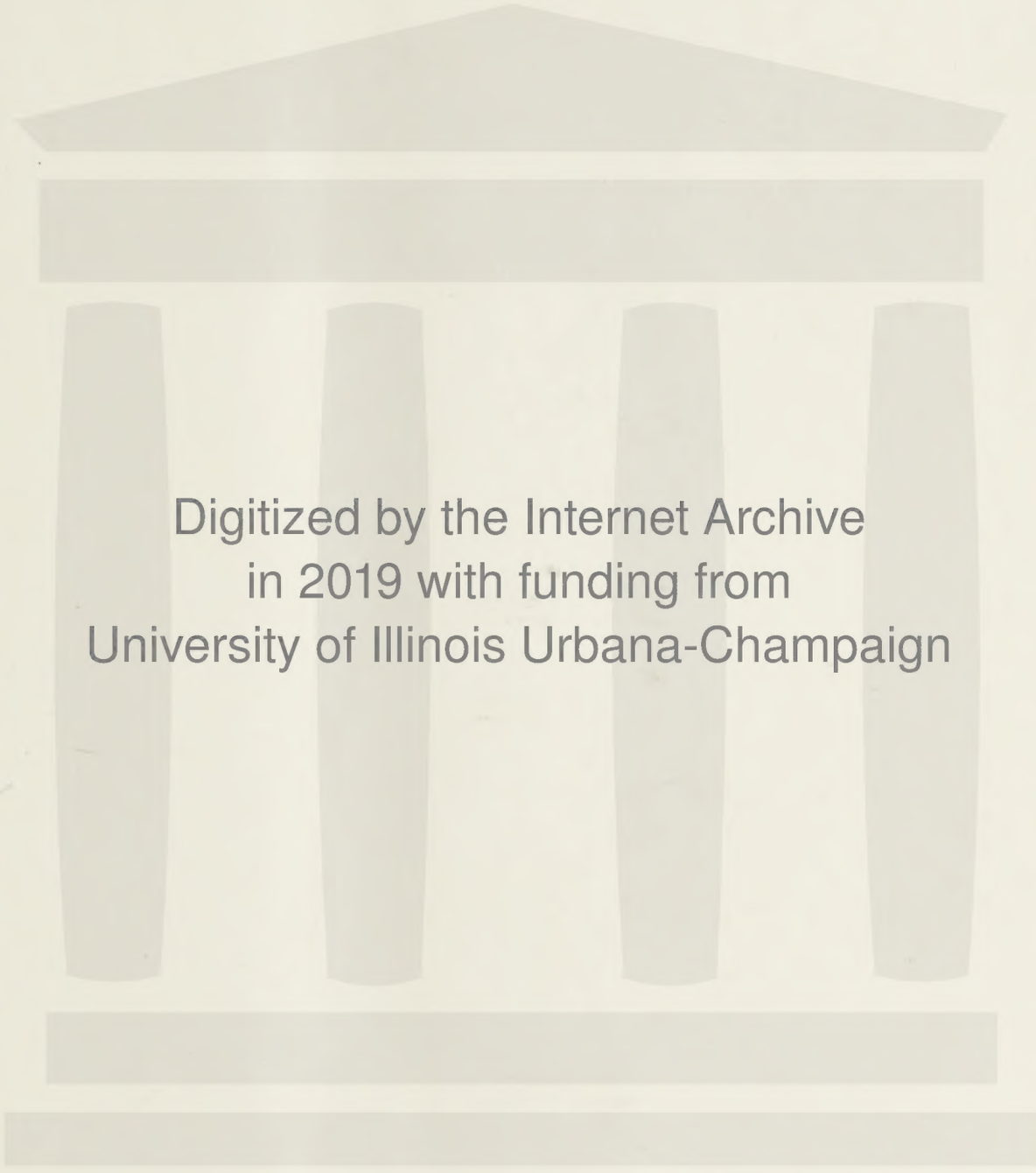
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CLINICAL LECTURE

ON

LACERATION OF THE OS AND CERVIX UTERI, AND THE OPERATION OF TRACHELORRAPHY.

By GRAILY HEWITT, M.D., F.R.C.P.,

Professor of Midwifery and Diseases of Women, University College; Obstetric Physician to the Hospital.

GENTLEMEN,—I propose to-day to discuss the subject of lacerations of the os and cervix uteri, and to give the result of my personal experience of trachelorraphy, or Emmet's operation, as it is often termed, in the treatment of these injuries.

As is well known, the operation, introduced to the profession by Dr. Emmet, of New York, has been largely practised in America. It was first performed in England by Dr. Playfair. Dr. Percy Boulton has published cases treated in this way. My attention was attracted by the results of Emmet, and I have pointed out the importance of the subject in the last edition of my work. I have also practised the operation in a sufficiently large number of cases to accumulate a certain amount of clinical experience on the subject.

The following is a brief summary of the cases in which I have operated, together with the results; from which it will be seen that, out of eleven cases, eight were completely cured of the laceration (in one case, after two operations); while in two, partial union was obtained; and in one, an attack of cellulitis prevented a successful result.

CASE I.—Mrs. H., aged 25, was sent to me in 1881 by Dr. Dobson, of Bangalore. She had had two, both very large, children. In the first labour, the perinæum was much torn. The child was born dead. She was extremely weak, and unable to walk. The uterus was said to be displaced. I found the uterus much retroflexed, large, and the cervix severely lacerated. The os presented what seemed at first to be a growth, but which was the everted and hypertrophied cervical interior. Trachelorraphy was very successfully performed. Later on, the perinæum was repaired. The patient went back to India cured.

CASE II.—Mrs. G., aged 33, wife of an Indian officer, was seen with the late Dr. Iles, of Watford. She had had six children, and two miscarriages since. There was a very deep cervical laceration on the right side. There were much eversion, great thickening of the tissues of the os, and a slight laceration on the left side. The uterus was much anteflexed. After rest and other treatment, the deep laceration was repaired by trachelorraphy, five stitches being used. The patient had been in a very feeble broken down state. The operation was quite successful. She has had a child since.

CASE III.—Mrs. C., aged 32, wife of a captain, had one child eight years ago. She suffered a long time from a numbing aching pain in the left groin; locomotion was difficult. There was a deep laceration on the left side of the cervix, also a less deep laceration on the right; much eversion of the anterior lip, which had assumed a snout-like shape, and was of some size. An operation was performed. Much cicatricial tissue was removed. There was difficulty in producing apposition of the edges, owing to deformity of the parts. Both lacerations were treated, by five sutures on one side and three on the other. Complete cure resulted.

CASE IV.—Mrs. ——, aged 34, was seen with Mr. Deacon, of Kilburn. She had had two children, and two miscarriages. She had been under treatment for retroflexion for some time, with only partial relief; the discharge was profuse. There was laceration on both sides, very deep on the right side. Eversion was very great; there was rawness of both surfaces. An operation was done on both sides; the result was good adhesion, and there were satisfactory results otherwise. The patient, at intervals, wears a ring-pessary.

CASE V.—Mrs. W., aged 42, a hospital-patient, had had two children; the first labour was instrumental, and lasted six days; in the second, she was delivered by craniotomy. She had one miscarriage. The patient was very nervous, low spirited, and hysterical. She had had treatment for the chest, and was very weak. The uterus was much retroflexed, and low down. Treatment of the displacement not giving relief, trachelorraphy was performed. Both lips of the os were thick, indurated; on the left side there was a deep laceration, one inch and a half long. Union took place to a partial extent.

CASE VI.—Mrs. E. S., aged 36, laundress, a hospital patient, had had three children, all very large, and one miscarriage. She had been troubled by severe abdominal aortic pulsation, and had much treatment. There was much pain in the lower part of the abdomen. The uterus was much anteverted; the cervix was severely lacerated up to the vaginal reflection on the right side; less severely on the left side. The os presented an extremely vascular, velvety raw surface, due to eversion of the cervical lining. A double operation was performed. There was much cicatricial tissue, very dense, in the larger fissure. Four stitches were applied on one side, two on the other. On the removal of the stitches, a healthy looking vaginal portion, three-fourths of an inch long, was visible. Abdominal pulsation was diminished. The patient left wearing a pessary.

CASE VII.—Mrs. L., aged 29, hospital patient, had one child, after two days' labour. She was obliged to go to a situation, and soon afterwards had severe strain, and ever since severe ovarian pain and illness, obliging her to give up work. There was double laceration of the cervix, on one side more than on the other. A double operation was performed. Union was obtained, but partially gave way, in consequence, as is believed, of the patient getting up, fainting, and falling down a few days after operation. The result was considerable improvement.

CASE VIII.—Mrs. G., aged 39, hospital patient, had had seven children; two labours were difficult. She had had a sanious discharge in the first three months of the last three pregnancies. She had had much treatment for a paralytic affection of the neck (now cured), and had been treated for "ulceration" of the womb also. She had a severe strain recently, and was invalided, finding pain in motion. The uterus was anteflexed and large. There was a very deep laceration of the left side of the cervix, and much eversion, but the everted surfaces were smooth and not raw. Three or four very large Nabothian follicles were found. Trachelorraphy was performed; the density of the tissues was very great. Union was not satisfactory. Three months later, she was again admitted; and a second operation, which proved perfectly successful, was performed. The patient was much relieved; the size of the uterus was much diminished.

CASE IX.—Mrs. P., aged 34, hospital patient, had her second child born ten years ago, after which she had a severe flooding and illness. Next she had a severe abortion; since which she had severe pains in the right side, extending down the leg. Three children had been born since, each at eight months, and she has had one miscarriage. The os uteri was triradiate from three lacerations. There was much eversion and erosion, and general irritation. An operation was performed; the three lacerations were dealt with by five, four, and three sutures respectively. An attack of cellulitis followed the operation. Union was obtained, but not maintained. It would have been better probably, if, in this case, a longer preparatory treatment had been enforced. The patient was much relieved so far, however, by the persistent leucorrhœa.

CASE X.—Mrs. N., aged 31, hospital patient; the subject of retroversion and a severely lacerated cervix for some time. She had had eight children, the last child nine years ago, since which she had had nine or ten miscarriages. The last labour occupied fifty hours. She had been in hospital, under treatment for the retroflexion, two or three times, without relief. The operation of trachelorraphy had been recommended, but the patient had only now consented to having it

done. There was double laceration on the left side to the insertion of the vagina, on the right less deep. There was much eversion, but the raw surface was only limited in extent. A double operation was done. The result was extremely good. Two months afterwards, her condition was very satisfactory; she felt well. A Hodge's pessary was ordered to be worn.

CASE XI.—Mrs. P., aged 37, hospital patient, had had two children. Her first labour was severe, instrumental. She had severe pain down the right side, as if there were a sore place there. The uterus was low down, retroverted. There was a deep ulceration on the right side of the cervix. The operation was completely successful. Subsequent accounts were good. A Hodge's pessary was ordered to be worn for a time.

REMARKS.—Observation of the cases which have been above related has suggested the following remarks on the question as to the influence of lacerations of the cervix in giving rise to symptoms, to interference with the comfort and health of patients, in regard to their interference with pregnancy, and in reference to the question as to the predisposition to uterine cancer held by some to exist in cases where such laceration is present.

General discomfort, and *incapability of walking* and following ordinary avocations, frequently spoken of as "weakness," constitute the most generally present symptoms in cases of chronic cervical laceration. It may be objected, that these symptoms are indefinite; but, as a matter of fact, they are the symptoms which cause the patient most frequently to seek advice. These feelings on the patient's part are associated with various other symptoms in different cases, and it need hardly be stated that there is nothing pathognomonic about them, for this general misery and incapability may be due to other causes.

Pain was frequently observed in the cases under my notice. It is not always so, but there is frequently a characteristic pain on one or other side near the groin, as if there were a sore place, and more or less persistently present, often extending down the leg on the same side. When this pain is not present, a constant aching discomfort, or increase of discomfort from walking, may be observed. Pains in the situations indicated are not actually pathognomonic of cervical laceration; for they may be due to severe flexion, which is not seldom associated with lacerations. On the whole, it may be stated that severe chronic pain traceable to lacerated cervix constitutes a frequent indication for the operation.

Reflex symptoms are occasionally observed. In one patient, there was present a most painful abdominal aortic pulsation, together with tenderness of skin at various spots, which became much relieved after the operation. There had been, in the same case, other anomalous nervous symptoms.

Liability to Cellulitis (Parametritis), possibly also to Perimetritis.—There is no doubt of the fact that an inflammatory exudation is liable to occur in immediate proximity to a laceration, probably due to septic absorption. Thus, one of my patients had, to my knowledge, a deep laceration of the left side of the cervix. A little while afterwards she was delivered of a second child, and three days after the labour I was requested to see her, and found her suffering from cellulitic effusion of the size of an orange, close to the laceration. Probably the existing laceration had been increased during the labour, and hence the inflammation. I think it probable that many cases of cellulitis *post partum* are connected with laceration, possibly very slight, and in themselves unimportant, but sufficient to give ingress to septic material. This view of the matter I have seen maintained also by others who have written on the subject. In a minor degree, there can be no doubt that local uterine inflammation, short of actual cellulitis, is frequently set up by the physical injuries to which the everted mucous membrane is subjected.

Leucorrhœa or menorrhagia does not necessarily indicate necessity for operation in cases of laceration. There are, however, symptoms frequently present in a severe degree in such cases; and there are undoubtedly cases in which the leucorrhœa or the menorrhagia cannot be satisfactorily dealt with, unless the cervix be repaired.

Of the several *morbid changes at the os uteri*, which appear to be unquestionably due to laceration of the cervix, *eversion of the lining of the cervix* is one of the most important, subjecting the delicate already torn surface to friction and injury in various ways. Hence some of the so-called severe ulcerations. The irritation thus produced leads to further notable effects. The most important of these are swelling of the tissues of the os uteri, and consequent hypertrophy, so that in a severe case the os uteri often presents two large masses, looking like two tumours growing at this situation; or there may be only one, constituting sometimes a long snout-like prolongation, one surface of which is smooth, the other perhaps raw and rough. Profuse losses, leucorrhœal, and sometimes menorrhagic, result. It is a fact which I have several times verified, that this hypertrophy disappears when the repair of the laceration is effected, sometimes with extreme rapidity, doubtless indicating that the circulation in the tissues round the os had been impeded owing to the rent. Eversion of the lining of the cervix to any great extent can hardly occur without cervical laceration, and the operation of trachelorraphy is most effective in removing this irritating condition. It may be said, indeed, that it constitutes the only real cure for it. It is true that an alternative treatment, namely, the use of the cautery, may be made effectual in curing the tendency to eversion; but this method must be regarded as inferior to trachelorraphy, and there is necessarily a risk of bringing about a cicatricial closing of the os uteri, if the cautery be extensively employed.

Formation of Cysts is another result of laceration with great eversion of the os. These cysts may be found as large as peas, three or four or more in number, on the surface of the original wound, or near the free end of the hypertrophied lip.

Judging from my own experience, *miscarriages* frequently occur in cases of lacerated cervix, and, in some cases, are distinctly connected with it, though in others they seem in part due to a coexisting displacement. Thus one patient with displacement *plus* severe laceration had had nine miscarriages; another, similarly affected, had had two miscarriages; another, one miscarriage. In two other cases where laceration alone existed, miscarriage had occurred; and, in one case, the three last labours had taken place at eight months, due, no doubt, to the existence of the laceration. It appears to be the fact that, in certain cases of severely lacerated cervix, the tendency to miscarriage can only be cured by repairing the injured structures.

Association of laceration of the cervix with acute *retroflexion*, or with troublesome *anteflexion*, is not seldom met with. The question arises, What is the connection between the displacement and the laceration? It is reasonable to suppose that, when the laceration is extensive, a displacement of the body of the uterus forwards or backwards will more readily occur. In one of my hospital cases, where retroflexion was present, the condition of the patient was found to be practically irremediable and unrelievable, until the laceration was dealt with. On the other hand, the displacement would, of course, intensify and aggravate the effects of the laceration. In a case recently under my notice, where the position of the uterus had been kept right by a pessary, and the instrument removed for a week, to facilitate preparation of the patient for the operation, it was found that the eversion had, at the end of that time, become much more severe, and the lips of the laceration much opened out, as the result of the recurring displacement. In cases where the laceration is slight, and the displacement considerable, an operation might not be necessary; but, when the laceration is extensive, the patient cannot be thoroughly relieved in any other way than by performing a repairing operation.

The *degree* to which the laceration extends varies, of course, in different cases. As a rule, the symptoms and bad effects are in direct proportion to the depth of the laceration. When the laceration extends more than half way up the vaginal portion of the cervix, it may be said to be "severe;" but, when it falls short of this, unless there be great eversion of the lining of the cervix, the case does not seem to be one calling for operative interference. Such would seem to me, at least, a proper restriction to make. And, again, when there is a severe laceration on one side, and a trifling one on the other, it will probably be found sufficient to deal with the more severe one only by operation. The absence of erosion is sometimes observed in long standing cases of originally severe laceration. In such cases, however, it may be found that the cicatricial tissue at the bottom of the tear is extensive, and seems to be the cause of continuous pain, which would necessitate operation for its relief. The cicatricial tissue probably compresses certain nerves, and thus may produce pain at the spot, or induce reflex irritation elsewhere.

When the degree of the laceration is very considerable, it appears to be desirable that an operation should be performed, even in cases where severe symptoms have not yet arisen. For instance, if, on examination at the end of the puerperal period, the cervix be found deeply lacerated, it would be better to restore the integrity of the cervix at once, rather than wait for the secondary irritation and other effects which are in most cases pretty certain to occur later.

In all cases when the condition has become chronic, it is advisable to subject the patient to a careful treatment, consisting of rest, hot douches, and other remedies calculated to improve the condition of the parts, at the end of which a judgment will be more readily arrived at as to the real necessity for an operation; besides which, the operation will, by such preparation, be more likely to succeed if finally determined on.

The advisability of the operation in order to *prevent occurrence of cancer of the cervix uteri*, has been strenuously urged in America, and the question is certainly a very important one. For, if it be the fact that a torn cervix uteri is more likely to become the seat of cancer than a sound one, that would constitute an important argument in favour of carefully repairing these injuries, even in cases where the laceration is only slight in degree. What is known as to the relative frequency of uterine cancer where sexual intercourse has occurred, and in those where it has not, favours the conclusion that the latter class is markedly less liable to the disease. At present, we are hardly in a position to say whether this comparative frequency of cancer in the former class of cases is due to the mechanical injury of the structures at the os uteri (including cervical lacerations), or to the increased functional activity of the uterus associated in such cases. That eversions of the mucous lining of the cervix, followed by mechanical bruising of the structures, probably constitutes a condition in a certain degree favourable to occurrence of cancer, may be strongly suspected. In a recent paper, Zinke (*Jour. Amer. Med. Association*, July 25th, 1885), who has collected opinions on the subject of the indications for the operation from various authorities, concludes that, when there is present hereditary tendency to cancer, marked lacerations should be always dealt with by operation, even in cases where no present inconvenience exists, and solely with the idea of warding off the occurrence of cancer. This appears to me to be a proper view to take of the subject. Further, it may be suggested that, if the laceration be not so severe as to necessitate the operation, the desirability of cauterising the torn surfaces, even in cases when there is no special hereditary tendency manifest, presents itself. For it must be recollected that, in many cases of uterine cancer, no history of hereditary tendency is discoverable.

Summary.—There will, no doubt, be differences of opinion as to the indications for the performance of trachelorraphy; but the following may be submitted as embodying conclusions at which I have personally arrived:—

The operation is indicated by the presence of a chronic extensive eversion of the cervical lining; by the presence of considerable hypertrophy of the os, the result of laceration, and the more so if hypertrophy and eversion be conjoined; by the presence of chronic severe local pain, evidently traceable to the irritation of a raw surface less extensive in amount, or traceable to cicatricial hardening at the bottom of the fissure; by the association of marked laceration with a troublesome displacement of the body of the uterus; by the presence of repeated miscarriages in a chronic case; by the presence of a severe recent laceration, even in cases where no severe symptoms have had time to develope themselves, with the view of preventing (1) cellulitis; (2) the occurrence of cancer; (3) the supervention of symptoms generally; lastly, by the presence of general severe prostration, inability for locomotion, etc., obviously traceable to laceration.

The operation itself is not, in most cases, a difficult one, but, in some cases, it is so. In assisting to hold the cervix down, I have found the large tenaculum hooked forceps, depicted in the last edition of my work on *Diseases of Women*, made by Mayer and Meltzer, of very great utility. Sometimes the nodular hypertrophy renders co-aptation of the edges, after paring them, not easy, owing to one side of the rent being very short, the other very long. Another difficulty is, in some cases, the excessive hardness of the tissues to be perforated by the needle, which is sometimes so great that much force is required to penetrate the tissues. The needles need to be very strong for such cases. I have found No. 6 silver-wire most suitable for sutures, and have generally removed them in not less than ten days. Probably it would be better to leave them a week or two longer, in cases where the patient is very weak and nutritive action feeble. The importance of a preparatory treatment before proceeding to the operation has already been pointed out.

DEVONSHIRE HOSPITAL, AND BUXTON BATH CHARITY.—A donation of £100 has been received by this institution during the past week from Mr. William Coare, Brocklehurst, M.P. for the Macclesfield division of the county of Chester. The donation was sent through the hands of Mr. R. R. Duke, one of the trustees of the hospital. A small legacy has also been received by the institution from the executors of the late Joseph Barlow, of Haslingden, the amount being £17 13s. 4d.

CHOLERA AT SEA.—An epidemic, supposed to be cholera, has broken out on board the Queensland Line steamer *Dorunda*, which arrived at Townsville on Dec. 11th. The *Dorunda* has arrived at Brisbane. Since the beginning of the outbreak there have been altogether thirty-one cases and fifteen deaths.

A LECTURE
ON
THE EXCITING CAUSES OF DISEASE.

Delivered before the Edinburgh Health Society.

BY BYROM BRAMWELL, M.D., F.R.C.P.Edin.,
Assistant-Physician to the Edinburgh Royal Infirmary; Lecturer on the Principles and Practice of Medicine, and on Practical Medicine and Medical Diagnosis in the Extra-academical School of Medicine, Edinburgh.

MY LORD PROVOST, LADIES, AND GENTLEMEN,—In the lecture which I had the pleasure of delivering to the members of this Society a year ago, I directed attention more particularly to the derangements of nutrition and to those disorders which result from infringement of, what may be termed, the elementary laws of health. And before proceeding to the subjects which I wish to bring under your notice this evening, allow me very briefly to recapitulate one or two of the more important points.

We saw that, for the nutrition of the body as a whole, and indeed of each one of its individual organs and parts, certain requirements are necessary. These are: 1, a sufficient supply of nutritive material—blood-plasma; 2, a sufficient supply of oxygen; 3, satisfactory removal of waste-products; 4, a healthy condition of the nervous system; 5, a sufficient amount of rest and sleep.

Now it is the object of this Society to supply to the inhabitants of Edinburgh in the first instance, and then (by means of our published lectures) to the community at large, a knowledge of health-matters. I regret that we are unable to supply to those who need it the power of self-control. We must look to the parents (more especially to the mothers) of our children, and to the teachers in our schools, for the training and development of the will and the power of self-control. There are undoubtedly great natural differences in the force of will and the power of self-control in different individuals, just as there are great natural differences in the power of acquiring information, of reasoning, and of all the faculties of the mind; but what I want particularly to insist upon is this, that the power of self-control is to a large extent a matter of training and of habit, and that the education of this power of self-control, the power of inhibition, as we technically term it—the power which the highest nervous centres have of restraining, controlling, or inhibiting the action of other and lower centres—the highest faculty of the nervous system, should begin in early infancy, and should be steadily cultivated and perfected all through life. What, I would ask, is the use of teaching a child the theoretical distinction between right and wrong, if you do not at the same time endeavour to strengthen its will and its power of self-control; if you do not encourage it, by example as well as by precept, in the habit of doing what is right, and in the habit of not doing, or in other words, in the habit of inhibiting or restraining the desire to do what is wrong? I would like to repeat more emphatically and more fully than I did in my last lecture, that the main object of education—I am, of course, speaking of so-called secular education (I may, perhaps, be allowed to remark in passing that I do not like the word secular as applied to education, for I cannot conceive of any system of education which does not include as its first fundamental the inculcating of the higher moral and religious truths)—I say that the main object of education is not, as some people seem to suppose, to cram the child with the greatest amount of fact-knowledge, but to teach it how to work; to cultivate its power of application and of mental concentration; to teach it habits of cleanliness, order, regularity, and diligence; to call forth, stimulate, and strengthen its powers of observation and reasoning; to give it opportunities of experiencing the feeling of mental satisfaction and enjoyment, with the resulting invigorating effect, both on body and mind, which attends the successful accomplishment of any piece of work, however small, which is well done; to set before it a high ideal of life and conduct; above all, to strengthen its will, to give it force of character, and to teach it the power and habit of self-control.

Now, these which are, in my opinion, by far the most important objects of any system of education, are difficult or impossible to measure by any system of payment by results. There is a possibility, therefore, of their being to some extent undervalued or lost sight of, both by the managers of schools in the selection and appointment of teachers, and by the teachers themselves.

The Exciting Causes of Disease.—This evening I wish to direct at-

tention to some other causes of disease, and to give you some practical information as to their prevention. I must premise my remarks by saying that the causes of disease may be divided into two great groups or divisions, namely: 1, the direct or exciting causes; 2, the indirect or predisposing causes; and that, for the production of many diseases, both a predisposing and an exciting cause are required.

Many of the diseases to which I am going to refer are due to the nature of our surroundings, and to the somewhat artificial conditions in which we are compelled, by the circumstances of our advanced civilisation, to live; to the imperfect sanitary arrangements of our houses and towns; to the fact that the air we breathe, the water we drink, the food we eat, are all liable to be loaded with noxious impurities, and that the very persons with whom we come in contact are at times eminently hurtful and injurious to us.

It is important to remember, as Mr. M'Candlish forcibly pointed out at the last annual meeting of this Society, that many of the diseases to which I am about to refer cannot be prevented by the individual efforts of the person who becomes affected by them; and that it is the duty of each member of the community not only to avoid doing anything which may interfere with the comfort, injure the health, or endanger the lives of his fellow-citizens, but also to submit cheerfully and readily to any regulations which the authorities who watch over the public health may see fit to impose, and to co-operate heartily with them, so far as he is able, in their laudable endeavours to diminish sickness and to protect health.

Let us now look at some of the more important of the direct or exciting causes of disease.

1. *Accidents and Injuries* are such common and obvious causes that they need not detain us. Nor can I pretend to advise you how they are to be guarded against and prevented any better than you can advise yourselves.

2. *Catching Cold.*—Exposure to cold, especially to damp cold, and to sudden variations in temperature, is a fertile source of disease, more particularly of rheumatic, bronchial, and pulmonary affections. The number of deaths which annually result from this cause is great.

It may not perhaps be altogether inopportune if I say a few words with regard to the proper clothing of the body. One of the most striking characteristics of good health is the power which the human body has of maintaining its temperature at a fixed point, notwithstanding the external alterations in temperature to which it may be exposed. Two things only (in addition to health) are required: firstly, it must be supplied with a sufficient quantity of suitable food or fuel; and, secondly, it must be suitably clothed.

Had time permitted, it might perhaps have been interesting to have described the exact manner in which this fixed temperature is maintained under varying conditions. Suffice it, however, to say that the heat-production is due to the chemical changes which are constantly taking place in all the tissues, more especially in the muscles, and in the great glandular organs, such as the liver; that the loss of heat is in great part due to radiation and conduction from the surface of the skin, and to the evaporation of the surface-moisture or sweat; and that the balance between the production and loss of heat is regulated by a beautiful self-adjusting or automatic nervous mechanism. When, for instance, the body is placed in a cold atmosphere (*a*), the vessels in the skin contract; less blood passes through the superficial or surface circulation; less heat is consequently carried to the surface, for the blood is the great means or channel through which the heat, which is produced in the deeper tissues, is distributed through the body; (*b*) the condition of the skin is so altered that its power of transmitting or conducting heat is diminished; (*c*) the secretion, and, therefore, the evaporation of sweat, is greatly lessened. For all these reasons, the loss of heat is very much diminished, and the body does not cool down and reach the temperature-level of the surrounding atmosphere, as an inanimate object or even a cold-blooded animal would do. But, further, the temporary application of cold to the surface not only lessens the loss of heat, but it so acts upon the central nervous system that the production of heat is actually increased. In this way, chiefly by the diminution of loss of heat, but partly by the increased production of heat, the cooling of the body is prevented. Now, in very cold climates, Nature requires to be assisted in her efforts at maintaining a fixed temperature. The Laplanders, for instance, eat large quantities of blubber and fat, which are eminently heat-producing foods, and clothe themselves with furs, in order to form an additional non-conducting heat-barrier between the severe external cold and their own warm bodies.

The Requirements which Clothing should Possess.—In this changeable and somewhat cold climate of ours, the first requirement which clothing ought to possess is, that it should be sufficiently warm. There is a great deal of carelessness, more especially amongst young men, with regard to this matter. Glorying in the enjoyment of splendid health, they are apt to think that they can go out in any weather without a great coat; that they may even get wet through and sit in damp clothes with impunity. Now, I am not going to advocate any system of coddling; it would be, I think, a bad day for our country if we gave up our football because a few boys get broken legs, if we stopped our hunting because a few men are killed every year, or if we were to keep indoors on wet days because some of us get cold; all I want to advocate is reasonable carefulness without coddle. I would like everyone to realise that a cold is not always a trivial matter. Very grave disease may, indeed, result from it afterwards. Consumption, as I shall afterwards, if time permit, more fully point out, has its starting point in a simple cold. In many cases, disease of the valves of the heart results from catching cold, and the resulting rheumatism. Most people are aware that the great risk in rheumatic fever is inflammation of the valves of the heart; but few people know that inflammation of the heart may arise when the rheumatic symptoms are slight and trivial. This is more especially the case in children and young persons, in whom a stiff neck, a painful joint, or any other indication of rheumatism, should always be most carefully attended to. Knowing the serious consequences which sometimes result in cases of this description, I would most earnestly impress you with the importance of carefulness in this matter.

The second requirement which clothing should possess, is that it should be sufficiently porous to allow the diffusion of gases and the absorption of any excess of surface-moisture. Underclothing made of flannel, or of some woollen material, such as merino, answers these requirements (warmth and porosity) the best; silk is also good, though not so good, and its first cost is so much greater that it does not come within the reach of most people.

The third requirement is, that the clothing should be light; and here I would point out that the common idea that weighty clothing is necessarily warm is often fallacious. Woollen materials, which are the warmest, may be lighter than other. It must also be remembered that a heavy dress or cloak, such, for example, as the long cloaks trimmed with heavy furs, which many ladies are wearing at the present time, have this disadvantage, that they necessarily interfere with brisk walking, which, as we all know, is one of the best ways of keeping ourselves warm in cold, frosty weather.

The fourth requirement is, that the articles of clothing should fit well and not hang heavily, nor drag nor press unduly upon any part; in short, that they should not interfere in any way with the free movements of the body. I need not say that this requirement is not always fulfilled. High heels, which throw the centre of gravity out of the proper line, and place an unnatural strain on the ligaments, bones, and joints, interfering with all free movement, and transforming the beautiful elastic step of Nature into a miserable and ugly hobble; pointed toes, tight skirts, "wasp"-waists, and other monstrosities which could be mentioned, are not altogether unknown. The practice of tight lacing is specially injurious; for, by compressing the ribs and thorax, it interferes with the free movement both of the heart and lungs, it squeezes, distorts, indents, and sometimes even dislocates the liver, and interferes, more or less, with the free play of all the abdominal viscera.

The fifth requirement is, that the clothing should be suitable to the occupation and in accordance with the means of the wearer.

The sixth is, that it should be nice looking and becoming. There will, I fancy, be considerable difference of opinion as to the relative importance of this last requirement. Although I think it the least important, and have therefore placed it last, I by no means wish to undervalue it. I not only like to see people nicely dressed, but I even go so far as to say that it is, in my opinion, the duty of every one to look her best (I put it, you will observe, in the female gender); I say I think it is the duty of every woman to look her best, and to see not only that she is clean and tidy in her person, but that her dress is neat, tasteful, and becoming. Do not, please, misunderstand me, and suppose that I am advocating expensive or fashionable dressing. Quite the contrary; I strongly deprecate the wasteful expenditure in dress which is only too common in all ranks of society at the present day. It is necessary to remember, on the one hand, that persons of modest means who dress expensively are not suitably and becomingly clothed; and, on the other, that with a little taste in the selection of materials, and with a little skill in the cutting and fitting, the most homely and least costly materials may be made both elegant and becoming.

Influence of Fashion.—You will hardly expect me to say anything with regard to fashion, that mysterious custom whose imperious

dictates a large number of our lady friends seem to think it would be almost a sacrilege to disobey. The best I can say of fashion is that it is good for trade, that it puts money into the pockets of the milliners, and that the changes which it necessitates are, as a rule, harmless from a health point of view. There are, however, exceptions to every general rule, and some of the customs which fashion favours are distinctly injurious. I will only mention one, the custom of puffing and painting, which is common further south, but happily comparatively rarely seen here.

3. *The Introduction into the Body of Noxious Materials.*—The diseases due to this cause are very numerous, and many of them of great importance. The noxious material may come into contact with the surface of the body, and produce disease of the skin ; or it may be inhaled with the breath, or carried into the stomach and alimentary canal with the food and drink.

Diseases due to Mechanical Irritants.—In some cases, the noxious material, or poison, as we might perhaps term it, is simply a mechanical irritant. As an illustration of this group, I may mention the bronchial and pulmonary diseases which are due to the inhalation of dust-particles, Stone-masons, knife-grinders, potters, and the workers in many other trades, for instance, very frequently suffer, and often die, from severe forms of lung-disease produced in this way. In coal-miners, the lung sometimes becomes impregnated with minute (microscopic) particles of coal-dust and smoke ; though, in consequence of the better ventilation of the pits, this disease—coal-miners' phthisis, as it is technically termed—is by no means so frequent as it was a few years ago. All measures which prevent the escape of dust-particles into the atmosphere, free ventilation, and the use of respirators, are the means by which the diseases due to the inhalation of fine dust-particles are to be prevented.

Diseases due to Chemical Poisons.—In other cases, the noxious material is a chemical poison. Obscure cases of illness, for instance, every now and again result from arsenic having been used in the manufacture of wall-papers and paints. Bright emerald greens, which owed their colour to arseniate of copper (Scheele's green), were at one time largely used in house-decoration ; but it is not only greens which are injurious ; white grounded papers sometimes contain large quantities of arsenic. So recently as six years ago, my own children suffered from very anomalous symptoms, which I could not explain until I detected arsenic in the wall-paper of the nursery—a white grounded paper, with a blue pattern. Dr. Stevenson Macadam, who was kind enough to confirm the analysis, found that the quantity of arsenic in this paper was very great. For the first few months after a paper which contains arsenic is put up, there may be no injurious effects ; it is only after the surface of the paper becomes rubbed and its gloss taken off, that the poisonous particles are thrown into the atmosphere, and are absorbed into the system chiefly through the air-passages. I understand that the best manufacturers are now fully alive to the danger ; but it is as well, in choosing a paper, more especially a cheap paper which contains bright green colours, to have a guarantee from the paper-hanger that it is free from arsenic.

I might mention several chemical substances which prove injurious to the workers in particular trades. Makers of lucifer matches, for example, used not unfrequently to suffer from decay (necrosis) of the jaw-bone, the result of phosphorus-poisoning. Painters, plumbers, and all persons who come into contact with white lead, are liable to suffer from chronic lead-poisoning. The manufacturers of white lead not unfrequently die from lead-poisoning. Severe cases of this description are, fortunately, not met with in this neighbourhood, for there are no white lead factories near Edinburgh ; but in Newcastle-on-Tyne, where I formerly practised, I used frequently to have amongst my hospital patients the most serious cases of this kind.

I have known symptoms of chronic lead-poisoning produced by the use of hair-dyes containing lead. A few years ago, a medical friend told me of a case in which death had actually resulted from lead-poisoning produced in this manner.

Diseases due to Living Organisms.—In other cases, the noxious material is a living organism. In this group, an immense number of diseases are included, many of them highly contagious and infectious.

In some, as in ringworm and scabies or itch, the disease is local, and confined to the surface of the body. In the former (ringworm), the poison is a minute vegetable organism ; in the latter, an insect (the *sarcoptes scabiei*). Both diseases are readily communicated by contact from person to person. To prevent their spread, you must destroy by local means the parasite which is their cause.

In others, the disease is local and internal. The most common and fatal disease, pulmonary consumption, has been proved by the celebrated German pathologist, Professor Koch, to be due to a minute living organism (the tubercle-bacillus).

In others, again, the disease is general. That dreadful disease, pyæmia, which used to be common in our hospitals, and was frequently the cause of death after surgical operations—even after trivial operations—is due to the entrance of germs or septic particles into a wound, and to the poisoning of the system by the putrefactive products which result therefrom. Owing to the free use of antiseptic measures, decomposition in wounds, and the resulting pyæmia, are now happily rare. As you are probably all aware, we are chiefly indebted for this immense advance in the treatment of surgical cases, and for the enormous saving of life and suffering which it has effected, to the great surgeon, Professor Lister, whose name will, without doubt, be honoured by posterity as one of the greatest medical celebrities and benefactors of this or any other age.

The great group of specific infectious diseases, such as scarlet fever and small-pox, are probably all due to the introduction into the body of a particular organic poison, though in every case the poison has not as yet been demonstrated.

The Prevention of the Specific Infectious and Contagious Diseases.—The prevention of these diseases is of such immense importance, that, although several previous lecturers have spoken to you on the subject, I make no apology for again bringing the matter before your notice.

It is astonishing how much ignorance, I fear I must go further, and say, how much culpable negligence, there is in regard to the precautions which should be taken to prevent the spread of these diseases, and that even amongst the more intelligent and more highly educated classes. Take, for instance, the spread of infectious diseases in schools. Cases are again and again met with, in which a child is sent to school from a house in which there are cases of scarlet fever, or still worse, in which a child, who has just recovered from an attack of whooping cough or scarlet fever, is sent back to school while still infectious. I fancy that most of those who have conducted for any length of time our high-class day schools in Edinburgh, have met with some cases of this description. Certainly more than one has come to my own knowledge. I need not say that, if cases of this sort occur in the upper ranks of society, they are still more liable to occur amongst the labouring and working classes. I can hardly conceive that the magnitude of the consequences which may result from carelessness in this matter is fully realised. A child who is sent to school from a house in which there is a case of scarlet fever, may carry (observe, I do not say will carry) the fever poison with it ; some of its fellow pupils may contract the disease, some of them may die ; the schoolmaster or schoolmistress will certainly be caused grave mental anxiety ; the school may have to be shut up, the house repapered and repainted ; serious pecuniary loss may, in consequence, be inflicted on those who are perhaps little able to bear it, for I need not say that schoolmasters and schoolmistresses are not, as a rule, wealthy people. These consequences are serious, they are surely sufficiently serious to necessitate the most scrupulous care on the part of all concerned ; but I would be giving you a very inadequate and imperfect idea of the magnitude of the evils which may, and which sometimes do actually result, if I were to stop here. I may perhaps enable you to realise more vividly what these results may be, if I make use of a comparison. During the past few years, we have from time to time been startled by the accounts of one of those dreadful dynamite explosions, which, thanks to a kind providence, have happily, I think I am right in saying, been miraculously unattended with any loss of human life. Now, suppose that a parent, either through ignorance, or carelessness, or culpable negligence, were to send a child to school with its pockets filled with dynamite ; suppose that the dynamite were to explode, to wreck the building, and to kill both teachers and scholars, would not a thrill of horror reverberate from one end to the other of the civilised world? And, supposing that such a catastrophe were to occur again and again, would not the nation rise as one man, and demand that the most stringent measures be immediately taken to prevent the possibility of the recurrence? Now, I speak without any exaggeration when I say that the evil which may result from introducing scarlet fever into a school may be even more disastrous. True, the immediate effects are not so startling and sudden, and the full results may never perhaps come before the public eye ; but the total loss of life and suffering may be infinitely greater. There is this essential difference between dynamite and the scarlet fever poison, that, in the case of dynamite, the maximum effect is at once reached ; although the immediate result may be terrible, yet the evil is at an end with the occurrence of the explosion ; and it is possible, immediately after the accident, to sum up the damage, and exactly measure the result. But the scarlet fever poison is a living material, which, so long as it meets with a suitable nidus or soil, continues to grow and multiply, and which may be propagated from person to person almost indefinitely. A single case may thus give rise to an epidemic, which may spread

itself over the length and breadth of the land, and may produce a huge mortality. It may, of course, be said that scarlet fever is always epidemic somewhere, and that, do what you will, you cannot stamp it out; that children must therefore run their chance. Such an argument is, I hold, altogether fallacious; if it were once admitted, it would prevent us from taking any steps whatever to check the spread of diseases of this kind. I want every individual here present to realise that much more can be done, and ought to be done, in the way of arresting and stamping out these infectious diseases, than we are doing; and that it is the duty of every right-minded man and woman to do what he or she can to help in this matter.

[*To be continued.*]

FURTHER RESEARCHES ON CHOLERA.

By R. KOCH, M.D.,
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Speech at the commencement of the Second Conference on Cholera, held at Berlin on May 4th, 5th, 6th, 7th, and 8th, 1885.

GENTLEMEN,—As an introduction to our discussions, I propose to give you a short sketch of the investigations of cholera made since our last conference, and to add thereto some facts with regard to investigations which I have carried on, in conjunction with Drs. Weisser and Frank, on the pathogenic properties of the cholera-bacteria, and some questions connected therewith.

As you will, no doubt, remember, the investigations made by the Commission sent to India to investigate cholera, showed that a micro-organism, belonging to the group of bacteria, is present in cholera, chiefly in the intestines of persons who have died of that disease, and in the dejecta of those suffering from it; and that this organism can be distinguished from all other bacteria by its peculiar characteristics, and thus must be regarded as a distinct species. As these bacteria were never found elsewhere than in cholera, we had to do with a micro-organism which was characteristic of cholera, and which stood in the closest relation to it. You remember, further, the conclusions which I have drawn, partly on account of this connection, between the cholera-bacteria and cholera, and partly on account of the correspondence between the behaviour of the cholera-bacteria and epidemiological experience—the conclusion being that the cause of cholera was to be looked for in these bacteria.

It was to be expected that my statements would not at once be accepted. I had never expected that myself; and it seemed to me very desirable that my investigations should be tested, in all directions, with the utmost possible completeness, and with thorough criticism. This has also happened to the most complete extent. A number of investigators, skilled and unskilled, have busied themselves with this question, and have arrived at results, of which I shall give you a short sketch. It would lead me too far to inform you of all which has been written with regard to the cholera-bacteria; and I will, therefore, confine myself to the most important works.

The first who published anything with regard to the relation of the cholera-bacteria to cholera were Finkler and Prior, who, as is undoubtedly known to you all, were of opinion that they had found a micro-organism in cholera nostras which could not be distinguished from the cholera-bacilli. If this statement had been correct, then naturally the importance of the cholera-bacteria would have been lost. I obtained, through the courtesy of Messrs. Finkler and Prior, the opportunity of thoroughly investigating for myself the bacteria found by them, and was able to compare them with the cholera-bacteria found by me. It was very soon evident that very important differences existed between these two forms of bacteria. Instead of long descriptions, I will show you some preparations, by which you will be able to convince yourselves of their different behaviour. I hand you two vessels. In one are pure cultivations of cholera-bacteria, in test-tubes which contain nutritive gelatine, and are closed by cotton-wool plugs. You will easily recognise the characteristic growth of the cholera-bacteria, which form in the nutritive gelatine a thin whitish thread of the length of the puncture made by the platinum wire. The liquefaction of the gelatine which is caused by the growth begins at the upper end of this thread, and spreads very slowly. At the same time, a shrinking or drying occurs at the upper end of the thread; and thus a funnel-shaped depression is formed, which, when looked at by transmitted light, looks as if it were an air-bubble. The cultivations of Finkler's bacilli, which are present in the second glass, and were prepared in exactly the same way, behave very differently. They liquefy the gelatine much more quickly, and in the whole extent of the needle-track. Hence that drying up or absorption of a part of the thread does not occur, and thus you miss the apparent air-bubble in the upper part of the cultivation. I will, however, remark here that this air-bubble, which is here seen in the cultivations of the cholera-bacilli, and is absent in those of Finkler's bacteria, is not the only point of distinction. It has been said that, under certain circumstances, a similar bubble may be formed in the cultivations of Finkler's organisms. This is correct. If the organisms be grown at the lowest possible temperature—that is, very slowly—a bubble-formation is produced, similar to that of the slower growing cholera-bacilli. These cultivations which you see here, however, have grown under exactly similar conditions—namely, in gelatine of the same concentration, and at the same temperature; and hence, if these bacteria be the same, they must behave similarly in the gelatine-cultivation. But this is not the case. When you compare the cholera-cultivations with Finkler's, you observe that, when the first show scarcely perceptible evidence of liquefaction, and in the lower part are thin and thread-like, Finkler's organisms have already liquefied a great part of the gelatine, and formed a sac-like fluid part with muddy contents. This is, however, as I have said, not the only difference. The products of the decomposition of these two forms of bacteria are also different, as is evident from the fact that the cultivations of Finkler's bacteria have a stinking smell, while those of the cholera-bacilli have a peculiar aromatic odour. Further, they behave differently when they are grown on boiled potatoes. The cholera-bacteria do not develop at all on potatoes at the ordinary temperature of the room, or only so slightly as not to be evident to the naked eye. You see a potato, which was inoculated with cholera-bacteria six days ago, and there is not the slightest growth. On the other hand, on this potato, inoculated at the same time with Finkler's bacteria, there has been formed, as you see, a greyish yellow slimy mass, which consists of an enormous vegetation of Finkler's organisms.

The same results as regards the difference between these two kinds of bacteria have also been obtained by others quite independently of my investigations; for example, by Dr. Van Ermengem, who had likewise received specimens of their bacteria from Finkler and Prior.

I should like to mention only, in addition, that it seems to me questionable whether the bacteria found by Finkler are related to cholera nostras, as Finkler has supposed. They were found in the evacuations of persons who had suffered from diarrhœa, and that not in the fresh evacuations, but after these had stood in a putrefying state for fourteen days. I have seen microscopical specimens of the fresh evacuations, and these did not contain the peculiar forms of Finkler's bacteria, but other forms, which, however, according to Finkler's idea, belong to their cycle of development. In addition, I may point out here that, up till now, a number of undoubted cases of cholera nostras have been investigated by different observers for the presence of comma-shaped bacteria. At our first conference I was able to inform you of some cases in which nothing could be found which was at all like the cholera-bacteria. Since then, I have investigated several cases, in part fatal ones, with a like negative result. But other investigators, also, have examined numerous cases in like manner, for example, Van Ermengem, Watson Cheyne, Biedert, etc.; but no one has found in cholera nostras bacteria which were the same as the cholera-bacteria or Finkler's organisms.

The second noteworthy research on cholera-bacteria which I must mention is that made by Dr. Klein. As is well known, Klein was sent to India by the English Government to carry out investigations into the etiology of cholera. From the reports by Klein which have as yet been published, we must conclude that he has exclusively busied himself in upsetting my statements. At least, I have as yet found nothing in Klein's publications but what stands in direct contradiction to my results. Klein has brought back nothing positive or new from his expedition. Any other result could scarcely be expected; for already, before he went to India, his judgment of my statements was decided. He attempted, at that time, to show that I had contradicted myself; that I had, in Egypt, compared the bacteria found in the wall of the small intestine with the bacilli of glanders, but that the latter were not curved, but straight bacilli; then all at once, in India, the straight bacilli had become curved ones. This objection has later, also, been brought forward by others; but—in order at once to settle this point—he who asserts this has evidently never seen side by side sections containing cholera-bacilli and glanders-bacilli—I have taken the liberty of placing here such preparations, and you will be able to convince yourselves that it is very difficult to distinguish these

two kinds of bacteria from one another in these sections. The glanders-bacilli are, no doubt, generally straight, but they are by no means rigid bodies, but, on the contrary, are soft and yielding, and very often assume more or less curved forms in the tissue when lying between cells closely packed together, to which they must accommodate themselves. On the other hand, the curved form of the cholera-bacilli is not so well marked in sections. One can, therefore, very well compare the two forms of bacteria with one another, as their size is very similar; and even now I would not hesitate a moment, if I wished to convey quickly a general idea of these bacteria to any one who had not yet seen the cholera-bacilli, but who knew the bacilli of glanders, to select, as a comparative object, sections containing glanders-bacilli; and it was only of the appearance in sections which I spoke when I made my returns from Egypt. With what astounding ignorance of bacteriology this matter has been treated, will be seen from this drawing, which was published by Lankester, in *Nature*, of December 25th, 1884. In this question, Lankester takes up the same standpoint as Klein, and says that it is a horrible error on my part to compare glanders-bacilli with comma-bacilli. In order to illustrate this, he figures here a glanders-bacillus, and side by side a hay-bacillus and a tubercle-bacillus. As you see, these different kinds of bacilli are shown as of about the same size. In fact, the glanders-bacillus seems to be longer and thicker than the hay-bacillus. The differences in size are, however, in reality very considerable, the glanders-bacilli and the bacilli of tubercle being both very much smaller than the hay-bacillus. Lankester has evidently never in his life seen a glanders-bacillus; nevertheless, he considers himself justified in giving his judgment as to the appearance of the glanders-bacilli and their resemblance to cholera-bacilli, which he had certainly at that time never seen in sections.

A further objection of Klein's, which, however, is of very small consequence, but which characterises the style of his controversy, is that the cholera-bacteria are not bacilli, but spirilla. I had stated in my communications that, on account of their curved form, they might take an intermediate place between bacilli and spirilla; as I am of opinion that the differences between bacilli and spirilla are not sufficiently made out, and I therefore consider it precipitate to make at this time a strict separation between them. However, it is all the same to me whether the cholera-bacteria are called bacilli or spirilla, so long as one pays attention to and lays stress on their other characteristics; the name is, in this case, of the least importance. I can, however, here show you that a capable botanist, namely, De Bary, still calls curved rod-shaped bacteria bacilli. You will find here, in his latest work on the morphology of fungi, a picture of a form of bacteria called by him bacillus megatherium. These bacilli are distinctly curved, and look like large comma-bacilli. Thus I do not think that I have made any mistake in designating the cholera-bacteria for the present as bacilli.

Further, Klein states that he has found the cholera-bacteria, not only in the deposits on the teeth of healthy men, but also in other diseases, more especially in persons who had suffered from diarrhœa; for example, in phthisical and dysenteric cases. He further asserts that they are present in cholera in only quite small numbers, and that the earlier the *post mortem* examination is made, in so much the smaller quantity are they found, large numbers being only present in bodies where the necropsy has been delayed. In this point, Klein stands in opposition, not only to me, but to all other investigators, who have found the comma-bacilli in numbers a very short time after death.

He further ascribes to me the assertion that the comma-bacilli are killed by weak acids—a statement which is quite erroneous. I have not, in my former communications, spoken of the death of the comma-bacilli, but, as you will remember, only of the hindrance to their development caused by different substances, and, among others, of the absence of growth in gelatine of an acid reaction.

In India, Klein states that he found comma-bacilli in the same tank in which we found them, but at a time when those who lived in the neighbourhood of the tank were free from cholera. No one knows what Klein found; whether they were the true cholera-bacteria, or, more probably, the same bacteria which he found in the evacuations of phthisical patients, or in the saliva of healthy persons, and which he held to be cholera-bacteria. Klein's report has also in England been subjected to a very thorough and able criticism by Dr. Watson Cheyne. Klein was compelled, in consequence of the unanswerable objections made by Dr. Watson Cheyne, to withdraw most of his assertions, or almost all which are of importance, and thus to record, in a drastic manner, the untrustworthiness of his former statements; more especially, he had to admit that the cholera-bacilli differed from those occurring in phthisis, in dysentery, and in the mouth; and he has further admitted that he has found true cholera-bacilli in all cases of cholera. Thus he finally comes, under compulsion however, exactly to the same result as I did—namely, that the cholera-bacteria are a specific variety, and seen exclusively in cholera. Klein will not be able to escape from all the conclusions which follow from these facts, unless he again involve himself in contradictions.

I come, now, to the investigations of Emmerich. Emmerich has found in Naples a special form of bacteria in the blood, and partly also in the internal organs, of nine cholera-cadavers, and of one patient suffering from cholera. He has also seen the true cholera-bacilli, but, as he says, not in all cases; and he, therefore, looks on the bacteria found by him as the true cholera-bacteria. Emmerich's investigations, and more especially the methods which he employed, have been subjected by Flügge to a criticism which I completely agree with; I consider it able, and altogether just. I should like to point out quite shortly that Emmerich's assertion, as to the constant presence of bacteria in the blood of cholera-patients, is directly opposed to the results of all other investigators, who have investigated cholera-blood and cholera-organs. The most important objection which must be made to his results is, that he has employed faulty methods. He introduced a certain quantity of blood, and of material from the organs, into test-tubes containing nutritive gelatine; and then took these tubes to Munich, and there, for the first time, made his pure cultivations. This reminds me of the method employed formerly by Hallier in his investigations on cholera. In the year 1866, if I am not mistaken, a flask containing cholera-dejecta was sent to him; he corked it, and let it stand till next spring, when he investigated it with all possible precautions. Emmerich's error is not so great, but still it is essentially the same. I have lately, by chance, had the opportunity of becoming acquainted with the investigations made by Professor Ceci during the cholera-epidemic in Genoa. He had followed exactly the same method as Emmerich; he had taken blood from cholera-cadavers, and also small portions from the spleen, kidneys, and other organs, and introduced them into the gelatine with a previously heated platinum wire. Ceci had, however, only employed perfectly fresh bodies, and had worked with the greatest care. When he took portions from the liver, for example, he made a cut through the organ at right angles to the surface; then with a fresh knife (likewise previously heated) he made another section at right angles to the surface of the former, and then from this second surface took portions for introduction into the gelatine. In this way, as he assured me, he had made more than 100 experiments. When he was here, he was able to show me about fifty such test-tubes, which had been covered with paraffin to prevent evaporation. In not one of them had growth occurred from the blood or from the pieces of the organs. This result thus is also directly opposed to that obtained by Emmerich. Emmerich has further stated that he has been able to produce, with his bacteria, effects on animals which completely corresponded to Asiatic cholera; he injected his bacteria subcutaneously in large quantities; his animals died after some time, and the intestine showed exactly the appearances of a cholera-intestine. If this is the case, as I do not doubt that it is, this would not in the least show (apart altogether from all other objections, and in spite of the faulty methods by which his bacteria were obtained) that these bacteria had anything to do with cholera. As has been long known, one can, with various bacteria, produce choleraic symptoms in animals. I have already, some years ago, experimented with bacteria, by means of which a form of septicæmia was produced in rabbits. I had to inject a considerable quantity subcutaneously, in order to kill the animals, and then I found peculiar appearances in the intestine which completely corresponded to those described by Emmerich.

The symptoms described by Emmerich can be produced in guinea-pigs, in a very characteristic manner, by a pathogenic form of bacteria isolated by Professor Brieger from human fæces. I will to-morrow inject some animals subcutaneously with these bacteria, in order that you may convince yourselves of their peculiar effect.

These are the most important objections which have been made against the comma-bacilli. I believe that I have shown you that they are unfounded. On the other hand, my statements have received much confirmation.

Very many have busied themselves in investigating saliva and tartar, the intestinal evacuations of the healthy and sick, putrid fluids and other mixtures of bacteria; but all trustworthy observers are unanimous in stating, that they have not been able to find any organism which was identical with the cholera bacteria. In the Sanitary Institute, more than 150 medical men have been instructed in the methods of demonstrating cholera-bacteria during the cholera-courses, and many hundred examinations of saliva, fæces, etc., were made

but, with the exception of a case to be mentioned later, we have never met with the characteristic cholera-bacteria. At the same time, all who were sufficiently acquainted with bacterial work, have convinced themselves that the cholera-bacteria can be easily distinguished from all other bacteria, and that their characteristic properties justify us in regarding them as a specific independent variety.

Further, the spread of cholera during the last year in Europe, has afforded opportunities to a number of physicians to test my statements by the investigation of cholera-patients and cholera-cadavers, and to confirm them almost without exception.

The first thorough investigations were made by Nicati and Rietsch, to whom I showed the methods of investigation during my stay in Marseilles. They have examined a large number of cases (if I am not mistaken, more than thirty) for the presence of comma-bacilli, and have found them in all without exception. Almost at the same time, Van Ermengem studied the epidemic in Marseilles, and likewise found the comma-bacilli in all cases. Baber, Watson Cheyne, and Pfeiffer give the same report from their observations in Paris.

In Italy, the comma-bacilli have been found by Ceci, Escherich, Armanni, and Fede. Lately, Schottelius has published some facts with regard to positive results in Turin. Ceci's communications as to his investigations, made in the first instance in conjunction with Klebs, are in so far of interest, as both these investigators at first reported, that they had not found the comma-bacilli in all cases, and that they had also been found in other diseases, for example, by Klebs in a case of pneumonia. Later, however, Ceci, who had worked with insufficient objectives, procured a Zeiss's microscope with an oil lens, and with this subsequently demonstrated the presence of the comma-bacilli in his preparations and cultivations, so that he is now, as he himself told me, convinced of their constant presence in cholera. I received from Klebs a preparation from the above-mentioned case of pneumonia, as well as a portion of the evacuations in question, but I have not succeeded in finding any cholera-bacteria in them. I do not believe that Klebs still insists on identifying the bacteria in question with cholera-bacteria, on account of their very doubtful morphological resemblance alone, as all cultivation-experiments yielded negative results.

I can also add here some facts with regard to further investigations which I have myself made. When I left Calcutta, I gave the remainder of my cover-glasses to Dr. Dissent, physician at the Sealdah Hospital, with the request that he would make preparations of the intestinal contents from cases of cholera. Dr. Dissent, whom I have to thank for much help in procuring material for investigation during my stay in Calcutta, and for very valuable information with regard to cholera in Bengal, has also carried out this request with the greatest willingness, and has, in the course of half a year, sent me cover-glasses from more than eighty cholera-cases, from every case about five cover-glasses. Of these, only seventy-nine could be used, as some cover-glasses were spoilt during the transport. Of these seventy-nine cases, which were examined here by Drs. Weisser and Frank, seventy-six came from *post mortem* examinations, and three from dejecta of patients. Comma-bacilli were absent in only five of these cases, and in these five the preparations consisted of numerous red blood-corpuscles, whence it may be concluded that they came from cases at a late stage of the disease. In thirty-seven cases, the bacilli were present in moderate numbers, but quite sufficient to enable one to demonstrate them with certainty. Of these, thirty contained blood; in three it was doubtful whether blood was present or not, and in four there was no blood. Twenty-seven of the preparations contained very many bacilli, and in ten cases there was almost a pure cultivation. The latter again confirmed my former statements, that the more rapid the case the more numerous and the purer were the comma-bacilli.

I have, further, something to show you which has a certain amount of interest: it is a number of cholera-cultivations from different sources. I received, from almost all those who have found the cholera-bacteria during the recent epidemic, specimens of their cultivations, and it seemed to me of value to test these to see if they corresponded in all their properties. I have for this purpose collected them, and you see here cultivations from Marseilles, three different ones from Paris, and two from Italy. Along with them, you see one brought by me from Toulon. No difference can be observed in these cultivations, and they correspond exactly when investigated with high powers, and their pathogenic properties are identical.

All these facts, then, confirm fully the statement made by me at our former conference, that the cholera bacteria occur only in cholera. Nothing of importance has been added by these recent investigations to what I have formerly communicated to you.

[*To be continued.*]

ON A NEW PROCEDURE FOR THE REMOVAL OF SMALL CALCULI FROM THE BLADDER, IN MALE CHILDREN.

By THOMAS ANNANDALE, F.R.S.E.,
Regius Professor of Clinical Surgery in the University of Edinburgh.

Although lateral lithotomy is a most successful operation in male children, it must, I think, be acknowledged that in the case of small calculi, this operation is a severe one, considering the small size of the irritating body to be removed. Erichsen (*Science and Art of Surgery*, vol. i, page 51, 8th edition) remarks, "Very many boys are cut for stone every year, and recover; but I scarcely recollect to have met with a middle-aged adult who had been operated on in childhood."

It is also well known to surgeons that lateral lithotomy in children has some special risks connected with the operation itself, and depending upon the tender nature of the urethral structures and position of the bladder. It is quite possible to seize and crush a stone in the young male bladder by means of a small lithotrite, but it is not so certain to insure the complete removal of the fragments after the proceeding as evacuating catheters are still made too large to pass along the young male urethra. I believe that this difficulty may be overcome, and that in certain cases lithotrity may be thoroughly and successfully carried out even in children.

Sir H. Thompson (*Practical Lithotomy and Lithotrity*, page 229), in advocating lateral lithotomy as the rule in young males, remarks, "The exceptional cases are those in which the stone is only too large to pass by the urethra, and therefore small. For these, there is no occasion to perform lithotomy. Opposed as I am to lithotrity in children as a rule, for reasons already named, I nevertheless believe that, when the stone is so small as to be easily pulverised at a single crushing by a slender lithotrite, it is the simplest and best method of proceeding, and that when the stone can be well and easily crushed in two sittings it may be admissible." Unless the fragments of the crushed stone can be completely evacuated at the time of the operation, I am of opinion that lithotomy is still preferable to lithotrity in children, even in cases where the stone is small.

In the meantime it has been my wish to discover some method which would be more simple, and cause less injury to the urethral and vesical structures in the case of male children, than the ordinary operation of lateral lithotomy, more particularly when the stone to be removed is limited in size.

In the following case, I practised what I believe to be a new procedure, and have hopes that it may prove to be an useful addition to our means of treatment in connection with this department of surgery.

Case.—A boy, aged 4½, was sent to me by my friend Dr. Hunter, of Linlithgow, on account of symptoms of stone in the bladder which had existed for about a year. The usual symptoms were present and well marked, and, upon sounding him, I detected a small and light stone.

On December 10th, I put him under the influence of chloroform, and dilated his urethra by passing Nos. 6, 7, 8 and 9 silver catheters in succession. The first three passed readily, but No. 9 was slightly grasped in its passage along the urethra. Before removing this last catheter, four ounces of antiseptic fluid (corrosive sublimate 1 to 4000) were injected through it into the bladder. This catheter being withdrawn, a small lithotrite, having a diameter about equal to a No. 8 bougie, was introduced along the urethra into the bladder. After a little careful manipulation, the stone was seized, and fixed between the blades of the instrument. It was then found that, by depressing the handle of the lithotrite, its vesical extremity, together with the stone, could be readily felt through the abdominal wall immediately above the pubes. The lithotrite being held in this position, a small incision, an inch in length, was made in the middle line of the abdominal wall over the pubes, and for a short distance above it. The various tissues were divided, until the wall of the bladder was exposed at the point against which the blades of the lithotrite and the enclosed stone were pressing. A little further depression of the handle of the lithotrite caused the extremity of its blades covered by the stretched wall of the bladder to protrude through the wound in the abdominal wall; and a small incision having been made through the wall of the bladder by cutting upon the extremity of the lithotrite, the blades of the lithotrite, together with the stone, were pushed through the wound. The stone was here extracted from between the blades of the lithotrite; and the open extremity of a No. 7 India-rubber catheter was seized, and drawn into the bladder and along the urethra as the lithotrite was removed, thus leaving a drain for the urine to escape from the bladder.

The wound in the abdominal wall was closed by means of two horse-hair stitches, and a drainage-tube introduced into it so as to aid the escape of any urine which might flow from the bladder-wound. Irrigation with corrosive sublimate solution (1 to 2000) was employed during the operation, and the wound and parts around were covered with a dressing of corrosive sublimate wool. The stone removed was about the size of a horse-bean, of uric acid formation. For the first thirty-six hours after the operation, the urine was slightly tinged with blood, passed principally by the abdominal wound; but, after this, it flowed through the catheter, which had been secured in the bladder.

Forty-eight hours after the operation both drainage-tube and catheter were removed, the patient not having had the slightest bad symptoms. For twelve hours after the removal of the drainage-tube and catheter, the urine came by the abdominal wound; but, after this, it passed almost entirely by the urethra, and the patient was running about the ward, perfectly well, on the tenth day after the operation.

It may be said that this is simply a suprapubic lithotomy, and so it is, but I maintain that it is a much less serious proceeding than the ordinary suprapubic operation, as the bladder is scarcely disturbed, and the wound made in it is very limited. Its advantages over lateral lithotomy are:—1. That the urethra, prostate, and neck of the bladder are left uninjured; 2. That it is a much more simple proceeding, and does away with the principal risks which have occasionally been encountered in performing the operation on children.

I confess that it requires a little manipulative dexterity to seize a small stone in a male child's bladder; but no greater dexterity is required in doing so than what every surgeon, professing to be an operating surgeon, should possess.

It is possible that in certain cases the same principle might be carried out, by bringing the stone to the neck of the bladder, opening the prostatic part of the urethra, and thrusting the blades of the lithotrite and contained stone into the perineal wound; but in the case of children there can, I think, be no doubt that the suprapubic method is preferable.

PARTIAL DISLOCATION OF THE HEAD OF THE RADIUS PECULIAR TO CHILDREN.

By J. HUTCHINSON, Jun., F.R.C.S.,
Surgical Registrar to the London Hospital.

In the British Medical Journal of December 5th, 1885, is a short paper bearing the above title by Mr. S. H. Lindeman, in which the true nature of an obscure and frequent accident in early life is well described. Mr. Lindeman has done good service in calling attention to it, and I should hesitate before again referring to the subject merely to establish a priority of publication. But there are some points in the article which might with advantage be amended. In the *Annals of Surgery* for August, I gave a full account of the lesion, with illustrations, having been led, a year ago, to ascertain its true nature (by experiments on the dead subject), owing to the lack of a satisfactory explanation in any previous work.

The best way of regarding this accident is to remember that the orbicular ligament, which in adults strongly grasps the bony head of the radius, in young children has a weaker hold on the same part, which with them is cartilaginous. The nucleus for the head of the radius does not appear until the age of 5, and this limits pretty accurately the time up to which the lesion is commonly met with. In fact, I could not produce it upon the bodies of children much older than this. During traction on the hand, combined with supination, as, for instance, when the child is dragged along or lifted by the arm, the ligament is very liable to slip up. Its attachment to the neck of the radius (only a thin membrane, which I have ventured to name the sub-orbicular) may be at the same time torn through, though this probably does not happen in a large proportion of the cases. Thus the bone slips a very little downwards, and a very little forwards. Mr. Lindeman thinks it may reach the depression above the capitellum; this would, of course, be accompanied by marked deformity, which is, on the other hand, conspicuous by its absence. If it were not so, the true nature of the accident would not have been so long overlooked, and the lesion ascribed to a displacement of the fibro-cartilage at the wrist, etc. (see Tillaux's *Anatomie Topographique*, p. 549, and also M. Goyrand's work). Mr. Lucy has observed and kept notes for me of a number of cases at the London Hospital, and we can unhesitatingly affirm that the deformity at the elbow would be overlooked by anyone, even if acquainted with the real nature of the lesion. In fact, although a true dislocation, it is rather one of the ligament than of the bone. It is perhaps possible, by "strongly supinating and pressing on the head of the radius," to reduce the displacement; but, in my paper, an easier and a surer way is described.

Gently flex to a right angle, or a little beyond that; at the same time, gently but fully pronate the forearm. By this method, if the case be one of the class described, the ligament will infallibly descend to its right place, again grasping the head of the radius. The descent is known by the audible click (Mr. Lindeman's "thud" hardly expresses it) which then occurs, and by the relief of the symptoms, although the child is sometimes too young to reveal the latter; but the surgeon may feel sure, on hearing the click, that the displacement is reduced. Mr. Lindeman says that it is very liable to recur; I think this is due to his method (supination and pressure) not always effecting complete reduction. We have, with reference to this point, charged the mothers to bring the child back if the symptoms recurred, and in no case have they done so. No splint is absolutely necessary, although it is certainly well to keep the part at rest for a time.

The reason why pronation and flexion succeed so readily, is probably to be found in the shape of the head of the radius. That part of it opposed to the curve of the orbicular ligament, in full supination, has a rectangular edge, whilst in pronation it is rounded off and less deep; hence the ligament easily slips over the latter edge when brought up to it by flexion of the forearm.

The frequency of this accident may be judged from the fact that, at the London Hospital, two perfectly typical cases have often been seen on the same day. Whereas formerly they were liable to cause doubt and were unsatisfactory to deal with, their nature and the method of reduction are now fully established. A few examples may be quoted from Mr. Lucy's and my own notes.

1. Sarah M., aged 2½, was admitted with left forearm semiprone and motionless, crying with pain on passive movement. The mother had pulled the child up by the hand, the forearm being semipronated and fully extended, an hour before. On full pronation and flexion a click was felt, and the symptoms disappeared. There was certainly no lesion at the wrist.

2. John B., aged 2 years, had been dragged from the floor by the hand. The child, a fat heavy one, cried, "let its arm hang and couldn't hold anything." The forearm was extended and semipronated; full flexion and pronation produced a click; the child ceased crying, and easy movements of the radius followed.



Dissection of Sprain of Elbow (produced *post mortem*), showing the orbicular ligament displaced upwards, the head of radius forwards and downwards.

3. May F., aged 1 year, was admitted with her forearm bent and semipronated. One movement of flexion and pronation caused a click to be heard, and the child actively resisted any further manipulation.

4. A young child was diagnosed to have "an injury to the head of the radius," and its arm was bandaged to the side. During the next two or three days, she continually complained of pain in the

elbow. On her second visit, I fully flexed and pronated the forearm; the usual click was heard, and after that the pain and resistance on movement disappeared.

This accident may occur to any young child, and is probably, like fracture of the clavicle, one of the commonest lesions of the upper extremity in early life. Its true nature had almost been detected by Mr. C. Heath, Mr. Southam, and Professor Hamilton, but (so far as I can ascertain) not fully described until the publication of my paper.

REMARKS ON A CASE OF MANIA WITH PHTHISIS: PULMONARY FISTULA: DEATH: NECROPSY.

Read before the Dorset and West Hants Branch.

By P. W. MACDONALD, M.B. and C.M. Aberd.,
Senior Assistant Medical Officer to the Dorset County Asylum.

In bringing this case before the meeting, I have been less influenced by the wish to say anything that is new than to place on record a very rare and complicated case.

L. S. was first admitted into the Dorset County Asylum in May, 1872. He was a plasterer by trade, single, and at the time of his death aged 35. His father and mother are living, and in the enjoyment of good health. He had six brothers, two of whom died in infancy, and one at the age of 18, from heart-disease; and five sisters, one of whom died at 20, from heart-disease. Those now living—namely, three brothers and four sisters—are strong and healthy.

On his admission in 1872, he was suffering from mental depression, with delusions. In conversation he was irrational, and in temperament irascible. He slowly improved, and was discharged recovered in December, 1873.

After a lapse of five years, he was admitted for the second time in October, 1878. The mental symptoms had returned in an aggravated form, and his bodily health was much impaired. For many months there was no improvement. In July, 1879, he was reported to be morose and self-absorbed, but, on the whole, more rational and intelligent. At times, he was liable to sudden outbreaks of maniacal excitement, when he was dangerous to himself and others.

On February 21st, 1881, he had a severe attack of hæmoptysis, bringing up nearly a pint and a half of blood and phlegm. On a physical examination of the chest, there was found advanced consolidation of the left lung, with a vomica at the apex. *Râles*, coarse crepitation, and pectoriloquy were heard. During the next week, he had several slight attacks of hæmoptysis; but, on March 18th, it was reported that there had been no return of the hæmoptysis for more than two weeks; and, though very weak, he was mentally more rational, and gaining in strength.

He was treated with cod-liver oil and the time-honoured expectorant mixtures. He slowly gained in strength; and, as he improved physically, his mind seemed to gain in tone and power. About this time, his family made a strong request to have him home, fearing he might sink from phthisis; and on May 17th he was discharged to their care, as mentally relieved.

His relations nursed him for over eleven months, when, as there was no improvement in his general health, and he had become maniacal and unmanageable, he was readmitted (April, 1882). On admission, it was found that his mind had deteriorated, and that he had lost much in strength. Mentally, he was irrational, apathetic, and delusional; and he was suffering from a severe cough, with profuse expectoration. The same treatment was adopted as when he was previously in the asylum; and at the end of six months there was such a decided improvement that, during the summer and autumn, he was employed on the farm.

During the year 1883, there was absolutely no change.

In April, 1884, the lung-disease showed signs of activity. The cough returned, and there was much expectoration. His lungs were, from time to time, examined; and I think I am right in saying that, at one time or other, every known sign and symptom of phthisis—not to mention the various indescribable symptoms, auscultatory and otherwise—were met with, and noted. He was feverish, thin, and pale; and the mental symptoms were aggravated. This might be termed the beginning of the end; for he did not again rally, mentally or physically.

In October, 1884, a very rare complication happened. On the 10th of that month, a small abscess was observed to be forming in the fifth costal interspace, on the left side, just beyond the cartilages of the ribs. The abscess increased in size, and on the 21st it spontaneously opened, when over a pint and a half of very offensive grumous-looking liquid ran out. There was free and direct communication with the lung; for, when the patient coughed, air escaped by the newly formed pulmonary fistula. After this occurrence, he seemed much relieved. The cough was less troublesome, and there was not again any expectoration.

On the 22nd, his pulse was 74, weak and irregular; temperature (evening) 99.6°. His appetite was good, and his bowels regular. The wound was dressed antiseptically.

The cough returned at times, but no expectoration. Temperature varied, but at no time rose over 101°. The fistula continued to discharge daily large quantities of purulent material, which varied in colour and consistence. The offensiveness increased, and the colour changed from a dirty brown to a greenish brown, and towards the end was of a gangrenous nature.

On January 6th, there was much swelling and œdema of the lower extremities, penis, and scrotum. Like all costal abscesses, the discharge burrowed between the ribs and the skin, and caused two small openings at the lower edge of the sixth rib. His appetite was good at the last, and there was no intestinal derangement. He died on January 12th.

Necropsy, thirty-six hours after death.—The dura mater was normal. There were opacity and thickening of the pia arachnoid. The occipital lobes were small. The convolutions were regular, and well formed. The grey cortex was reddened, and showed punctiform injection. The white central medulla was soft. The basal ganglia were normal. The heart was normal; its valves were closed. The right lung was free from adhesions. In the anterior edge of the upper lobe, there were several small caseous nodules, otherwise the lung was healthy. On proceeding to remove the left lung, there was none to be found. The cavity, thus formed, was three-fourths full of grumous-looking material. By means of a cup and sponge, the liquefied lung was removed, and it seemed to consist of degenerating lung-tissue, caseous masses of various sizes, pus, fat-cells, etc.

After removing the purulent collection, not by any means an agreeable proceeding, nowhere could any of the lung be found, with the exception of a small collapsed piece behind the root of the lung, or, I should say, what remained of the root of the lung. The pleural space was obliterated, and the adhering pleural layers could not be removed from the chest-wall except in pieces. The vessels and bronchi forming the root of the lung were all plugged, the former by well formed fibrinated clots, which adhered to the epithelioid lining of the vessels, and the latter by clots of a fibrous nature. The bronchi were quite impervious to air.

In the fifth interspace, at a spot three and a half inches from the centre of the sternum, was a small opening that would admit an ordinary sized quill. This was the internal opening of the fistulous communication with the lung. The external opening was at the upper edge of the sixth rib, the course of the fistula being downward and backward. Close to the internal opening, the free surface of the thickened pleural layer was dark and granular. The skin around the external opening was hyperæmic, and had given way in one or two places, exposing the sixth rib, which was denuded of periosteum. The liver was large; its edges were rounded; the organ generally was soft, pale, and fatty. The kidneys were large, and in both the cortex was paler than natural. There were fibroid changes in the spleen. The intestines were normal; there was no ulceration. The pelvic organs were normal.

Remarks.—I have endeavoured to curtail the clinical notes as much as possible, thinking that more might be gained from a general review of the symptoms and state of parts.

Though this patient had suffered from mental aberration for many years before symptoms of pulmonary disease were known to be present, I am, nevertheless, inclined to class it as a case of mania associated with phthisis. The history of the case bears out this view.

From the first, he was irritable, excitable, and suspicious; and, as the case advanced, symptoms of dementia predominated. In this case, as in most others where mental derangement co-exists with lung-mischief, the insanity commenced insidiously. His relations say that the insanity was caused by a severe beating about the head; but after death I failed to find a single sign, macroscopically or microscopically, to favour this view; and I do not think that there was any connection, as to cause and effect, between the beating and the insanity.

Dr. Clouston says that phthisis is entirely latent in between one-third to one-fourth of all the cases among the insane; and, in almost all the others, it is latent for a considerable time.

On inquiry, we ascertained that the cause of death, in the case of the brother and sister who died, was phthisis, and not heart-disease. We also learned that there was a maternal history of lung-disease.

Having, then, obtained reliable evidence of a strong hereditary predisposition to pulmonary disease, and bearing in mind the latency of

phthisis among the insane, also the insidious nature of the mental symptoms, there need not be much hesitation in classing this case as one of Phthisical Mania.

Taken as a whole, the case is of more interest and practical importance to the surgeon than to either the alienist or the physician. But, before drawing your attention to the most important point of the case, I wish to allude to the pathological conditions met with at the root of the lung. I have said that, after the formation of the pulmonary fistula, the cough returned at intervals, but that there was not again any expectoration. Like many more diagnostic doubts, this sudden cessation of all expectoration remained to be explained on the *post mortem* table.

After ascertaining that the bronchi were rendered impervious, there was no difficulty in accounting for the absence of expectoration; but why this should have taken place after, and not before, the spontaneous opening of the abscess, I hesitate to express an opinion. It may have been a mere coincidence, and the slowly forming clots may have been only completed at or about the time when the abscess opened.

The sealing of the pulmonary vessels was even more remarkable. In attempting to force a stream of water through the pulmonary artery after death, I could not do so without injury to the vessel, so perfect was the plugging. The pulmonary veins and bronchial arteries were also hermetically closed, and the vessels must have been in this condition for some time. It seems hard to believe that there was no hæmorrhage during the liquefaction of the lung; but, beyond the hæmoptysis in February, 1881 (which, no doubt, resulted from a vessel giving way in a small cavity), there was at no time any hæmorrhage. I may here state that hæmorrhage is of rare occurrence in cases of phthisis among the insane.

So far as I know, this case stands unique as regards the condition of the larger bronchi and pulmonary vessels, and that there was absolutely no lung. The real interest of the case centres in the pulmonary fistula, as being one more instance in support of the operative treatment of affections of the lung. The fistula was in the fifth interspace, and occurred at what Professor Marshall terms the "weak spot." For the anatomical relations of this spot, I refer you to Professor Marshall's lectures published in the *Lancet* for 1882. The fact that in this instance the opening was spontaneous, and not by operation, must not be overlooked; but the principle is the same.

Mr. Norman Porritt, in his admirable essay on *Intrathoracic Effusion* (page 169), says: "Ancient writers assumed that, when the pleural cavity was found full of pus, and the lung diminished in bulk and functionally inactive, the pulmonary tissue had been liquefied." The present case tends to support this theory, though Mr. Porritt cites several instances to show the incorrectness of the opinion held by ancient writers. I exclude any consideration of purulent collections in the pleural cavity; and I know that I shall be challenging criticism by saying that it is a point quite open to question whether a percentage of the so-called cases of empyema are not actual instances of pulmonary disease—that is, purulent collections in the lung-tissue.

At a meeting of the Royal Medical and Chirurgical Society in May 1884, two important papers were contributed on the surgical treatment of affections of the lung. Dr. Cayley related a case of pyæmic pulmonary gangrene, in which Mr. Pearce Gould punctured the lung with a large-sized trocar and cannula, and introduced through the latter a drainage-tube. Pus and a sequestrum of gangrenous lung were discharged through the tube. The child rapidly improved, and was discharged recovered. At the same meeting, Mr. Walsham related the case of a patient who had a phthisical cavity at the left apex; a small sinus appeared above the left nipple. He followed the sinus upwards to the second intercostal space, laid open the cavity, and washed it out with a solution of carbolic acid. A slow but great improvement took place. Other cases were mentioned; and the general opinion was, that single basic cavities, abscesses, and cases of pulmonary gangrene might, with safety and advantage to the patient, be opened and drained; but that, in the case of tubercular cavities, experience did not warrant surgical interference.

To return to the case under consideration, the first question we have to ask ourselves is, Would surgical interference have been advisable? I was much impressed at the relief afforded by the opening of the abscess, and after drainage of the pulmonary cavity; and, but for this happy occurrence, the fatal end must have come much earlier.

Had we had to deal with a subject in the full enjoyment of mental equilibrium, instead of one in the last stages of mental infirmity, I think a counter-opening and complete drainage of the pulmonary cavity would have been justifiable; but, as it happened, surgical interference, beyond the spontaneous fistula, was out of the question. Were a similar state of parts met with in a favourable subject, experience holds forth the best hopes of operative treatment. In more than one instance, complete recovery has followed the drainage of a pulmonary cavity; in others, temporary relief has been afforded; and the case I have just related adds one more to the short list.

There are few data to guide us, "but the one great fact in justification of surgical interference is the impotence of all known medical means of relief in such cases." And when the desperate nature of the cases, if left to themselves, is fully considered, there "would seem to be a still greater reason for wishing to convert a putrid cavity discharging its foul contents through the mouth, into a thoracic fistula, the secretion from which can be easily kept sweet." This alone "relieves the patient's distress, even when it fails to prolong life."

So far, then, experience warrants any such attempt to alleviate suffering and prolong life; and I would ask, Can we, in the majority of instances, hope for more, when fighting against the destruction of a vital organ?

VIOLINIST'S CRAMP TREATED SUCCESSFULLY BY ELECTRICITY.

Read before the Manchester Central Medical Society.

By ADOLPHE WAHLTUCH, M.D., L.R.C.P.Lond.,
Honorary Physician to the Hulme Dispensary, Manchester.

Miss M. J., aged 19, consulted me in July, 1885. She has been learning to play on the violin since she was twelve years old; and, during the last twelve months, whilst practising a short time, she felt obliged to stop, on account of a painful cramp in the upper left arm and right wrist. On examination, I noticed that she could not raise her left arm as high as she did the right one. In getting the violin in the proper position, the cramp and pain manifested themselves in the left deltoid, biceps, and pectoralis muscles; the right hand holding the bow soon felt unable to do so, owing to a weakness in the wrist. In every other respect, she enjoyed very good health. My treatment consisted in applying, three times a week, a continuous current of galvanism to each of the affected muscles, separately, for five to ten minutes at a time, using from five to fifteen Leclanché cells. To th right wrist I at first used the faradaic, and, later on, the continuous current. In all, I made nine applications within three weeks, when all unpleasant symptoms ceased. I saw her three months later, when she assured me that she could practise now for several hours daily without experiencing any inconvenience whatever.

In looking up medical literature, I was unable to meet with any record of cases of "violinist's cramp." This affection, though rare, yet belongs to a group of spasmodic diseases, amongst which the most familiar is that of "writer's cramp." Benedikt mentions a case of "knitter's cramp," and "tailor's cramp;" Watteville, "telegrapher's cramp;" Dupuytren, "coachman's cramp;" Henoch, "nailsmith's cramp;" Basedow, "milkmaid's cramp;" Clemens, "shoemaker's cramp;" Kunze, "typesetter's cramp;" and various authors, "pianist's," "painter's," "seamstress's'," and "writer's cramps." No doubt, violinist's cramp is an analogous condition, having the same general characteristic—namely, the recurrence of spasm or pain in a special group of muscles, when called upon to execute a series of combined special movements. It is a disturbance of co-ordination, caused by over-exertion. The treatment generally consists in allowing temporary rest to the muscles implicated, and also rational and harmonious local gymnastics. But the most effectual results are obtained by the use of electricity. In the case mentioned by me, violin-practice was not stopped altogether during the treatment; my patient was allowed to practise for a very short time every day, and advised to play tennis, to write, to paint, and generally to use her hands in a variety of occupations.

Professor Axel Jäderholm died on October 9th at the age of forty-eight. He was born on April 9th, 1837, and entered as a student at Upsala in 1855. After his candidate's examination, Jäderholm came to Stockholm in 1862, where he continued his microscopic studies, and was appointed assistant in pathological anatomy. He took his licence in 1867, and was for some time assistant-physician to the medical clinic at the Royal Seraphim Hospital. Here he pursued his pathological and anatomical studies. The professor's chair at the Carolina Institute becoming vacant, Jäderholm was appointed to it, and had a favourable opportunity of bringing his scientific knowledge into use. In 1872, he was made chief editor of *Hygiea*.

Vaccination.—Mr. M. Q. O'Callaghan, of Brailsford, Derby, has obtained a Government grant for efficient vaccination in the Longford district of the Ashbourne Union.

SURGICAL MEMORANDA.

PARTIAL DISLOCATION OF THE HEAD OF THE RADIUS PECULIAR TO CHILDREN.

MR. LINDEMAN'S interesting paper on the above subject in the JOURNAL of December 5th recalls to my memory a similar case in my own experience. While acting as *locum tenens*, some years ago, at Great Wakering, near Southend, I was summoned, in all haste, to visit a child who, I was informed, had sustained a very sudden injury. The patient was a boy about four years and a half old. His nurse had suddenly lifted him from the ground by his right hand, in that imprudent manner to which Mr. Lindeman refers. He at once screamed out with pain, and could not bend his arm beyond a right angle. The limb hung down uselessly, midway between pronation and supination. I noticed unusual prominence at the outer aspect of the elbow-joint. On further examination I found that I could, while the hand was pronated, flex the arm to a right angle, but that I could not exceed this amount of flexion without encountering great resistance, and causing excessive pain. I, however, accomplished reduction by holding the child's hand gently but firmly in my own left hand, at the same time using the thumb of my right to press on the head of the radius. I then strongly supinated the disabled limb, and before complete supination had taken place I distinctly heard a well-marked "thud," and the head of the radius then slipped back behind the annular ligament, in complete accord with Mr. Lindeman's experience. In further conformity with his description of this class of cases, the child in question, a few minutes after this successful reduction, was able to pronate and supinate his hand with ease, and, further, to grasp my hand as I held his, an action on his part which would have been impossible to him before I had reduced the dislocation. With due regard to precaution, I placed the arm in an ordinary rectangular splint; but the child, as far as I knew, never had any renewal of this injury.

It is always a grateful task to bear testimony to the exactitude and correctness of the observations of another, and I venture to submit to the reader that no fairer example in every detail could have been furnished by Mr. Lindeman himself in support of his description. The method of reduction which I adopted, and should resort to again in any such similar instance, and the splint which I applied, were precisely in accordance with Mr. Lindeman's practice. I am only too happy to be able to furnish such complete corroboration, as similar cases are rarely met with out of hospital practice; and this case I have described is the only one which has come under my observation in an extensive private practice. I have therefore selected it in preference to numerous similar hospital cases which I could describe.

A caution to those who have the charge of young children can be deduced from my own and Mr. Lindeman's united experience. To swing a child round by the hands in sport, to raise it by one arm, and leave it hanging bodily, while crossing a road, are but too frequent practices among nurses. We have most of us heard of some child injured by some such act of carelessness, even of a neck dislocated by the barbarian practice of "jumping" a child by the chin and ears in sport. Let nurses and others realise even to a slight extent the permanent injury such culpable thoughtlessness or idle trifling may bring on, and it may be safely predicted such injuries as Mr. Lindeman has so ably depicted will happily grow rarer and rarer.

J. BRINDLEY JAMES, M.R.C.S.Eng.

OBSTETRIC MEMORANDA.

DYSTOCIA FROM RIGOR MORTIS IN THE FŒTUS.

LIKE Mr. Jones (BRITISH MEDICAL JOURNAL, November 21st, 1885), I had never heard of rigor mortis in the fœtus, and could find no reference to it in books at hand, and could get no help from medical brethren to whom I mentioned the case.

On September 22nd last, I was called to attend Mrs. D., aged 32, in her first confinement. On examination, the os was found dilated to the size of a shilling, and presentation was natural. Abdominal examination failed to reveal fœtal life, but nothing was said to the woman. Eighteen hours from the time the first pain was felt, the os was fully dilated, and the membranes intact. The head descended fairly well, until the pelvic outlet was reached. Here it remained stationary for two hours, while the pains were severe and frequent. The forceps was now applied, and with some difficulty the head was extruded—twenty-three hours from the commencement of the labour. After the head was delivered, a peculiar feeling of resistance was experienced. All seemed right on examination; traction was therefore used, and the child, with some difficulty, was born.

The whole body of the fœtus was rigid, with the arms across the chest and the knees flexed. So great was the rigidity, that the first impression conveyed was that there was ankylosis of the various joints. More careful examination revealed the true state of matters. There was no desquamation of the cuticle. The child was well developed. Three hours after birth, the rigor mortis began to pass off rapidly.

At 1 P.M. on September 21st, while the woman was doing light kitchen work, a "sinking feeling" was experienced in the abdominal region, soon followed by complete blindness, lasting for at least ten minutes, during which time she retained her senses, but felt unable to move her limbs. Shortly after this, labour-pains were experienced. This history was confirmed by a neighbour who was in attendance. Neither the mother nor her attendant is of a nervous disposition.

THOMAS DAVIDSON, M.B.,
Thornhill, Dumfries-shire.

PREVENTION OF LACERATION OF THE PERINÆUM IN PRIMIPARÆ.

I FULLY agree with Dr. D. P. Gaussen as to the importance of manipulation in preventing laceration of the perinæum, both in primiparæ and in multiparæ. I would, however, take exception to his method. How does he manage, in the cases of narrow ostium vaginæ, which are those of which he speaks, to "pass the fore and middle fingers of the right hand" "behind the pubes during a pain," and pull the occiput down, having "grasped" it? And, again, he says: "During the few pains which immediately precede the birth of the head, the occiput should be grasped in the hollow of the right hand, and pulled down from behind the pubes." Would not a single blade of the forceps be much more likely?

While I consider something may be done with the finger and thumb on each side of the occiput to help it down from behind the pubes, and that the frontal bones and face can be partially kept up to prevent extension, a much more efficacious plan may be adopted for the prevention of laceration. This is, simply with two fingers (well lubricated) to stretch the posterior fourchette and perinæum backwards, until room is obtained for the head to pass. This is unnecessary when the ostium is large and the parts elastic; but, in the opposite conditions, a very great gain is obtained by the traction. Five or seven minutes' continuous steady pressure is sufficient, and it must be timed accordingly. I begin gently as soon as the head first touches the perinæum, or even before, as the stretching of the part usually induces strong expulsive pains. If there be a danger of the head being forced through too soon, it is well to direct the patient to cease bearing down voluntarily, and to exert a little pressure against the posterior part of the head within reach. During a pain, if the head be far enough down to nip the fingers tightly between it and the perinæum, they must be withdrawn. Care should be taken not to "saw" with the fingers, but to press directly backwards, or the mucous membrane will be injured. The patient, though objecting at first, readily acquiesces when told the end in view. This seems to me the most natural proceeding; it is certainly an useful one, but, since the day of Purio, who taught it, has rather fallen out of notice.

JOHN MASON, M.B.Camb., M.R.C.S.

CLINICAL MEMORANDA.

CONGENITAL ASYMMETRY.

AT a meeting of the Medical Society of London, a report of which appeared in the BRITISH MEDICAL JOURNAL of October 31st, Dr. Isambard Owen showed a well marked case of asymmetry. We have in this vicinity, I think, a case which shows, comparatively, even a greater contrast in the measurement of the two sides.

The subject is a boy, between four and five years of age, quite healthy and very active, the second youngest of a numerous family of good-looking, well-developed children.

The following are the measurements of the right side in excess over the left: length of arm, from acromion process to tip of middle finger, seven-eighths of an inch; length of leg, from anterior superior spinous process of ilium to malleolus, one inch and a quarter; length of foot, half an inch; length of hand, from lower end of radius to tip of middle finger, one-eighth of an inch; circumference of arm above elbow, one inch; below, half an inch; circumference of thigh, one inch and a quarter.

There is no sign of atrophy or defect on the smaller side. The want of symmetry in this case is undoubtedly congenital, and seems to be on the increase.

WILLIAM GRAHAM, Brussels, Canada.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GENERAL HOSPITAL, BIRMINGHAM.
TWO CASES OF NEURALGIA.
(Under the care of R. M. SIMON, M.B.)

CASE I. *Severe Intractable Neuralgia; Paralysis of Cranial Nerves: due to Sarcoma Basis Cranii.*—J. S., aged 54, a wood-turner, was treated for two months as an out-patient; but, not receiving any benefit, and becoming altogether unable to work, on account of the severe and constant pain which he suffered, was admitted an in-patient on May 11th, 1885.

With the exception of a confession of free drinking, there was no history of bad habits or of disease. Syphilis was denied. The family history was good.

For the previous two or three years, he had had pains in the back of the neck and the left shoulder. During the last two months, the pains had radiated all over the head, especially on the left side. Two days before admission, his left eye became painful, and he saw double. His teeth became painful at the same time.

He was a wasted, middle sized man, of sallow complexion. He complained of pain in the back and left side of the neck, shooting up the back of his head, and round both jaws. There were no tender points on the face or head. He kept his left eye shut, on account of the double vision.

There was paralysis of the external rectus of the left eye, and the left pupil contracted to light, but did not vary in size as objects were approached or removed. The right eye was normal, and the field of vision in both eyes was normal.

He continued in much the same condition, receiving no benefit from treatment, and relief only from morphine, until June 10th, when it was noted that he complained of difficulty in swallowing, and of biting his tongue and cheek. The severity of the neuralgic pains had been controlled by morphine, but he complained of stinging pains like nettles, all over the left side of the face and the inside of the mouth on the left side.

June 15th. The lips were ulcerated from biting them. He said that, when he ate bread, it stuck in his throat. The pains were about the same.

June 20th. There was almost complete paralysis of the superior and inferior recti muscles, and a considerable degree of ptosis. The internal rectus was also nearly paralysed. The side of the face felt cold. The pain was worst from the chin to the angle of the mouth, and along the angle of the jaw to the ear and side of the head.

June 24th. The left eye was motionless, but for slight power of downward movement. Speech was much affected, owing partly to paralysis of the tongue on the left side. He bit his lips and tongue more than previously. The pain was worse on side of face and head.

July 7th. The paralysis of the left side of the face and tongue, and of the left eye, was complete. The sight of the left eye was much diminished; he could not count fingers, and could scarcely see. Hearing was impaired on the left side.

July 14th. There was much conjunctivitis of the left eye. Much difficulty in swallowing, and a troublesome cough.

July 20th. The conjunctivitis was very severe. The cornea was opaque, and the eyelid œdematous. The uvula and soft palate were drawn to the right side. He still had the pains in the left side of the head, the temple, and the side of the face. There was much dysphagia, but more in swallowing small than large lumps of food. He lingered much in the same condition for a week, when his lungs became œdematous, and he died very rapidly on July 29th.

The following is a report of the *post mortem* examination. He was a thin ill-nourished man with deeply pigmented scars of ulcers on the front of each tibia; the edges of the tibia were sharp and thin, and there were no external signs of syphilis. There were extensive moderately firm pleural adhesions on both sides. The upper lobes on both sides felt semisolid, and on section this condition was seen to be due to the presence of small, white, firm, fibrous-looking masses, and a diffuse fibrous infiltration. Most of these nodules were round, about a quarter of an inch in diameter, and distinctly defined. Microscopically, the centre was granular and structureless, like caseous material, and the edge was purely fibrous; nothing like an active cell-growth was to be found. This condition obtained to a lesser degree in the lower lobes, and much more extensively on the right side than on the left. There were no pericardial adhesions nor excess of fluid. The cardiac valves were healthy, the cavities were slightly dilated, and the left ventricle rather thicker than natural. The liver was congested, and slightly fatty. The spleen was firm. The capsules were adherent to the kidneys, leaving a rough torn surface. On section, the cortex was irregularly thinned, bright red, and tough. The cerebral meninges were normal. The ventricles were slightly dilated; the consistence was natural. No coarse lesion was found. Infiltrating the left side of the base of the skull was a new growth; viewed from the inside, it partly filled the middle fossa, lifting the dura mater, and leaving it entire, except towards the petrous bone, where it had perforated it. The projecting nodule, which was a little larger than a pea, was vascular, irregular, and granular on the surface. It had infiltrated the bone to the following extent: in front it entered the sphenoidal fissure, filled up its opening, and extended for about a quarter of an inch into the cavity of the orbit, involving the muscles and structures at the back of that cavity. In this way it had involved the left optic nerve, and the other nerves entering through the sphenoidal fissure. It extended backwards along the side of the body of the sphenoid to the basilar process of the occipital bone, infiltrating most of the sphenoidal bone, but keeping clear of the foramina on the right side. On the left side, it extended a quarter of an inch external to the foramen ovale and foramen rotundum, across the petrous portion of the temporal bone (involving the auditory nerve), and then gradually tailed off into the basilar process. In the base of the skull, therefore, it involved the left second, third, fourth, fifth, sixth, and seventh nerves, but not the eighth or the ninth. It was impossible to dissect out the growth from below, as it invaded the structures generally, and was not encapsuled. In this way, the top of the pharynx, the back of the nose, and the structures lying on the front of the vertebral column, were involved. It did not extend far to the right of the middle line, and thus the nerves on that side escaped; but it caught the eighth and ninth on the left side soon after they left the skull, and the carotid artery and jugular vein. It extended about one inch along the vertebral column, but did not attack the vertebræ. The cervical lymphatic glands were enlarged.

Microscopically, it consisted of large spindle-shaped cells, with well marked rod-shaped nuclei, held together by a fibrous stroma and plenty of blood-vessels. In the stroma, a few isolated round cells were found, with one or two nuclei.

REMARKS BY DR. R. M. SIMON.—From the notes of the *post mortem* examination, kindly furnished by Mr. Coulson Bull, it will be seen that the symptoms were due to the presence of a sarcomatous growth originating probably in the middle fossa of the skull, extending forwards into the orbit, and backwards to the basilar process of the occipital bone and the top of the pharynx. Ross (*Diseases of the Nervous System*, vol. ii, page 576) has described a somewhat similar case, reported by Ziemssen, but due to syphilis. In the hope that the disease might have been due to syphilis, iodide of potassium was given in increasing doses, but without avail. The multiplicity of the symptoms, and their gradual onset, made the localisation of the growth easy. The final rapidity with which death followed his long sufferings was probably due to the implication of the pneumogastric.

CASE II. *Epileptiform Neuralgia.*—Samuel C., aged 56, was an out-patient for six months, suffering from epileptiform neuralgia. The pain first appeared four years before as a burning pain in the upper lip, and gradually spread until it involved the whole of the left side of the face, corresponding to the distribution of the facial nerve. Two years before, he had been for a time relieved to some extent of the pain, but it had returned, and totally prevented him from following his occupation. The paroxysms were agonising, and excited by food or drink, or even exposure to cold air. Apart from his complaint of pain, there was no evidence of disease; and, with the exception that he had no teeth, he was a well preserved man.

Some relief was afforded by rubbing the face with the following preparation: ℞ Ol. caryophylli ℥iss; menthol ℥iss; spir. chloroformi ℥iij. All medicines failed to give him permanent relief; indeed, nothing helped him in the least, except large doses of opium, until he began to take bromide of potassium in twenty-grain doses, three times a day. He began to improve immediately; and six months later was in very fair health. He had resumed work, and, though he had occasional slight pains, was practically free from neuralgia.

REMARKS BY DR. R. M. SIMON.—The only reference to the use of bromide of potassium in neuralgia I can find is by Buzzard, who advises its administration where there is much restlessness. Trousseau and Anstie advocated large doses of opium, but only on account of the

apparent hopelessness of these cases, and the necessity for obtaining relief. My experience in this case will certainly justify a trial of the bromides before a resort to a remedy which is almost worse than the disease.

EDINBURGH ROYAL INFIRMARY: OUT-PATIENT DEPARTMENT.

(Under the care of Dr. BYROM BRAMWELL.)

I.—LOCOMOTOR ATAXY WITH ALMOST ENTIRE ABSENCE OF LIGHTNING PAINS.

A. B., aged 35, an engineer, presented himself on December 18th, 1885, suffering from well marked locomotor ataxy. He stated that four years earlier he was laid up with very severe intermittent fever and dysentery in India, and had to be invalided home. It was when recovering from this illness, that the difficulty in walking and regulating his movements were first noticed. He had had some pain in the back, not apparently of the lightning-like kind; but there had been no pains in the lower extremities. For the first three years after his return to this country his general health improved, but the difficulty in walking and balancing became worse. During the past year his walking had been distinctly better, and he had been able to follow his employment, superintending work in an engineering establishment on the Tyne. He went to work at 5 A.M., and returned at 6 P.M. He volunteered the statement that he had great difficulty in getting up a ladder. He said that he had not had syphilis. He had been married for ten years; he had lived freely in his youth. For the past year he had not taken any medicine. His condition when he attended was as follows. He was a spare man, of dark complexion; he could walk without a stick; but had a typical "locomotor gait," the legs being thrown out wildly, and the heels brought to the ground with a stamp, when walking; the eyes were not so steadily fixed on the ground and on the feet as is often the case in ataxic patients; when the eyes were closed, he was unable to balance himself in the erect position, even although the feet were placed wide apart; he said that if he bent his back and leant his head forward, he could stand more steadily, and this seemed to be the case when the eyes were open; he managed to walk backwards, though with great difficulty and with great apparent risk of falling. Co-ordination in the upper extremities did not appear to be impaired. Muscular power in the lower limbs was good. The knee-jerk could not be obtained, and the plantar reflex also seemed to be absent. Tactile sensibility in the lower extremities was impaired, and sensibility to pain quite destroyed; he said he felt as if he were standing on the point of a stick; formerly, when he was touched or pricked with a pin, it was a long time, he said quite half a minute, before he felt the sensation; but, at the time when the examination was made, there was no apparent delay in the transmission of sensory impulses from the lower limbs; the prick of a pin was felt as an ordinary contact impression; it produced no pain, and the impression was imperfectly localised. Sensation was, he said, much better than it used to be. The pupils, which were of medium size, contracted to light, but in a sluggish manner; contraction on converging for near objects was active; the Argyll-Robertson condition of pupil was, therefore, present, but imperfectly developed. The optic discs seemed healthy. Urination was not affected; but the bowels were very troublesome; for several hours every morning he was frequently and repeatedly called to stool, often every quarter of an hour, but was unable to get a satisfactory motion; once the bowels were evacuated, he was easy for the rest of the day. Sexual desire and sexual power were very much impaired.

REMARKS.—Dr. Bramwell pointed out that this case was of great interest, from the fact that the lightning-like pains, which are almost invariably present in locomotor ataxy, seemed to be entirely absent. The case was quite typical in other respects. The fact that the patient could stand more steadily when the head was bent forwards was probably to be explained by supposing that, in that position, the patient had (by means of vision) a better appreciation of the position of his feet and their relationship to the ground. Dr. Bramwell failed to satisfy himself that the patient could stand more steadily in this than in the erect position, when the eyes were closed. The point was of interest, and had not before come under his observation; it was worth investigating in future cases. Improvement in locomotor ataxy was not uncommon, but recovery in such a well marked case as this was very rare. The troublesome condition of the bowel was probably connected with the former attack of dysentery. Nitrate of silver in pill, three times daily, was prescribed, and the patient was told to evacuate the bowels every morning by means of an enema. He was advised not to climb ladders, and was told to protect himself carefully from cold. He stated, in reply to this advice, that he did not feel any discomfort or ill effects from exposure to cold; this, it was pointed out, is not usually the case in patients who are suffering from disease of the spinal cord.

II.—THE ASSOCIATION OF HERPES ORIS AND ACUTE CROUPOUS PNEUMONIA.

A girl, aged 13, presented herself, on December 19th, 1885, suffering from an eruption on the face, and complaining of feeling generally ill. A well marked herpetic eruption was present all round the mouth, on the right temple, and on the right upper eyelid. On inquiry, it was ascertained that the attack had commenced a few days previously, that she had had a shivering, and was troubled with a cough, and pain in the right side. The girl looked ill; the tongue was furred, the pulse 128, the respirations 34, and the temperature 100.4° Fahr. Well marked physical signs of acute croupous pneumonia were present over the base of the right lung.

REMARKS.—Dr. Bramwell pointed out that acute croupous pneumonia was not so common in children as in adults. The frequency with which the disease was accompanied by herpes oris was alluded to. This case was peculiar, inasmuch as the herpetic eruption not only completely encircled the mouth, but was also present on the temple and eyelid. An herpetic eruption usually corresponded in its position to the area of distribution of some particular nerve; and the cause of ordinary "shingles," and of such an herpetic eruption as was present on the temple and eyelid in this case, was generally a lesion of the nerve; herpes was, in fact, an excellent example of the trophic results of a nerve-lesion. Why herpes should be associated with acute croupous pneumonia, was not known; that point required investigation. Herpes oris very often seemed to result from exposure to cold. Dr. Bramwell suggested the desirability of examining microscopically, and by means of "cultivation-experiments," the contents of the vesicles, both in ordinary herpes oris the result of cold, and in herpes associated with acute croupous pneumonia, with the object of determining whether any organisms were present; and, if so, their relationship to the organisms which had been detected in the air-cells of the lung in acute croupous pneumonia.

III.—CANCER OF THE RECTUM: THE NECESSITY FOR DIGITAL EXAMINATION.

A man, aged 51, presented himself on December 19th, 1885, complaining of a discharge from the bowels, and of a frequent desire to go to stool. He stated that he had been troubled with these symptoms for three months; that the matter which he passed was sometimes fæculent, at others thin and watery, and blood tinged or mixed with mucus.

On digital examination, the lower end of the rectum was found to be constricted, and a dense hard brawny mass, apparently of cancer, could be felt just within the sphincter.

REMARKS.—Dr. Bramwell stated that the case exemplified the importance of a thorough physical examination of any and every part which appeared to be diseased. Without a rectal examination, this case might easily have been put down as one of dysenteric diarrhœa. The long duration (three months), and the great rarity of long continued and severe dysentery in this country (except in persons who bring the disease home with them from the tropics) would have made a careful observer suspect cancer; but a thorough physical examination was the only means of arriving at a certain diagnosis. Imperfect, insufficient, and hasty examination was the most common cause of errors in diagnosis amongst experienced practitioners. Beginners, of course, often failed to arrive at a correct conclusion from inability to observe the facts correctly.

CORK UNION HOSPITAL.

A CASE OF AMNESIC APHASIA.

(Under the care of Dr. P. J. CREMEN, Physician to the Hospital and the Cork North Infirmary.)

HENRY D., aged 27, a plumber, married, and the father of one child, was admitted on April 10th, 1885. His mother stated that he enjoyed good health up to ten years of age, when he had an attack of rheumatic fever, which lasted about two months. Since then he had not complained until about eighteen months before admission, when, whilst in the act of stooping, he suddenly felt giddiness, with loss of speech. Almost immediately afterwards, he ran home, a distance of half a mile, and proceeded at once to wash his hands, thinking he had got lead into his system. He could not speak a word, but made signs that he required paper and ink, which were immediately procured; thereupon, wishing to get some brandy, he wrote "brad-randy" instead. This occurred about one o'clock in the afternoon. He returned to his work at three, and finished his day, still unable to speak or to make himself understood except by signs.

After this, he attended occasionally as an extern patient at one of the city hospitals for about five months, during which his speech improved very much. About this time, he occasionally complained of violent pain in the left temporal region, and a rocking sensation in his head, which he described as similar to that which he once felt on landing after a very rough passage across the Channel.

He now commenced to do some light work, being able to make himself understood fairly well, occasionally using one word for another, and gradually progressing up to about last Christmas, when he was surprised, on awaking one morning, to find that he had lost the sight of his left eye; he continued otherwise the same as regards speech, until about four weeks before admission, when, after a hard day's work, whilst in the act of holding a candle, he suddenly allowed it to drop, and commenced to cry. His speech again became very imperfect, and his mother noticed that his mouth was slightly "turned." Since then, no change had taken place in his symptoms.

He was of intemperate habits; he never had lead-colic, syphilis, or any paralysis of the extremities.

On admission, volitional speech was much affected. When asked of what he complained, he pointed to his left temple, and said he had a pain there; and on being asked if it was constant, he said not. He also pointed to the left eye, and indicated that he could not see with it.

His memory of names, places, and things was very defective. He did not recollect the names of his father, mother, or other near relatives. When asked to try, he made an effort to do so, sometimes repeating his own name instead, evidently knowing that he was wrong. When corrected, he repeated the name distinctly, having no difficulty whatever in articulation, the latter being very distinct and clear, with the exception of a slight thickness in the pronunciation of some of the consonants, which his mother stated he always had. When asked to name the organs of sense, he called the ear a hair-pin, and named correctly the nose and tongue; he did not recollect the name of the eye, and called this also the tongue; but when corrected, said "Yes, eye; that's right." When further questioned, he became confused, calling nearly everything that was shown to him "tongue." His vocabulary was, however, liable to variation from day to day, recollecting the names of things which he could not remember the previous day, and forgetting those with which he was most conversant. Wishing to get some butter one day, he asked for "oyster boys;" on the next day, he called it by its proper name; and the same frequently occurred in the case of other substantives. When asked to repeat the Lord's Prayer," he failed to do so, but repeated another prayer instead; however, when given the first sentence, he repeated it through correctly.

The following composition, in which it is impossible to discover any meaning, was written by him at my request as the history of his case.

"Cork Molens.—I noscent nountg ani ammbys gosisbyoyey imitwats yab i bet yas you me sent sml me good me much cocleped.—HENRY D."

He wrote his own name and residence accurately, and could write numerals to any extent without dictation.

The following will exemplify defects in writing from dictation. When asked to write the word "just" he wrote "fugl," for "subject" "supfect," for "speak" "sery," for "found" "spunt." Strange to say, when told to spell those words, he did so accurately in every instance, and, when asked why he did not write them, he explained that he had forgotten how to make the letters.

His understanding of spoken and written language was perfect. He could repeat accurately and quickly words spoken before him. Notwithstanding this great defect of memory of words, he could read aloud clearly and distinctly, without hesitation, a page of a book from beginning to end.

He had no difficulty in using his arms and legs; never had any paralysis of the extremities. The power of grasp was equal in both hands as tested by the dynamometer. Sensation was normal in every part of the body. The skin and tendon-reflexes were normal. Smell was normal. On examination with the ophthalmoscope, the left optic disc was seen to be in a state of well marked grey atrophy. The descending branch of the arteria centralis was seen to be quite empty; the ascending filled with a dark coagulum; whilst the smaller branches were obliterated. Around the macula lutea, the retina had a mottled, hazy grey appearance. The right eye was normal, but slightly congested. The movements of the eyes were normal. The pupils were equal, and sensitive to light. On placing the finger over the right eye so as to close it, and getting him to look fixedly at the light with the left, the pupil of the latter dilated rapidly; on reversing the experiment, no such change occurred in the pupil of the right eye.

The fifth nerve was normal. The features had a dull expression, especially on the right side. When he laughed, the mouth was drawn to the left; the zygomatic muscles on the right side evidently not acting. When he depressed the angles of the mouth by bringing the upper lip over the lower, there was a marked deviation to the right side, the depressor muscle of that side not acting. He could whistle, blow out a candle, and close both eyes. Hearing and taste were normal. When the tongue was protruded, its tip deviated markedly to the right.

Physical examination of the heart disclosed aortic and mitral regurgitant disease fully compensated. The quantity of urine passed in twenty-four hours averaged forty ounces; it was of specific gravity 1.025, high-coloured, with an excess of urea, and, on one occasion, a slight trace of sugar; no albumen.

He remained in hospital for about three months, and left much improved in his speech, being able to carry on a conversation fairly well, occasionally using one word for another. He could name objects better. Volitional writing was not improved; writing from dictation was slightly better. There was no change in the sight of the left eye.

The treatment adopted was of a tonic and alterative character, at the same time getting him to read and write daily, and engage in conversation.

REMARKS BY DR. CREMEN.—This case is clearly one of the clase described under the heading of amnesic aphasia, due to two distincs attacks of embolism of the middle cerebral artery on the left side. This form of aphasia without motor paralysis of the extremities is considered by Hammond and others to be due to a lesion in the grey matter of the cerebrum. The paralysis of the zygomator levator and depressor anguli oris on the right side of the face (and of these only, as is evident from the symptoms described), in my opinion, point to the motor centres in the ascending frontal convolutions on the left side (described by Ferrier as presiding over the action of these muscles) as portion of the seat of lesion; and to the motor centre in the adjoining portion of the third frontal convolution that presides over the protrusion and retraction of the tongue as being also engaged.

A distinct attack of embolism of the arteria centralis retinæ, a small branch of the ophthalmic, explains the condition of the left eye. This is one of the very few cases on record where a patient suffering from such defects of speech could read aloud without difficulty.

In a very able paper on Aphasia by Professor Lichtheim, of Berne, translated from the German by Dr. de Watteville, which appeared in the number of *Brain* for January, 1885, he describes no fewer than seven types of aphasia due to lesions in the nerve-paths between the centres. His fourth type resembles that under consideration, but differs from it in some particulars that I will point out. He describes it as follows: "A variety of motor aphasia created by interruption of the path between the centre of motor representations of words and what he terms the concept centre;" and he says in this, according to diagram which he figures, we should expect the loss of *(a)* volitional speech; *(b)* volitional writing; whilst these are preserved: *(c)* understanding of spoken language; *(d)* understanding of written language; *(e)* the faculty of copying; *(f)* faculty of repeating words; *(g)* faculty of writing to dictation; *(h)* power of reading aloud. He says that most recorded cases are incomplete in the faculty of reading aloud, but gives details of one case of traumatic aphasia in which it was well marked. The case of Henry W., as will be seen on comparison, agrees in all particulars save one, namely, ability to write to dictation with his fourth subdivision. This difference can be explained by another interruption existing in the path between the centre of auditory representations and the centre from which the organs of writing are innervated.

MEDICAL MAGISTRATE.—Dr. George Lyndon has been placed on the Commission of the Peace for the County Cavan.

THE appointment of George Edward Paget, Esq., M.D., Regius Professor of Physic in the University of Cambridge, to be a Knight Commander of the Order of the Bath appeared in the *London Gazette* of the 29th ultimo.

BEQUESTS AND DONATIONS.—Mr. George Redford, of Southport, has bequeathed the "residue" of his estate, amounting to £8,600, to the Southport Infirmary, the Southport Convalescent Hospital, and the Oldham Infirmary.—Mr. Henry Aste, of Norwood, has bequeathed £200 to University College Hospital, £100 to the North London Consumption Hospital, £100 to the Royal Hospital for Incurables at Putney, £100 to the Earlswood Asylum for Idiots, and £20 to the Margate Sea-bathing Infirmary.—Messrs. J. and P. Coats have given £100, Mrs. Crerar Gilbert £100, and "J. B. G." £50, to the Glasgow Royal Infirmary.—The City of Dublin Hospital has received £150 under the will of Mr. Robert Culley, of Monkstown.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

W. M. ORD, M.D., F.R.C.P., President, in the Chair.

MONDAY, DECEMBER 21ST, 1885.

Dissecting Aneurysm of the Innominate Artery.—Dr. B. W. RICHARDSON, in giving the clinical history of this case, called attention to several exceedingly curious features which presented themselves for remark. The patient was a woman aged 62, of good personal and family history; no suspicion of syphilis. She had been quite healthy and strong up to October, 1884, when she came to see him for a swelling on her chest. On examination, he found a large pulsating tumour, which, however, caused her little or no inconvenience; indeed, one of the remarkable features was the absence of any of the secondary troubles commonly present. She was advised rest and iodide of potassium, and for awhile nothing more was seen of her, until in May, 1885, when she came back, saying she thought that she had quite recovered. The tumour had quite disappeared, but pulsation could still be felt between the first, second, and third ribs. On June 27th she was again seen, and then had three distinct pulsating tumours, one above and the others below the clavicle. The covering of skin over one of the tumours was very thin, and through it blood first oozed out, and finally an opening of some size formed, which was dressed with styptic iron wool. She died on November 30th. Dr. Richardson handed round a selection of cardiographic and sphygmographic tracings of the case, together with drawings of the patient's appearance, and the specimen itself.—Dr. LOWE mentioned that whenever retrocession of the tumours was noticed, lamination had probably taken place.—Dr. DE HAVILLAND HALL spoke very highly of the value of large doses of iodide of potassium, which he had used with success in many cases, and for a knowledge of which physicians were indebted to Dr. Balfour, of Edinburgh. He also suggested aconite as suitable treatment.—Dr. ANGEL MONEY suggested that it was to the depressing and quieting effect of the iodide that the good effects were due.—Mr. W. B. HADDEN expressed his doubts as to the alleged good results of iodide of potassium in these cases.—Dr. ADAMS said that nature had tied the subclavian and carotid arteries in this case by obliteration, and yet a cure had not resulted.—Dr. FOWLER expressed his surprise at the difference of opinion as to the value of iodide of potassium, in which he had great faith.—Dr. ORD declared his personal faith in the good derived from the drug, and suggested that galvano-puncture might have been applicable.—Dr. RICHARDSON, in reply, said that the presence of a tumour which receded, the absence of secondary symptoms, and the prolonged duration of life under the above circumstances, were all remarkable facts in the case. He did not think that the carotid and subclavian were really quite obliterated.

Poisoning by Bisulphide of Carbon.—Dr. W. B. HADDEN read a paper on a case of chronic poisoning with bisulphate of carbon, in a man aged 45, a vulcaniser, the symptoms being loss of power over the extremities, and cerebral weakness.—Dr. RICHARDSON alluded to some contributions of M. Delpech on the same subject. He suggested that its chemical action as a solvent of fats might account in some way for its effects.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, NOVEMBER 25TH, 1885.

ALFRED MEADOWS, M.D., F.R.C.P., President, in the Chair.

Specimens.—Dr. PURCELL showed a cancerous uterus removed from a patient by the intravaginal method. The patient recovered.—Dr. WALTER (Manchester) showed a peculiar form of uterine polypus removed from a married woman, who had never been pregnant. It grew from the cervix, and resembled a mass of hydatids or vesicular disease of the chorion.—Dr. AVELING exhibited an ovarian cyst which had ruptured during examination. It was at once removed. The patient recovered.—Mr. LAWSON TAIT exhibited a new form of continuous gas-cautery. It could be applied to any gas-jet which happened to be in the room.—Dr. BANTOCK showed two cysts removed from a patient that afternoon. The larger contained 5½ pints, and grew from the right side, with the tube attached. The second grew from the left. They were both parovarian.

Laceration of the Cervix Uteri.—Dr. R. T. SMITH read a paper on laceration of the cervix uteri. Having performed the operation recommended by Emmet for the cure of laceration of the cervix uteri in more than fifty cases, he had been able to collect a considerable amount of careful observation on the general bearings of this condition of the uterus. It was not surprising that our American colleagues should be astonished at the neglect shown in this country to a practice which with them had long been an universally recognised rule of action. Dr. Barnes had graphically indicated the importance of laceration as a cause of puerperal mischief; but English gynæcologists had, Dr. Smith feared, failed to see in this condition the essential cause of chronic uterine disorders, of protracted discharges, of peri-uterine inflammation, and of various and serious disorders. He had operated on several patients, at ages ranging from 47 to 50 years, where there had been tenderness, menorrhagia, and various neuroses, with almost immediate and permanent relief. Questions of most vital moment crowded around this pathological position. What about cancer? While he could not admit laceration by any means as the sole cause, he had been startled by the number of cases he had witnessed sprouting on everted labia. Like Dr. Goodell, of Philadelphia, he operated on all cases of laceration if there were any family history of cancer. If there was any truth in the doctrine of irritation, here surely was a most conspicuous example: an ill-conditioned sore exposed to frequent irritation and varying blood-supply, and, as a rule, associated with a low condition of general health. He laid it down, as a fundamental rule, that in neuralgia the cause of irritation must be sought and removed; and he could only commend this probable causation to all for careful observation and subsequent recording of their experience of treatment directed to this end, removing the cicatricial tissue and dense plug, thereby getting rid of a constant source of irritation.—Dr. BARNES said that the paper brought into prominent notice a subject of great importance in its relations to metric and perimetric disorder. Emmet's merit was twofold; he had devised an operation of great benefit to women, and had endowed surgeons with a new means of relieving a distressing condition.—Dr. BANTOCK proposed, and Dr. AVELING seconded, that the discussion on Dr. R. T. Smith's paper be adjourned until December 23rd. This was carried.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, DECEMBER 9TH, 1885.

WALTER DICKSON, M.D., President, in the Chair.

The German Vaccination Commission.—Dr. E. J. EDWARDES read a paper on the Report of the German Vaccination Commission. This commission was appointed by the German Government to make inquiry into the present aspect of vaccination, especially as regards any attendant evils; to frame rules for the eventual introduction of animal vaccine lymph into general use in public vaccination; to draw up a scheme for the institution of an effective supervision of public vaccination; and to arrange for an imperial statistical return of the small-pox mortality. The Commission's answers to eight questions propounded by the Imperial Board of Health were as follows. 1. With rare exceptions, one survived attack of small-pox confers immunity against future attacks. 2. Vaccination exerts a similar protection. 3. The duration of the protection afforded by vaccination varies within wide limits, but is about ten years on the average. 4. At least two well developed vaccine vesicles are necessary to ensure efficient protection. 5. Revaccination is necessary ten years after primary vaccination. 6. A well vaccinated condition of the community increases the relative protection which the individual has acquired against small-pox; and thus vaccination is useful, not only individually, but generally, against small-pox. 7. Vaccination may, under certain circumstances, be injurious to health. In the case of human lymph, the danger of transferring syphilis, although extremely slight, cannot be entirely excluded. Any other injurious effects are apparently due only to accidental wound-diseases. All these dangers may, by precautions in the performance of vaccination, be reduced to such a minimum, that the benefits of vaccination infinitely outweigh any possible injurious effects. 8. Since the introduction of vaccination, no scientifically provable increase of any special disease or of the general mortality has occurred, such as might be regarded as a consequence of vaccination. The statistics brought forward by the Imperial Board of Health to show the effect of the law of 1874 introducing compulsory revaccination throughout Germany at the age of 12, have been already published. Other valuable statistics were now produced, in particular the Bavarian statistics of Dr. von Kerchensteiner, the Leipzig statistics of Dr. Seigel, and the elaborate army statistics of Dr. Grossheim. In the last case, accurate particulars were known as to 1,005 small-pox cases, with 61 deaths. Of these 1,005, 4 were not vaccinated, with 1 death, or = 25 per cent.; 109 were successfully revaccinated, with 2 deaths, = 1.1 per cent.; 224 were unsuccessfully vaccinated, with 10 deaths, = 4.5 per cent.; 531 were not revaccinated, with 46 deaths, = 8.6 per cent. In 130, where the result of revaccination was unknown, there was 1 death, = 0.7 per cent. In 7 cases where the result was doubtful, there were no deaths. The whole number of cases in the German Field Army during the epidemic of 1870-71 was 4,991,

with only 297 deaths = nearly 6 per cent. of the cases. Whether the number of cases in the French army given by some French writers was absolutely correct or not, it was impossible to say; that number for the field-army was 23,469. But, in the Paris army alone, numbering 170,000, the cases were 11,500, and the deaths 1,600 (nearly 14 per cent.). Again, the French prisoners in Germany were 372,918; the small-pox cases were 14,178, the deaths 1,963, that is, over 13 per cent.; while the unmobilised German army, on the other hand, numbered 300,424, the small-pox cases 3,472, and the deaths only 162, that is, 4.6 per cent. This was a striking instance of the protective power of vaccination, for Dr. Grossheim amply proved that the French army was far less thoroughly vaccinated than the German. The following were the conclusions of the Commission upon animal lymph. 1. Since dangers to health and life (syphilis, erysipelas, etc.) are occasionally connected with the use of human lymph, so far as any direct transference of syphilis or of accidental wound-diseases is concerned, and since vaccination with animal lymph has been recently so perfected, that it may now altogether supersede the use of human lymph, the latter should be replaced by animal lymph. 2. This is to be effected gradually, and (by the help of experience already gained) institutions are to be established for the provision of sufficient supplies of animal lymph. When the supply is thus secured, public vaccination will be performed with animal lymph exclusively. Other conclusions followed. The arguments for and against animal lymph had been previously ably summed up in a memorandum emanating from the Imperial Board of Health. On the side of human lymph were: certainty of effect, simplicity of operation, and costlessness; while against it were the proved danger of imparting syphilis and erysipelas, the theoretical possibility of imparting tuberculosis, and, lastly, the difficulty of obtaining it at times. The advantages of animal lymph were: security against syphilis, the advantages connected with large supplies (namely, uniformity of character and subjection to test-inoculation), simplification of the public vaccinator's work, and, lastly, the advantage of obtaining it under antiseptic precautions, to the certain exclusion of "early erysipelas." Its only disadvantages were the somewhat less certainty of direct effect, a slightly complicated operation in using it, and, lastly, its cost. But Koch maintained that compulsory vaccination could only be justified by making it as absolutely safe as possible. It had been conclusively proved that syphilis could not be communicated to animals. Dr. Edwardes said that one point seemed to have escaped the notice of the Commission. If it were a fact, as stated, that the syphilitic virus could not subsist outside the human body, except for a short time, certainly not more than a few days, then human lymph was as safe as calf-lymph, if only vaccination from arm-to-arm were done away with. The use of charged points or capillary tubes should be imperative in every case. But for this, again, the supply would never be sufficient; so that, after all, animal lymph was the only effective solution of the problem.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 4TH, 1885.

W. B. HEMMING, M.R.C.S., President, in the Chair.

Some Cases of Interest from the late War in the Soudan.—A paper contributed by Surgeon HAROLD HENDLEY, Indian Medical Service, was read by Mr. DUNN. It consisted of reports of five cases, in four of which operation was followed by exceedingly good results. CASE I. *Bayonet-Wound.*—A bayonet transfixed the left arm through the biceps, and caused an apparently superficial wound of the chest in the mid-axillary line, immediately below the seventh rib. There were no signs, during life, of penetration of the thorax. The man, contrary to orders, left the hospital in the course of an hour, and after three hours difficulty of breathing supervened, and death occurred from asphyxia. On *post mortem* examination, extensive pneumothorax was found, with collapse of both lungs. There were four ounces of venous blood in the left chest, and there was a small wound of the lower lobe of the left lung. CASE II. *Bullet-Wound (Remington Rifle).*—An Indian mule-driver, aged 28, was admitted with a bullet-wound of the right thigh and left foot. The bullet had passed into the foot immediately in front of the astragalo-scaphoid articulation. Under chloroform, careful digital examination and the use of Nélaton's probe having failed to detect the situation of the missile, the patient was placed in the position in which he was supposed to have been when the injury was received. Palpation of the foot then revealed an oblong mass in the sole; this swelling was cut down upon, and proved to be the bullet. The patient was subsequently invalided to India, and did well. CASE III. *Suture of Tendons and of the Median Nerve.*—E. N., a Greek, was admitted from one of the field-hospitals for a deep horizontal sword-cut across the front of the right wrist, in consequence of which, some time previously, it had been considered necessary to resect the lower end of the radius. On admission, there were complete loss of sensation over the parts supplied by the median nerve, and but limited power of movement of the hand. The wound was reopened, and the median nerve, after some dissection, together with the tendons of the flexor carpi radialis and palmaris longus, were found widely separated. The ends were pared, and catgut sutures used to bring them into close apposition. The hand was fixed upon a splint in a flexed position. The wound granulated well, and ultimately the man was discharged with complete recovery of sensation, except over two small patches, and with daily increasing power of movement. CASE IV. *Ununited Compound Fracture of the Right Radius and Ulna at the Middle Third.*—D. I., aged 20, a native of India, was admitted with this injury, which had been caused by the bite of a camel. The patient had been under treatment for some time, without any union taking place. Under chloroform, the ends of the bones were resected, and holes drilled through the fragments; the latter were then approximated with silver wire, the ends of the wire being left projecting. The patient was afterwards invalided to India with every prospect of good union. CASE V. *Malignant Looking Ulcer of the Pubes of 180 Days' Duration.*—The ulcer measured three and a half inches vertically, and two and a half inches transversely; its edges were irregular, raised, rounded, and hard; the base was firm and indurated; the inguinal glands were slightly enlarged. Under chloroform, the mass was removed; after which a flap of skin was brought down from the right of the middle line, twisted at its base, and attached by its free end to the loose skin of the penis, so that the wound was almost wholly covered. The patient was subsequently invalided to India, and was soon quite convalescent. The dressings used were carbolised oil, lint, iodoform, and tenax.—Mr. KEETLEY and Dr. THUDICHUM made some remarks upon the points of interest in the cases.

Antiseptic Surgery at the West London Hospital.—Mr. KEETLEY read a paper under this title. In the first five years ending August, 1881, he had 69 operations. Of these, 11 died. He now became acting full surgeon; and in the year immediately following, improvements as regards provision of antiseptic materials, etc., having taken place, he had 75 operations, and no death. In the four and a quarter years from August, 1881, up to the present, he had 438 operations, with 16 deaths. The percentage of mortality was, therefore, in the first period, 16, and in the second 3.6. Of the fatal cases, it appeared that the majority in the first period might be referred to septic causes, while an entirely different state of things prevailed in the second period. The class which bore the most striking testimony to the value of antisepticism, was that of operations affecting the large bones and joints. Of these, the author had done, since January, 1881, 235, with the loss of only four patients in the hospital, and a fifth who died soon after leaving it. All the fatal cases were seriously complicated; one being a double amputation of one leg and the other thigh; one being a patient with advanced phthisis; two having died of tubercular meningitis when they were far advanced in convalescence from the operations; and a fifth died seven months after being trephined, of cephalhydrocele. The 235 bone and joint operations included 22 major amputations, all but four through the lower extremity, with one death (in the previous period, there were seven major amputations with 4 deaths); 74 osteotomies with no death (in the preceding period, there was only one osteotomy, which inflamed and suppurated seriously). Of the osteotomies, 23 were of the hip, and 32 of the femur near the knee-joint. There were 15 excisions, including 3 of the hip, 5 of the knee, and 3 of the elbow; 7 excisions of tarsal and carpal bones; 17 partial excisions and erasions of the larger joints, including 7 of the hip and 5 of the knee. There were many cases of antiseptic drainage of the large joints; 8 sutures of the patella; 7 scrapings out of the medulla of long bones (the femur five times); 3 direct operations for caries of the spine; 4 for badly united and ununited fractures (femur and tibia, etc.) In the other classes of cases, such as excisions of tumours, myotomies, rectal, and genito-urinary cases, there were no deaths; and they otherwise showed a clean sheet except as regarded one case of erysipelas.—Mr. LUNN made some remarks.—Dr. SINCLAIR THOMSON observed that tetanus sometimes followed injuries in which no open wound was present. He was a strong believer in antiseptics.—Mr. TUKE described a case of sebaceous tumour of the scalp, which the patient refused to have removed. The cyst suppurated, and the cyst-wall was taken away. No antiseptics were used, and the patient died in six days with symptoms of blood-poisoning.—Mr. BENHAM remarked upon the low mortality of the cases in which no antiseptics had been used.—Dr. ALDERSON did not think that, in small operations, such as the

removal of sebaceous tumours, antiseptics were necessary.—Dr. THUDICHUM said that, where perfect cleanliness was observed, no cases of hospital-gangrene were met with. Antiseptics were not necessary when cleanliness was carefully observed. Cleanliness and the prevention of decomposition were the chief points to be attended to in the treatment of wounds. The devitalisation of germs, he considered, could only be accomplished by the use of extremely strong solutions, such as chlorine-water and others.—Dr. POPE was glad that Mr. Keetley had discarded the spray. He related a case in which a knee-joint had opened five successive times without it.—Mr. EDWARDS did not use the spray except in operations upon serous and synovial sacs. It was immaterial what antiseptic was used. The cardinal features of the treatment of wounds were pressure and drainage, and in this connection he strongly advocated Esmarch's bandage.—After some remarks from Dr. BALL, Mr. KEETLEY replied.

Suez as a Health-Resort, with Notes by the Way.—Dr. SINCLAIR THOMSON read an interesting paper upon a trip which he had taken to Suez and back, and advocated strongly the advantages of a short sea-voyage for the purposes of health.

Clinical Cases, etc.—Mr. KEETLEY showed the following cases: 1, Osteotomy of the Hip; 2, A Case of Complete Obliteration of One Nostril by Syphilis (congenital); 3, a Case of Removal of whole of the Lower Lip for Epithelioma.

Mr. LUNN and Mr. LEONARD MARK exhibited drawings.

Mr. H. PERCY DUNN showed the following pathological specimens: 1, the Sac and adjacent parts of a Large Omental Hernia; 2, Pendulous Growths from the Mucous Membrane of the Stomach; 3, Tubercular Disease of the Testis; 4, Tubercular Disease of the Kidney.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, DECEMBER 4TH, 1885.

THOMAS SAVAGE, M.D., in the Chair.

Sarcoma of Right Ovary.—Dr. A. S. UNDERHILL described this case. It was of interest chiefly from the difficulty of ascertaining the precise nature of the abdominal swelling before death. The patient was 42 years of age. Last June, she came home tired from a very long walk, and during the night she suffered intense pain down the right leg, which had become much swollen. On seeing her a few days afterwards, Dr. Savage found considerable œdema of the right leg, with tenderness down the saphenic and femoral veins. This increased till the thigh and vulva on the right side became immensely swollen. Deep in the groin a tumour of the size of a large orange could be felt; it was exquisitely tender. Defæcation became painful, and the patient was much exhausted. The case was considered to be one of phlebitis of the veins of the right leg, parametritis, and effusion into the right lateral ligaments. A month later, the abdominal swelling having considerably increased, she was admitted into the Guest Hospital. On opening the abdominal cavity, there was found a large cyst, which was tapped, and in it several smaller cysts, which likewise were emptied, and an attempt was made to remove the remaining mass. This was found impossible on account of general pelvic and intestinal adhesions. As much of the mass as possible was removed; the remainder was stitched to the abdominal incision. The pelvic and abdominal cavities were drained with glass drainage-tubes, and dry absorbent wove dressings were used. The temperature only once reached 100° Fahr., but she died on the fifth day from exhaustion. *Post mortem*, there was found to be fair adhesion of the stump to the abdominal incision, and the remaining mass proved to be an ordinary sarcoma of the right ovary, the uterus and the left ovary being normal.

Myoma Obstructing Labour.—Dr. A. S. UNDERHILL described this case. The patient was 36 years old, menstruated last Christmas, and had borne seven children at full term. She had been in labour for twenty-fours with feeble pains. The midwife in attendance, not being able to feel any presenting part, sent for assistance. The os uteri was entirely occluded by a thick boggy mass. No presenting part could be felt till the tumour was separated from the anterior segment of the os, when the membranes could be felt intact. The case was left for six hours, when dilatation was more completed. The tumour was further separated with the fingers, and an attempt was made to deliver with long forceps. As this was impossible, the hand was introduced into the uterus, and the tumour was readily enucleated, partly by scraping with the fingers, and partly by twisting; the child was expelled immediately afterwards. The uterus firmly contracted, and the woman made an ordinary and rapid recovery. The myoma weighed 15 ounces; it was of the ordinary submucous character, but perhaps a little soft, due probably to its rapid growth.

Double Fused Ovarian Sarcoma.—Dr. SAVAGE showed a specimen of double fused ovarian cystoma. There was acute peritonitis present. The pedicles were twisted, one complete, and one half turn round each other, so that the right tumour was on the left side, and *vice versâ*. Drainage was used; the patient did well.

Calculous Kidney.—Dr. SAVAGE also showed a calculous kidney, which he had removed successfully by Langenbuch's incision, without opening the peritoneum. The stump was very thick, and was transfixed by a steel pin, with a wire clamp on its distal side. The organ was much enlarged, full of pus, and contained three large sized calculi.

Pseudo-glioma.—Mr. PRIESTLEY SMITH showed a girl, aged 9, in whose left eye a densely white band-like opacity was visible, passing from side to side in the anterior part of the vitreous humour close to the lens. The remainder of the vitreous humour was turbid; the white appearance had been noticed about a month; the child came of a strumous family. Though there was no decided history of an inflammatory onset, the opacity was probably due to a morbid exudation from the ciliary body. It appeared right to watch for further changes rather than to remove the eye at present.

Omental Tumour.—Dr. FOXWELL showed a very firm solid tumour, weighing two pounds and a half, removed from the great omentum of a man, aged 34. The patient first noticed it ten weeks before the operation, when it seemed to him about the size of a pigeon's egg. It was diagnosed as a sarcoma; but its extreme mobility, the failure to detect any secondary deposit, and the complete absence of any bowel disturbance, or impairment of constitution, led Dr. Foxwell to advise its removal. Unfortunately, it was found to be very closely adherent to the middle of the ileum for four inches, and a fatal result ensued from gangrene of this portion of gut. *Post mortem* the whole of the peritnneum was found extensively infiltrated by secondary nodules, most of which were about the size of a split pea, but some as large as a marble. No other portion of the body was affected. Microscopically, the tumour proved to be a typical alveolar sarcoma, the fibrous tissue occupying about two-thirds of the bulk of the circumferential region, whilst centrally several areas of softening existed.

Deficiency of Arms.—Dr. SIMON showed for Mr. McCarthy a woman, aged 45, who was born without hands or arms. She was able to write well with the right foot, and use either for purposes of prehension. In sewing she held the material with the right, and the needle with the left foot, between the big and first toes. All these actions were performed with singular ease, and an absence of awkwardness that was very remarkable.

Fusiform Popliteal Aneurysm, from a Case of Senile Gangrene.—Mr. GILBERT BARDING showed this specimen. It was taken from a man aged 75, who, when returning from work, was seized with severe pain in the leg, which was followed in a few hours by gangrene. Several weeks after the onset of the gangrene, the dead parts were separated at the line of demarcation through the upper end of the tibia, the patient surviving nearly a month, but dying with hardly any repair in the stump. From the specimen, it appeared as though the popliteal artery had been thrombosed some time before the gangrene commenced; for, just above the bifurcation into the tibial arteries, the vessel was obstructed by a dense fibrous septum nearly half an inch thick. Extending upwards from this point into the femoral artery, was a clot which filled the dilated part completely, and which could be felt in the patient's leg when gangrene set in. Permission was only obtained to examine the stump; therefore the condition of the vessels generally could not be determined; but the femoral vessel above the popliteal for several inches was very atheromatous, and would hardly have borne a ligature.

General Pemphigus.—Mr. EALES showed a married woman, aged 42, suffering from general pemphigus on all parts of the body, including the pharynx. Her eyes had been affected from the onset last Whitsuntide. Her health began to fail last Christmas, without apparent cause; and, from being a very stout woman, she was reduced by emaciation to a very spare woman at the present time. There was no history or suspicion of syphilis. The skin of the left eyelids presented cicatrices and superficial ulcers, caused by bullæ. Nearly the whole of the conjunctiva was replaced by cicatricial tissue, both the upper and lower *culs-de-sac* being quite obliterated, and the lips adherent to the globe; while there was ankyloblepharon at the inner canthus up to the puncta. The cornea was dry, and the epithelial layer densely opaque. The right eye presented, on the under surface of the cartilage, an oval cicatrix about half an inch long by a quarter of an inch broad, the result of a bulla; but the cornea was intact.

DR. HENRY CASTLE has been placed on the Commission of the Peace for the Borough of Newport, Isle of Wight.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, DECEMBER 2ND, 1885.

WALTER WHITEHEAD, F.R.C.S., President, in the Chair.

Case of Nephro-lithotomy.—Mr. WRIGHT showed a patient upon whom he had performed nephro-lithotomy some months before. The stone had existed for eleven years, and gave rise to pain and hæmaturia. The T-shaped incision was employed. The wound healed by the twenty-seventh day, and the patient, when presented to the Society, was well in all respects. The calculus was polygonal, about the size of a horse-bean, and probably consisted of uric acid. The patient was a male, aged 19.

Cystic Bronchocele.—Mr. BISHOP showed a case of cystic bronchocele cured by tapping and injection, first, of solution of iodine, later, of Mackenzie's solution of iron, and drainage. He drew attention to the absence of information as to the time such cases were likely to last before cure was complete. The case in question, although the result in the end was perfect, lasted over eighteen months, the greatest part of which time was taken up by the final closure of a small sinus.

Chronic Poliomyelitis.—Dr. LEECH showed a patient, aged 26, some of whose symptoms pointed to chronic anterior poliomyelitis, whilst others seemed to indicate progressive muscular atrophy. Loss of power and wasting of the muscles of the lower extremity had been followed after many months by a similar, though less marked, condition in the upper extremities. But, whilst the muscles of the legs had been affected as a whole, individual muscles had been attacked in the upper part of the body, the upper third of the deltoid and the biceps having specially suffered as regarded size and power. The serratus magnus was weakened, but the muscles of the ball of the thumb and forearm presented no distinct sign of change, nor was there evidence that the intercostal muscles were considerably weakened. It did not appear then as if the lesion had spread from below upwards, and the changes in the upper extremity were, in some respects, more like those of progressive muscular atrophy; the fact that faradic contractility still remained in the weakened muscles pointed to this diagnosis, and the presence of only moderate reaction of degeneration and of the cutaneous reflexes likewise favoured it; yet the simultaneous wasting and loss of power in the muscles of the lower extremity indicated poliomyelitis rather than progressive muscular atrophy.

Trephining in Traumatic Epilepsy.—Mr. WHITEHEAD presented a man, aged 28, whom he had successfully trephined for traumatic epilepsy. The patient fell down a quarry, a distance of thirty feet, in May, 1884, and received a compound fracture of the skull, for which he was treated for seven weeks in the Bradford Infirmary. Since his discharge, he had suffered from constant headache, and for the seven weeks preceding his admission into the Manchester Infirmary on September 29th, 1885, he suffered from epileptic fits, sometimes amounting to six during twenty-four hours, and never free from headache and depression during the intervals. On October 2nd, he was trephined immediately outside the area of the fracture. Nothing abnormal was observed through the aperture; nevertheless, the man had ever since, with the exception of one attack, been free from fits, and his headache and depression had disappeared. Mr. Whitehead attributed the improvement rather to reflex influences than to any direct result of the operation. He promised to report the further progress of the case.

Fatty Tumour in a Child.—Dr. DONALD showed a boy, aged 2½ years, who had a large fatty tumour on the right side of his thorax. It extended from the third rib to the free margin of the ribs in a vertical direction, and from the right midaxillary line to two inches to the left of the midsternal line, in a horizontal direction; it measured 15½ inches in circumference at its base. It was almost globular in shape, not markedly lobed, of soft consistence, and quite painless. It was noticed a fortnight after birth, and was therefore probably congenital. It grew steadily until three months ago, but since that time its growth had been rather more rapid.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, NOVEMBER 6TH, 1885.

J. B. BRADBURY, M.D., President, in the Chair.

Friedreich's Ataxy.—Dr. MACALISTER read the case of a labourer, aged 29, single, who was admitted to Addenbrooke's Hospital, in July, 1885. The first appearance of the symptoms apparently dated about ten years ago, but the patient was able to work until about three years ago, when he began to feel weak in his legs and dizzy at times. On admission, he was a large flabby man, his legs were somewhat wasted, and the organs appeared sound. When he attempted with assistance to walk, the movements were exaggerated and ataxic. He could not stand even with his eyes open. He could move his legs and toes when he was lying or sitting. There was no abnormality of sensation. The patellar reflex and ankle-clonus were absent: the skin reflexes were apparently normal. He had complete control over the bladder and rectum. The arms were not perceptibly affected: his head was in constant slow motion from side to side: he had a slight convergent squint. He complained only of back-ache, and of (apparently flatulent) distension of the abdomen. No trace of syphilitic disease could be discovered. The pupils reacted both to accommodation and to light, the fundus appeared normal. The back showed a slight lateral curvature of the dorsal and lumbar spine to the left. Speech was slurred and drawling: there was no aphasia. Ataxy of the arms and hands afterwards set in, and the right eye became affected. He was treated at first with liquor strychniæ, and afterwards with iodide of potassium.

Embolism of the Central Artery of the Retina.—Mr. DEIGHTON said, on February 2nd, 1885, he was sent for to see Mrs. W—, aged 60, who said that as she was lying awake in bed in the morning she suddenly lost the sight of her right eye. She had never had any previous attacks of loss of sight, and the other eye was not affected; she did not feel giddy, faint, sick, or have any sensation of pain at the time of the attack. She was an anæmic looking woman, and the apex of one lung presented well marked evidence of phthisis. The pupil of the affected eye did not act directly to light, but contracted on illuminating the other eye; with moderate pressure there was no sensation of phosphenes. On February 3rd, she could distinguish large objects in a small peripheral portion of the temporal half of the field. Ophthalmoscopic examination showed the optic disc blanched, the arteries very much reduced in size but not filiform, the veins full and distinct. Round the optic disc and in the neighbourhood of the macula lutea a perceptible haziness of the retina was visible, but there were no hæmorrhages. The fundus of the other eye was quite healthy. This patient was seen again about six months later. The ophthalmoscopic appearances were those of atrophy; the arteries were very small but not obliterated. Vision was the same as before.

Flat Foot.—Mr. CARVER showed a specimen of flat foot taken after death from a man, aged about 30. He remarked that the deformity appeared to be due not to stretching or lengthening of the calcaneo-scaphoid ligament, but rather to displacement of the scaphoid and astragalus downwards and inwards; the head of the latter resting upon the anterior portion of the internal lateral ligament of the ankle-joint, and not on the calcaneo-scaphoid ligament.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, DECEMBER 9TH, 1885.

J. HOLMES JOY, M.D., President, in the Chair.

Mollities Ossium.—Mr. AUGUSTUS CLAY showed the sternum, portions of the femora, clavicles, and a part of the ilium, from a case of mollities ossium, in a woman, aged 39, who had been under the care of Mr. Pearse, of Brierley Hill. She was a dressmaker, and her mother, sister, brother, and eldest son, died of phthisis. She was the mother of five children, the last confinement being a difficult one. Her illness extended over nine years; and, at the time of her death, the bones of both thighs and legs were fractured, none of them showing any tendency to unite.

Removal of Foreign Body by Œsophagotomy.—Mr. BENNETT MAY showed a child, aged 7, from whom he had removed by œsophagotomy a halfpenny which had been swallowed three years and a half before the operation. It had ulcerated through the œsophagus, and opened the right bronchus, and was lying partly in the bronchus and partly in the œsophagus. After the operation, the child was at first fed by nutrient enemata. At the present time, there was a slight constriction at the seat of ulceration, but a bougie could be passed without any difficulty, and food was easily swallowed.

Removal of Tongue by Kocher's Method.—Mr. JORDAN LLOYD showed the whole of an epitheliomatous tongue and submaxillary lymphatic glands, which he had removed from a man by Kocher's method, after temporarily ligaturing the tongue at its root in two separate halves. The operation was practically bloodless. The man died on the tenth day from exhaustion.

Nephrectomy.—Mr. LLOYD also showed a kidney with dilated pelvis, as large as a fœtal head, which he had successfully removed from a boy, aged 5. Intermitting hydronephrosis, accompanied by great pain and constitutional disturbance, was the indication for removal. The operation was lumbar, and seven or eight renal arteries were ligatured separately; the kidney was liberated with its pelvis unopened, and cut off through the healthy ureter. The condition was probably congenital. The boy recovered perfectly.

Progressive Muscular Atrophy.—Dr. SUCKLING showed an engine-driver, aged 35, who was suffering from drop-wrist due to progressive muscular atrophy. There were complete paralysis and atrophy of the extensor muscles of both forearms, the supinator longus in each case escaping; other muscles of the hand and front of the forearm were also affected. The paresis and atrophy had gradually supervened, and advanced together. There was no history of lead-poisoning, no hereditary syphilis; but the man had acquired syphilis four years previously. There was no response to faradism or galvanism of the muscles of the back of each forearm; elsewhere, there were no qualitative changes.—Dr. FOXWELL showed a man with atrophy of the extensor muscles of both forearms and the short muscles of the hands, whose symptoms did not fully agree with any recognised form of such lesion.

Aphasia.—Dr. SIMON showed a case of aphasia, where the patient retained the power of writing.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 4TH, 1885.

T. R. JESSOP, F.R.C.S., President, in the Chair.

Spina Bifida.—Dr. GRIFFITH showed the lower vertebræ from a case of spina bifida.

Cancer in the Thorax.—Dr. BRITTON read notes of a case. The patient, a man, aged 43, had been suffering from dyspnœa for nine weeks, with slight expectoration of grey tenacious sputum. On admission into hospital, there was complete dulness, with absence of respiratory sounds over the whole of the right side of the chest, the liver reaching to within an inch of the crest of the ilium. He died from asphyxia on the twenty-first day. *Post mortem* examination. The upper edge of the liver was on a level with the lower edge of the ribs. In the mediastinum, the glands formed a hard mass three or four inches thick, which surrounded the aorta and other large vessels without adhering. The right bronchus was about one quarter of its usual size. On the right side, there was a gelatinous tumour, which could be easily separated from a whitish and harder substance about three-eighths of an inch thick, which was in direct contact with the inner surface of the ribs. It contained nearly three pints of clear watery fluid, and weighed, when empty, 2 lbs. 3 ozs. The mediastinal tumour had the appearance of scirrhus. The outer portion or sac of the larger tumour under the microscope was found to be white fibrous tissue, interspersed with cells. The points of interest were: 1, the patient lived in comparative comfort with one lung destroyed and the other œdematous, and the heart pushed two inches out of its normal position; 2, the hard cancerous mass enveloped the large vessels without appreciably altering their course or narrowing their channels; 3, the colloid material was enclosed in a sac, and only required the slightest manipulation to separate.—Dr. JACOB remarked on the rarity of primary carcinoma of the mediastinum or lungs.

Case of Arthrectomy.—Mr. MCGILL reported the case of a boy, aged 16, suffering from white swelling of the right knee, of six months' duration, on whom he had performed the operation of arthrectomy, removing all the pulpy synovial membrane, but not any bone. The wound healed by first intention, and the boy was allowed to be up in six weeks, when there was slight movement in the knee-joint, which somewhat increased subsequently. Three months afterwards he walked three miles, and seemed to be quite well. He drew attention to the great convenience of dry dressings, in that and in many similar cases. Salicylic silk and iodoform were used.—Dr. SWANN asked Mr. McGill what cases he would select for this operation. He had performed it once, and the patient died two months afterwards from tubercular meningitis: this termination had also occurred in another case, which had come under his notice lately, when no operation had been performed.—Mr. MAYO ROBSON had performed arthrectomy on a boy aged 7, but it was too early yet to pronounce on the result. He mentioned another case in which, a few weeks after operation, the disease had recurred in the bone.—Mr. WARD remarked on the liability of disease to begin in the articular ends of the bones, too often for asthrectomy to be often successful.—Dr. JACOB pointed out the bearing of this discussion on the more general question of the curability of tubercular disease. He traced the gradual growth of opinion towards the acceptance of cases of "pulpy swelling," as really tubercular, and therefore in danger of manifesting the tubercular diathesis as in the cases related by Dr. Swann.—Dr. CLIFFORD ALLBUTT suggested the use of an exploratory operation for the purpose of ascertaining the presence or absence of tubercle-bacilli. If these were found, he should think even excision would be an inadequate operation.—Mr. HICK said that he and his colleagues at the dispensary not unfrequently saw later developments of tuberculosis, in those dismissed from the infirmary as "cured" cases of joint disease.

Spina Bifida.—Mr. NORMAN PORRITT related a case operated on by Mr. Mayo Robson's method, the sac being ligatured.—Mr. WARD, after referring to a case he had cured by the plastic operation, said that he should never hesitate to operate in these cases.—Mr. MAYO ROBSON had just seen a patient, in good health, on whom he had operated for spina bifida a year ago. He referred to the report on the deformity, in the *Transactions of the Clinical Society*, and said that his experience led him to believe that the occurrence of nervous structures in the sac was much less frequent than was generally reported.

Strangulated Hernia with Duodenal Ulcer.—Mr. W. H. BROWN read a case of strangulated hernia complicated by a duodenal ulcer (the specimen was shown). The patient had been suffering some hours from symptoms of strangulated hernia; and though the hernia had been reduced before admission, the symptoms persisted. Herniotomy showed a knuckle of adherent omentum, which was returned into the abdomen. The symptoms persisted, but the patient seemed too ill to bear laparotomy. At the *post mortem* examination, there was found a perforating ulcer of the duodenum.—Dr. BARRS said that Mr. Brown's case showed the difficulty of making an exact diagnosis in these acute cases, when, although the causes might be variable, the symptoms were similar.

Ureometer.—Dr. CHADWICK demonstrated the use of Dupré's ureometer.

CHESTER MEDICAL SOCIETY.

FRIDAY, DECEMBER 4TH, 1885.

W. M. DOBIE, M.D., President, in the Chair.

Election of Officers.—The proceedings of this, the annual meeting of the Society, opened by the unanimous election of Mr. James Taylor as President, and Dr. Haining as Vice-President, for the ensuing year.

Parotid Tumour.—Mr. HAMILTON showed an enchondroma of the parotid gland of seventeen years' growth, removed from a patient aged 51. The diagnosis of enchondroma had been made before removal. There was neither lymphatic enlargement nor facial paralysis. The tumour had undergone some mucoid degeneration. Microscopic sections were exhibited.

Cystic Sarcoma of Mamma.—Mr. MILLER showed a round-celled sarcoma of the mamma containing a large cyst, which had been removed by Mr. Taylor. The patient was a married woman, aged 63, her youngest child being 30. Thirteen months ago, a piece of meat weighing 16 lbs., which she was trying to hang from the ceiling, fell and struck her left breast. She did not suffer from the effects of the blow at the time, but three months afterwards she discovered a lump of the size of a walnut at the seat of the injury. After trying various applications without benefit, she consulted Mr. Taylor, who drew off with a trochar and cannula a quantity of blood-stained fluid. The puncture did not heal, and round the small wound a circular hard mass could be felt. The lymphatic glands were not affected. The patient was admitted into the Chester Infirmary, and her breast removed. The cyst had apparently resulted from the breaking down of the centre of the tumour.

Pigmentation of Mucous Membrane from Lead.—Mr. HENRY DOBIE showed two patients suffering from chronic lead-poisoning, in whom not only the gums, but also the mucous membrane of the lower lip and cheeks, showed the blue pigmentation of sulphide of lead. He thought the pigmentation occurred wherever there was mechanical abrasion. One of the patients showed two parallel lines along the mucous membrane of each cheek, one corresponding to the line of junction of the lower teeth with the gum, the other to the line of meeting of the closed teeth. Both patients had suffered recently from colic and cerebral symptoms. In neither case was there albuminuria or any paralysis.—Dr. WEAVER thought the extensive coloration indicated an extensive general absorption of the lead into the system.

Fatal Affection of Spinal Cord resembling Rheumatism.—Dr. ROBERTS read notes of a case in which symptoms of subacute rheumatism passed rapidly into those of locomotor ataxy. Paralysis of motion came on only shortly before the fatal termination. No *post mortem* examination could be obtained.—Mr. TAYLOR, who saw the case, said he believed there was an inflammation of the posterior columns, which would have resulted in sclerosis if time had allowed.

Pathological Committee.—Upon the motion of Mr. TAYLOR, a pathological committee was formed to take charge of specimens, to examine and report upon them to the Society, and to start the formation of a collection of microscopic specimens to be the property of the Society.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THURSDAY, NOVEMBER 12TH, 1885.

SAMUEL FIELDEN, M.D., President, in the Chair.

Epithelioma of Tongue.—Dr. MORISON showed a patient upon whom he had operated four years ago, the man being then 60 years old, for epithelioma of the front half of the tongue and the floor of the mouth. Two and a half inches of the lower jaw, the floor of the mouth, and the anterior half of the tongue, were removed. The patient made a good recovery, and had a fairly useful jaw and powers of speech.

Excision of Knee in a Boy.—Mr. PAGE exhibited a boy, aged 9, whose knee he had excised a year ago. The boy had an useful limb, which appeared to be growing with his growth.

Popliteal Aneurysm.—Mr. PAGE also exhibited a patient in whom he had tied the femoral artery for popliteal aneurysm. The result was in every way satisfactory.

Trephining for Epilepsy.—Dr. OLIVER showed a boy who had been trephined in the right parietal region for supposed traumatic epilepsy. The fits had developed after a blow on the head; and although, on admission to the Newcastle-on-Tyne Infirmary, no injury could be detected, it was decided to trephine, as the epileptic phenomena were unilateral. The opening was made an inch above and behind the right ear, and a quantity of effused serum and lymph removed. The wound healed well, but the fits continued, though with less severity and frequency.

Abdominal Section.—Dr. MORISON exhibited a portion of bowel with perforating ulcer, and a portion of intussuscepted bowel, removed by abdominal section.

Vesical Calculi.—Dr. MORISON also showed seventeen vesical calculi. Among them was a calculus, which weighed 1 lb. 6¾ ozs., removed from a sailor, aged 52, who had suffered for thirty-eight years from pain and difficulty on micturition. The lateral operation was first tried, but did not give sufficient room to remove the stone. A suprapubic incision was made; and as no lithotomy-forceps which the operator possessed was large enough to grasp the stone, midwifery-forceps was used, and the stone successfully removed. The man did well till the twelfth day after the operation, when, without warning, he suddenly became very ill, and died on the fourteenth day. No necropsy was allowed.

Colotomy for Fibrous Stricture.—Mr. PAGE showed the sigmoid flexure and rectum from a patient who had suffered from fibrous stricture at the junction of these parts. No fæces had been passed for fourteen days before operation. Right colotomy was performed, with complete relief of symptoms; but the patient died three weeks afterwards. The necropsy discovered extensive disease of the kidneys, and partial occlusion of both ureters by bands of cicatricial tissue.

Large Aortic Aneurysm.—Dr. OLIVER exhibited a specimen of aortic aneurysm. The sac arose from the ascending aorta. and projected forward between the pleuræ to the anterior chest-wall, where it opened into a blood space behind the right pectoral muscles.

Eczema of Nipple and Scirrhus of Mamma.—Dr. HUME read a paper on two cases of scirrhus of the mamma, with eczema of the nipple. After carefully tracing the connection between the two, the author came to the conclusion that, where there was true eczema of the nipple, that is, eczema confined to the nipple alone, one was justified in recommending excision of the breast, as a safeguard against the malignant disease which, in his opinion, was almost certain to follow in the gland.—The discussion was carried on by Drs. DRUMMOND, ANNISON, and MORISON, and Mr. PAGE.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, OCTOBER 13TH, 1885.

GEORGE BUCHANAN, M.D., President, in the Chair.

Gallstone arrested at Time of Death in the Ductus Communis.—Dr. W. T. GAIRDNER showed a specimen, upwards of forty others (all small and facetted) having been found in the gall-bladder. There was a history of gastric symptoms, extending over a period of two years, but no jaundice at any time, not even in the fatal attack. (Path. Reg., Western Infirmary, No. 1369).

Cavities (Bronchiectatic) in Lower Lobe of Left Lung, accompanied by complete Absence of Carbonaceous Pigment in the Lobe so affected; the History pointing to a very Old, possibly Congenital Disorganisation.—Dr. W. T. GAIRDNER also showed this specimen, which was obtained from the body of a man aged 66, who had been frequently under treatment in hospital; and on all occasions his symptoms were nearly identically, viz., those of bronchitis and emphysema, with what was presumed to be a considerable excavation at the left base, probably bronchiectatic, but adding very little to the gravity of the symptoms. The patient had been liable to attacks of bronchitis since an "inflammation of the lungs" thirty years before death. He had had three wives, all of whom died either of consumption or scrofulous disease; and, of sixteen children born to him, only one survived him in 1883, being the first child of the first wife. At the *post mortem* the condition of the lung already mentioned was found, but no tubercles or emphysema; besides the large cavity, there were numerous dilated bronchi. The absence of tubercles in the midst of all these destructive changes, and the frequent possibilities of direct bacillary infection which this man must have been subjected to in connection with his married life, are facts which cannot but excite attention.

Cavities in Lower Lobe of Left Lung; Unsuccessful Attempt at Pneumo-Surgery shortly before Death.—Dr. W. T. GAIRDNER also showed the specimens in this case. They were obtained from the body of a boy, aged 11, and the symptoms had extended over a period of two years and a half, without there having been any history of a foreign body gaining access to the respiratory passages. The cavities were partly gangrenous, partly bronchiectatic, but were mainly determined by a foreign body impacted in the air-tubes, probably during infancy. The case was submitted for consideration to Drs. Finlayson and Douglas Powell, of London, and, with the concurrence of these two gentlemen, an attempt to open and drain the cavity was made by Professor Macleod. Dr. Macleod described the operative procedure, and Dr. Joseph Coats the results of the *post mortem*. Professor Gairdner gave a detailed description of the case, which will be found in the *Glasgow Medical Journal* for January, 1886.

Vascular Protrusion of the Eye-Ball.—Mr. HENRY E. CLARK showed a woman, aged 43, suffering from this condition, which had followed upon a wound of the forehead, received a week before she came under observation. The wound was over the left eye, but it was the right eye which became protruded. Mr. Clark regarded the condition as due to obstruction to the venous outflow from the orbit, and, if it did not subside under general treatment he proposed to ligature the common carotid artery.

Multiple Sarcomatous Tumours.—Mr. LYON SMITH showed two specimens. One originated in the posterior mediastinum, and extended round the right lung, being continued over the heart, and obliterating the pericardial sac. The other surrounded the cœliac axis, and extended across to the right kidney. In both cases the tumour had spread to more or less distant parts, and a minute account of the conditions, with speculations as to their nature and mode of extension, was given by Mr. Smith.

TUESDAY, OCTOBER 27TH, 1885.

GEORGE BUCHANAN, M.D., President, in the Chair.

Charcot's Joint Disease.—Dr. W. J. FLEMING showed a man aged 45, a gardener, who was admitted to Ward 20 of the Glasgow Royal Infirmary suffering from this disease. The patient presented well-marked symptoms of locomotor ataxy, which had developed after he was struck by lightning, about twelve years ago. On examination, both hip-joints appeared misshapen, and on handling there seemed to be a more or less complete absence of the heads and necks of the femora with partial dislocation of the shafts backwards.

Perforating Ulcer of the Foot Associated with Locomotor Ataxy.—Dr. BARLOW showed a patient, aged 22 years, suffering from this affection, who had been under his observation in the dispensary of the Glasgow Royal Infirmary. The ulcer was circular in form, with well depressed base, and undermined edges, covered slightly with granulations, and having little or no discharge. It waa not painful. The patient had led a most irregular life, and had a very bad family history, various members of it having suffered from insanity or other nervous affections. Dr. Barlow gave a detailed clinical account of the case, and discussed the connection between the nervous lesions and the ulcer on the foot.

Aneurysm of the Mitral Valve from a Case in which Death took place under Chloroform.—Mr. H. E. CLARK showed the specimen, and gave the clinical history. The case was one of aneurysm of the common femoral artery, for which the operation of ligature was performed. The condition of the heart was known before the operation, and it was considered best, notwithstanding, to administer chloroform. The anæsthesia was perfectly satisfactory until the operation was nearly completed, when the pulse failed, and respiration suddenly ceased.

Fracture of Body of Seventh Cervical Vertebra.—Dr. W. J. FLEMING showed the specimen. The fracture had occurred as the result of a fall out of bed ten days before death. The spinal cord was lacerated, but the membranes were uninjured. There was complete paralysis of the lower extremities and the lower part of the body, but none of the arms.

ACADEMY OF MEDICINE IN IRELAND.

Surgical Section.

Friday, November 13th, 1885.

Sir Charles A. Cameron, M.D., President, in the Chair.

Inaugural Address.—The President delivered an inaugural address, dealing with the history of Irish surgery and the contributions made by Irish surgeons to surgical science.

The Advantages of the Principle of Dry Dressings in Antiseptic Surgery.—Mr. Kendal Franks read a paper on this subject. The ground for discussion on the principle of antiseptic surgery had been shifted lately. That principle was almost universally recognised; the question now was as to the best methods of applying it. The ideal wound was one similar to a subcutaneous wound kept at perfect rest. The mode in which Lister's method failed to attain the ideal was that, by the necessity of frequent dressings, absolute rest could not be secured. In order to get uniformly good results from the method of dry dressing, the following points were insisted on: 1, the most rigid method of rendering and preserving a wound aseptic must be observed; 2, there must be absolute hæmostasis; 3, drainage-tubes must be abolished, and in place of them a natural system of drainage substituted, by means of which no foreign bodies are left in the wound—a method due to Neuber, of Kiel; 4, all cavities or spaces in the wound must be prevented by suturing together the deep tissues; 5, the application of large quantities of highly absorbent materials, rendered antiseptic; 6, the abolishing of all mackintosh or other impermeable material from the dressings; 7, the employment of a stable antiseptic in the dressings, instead of a volatile one like carbolic acid, or eucalyptol. The antiseptic best suited for the purpose was corrosive sublimate. The dressings employed by Mr. Kendal Franks consisted of a piece of sero-sublimate gauze previously wetted with carbolic solution—1 in 40—directly over the wound, and over the contiguous skin, so as to protect them from the action of the sublimate. Pads made of turf-moss containing 1 in 400 of corrosive sublimate, or wood-wool, containing 1 in 200 of the same antiseptic, made up in gauze-bags, were applied over the deep dressing in sufficient quantity, and the whole firmly bandaged on with a calico bandage. These dressings could be left on for weeks. Mr. Franks gave some examples to illustrate the results obtained, which included cases of radical cure of hernia, healed under one dressing in ten days; excision of the right lobe of the thyroid gland, soundly healed in ten days under a single dressing; removal of cancer of the breast, with clearing out of the axilla, under one dressing in a fortnight; excision of the knee, perfectly healed in three weeks under one dressing; and excision of the hip, healed in three weeks under three dressings. These cases were not exceptional. Almost every operation case had a similar history; the cases quoted were only cited as examples.

REVIEWS AND NOTICES.

Vital Statistics. Selections from the writings of William Farr, M.D., D.C.L., C.B., F.R.S. Edited for the Sanitary Institute by Noel A. Humphreys. Large 8vo. Pp. 563. London: E. Stanford. 1885.

Dr. Farr was in many respects a remarkable man; born in humble circumstances, and, with all the disadvantages of a desultory and defective education, he became, by force of character and his own exertions, a good classical scholar and linguist, and an excellent mathematician. In his thirtieth year, he contributed to McCulloch's *Account of the British Empire* the article on Vital Statistics, which, as a monograph of the subject, has never been surpassed, and which, with other papers on life-assurance, etc., led to his appointment, in 1839, as compiler of abstracts in the office of the Registrar-General, which had been created two years before.

Hitherto, the censuses had been very imperfect; civil registration of births, deaths, and marriages had but just come into existence, and it was only in consequence of his urgent representations that, in 1841, the ages of the people were reported. With this census, Dr. Farr had no immediate connection, but he at once set himself to the work of perfecting the machinery and materials of the department, and practically directed the censuses of 1851, 1861, and 1871.

For forty years, his mind and pen were incessantly occupied, and it is no injustice to those who, as Graunt, Halley, Neumann, and others had, with the most imperfect materials, laid the foundations of life-assurance, or to the economists and philosophers of the last century, who had speculated more or less wisely on the laws of population, to say that the science of vital statistics, as we now understand it, was the creation of Dr. Farr, since he first established it on a sound basis of facts, and rendered it as exact as any department of applied mathematics.

But the absorbing interests and imperative demands of his office left him no time for undertaking the writing of a systematic work, and his contributions to the science are scattered through the reports of the censuses, the annual reports and decennial summaries of the Registrar-General and other State papers, the transactions of the Statistical Society, and elsewhere; and we cannot strongly enough express our obligation to the Council of the Sanitary Institute, and to their editor, Mr. Noel Humphreys, one of Dr. Farr's ablest disciples and colleagues, for bringing together in one volume, which will ever remain a standard work, all that is of most value and of permanent interest from so many quarters, most of them more or less inaccessible to the ordinary student of a subject which might wel be called the Institutes of Public Health.

The work is divided into six parts, namely—1, population; 2, marriages; 3, births; 4, deaths; 5, life-tables; and 6, miscellaneous questions. Of these the first is, perhaps, the most valuable, containing, as it does, not only a survey of the entire subject of vital statistics, but an exposure of the erroneous doctrines of Malthus and Price, and of the fallacies into which later authorities, as Dr. Letheby, with our present knowledge of the facts of population in their possession, have nevertheless fallen. Indeed, we may take this opportunity of saying that, though the name of Dr. Rumsey is not mentioned, Dr. Farr has everywhere avoided, if he have not actually indicated, the fallacies which that accomplished writer exposed and attributed, by implication at least, to his arrangement of healthy and unhealthy districts.

Dr. Farr is ever conscious of the value of human life and human affections; he shows the fallacy of supposing that population can ever, to any great extent, outgrow the means of subsistence; for, though these fix a limit to the multiplication of the lower animals who subsist on the natural fruits of the soil, man can by his industry create other wealth, which is convertible into food by commercial exchange.

Should population increase at any time in a faster rate, as it will through an undue stimulation of production, he points out that, instead of the unnatural remedy of Malthus, or the hypothetical necessity for epidemics suggested by others, it will find its own relief in the voluntary postponement of, rather than in enforced abstention from, marriage, or in limitation of families. In fact, the rate of increase of a population may be doubled or halved by anticipating or delaying the mean age of marriage by five years; not only by the influence of such change on the number of children to a family, but by its reducing or extending the interval between one generation and another.

He insists on the benefit resulting from amelioration of the general health, and extending the duration of life from an economic as well as from a social point of view. He is in favour of emigration, seeing in it the immediate abstraction of productive power more than compensated by the opening of new markets, and the mutual political advantages derived therefrom. The marriage-rate he calls the barometer of national prosperity, but he points out that this prosperity may be real or illusory. In the one case the results will be permanent, in the other they will be followed by a reaction in the form of a depression of trade, and a consequent decline in the marrriage and birth-rate until equilibrium is restored.

We could carry on this analysis to a length incompatible with the space at our command, but must content ourselves with noticing a few too prevalent fallacies. Thus Dr. Farr shows that, though a high death-rate is always followed by a high birth-rate to fill the vacancies, the reverse is not true, at any rate for more than a few years; for, although a large proportion of young children may raise the death-rate somewhat, yet, if the high birth-rate be maintained for long, there will soon be a large excess of adults at the age of lowest mortality, and a correspondingly low proportion of aged persons who contribute largely to the death-rate.

Again he shows that the mean life-time and the percentage of old persons afford no indication of the real longevity of a people; for example, there are more persons over 60 in every 1,000 living in France than in England, not because life is longer there (which, in fact, it is not), but simply because the proportion of children, and therefore of young adults, is less. He insists on the necessity of calculating the mortality of any age on the number of persons living at that age; and we cannot but express our surprise that many medical officers of health persist, notwithstanding, in calculating the deaths of infants on the population, or on the total deaths at all ages, when it is so easy to compare them with the infant population, that is, the births of the year; all other estimates are utterly useless. Even the number

of children under five years may be known at each census, and roughly corrected in intermediate years, if the more closely approximate calculation from the births and deaths of each of the preceding five years be not resorted to.

Every page of the book is replete with instruction, and it should be in the hands of every medical officer of health of a district more extensive than a rural parish, as well as of all who have the health and wealth of the people at heart, whether as sanitarians, economists or statesmen.

The papers relating to the several cholera epidemics of 1848, 1854 and 1866 will be found of great value for reference ; and the section on life-tables deserves to be studied by those offices which still adhere to old and inaccurate tables. In other parts of the book, fallacious conclusions as to the health of gaols and the relative mortality of lunatic asylums are exposed ; but we must forbear, for only a study of the book itself can give an adequate idea of its worth.

The frontispiece is an excellent photograph by Lombardi of the "dear old doctor," as he was familiarly called in the office ; but we may be allowed to point out what must be a clerical or printer's error in the life, when Dr. Jenner is mentioned as one of the professors of University College whose lectures he attended in 1831 ; no doubt Dr. Turner (then professor of chemistry) is meant.

Overpressure in High Schools in Denmark. By Dr. Hertel, Municipal Medical Officer, Copenhagen. Translated from the Danish by C. Godfrey Sorensen ; with an introduction by J. Crichton Browne, M.D., LL.D., F.R.S. London : Macmillan and Co.

The question of overpressure in schools has recently received a considerable amount of attention in this country. We are not sure that the interest it has created has always manifested that freedom from bias, whether of party politics or of theological belief, which should characterise the discussion of a scientific question. In this country, the idea of national education is new to men's minds. A very short period of time has elapsed since, by the passing of Mr. Forster's Act, it could be truly said that education had been brought within the reach of all the children of the country. And, unfortunately, the working of the Act has raised, almost inevitably, an amount of party feeling which has tended to obscure the real issues of our educational policy. So markedly has this been the case, that an accusation of belonging to a political party has sometimes been considered a sufficient answer to criticisms of the conduct of our schools ; and, on the other hand, blindness to defects which were clear enough to others, has sometimes been said to have characterised those who supported what might be for the moment the dominant party responsible for the time being for the working of the Act. All this is very painful, and unworthy of a great nation ; and it is to be hoped that we have heard the last of the introduction of this kind of bias into discussions of this sort. Certainly, no satisfactory conclusion can be come to on these lines. Happily for the issue, Dr. Hertel's views come before us quite free from such prejudice. In his capacity of municipal medical officer, he has been able to approach the question in a judicial spirit, any prejudice that might have affected him being rather in the direction of supporting the Copenhagen school-system than of finding fault with it. Yet it is scarcely too much to say that he condemns it utterly. We view his monograph as a valuable contribution to what we may term the inquiry into the effects of educational systems, from the comparative point of view. Conclusions drawn from the system of any one country may be prejudiced by some of the facts peculiar to that country ; nations, like individuals, being liable to be biassed by their own peculiar "idola." But inferences, supported by inquiry in different countries, and under different conditions, become free from special prejudices, and tend thereby to approach more nearly to the truth. In truth, a good deal of evidence has already been accumulated, to show that overpressure is not confined to any one country. Voices have reached us from Sweden and Germany, declaring, in no uncertain tones, that the school-systems of those countries tax too heavily the tender growing powers of both boys and girls. When it is remembered that no less an authority than Professor Kjelberg, of Upsala, takes this view in Sweden, and says that "true power of mind and force of character are wanting among the young men of the present generation," it will be seen how grave is the state of the question in that country. For the moment, however, we have to do only with Dr. Hertel's statements regarding Danish schools. His inquiries further, it should be said, have, in the main, been carried on among the children of the more affluent classes ; and since these children are, on the whole, better cared for than the children of the poor, it is probable that the results are more favourable than they would have been if conducted among children of an inferior rank in life. Dr. Hertel says, also, that the autumn season, at which the answers to his questions have been sent in, has tended to more favourable returns, because the children are then in better health, owing to the long summer holiday, than they would have been had the answers been made in spring. The method of inquiry has been to send to the parents printed questions regarding the state of health, age, number of hours of work daily at school and at home, whether a private tutor assists the pupil, and for how long, whether the pupil has any particular difficulty in his work, the number of hours of sleep, and the time of going to bed for each pupil. On the question of nourishment, of course the children of the well-to-do have generally enough to eat ; but it is distinctly stated in many cases that the appetite was good in the holidays, but fell off during the school-session. It is important to note Dr. Hertel's definition of "sickly" children. He means "unsound children, who suffer from chronic complaints, but who are nevertheless able to attend school regularly ; in short, children whose state of health is abnormal, and who require special care, both at home and at school, during their growth and development."

Acute and temporary illnesses have not been included. The diseases to which Dr. Hertel attaches most importance are anæmia, scrofula, nervousness, headache, bleeding at the nose, curvature of the spine, and diseases of the eye.

In stating his results, Dr. Hertel uses the tabular method, throwing the whole conclusions into diagrammatic form, and has managed to include all he has to say in a compass of fifty pages for boys and about twenty-five for girls. The book will be found well worth perusal by those who are interested in this important question, but its condensation makes it almost as difficult to review as it would be to present a summary of the first book of Euclid. In the case of boys, he examined fourteen schools with a total of 3,141 pupils, of whom 60.5 per cent. were found to be healthy, 31.1 sickly, and non-returned 8.4. It is almost incredible—no one would have thought so *a priori*, we think—that one-third of all the boys attending middle-class schools in Copenhagen should be sickly. It appears that, on entering school, the healthy boys form 74 per cent., the sickly 18.4, and the non-returns 7.6. This is of itself very serious, for it shows to how great an extent delicacy prevails among the children of the well-to-do. If this result is to be taken as an indication of what is going on throughout civilised countries, it would seem that the cry of physical deterioration of the race has more to be said for it than is generally believed. But serious as is this state of things, it is evident that school-life aggravates it, because in the next year of school-life the proportion of sickly children is almost doubled : healthy, 56.9 ; sickly, 34 ; non-returned, 9.1. These figures apply to mixed schools; and the general average of these, calculated on 1,742 boys, is, of healthy children 62.2 per cent., sickly, 29.9 ; non-returned, 7.9. The total returns for boys in the modern division give, of healthy 56.5 per cent., sickly, 31.1, and non-returned, 12.4 ; and in the classical, healthy, 58.5 per cent., sickly, 34.4 per cent., and non-returns, 7.1 per cent. In the rhetorical section, the percentages are, of healthy, 68.2, sickly, 28.3, and non-returns, 5.3. The general result for boys' schools is therefore this, that about one boy in every five is sickly on entering school, but that, of boys actually in school-attendance, one is sickly in every three ; and the inference, therefore, seems to be irresistible that school-life somehow increases the sickliness of the boys.

In the examination of boys according to age, some very interesting and very important facts emerge. Thus Dr. Hertel shows that, shortly before puberty, the proportion of sickly boys actually rises to 40 per cent., although the general average remains as stated. This great increase of sickliness about the age of puberty (and the increase is even greater in the case of girls) emphasises the conclusion that school-discipline ought to be much less severe at that time of life, if indeed, it do not justify the demand that training should be intermitted from 13 to 14 years of age altogether.

Table III deals with the diseases from which Dr. Hertel has found schoolboys to suffer. They have been already named. Under the ages of puberty, scrofula is the commonest disease, both among boys and girls ; but in the highest classes, headache and nose-bleeding become common, showing, in Dr. Hertel's opinion, that the school-work tends to induce congestion of the brain.

As to hours of work, it is found that boys in the first mixed class have to work four to six hours a day, and that the duration of work increases rapidly in the following classes, until we get 7.7 hours in the sixth mixed class, being an average increase of half an hour per class. In the Rhetorical section of the classical schools, boys have to work 10.4 hours daily in the sixth class. In the Natural Science section, 9.6 hours in the highest class is the longest day's work. About one-third of the boys have private tuition in addition,

which brings up the working-hours to eleven a day. From facts mentioned by Dr. Hertel, it appears that these hours are longer than those of German boys of corresponding ages, and also longer than those of boys in corresponding Norwegian schools. They include the time spent at gymnastics and music.

Dr. Hertel's estimate of the amount of sleep required by boys is not very high, but he says that about 9 per cent. of the boys do not get sufficient sleep. It is, he says, more particularly amongst the elder boys that cases of insufficiency of sleep are most frequent, and of these there are many who sit up far too late, it being no uncommon thing for some of them to protract their studies till midnight, or even till one in the morning. Dr. Hertel even says that some (let us hope exceedingly few) boys of 9 and 10 years of age actually work "over eleven hours a day."

The inquiry into the case of girls resulted, in the main, in the same conclusions as were reached for boys, only they were worse. Altogether, 1,211 girls were examined between the ages of 5 and 16. The percentage over all, of healthy, was found to be 53.1; of sickly, 39.4; and non-returned, 7.5. This is a good deal worse than was found among the boys, although just at their entrance into school girls seem to be less sickly than boys. Thus, on entering school, the percentage of sickly girls is stated at 12.7, but, in the first three years, it rises rapidly to 32 per cent., the percentage of healthy falling, at the same time, from 79.7 to 59.4. At this time, the state of girls' health is much the same as that of boys', but it soon becomes much worse. Thus, from the ages of 12 to 16, the proportion of sickly is actually higher by some 10 per cent. than that of healthy girls, except at 14 years of age, when the proportions (46.2 per cent.) are exactly equal. But, at 16, the proportion of sickly is no less than 61 per cent., while that of healthy is only 39. It is noteworthy, also, that as the proportion of non-returned sinks to zero, the proportion of sickly children coincidently rises, which seems to show that it might have been fair to include the non-returned cases among the sickly. The same fact is observable among the boys, and the conclusion to be drawn appears to be that Dr. Hertel's results, bad as they are, ought really to have been worse than he has stated them. The same general conclusion as to the dangers of the state of puberty for girls obtains as in the case of boys, and the same warning from nature to intermit the violence of study at that time is also indicated. Miss Zahle has written strongly enforcing this view, and Dr. Hertel adopts and justifies her suggestion. In this connection, Dr. Crichton Browne, who writes an introduction to Dr. Hertel's book, points out a remarkable fact. It appears from the English Registrar-General that the death-rate of females from consumption between the ages of 5 and 20 is far greater than that of males at the same ages. This is the more remarkable as, above 35 years of age, men die of consumption at a higher rate than do women. The conclusion which Dr. Crichton Browne draws from these remarkable facts is the perhaps too obvious suggestion that "we should curtail rather than extend studious application, and insist on far more outdoor exercise for girls than they have hitherto enjoyed."

The diseases from which girls suffer are much the same as were found to prevail among boys. In the matter of hours of work, girls' hours do not seem at first sight so long as those of boys. This arises partly from the fact that head-mistresses have the power of arranging the hours for girls without Government interference; and hence it happens that in no case is more than eight hours' attendance at school demanded. On the other hand, far more girls have private tuition than boys have, and, also, girls begin to have it at an earlier age than boys do. Thus, between the ages of 14 and 16 girls have almost nine hours' daily study, which slightly exceeds the limit fixed for boys in perfect health. Dr. Hertel says that 30 per cent. of girls have "hard" work, and chiefly at the critical ages of 12, 14, and 15. Bearing these facts in mind, we are not surprised to find that they have far too little exercise, nor can we wonder at the answer Dr. Hertel often got from parents when he advised that the girls should have a daily walk, "You really must not expect that; the children have no time for it."

Such are, in brief, some of Dr. Hertel's conclusions regarding the forcing of children in Denmark. In the concluding chapter, he makes certain valuable suggestions, with which the limits set on our space do not allow us to deal. It remains to be ascertained how far the same facts prevail, as a rule, in English board and voluntary schools. But no doubt the Danish facts are very interesting in one of their aspects, and distressing from another, and that a study of them is urgently demanded from those who have at heart the welfare of English children, if we wish, in arranging our school-system, to avoid the errors into which our brethren across the North Sea have fallen.

MANUEL DES INJECTIONS SOUS-CUTANÉES. Par Bourneville et Bricon. 2nd Edition. Paris. 1885.

THE authors are to be congratulated on the second edition of this excellent and exhaustive manual of hypodermic injection. It is more complete than the first edition, and contains new articles on the following drugs: Chrysophanic acid, osmic acid, agaricin, antipyrin, convallaria majalis, cucaine, eucalyptol, ichthyol, kairin, nitroglycerine, paracotoine, paraldehyd, pareirin, permanganate of potash, salicylate of soda, and thallin. This list shows that the book has been brought up to the most recent date.

Hypodermic medication is undoubtedly more in vogue on the Continent and in America than in the United Kingdom, where indeed it may be said to be almost limited to the administration of morphine and atropine. Bourneville and Bricon's manual shows that it is worthy of more extended trial than at present.

The arrangement of the book is the same as in the first edition. In the introduction there is a valuable chapter on local accidents, to avoid which, in the case of some irritant drugs, it has been suggested to inject deeply beneath the cellular tissue. The authors are against such a proceeding. Intramuscular injection (for example, with ergotin) is not considered; and though a voluntary omission has been made of injection into the veins and serous cavities, and of transfusion, yet we cannot but think that the book would gain in value by the consideration of these subjects.

The remedies are arranged alphabetically. Each article is divided into four parts, considering the chief physiological effects, the local effects of hypodermic injection, the formulæ used, and, lastly, the therapeutical use of the drug. The short account of the physiological action is in all cases good, and includes the most recent work on the subject. The formulæ are taken from various authors, many being original; the most useful are indicated.

The manual is not only instructive reading, but is most valuable as a book of reference, being a complete treatise on the subject. It is worthier of a handsomer form of publication, and the mistakes in the spelling of English names ought to be rectified.

NOTES ON BOOKS.

DR. SHEEN'S "*Handy*" *System of Medical Bookkeeping.* Eleventh Year of Publication.—This system comprises a visiting-list, day-book, and ledger. The visiting-lists, three shillings a dozen, are of a convenient size for the pocket, and very handy. The day-book is an epitome of all the work of a medical man. On the right hand side are thirty-one columns for the days of the month; and on the left hand side are ruled spaces for name and address of patient, remarks, and cash-payments, and a cash-column for totalling amounts to be entered in the ledger. The ledger is indexed, so that the accounts may be entered under each client's name alphabetically, each client being distinguished by a number. (A separate alphabetical list may be kept, showing each client's name, address, number, and usual fee for consultation or visit.) The amounts only from the day-book are entered in the ledger, in columns ruled for the purpose; and it is assumed that accounts are sent out at least every six months. There are other columns, showing when an account is rendered, when paid, and when carried forward. This "handy" system reduces very considerably the labour of "posting," enables book-debts so be kept well in hand, and shows at a glance how much is booked year by year. Slips of paper are used for prescriptions; and these are kept in a drawer, alphabetically arranged, those in use being taken out when wanted, and kept on the table. The temperature-charts, three shillings a dozen, are the same size as the visiting-lists. The publisher is W. Lewis, Duke Street, Cardiff.

New Remedies. By THOMAS M. DOLAN, M.D.—This small handbook to the natural history, physiological action, and therapeutic uses of the most recent additions to modern pharmacy has lately appeared, and it has, at any rate, the merit of coming at a very opportune moment, and of affording information which is very difficult to obtain in any one publication elsewhere. Moreover, as the cost of the book is but small, there can be no objection to renewing the edition and bringing it up to date as often as this may be required. It is a reprint of a series of articles which have appeared in a contemporary. Several recent additions to the stock of drugs, whose reputation is *sub judice*, are, however, omitted, such as the fluorides, antipyrine, strophanthus, etc.; while, on the other hand, it is difficult to understand why veratria, staphisagria, etc., are classed as new remedies. The therapeutic portion is confined apparently to a recapitulation of the properties ascribed to the particular drug by its inventor or introducer.

The book may be found convenient for reference as to doses; but can scarcely do more than give a rough idea of the uses to which these drugs have been or can be applied.

Diaries.—Messrs. William Collins, Sons, and Co., Limited, have produced an extremely attractive and comprehensive series of diaries, 1886. They are printed on sight-preserving paper, which has proved so popular in former years, and the diversity of the forms in which they are published will render them useful in the office, the study, or the ordinary course of business. The Pocket and Portable Diaries are both in convenient sizes, and may be obtained in a variety of bindings at prices from 6d. to 1s. 6d. The Scribbling and Commercial Diaries, also, are very suitable for business purposes. The companions to them, the Tablet Diary, the Calendar Desk, and the Calendar Writing Pad, are published at extremely low prices, while the articles themselves are unrivalled for the style of their production. Two other books, which are at all times useful, have been prepared at very moderate prices by the same publishers. These are the Housekeeper's Account Book and the Dictionary Blotter, both being comprehensive in the arrangement of the contents. Considering the suitability of all these Diaries and Calendars, it is not surprising that they have already met with a very extended circulation, the sale for the present year being greater than on any former occasion.

Under the Red Crescent; or, Ambulance Adventures in the Russo-Turkish War of 1877-78. By R. B. MACPHERSON, Blantyre Surgeon with the Turkish Forces, etc. (London: Hamilton, Adams, and Co. 1885.)—Under this title the author, one of the surgeons sent out by Lord Blantyre, gives an account of his travels from the day of leaving Edinburgh to his reaching the neighbourhood of Plevna, and on through the campaign. The story is told in a straightforward, unassuming manner, and, notwithstanding a dash of the guide-book here and there and a certain strain of Mark Twainism in passages intended to be humorous, the book is one which will be read with interest, although so long after date.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

DR. SPENCER'S BINAURAL STETHOSCOPE,
COMBINING IN THE SAME INSTRUMENT A STETHOSCOPE FOR ORDINARY USE, AND A BINAURAL DIFFERENTIAL STETHOSCOPE.

THIS stethoscope was first introduced about eleven years ago, and a detailed description of it was published in the BRITISH MEDICAL JOURNAL, March 28th, 1874. At that time it was rare to see a medical man using a binaural stethoscope. The only binaurals in use were those designed by Dr. Leared (in 1851) and Dr. Camman of New York (in 1855). These were very clumsy instruments, and, acoustically, full of grave faults; the laws of acoustics were disregarded in their construction; all sorts of adventitious sounds were created in the stethoscope, and vibrations were reinforced by resonance to such a degree that differences in the characters of sounds could hardly be appreciated. The effect produced reminds us of the child's toy-resonator, a sea-shell. Dr. Spencer's binaural remedied these defects by making the conducting medium a column of air of uniform diameter everywhere, there being in no part of the instrument any conditions whereby new sounds or reinforcement of sounds by resonance could be produced. The column of air was continuous with and of the same diameter as the column of air in the auditory meatus. This stethoscope was originally designed as a binaural differential instrument, although it was adapted equally for general use. Until the time of its introduction, the only differential stethoscope was one designed by Dr. Scott Alison. With Dr. Alison's stethoscope two sounds could be compared, but the one with one ear and the other with the other ear; it was not a binaural at all, so far as regards hearing the same sound with both ears at the same time. In Dr. Spencer's differential stethoscope, sounds entering either of the two chest cups, or collectors, were conducted to both ears at the same time. This result was gained by means of a tubular joint, which fulfilled also other important functions connected with adjustment of the instrument to the ears. This stethoscope, as introduced eleven years ago, was too complicated in some of its details and too high in price to command general use. Nevertheless, stethoscope makers speedily adopted some of the more characteristic features; and one at least of the binaural stethoscopes introduced lately is a copy of Dr. Spencer's without the differential arrangements. The stethoscope is now reintroduced with modifications and improvements, and in a cheaper form. It is truly a scientific instrument, simple and elegant in form, very portable and handy in use, and has already gained considerable popularity. Acoustically, it leaves little or nothing to be desired; vibrations are conducted to the ears without loss of intensity and faithfully, the slighter variations in the character of vibrations are brought out with clearness, and shades of tone which cannot be appreciated with the usual forms are brought out by this stethoscope with remarkable clearness and fidelity.

The stethoscope may be described thus. Two metal tubes, bent in the usual way for adjustment to the ears, and fitted with two ivory ear-pieces, are crossed like the letter X, and are connected together where they cross by means of a tubular-joint. By means of this joint, the ear-pieces are readily separated and adjusted to the ears; when adjusted, the ear-pieces are retained in position by means of an elastic band stretched across the distal end of the tubes. Two pieces of rubber tubing, of special manufacture, are fitted to the two metal tubes at one end, and, at the other end, to a V-shaped metal piece which carries the collector.

The mode of fitting together the separate pieces, so as to ensure uniformity of diameter in the conducting medium, is a special feature, and secures the end aimed at. The collector, of the usual shape but smaller, is made of celluloid. In this form the stethoscope is adapted for all general clinical purposes. To convert it into a binaural differential stethoscope, it is only necessary to detach the V-shaped metal piece, and to fix to the two rubber tubes two collectors, (also celluloid), supplied with the stethoscope. Suppose, then, that the two collectors are applied to any two separated spots on the chest-wall, the sounds from one spot only are admitted to both ears if the rubber tube corresponding to the collector on the other spot is compressed between the thumb and forefinger. The sounds from this other spot may be listened to with both ears, if now the tube through which the former sounds were allowed to pass is compressed, and compression is made on the tube which before was allowed to be free. Thus, sounds can be readily and rapidly admitted to, or shut off from, the ears, at will, by alternate compression of one of the rubber tubes near the chest end. This obliteration of the tube, and consequent barring of the conduction of vibrations, is very complete; a loud cardiac *bruit* is effectually excluded from the ears, although the collector may be held in position directly over the site of the *bruit* whilst compression is being made on the rubber-tube.

In the earlier forms of this stethoscope, a somewhat complicated arrangement was introduced (called the "commutator") to provide for the shutting off of sounds. This is now omitted as being unnecessary. Messrs. Ferris and Co., of Bristol, are the makers.

A PORTABLE MEDICINE-CHEST.

SIR,—In answer to "Rus" in the JOURNAL of November 14th, page 942, concerning a portable medical-chest, I beg to say that I have just had one made for me. Its outside dimensions are 1 foot 7¼ inches long, 11 inches wide, and 8¾ inches high, with lock and key and carrying handle under the lock. The box is made with a box-cover, 1¾ inches deep, to carry things as labels, thermometer, etc.; but if "Rus" orders one to be made, let him have this box-cover made deeper, as I find now mine will not hold a few empty six ounce bottles. This cover has a thin wooden flap, which, when closed, keeps the things in box-cover, and also then falls on the top tray. The main box then has one fixed tray at the bottom and three movable ones, the whole four being divided to hold as follows:—24 ounce and a half bottles, 23 ounce bottles, fluids; 39 six drachm bottles for solids, total weight when full about 30 lbs. I lined the trays with baize, and wrote the names on the sized wooden partitions. Needless for me to say what drugs I carry, but the number, I hope, will keep me from getting into a rut. I have not had the case very long, but I can say the country folks appreciate getting their medicines instantly, and saving twopence halfpenny per bottle by the postman, not to mention time and labour; and we save one item, namely, bottles, as I make them find the bottle after the first visit. If "Rus" wants to know more about it, I will willingly supply the information.—I am, yours truly,

WILLIAM FRASER, M.B., Ashburton, Devon.

A GUARDED ASPIRATING NEEDLE.

SIR,—With reference to the remarks of Mr. Masterman, in the JOURNAL of December 12th, on a guarded aspirating and "exploring" needle, proposed by me, without wishing to enter into a controversy as to its superfluity or otherwise before it has been tried, I should like to say that, in submitting the plans published in the JOURNAL of November 14th, I by no means wished to imply that I thought it should supersede the usual aspirating appliances, but that it might be found an improvement on the ordinary needles for certain purposes. Doubtless, in simple effusion into cavities, the trocar and cannula now in use is sufficient; still, that is no reason why the aspiration of cavities should not be made safer if means can be devised. In a thick and tough serous membrane, the edge of the cannula may present an obstacle difficult to overcome, as I have found, and possibly others may have had the same experience; and it may then appear, as it did to me, that it would be an improvement to have an instrument that presented no obstacle to penetration and could be made safe after entering a cavity. The only way I can see to do this is to guard the point from the inside.

I think the little point of incising the skin in aspiration, etc., is the usual practice; and also that empyema is quite as often the result of the peculiarity of an inflammation or constitution as other causes. Aspiration is not, I think, regarded as dangerous when indicated.—Yours faithfully,

Newry. F. W. L. HODDER, Surgeon-Major, A.M.S.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 2nd, 1886.

AUTOMATIC HOMICIDE.

THE case of Harry Patrick, who is now lying under sentence of death for the wilful murder of Rachel Bailey, at Bromley, on November 23rd, is one which certainly demands further consideration from the Home Secretary. The trial of the convict had to be suspended for some time in consequence of his having been attacked by an epileptic fit, which is described as of a severe character; and on hearing his fate from the lips of Mr. Justice Hawkins, the unhappy man again fell down in convulsions, and had to be carried out of the dock in an insensible condition. The fits which occurred in court were witnessed by Mr. Morgan, surgeon to the House of Detention, and by Dr. Charlton Bastian, F.R.S., who were satisfied as to their genuineness; so that there cannot be, in this case, any question of simulation, or of an attempt, on the part of the prisoner, to evoke sympathy and shelter himself from the worst consequences of his criminal acts by mimicking the symptoms of a terrible disease. Nor can it be suggested, in the case of Patrick, that the seizures from which he now suffers are a pathological expression of remorse for his misdeeds, or of horror at the situation in which he finds himself; for it was clearly proved that he was subject to epileptic fits before he committed the murder for which he has been condemned, and that these, about six months ago, induced an attack of what was called "brain fever," but was, in all likelihood, epileptic mania.

It is a noteworthy circumstance, in endeavouring to estimate the criminal responsibility of the convict Patrick, that no adequate motive for the murder of which he has been found guilty was proved to have existed. It was hinted that it sprung out of jealousy, but this suggestion rested on a very insufficient basis. His victim was heard to say to him before they retired to rest for the night, "The gin-palace is still open, and I will go and see George;" and because some similar form of words with reference to a man named "Ted" had, on a previous occasion, stung him into excitement, in which he had used threats and shown a revolver, it was argued that he killed his mistress under suspicions of rivalship. But it is to be borne in mind that his mistress had, to his knowledge, been leading an immoral life before he took her under his protection a short time ago, that he received with composure her proposal to go and see George, which, moreover, she did not carry out; and that the murder, according to the medical testimony, was not committed until eight or ten hours after the supposed provocation of jealousy was given him. Many medical men, after carefully pondering the evidence adduced at the trial of Patrick, will come to the conclusion that the murder was in no way dependent on jealousy, but was a mere automatic atrocity, an insane act indicative of a temporary mental disorder after an epileptic paroxysm.

The occurrence of the fits at his trial proves that the epileptic seizures to which this man is liable are of a kind that are induced by emotional disturbance, and it is therefore easily conceivable that a fit was brought on by sexual excitement, which is particularly apt to explode an unstable nerve-centre, and that, in a state of partial unconsciousness following the fit, he cut the throat of the girl who lay beside him with the Japanese dagger which he had about him, and without any intention of injuring her. This feasible and, indeed, most reasonable explanation of Patrick's crime was not before the court, so that the witnesses were not asked the very questions which were most important in relation to it, and intelligent answers to which must have gone far to establish or negative it; but one or two facts which came out incidentally in the course of the evidence, tend in some measure to support it. It seems that the convict took no steps to conceal his crime, or, as is commonly done by vulgar murderers, to hide the weapon with which it was committed. The blade of the dagger, on which there were stains of blood, was found under the pillow, and the handle and sheath were on other parts of the bed. When he came downstairs to go out, immediately after the murder, he could not open the door of the house, and had to have this done for him by the landlady's son. Now the latch of an ordinary London house is not a very insoluble problem, and the fact that Patrick could not solve it at that particular moment perhaps indicates that he was still labouring under some degree of mental bewilderment. Mere straws of evidence these, it may be observed; but we are glad to avail ourselves of straws even, to show how the wind of conduct blows when all trustworthy vanes are denied to us.

The objection may be made that Patrick, whose fits in court were severe, could scarcely have had a fit immediately prior to the murder, as the other inmates of the house heard no disturbance, and as the girl who was with him did not call for assistance, as she would probably have done under such circumstances. But this objection is disposed of by the incontrovertible truth, that those persons who have severe fits have also slight ones, and that it is generally after trifling and brief attacks that most mental obscuration occurs, during which the most grotesque and savage actions are performed. The fact that Patrick remembered afterwards that he had "killed Rachel," and took his measures accordingly, making his will, and preparing to give himself up to the police, does not invalidate the theory that he was reduced to a state of mental automatism when he used the dagger. There are all degrees of defect of consciousness after epileptic fits, from complete coma up to slight confusion of thought; and a patient who, in transient postepileptic mental disorder, has performed absurd or violent acts, may afterwards retain a more or less clear recollection of them, and even attempt to explain them on rational principles. We do not gather that Patrick retained anything more than a hazy impression of what he had done; but even had he recollected the circumstances in some detail, and endeavoured to show that the murder was premeditated, we should not on that account have considered it unnecessary to inquire carefully into the possibility of automatic homicide. Epileptics rarely claim to be irresponsible for their most insane actions, or even to extenuate them; their tendency is to minimise their disease and its consequences. Incapable of comprehending a mental state in which the highest con-

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trolling nerve-centres are paralysed, while the lower ones are hyperactive and under the sway of suggestion, they seek to explain their grotesque or dangerous proceedings on some reasonable hypothesis. If it were proved that Patrick had read or heard a vivid description of a case of cut-throat, the night before he killed Rachel Bailey, that fact, taken in connection with his acknowledged morbid condition, might at once convince a medical man that the murder was an automatic one; but it would not probably supply any interpretation of his doings to Patrick himself. Knowing nothing of the laws of mental automatism, he would think it preposterous to suppose that a series of complex and elaborate actions, which he went through with his eyes open, were the vagaries of an epileptic dream, and that an enormity like murder might have precisely the same significance as a nonsensical phrase or a breach of etiquette.

Dr. Charlton Bastian, who was called on behalf of the prosecution, testified that Patrick was a man of sound mind and understanding, and so he no doubt was at the time when Dr. Bastian examined him. But Dr. Bastian saw him for the first time the day before his trial in the interparoxysmal condition, and does not appear to have been asked any questions about transitory postepileptic mental states. Exception might, perhaps, be taken to Dr. Bastian's statement that "epileptic fits sometimes affected the mind." It would surely have been more correct to have said that epileptic fits necessarily affect the mind in a transitory manner, and that they frequently result in prolonged disorder, or hopeless deterioration of mind.

The Home Secretary can scarcely refuse further inquiry into the case of Patrick by competent physicians; and we would suggest that he would be creating an excellent precedent if he would entrust the inquiry to a neurologist and medical psychologist. The verdict of a physician who has given special attention to nervous disorders, such as Dr. Hughlings Jackson, Dr. Ferrier, Dr. Buzzard, or Dr. Gowers, would be eminently satisfactory to the medical profession in a case like this.

ARTISANS' HOUSES FIT FOR HABITATION.

A SHORT time ago we took the Local Government Board to task for their apparently inexplicable silence with regard to the Housing of the Working Classes Act, which had been passed more than two months without the attention of local authorities having been officially called to it. Since then, a circular-letter has been issued by the Board explanatory of the Act, and impressing upon the local authorities "the importance of carrying into effect the intentions of the Legislature, by availing themselves of the extensive statutory powers now vested in them, and by taking such action as may be necessary with regard to the dwellings for the working classes in their districts." It might have been well for the Board to have announced their intention of calling for an annual return of the action taken under the Act in each district; but as there is still time for them to do this, the point may be allowed to pass. There is one remarkable omission from the circular, however, which cannot be passed over in silence. In their exposition of the new Act, the Board stop short at Section 11; and of Section 12, as to the presumed healthiness of tenements at the time of letting, they say not a word. If challenged on the subject, they would no doubt say that action under this section was not primarily the affair of local authorities; but who, knowing the relations which exist between poor artisans and their landlords, can doubt that, if the section is to be enforced at all, it must be by the local authority?

It will be remembered that the clause in its original form recited that:

"Whereas by existing law there is implied a condition on letting a furnished house, that it is reasonably fit for human habitation, and it is expedient to extend such implication to the letting of unfurnished houses; be it therefore enacted that, in any contract for letting for human habitation an unfurnished house, or part of an unfurnished house, there shall be implied a condition that the house is in all respects reasonably fit for such habitation; and in the event of a breach of such condition as above-mentioned, in the case either of a furnished or unfurnished house or any part thereof, any inmate of such house who suffers any loss by injury to health or otherwise in consequence of such breach, shall be entitled to recover damages from the person responsible for such breach."

To a clause thus framed, it was objected that it went beyond the scope of the Bill, which dealt with the housing of the working classes, as it proposed to alter the law as to unfurnished houses generally, by whatever class inhabited. And the representatives of certain building societies fomented opposition to it upon the further ground that its effect, if enacted, would be to render innocent purchasers or mortgagees of house-property liable in damages to tenants who were previously in possession, that it would encourage speculative actions by such tenants, and that the knowledge of the liability to such litigation, and its certain ruinous expense, would prevent the working-classes and small investors from purchasing house property.

These alarmist views do not require much refutation; but the effect of their promulgation and the other objections raised to the proposal, may be seen in the final shape of the clause as it received the Royal Assent. Section 12 of the Act, which the Local Government Board do not think important enough to notice in their circular, runs as follows:

"In any contract made after the passing of this Act, for letting for habitation by persons of the working classes a house or part of a house, there shall be implied a condition that the house is, at the commencement of the holding, in all respects reasonably fit for human habitation. In this section, the expression 'letting for habitation by persons of the working classes' means the letting for habitation of a house or part of a house at a rent not exceeding in England the sum named as the limit for the composition of rates by Section 3 of the Poor Rate Assessment or Collection Act, 1869, and in Scotland or Ireland £4."

So far, well: but let us suppose the case of a house which is let to a working man, and turns out not to have been, "at the commencement of the holding, in all respects reasonably fit for habitation." There is no specific penalty imposed upon the landlord by the Act; and the statement contained in the original clause that a breach of the implied condition would entitle the tenant to recover damages in the event of any inmate suffering loss by injury to health or otherwise has been suppressed in its first form. Apparently, therefore, all that the tenant could do would be to proceed by common law for a breach of contract, fortified by the language of the section in question. Now, is it in the remotest degree likely that a working man dependent upon his weekly wages could or would, out of his own unassisted resources, go to law in this way, and involve himself in ruinous expense in order to bring a "house-knacker" to justice? The clause may look very nice and proper upon paper; but who can doubt that if municipal action do not give it vitality it will prove an absolute dead letter? It is for this reason that we feel a shock of pained surprise at the studied omission of any reference to it in the Local Government Board's circular. The powers of a local authority for the suppression of

nuisances are very large and far-reaching. If the authority do not —either under its existing powers or, if these be insufficient, then under new powers to be given—take measures for insisting upon premises being put into a habitable state before a new tenant moves in, the poor artisan's protection under section 12 of the Act of last session will most certainly prove only a delusion and a snare.

THE DUAL ACTION OF THE BRAIN.

Some of the more fantastic physical philosophers would have us believe that the general character of our dreams depends in the main upon whether we are lying, when we dream, upon the right side or the left, and would attribute this to the different faculties and associations of the right and left hemispheres of the brain. If we lie on the left side, then the left hemisphere, they would say, receives a larger supply of blood than its fellow; it is dominant, as it normally is when we are awake, and our left-sided dreams, if we may so term them, are comparatively intelligent; they bear on real and recent facts, and they may be accompanied by talking in the sleep, for language belongs to the left side of the brain. But the right-sided dreams are illogical, absurd; they deal with distant and confused recollections; they may show some sense of rhythm, of music, even of morality, but they are essentially meaningless. Such are fancies vaguely embodying some of the knowledge that has been gained in the last quarter of a century on the nature and differences of the two hemispheres of the brain.

The idea of the dual action of the brain is not an old one. Aristotle paid little attention to the brain, considering it chiefly as a chilling organ to hold in check the heart, that hot and fiery seat of life. Ennius was not dimly hinting at its dualism when he wrote "*saxo cere comminuit brum.*" But as far back as we can trace anything of the history of insanity, there have been cases where the minds of those whom we should now probably call the insane have been under the dominion of an idea that they contained within themselves two perfectly distinct personalities. They often did not identify themselves with either of these, but criticised both freely, and did not notice that this suggested the co-existence in themselves of a third person who was the critic. Such experiences were usually regarded with more or less of terror, but sometimes with reverence, and were ascribed to possession by some alien spirit, more often malign than beneficent; but neither one hemisphere nor the other was held responsible. However, with the establishment of a unilateral seat for language, a new interest was felt to attach to localisation, and new possibilities to cerebral dualism; more attention was paid to the evidence for and against a complete autonomy of each hemisphere, not only in motion and sensation, where it seemed fairly obvious, but also in mental processes.

And, first, the evidence of anatomy was to be considered. How far did that suggest or contradict the idea of a unilateral independent action in emotion and thought? There was good evidence for associating the mental processes with the strata in the brain above the central ganglia; and, if the two hemispheres would only act together, it was likely there should be free intercommunication. The corpus callosum could easily be pointed to as the great bond of union; a mass of nervous tissue occupying far more space in man, in proportion to the hemispheres, than in the lower animals, and seeming, from the evidence of comparative anatomy, and from its late development in the embryo, to be the last acquisition of the human brain. But the pathologist could throw some doubt on its function as a highway of communication. In 1846, a remarkable paper was published by Mr. James Paget, then a junior surgeon, describing with rare felicity of language and most scrupulous accuracy a case in which *post mortem* examination had shown that the corpus callosum in a girl aged 21 was almost entirely absent from congenital defect, whereas her mental condition had shown nothing abnormal. It might be that the few remaining fibres had sufficed to conduct the intercommunication, if there was any. Subsequent observation has shown, however, that, in such cases of injury or defect of the corpus callosum alone, which are very rare, there is usually more or less mental incapacity. The difficult study of the course of nerve-fibres has been so far perfected, that some intercommunication by this route has been established between the cortex of one side and the external capsule of the other, and possibly between the corresponding portions of the right and left cortex, though the demonstrations of Professor Hamilton on this latter point show that most probably it is a mistake. At any rate from the anatomical point of view, there is no evidence that the highest strata on the two hemispheres are so intimately linked together, that they could not be expected to have more or less independent powers in their special function of mental action.

And, further, the sensori-motor impressions, which are the representatives of their mental states, are probably conveyed not only from one side of the body to the opposite side of the brain, but, in a subordinate and much slighter degree, to the same side of the brain as well. The clinical observer finds that an injury confined to the left hemisphere, which produces very nearly complete paralysis and anæsthesia of the right side of the body, often produces also very slight but perceptible diminution of strength, and possibly of sensibility, in the left side of the body also; and the pathologist judges that this is probably due to the interruption, not of the fibres in the corpus callosum, which have crossed from the left to the right hemisphere, but of the small part of the right pyramidal tract which does not cross; because the fibres of the corpus callosum, so far as we know at present, do not degenerate after such an injury, and the direct pyramidal tract and column of Türck does. To this very imperfect extent, then, each hemisphere has cognisance of the whole body.

The lower vertebrates certainly, and very probably all the apes, are ambidextrous; their left limbs are as dextrous as their right. Man has specialised more, and, by almost universal consent, has agreed to give the preference in use to his right limbs; and, consequently, more education in sensori-motor impressions to his left hemisphere. But the habit has hardly been established long enough to have become hereditary in more than a very slight degree. A baby is almost completely ambidextrous, or perhaps we had better say ambisinistrous, considering its general *gaucherie*. But it is difficult to keep it in this state. Its surroundings make it almost imperative that it should choose between right and left, and much more to its convenience that it should choose the right; and so it does in nineteen cases out of twenty, unless it be an idiot, in whom lefthandedness is much more common. Whether the slightly greater blood-supply to the left hemisphere by the left carotid artery, which Dr. William Ogle has laid some stress upon, be a cause or a consequence, it is very hard to say; but, at any rate, by an almost involuntary choice, and by subsequent practice, in almost every case, the left hemisphere is established as the

leading side in both physical and mental operations. Its fellow hemisphere, however, is by no means idle or incompetent; it co-operates habitually in all, or almost all, mental matters; and, though it may probably be the more automatic, yet it is competent, by slow substitution, to take on itself the whole mental management, including, in some rare cases, even the faculty of speech. It is the more emotional, says Professor Ball; for, if one observe a hundred cases of right hemiplegia, when the right hemisphere is uninjured, and presumably for the time dominant, they will be found more emotional than another hundred in whom the left hemisphere is uninjured. Observations on English subjects, however, have, so far as we know, left this point indistinct. In some large injuries, where the greater part of the leading side has been destroyed too suddenly to allow any gradual process of substitution, the comparatively childish mental capacities of the right hemisphere may be brought to light; it can use, perhaps, one or two common words, like "Yes" and "No;" and, very possibly, that most rudimentary form of expression, an oath.

There are, moreover, a few rare conditions in which it seems not unreasonable to suppose that, without any destruction or injury of the habitually leading side, the more automatic has, nevertheless, become dominant, though, perhaps, only for a time.

In somnambulism, there is the interesting fact that the memories of the successive somnambulic states are continuous with one another, but entirely disconnected with the memories of ordinary life. A somnambulic subject may begin to commit suicide in somnambulism to-day, may luckily fail to bring it to a conclusion, and only take up this task again in his next fit of somnambulism; whilst, in the interval of many days or weeks, he may be perfectly ignorant of what he has attempted, and is going to attempt again. There is no proof, of course, of an independent action of his hemispheres, but, at any rate, there is a dualism of memory; and, in some hypnotic states, it has been shown how literally true it is that a man may laugh on one side of his mouth, and cry on the other. By suggestion, in fact, in such cases, the whole gesture and expression of one side of the body and face may be made joyful, and of the other, melancholy; or one side lethargic, and the other cataleptic; and in the view of M. Dumontpallier, as embodied in the recent essay of his pupil, M. Bérillon, this is a strong argument for the capacity of each side of the brain to maintain an independent emotional state.

In the far more complicated, and even more interesting, cases of the changes of personality, as in Dr. Azam's very celebrated case of Félida X., it is a subject worth consideration, though hardly ripe for settlement, whether any explanation can be afforded by the hypothesis of a temporary dominance, alternating between one hemisphere and the other. The memory, the handwriting, the fashions of speech, and, indeed, the whole character, change so rapidly, and each state repeats itself so exactly, that it is tempting to suppose that there has been a change of *venue*, so to speak, of the mental processes, and it would not be surprising that the equilibrium should be unstable when the two sides are so nearly balanced, and neither is so incompetent to take the lead as one of them generally is. In such cases as these, there are not generally more than two personalities between which the patient can oscillate, that is to say, one for each hemisphere, if we are allowed to make a very bold assumption. But in the last number of the *Revue Philosophique*, conducted under the high authority of M. Ribot, Professor Bourru and M. Burot, of Rochefort, have published a very strange case of a young man, who seems able to assume six states of what may fairly be called different personality. The memories attaching to each of these states are very different, though only one is completely exclusive of all the others; the handwriting varies between complete competence and complete incompetence, the character between childish timidity, courteous reserve, and reckless arrogance; and to four of these states, a special form of what the authors call hysterical paralysis is constantly attached; indeed, it is found possible, by suggesting any one of these four various forms of paralysis, to induce not only the paralysis, but also the memories, capacities, and character habitually accompanying it. Such changes, if they can be thoroughly established, would certainly suggest either that a personality can be embodied in much less than a hemisphere, or else is the result of something much too subtle to be localised.

Sir William Roberts, of Victoria University, Manchester, attended at Osborne on Monday, for the purpose of receiving the honour of knighthood.

Sir G. E. Paget, F.R.S., Regius Professor of Physic in the University of Cambridge, is this week gazetted as "an Ordinary Member of the Civil Division of the Second Class, of Knights Commanders of the Order of the Bath."

The library of the Royal College of Surgeons of England will be closed on Tuesday, Wednesday, Thursday, and Friday, the 5th, 6th, 7th, and 8th of January, for the purposes of the examinations.

Mr. Jonathan Hutchinson, F.R.S., will deliver the first Lettsomian Lecture before the Medical Society of London on Monday next, January 4th, at 8.30 P.M. The subject of the course is "Some Moot Points in the Natural History of Syphilis."

A presentation of plate, together with an illuminated address, has been made to Dr. Protheroe Smith by the medical staff of the Hospital for Women, Soho Square, on his retirement as physician and appointment as consulting physician to the hospital.

The memorial tablet to the late Dr. H. T. Lanchester, which has been placed in the entrance-hall of the Croydon General Hospital, was unveiled on Saturday last, in the presence of a numerous assembly of brother practitioners and friends.

Another case of death from hydrophobia is reported at St. Bartholomew's Hospital. The patient was bitten only a few weeks ago; the symptoms were well marked, and he died in great suffering.

Eleven military medical officers have been ordered to the front from Cairo in anticipation of the active military operations which have now commenced.

An inquest was held this week on the body of Dr. Henry Wotton aged 48, practising at Notting Hill, and who had died from taking prussic acid. He had been in a weak state of health for some time before, and had made an attempt upon his life in 1856, and again in 1857. He had suffered from meningitis, and from the pressure resulting from over-work.

The *Athenæum* states that a sum of money, amounting to 25,000 dollars, has accumulated under a bequest of Mrs. Elizabeth Thompson, who desires the sum to be appropriated "for the advancement and prosecution of scientific research in its broadest sense." Applications to the trustees for grants out of this request should be made without delay to Dr. C. S. Minot, 25, Mount Vernon Street, Boston, Mass., U.S.A., as the first appropriations will be made early this year (1886).

THE last week has been remarkable for the large number of deaths from burning, due to the incautiousness of ladies in dressing near the fire. Christmas season, which brings its festivities, brings also always a considerable addition to the list of fatalities due to incautiously venturing on thin ice, and to carelessness in respect to fire. There are no specifics against such mortality, but it is well to notice them with a view of impressing that amount of caution which may at least diminish the number of fatalities, if it do not altogether abolish them.

YELLOW FEVER AT RIO DE JANEIRO.

IT is reported from Rio de Janeiro that several scattered cases of yellow fever occurred in that city during the month of November last. For some months previously the district had been free from the disease.

RAGS FROM SPAIN.

THE Local Government Board have considered it expedient to extend, until March 1st next, the prohibition of the importation into this country of rags from Spain, and have issued their order accordingly. Otherwise the prohibition would have ceased on January 1st, 1886.

PRIZE ESSAY ON TOTAL ABSTINENCE.

OUT of the thirty-nine essays sent in, in competition for the one hundred guinea prize of the Medical Temperance Association, for the best essay on total abstinence by a medical student, the adjudicators, the Lord Bishop of London, Dr. Richardson, F.R.S., the Attorney-General, Sir R. Webster, Q.C., M.P., Dr. Norman Kerr, and Dr. Ridge, declared the essay bearing the motto "Ohne Hast, ohne Rast," to be most deserving, and reported to the Council of the Society accordingly. On breaking the seals on Tuesday last, the winner of the prize was found to be Mr. H. A. W. Coryn, of Charing Cross Hospital. Certificates of merit were awarded to the writers of three other essays, specially named by the arbitrators as being deserving of honourable mention.

BRITISH AMBULANCE WORK AT BELGRADE.

DR. HUME writes, in a letter from Belgrade under date December 22nd, to Sir William Mac Cormac as follows:—"We arrived here on December 1st, and, after consultation with the authorities, decided to take over one of the existing hospitals established since the outbreak of the war at Belgrade. Newby, Boyd, and Lake arrived a week later, and we then took charge of a hospital containing 127 beds. The more severe cases had already fallen into the hands of the Austrians (of whom the principal here are Von Mosetig and Meidl), and others who were here before us. However, we have a fair number of interesting cases." Mr. Lake writes: "A medical society has been established at Belgrade; it meets weekly, interesting cases are recorded and discussed, as well as more general questions. At the last meeting the value of iodoform in the treatment of gunshot wounds was the subject of debate. In the hospitals under Professor Mosetiq's care all the wounds have been dressed with iodoform exclusively. The results appear to be very good."

DIPHTHERIA AND DRAINAGE.

AT an inquest held at the Islington Coroner's Court, last week, on the body of a child, aged 9 years, of Hornsey Street, Lower Holloway, whose death was attributed to diphtheria, Dr. Wright stated that the mother of the boy was now suffering from that disease. He had been called upon lately to attend to several cases of diphtheria which had occurred in Hornsey Street, on the same side of the street, as the one in which the death had occurred. In answer to the coroner, the witness further stated that the house drains in the street had been examined, and were not found defective. If there was an escape of noxious gas it was probably from the main sewer. The coroner remarked that there was evidently something wrong in the condition of this street. Diphtheria certainly arose from gases engendered by decomposing matter. Having regard to the fact that several cases of diphtheria had occurred in Hornsey Street recently, the jury recommended that a careful inspection should be made by the local sanitary authority, with a view of tracing the causes of the outbreak of the disease.

THE MEDICAL SOCIETY OF LONDON.

THE completion of another year's work, during which the Medical Society of London entered upon its hundred and thirteenth session, ought not to be allowed to pass without a few words of hearty appreciation. The Society has in recent years greatly enlarged its sphere of usefulness, and now fills a conspicuous place in medical life in London; it is especially the Society where men of all ranks and all departments of practice can meet for exchange of opinion and experience, to the great advantage of every rank and department. Under the able and genial presidency, first of Mr. Durham, and then of Dr. W. M. Ord, its meetings have been remarkably interesting. Dr. Ord himself has contributed a very thoughtful and suggestive address on the nature of the process of fever, a subject which can never be exhausted; and he and Dr. Semon called attention to the not unfrequent occurrence of partial paralysis of the glottis-openers in locomotor ataxy, an observation as important and interesting as it was, we believe, novel. Other subjects discussed at the meetings of this Society ranged over the whole field of practical medicine. Thus Dr. Gowers read an important paper on the significance of the deep reflexes, Mr. Macpherson sketched the history of the use of ipecacuanha in dysentery, Mr. A. Pearce Gould raised an interesting discussion on the occurrence of sarcoma after injury, Mr. Treves read an elaborate paper on intussusception, and Mr. Mitchell Banks contributed a brilliant essay on the treatment of gangrenous intestine. Mr. Henry Morris's paper on the surgery of the kidney, and Professor Humphry's philosophical oration on old age and the changes incidental to it attracted wide attention. Under the auspices of Dr. Ord, also, the Society has resumed its clinical evenings, when a number of most interesting cases are collected, and afford rare opportunities for gaining a practical acquaintance with unusual forms of disease.

ALCOHOL AND DISEASE.

DR. DAWSON BURNS, the Honorary Secretary of the London Temperance Hospital, referring to the statement made to the Local Board of Winsford by the District Medical Officer that, in his opinion, three men who lately died from what seemed an attack of cholera owed their deaths to the refusal to take alcoholic liquor, calls attention to the fact that the alcoholic treatment of cholera had confessedly proved a failure, and that recoveries had been far more numerous where it had been dispensed with. It was an admitted fact that the ordinary use of alcoholic drink, instead of being a preventive of that disease, rather predisposed to it. The superstitious value attached to alcohol in the treatment of disease was fast disappearing from enlightened medical circles; that the use of alcoholics in the great London hospitals was largely diminishing, with good results; and that the experience of the London Temperance Hospital, where alcohol had been given in only three out of three thousand in-patient cases, with an average annual mortality of five per cent. during twelve years, was exposing the fallacy under which the medical officer of Winsford appeared still to suffer.

THERE IS NO PHYSICKING AN OLD SOW.

"KILL her, and pack her, and send her to London." That is the view of one large cattle-trader, and explains the appearance in the London market of a carcase which was unsound and absolutely unfit for food. It is rather alarming to find that this gentleman has been farming largely for twenty-one years, and "never had a complaint of this kind before against him." Such a case should, at any rate, impose the duty of vigilant caution on our metropolitan medical officers of health and sanitary inspectors, who cannot do better than acquaint themselves carefully with the indications of unsoundness in meat, which have been carefully studied and well expounded by authorities, among whom Mr. Vacher, of Birkenhead, is prominent.

CREMATION IN PARIS.

MUCH public interest continues to be excited in Paris by the recent decision of the Municipality to erect a crematorium at Père Lachaise, for which plans have been accepted. It is settled that the expense of cremation is not to exceed fifteen francs, and the time required for combustion will be two hours. It is in contemplation to erect a suitable building for the reception of urns or other funereal vessels containing the ashes of dead relatives, and the artistic world is already discussing the æsthetic side of cremation, while M. Koechlin Schwartz points out that persons of all denominations may unite in erecting a vast mausoleum, in which ashes of thousands could be deposited in beautiful vessels without injury to the living. This is, however, looking rather far into the future.

SIR JAMES SAWYER, M.D.

A COMPLIMENTARY banquet was given on December 23rd to Sir James Sawyer, M.D., by his colleagues at the Queen's Hospital and his professional friends, in honour of the dignity of knighthood recently conferred upon him. Mr. John St. S. Wilders presided. There was a large attendance of the members of the profession, including Dr. Agar (Henley-in-Arden), Mr. T. H. Bartleet, Mr. J. P. Bradley, Mr. Herbert Bracey, Mr. Cordley Bradford, Mr. Langsford Clay, Mr. A. F. Clay, Mr. G. A. Cardew (Cheltenham), Mr. J. G. Clendinnen (Coseley), Mr. W. Clarke (Erdington), Dr. Donovan (Erdington), Dr. Edginton, Mr. H. Eales, Mr. A. P. Evans (West Bromwich), Mr. W. Flewitt, Mr. E. L. Freer, Mr. W. Fowler, Dr. Gosling, Dr. Grinling, Mr. F. Hollingshead (Selly Oak), Mr. F. Hodges (Leicester), Mr. J. Hunt, Mr. A. Hawkins, Dr. Hogben, Dr. Bostock Hill, Mr. J. J. Hues, Dr. F. H. Haynes (Leamington), Dr. H. R. Ker (Halesowen), Mr. E. W. D. Kite (West Bromwich), Mr. Vincent Jackson (Wolverhampton), Mr. George Jones, Dr. Johnston, Dr. Leah, Dr. Marriott (Leamington), Mr. J. W. Moore, Mr. W. S. Mann, Mr. R. A. Newton, Mr. Bernard Neale, Mr. Lloyd Owen, Mr. F. O. O'Dowd (Dudley), Mr. A. Oakes, Dr. A. Potts, Rev. W. H. Poulton (Warden of Queen's College), Dr. Rees (West Bromwich), Dr. T. Richards, Dr. W. Richards, Dr. Robinson, Dr. Bullock, Mr. Gilbert Smith, Mr. C. Torbitt (Oldbury), Mr. Hugh Thomas, Mr. T. Simpson, Mr. Wright Wilson, Mr. Vickers Whitby, Mr. Bennett May, Dr. Suckling, Dr. Vinrace, Mr. S. Parker, Dr. G. Parkes, and Mr. Jordan Lloyd (honorary secretary). A large number of letters of apology were received. The Chairman, in proposing the guest, said that Sir James Sawyer's colleagues, and many of his old friends and pupils at the Queen's Hospital, had desired to join in their expressions of satisfaction at the honour of which he had become the recipient. It was an honour to the medical school where he was educated and was now a professor; to the hospital of which he was the senior physician, and to the profession. Sir James Sawyer was not only senior physician to the Queen's Hospital, president of the Clinical Board, and a professor of medicine of Queen's College, but it was not the least of his distinctions that he was president of the Birmingham and Midland Counties Branch of the British Medical Association, which comprised all the best and first practitioners in Birmingham and the Midlands. By his industry, energy, and determination, he had placed himself in the front rank among the consulting physicians of Birmingham. The toast was supported by Dr. Johnson and the Rev. W. H. Poulton. Sir James Sawyer, in replying, in appropriate terms added to his acknowledgments of the kindness of the congratulations which he had received so widely from his professional friends, an expression of the hope that professional unity might continually increase in strength and in good works, and that they might realise in essential things unity, in doubtful things liberty, and in all things charity. Other toasts followed, and a very agreeable evening was spent.

THE EFFECT OF THE WEATHER OF 1885 ON VEGETATION.

IN a paper read before the Royal Meteorological Society on December 5th, by the Rev. T. A. Preston, it was stated that the year 1885 had been a very dry one, and this had greatly affected all kinds of vegetation. Although the winter was mild, plants were very late in flowering and lasted only a short time. The bloom was often profuse, and, as bees and other insects could visit them, the crop of fruit was unusually great; the apples, for instance, being often spoilt in quality from the enormous number on the trees; whilst in the case of wild fruits, the brilliant colour of the bushes, when in fruit, was quite as beautiful as when in bloom; but, at the same time, the drought acted very prejudicially, especially to root-crops and bush-fruit, as well as strawberries. In the case of the root-crops, the seed had great difficulty in germinating, and the weak plants were at once overpowered by insect pests, so that the crops of turnips were generally complete failures. The insects also did much damage to bush-fruit, while the drought prevented the strawberries from swelling. The corn did not suffer to any great extent, the dry season allowing the land to be prepared; and, although the straw was often short, the yield was not unsatisfactory. A general absence of butterflies was noticed in some places. In the south of England the white butterflies were most abundant at one time, but the autumn butterflies were not so plentiful as usual.

EFFECT OF FORESTS ON CLIMATE.

AT the monthly meeting of the Royal Meteorological Society on December 16th, a paper on the Influence of Forests upon Climate, by Dr. A. Woeikof, was read. He stated that the first step towards a scientific investigation of the influence of forests upon climate was taken by the establishment of the Bavarian forest meteorological stations. This example was followed by Germany, France, Switzerland, Italy, and other countries. As a general result, it was found that during the warmer season the temperatures of the air and earth were lower in the forest, as compared with contiguous wooded places; that their variations were less; and that the relative humidity was greater. According to Dr. Woeikof, in the western portions of the Old World, extensive forests materially influence the temperature of neighbouring localities; and the normal increase of temperature from the Atlantic Ocean towards the interior of the continent is not only interrupted by their agency, but they cause the summer to be cooler in regions situated further interior than those nearer the sea. Hence forests exert an influence on climate which does not cease at their borders, but is felt over a greater or less district, according to the size, kind, and position of the forests. From this, it naturally follows that man, by clearing forests in one place and planting others in another, may considerably affect the climate.

THE PATENT MEDICINE DELUSION.

A MAN, styling himself "Professor" Stephen Jarrett, carrying on the business of a herbalist at Croydon, was summoned by the Commissioners of Inland Revenue for selling certain medicines without paying duty on the same. An officer of Inland Revenue purchased at the defendant's shop a bottle of "neuralgic mixture," which was described as being good for sciatica and other complaints, and other so-called never-failing remedies liable to duty. The defence was, that the defendant did not profess to practise any particular art in compounding the neuralgic mixture, which was "one simple thing diluted with water," and offered to the public as a so-called specific; and it was held that no Government duty was applicable to any medicine compounded as that was, unless the vendor had at the time letters patent for the exclusive sale of that particular compound. The defence that had been raised was a very ingenious one, but it proved to be wrong in point of law. As a matter of fact, there is no such thing existing as letters patent for any medicine. All medicines held out to the public as nostrums are liable to duty. The defendant was here himself a victim of the error under which the public in general labour. The so-called system of patent medicines, and of stamps thereon, breeds a delusion that such nostrums are patents protected by law as being new inventions, and having a sort o

Government approval. This delusion will only be dispelled by abolishing the whole system.

PRIZES OFFERED BY THE SPANISH MEDICAL ACADEMY.

THE Spanish Medico-Chirurgical Academy has published the following programme of themes for prizes to be given at next year's competition. The essays may be written in English, and must be sent in by the middle of September next, accompanied by a sealed packet containing the author's name and address, a motto being endorsed on the envelope similar to that inscribed on the essay. 1. Prize given by the Academy, £10. What modifications has the panspermist theory produced in the treatment of internal diseases which are known, or suspected, to be of a parasitic nature? 2. Prize given by Senor Morales, £30. Critical examination of the progress made in operations on bones.

OPEN SPACES IN THE METROPOLIS.

A VALUABLE addition has been made to the free open spaces of the metropolis. A year and a half ago, a suggestion was made by a member of the Board of Works, Mr. Samuel Pine, that a piece of ground known as Highbury Fields, twenty-two and a half acres in extent, should be obtained for the use of the public. Some difficulty arose at first on account of the expense; but this was soon obviated by the Vestry of Islington offering to pay half the cost. A Bill for the acquisition of the land passed through Parliament, and on December 21st a cheque for £60,000, being the price of the land, was paid to the freeholder, the Islington Vestry contributing one-half of the sum. On December 24th, the fields were formally opened as a perpetual recreation-ground for the inhabitants of Islington by Mr. Bradfield, the Chairman of the Parks and Open Spaces Committee of the Metropolitan Board of Works. The fields are at present in a rough state, but it is probable that arrangements will be made for constructing paths, and making other improvements. The people of Islington are to be congratulated on the success of the endeavours made to rescue a large space in their midst from the hands of the builder, and to dedicate it to their healthful use. The prompt action of the Islington Vestry, and the liberal manner in which they have contributed towards the purchase of the land, are deserving of high commendation. They have set an example which other metropolitan parishes would do well to follow, and which will be remembered to their credit.—Earl Cowper has offered to purchase a freehold site in Finsbury for £1,500, on condition that it should be laid out and maintained by the Metropolitan Public Gardens Association as a public recreation-ground. Another gentleman has generously offered to bear the expense of laying out Soho Square on similar conditions.

THE THERAPEUTIC MOVEMENT.

A CORRESPONDENT writes to us: It is time to utter a protest against a proceeding which has assumed proportions which render it positively dangerous to contribute a readable article to a medical journal bearing on any new or promising method of treatment. We allude to the practice which has grown up, on the part of provincial practitioners more particularly, of writing to the author of the article with a series of questions, often irrelevant or already answered, but overlooked by the very men who so unscrupulously trespass on their senior's time and patience. For example, the writer of a recent contribution on a new remedy assured us that he had received upwards of 200 letters during the first four days following the publication of his remarks. Few of the inquirers thought it desirable to prepay the answer; and, it may be added, fewer still ever acknowledged or thanked him for his reply. Many of the applicants went so far as to describe the symptoms of a particular case, and discuss the appropriateness of this or that remedy, and so obtain the benefit of a consultation gratuitously. Such letters can scarcely be left without a reply, for that would offend the writers wholesale; and it is difficult to see how any observation on the subject could be couched so as to avoid hurting their feelings. The practice is, nevertheless, a dubious one, and it ought to be understood that, in soliciting information on a subject of which the writer of the article may have made a special study, probably at no small expense to himself in money, time, and trouble, it is only reasonable that he should receive some remuneration, and that without the necessity of asking for it.

DEATH UNDER CHLOROFORM.

A DEATH during the administration of chloroform occurred last week at Newcastle-upon-Tyne. We have not received any report from a medical source, but the facts elicited at the inquest appear to have been that the deceased young man had several times consulted Mr. Heath about a squint in his eyes; and Mr. Heath stated, in his evidence, that he operated on the left eye about a month ago for strabismus, at the request of the deceased. On that occasion he administered chloroform to the deceased, but, owing to his having been eating immediately before the operation, he was very sick, and vomited. On that account, he did not then proceed to operate on the other eye. The sickness was a natural consequence of the stomach being full. On Saturday last, the deceased came to have the other eye done, and the operation completed. Witness had cautioned deceased not to have a full stomach, consequently he would have had nothing to eat since breakfast time. An ordinary dose of chloroform—rather a small dose, in fact—was administered to deceased, and the effects were such as are usual in such cases. The operation lasted only a very short time, and was nearly over, the chloroform having been removed, when he gave some indications of returning consciousness, but he suddenly seemed to be faint. Various means of restoration were adopted—artificial respiration; galvanism, stimulants, etc., for fully an hour, but he was unable to resuscitate the deceased. Death resulted from failure of the heart's action, probably from mixed causes. Witness had given chloroform to patients about twice a week for thirty years; and, considering the number of persons to whom chloroform was administered, the number of deaths was very small. The great peculiarity of the case was that the lad came completely round, and then relapsed. A verdict was returned to the effect that deceased died from "failure of the heart's action, after undergoing an operation under the influence of chloroform."

NOTE ON LEAMINGTON.

DR. F. W. SMITH, of Leamington, in a recent paper brings before his brethren of the profession the merits of that health-resort. The Corporation is proposing to expend £20,000 on the improvement of the baths. The following are some of the points which he uses in favour of the place. The sanitary conditions of Leamington are excellent; the death-rate from all causes for the last three years averaged 15.24 per 1,000, and that from zymotic diseases during the same period, 1.1. This bears favourable comparison with other inland watering places of the same population. The climate and temperature of Leamington may be characterised as equable, and not subject to great extremes, and, therefore, suitable for most constitutions. The place is recommended both for permanent residence, and for visitors who wish to employ saline mineral waters in England avoiding the trouble and expense of a journey to the Continent. The diseases in which the waters have been found most efficacious are shortly these, and their good effects are produced either by their aperient or their diuretic effect:—irritative dyspepsia, congestion of kidneys, congestion of liver, chronic gout, chronic rheumatism, sciatica, and skin affections, as eczema and psoriasis. In anæmia, the effects of the saline waters with the aid of the chalybeate spring are often marvellous, and they are also useful in struma, and in various degenerations of tissues and of vessels. Leamington is a pretty and clean town; in the greater part, it is built upon a regular plan, with wide and open streets, in many instances bordered with chestnut and lime-trees. Besides the baths of various kinds which materially assist the internal use of the waters, patients can find every sort of accommodation in spacious and comfortable hotels and lodging-houses, sunny, well appointed, and clean, to say nothing of noiseless and easy bath-chairs

and all manner of invalid appliances. For those who are strong enough to follow it, there is fox-hunting all through the winter months. The country round, as is well known, is fertile, undulating, and wooded, and is rich in objects of great historical interest.

BLOTTING-PAPER AS AN ANTISEPTIC DRESSING.

Dr. Bedoin, in a paper communicated to the Belgian Royal Academy of Medicine on antiseptic dressings suitable for military purposes, said that the requisites to be kept in mind were that any dressing to be used on the field of battle must be simple, occupying but small space, inexpensive, and capable of being used for all surgical necessities. Dr. Bedoin believes that he has found a substance which combines in itself all these requisite qualities—a substance, too, which is well known, easily procurable, and in constant use—being, in fact, no other than blotting- or filtering-paper. Before being used for surgical purposes, it should be disinfected by a lengthened exposure to a heat of 120° Cent., and by immersion in an antiseptic solution, and afterwards dried. Wounds are dressed by the application of seven or eight layers of this paper, the whole being covered with gutta-percha tissue, and a bandage applied. The dressing weighs only about forty grammes, so that each soldier can carry one. In the ambulance, this dressing can be applied by the surgeon with any others that it is thought well to employ.

SCOTLAND.

AMBULANCE LECTURES, NORTH BERWICK.

A course of ambulance lectures has been most successfully conducted at North Berwick, and on Saturday Dr. Crombie delivered the closing lecture to a class of about thirty-six ladies and gentlemen. The nature of the work done in the course will be practically put to the test, at an early date, in an examination of the class on behalf of the St. Andrew's Ambulance Society.

CLINICAL TEACHING OF INFECTIOUS DISEASES IN EDINBURGH.

At present the instruction given clinically in Edinburgh on infectious diseases is almost *nil*. Lately the university authorities and the Extramural School approached the Town Council on the subject of regular clinical instruction being given in connection with the new City Fever Hospital. A considerable amount of discussion took place at a meeting of the Town Council on Tuesday, in connection with the proposal to appoint a visiting-physician for the Fever Hospital. No definite conclusion has been arrived at; but it is earnestly to be hoped that an arrangement will soon be made which will ensure the education of future practitioners in a branch of their work in which much depends upon an early recognition of every case of infectious disease.

THE DESTITUTE SICK SOCIETY.

The one hundredth annual meeting of the directors and supporters of the Edinburgh Society for Relief of the Destitute Sick was held last week, and was presided over by Lord-Provost Clark. The total income for the year was £1,698, but there had also been a legacy of £1,000, and a donation of £1,500, which more than made up for a deficiency of £1,200 as compared with the previous year. The expenditure was £2,516, and this had been spent in relieving the destitute sick by means of money, meal, coal, clothing, etc. The relieving officers of the Society, all people of good position and working gratuitously, made many thousand visits to the destitute sick, and were the means of distributing wisely the comforts represented by the above sum. The adoption of the annual report was moved by the chairman, the Rev. Dr. Thomson, and seconded by Professor Simpson.

SPANISH RAGS.

The importation into Scotland of Spanish Rags has been further prohibited by the Board of Supervision until the 1st of March, 1886. The previous order on this subject expired on January 1st.

DR. PATERSON, BRIDGE OF ALLAN.

On Thursday evening, December 24th, a large and influential gathering of gentlemen took place for the purpose of presenting Dr. Paterson with a testimonial, in appreciation of his long and valued services as a doctor in Bridge of Allan and the neighbourhood. Mr. Laurence Pullar, chief magistrate, acted as chairman, and the Rev. Dr. Ross performed the duties of croupier. The presentation consisted of a cheque for £340, enclosed in a silver casket, bearing the following inscription: "Presented to Dr. Alexander Paterson, along with a cheque, given by 260 subscribers over the whole country, in testimony of their regard for him as a successful physician, a kind friend to the poor, and a public benefactor to the inhabitants of Bridge of Allan." The speeches testified to a very high appreciation, not only of Dr. Paterson's amiable personal character and remarkable abilities as a professional man, but also of his great universal kindness, and of the affection with which he was regarded. Frequent allusion was made to the wide range of accomplishments of Dr. Paterson, who holds a foremost place among the great horticulturists, as well as among the collectors and archæologists of Scotland.

IRELAND.

QUEEN'S COLLEGE, BELFAST.

Rumours having prevailed of late that Professor Gordon, who occupies the chair of surgery in this institution, would not lecture any more this session, it may be expedient to explain how matters stand. Professor Gordon sent in his resignation, but has been induced to fill the office at all events for this session, so that there is no truth in the statement that another gentleman had been appointed to the chair in question.

HOSPITAL FOR WOMEN AND CHILDREN, CORK.

A Russian Fancy Fair was held last week in the Assembly Rooms, Cork, in aid of the funds of the Hospital for Women and Children. The hospital, we may mention, was founded in 1874 by Miss Woodroffe, and was so successful that it was removed to Pope's Quay, the institution being managed by a committee of twenty gentlemen. As years passed, the available accommodation was found insufficient for the demands made for admission, and the committee were anxious to obtain a larger house, with an enclosed garden for the use of convalescents. In this they were successful; and, on September 1st last, the hospital was removed to the building in Infirmary Road. The expenses connected with furnishing the institution were generously undertaken by Mr. Crawford, whose donations to the Queen's College and other institutions are well known. In the beginning, all patients admitted were charged nominal sums for their maintenance, but at the present time there are now twelve free cots for children and four free beds for women annually maintained. Other patients are charged for: adults seven shillings a week in the general ward, and something higher in the semi-private ward; children being "paid for in proportion." Besides this, there are two private wards for ladies, who pay from one to three guineas a week. There is altogether accommodation for fifty-six beds in the hospital, fourteen of which are for adults.

HEALTH OF CORK.

During November, the births registered numbered 150, and the deaths 121, of which 24 occurred in the workhouse. As compared with the corresponding month of last year, there has been an increase in typhoid fever and also in scarlatina, but a well marked decrease in typhus fever. The birth-rate was equal to 24.33 per 1,000, and the annual mortality a ratio of 19.63; both rates show a decrease from the corresponding month of last year.

The Penrith Rural Sanitary Authority have, with the consent of Dr. Robertson, the medical officer of health, reduced his salary from £150 to £100 *per annum*.

BACTERIOLOGY AT ST. THOMAS'S HOSPITAL.

At a meeting of the Medical and Physical Society of St. Thomas's Hospital, on December 10th, 1885, Mr. C. A. Ballance and Dr. Theodore Acland gave a demonstration of the method of cultivating micro-organisms on the various nutrient media in use, gelatine, Agar-Agar, blood-serum, bread-paste, and potatoes. Sterilisers, incubators, and the other apparatus used in bacteriological work, the whole kindly presented by Dr. Stone to the Pathological Department, were exhibited and explained. Dr. Becker, bacteriological assistant to Professor Birsch-Hirschfeld, of Leipsic, had sent over specimens of thirty-three different micro-organisms, which Mr. Watson Cheyne had kindly supplemented from his own laboratory, so that about fifty varieties were exhibited. The methods employed to separate micro-organisms from each other, and thus to obtain pure cultivations, were explained; and Mr. Ballance made a few explanatory remarks about each micro-organism exhibited, and mentioned the bacillus of blue pus, of noma, of ulcerative stomatitis in the calf, of malignant œdema, of syphilis, of leprosy, and of the micro-organisms found in cases of purpura hæmorrhagica, pernicious anæmia, ulcerative endocarditis, rheumatism, scarlatina, scurvy, acute yellow atrophy, measles, warts, hydrophobia, mouse-tetanus, cattle-plague, gonorrhœa, vaccinia, variola, malaria, relapsing fever, septicæmia, pyæmia, and gangrene occurring either in man or in the lower animals, etc. The comma-bacilli were last touched upon—those of Flugge, Deneke, Miller, Koch, and the salivary bacillus of Lewis.

Subsequently, Dr. Acland, Dr. Stone, Dr. Harley, and others, took part in a discussion. Mr. Watson Cheyne congratulated St. Thomas's on being the first hospital in this field.

Sir William Mac Cormac, Mr. Croft, and Dr. Payne, were among those present; and, after the meeting, the members of the Society spent some time examining the microscopes. Of the seventy objectives of high power in use, Messrs. Baker contributed thirty, each one with Abbé's condensers, and there were in all about thirty immersion-objectives in the room, of which about a dozen were "oil immersions." None of the microscopes had object-glasses to a lower power than Zeiss' D. The slides which seemed to attract most attention were those which showed the mycelium of actinomycosis, the micrococcus of gonorrhœa, the typhoid-bacillus, the spirillum of relapsing fever, the bacillus of leprosy, bacterium termo, bacillus of glanders, living bacilli of the butyric acid fermentation, bacillus subtilis, the bacillus of diphtheria, and a large bacillus found in a case of acute traumatic gangrene.

Micro-organisms exhibited.

Black torula
Pink torula
Micrococcus Indicus
,, prodigiosus
The violet bacillus
The fluorescing bacillus
The bacillus of green pus
Yellow sarcina
The bacillus of blue milk
Bacterium lactis
The bacillus of butyric acid fermentation
Milk-micrococci
Micrococcus ureæ
Staphylococcus pyogenes aureus
,, ,, albus
Streptococci pyogenes
Lichtheim's mucor
A non-pathogenic mucor
Aspergillus fungatus
,, flavescens
,, albus
,, niger
Bacillus of swine-plague
,, of glanders
Bacillus anthrax
,, of tubercle
,, of septicæmia of the mouse
Bacterium of rabbit-septicæmia
,, of fowl-cholera
Bacillus alvei
,, of diphtheria of the pigeon
Micrococcus tetragonus
,, of osteomyelitis
Bacillus of enteric fever
Micrococcus of acute pneumonia
,, of erysipelas
Bacillus of human diphtheria
,, of epidemic meningitis
Micrococcus of puerperal fever
The "comma-bacillus" of Finkler and Prior
,, ,, of Deneke
,, ,, of Miller
,, ,, of Koch
Yellow micrococci
Brown ,,
Yeast

THE USE OF ALCOHOL IN HOSPITALS.

A paper on this subject, by Mr. George Sturge, who has been a most munificent contributor to hospitals, was read at a recent meeting of the Hospitals' Association; Dr. Bristowe, F.R.S., in the chair.

After referring to the declaration concerning alcohol signed by Sir B. Brodie, Dr. Babington, Dr. Addison, and 2,000 members of the profession in 1847, Mr. Sturge said:

At the present day, in some of our large London hospitals, alcoholic drink is still found as part of the ordinary diet-table, and, according to the last report, the London Hospital, in 1884, spent £1,350 6s. 7d. on beer, wine, and spirits; thus confirming their poor patients in the erroneous notion that alcoholic drink is necessary to preserve their health, and confirming drinking habits—our national vice. However, during the last twelve years the Temperance Hospital has been carrying on an experiment open to the observations of the medical profession, which has conclusively proved that medical practice can be carried on and cures effected, with a low rate of mortality, without the use of alcohol. Up to April 30th, 1885, out of 2,862 patients admitted to this hospital, only 140 deaths have occurred, giving a rate just under 5 per cent.

From the examination of 140 reports of hospitals, chiefly in England and Scotland, it seems that great diversity in the practice of using alcoholic drinks as part of diet exists, and in some cases, during the last forty years, this practice has very much decreased. But, with the exception of the Temperance Hospital and two others in the London district, the decrease has been much greater in some of our provincial hospitals than in those in London, as will be seen in the subjoined tables, giving the amount of alcoholic drink per patient in ten London hospitals and ten hospitals in the provinces.

Hospital.	No. of Patients.	Cost per Patient. £ s. d.	
Brompton	1,901	0 10 7	London Hospitals.
Charing Cross	1,610	0 3 4	
Middlesex	2,540	0 4 3	
King's College	2,383	0 2 9	
Royal Free	1,940	0 5 3	
London	8,565	0 3 1	
St. Mary's	2,482	0 3 11¾	
St. George's	4,001	0 5 1	
University	3,152	0 2 7	
German	1,822	0 4 5	
Westminster	2,154	0 2 0	
Leeds	1,898	0 1 3½	Provincial Hospitals.
Royal Infirmary, Edinburgh	5,746	0 3 9	
Bath	1,159	0 2 9	
Oxford	1,423	0 4 1	
Cambridge	867	0 6 7	
Hull	1,705	0 1 7	
Bristol	3,794	0 3 2	
Glasgow	3,977	0 1 10	
Chester	985	0 0 11	
Manchester Infirmary	7,463	0 0 10¾	

These tables will indicate the urgent need of attention to the diet tables of hospitals, on account of economy, and much more in order to overcome the erroneous teaching in the present hospital-practice that these alcoholic drinks contribute to health; whereas there seem some reasons to think it might be more correct to class them among slow poisons, and, from the knowledge we have gained of late years from tables of mortality and life-assurance, statistics seem to point in that direction.

It is well known that in the General Provident Life Institution they have two classes of insurers, one class abstainers from alcoholics the other, non-abstainers. From the published statistics from 1866 1882 of this institution, according to the ordinary tables of mortality, 2,644 deaths should have taken place, but only 1,861 occurred in the abstaining section; while of 4,408 expected deaths in the non abstaining section, 4,339 took place, or only 69 less, or only 1.2 less than the expected result.

The deleterious effect of alcohol is strikingly shown by the statistics of innkeepers and publicans; according to the Scottish Amicable (1826-76), this class of persons had a mortality of 68 per cent. in excess of the ordinary male table.

That great reduction may be made safely, even where total abstinence is not fully adopted, may be seen from the following tables.

Cost of Liquors used in Middlesex Hospital.

Date.	No. of Patients.	Cost. £ s. d.
1875	2,681	1,079 3 2
1876	2,369	1,118 8 8
1877	2,250	1,056 0 7
1878	2,040	814 18 6
1879	2,634	884 18 2
1880	2,545	860 10 1
1881	2,731	771 1 11
1882	2,833	675 6 11
1883	2,638	678 2 9
1884	2,540	547 4 7

Cost of Wines, Spirits, etc., at Manchester Infirmary.

Date.	No. of Patients.	Cost per Patient £ s. d.
1875	3,828	0 7 2¼
1876	4,938	0 5 0½
1877	5,977	0 3 11
1878	3,347	0 3 3½
1879	5,527	0 2 11¼
1880	5,688	0 1 6
1881	5,817	0 1 4½
1882	6,092	0 0 11⅝
1883	6,415	0 0 9½
1884	7,269	0 0 10¼

He argued from these tables of reduction in the amount of alcoholic stimulants (1875-1884) what great need there is for further improvement, of which the Temperance Hospital has set so good an example

and happily is able to show such satisfactory results in the matter of a low rate of mortality; while the life-assurance societies have given evidence of the dangers which arise from the use of alcohol in lessening the duration of human life. In conclusion, he expressed the opinion that the time has now come in which the Hospitals' Association may profitably consider whether any hospital, supported by charity, can be justified in applying its funds to buy alcoholic luxuries for the use of its medical men, nurses or servants, not to mention its patients.

The following took part in the discussion which followed the reading of the paper: Dr. Edmunds, Dr. Ridge, Mr. Burdett, Mr. Nixon (London Hospital), Mr. Frank Wright, Mr. Pearce Gould, General Keatinge, and Dr. Bristowe. The general view was, that the administration of alcohol was a matter with which the Committees of Hospitals had little to do, and that its administration or otherwise must always be left to the discretion of the medical attendant. It was shown that, although a great reduction had taken place in the amount of alcohol now given to the patients of most hospitals as compared with years ago, there had been no consequent saving in expenditure, but rather the reverse, as the increased expenditure on milk was considerable. Thus, at the London Hospital, with 3,691 in-patients in 1844, the expenditure per patient for alcohol was 4s. 5d., and for milk 2s. 5¼d., as compared with the year 1884, when, with 8,015 in-patients, the expenditure per patient was 2s. 8d. for alcohol and 6s. 3d. for milk.

THE SICK AND WOUNDED IN WAR.

SOME interesting and graphic notes of the work being done by the National Society for aid to the Sick and Wounded in War, in Belgravia, culled from letters sent home by General Laurie and Mr. Kennett Barrington have been furnished for publication by Lord Wantage.

General Laurie writes: That it was quite evident that proper work could only be done by undertaking a hospital for ourselves and in our own name. This he has done. He has caused the building given over to him to be altered so as to allow it to be worked to the best advantage, and has retained the Servian staff of nurses; they are for the most part Servian ladies, who have offered their services gratuitously. The Government staff is also retained in our hospital and made comfortable. He has added materially to the food of the patients, as well as provided better clothing for them. This will have a capital moral effect in removing the prevalent idea as to our want of friendship to the Servian nation. From Sofia Mr. Kennett Barrington writes that he spent December 7th and 8th in visiting the various hospitals, and making the acquaintance of the authorities. At the present moment there are 24 hospitals in the town of Sofia, of which 12 are Government hospitals, and 12 are mainly supported by voluntary agencies. In some cases, the Government supplies food and furniture, while a Red Cross Society supplies the medical staff and sisters. Among the voluntary hospitals, he mentions four of the Société Internationale (90 beds), three of the Bulgarian Red Cross Society, one Jewish hospital, and one Greek hospital. The largest Government hospitals are in the military hospital and lunatic asylum (215 wounded), the Ecole Militaire (about 270 wounded), and the Assemblé Nationale. The surgeons in several of the Government hospitals are selected from foreign ambulances. The principal voluntary societies are the Vienna Red Cross, the Darmstadt Red Cross, the Bulgarian Red Cross (of which the Bishop of Sofia is president), and the Société Internationale, of which Mr. and Mrs. Lascelles are the moving spirits. The last society has done excellent work with the credit supplied by the English National Aid Society. With their small funds this society has supported four small hospitals, containing in all 70 to 100 patients. Of these four, one is established in the Railway Administration Offices (25 beds), one paid nurse and servant, the rest volunteers; the second was formed by a resident Italian doctor in his own house, his daughters being the nurses, and at one moment having the care of forty wounded, now about twenty-five. The expenses of keeping up this hospital have been borne by the Comité Internationale. The third is one taken over from the "brothers" or monks, who are willing helpers, but untrained in hospital work. The fourth is established in the convent, the nurses being sisters of charity. These four hospitals have been in full work under the medical charge of the Italian and Bulgarian (volunteer) doctors since November 22nd. Their funds consist mainly of the amounts received through Mr. Lascelles from his credit at Coutts and Co. They cannot be continued without our support, so I propose to keep them going for another month at least at a cost of about £130 or £150 in all. A Belgian civil engineer of great experience in this country looks after the economic arrangements and supplies; the whole is worked on an inexpensive but effective system. The wounded in them, as in the other hospitals, look for the most part contented, and even cheerful. Of course, many of the hospitals do not come up to our ideas of cleanliness. However, making all allowances, and remembering the fact that over 4,000 wounded were, in the course of a day or two, thrown upon the hospital, both Dr. Fetherstonhaugh, Miss Stewart, and Mr. Barrington consider that the Bulgarians deserve the greatest credit for having met the emergency so promptly and effectually. The wounded Servians are, if anything, made pets of, and a kind word is said to them by every passer-by. One brave Servian captain, who defended the standard of his regiment until he fell with five wounds, is a special favourite. Close by are lying, side by side, a wounded Servian and wounded Bulgarian. They had a hand-to-hand fight in the Slivnica trenches, and, after wounding each other severely, helped each other along to the Bulgarian field-ambulance. Among the wounded are several Turks. Many of the wounded have to use their uniform great-coats for coverings in bed. It is difficult to keep the wards perfectly clean under these circumstances, and it is impossible to buy blankets here. The bales which are sent out will come in very usefully. The Bulgarian Red Cross Society has been formed by a grant from the Government, and by subscriptions from abroad. The President is the Bishop of Sofia, and the Council is composed of Bulgarian residents in Sofia. In order to systematise the relief offered by the Red Cross and other Societies, the Government has appointed a special Commission, of which M. Greikoff, the late Prime Minister, is President, and Dr. Volcovitch, Chief Surgeon of the Army, is an important member. Mr. Barrington had a consultation with both these gentlemen, and probably the result will be that Mr. Fetherstonhaugh will be given medical charge of a ward in a Government hospital, in which special serious cases will be placed. Miss Stewart, with some English-speaking Bulgarian girls, will be placed under him to do the nursing. At the same time, Mr. Fetherstonhaugh will act as consulting-surgeon and operator in any serious cases of the four Société Internationale hospitals, and Miss Stewart will visit these also to give hints as to nursing, and attend the heaviest cases. All will be done with the entire co-operation and sanction of the British Consul-General. Captain Lumley, with the instruments, arrived several days before Mr. Barrington. The instruments were all distributed by Mr. Lascelles as presents from the National Aid Society, and receipts have been given, which will be duly forwarded.

BURMAH EXPEDITIONARY FORCE.

THE following details of the medical arrangements of the Burmah field-force, forwarded on November 21st by a correspondent from headquarters, may interest our readers.

The staff is constituted as follows: Principal Medical Officer, Deputy Surgeon-General J. McNeal Donnelly, I.M.S.; Assistant to Principal Medical Officer, Surgeon-Major H. W. A. Mackinnon; Staff-Surgeon, Surgeon-Major C. Sibthorpe; Staff-Warrant Medical Officer, Apothecary T. G. Devine.

The general hospitals for British and native troops with the followers are to be opened at Lhyetemgo. There are to be 200 beds for British troops, and 475 for native troops and followers. There are two field-hospitals for British troops, and four for native troops and followers. They were distributed as follows.

British Troops.—No. 4 on board the *Rangoon*, with bearers, dandies, and complete camp-equipage. No 5, A and B Sections, with *Rangoon* on Flat 44, as a floating-hospital. No. 5, C Section, on *Panlang*, as a travelling hospital to and from the base. No. 5, D Section, on *Waikema*, also as a travelling hospital.

Native Troops and Followers.—No. 13, on *Rangoon*, with bearers, dandies, and complete camp-equipage. No. 14, A and B Sections, on flat with *Panlang* as a travelling hospital. No. 14, C and D Sections, on flat with *Waikema* as a travelling hospital. No. 19, followers' hospital stores, to be retained at base in general hospital. No. 20, on flat with *Rangoon* as a floating hospital.

The following is the distribution of medical officers. General Hospital, British Troops: Surgeons-Major J. N. Stock, R. M. Craigh, and D. B. Brown; Surgeons R. W. Ford, G. H. M. O'Callaghan, F. H. Burton, and Thompson. General Hospitals, Native Troops and Followers: Surgeons-Major J. W. Johnston, D. W. Bateman, and Wilkins; Surgeons Simmonds, P. Adams, Walsh, and Eaton. Field-Hospitals, British Troops.—No. 4: Surgeons-Major E. Townsend and J. M. Beamish; Surgeons A. P. O'Conner, J. Heath, and Blackwell. No. 5: Surgeon-Major C. Corbett; Surgeons A. Dodd, C. Williamson, and W. Gibson. Native Troops and Followers.—No. 13: Surgeon-Major J. Makenna; Surgeons D. F. Dymott, J. Kernan,

and J. T. Leslie. No. 14: Surgeon-Major Peters; Surgeons Stuart Davis, W. A. Corkery, and Kama. No. 20: Surgeons-Major J. A. Howell and J. Greany; Surgeons C. G. Lowdell and J. MacGregor.

There is a bearer-column consisting of three European transport sergeants, 9 sirdars, 18 mates, and 880 dhoolie-bearers, with 200 dandies, each dandy being supplied with two leather water-bottles. These bearers are divided between the regimental units, the field-hospitals, and the general hospital at the base. The general hospital for British troops is also supplied with four ambulance-carts.

The following medical officers are attached to the different corps units. Royal Artillery: Surgeon Trevor; Scotch Royal Artillery: Surgeon O'Brien, Surgeon Anderson, and Surgeon Kerin; Sappers and Miners: Surgeon Evans; Coolie Corps: Surgeon Fuller; British Infantry, Liverpool Regiment: Surgeon Gardiner; Royal Welsh Fusiliers: Surgeon Leake; Hampshire Regiment: Surgeon-Major Kilray; Native Infantry, 2nd Bengal: Surgeon-Major Leaman; 11th Bengal: Surgeon Weir; 1st Madras Pioneers: Surgeon Hoey; 12th Madras Native Infantry: Surgeon-Major J. Power; 21st M. N. I., Surgeon-Major Lawrenson; 23rd M. N. I.: Surgeon Mackie; 25th M. N. I.: Surgeon-Major Blinkinsop; Naval Brigade: Fleet-Surgeon Brownlow and a surgeon.

The hospital-ship *Rangoon* is one of the finest of flotilla-companies' steamers, similar to the large American river-steamers; she is provided with every comfort for travelling; the fore part of her upper deck has been devoted to sick officers. The medical officers of the field-hospitals, which are established on board, have very comfortable quarters, and a good mess on the saloon-deck. On each side of the steamer, a large double-decked accommodation-flat has been lashed; the upper decks are devoted to the sick for European troops, the other for native troops and followers; they are capable of putting up seventy beds each, and have been supplied with iron cots, mattresses, arm-racks, accoutrement-pegs, the lower decks are used for the dhoolie-bearers, hospital-servants, cookhouses, and latrines. This hospital is intended to follow the advancing force, and on it are two extra field-hospitals complete, with camp-equipage and coolies for carriage, in case it may be necessary to send them forward with troops leaving the river. The two travelling hospital-steamers are also fitted up in the same manner as the *Rangoon*, and are meant to travel to and from the front to the base at Lhyatmego. Each of them is capable of accommodating twenty-five European troops and fifty native troops and followers on an attached flat. The evening of the severe fight at Minhla, the *Rangoon* was sent alongside the river-bank, where the fight had taken place, and at once sent on shore a bearer-company, who conveyed all the wounded, both of our own men and the Burmese, on board from the field. The medical officers were working up to 4 A.M. the next morning, and attended to twenty-five of our men and twenty Burmese. One of our officers had been killed, and three wounded, two of them severely.

THE WOUNDED IN BULGARIA.

A CORRESPONDENT with the hospital aid train belonging to the Society of the Knights of Malta, writes as follows:—

"It was not till dusk that the first batch of wounded arrived, and these had to be shifted from the arabas and ambulance waggons by the light of torches. The glare and flicker of this fitful light on the pain-stricken faces of the wounded had a most ghastly effect. As soon as the poor fellows neared the Ritter's train, they were taken in charge by the Knights of the Order, Prince Lichnowsky, his adjutant, Prince Lichtenstein, and the commanders of the train, Count d'Harnoucout, and Barons Mundy and Wallerskirchen. These gentlemen were untiring in their endeavours to make the transfer of their helpless passengers as painless as possible. The regular Ritter train has fifteen carriages, ten for the wounded and the rest for the officials, medical men, cooks, and stores. There are ten cots in each carriage for the sick, with invalid tables fitted over the beds. There is a stove in each car, and an attendant regulates the temperature and looks after the wants of the wounded. Directly the cars have their complement of passengers, cigars and cigarettes are handed round, and very few refuse the luxury of a smoke. Soup, meat, and bread, and wine are placed before each invalid; the attendants gently persuading and coaxing their charges, who are too sick to eat, to take a little soup or sup of wine. Drs. Baron Mundy, Heinrick, and Grunes are in attendance throughout the journey; there is an alarm bell in each ward, and they are on the spot immediately their services are required. I was in the commandant's car during the night when the alarm was sounded. Dr. Mundy was up in a moment, brandy-bottle under his arm, and instrument-case in hand. He was beside the sufferer seven cars off in less than a minute.

"No report is sent in by the Servian medical men, so the Ritter medical men have no knowledge of the cases in hand. The case in question was one of an appalling number of the same kind—blood-poisoning from neglect. The poor fellow's wounds had not been dressed for ten days after he fell in the Dragoman Pass. It was a simple flesh-wound in the leg. The slightest attention at first would have saved the man's life, and he now lay rotting and dying. He passed away during the night. I doubt if the poor fellow ever received more kindness during life than now, when it was slowly ebbing from him, and from the hands of strangers. There are hundreds and hundreds of this kind of wounded who might be saved to the country, but for the stupid jealousy and mistrust of foreigners by Servian officials, who will not allow the numerous German and English surgeons, who have come to Servia with the best possible spirit, to render them service at the front."

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

AN exceedingly valuable example of an organised effort to benefit the Medical Benevolent College at Epsom, is being made at York by some of the leading clergy. The *modus operandi* is explained in the following circular letter, which is issued by Mr. H. E. Spencer, the Honorary Local Secretary and Treasurer of the Royal Medical Benevolent College, and by Mr. F. Shann, President of the York Medical Society. The letter runs thus:

"On Thursday, January 7th, 1886, at 7.30 P.M., a special service will be held, by kind permission of the Rev. S. H. Bennett, at the Church of St. Mary, Bishophill Senior, when a sermon will be preached by the Venerable Archdeacon Blunt, D.D., and a collection made on behalf of the Royal Medical Benevolent College, Epsom. We hope that you will find it convenient to attend this service, and that you will invite some of your friends to accompany you. The Dean has very kindly volunteered to devote the offertories at the Minster, on Sunday, January 3rd, to the same object. The Corporation will be present. With the solitary exception of Rochester, no such collection has previously been made in any cathedral church. In this benevolent purpose, the Dean is actuated by the just consideration that a profession many of whose members give their gratuitous aid to the poor and suffering in hospitals, dispensaries, various charitable institutions, and in other ways, may not unreasonably ask from the public some assistance for its own unfortunate members and those dependent upon them."

We shall be glad to hear the result of this most reasonable and helpful proceeding. We trust that we may be able to announce such an one as will encourage other medical friends of this institution to use their influence in obtaining like aid for its funds in other cities and towns. No profession gives so lavishly of its time and professional resources to the poor and the needy genteel classes. They receive but scant thanks very often. The medical charities have undoubtedly a claim on public aid which is very imperfectly recognised.

ICE TO THE SPINE IN OBSTINATE VOMITING.—Dr. W. L. Davis reports (*Mississ. Valley Med. Monthly*) a case of vomiting in typhoid fever, in which every remedy, even pellets of ice, was rejected by the stomach. He applied ice to the lower part of the spine in considerable quantity, and the vomiting instantly ceased; a profuse perspiration followed. The use of ice was only persisted in when indicated; and cool sponging was instituted with marked benefit, so that the ice was only occasionally required. Recovery in the average time took place.

BEQUESTS AND DONATIONS.—The inhabitants of Ossett have presented a piano-forte, music-stools, canterbury, etc., of the value of upwards of £60, to the Dewsbury District Infirmary, for the benefit of the patients in the female ward.—The Hon. Mrs. Robert Bruce has given £50 to the Victoria Hospital for Children, Chelsea.—St. Peter's Hospital for Stone, Henrietta Street, Covent Garden, has received 25 guineas from the Fishmongers' Company, and 5 guineas from the Salters' Company.—The following amounts have been received by the medical charities of Birmingham, under the will of Mr. T. Aston, all less duty: namely, the Roman Catholic Hospital for Female Incurables, £300; the Orthopædic Hospital, £200; and the General Hospital, the Queen's Hospital, the General Dispensary, the Eye Hospital, the Ear and Throat Infirmary, the Free Hospital, and the Lying-in Charity, £100 each.—The Cumberland and Westmorland Convalescent Institution, Silloth, has received £100 under the will of Mrs. Barnes, of Mealesgate.—The Dowager Lady Howard de Walden has given £100 to Miss Mary Wardell's Convalescent Home for Scarlet Fever patients, at Stanmore.—Mr. Henry Thompson has given £100 towards the endowment of the Andover Cottage Hospital.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 20th day of January, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 17th, 1885.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on January 20th, April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

The Committee is also glad to receive reports of cases of the following conditions, memoranda and forms for which have been prepared, and may be had on application. PAROXYSMAL HÆMOGLOBINURIA, ALBUMINURIA IN THE APPARENTLY HEALTHY, SLEEP-WALKING, ACUTE GOUT, and special forms of PUERPERAL PYREXIA.

The "Sleep-walking" form may be filled in by a non-medical person if necessary.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in the preliminary discussions conducted by the Branches.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

BORDER COUNTIES BRANCH.—The winter meeting of this Branch will be held on Friday, January 8th, 1886, at the County Hotel, Carlisle. The chair will be taken at 6 P.M. by Mr. C. S. Hall, President. The Secretary will be glad to receive notices of papers, and morbid specimens for exhibition, or patients, without delay. Supper will be provided in the hotel at 9 o'clock. Members from a distance can be taken in for the night by communicating with the Secretary, H. A. LEDIARD, Carlisle.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the above district will be held, by invitation of Dr. Amsden, at the Essex County Asylum, Brentwood, on Wednesday, January 27th, 1886, at 2.30 P.M. Previously to the business of the meeting, Dr. Amsden has kindly offered to escort the members round some of the wards of the asylum. Dr. Elliston, President of the Branch, will preside. Programme and Business Agenda:—1. To arrange the place and date of the next meeting, and to nominate a member of the district, resident in or near such place of meeting, to take the chair thereat, provided the President of the Branch does not attend. 2. To elect an honorary secretary for the year 1886. The following papers have been promised:—1. On the Administration of Medicines by Injection into the Rectum, by the President. 2. On Fits, by W. B. Hadden, Esq., M.D., of St. Thomas's Hospital, London. 3. The Treatment of Acute Mania by Hyoscyamine, by G. Amsden, Esq., M.B., Medical Superintendent, Essex County Asylum. 4. The Necessity of a Medical Defence Fund in connection with the British Medical Association, by J. Sinclair Holden, Esq., M.D., Sudbury. 5. Dr. Hadden will exhibit some sections showing Naked-eye Changes in the Spinal Cord, and some drawings of Brain and Cord Diseases. Gentlemen intending to be present, or wishing to read a paper, or show a case, are requested to communicate with the Honorary Secretary not later than January 25th.—WM. THOS. JACKMAN, Honorary Secretary, Coggeshall, Essex.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

A MEETING of this Section was held on December 4th, 1885; Dr. SAVAGE in the chair.

Card Specimens.—The following were shown.

1. Mr. BARLING: (*a*) Hydrocele of Neck; (*b*) Knee-joint in a case of Acute Necrosis.
2. Dr. SIMON: (*a*) Plaster Casts from cases of Lead-poisoning; (*b*) Injury to Ulnar Nerve.
3. Mr. BENNETT MAY: A large Ranula or Sublingual Cyst removed by Median Incision below the Jaw.

Cases and Specimens.—The following were communicated.

1. Dr. A. S. UNDERHILL read notes of cases of Sarcoma of the Ovary, and of Myoma Obstructing Labour.
2. Dr. SAVAGE showed specimens of Double-fused Ovarian Cystoma and of Calculus in the Kidney.
3. Mr. PRIESTLEY SMITH showed a specimen of Pseudo-Glioma.
4. Dr. FOXWELL showed Tumours of the Omentum.
5. Dr. SIMON showed, for Mr. MCCARTHY, a Woman born without Arms.
6. Mr. BARLING showed a specimen of Fusiform Popliteal Aneurysm.
7. Mr. EALES showed a case of General Pemphigus.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above District was held at St. Bartholomew's Hospital, Chatham, on December 18th; J. LANGSTON, Esq., J.P., in the chair.

Medico-Ethical Committee.—Dr. J. V. Bell was unanimously elected the Rochester representative in the above Committee of the District.

Next Meeting.—It was decided, *nem. con.*, that the next meeting be held at Gravesend in February, and that Mr. O. R. Richmond be requested to preside on the occasion.

Communications.—The following papers were read and discussed.

1. Dr. J. V. BELL: Two cases of Injury to the Head.
2. Mr. F. B. JESSETT: Plastic Operations for Restoration of Upper Lip after removal of Epithelioma.
3. Dr. H. LEWIS JONES: Clinical Notes of Empyema.

Dinner.—Thirteen members and visitors subsequently dined at the Bull Hotel, Rochester.

ABERDEEN, BANFF, AND KINCARDINE BRANCH: ORDINARY MEETING.

A MEETING of this Branch was held in Aberdeen on Wednesday, December 16th, 1885; Professor OGSTON, M.D., in the chair.

New Members.—The following were elected members of the Branch: Dr. C. MacIver Campbell, Perth District Asylum, Murthly; Dr. A. Theodore Brand, of Driffield; Dr. G. Burnett Currie, of Buxburn;

Professor Matthew Hay, of Aberdeen; and Dr. Thomas G. Paterson, of Marischal College, Aberdeen.

Communications.—The following communications were made.

1. Professor DYCE DAVIDSON: Cases of Congenital Blindness from Optic Atrophy and Pigmentary Retinitis.
2. Dr. F. OGSTON: Some Uses of Ergotine.
3. Dr. MACKENZIE DAVIDSON: New Ophthalmic Instruments.
4. Dr. WILLIAMSON: Deformity of the Mouth and its Mechanical Treatment.
5. Dr. D. DAVIDSON: Papilloma of the Bladder.
6. Professor OGSTON showed Photographs of a Case of Congenital Dislocation of the Hip-joint.

A letter of apology was read from Dr. Urquhart, who was to have exhibited a specimen of Ununited Fracture of the Femur.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING.

THE fifty-fourth Annual Meeting of the British Medical Association will be held at Brighton, on August 10th, 11th, 12th, and 13th, 1886.

President: W. T. Edwards, M.D., F.R.C.S., Physician to the Glamorgan and Monmouth Infirmary, Cardiff.

President-elect: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

An Address in Medicine will be delivered by Austin Flint, M.D., New York.

An Address in Surgery will be delivered by Frederick Abell Humphry, F.R.C.S., Surgeon to the Sussex County Hospital.

An Address in Public Medicine will be given by E. D. Mapother, M.D., Consulting Medical Officer to the City of Dublin.

The scientific business of the meeting will be conducted in nine Sections, as follows, namely:

MEDICINE.—*President*, W. H. Broadbent, M.D. *Vice-Presidents*, Frederick Bagshawe, M.D., Hastings; Joseph Ewart, M.D., Brighton. *Honorary Secretaries*, Francis Warner, M.D., 24, Harley Street, London; Henry Seymour Branfoot, M.B., 42, Norfolk Square, Brighton.

SURGERY.—*President*, John Eric Erichsen, F.R.C.S., F.R.S., London. *Vice-Presidents*, Frederick William Jowers, M.R.C.S., Brighton; John Ward Cousins, F.R.C.S., Southsea. *Honorary Secretaries*, William Johnson Walsham, F.R.C.S., 27, Weymouth Street, London; Willoughby Furner, F.R.C.S., 2, Brunswick Place, Brighton.

OBSTETRIC MEDICINE.—*President*, Alfred Meadows, M.D., London. *Vice-Presidents*, Constantine Holman, M.D., Reigate; Frederick W. Salzmann, M.R.C.S., Brighton. *Honorary Secretaries*, Charles J. Wright, M.R.C.S., Lynton Villa, Virginia Road, Leeds; Alban Doran, F.R.C.S., 9, Granville Place, W.

PUBLIC MEDICINE.—*President*, Richard Patrick B. Taaffe, M.D., Brighton. *Vice-Presidents*, Sir Charles Alexander Cameron, M.K.Q.C.P., Dublin; Charles Kelly, M.D., Worthing. *Honorary Secretaries*, W. Brown M.R.C.P.Edin., Carlisle; William Joseph Tyson, M.D., Folkestone.

PSYCHOLOGY.—*President*, Thomas Smith Clouston, M.D., Edinburgh. *Vice-Presidents*, Charles A. Lockhart Robertson, M.D., Brighton; Joseph Raymond Gasquet, M.B., Brighton. *Honorary Secretaries*, Charles Spencer Waller Cobbold, M.D., Earlswood Asylum, Redhill; James M. Moody, M.R.C.S., Surrey County Asylum, Canehill, Purley.

PATHOLOGY.—*President*, Julius Dreschfeld, M.D., Manchester. *Vice-Presidents*, James Frederick Goodhart, M.D., London; Heneage Gibbes, M.D., London. *Honorary Secretaries*, John E. Ranking, M.D., Mount Ephraim Road, Tunbridge Wells; John Caldwell Uhthoff, M.D., 9, Brunswick Place, Brighton.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Thomas Lauder Brunton, M.D., F.R.S., London. *Vice-Presidents*, John Mitchell Bruce, M.D., London; Edward Mackey, M.D., Brighton. *Honorary Secretaries*, Cornelius William Suckling, M.D., 108, Newhall Street, Birmingham; John Theodore Cash, M.D., Drumearn, Earlsfield Road, Wandsworth Common, S.W.

OPHTHALMOLOGY.—*President*, Chas. Oldham, F.R.C.S., Brighton. *Vice-Presidents*, Louis Tosswill, M.B., Exeter; George Anderson Critchett, F.R.C.S.Edin., London. *Honorary Secretaries*, Frank Henry Hodges, F.R.C.S.Edin., 17, Horse Fair Street, Leicester; Arthur Nicholson, M.D., 98, Montpellier Road, Brighton.

OTOLOGY.—*President*, G. F. Hodgson, M.R.C.S., Brighton. *Vice-Presidents*, Alphonso Elkin Cumberbatch, F.R.C.S., London; Edward Cresswell Baber, M.B., Brighton. *Honorary Secretaries*, Henry Albert Reeves, F.R.C.S.Edin., 6, Grosvenor Street, W., London; Patrick William Maxwell, M.D.Edin., 10, Lower Mount Street, Dublin.

Honorary Local Secretaries: Thomas Jenner Verrall, M.R.C.S., 95, Western Road, Brighton; Alfred Scott, L.R.C.P., German Place, Brighton.

TUESDAY, AUGUST 10TH, 1886.
2 P.M.—Meeting of 1885-6 Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 11TH, 1886.
9.30 A.M.—Meeting of 1886-87 Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione*.

THURSDAY, AUGUST 12TH, 1886.
9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Surgery.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 13TH, 1886.
10 A.M.—Address in Public Medicine.
11 A.M.—Sectional Meetings.
4 P.M.—Concluding General Meeting.
8 P.M.—Reception.

SATURDAY, AUGUST 14TH.
Excursions.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Salicylate of Lithia.—New Purgatives.—Recent Researches on Broncho-Pneumonia.—General News.

M. VULPIAN has read before the Académie de Médecine a summary of the results of his experiments with salicylate of lithia in articular rheumatism. He states that his experiments indicate that lithia salts are not so poisonous as they are believed to be. Salicylate of lithia is not more dangerous than salicylate of soda, and can be administered in almost equally strong doses. In acute articular rheumatism, salicylate of lithia relieves the pain which often remains in the joints after the swelling has disappeared; whereas colchicum and salicylate of soda have no effect. M. Vulpian believes that salicylate of lithia is especially beneficial in fibrous rheumatism. In progressive subacute rheumatism, M. Vulpian has seen salicylate of lithia produce great improvement. Salicylate of soda has also been successful in such cases, and produced amelioration of the patient's condition; but both greater and more lasting benefit is obtained by salicylate of lithia. In chronic articular rheumatism M. Vulpian has found salicylate of soda useless, whereas salicylate of lithia has had a marked effect on the joints, which become less swollen and less painful than before the treatment. In order to obtain evident results, four grammes, sometimes four and a half or five grammes, must be given daily. Larger doses are followed by toxic symptoms. This drug sometimes induces headache and deafness, but is never followed by the distressing noises which characterise treatment by salicylate of soda. The headache and deafness disappear quickly.

A few years ago, Dr. Noel Gueneau de Mussy communicated to the Academy of Medicine Professor Rutherford's researches on different medicinal substances. M. Desnos has tested these experiments on four different bodies—baptisin, sanguinarin, juglandin, and phytolaccin. They are all resinous extracts from American plants. They are brown red powders, very hygrometric, and have a saltish taste. M. Desnos used them in the form of pills of from five to ten centigrammes. Baptisin was administered to fourteen patients; sanguinarin to four; juglandin to thirteen; and phytolaccin to seventeen. The patients did not remain in bed all day, in order not to encourage constipation. The general dose was thirty centigrammes (about 4.6 grains) daily, administered in two separate doses. If more were given, a third dose was taken at eight o'clock at night. The patients generally had a stroll the following day or night. In the case of patients habitually constipated, they gradually had regular motions. Baptisin in doses of thirty centigrammes was regular in its action, but frequently provoked colic. Sanguinarin, considered by Professor Rutherford as a never failing cholagogue and purgative, was perfectly inert, though given in doses of sixty centigrammes. The action of guglandin, Dr. Desnos says, is the same as that of baptisin. In two patients, after it had been administered, the stools contained

blood; one was convalescent after typhoid fever, and the other was rheumatic and dyspeptic. Phytolaccin, given in doses of ten or twenty centigrammes, is regular in its action, and is not accompanied with colic.

At a recent meeting of the Surgical Society of Paris, M. Terrier read a report on two cases of eye-grafting by Chibret, of Clermont, and M. Rohmer, of Nancy. M. Chibret transplanted a rabbit's eye, after the patient's eye had been enucleated. On the fifteenth day there was necrosis of the cornea, and suppuration of the stump. M. Terrier performed the same operation. He joined, by sutures, the human conjunctiva to that of the rabbit. A few days subsequently gangrene set in, and only the stump remained. M. Rohmer transplanted a dog's eye. He cut the conjunctiva two millimètres from the cornea, and thus preserved a band of the membrane; he then sutured together the two conjunctival membranes. A few days after the operation the eye could be turned on every direction, but in a short time sphacelus set in on the band of mucous membrane, and spread to the cornea; and M. Rohmer entirely enucleated the eye, in consequence of sympathetic disturbance, which was manifested in the sound eye. Mr. Bradfert, of Boston, in performing this operation, joined the two optic nerves, then the muscles, which he grafted on to the connective tissue underneath the conjunctival membrane. On the eighteenth day the cornea became clearer; there was a little ulcerated spot on the cornea, but the globe of the eye retained its movements. M. Terrier laid great stress on the advantages of Mr. Bradfert's method.

M. Darier, in his doctoral thesis, published last March, studied the question of broncho-pneumonia in diphtheria. At a recent meeting of the Biological Society, he read a description of the results of further researches. He has succeeded in isolating four different species of micro-organism; the staphylococcus pyogenes aureus; the staphylococcus pyogenes albus, or a micro-organism closely resembling it; the streptococcus pyogenes; and a bacillus, said to be of diphtheria. This latter he met with nine times out of thirteen. The first three kinds are easily cultivated in veal-broth, to which is added gelatine or agar-agar; the last species can only be cultivated on gelatinised serum. From a series of experiments made with these micro-organisms, obtained from pure cultivations, M. Darier concludes that the staphylococcus aureus and albus, and the streptococcus pyogenes, exercise an evident pyogenic action, and by their presence complicate the primary affection. They intensify the pulmonary inflammation determined by the bacillus of diphtheria; they also cause blood-poisoning, and are capable of provoking suppuration of the pulmonary lobes. It is possible that M. Darier has hit upon a general pathological fact, that when a morbid microbe is present in the human organism, it opens the door to others, which add their action to that of the specific microbe.

M. Vulpian has presented to the Academy of Sciences a memoir by MM. Cazeneuve and Lépine on the effects produced by administering doses of the yellow substances extracted from coal, and also by injecting them into the veins. There are three of these substances; one is called Manchester yellow. It is used for colouring vermicelli, and the *pâtes Italiens* used for soups. Experiments demonstrate that this substance is toxic. When swallowed it produces diarrhœa, and vomiting, and in dogs it raises the temperature to 44° Cent. (111.2 Fahr.). The same phenomena, intensified, result from intravenous injection. The other two substances are inert.

At a recent meeting of the Paris Biological Society, MM. Pitres and Vaillard showed an anatomical specimen, which demonstrated that the trophic affections, described by M. Charcot, can also take place in the vertebral column. The patient exhibited symptoms of motor incoordination in 1881. In 1883, he was unable to walk; he was free from pain, but he said he felt as though his hips were dislocated. The spine became curved in the lumbar region. There was a posterior convexity on the left side, and the waist gradually grew smaller by twenty-three centimètres. The first lumbar vertebra was entirely destroyed; the second presented a collection of osteophytes. The pelvis and femur had similar lesions.

M. Lacaze-Duthiers, at a recent meeting of the Academy of Sciences, called attention to the researches of M. Herman Fol, of Geneva, on hydrophobia. M. Fol has isolated a microbe which he believes to be the specific element of the malady. Inoculation with this microbe through the orbit produced rabies, and the incubation-period was shorter than with M. Pasteur's method.

M. Troussart has recently published in the International Scientific Library a volume entitled *Microbes, Ferments, and Moulds.* This work is well fitted to teach the ignorant public what are those micro-organisms which which have been lately so much talked about. To medical men who intend to study the question, it may serve as preliminary reading. To those who are conversant with the questions, it is only useless; it is neither complete nor accurate. Nevertheless, it is well calculated to convey rapidly an idea of what is a microbe and its function, and thus save the student the labour of seeking data, often contradictory, spread about in different scientific publications. It is especially to be regretted that the author has not more carefully described the different methods of cultivating microbes, and that he has not noticed the conditions favourable or unfavourable to their reproduction.

M. Siredey has drawn up a report on epidemics for the Academy of Medicine. In it he states that schools and asylums are active in spreading diphtheria; he advises that when the disease is in them they should be closed. Typhoid fever he attributes, in a great measure, to water contaminated by contact with excrement, or from mephitic vapour. He severely censures the practice prevalent in the North of using night-soil for manure. At Guérot typhoid fever broke out in barracks, near a field, immediately after it had been covered with this form of manure. The outbreak of typhoid fever, which had proved so fatal to the French troops at Tunis, was, Dr. Siredey says, imported by the soldiers themselves; the epidemic spread among them from regiment to regiment, and became intensified owing to neglect of the most elementary rules of cleanliness and hygiene, and to the insufficiency of medical resources. The Tunisian barracks, where the French troops were stationed, are hot-beds of contagion; the ambulance organisation was excessively faulty. They were situated at a distance of twenty-seven or forty miles from the army; often the poor fellows in need of urgent treatment died on the way to the ambulance. In some, four sheets and eight blankets were all the bed-furniture at disposal; in others, eight sheets and five shirts were all that could be mustered for a division of 1,400 men. It is said that serious reforms have been effected. Dr. Siredey, in conclusion, demands that a sanitary service should be created, and instructed in all the arrangements necessary to lessen the appearance of epidemics.

The son of Meissonier, the well-known painter, has been treated by M. Pasteur for hydrophobia. At his country house at Passy there was a large watch-dog; the animal was evidently excessively irritable, and ultimately showed symptoms of rabies. He attacked M. Meissonier, jun., and bit him on the wrist, and bit a servant. A few days ago a big black dog bit two passers-by near the Bank of France, and the soldier on duty; another soldier tried to drive off the animal, and was bitten on the ankle; one of the staff of the bank was also bitten. A policeman seized the animal by the neck and strangled him, but he was badly bitten on one of his thumbs. The policeman and bank official were cauterised, and they afterwards went to M. Pasteur.

A trial has lately revealed the severity of the discipline of military prisons, and the cruel insufficiency of the diet. The Conseil de Guerre of Grenoble tried a soldier who had destroyed his bedding, and struck a superior officer. It appears he was guilty of these offences whilst undergoing punishment at Fort Barraut, for having struck a fellow prisoner at the prison Rue du Cherche Midi, where he was imprisoned for desertion. At Fort Barraut the punishment is divided into three periods. The offender is imprisoned in a cell, where he can neither hear nor see anything. During the first period, which extends over thirty-five days, he is allowed only 750 grammes of bread a day, rather better than half a pound, a jug of water, and soup on Thursdays and Sundays. Ghestin, the offender in question, had endured his punishment during thirty-two days, bitterly complaining all the time of violent hunger, the general complaint of all the prisoners at Fort Barraut. Ghestin habitually ate six pounds of bread a day, and therefore his sufferings were greater than those of prisoners with more moderate appetite. On October 9th, he was in a state of intense excitement, and tore up his bedclothes. The next morning, when the prison official remonstrated, Ghestin struck him, and was condemned to death by the Council of War. His lawyer eloquently pleaded in his favour, and represented him as a victim of the cellular system, removed from all contact with human beings, not even allowed to work, or able to see beyond the walls of his cell, added to which, he had a diet which bordered on starvation. These extenuating circumstances were taken into consideration, and Ghestin was sentenced to ten years' hard labour on public works.

THE Sanitary Union of Holland held their first meeting at Amsterdam on October 1st. Heer Ali Cohen was chosen President, J. S. Wichers, Vice-Secretary, and A. P. Focker, Vice-President. It was reported that the analyses of milk had proved most unsatisfactory, different qualities of milk being distributed in different districts. There was a long discussion on the advisability of having an epidemic chart printed at the expense of the Union. The proposal was put to the vote and rejected.

UNITED STATES.

[FROM A CORRESPONDENT.]

The International Medical Congress.—Cucaine Anæsthesia.—Compound Comminuted Fracture of Skull.—Pyridin in Asthma.—Tænia Echinococcus.—Tænia Flavo-punctata.—Dr. Agnew's Antisepti Surgery.—Dilatation of the Cervix Uteri.

THE most interesting question before the profession, not only of this country, but, indeed, of the world to-day, is that of the next International Congress, about which much has been written, but which seems, as yet, not to be properly understood in Europe. To put the matter in a nut-shell, it is just as follows. The American Medical Association, which is the most representative body of the profession in this country, and from which the invitation to hold the Congress here emanated, saw fit to enlarge the original committee of arrangements (which it had created), and its right to do so was sustained by most eminent and most experienced persons. This action so incensed a select few, who had proposed to manage the Congress in their own way, that they at once resigned from the committee. The vacancies were promptly filled by able men, and the committee are now quietly and steadily making arrangements for a great meeting. If the Congress should be a failure (of which I have not the slightest fear), the failure will be due, not to the American Medical Association, not to the profession of America, but to the action of a limited number of persons who would rather suffer a stigma to rest upon the fair name of our profession than resign their personal claims, and to those of our brethren abroad who suffer themselves to be kept away by the interested representations of those persons to whom a failure of the Congress would be a personal triumph. This is the true position of affairs, as viewed by one who has no special interest or connection with the Congress.

Cucaine is being used in this country for nearly everything ; but we have already found out that this sweet rose of our therapeutic bouquet has its bitter thorn. A poor fellow (a physician) out in Chicago, in his earnest desire to investigate its wonderful properties, has become a *habitué*, and has drugged himself and his family down to the lowest depths of degradation. Taking cucaine himself, and giving it to his wife and little children, he mercilessly hacked their flesh to test its anæsthetic properties. He is now in an asylum, where he will probably soon end his career. Dr. J. Leonard Corning, of Brooklyn, having demonstrated that, when the circulation in a part is impeded, as by the Esmarch bandage, the anæsthetic effects of cucaine are prolonged, Dr. J. Milton Roberts has recently performed two grave operations (one exsection of the head of the femur), the cucaine being deeply injected, which he reports as being painless.

At the Presbyterian Hospital in Philadelphia, Dr. W. G. Porter had recently under his charge a boy aged about seven, who, falling from a height on his head, fractured the skull. He was trephined, and enough bone removed to leave a bare space as large as the whole hand, extending upwards from the temporal ridge. The boy recovered without a bad symptom, and is now well. The periosteum was left, and it is hoped that new bone may form.

Following the suggestion of M. Germain Sée, Dr. Joseph Neff, of Philadelphia, has been using pyridin in asthma with eminently satisfactory results. He believes it to be more efficacious in relieving the paroxysms, and probably in preventing their recurrence, than any drug that has ever been offered to us ; it is used, of course, by inhalation.

At a recent meeting of the Philadelphia Pathological Society, Dr. William Osler presented specimens of the *Tænia Echinococcus*, which rare parasite he had reared experimentally by feeding a dog with hydatids from the liver of a pig. The animal was killed after seven weeks, when the small intestine was found to contain many hundreds of the mature tape-worms. From the small size of the worms, only a few lines in length, they were very apt to be overlooked. Dr. Leidy has never met the adult worm in this country.

Dr. William Pepper also presented specimens of *Tænia Flavo-punctata*, which was described by Dr. Leidy in the *American Journal of the Medical Sciences* for July, 1882. This species has only once before been seen and recognised, and then by Weinland, of Boston, in 1858. Both specimens were expelled by young children, and averaged twelve inches in length.

As an item of interest, I note that Dr. D. Hayes Agnew, who is in the first rank of American surgeons to-day, always uses the carbolic spray when performing operations that open a joint or expose the cancellous structure of a bone.

Dr. William Goodell is a most earnest advocate of dilatation of the cervical canal for the cure of dysmenorrhœa and sterility. He has now performed the operation more than two hundred and twenty times, and has never had any serious results. On three occasions only has he torn the cervix ; and in one of these cases it had been previously rendered brittle by the prolonged application of nitrate of silver, while in the other two cases the tenaculum used was too large, and it tore out ; but in all three cases the tear was very slight, not more than would have occurred from labour. He very much prefers this operation to that of incision, which he considers at times a dangerous operation. Antiseptic precautions are used. The vagina is first thoroughly swabbed out with carbolic acid ; and, after the dilatation (which he usually carries up to one inch, and frequently to one and a quarter inches), he throws up a quantity of carbolised water. This operation nearly always cures dysmenorrhœa, and will relieve sterility if it be due to stenosis ; but, as this condition is sometimes due to changes in the uterine cavity that render it unfit to serve as a nidus for the product of conception, or, in some cases, to the fact that the male semen is devoid of spermatozoa, the operation will not always cure. Before commencing to operate, he introduces a suppository of one grain of the aqueous extract of opium, which is repeated in two hours, if necessary. If there be any soreness the next day, he uses poultices, and, if any rise in temperature, an ice bag.

Philadelphia, December 18th.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

Report on University Examinations.—Ambulance Staff Corps.—Trephining the Spine.—Discussion on Cancers.—Demonstration by Mr. Lawson Tait.—Health of the City.

THE report of the Commissioners from the General Medical Council, who visited our university examinations last summer, has been received, and its terms are very complimentary to all concerned. The visitors were evidently very much impressed with the thoroughness of the examinations, and they speak in high praise of the system followed for testing the fitness of the candidates. The only point that they think might be amended is an increase in the amount of practical midwifery accomplished by the students before graduation. I have no doubt that attention will be directed to remedying this want of clinical work in a very important branch of medical practice, but there are difficulties in the way, and these have not been lessened by a recent resolution at the Maternity Hospital that no students are to be allowed to attend the out-patient practice of the charity until they have attended a course of lectures on obstetrics.

Before separating for the Christmas recess, another meeting was held by the students favourable to the formation of the University Volunteer Ambulance Corps. Drs. Young and Cathcart, of Edinburgh, very kindly came through and gave the meeting the benefit of the experience already gained in Edinburgh in the matter. Their visit was of great value, as they were able to point out the chief difficulties to be encountered, and also to furnish suggestions as to how they were to be met ; and they spoke in such a hopeful tone of Government recognition of the scheme being sooner or later a certainty, that a very hearty response was made to the invitation to send in names for enrolment. Already a very large number has been received, and the formation of the company will be proceeded with as soon as the classes meet again after the new year.

Dr. Clark's paper at the Medico-Chirurgical Society on Trephining for Epilepsy has been followed by an equally interesting discussion raised by Dr. William Macewen at the last meeting of the Pathological Society on trephining the spine. He showed the members one case of paraplegia in which the operation had been done with marked benefit for paralysis connected with Pott's disease, and another case of fractured spine where this line of treatment accomplished what may be regarded as a cure. Considerable difference of opinion was of course expressed in connection with what has long been a moot point in surgery, but the cases shown were strong arguments in favour of Dr. Macewen's view that there was more to be done by surgical interference in many of these apparently unpromising cases than was usually admitted or acted on.

The proposed discussion at the Pathological Society on cancers has been fixed for Wednesday, January 20th. On the preceding Wednesday, a demonstration of specimens of cancers will be given, so that members may have the opportunity of making themselves familiar with the microscopic characters of many of the tumours that will be referred to in the debate. As I mentioned in a previous letter, the discussion is to have special reference to the following points ; namely, the origin and mode of extension of cancers, their recurrence, their hereditary tendency, and how they cause death apart from involving vital organs.

A large number of the profession had the opportunity last week of seeing, at the Nurses' Training Home, Mr. Lawson Tait perform the operation for laceration of the perinæum, which he has recently advocated, and which has been attended with very uniform success in his hands. The case operated on was one of complete rupture. Those who witnessed the operation had no difficulty in following Mr. Tait in his mode of procedure, which has certainly the merit of simplicity, although it is not easy to make it clear by any written description of its various steps. The advantages that Mr. Tait claims for his operation were very clearly shown in this instance.

Along with the other various charities, our hospitals have not been forgotten at this Christmas season. Although there was little in the shape of cold or snow to remind one of the time of year, the cheery look of the wards, with their decorations of holly and evergreen, and the Christmas trees loaded with gifts, must have shown the patients that they were not forgotten by the outside world, and also by those more immediately around them, and that they had their warmest sympathy and best wishes for their better health.

Dr. Russell's report for the fortnight ending December 19th shows the death-rate to have been 27.2 per 1,000. A few cases of small-pox, about four in number, were registered; but it is evident that the authorities have the disease well in hand, and that there is no fear, at present, of its extension. I observe that the Council has authorised the continuance of intramural interments for another year from January 1st, 1886.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The Societies.—The Eye Hospital.—The Vacant Chairs at the Owens College.—Uncertified Deaths.—Overlaying of Infants.

THE various societies have displayed more than their usual activity during the past month, four society meetings having been held, and much interest has been taken in their proceedings. Many of the members of the Pathological Society availed themselves of the courteous invitation of the President of the Liverpool Medical Institution to be present at their meeting on December 11th, to hear an address from Professor Hamilton, of Aberdeen, on the functions of the corpus callosum, and to take part in the proceedings. Unfortunately, by reason of other engagements, many of our members were unable to be present.

The new Eye Hospital, which for the last year or two has been in process of erection, is now completely equipped and furnished, and in part occupied. It has been erected on a prominent site in Oxford Road, a short distance beyond the Owens College, and forms a handsome red brick building. It is replete with every modern improvement, and is probably one of the finest and most commodious ophthalmic hospitals in the kingdom. The patients have been transferred from the old building in St. John Street; but, for the present, the surgical staff are attending at both institutions to see out-patients, the patients selecting the hospital for attendance which is nearest to their own homes. The formal opening has been deferred till January, in the hopes of securing the services of a prominent member of the Royal family to assist in the ceremony; but in this, there is reason to fear, there will be a disappointment. In connection with the erection of the new hospital, it is only bare justice to say that this is largely due to the exertions of the honorary treasurer, Mr. Alderman Goldschmidt, the present mayor of Manchester, who has been indefatigable in raising the funds, and has, I believe, equipped and endowed a ward himself in memory of his wife.

Neither of the vacant chairs at the Owens College, referred to in my last letter, has been as yet filled up. Unavoidable delays have taken place with regard to the Professorship of Physiology, which has now been vacant several months, but there is good reason to believe that the final selection will be made early in the present year. Dr. Theodore Cash has withdrawn from the candidature. The new lecturer on Medical Jurisprudence will, it is expected, be appointed at the next meeting of the Council, to be held at the end of January. Dr. Edge has withdrawn from the contest; it is generally thought that the final contest will lie between Dr. Dixon Mann and Mr. Dacre Fox, and that the contest may not improbably be a close one.

Laudable efforts are being made by our local Sanitary Association to call public attention to the number of deaths which take place in this city which are uncertified either by coroner or medical man. In some districts at least, during the last few years, from five to six per cent of the deaths taking place have been entered in the registrars' books as "uncertified." This is a subject which certainly needs a little light, and the Manchester and Salford Sanitary Association will add another to their many claims on the support of the public if they can manage to let it in. The initial difficulty arises from the fact that the whole of the responsibility in the matter lies with the registrars themselves, the coroner having no power to interfere unless evidence be forthcoming. In connection with this subject, it is worth noting that the recently issued returns of the Manchester Police record that ninety-two deaths of infants from "overlaying" have taken place during the past year. This number, however, does not represent probably anything like the total number, as there is reason to believe that many such are registered as "uncertified," and never come under the notice of the coroner or police. Mr. Smelt, deputy-coroner, has frequently called attention to the number of infants thus yearly sacrificed; but it is to be feared that a remedy is not easily found, especially when it is found extremely difficult to get a jury to convict in such cases.

CORRESPONDENCE.

NATIONAL SOCIETY FOR AID TO SICK AND WOUNDED IN WAR.

SIR,—A paragraph in your JOURNAL of December 19th has attracted my notice. Will you permit me to observe that there is no truth in the statement that "one or two professional members of the above Society have declined to attend its meetings?" Professor Longmore, of the Royal Victoria Hospital, Netley, one of the most valued and constant attendants at the meetings of the Society, retired from the Council early last year, solely on the ground that the important work which he specially supervised, namely, that of training nurses for army hospital service, had come to an end through the Government having taken over the said nurses on to the regular staff of the Army Medical Department. No member of the Council has on any occasion declined to attend the meetings, nor have any expressions of dissatisfaction been received with regard to the proceedings of the Society.—I remain, your obedient servant,

WANTAGE, Chairman of National Aid Society.

*** We have good reason to know that the dissatisfaction to which we refer is much more real than Lord Wantage supposes; and we feel satisfied that, if he will make inquiry among the professional members of the Society, past or present, he will ascertain that the paragraph to which he refers was by no means without foundation, and that there is a pretty general opinion that there is much room for reform in the constitution of the valuable Society over which Lord Wantage has so long presided with eminent advantage, and which has rendered such distinguished international services.

THE EASTERN HOSPITAL SCANDAL.

SIR,—Referring to the inquiry which is constantly referred to under the above heading, about the working of the hospitals under the Metropolitan Asylums Board, may I ask the following questions?

1. Is there a code of regulations, like the army medical regulations, defining, paragraph by paragraph, the duties of the various officials in the Metropolitan Asylum Hospitals? If so, where can the code be purchased? It would be highly interesting to compare their system with the army medical system laid down in the regulations.

2. With such a code, defining accurately the powers and duties of the medical superintendent, it would be difficult for any great neglect of work to occur, unless the officials were all overworked; and here, again, the army medical code would form a rough guide.

3. The army system of diet-cards, diet-returns, written indents, rules for extras, is all worthy of study by hospital administrators.

4. The relation of the stewards or chief storekeepers to the medical officers is also very interesting, and I would invite civil medical men to read our regulations as to the duties of the quartermaster's medical staff corps.

5. Is there, for the Metropolitan Asylums, any special inspector corresponding to the deputy surgeon-general of a district in the army, who, by frequent and unexpected visits, can supervise the working of the hospitals, both as to medical treatment and general routine?

6. I think there is the greatest need for a definite official code, to be drawn up by the Local Government Board, dealing accurately with hospital management, and also with the duties of Poor-law medical officers and medical officers of health.

7. Finally, let me say this much without any reference to any recent cases. Nothing can be more pitiful than the way in which the young medical man is turned out in London as regards his training in hospital management and administration. The construction of hospitals, their cubic space, ventilation, sewage arrangements, nursing system and staff, relation between the store depart-

ment and the executive medical officers, are never taught to the student. Go into most London hospitals, you find the patients mixed up in the ward under two or three medical men, the nurse being the real authority on ventilation, cubic space, etc. The hospitals themselves vary immensely in system and methods of work; and, in the chaos of conflicting systems, the teaching of the future medical man on all such subjects is absent. Everywhere over the world, the medical men are claiming more voice in such questions; but how are they fitting themselves for such work? "Compromise" is the watchword in many London hospitals, and principle is non-existent.

I hope the day will come when the construction and administration of hospitals will certainly form a part of the young medical man's training. The true reason of the power of the nursing body is, that they know more, as a rule, about hospital system than do the medical men.

I would beg any medical man governing any medical institution, who may be in any doubt as to how his work should be done, to purchase the Army Medical Regulations, and refer to the paragraphs dealing with the subject. I feel certain the average medical man will find them highly useful on many points. They are the result of one hundred years of experience, regularly formulated.

But please do not forget the need of a civil medical code for the Poor-law administration.—Yours,

Woolwich. G. J. H. EVATT, M.D.

THE NEW PHARMACOPŒIA.

SIR,—I observe in a recent number of the JOURNAL a rather formidable list of "corrections" to the new edition of the *British Pharmacopœia*—a list which, I presume, is official, although it is not so stated. May I point out that this list of corrections itself requires to be corrected? Corrections Nos. 16 and 17 are obviously incorrect; while the last in the list is unintelligible, presumably from the wrong page being given. It is singular, also, that three of the errata indicated on the slip published with the volume are not included in the new list, being, perhaps, withdrawn intentionally.

Two additional errors or inconsistencies of no great importance, have come under my own notice in a cursory examination of the book.

1. The substitution of red for yellow cinchona in the preparation of the decoction is classed amongst the changes of name; while an identical alteration in the case of the tincture is given (more correctly) in the list of substitutions.

2. In the preparation of the syrup of chloral, the "simple syrup" directed to be used should be "syrup" simply.—Yours truly,

F.R.C.P.

VAGINAL EXTIRPATION OF THE ENTIRE UTERUS.

SIR,—In reply to the note of Dr. Duncan, published at page 1016 of the JOURNAL, for November 28th, allow me to express my opinion that he has not accurately interpreted the import of the discussion on his valuable paper at the Obstetrical Society. He writes that, "there was a remarkable unanimity of opinion adverse to extirpation in cancer of the cervix expressed by such men as Braxton Hicks, Priestley, Graily Hewitt, Playfair, John Williams, Sir Spencer Wells, Sir William Mac Cormac, Galabin, Knowsley Thornton, and Doran;" and thus fortified, asks whether "it is not a matter of regret that any surgeon in this country should have felt he was acting in the best interests of his patient by performing this particular operation?" On turning to the report of the meeting, I find that Sir Spencer Wells "compared amputation of the cancerous cervix to partial removal of a cancerous breast, and maintained that if Sir James Paget was not aware of a single case of recovery (that is, survival for ten years without any active return) after amputation of the breast, and yet operated in cancer of the breast, we are justified in performing extirpation of the entire uterus, even if no better results followed. Again, the results of Olshausen and Schroeder lead us to think that improved methods of operating, may give us better results in the future. There is still much to learn in the details of the operation; and improvement, both in early diagnosis and in early operation, may give a much lower mortality, retarded return, or even complete recovery. He trusted that condemnation of the operation may not be the verdict of the Obstetrical Society." So much for the "remarkable unanimity of opinion adverse to extirpation in cancer of the cervix," etc.

Dr. Duncan states the mortality, after vaginal extirpation, at 28.6 per cent., and for supravaginal amputation at 7 per cent., and the results as regards recurrence precisely similar. Quite so. But, in consideration of the formidable character of the operation, extirpation has generally only been performed for malignant disease of the body, or advanced cancer of the cervix; usually, therefore, the entire growth, or adjacent and infected structures, have not been removed, and recurrence has taken place. No surgeon, in his senses, would perform a partial excision of the breast for cancer; and the only reason why partial excision (that is, supravaginal amputation of the cervix) of the uterus is elected in preference to extirpation of the entire organ, is that the mortality of the latter is high. But, on perusing the description of these operations, one is struck with the large number of misadventures which have occurred during its performance, such as perforation of the bladder, or injury or ligature of the ureter, wound of the intestines, hæmorrhage, and peritonitis. Perceiving, however, that each of these sources of danger could be obviated by proper care and careful study of every detail of operative procedure with sufficient practice on the dead body, and that therefore the danger of the operation practically should not be greater than that which attaches to some other abdominal operations, I had little hesitation in performing vaginal extirpation for Mr. Prowse's patient; and since she is now convalescent, I think, from an examination of the pathological specimen, that her interests have been better consulted by extirpation than they would have been had supravaginal amputation been performed instead.—I am, sir, faithfully yours,

CHARLES E. JENNINGS, F.R.C.S.Eng., M.S.

Park Street, Grosvenor Square.

INFLUENCE OF POSITION ON THE HEART.

SIR,—In the interesting article, by Mr. C. J. Bond, on the influence of position on the heart, very little, except the bare mention of the fact, is said with respect to the lateral movement of the heart on assuming the right or left lateral position.

May I suggest that the extent of the movement of the apex-beat in the change from the dorsal to the left lateral position may afford information of some value? Two years ago, I began to make some investigations on this point, but I have now no opportunity of taking statistics in the number in which alone they would possess value.

I would suggest tentatively that the best method of expressing the amount of this movement would be as a fraction; the distance of movement of apex as a numerator, the circumference of chest at that level as a denominator. I think this would prove fairly constant, at least, in certain large classes. It would then be for us to compare the similarly obtained fraction in known disease with this, and see if the information obtained were of value or not. I cannot but think that some useful knowledge might so arise.—I am, sir, yours obediently,

West Brighton. ADOLPHUS J. RICHARDSON, M.B.

N.B.—This matter may have been thoroughly threshed out; if it have been, I should be greatly obliged to any reader who would give me references.

LEAD-POISONING THROUGH MOTHER'S MILK.

SIR,—It is much to be regretted that atropine was not used in the case of opium-poisoning, through mother's milk, recorded in the JOURNAL of December 19th. Seeing that the infant survived for sixteen hours the second dose of the poisonous milk, there is good reason for believing that its life might have been saved by the timely use of atropine. It is, at the present day, pretty well established that opium and belladonna act with opposite effects upon the system.

In 1878, Mr. J. Stuart Nairne, of Glasgow, reported in the BRITISH MEDICAL JOURNAL the case of an infant so saved. To an infant, two weeks old, half a minim of laudanum had been administered at 10 A.M. At 2 P.M., the pupils were contracted to a point, the lips were livid, the cheeks bloodless; there was a dusky hue round the eyes, and the pulse was imperceptible. At 8.30 P.M., a quarter of a grain of atropine was dissolved in one drachm of water; the lips were moistened with this, and the application was repeated as the lips dried. At 9.30, the pupils began to dilate, the pulse became perceptible, and there were convulsive twitchings. The treatment was continued through the night, and the infant was supported by injections of warm water, milk, and whisky. Next morning, at 8 A.M., there was general improvement; and, at 1 P.M., all effects both of opium and of atropine had completely passed away.

Mr. Nairne mentions another case of an infant, nine days old, to whom four drops of Battley's solution had been recklessly given to stop its crying. In ten minutes, it was in a deep sleep. There were several convulsions. Two hours after the poison was taken, atropine was used, which appeared to mitigate the convulsions, but the child died at the end of about seven hours. The failure in this case was partly owing to the atropine solution being too weak, only one-eighth of a grain being used to a drachm of water; it would probably have failed in any case, because the dose of opium was very large.

It is unfortunate that these cases, occurring as they do rarely

and at long intervals of time, seem to escape the notice of the profession. In this way, many valuable lessons come to be lost.—Yours very truly, EWING WHITTLE, M.D., M.R.I.A.,
Late Lecturer on Medical Jurisprudence and Toxicology to the Faculty of University College, Liverpool.
Parliament Terrace, Liverpool.

THE GOVERNMENT OF THE COLLEGE OF SURGEONS.

SIR,—The impression seems generally to prevail that the Council of the College of Surgeons will stand firmly to the terms of their resolutions, which were read at the meeting of the Fellows and Members on December 17th. Consequently, the question obtrudes itself, in view of what has taken place, "what will happen next?" It seems to me that the solution of the difficulty is to be found in some compromise. The position of the College is admittedly increasing year by year in importance. It seems therefore only reasonable, while its aims, its work, its responsibilities, are extending in every direction, that the Council itself should submit to a process of enlargement. The number twenty-four represents, I believe, the numerical strength—not necessarily the collected wisdom—of vestries in rural hamlets, over which the clergyman presides. I do not suggest that this fact had anything to do with the original selection of the number to form the Council. But why should not this number be augmented at the College in Lincoln's Inn-fields? Let the Council consist of thirty-five members, and let eleven of these be Members of the College, elected by the Members, and the rest Fellows of the College, elected by the Fellows.

Enlargement of the franchise is at present the claim of the Members. But enlargement of the franchise, without "redistribution," has been deemed in the political world of England to be inexpedient. Therefore, the cases being parallel, or nearly so, I venture to think that the treatment of each should be the same.—I am, sir, yours faithfully,
3, St. Stephen's Road, W. H. PERCY DUNN.

SUBCUTANEOUS EMPHYSEMA DUE TO LABOUR.

SIR,—Dr. A. C. Millar relates, in the JOURNAL of December 5th, two interesting cases of this accident. He pleads, as a reason for publishing them, that "the condition is not referred to in the ordinary text-books."

I will not pretend to say how far the *System of Obstetric Medicine and Surgery*, lately published by myself and Dr. Fancourt Barnes, deserves to be considered an "ordinary text-book;" but emphysema occurring during labour is there referred to. I have seen several cases in ordinary labour, and especially in ergotic labour.—I am, sir, yours, etc., ROBERT BARNES.
15, Harley Street.

FRACTURE OF PATELLA: "SWAN'S OPERATION."

SIR,—I think Dr. Cooper, in taking up the cudgel for Dr. Swan's operation, has certainly shown us that the matter is "out of his province." In the first place, the quadriceps extensor, as a mass of muscle, does not influence the separation of the fragments in transverse fracture of the patella; it is the rectus element of it, and that alone—the rest of the mass drags laterally. Every London surgeon is aware that he may get the best results by the subcutaneous division of the rectus tendon, and it seems incredible that one is to be taught the process by a gentleman who confesses he knows little or nothing of the matter in hand. I enclose my card.—I am, sir, yours, etc., F.R.C.S.Eng.

ON PHYSIOLOGICAL ACTION AND THERAPEUTIC DEDUCTIONS.

Sir,—In an address on medical treatment delivered before the Midland Medical Society, by Dr. Wilks (reported at p. 903 of the last volume of the JOURNAL), it is stated, when alluding to the action of digitalis, "the application of a physiological result to morbid processes in this and in many other cases has been fraught with harm, and I cannot regard the method as truly scientific." Now I consider such a remark, appearing as it does in connection with the valuable and most rational conclusions arrived at by Dr. Wilks as to the general treatment of disease, likely to cause mischief; at the same time, it offers a striking example of the reason why physicians are apt to misapply the results of physiological teaching as regards the action of medicines. Now what is the teaching of physiology as regards the action of digitalis? I believe the first physiological researches on the action of this drug were those I made in 1837, which were published in a paper read at the meeting of the British Association at Newcastle in 1838 (the paper was printed in the *Edinburgh Medical Surgical Journal*, vol. xli). I then stated that the most marked action of digitalis was to increase the blood-pressure in the arteries by acting directly on the coats of the vessels; and that although it slowed the action of the heart, the arterial pressure still kept up above the normal. The teaching, then, of physiology as regards the therapeutic action of the drug, is that it would probably prove useful in diseases accompanied by low arterial pressure. That these physiological provisions have been fully realised, must be the experience of every physician who has used the drug in heart-disease, and in delirium tremens, a disease in its worst forms, accompanied by an almost paralysed condition of the vaso-motor centre. In such cases digitalis certainly does good; and it is only in such cases that any scientific physician who is at all up in his physiology would think of administering the drug for the purpose of modifying the circulation. That physicians can be found who would prescribe the drug to reduce the pulse in pericarditis and pneumonia, when the arterial pressure is above the normal, only shows that there are physicians who go wrong from neglecting the teachings of physiology, and not that it is physiological experiment that has led them astray. Had Dr. Wilks pointed out why, for physiological reasons, digitalis was likely to prove absolutely injurious in the cases to which he alludes, he would have rendered a much greater service to the profession than in attributing such bad practice to the imperfect teachings of physiological research. Whilst on the subject of digitalis, I would call the attention of Dr. Fraser, who has an article on the drug in the same number of the JOURNAL, to the fact that, in alluding to those who have investigated the action of the drug, he has cited the names of three Frenchmen, three Germans, and one Pole, and has left out the name of his own countryman. I was the first to point out the true physiological action of the drug, which I did in the paper before alluded to. This was fully twenty years before Bernard wrote on the subject, although he is credited with having originated the experimental investigation of the action of the drug. Amongst the names he mentions, most of them, through imperfect methods of investigation, had arrived at wrong conclusions on its action, although writing many years after my results had been published. The remarks of Dr. Fraser afford an interesting example of our modesty, as a race, in pressing upon foreigners the discoveries of our own countrymen.—I am, etc., JAMES BLAKE, M.D.
San Francisco, California.

ADDISON'S DISEASE.

SIR,—In the JOURNAL of December 26th, page 1214, the reviewer, who has written the article on Pathology, has so worded his reference to my theory of the function of the adrenals, as to leave an impression on the mind of your readers that the hæmochromogen of the medulla of the adrenals has been found by Krukenberg to be a pyrocatechin compound. This is not so. In Krukenberg's paper, "Die farbigen Derivate der Nebennieren-chromogene (Virchow's *Archiv*, Band ci, 1885), he merely quotes my observations; and in a sentence—which is, on account of its double meaning, rather difficult to render exactly—makes it appear that the occurrence of hæmochromogen in fresh organs is to him *incomprehensible (unverständlich)*; but he does not deny its occurrence—for a very good reason, that he cannot; nor can anyone else who takes the trouble to examine the organ in the way I have described (*Proceedings of the Physiological Society* for December 13th, 1884). By another method, Krukenberg proves the presence of a pyrocatechin compound, which may also be present. If this observation should prove to be correct, it strengthens my position, as anyone cannot fail to see who knows the origin of other bodies of the aromatic series; for the presence of pyrocatechin would tend to prove the metabolism of proteid, as that of hæmochromogen proves the metabolism of the coloured constituent of effete hæmoglobin and effete histohæmatin.

I do not expect my view to be accepted at present by every physiologist, because it is only those who have made spectroscopic examination a special study who are in a position to appreciate the significance of the appearances seen, which are very striking; but in time I hope others will confirm the truth of my observations. Even had Krukenberg contradicted my statement absolutely, I should not have been surprised, especially as his observations have been made, up to the present, by means of a chemical spectroscope illuminated by sunlight reflected from a heliostat; whereas mine have been made with a microspectroscope of small dispersion and excellent definition, the source of illumination being a Swan lamp, and the organ being examined in a compressorium.

I hope shortly to give a sketch of the spectrum of the appearances seen, compared with the spectrum of hæmoglobin, which will help to make the subject clearer to those who have not an opportunity of seeing the actual specimens.—Yours faithfully,
Wolverhampton. C. A. MACMUNN.

MEDICO-LEGAL AND MEDICO-ETHICAL.

WEST LONDON MEDICAL AID INSTITUTE.

SIR,—In your remarks, page 1041, November 28th, on the West London Medical Aid Institute, my name is mentioned in connection with the Institute in a way which requires my attention. It would have been well, before these remarks were made, and you mentioned my name, if you had ascertained whether the representations made to you were correct. Your remarks would lead your readers to believe that I had some pecuniary interest in the institute. Allow me to inform you that such a representation is incorrect, and I regret that you did not take a little trouble to ascertain the facts, and thus save me from the painful duty of correcting the misrepresentation in this decisive manner.—I am, sir, yours truly, ROBERT LEE.

6, Savile Row, W.

***A letter was addressed to us by the Honorary Secretary of the West London Medical Aid Institute, on November 17th, 1885. He enclosed three circulars, A., B., and C. Circular A. is headed "West London Medical Aid Institute," and the first paragraph is as follows :—

"It is proposed to establish an institution in the neighbourhood of West Kensington and Fulham, for supplying, on self-supporting principles, medical and surgical advice, treatment and medicines to all those who are not in a position to pay for ordinary medical attendance."

The fourth paragraph runs as follows :—

"The following gentlemen have promised their professional support, Dr. Robert Lee, Mr. A. G. Wills, Dr. Addinsell, and Mr. Philip Birch, by any of whom subscriptions will be gladly received."

Circular B. is signed by "Robert J. Lee, Honorary Treasurer; Philip Birch, Honorary Secretary." This circular states that the Institute supplies "all the advantages of the out-patient department of a hospital and dispensary," with the important addition, not provided at hospitals, of "home attendance." The circular proceeds to state that the institute "will be supported largely, if not entirely, by payments received from those who attend it," but adds that subscriptions are invited, and that orders will be furnished to subscribers for distribution, to meet those cases where absolute necessity justifies the aid of charity.

Circular C. contains the names of the committee of management, with that of Dr. Robert J. Lee at the head; it states that :—

"This institute is established to enable residents in the districts of West Kensington and Fulham, who cannot afford to pay ordinary medical charges in time of sickness, to secure prompt and efficient medical attendance when required, at rates within their means. Applicants may obtain the advantages of the Institute as members, or as non-members, on the following terms. Terms for members. Single member, 6d. per month. Families (including all children under 15 years of age) 1s. per month. To be paid in advance ..... Terms for non-members. First consultation at the Institute 1s. All further consultations during the same illness, 6d. All home visits 1s. No charge is made for medicines."

Patients holding subscribers' orders were entitled to the same advantages as obtained by non-members. Members if too ill to attend, can claim the services of the medical attendant at their own homes. In the "time table" of the Institute it is stated that "Dr. Lee will attend for special consultations on Friday at 3 P.M." In a medical aid institute, established "on self-supporting principle," the medical staff must be paid, otherwise the term is misapplied. We have it on the authority of a circular issued by this Institute, and forwarded to us by the honorary secretary, that it is intended to be self-supporting. The question is set at rest, however, by a resolution which, we are informed by the honorary secretary, was unanimously passed by the committee. It is in these terms, "That the appointment of a medical staff shall rest with the committee alone, who shall have power to regulate the duties of, to add to, or remove any member from (*sic*), according as the duly considered interests of the Institute shall require. That the services of the medical officers shall remain gratuitous until, in the opinion of the committee, the finances of the Institute will satisfactorily allow some remuneration to be begun, and the committee shall then decide upon the amount and plan of such remuneration." There is no indication, neither in the communications addressed to us by the honorary secretary, nor in the circulars issued by the Institute, that Dr. Lee was on any different footing to the other members of the medical staff as to the matter of remuneration. If the Institute were in reality truly based on the provident principle, is there any good reason why any member of the medical staff should refuse the remuneration to which he would be clearly entitled? Nobody doubts the purity of Dr. Robert Lee's motives, or that he has fully convinced himself that "this is the only way in which the question of medical relief can be satisfactorily solved," and we sincerely regret that he should be pained by our criticism, which had no personal bearing, but was directed to general principles; the system of admitting non-members, and persons introduced by subscribers to the benefits of these institutes, strikes at the root of the provident principle.

MEDICAL ETIQUETTE.

SIR,—B. and C. are partners in an old established practice; both are Churchmen. Dr. A. is a fresh comer, young, unmarried, on friendly terms with C., but unknown to B. Dr. A. and family are Presbyterians. C. has attended Dr. A.'s family on two or three occasions, for slight ailments. Dr. A. is now opening a surgery opposite B.'s house. Up to the present he has not called on either B. or C.; but one of B.'s patients, who is a Presbyterian, tells B. that Dr. A. has called on them and solicited their support; giving as his reason for doing so, the fact of his being a member of the same church; and of his father being a great upholder of Presbyterianism in that district. Kindly inform me :—1. What you think of Dr. A.'s conduct. 2. How should C. behave (A.) to Dr. A.; (B.) to Dr. A.'s family.—Yours truly, T.

*** To our correspondent's three questions we reply as follows. 1. The act of "Dr. A.," in calling upon B.'s patient to "solicit the support of the family," on the plea "of being a member of the same church, and his father also being a great upholder of it," is a regrettable instance of unethical procedure; which, however, we would fain attribute to a lack of medico-ethical knowledge rather than to wilful intent. To a like cause, we would ascribe his omission to pay B. and C. the enjoined visit of professional courtesy on commencing practice in their immediate locality; for, in the absence of collegiate or other instruction, on such and kindred subjects, it is scarcely to be wondered at that young practitioners should be so generally ignorant of medical etiquette (diverse as it is from that pursued in ordinary social life, in relation to new comers) expected from members of the profession on commencing or changing the locality of practice, and which entails on each new comer, young or old, an obligation to call, with as little delay as may be, upon every duly qualified, legitimate practitioner resident within a reasonable distance of his own selected place of abode, and courteously to announce his intention to practice in the locality. 2A. In regard to "C.'s behaviour to Dr. A.," prospectively, he will, in our opinion, act wisely and well by practising the true spirit of brotherly love, and, without unduly seeking the acquaintance, by availing himself of the first favourable opportunity to courteously indicate to his fellow-practitioner the ethico-social and the medico-ethical obligations which devolve on new comers, etc. 2B. The particular point on which "C." seeks counsel in reference to his future demeanour "toward Dr. A.'s family," is not sufficiently defined to enable us to reply otherwise than conjecturally.

THE RIGHTS OF A JUNIOR PARTNER.

SIR,—May I ask your opinion on the following facts? A., a surgeon, not far off, aged 70, and in a very uncertain state of health, and B., about forty years younger, just commencing practice, go into partnership for a period of five years. B. pays to A., at once, a sum of money—one half the value of the practice—they work together, and each takes an equal share of the profits, etc. B. does the greater part of the work, while A. does just as his own health and inclination may dictate. Clause 5 of the contract says—"And the said A. shall and will introduce the said B. to his patients, with the view to induce them to become the patients of the said B., as well for the benefit of the said firm as possibly and eventually of the said B. individually." Shortly before the end of the partnership, B. writes to A., referring him to this clause, and asks him to perform his part of the contract with regard to the club and factory appointments, which A. still holds nominally, but which B. regards as rightly coming within the meaning of the word "patients," in the above clause.

I may say that B. has received no answer from A., the only difference being that when they next met, in the street, A. "cut" him.

The members of the club have unanimously expressed their preference for retaining the services of B., and when a deputation waited on A., to communicate this fact, he is said to have been "very cross." I should like your opinion as to whether B. is right in regarding these appointments as included in the word "patients?" and whether he has not a right to expect that A. should do something towards inducing the factory appointment to come to him. Your notice in an early issue will oblige, as B. wishes to do only that which is right and fair, but has no fancy for being cheated.—Yours truly, MANCUNIAN.

*** That "B. is right in regarding the appointments as included in the word 'patients,'" there can, we think, be little doubt; and, also, that A. is alike morally bound in the matter of "the factory appointment," but how far he is legally so is a question which, in the absence of "the contract," we are not in a position to answer. Indeed, if the only compulsory clause on the point in question is that quoted by our correspondent (Clause 5), we apprehend that, in regard to legal enforcement of his claim, he is without remedy, since the qualifying words "as possibly," would, we believe, put him out of court. Moreover, as far as we are able to judge, from the tenour of B.'s statement, A. would seem to have fulfilled the covenant he entered into, "to introduce the said B. to his patients." The question, however, is a legal one on which B. will do well to consult his solicitor, if he think it worth while to enter into litigation about a matter of minor importance, with the probability that A. would convert the simple "street cut" into active and, may be, mischievous opposition, from which B. could scarcely fail to receive more or less professional injury.

ETHICS OF CLUB MEDICAL APPOINTMENTS.

SIR,—I am medical officer to the Elgin Branch of the National Independent Order of Oddfellows, and have been so since its origin, nearly two years ago. It is an annual appointment, and the date for re-election will soon be at hand. Is it in accordance with professional etiquette for a brother practitioner to allow himself to be nominated in opposition to me? An early answer in the JOURNAL will much oblige.—Faithfully yours, WILLIAM GALLETLY.

*** Unless the members of the club, alluded to by our correspondent, have just cause for dissatisfaction with their present medical officer, the intervening application for the appointment by another practitioner, although not, technically speaking, perhaps in open contravention of "medical etiquette," nevertheless indicates to our mind a default in the true professional feeling, and conflicts with the principle of doing unto others as we would be done by; in confirmation of which, we would, in the interest of the profession at large, quote, as a brief and comprehensive compendium of the whole duty of practitioners in their relation to each other, the following definition of "medical etiquette," from the new edition of the *Code of Medical Ethics*, page 92.—"The author, in the absence of a better definition of the oft recurring question, What is medical

etiquette? would, in reply, venture to define it, simply and literally, as a conscientious, practical observance, in the daily walk of professional life, of the divinely impressive command, 'Whatsoever ye would that men should do unto you, even so do ye also unto them.'"

MEDICAL USAGE.

SIR,—I would be glad if you or any member of the profession would tell me if it is customary to charge for medical attendance on clergymen, who are fathers of medical men in practice. One medical man, of large experience, told me that he never made any charge in such cases, and another told me that he charged clergymen as ordinary patients, whether they were the fathers of medical men or not. I would be glad to know the rule in such cases.—Your obedient servant,

MEMBER, IRELAND.

*** A clergyman, simply as "the father of a medical man," is not entitled to the gratuitous services of the profession; nor, indeed, even for himself in his purely clerical capacity, excepting under the circumstances specified in the following rule, parenthetically introduced in the new edition of the *Mode of Medical Ethics*, under the head of "The duties of practitioners in reference to professional charges," page 79, chapter ii, section 7. "[Doubt and misconception having long existed in regard to the question of professional charges to the clergy, it will not, it is hoped, be deemed foreign to the subject of medical ethics, or otherwise inexpedient, to remark in respect to charges for professional attendance on the clergy, beneficed or unbeneficed, and their families, that there is no special general rule other than the simple 'unwritten' one (a time-honoured, and true Samaritan principle, alike applicable to other classes;) by which the faculty have long been self-guided: namely, although fully and justly entitled to a commensurate remuneration for professional services, accordant to the patient's position in life, nevertheless to make a greater or less reduction, according to the circumstances of the individual case, to such as may fairly be classed among the 'poor clergy' (beneficed or unbeneficed)—so called—in contradistinction to the well endowed and independent clergy; which latter should be charged as ordinary and not exceptional patients.]"

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

THE following appointments have been made at the Admiralty:—W. J. WINCKLER, Surgeon, to the *Briton;* THOMAS POLLARD to be Surgeon and Agent at Tribane; and JOHN OTTLEY to the Cape of Good Hope Hospital.

Fleet-Surgeon T. W. JEWELL died on December 19th, at Rocquettes, Guernsey, in the eighty-third year of his age. He entered the Royal Navy as Surgeon, February 9th, 1828; rose to Staff-Surgeon, July 20th, 1838; and to Fleet-Surgeon, May 13th, 1859. Mr. Jewell served in the Baltic during the Russian war in 1855 as Surgeon to the *Desperate;* and had received the Baltic medal.

ARMY MEDICAL SERVICE.

SURGEON-MAJOR T. J. ORTON has been granted retired pay, with the honorary rank of Brigade-Surgeon. He entered the service, January 17th, 1855; became Surgeon, November 9th, 1867; and Surgeon-Major, March 1st, 1873. From *Hart's Army List* we learn that Mr. Orton served with the Royal Artillery in the trenches before Sebastopol in 1855, and at the assault of the Redan on the 8th September (medal with clasp and Turkish medal); with the Central India Field Force under Sir Hugh Rose in 1858, and was present at the siege and capture of the Fort of Chandairee, siege and capture of Jhansi, battle of the Betwa, action at Kooneh, actions of May 17th and 18th, and of May 21st at Golowlie, and capture of Calpee; was afterwards present in various actions in the Bundlekund district (medal), and with the Perak Expedition in 1875-76 as Principal Medical Officer of the force (mentioned in despatches, medal with clasp).

Surgeon M. E. FITZGERALD has resigned his commission, which dates from February 4th, 1882.

Surgeon-Major R. M. CRAIG, having returned from Madras, is posted to general duty in the Poona Circle, Bombay Presidency.

Surgeon R. J. GEDDES, M.B., doing duty at the station hospital, Secunderabad, Madras Presidency, is ordered to do general duty in the British Burmah division.

Surgeon-Major W. KEIR, M.D., Senior Medical Officer at the station hospital, St. Thomas's Mount, Madras, is appointed Senior Medical Officer at the station hospital, Wellington.

Surgeon J. I. ROUTH, doing duty at the station hospital at Secunderabad, Madras Presidency, is directed to do general duty in the eastern district.

Surgeon W. F. CARTER has resigned his commission in the 1st Gloucestershire Engineer Volunteers, which he joined October 1st, 1877, his commission as Surgeon, however, dating from September 4th, 1875.

Mr. J. P. STEWART, M.B., is appointed Acting-Surgeon to the 2nd Volunteer Battalion of the Lincolnshire Regiment (otherwise the 2nd Lincoln Rifle Volunteers).

Surgeon G. T. GOGGIN, serving in Bengal, is appointed to the charge of the Nowshera Lock Hospital.

INDIAN MEDICAL SERVICE.

SURGEON D. BASU, Bengal Establishment, is appointed to the officiating medical charge of the 39th Native Infantry, *vice* Surgeon-Major C. J. McKenna.

Surgeon-Major W. A. D. FASKEN, M.D., Bengal Establishment, second class civil surgeon, is transferred from Deyrah Dhoon to Moozuffernugger; and Surgeon J. A. CUNNINGHAM, M.D., of the Bengal Establishment, civil surgeon, is transferred from Delhi to Goordaspore, where he assumed charge of his duties on October 29th.

Brigade-Surgeon W. F. DE FABECK, M.D., is directed to officiate as Deputy Surgeon-General, with temporary rank, from October 29th, *vice* Deputy Surgeon-General W. H. Rean, M.D., on furlough.

Surgeon T. R. POPE, M.D., Madras Establishment, is appointed to the officiating medical charge of the 2nd Light Cavalry; *vice* Surgeon E. P. Youngerman, M.B.

Surgeon-Major G. Y. HUNTER, Bombay Establishment, is to be Brigade-Surgeon, *vice* H. Cook, promoted. He entered as Assistant-Surgeon, July 23rd, 1858. He has the medal for the Abyssinian war in 1868, when he served as Staff-Surgeon and Medical Storekeeper.

Surgeon H. St. C. CARRUTHERS, Madras Establishment, is appointed officiating Medical Officer to the 3rd Light Cavalry; and Surgeon W. F. THOMAS, of the Madras Establishment, to the 4th (P.W.O.) Light Cavalry.

Brigade-Surgeon THOMAS BEAUMONT, M.D., of the Madras Establishment, has retired from the service, which he entered January 29th, 1857, attaining to the rank of Brigade-Surgeon, April 5th, 1885. He does not appear to have seen war-service.

Surgeon-Major GEORGE GRANT, M.B., of the Bengal Establishment, has also retired. He entered the service February 10th, 1859, and rose to Surgeon-Major, February 10th, 1871; he now obtains the honorary rank of Brigade-Surgeon. Mr. Grant also has no war-record.

Surgeon-Major E. C. BENSLEY, of the Bengal Establishment, has likewise retired. His commissions are contemporaneous with those of Surgeon-Major Grant, and, like him, he has not been under fire.

Surgeon-Major J. W. STRONG, of the Madras Establishment, has also retired, His commission as Assistant-Surgeon dates from October 1st, 1866, and as Surgeon-Major from October 1st, 1878. He has not had personal experience of war.

Brigade-Surgeon ROBERT ROUSE, of the Bengal Establishment, who recently retired, is now granted the honorary rank of Deputy Surgeon-General.

Surgeon-General J. R. MILLER, M.D., of the Bombay Establishment, died on December 7th, at Meran, in his sixty-sixth year. He entered the Indian Medical Service December 2nd, 1841; became Deputy Surgeon-General, September 14th, 1871; and retired May 24th, 1877, on a pension amounting to £800 *per annum.*

Surgeon-Major A. CAMERON, M.D., Bengal Establishment, second class Civil Surgeon, Nymee Tal, is directed to officiate in the first class, and to hold medical charge of the Allahabad district.

Surgeon J. ANDERSON, M.B., second class Civil Surgeon, and officiating first class at Allahabad, reverts to the second class, and to have medical charge of the Moradabad district.

The services of Surgeon E. R. DA COSTA, Madras Establishment, are placed at the disposal of the Government of India.

The services of Surgeon F. C. REEVES, Madras Establishment, are placed temporarily at the disposal of the Public Works Department.

The services of Surgeon D. ELCUM, Madras Establishment, Civil Surgeon of Berhampore, are placed at the disposal of the Provincial Commander-in-Chief.

Surgeon-Major W. NOLAN, M.D., Bombay Establishment, has been permitted by the Secretary of State for India to return to duty.

Surgeon-Major H. DEANE, M.D., Bengal Establishment, Civil Surgeon of the second class, Cawnpore, is directed to officiate in the first class, and to hold civil medical charge of the Benares district.

Surgeon C. L. SWAINE, M.B., Madras Establishment, Medical Officer of the 2nd Infantry, Hyderabad Contingent, is appointed to officiate as Civil Surgeon and Superintendent of the gaol at Belaspore.

Brigade-Surgeon D. W. TRIMNELL, Madras Establishment, Civil Surgeon of Raepore, has been placed in medical charge of the depôt of the 8th Madras Native Infantry at that station.

Surgeon-Major H. ATKINS, Bombay Establishment, in medical charge of the 20th Native Infantry, is transferred to the general list, Presidency Circle, pending retirement from the service.

Brigade-Surgeon H. R. L. M'DOUGALL, M.D., Superintendent of Matheran, has been permitted to return to duty from sick furlough.

MR. KENNETT BARRINGTON and Dr. Fetherstonhaugh, of the National Society for Aid to the Sick and Wounded, in a report just published, bear testimony to the energy and success with which the Bulgarians at Sofia have dealt with the large numbers of wounded men committed to their care. The Servian prisoners have been specially well treated.

INDIA AND THE COLONIES.

INDIA.

MEDICAL AID FOR THE WOMEN OF INDIA.—The Countess of Dufferin's National Fund has already begun to assume shape, and the first public meeting in the Central Provinces, held on Wednesday, December 2nd, at Nagpore, was attended by a large and representative body of native gentlemen. The objects of the fund had been made extensively known by circulars, letters, and articles in the vernacular newspapers. The first appeal for contributions now made was most successful. Upwards of 12,000 rupees were subscribed on the spot by a few of the chief persons present. The Central Provinces Branch propose to commence business by establishing a school for nurses at Nagpore, and the municipality have promised to make such additions to the Mayo Hospital as may be necessary. The next step will be to engage the services of a lady doctor, and to establish a school for the instruction of female hospital assistants. The expenditure, it is thought, will amount to at least 1,000 rupees a month.

A HOSPITAL FOR WOMEN AT MADRAS.—The temporary buildings for the Victoria Hospital for caste and Gosha women at Madras, of which the Queen is the patroness, were opened on December 7th by Mrs. Grant Duff. Mrs. Scharlieb, who graduated as Bachelor of Medicine at the University of London, and took a scholarship and a gold medal for midwifery and honours in medicine, and is also Bachelor

of Surgery, has been appointed Lady Superintendent, on a salary of 500 rupees per month, with an assistant lady superintendent. Mrs. Grant Duff, in declaring the hospital opened, said that the object of the promoters was to benefit a most meritorious class of persons, namely, the women precluded by religious feeling or social custom from profiting by the various hospitals opened to others of lower caste or different faith, and referred to the fact that it was nearly eleven years since Surgeon-General Balfour initiated a school of medicine for women in Madras, under the auspices of Lord Hobart.

FEMALE VACCINATORS.—At a special meeting of the Municipal Commissioners for the town of Calcutta, the proposal of Babu Omirtonath Mitter, approving of the vaccination of native females by female vaccinators, has been adopted.

OBITUARY.

SAMUEL SUMNER DYER, M.D., OF RINGWOOD, HANTS.

SAMUEL SUMNER DYER, M.D., of Ringwood, Hants, was the embodiment in a marked degree of many admirable and attractive qualities. His death, at the age of 61, was sudden and deeply deplored. After apprenticeship to his father at Ringwood, Samuel Dyer went to King's College, entering at the same time as his brothers-in-law, Mr. Henry Smith and Dr. Stephen Monckton, whose death at Maidstone we had recently to deplore. Samuel Dyer's career at King's College gave much promise of distinction in consulting practice in London; but the state of his health compelled him reluctantly to leave London and join his father in his native town. Here he rapidly gained the confidence and affection of all classes. He was rapid and accurate in diagnosis. As an operative surgeon, he was worthy to be reckoned among the most distinguished pupils of Fergusson, and he could reckon many brilliant cases of lithotomy, amputation, resections of joints, ligature of main arteries, etc. His charm of manner, gentleness, and delicacy gave him an unusual hold upon the affections of women and children. As a physician, his experience, corrected and supplemented by the continuous study of medical literature, made his opinion much sought for in consultation by his professional brethren. He was President of the Dorset Branch of the British Medical Association at the time of his death.

Perhaps the most salient features of Dr. Dyer's character were his sweet unruffled temper, and his large-hearted respect for, and tolerance of, the opinions of others. A zealous churchman, and for eighteen years churchwarden, he was always ready to assist in all religious and useful movements, by whomsoever initiated. Too unselfish to have amassed a large fortune, his purse was always open to the dictates of a large-hearted benevolence. His professional advice and assistance were literally given to those whose means did not enable them to reward him otherwise than by gratitude and affection. He was interred in the cemetery at Ringwood on Christmas Eve, his body being followed by a large number of old pupils, assistants, and medical friends from all parts of England. No higher testimony to his worth, and the heartfelt sorrow caused by his loss, could have been rendered than that spontaneously offered by the enormous crowd of genuine mourners who followed him to the grave, the peer and the peasant uniting in deploring their common loss of a true and trusted friend.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

MEDICAL TREATMENT IN WORKHOUSE FEVER HOSPITAL WARDS.

SIR,—As the letter of "M.D.," in your issue of December 5th, relating to "Medical Treatment in Workhouse Fever Wards" refers to what has recently transpired between Dr. Jackson and myself, I do not hesitate in openly laying before you the circumstances of the cases as they occurred, and I do so without fear of disguising who were parties to the proceedings, instead of asking your opinion anonymously, as has been done.

The statement that, on two previous occasions, patients have been admitted to the fever wards, and attended to by Dr. Jackson, is not strictly correct, as, whilst only on one occasion has a patient been attended by him in these wards, the circumstances were so different, that I cannot understand Dr. Jackson for a moment comparing the case which has led to this correspondence with that which occurred some years ago, much less in stating that there had been two other cases under parallel circumstances.

The case which occurred more than six years ago was that of a daughter of a respectable tradesmen in Hexham suffering from fever. Her father had seen the governor of the workhouse, and arranged with him, without my knowledge or consent, for the admission of the girl into the fever hospital, and for Dr. Jackson to attend her. It was not until, by a mere accident, that, twenty-four hours afterwards, the existence of that case, and Dr. Jackson's attendance upon it, came to my knowledge; and there and then I told the governor of the workhouse that although, under the mistaken responsibilities of myself with regard to all patients admitted to the house or fever wards, this case had been admitted by him, on no future occasion would such a breach of the regulations of the workhouse be permitted by me. Dr. Jackson was allowed to attend to this patient and send medicines, the parent sending the food and stimulants from his own residence, and also sending and paying for a nurse, and nothing was provided by the governor at the expense of the guardians. In a few days, the girl died; and, until the present case arose, nothing has since transpired to bring Dr. Jackson into connection with the fever-wards of the union. You will therefore at a glance see that the circumstances attending the present case are altogether different from those connected with the former; and that, while the previous patient was admitted without my knowledge or consent, the latter was admitted as a pauper with the order of the relieving officer and consent of the clerk, and with my knowledge, and at once taken over and attended to by me, as in duty bound by the regulations of the Local Government Board.

I was not aware that Dr. Jackson had sent any medicine for the patient until acquainted thereof by the governor of the workhouse, who at the same time informed me he had returned it.—I am, sir, yours faithfully,

THOMAS STAINTHORPE, M.D., F.R.C.S., President of the North of England Branch of the British Medical Association.

Hexham.

SANITARY SCIENCE CERTIFICATES AND PUBLIC HEALTH APPOINTMENTS.

SIR,—It is generally believed that the value of sanitary science certificates is very little understood by vestries and local boards who have the gift of public health appointments in their hands, and as the number of practitioners holding the certificates is getting larger, an impression generally exists that something should be done to draw the attention of the Local Government Board to this matter. I therefore, through your columns, will ask every medical man who possesses a degree or certificate in sanitary science to write directly to the Secretary to the Local Government Board, Whitehall, London, S.W., drawing his attention to the fact that there are as many medical men now who train especially for sanitary science certificates, and who possess certificates guaranteeing efficiency to hold public health appointments, that he would be pleased to give the matter his especial consideration, and recommend vestries and other local bodies, on the vacation of public health appointments, to observe that all candidates for future election possess, if possible, a guarantee of efficiency; that is, a sanitary science certificate or degree.

If every one possessing a certificate or degree will, on perusing this, write direct to the authorities as stated above, we will, I trust, in one week have done some good to this cause; and surely Dr. Hubert Airy, who is an examiner for the Sanitary Science Certificate, Cambridge, with the other twelve sanitary medical men attached to the Local Government Board, will be only too glad to further any good cause in the interests of sanitary science.—I am, sir, yours faithfully,

S. SC. CERT. CAMB.

London.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, December 19th, 5,835 births and 3,918 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,906,446 persons. The annual rate of mortality, which had been 20.2 and 20.3 per 1,000 in the two preceding weeks, further rose during the week under notice to 23.0. The rates in the several towns, ranged in order from the lowest, were as follow: Brighton, 16.4; Blackburn, 16.7; Bradford, 18.5; Birkenhead, 18.5; Huddersfield, 18.5; Sunderland, 18.7; Norwich, 18.9; Wolverhampton, 19.1; Bristol, 19.6; Hull, 20.7; Leicester, 21.5; Cardiff, 21.5; London, 22.0; Salford, 22.2; Birmingham, 22.7; Sheffield, 23.2; Derby, 23.3; Halifax, 23.6; Leeds, 23.8; Newcastle-upon-Tyne, 23.8; Preston, 24.9; Portsmouth, 26.3; Manchester, 26.5; Liverpool, 26.8; Oldham, 28.9; Bolton, 30.3; Nottingham, 33.8; and the highest rate during the week, 41.2, in Plymouth. The death-rate in the twenty-seven provincial towns averaged 23.7 per 1,000, and exceeded by 1.7 the rate recorded in London, which, as before stated, did not exceed 22.0 per 1,000. The 3,918 deaths registered during the week under notice included 419 which were referred to the principal zymotic diseases, against 385 and 352 in the two preceding weeks; of these, 140 resulted from measles, 124 from whooping-cough, 49 from "fever" (principally enteric), 43 from scarlet fever, 33 from diarrhœa, 30 from diphtheria, and not one from small-pox. These 419 deaths were equal to an annual rate of 2.5 per 1,000. The zymotic death-rate in London was equal to 2.4 per 1,000, while in the twenty-seven provincial towns it averaged 2.5, and ranged from 0.5 and 0.6 in Cardiff and Huddersfield, to 4.7 in Bolton, 5.7 in Nottingham, and 6.2 in Plymouth. The deaths referred to measles, which had been 123 and 109 in the two preceding weeks, rose again to 140, and showed the largest proportional fatality in Oldham, Nottingham, and Plymouth. The fatal cases of whooping-cough, which had been 111 in each of the two previous weeks, increased to 124 during the week under notice, and caused the highest death-rates in Brighton and Bolton. The 49 deaths referred to "fever" showed an increase of 17 upon the number returned in the preceding week; this disease was proportionally most fatal in Birmingham and Manchester. The fatal cases of scarlet fever, which had been 40 and 42 in the two previous weeks, further rose to 43, and caused the highest death-rates in Sunderland and Leicester. The deaths referred to diphtheria, which had been 26 and 29 in the two preceding weeks, were 30 during the week under notice, and included 21 in London, 2 in Brighton, and 2 in Leicester. No death from small-pox was registered either in London or in any of the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily declined in the six preceding weeks from 90 to 56, further fell to 50 on Saturday, December 19th; the admissions, which had been 13 and 6 in the two previous weeks, rose again to 13. The death-rate from diseases of the respiratory organs in London during the week was equal to 6.4 per 1,000, and was slightly below the average. The causes of 87, or 2.2 per cent., of the 3,918 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, November 21st, 842 births and 553 deaths were registered in the eight principal Scotch towns, having an estimated popula-

tion of 1,269,170 persons. The annual rate of mortality, which had been 19.7 and 20.5 per 1,000 in the two preceding weeks, further rose during the week under notice to 22.7, and exceeded by 2.9 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 16.0 in Dundee, 16.6 in Perth, 17.9 in Aberdeen, 20.3 in Edinburgh, 22.0 in Leith, 23.0 in Greenock, 26.4 in Paisley, and 26.7 in Glasgow. The 553 deaths registered during the week in these towns included 60 which were referred to the principal zymotic diseases, against 61 and 44 in the two preceding weeks; of these, 15 resulted from diarrhœa, 14 from scarlet fever, 12 from whooping-cough, 11 from diphtheria, 5 from "fever" (principally enteric), 2 from measles, and 1 from small-pox. These 60 deaths were equal to an annual rate of 2.5 per 1,000, which exceeded by 0.6 the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates during the week in these Scotch towns were recorded in Glasgow, Paisley, and Perth. The 15 deaths from diarrhœa were considerably below the number returned in the corresponding period of last year, and included 6 in Glasgow and 4 in Edinburgh. The fatal cases of scarlet fever, which had been 17 and 12 in the two previous weeks, rose again to 14, of which 11 occurred in Glasgow. The 12 deaths from whooping-cough showed an increase of 2 upon the number returned in the preceding week; 9 occurred in Glasgow, and 2 in Edinburgh. The fatal cases of diphtheria, which had been 2 and 6 in the two previous weeks, further rose to 11, and included 4 in Glasgow, 2 in Edinburgh, 2 in Dundee, and 2 in Perth. Of the 5 deaths referred to "fever," 2 occurred in Edinburgh, and 2 in Paisley. The fatal case of small-pox was recorded in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 5.6 per 1,000, against 5.8 in London. The causes of 93, or 16.8 per cent., of the 553 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, November 28th, 773 births and 550 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,269,170 persons. The annual rate of mortality, which had increased in the three preceding weeks from 19.7 to 22.7 per 1,000, declined last week to 22.5, but exceeded by 1.2 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 10.0 in Perth, 13.7 in Leith, 19.1 in Greenock, 19.3 in Aberdeen, 20 8 in Dundee, 21.6 in Edinburgh, 22.0 in Paisley, and 26.7 in Glasgow. The 550 deaths registered during the week included 44 which were referred to the principal zymotic diseases, against 44 and 60 in the two preceding weeks; of these, 13 resulted from diarrhœa, 11 from whooping-cough, 7 from diphtheria, 6 from scarlet fever, 5 from "fever" (principally enteric), 2 from measles, and not 1 from small-pox. These 44 deaths were equal to an annual rate of 1.8 per 1,000, which was 0.4 below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week were recorded in Dundee, Greenock, and Paisley. The 13 deaths from diarrhœa showed a slight decline, and almost corresponded with the number returned in the same period of last year; 5 occurred in Dundee, and 4 in Edinburgh. The 11 fatal cases of whooping-cough were within 1 of the number recorded in the preceding week, and included 8 in Glasgow and 3 in Greenock. The deaths referred to diphtheria, which had risen from 2 to 11 in the three previous weeks, declined again to 7, of which 5 occurred in Glasgow, and 2 in Aberdeen. The 6 fatal cases of scarlet fever showed a marked decline from recent weekly numbers, and included 5 in Glasgow. The 5 deaths referred to "fever" corresponded with the number in the preceding week; 2 occurred in Glasgow, and 2 in Edinburgh.. The 2 fatal cases of measles were returned in Paisley. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 7.7 per 1,000, against 6.1 in London. The causes of 86, or 15.6 per cent. of the 550 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,269,170 persons, 835 births and 596 deaths were registered during the week ending Saturday, December 5th. The annual rate of mortality, which had been 22.7 and 22.5 per 1,000 in the two preceding weeks, rose to 24.4 during the week, and exceeded by 4.2 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 21.6 in Perth, 22.5 in Aberdeen, 23.1 in Dundee, 23.3 in Greenock, 23.4 in Edinburgh, 23.6 in Leith, 23.7 in Paisley, and 26.2 in Glasgow. The 596 deaths registered during the week in these Scotch towns included 16 which were referred to diarrhœa, 12 to whooping-cough, 8 to "fever," 5 to scarlet fever, 4 to diphtheria, 2 to measles, and 1 to small-pox; in all, 48 deaths resulted from these principal zymotic diseases, against 60 and 44 in the two previous weeks. These 48 deaths were equal to an annual rate of 2.0 per 1,000, which was slightly below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week were recorded in Perth and Leith. The 18 deaths from diarrhœa showed an increase upon recent weekly numbers, and included 4 in Leith, and 3 in Edinburgh. The fatal cases of whooping-cough, which had been 12 and 11 in the two preceding weeks, were 12 during the week under notice, of which 10 occurred in Glasgow. The 8 deaths referred to different forms of fever exceeded by 3 the number in two previous weeks; 3 were returned in Leith, and 2 in Glasgow. The fatal cases of scarlet fever, which had been 14 and 6 in the two preceding weeks, further declined to 5, and included 4 in Glasgow. The 4 deaths from diphtheria also showed a decline from recent weekly numbers; 2 occurred in Glasgow. The 2 fatal cases of measles were returned in Paisley. The death from small-pox occurred in Greenock. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 7.3 per 1,000, against 5.2 in London. As many as 95, or 15.9 per cent., of the 596 deaths registered during the week in these Scotch towns, were uncertified.

During the week ending Saturday, December 12th, 778 births and 578 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,269,170 persons. The annual rate of mortality, which had been 22.5 and 24.4 per 1,000 in the two preceding weeks, declined to 23.7 during the week under notice, but exceeded by 3.4 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 13.9 in Dundee, 18.3 in Greenock, 19.3 in Aberdeen, 19.8 in Leith, 21.6 in Edinburgh, 28.2 in Perth, 28.7 in Glasgow, and 30.8 in Paisley. The 578 deaths registered during the week included 55 which were referred to the principal zymotic diseases, against 44 and 46 in the two preceding weeks; of these, 17 resulted from diarrhœal diseases, 12 from whooping cough, 9 from "fever" (principally enteric), 9 from scarlet fever, 6 from diphtheria, 2 from measles, and not one from small-pox. These 55 deaths were equal to an annual rate of 2.3 per 1,000, which slightly exceeded the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates were recorded in Glasgow, Perth, and Greenock. The 17 deaths from diarrhœa showed a slight further increase upon recent weekly numbers. The fatal cases of whooping cough, which had been 11 and 12 in the two preceding weeks, were again 12 during the week under notice, and included 8 in Glasgow, and 2 in Greenock. The deaths referred to "fever," which had been 5 and 8 in the two previous weeks, further rose to 9, of which 4 were recorded in Glasgow, and 2 in Edinburgh. The 9 fatal cases of scarlet fever showed an increase of 4 upon the number in the preceding week, and included 7 in Glasgow, and 2 in Leith. The 6 deaths from diphtheria also showed an increase, and included 3 in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 7.5 per 1,000, against 5.2 in London. The causes of 93, or 16.1 per cent., of the 578 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,269,170 persons, 888 births and 588 deaths were registered during the week ending Saturday, December 19th. The annual rate of mortality, which had been 24.4 and 23.7 per 1,000 in the two preceding weeks, rose again during the week to 24.1, and exceeded by 1.1 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 19.7 in Leith, 20.2 in Aberdeen, 20.4 in Dundee, 21.6 in Perth, 23.2 in Edinburgh, 25.8 in Glasgow, 28.2 in Greenock, and 30.8 in Paisley. The 588 deaths registered during the week in these Scotch towns included 15 which were referred to scarlet fever, 11 to diarrhœa, 8 to diphtheria, 7 to whooping-cough, 7 to "fever" (principally enteric), 1 to measles, and not one to small-pox; in all, 49 deaths resulted from these principal zymotic diseases, against 48 and 55 in the two preceding weeks. These 49 deaths were equal to an annual rate of 2.0 per 1,000, which was 0.5 below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Greenock, Glasgow, and Leith. The deaths from scarlet fever, which had been 5 and 9 in the two previous weeks, further rose to 15, of which 9 occurred in Glasgow, and 2 in Paisley. The 11 fatal cases of diarrhœa were considerably below the number in the corresponding period of last year. The deaths referred to diphtheria, which had been 4 and 6 in the two preceding weeks, further rose to 8, and included 3 in Leith, 2 in Glasgow, and 2 in Greenock. The 7 fatal cases of whooping-cough showed a decline from recent weekly numbers; 5 occurred in Glasgow. The 7 deaths referred to "fever" showed a decline of 2 from the number in the previous week, and included 3 in Edinburgh, and 2 in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 7.4 per 1,000, against 6.4 in London. As many as 79, or 13.4 per cent., of the 588 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending November 7th, the number of deaths registered in the sixteen principal town-districts of Ireland was 371. The average annual death-rate represented by the deaths registered was 22.4 per 1,000. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 5.2; Belfast, 24.0; Cork, 18.8; Drogheda, 21.1; Dublin, 23.5; Dundalk, 13.1; Galway, 13.4; Kilkenny, 8.5; Limerick, 27.0; Lisburn, 4.8; Londonderry, 26.7; Lurgan, 10.3; Newry, 28.1; Sligo, 14.4; Waterford, 23.2; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.6 per 1,000, the rates varying from 0.0 in nine of the districts to 5.1 in Lurgan. Among the 101 deaths from all causes in Belfast, were 2 from measles, 1 from scarlatina, 1 from typhus, 2 from whooping-cough, 1 from enteric fever, and 2 from diarrhœa. Among the 29 deaths in Cork, were 2 from scarlatina, and 1 from typhus, and the 15 deaths in Londonderry comprised 2 from whooping-cough. In the Dublin registration-district, the deaths registered during the week amounted to 159. There were only 11 deaths from zymotic diseases registered in Dublin; they comprised 2 from scarlet fever, 2 from diarrhœa, and 1 from each of the following diseases—typhus, whooping-cough, diphtheria, enteric fever, dysentery, and erysipelas. Forty-seven deaths from diseases of the respiratory system were registered in Dublin; they comprised 27 from bronchitis, and 10 from pneumonia. The deaths of 10 children (including 6 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 12 by diseases of the circulatory system. Phthisis caused 14 deaths, tubercular meningitis 6, and cancer 2. In two instances, the cause of death was "uncertified," and in 17 other cases there was "no medical attendant."

In the week ending November 14th, the number of deaths registered in the sixteen principal town-districts of Ireland was 413. The average annual death-rate represented by the deaths registered during the week was 24.9 per 1,000 of the population. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 5.2; Belfast, 24.5; Cork, 19.5; Drogheda, 8.5; Dublin, 28.8; Dundalk, 34.9; Galway, 10.1; Kilkenny, 12.7; Limerick, 27.0; Lisburn, 24.2; Londonderry, 37.4; Lurgan, 10.3; Newry, 7.0; Sligo, 14.4; Waterford, 18.5; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.9 per 1,000, the rates varying from 0.0 in nine of the districts to 5.1 in Lurgan; the 2 deaths from all causes registered in that district comprising 1 more from scarlatina. Among the 103 deaths from all causes in Belfast were 3 from measles, 6 from scarlatina, 1 from typhus, and 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 201. Thirty-one deaths from zymotic diseases were registered in Dublin; they comprised 7 from scarlet fever, 9 from whooping-cough, 1 from cerebro-spinal fever, 8 from enteric fever, 5 from diarrhœa, etc. Thirty-nine deaths from diseases of the respiratory system were registered; they comprised 27 from bronchitis, 6 from pneumonia, and 2 from croup. The deaths of 14 children under 5 years of age (including 10 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 9 by other diseases of the brain and nervous system (exclusive of convulsions) and 17 by diseases of the circulatory system. Phthisis caused 22 deaths, mesenteric disease 5, and cancer 5. Five accidental deaths and one case of homicide were registered. In 31 instances, there was "no medical attendant" during the last illness.

In the week ending November 21st, the number of deaths registered in the sixteen principal town-districts of Ireland was 396. The average annual death-rate represented by the deaths registered was 23.9 per 1,000. The deaths registered in each of the towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 19.3; Cork, 20.8; Drogheda, 16.9; Dublin, 30.0; Dundalk, 34.9; Galway, 16.8; Kilkenny, 33.8; Limerick, 14.8; Lisburn, 9.7; Londonderry, 32.1; Lurgan, 20.5; Newry, 10.5; Sligo, 4.8; Waterford, 11.6; Wexford, 29.9. The deaths from the principal zymotic diseases in the six[illegible] districts were equal to an annual rate of 2.6 per 1,000, the rates varying [illegible]m

0.0 in ten of the districts to 6.5 in Cork; the 32 deaths from all causes registered in that district comprising 7 from scarlatina, 1 from typhus, and 2 from diarrhœa. Among the 81 deaths from all causes in Belfast were 1 from measles, 3 from scarlatina, 1 from whooping-cough, 3 from enteric fever, and 2 from diarrhœa; in the Dublin Registration District, the deaths registered during the week amounted to 205. Twenty-four deaths from zymotic diseases registered in Dublin; they comprised 1 from varicella, 2 from measles, 4 from scarlet fever, 1 from typhus, 5 from whooping-cough, 1 from diphtheria, 3 from simple continued and ill-defined fever, 1 from enteric fever, etc. Forty-five deaths from diseases of the respiratory system were registered; they comprised 32 from bronchitis and 8 from pneumonia. The deaths of 11 children under five years of age (including 8 infants under one year old) were ascribed to convulsions. Five deaths were caused by apoplexy, 13 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 24 deaths, mesenteric disease 3, and cancer 5. Eight accidental deaths were registered. In two instances the cause of death was "uncertified," and in 27 other cases there was "no medical attendant."

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, October 17th, that the annual death-rate was recently equal to 26.4 in Bombay, and to 36.7 in Madras. Diarrhœal diseases caused 43 deaths in Madras, and cholera 6 in Bombay; "fever" fatality showed the usual excess in each of these cities. According to the then most recently received weekly returns, the annual rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 20.8 per 1,000, which exceeded by 3.1 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 24.2, and showed an increase upon that which prevailed in the previous week; the 431 deaths included 76 from diarrhœal diseases, 13 from scarlet fever, and 9 from typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 18.8, ranging from 16.2 in Copenhagen to 20.3 in Stockholm; diphtheria and croup caused 8 deaths in Christiania, 5 in Stockholm, and 3 in Copenhagen. In Paris, the death-rate declined to 18.9, but exceeded the London rate by 1.7; the deaths included 71 from diarrhœal diseases, 21 from typhoid fever, 26 from diphtheria and croup, and 3 from small-pox. The rate in Brussels was 17.4, 20 of the 131 deaths being attributed to diarrhœal diseases. The 29 deaths in Geneva gave a rate of 21.2. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 18.8, the highest rate being 19.0 in Rotterdam; diphtheria and croup caused 5 deaths in the Hague, and scarlet fever 6 and 4 respectively in Amsterdam and Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 21.8, and ranged from 18.9 and 19.9 in Dresden and Buda-Pesth, to 25.5 in Prague and 33.6 in Trieste. Small-pox caused 8 deaths in Vienna, 5 in Prague, and 5 in Buda-Pesth; diphtheria showed the greatest proportional mortality in Dresden, Berlin, and Trieste. The death-rate was 19.0 in Turin, and 21.8 in Venice; small-pox caused 5 deaths in Venice, and typhoid fever 6 in Turin and 3 in Venice. No returns have recently been received from Madrid, Lisbon, or Alexandria. In four of the largest American cities, the mean recorded death-rate was 21.4, the rates ranging from 17.2 in Baltimore to 25.3 in New York. Diphtheria caused considerable mortality in each of these American cities; 17 deaths from typhoid fever occurrred in Philadelphia, and 4 in Baltimore.

It appears from the statistics published in the Registrar-General's return for the week ending Saturday, October 24th, that the annual death-rate recently averaged 28.6 per 1,000 in the three principal Indian cities; it was equal to 24.5 in Bombay, 30.0 in Madras, and 30.3 in Calcutta. Cholera caused 11 deaths in Calcutta, and 2 in Bombay; diarrhœal diseases (exclusive of cholera) caused the greatest mortality in Madras, and "fever" in Bombay. According to the then most recently received weekly returns, the annual rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 20.8, exceeding by 2.3 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 22.7, showing a decline from the rates in recent weeks; the 403 deaths included 48 from diarrhœal diseases, 19 from scarlet fever, 7 from diphtheria, and 7 from "fever." In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 17.6, the highest rate being 18.7 in Stockholm; diphtheria and croup caused 6 deaths in Christiania, 5 in Copenhagen, and 5 in Stockholm. In Paris, the death-rate was 20.6, exceeding the rate in London by 2.0; the deaths included 54 from infantile diarrhœa, 43 from typhoid fever, 27 from diphtheria and croup, and 5 from small-pox. The rate in Brussels was only 15.5, although the 130 deaths included 21 from diarrhœal diseases, and 2 from "fever." The 27 deaths in Geneva gave a rate of 19.7. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 20.6, the rates ranging from 19.8 in Amsterdam, to 21.6 in the Hague; in Amsterdam, 7 deaths were referred to scarlet fever, and 6 to diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 22.5, and ranged from 19.7 and 20.5 in Vienna and Berlin, to 26.3 in Prague and 30.7 in Munich. Small-pox caused 13 deaths in Vienna, 7 in Buda-Pesth, 5 in Prague, and 4 in Trieste; diphtheria showed more or less fatal prevalence in nearly all these German cities, and caused the greatest mortality in Hamburg, Breslau, and Trieste. The death-rate was 22.1 in Rome, and 22.2 in Venice; the deaths in Rome included 28 from diarrhœal diseases, and 5 from typhoid fever, and 10 fatal cases of small-pox were recorded in Venice. No returns have been received from Madrid, Lisbon, or Alexandria. In four of the largest American cities, the mean recorded death-rate was 20.6, the rates ranging from 17.2 in Baltimore, to 23.1 in New York; diphtheria caused the largest proportional mortality in New York, and Baltimore; the 600 deaths in New York included 84 from diarrhœal diseases.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, October 31st, that the annual rate of mortality was recently equal to 26.0 in Bombay, and 32.8 in Madras. Fever caused 50 deaths in Madras, and 12.5 in Bombay; 48 deaths were referred to diarrhœal diseases in Madras, and 29 in Bombay. According to the then most recently received weekly returns, the annual death-rate in twenty of the largest European cites averaged 21.0 per 1,000 of their estimated aggregate population, and exceeded by 3.0 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 22.9, and was almost identical with the rate in the preceding week; the 407 deaths included 62 from diarrhœal diseases, 19 from scarlet fever, and 11 from "fever." In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 15.8, the highest rate being 17.8 in Christiania; the 44 deaths in Christiania included 8 from diphtheria and croup, and 4 from scarlet fever; and 8 deaths from diphtheria and croup were also reported in Stockholm. In Paris, the death-rate was equal to 21.2, showing a further increase upon the rates in previous weeks, and exceeding the rate in London by 3.7; the deaths included 62 from infantile diarrhœa, 26 from diphtheria and croup, 45 from typhoid fever, and 6 from small-pox. The rate in Brussels did not exceed 15.1, although 19 of the 127 deaths resulted from diarrhœal diseases. The 31 deaths in Geneva, including one from "fever," gave a rate of 22.6. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 19.9, the highest rate being 23.0 in Rotterdam, where the 75 deaths included 2 fatal cases of scarlet fever; 7 of the deaths in Amsterdam resulted from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 22.7, and ranged from 19.8 in Dresden, and 20.7 in Berlin, to 25.7 in Breslau and 29.4 in Trieste. Small-pox caused 14 deaths in Vienna, and 9 both in Prague and in Buda-Pesth; diphtheria showed the largest proportional fatality in Berlin, Dresden, Hamburg, and Breslau. Venice is the only Italian city contributing to the table; the 72 deaths in this city were equal to a rate of 25.7, and included 9 from small-pox and 2 from typhoid fever. No returns have recently been received from Madrid, Lisbon, or Alexandria. In four of the largest American cities, the mean recorded death-rate was 19.5, the rates ranging from 17.7 in Brooklyn, to 20.9 in New York. Diphtheria showed fatal prevalence in each of these American cities; small-pox caused 3 deaths in New York, and typhoid fever 14 deaths in Philadelphia.

It appears from statistics published in the Registrar-General's return for the week ending November 7th, that the annual death-rate recently averaged 28.1 per 1,000 in the three principal Indian cities; it was equal to 24.3 in Bombay, 26.4 in Calcutta, and 32.8 in Madras. Cholera caused 6 deaths in Calcutta, and 4 in Bombay, and 43 deaths were attributed to diarrhœal diseases in Madras; "fever" showed the greatest mortality in Calcutta. According to the most recently received weekly returns, the annual death-rate in twenty-one of the largest European cities averaged 22.0 per 1,000, and was 2.9 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 22.5, and the 401 deaths included 45 from diarrhœal diseases, 12 from "fever," and 9 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate did not average more than 19.2, ranging from 16.7 in Copenhagen, to 24.8 in Christiania; diphtheria and croup caused 4 deaths in Stockholm, 5 in Copenhagen, and 20 in Christiania; 5 fatal cases of scarlet fever being also recorded in the last mentioned town. The death-rate in Paris was equal to 20.5, showing a decline from the rate in the previous week, but exceeding the rate in London during the week by 7.6; 37 deaths were referred to typhoid fever, 25 to diphtheria and croup, 23 to measles, and 8 to small-pox. The 144 deaths in Brussels were equal to a rate of 17.2, and included 15 from diarrhœal diseases, 3 from "fever," and 2 from diphtheria. In Geneva, only 19 deaths were recorded, giving a rate of 13.9; one resulted from "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 20.6, the several rates ranging from 19.3 in Rotterdam to 20.1 in the Hague; Diphtheria and croup caused 6 deaths in Amsterdam, and a fatal case of small-pox occurred in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 23.7 per 1,000, and ranged from 19.6 and 21.4 in Dresden and Berlin, to 28.4 in Trieste and 30.7 in Prague. Small-pox caused 17 deaths in Vienna, 10 in Prague, and 8 in Buda-Pesth; the mortality from diphtheria showed the largest excess in Berlin, Hamburg, and Dresden. The death-rate was 22.7 in Rome, and 26.1 in Venice; small-pox caused 7 deaths in Venice, and 2 in Rome; and typhoid fever 4 in Rome and 2 in Venice. No returns have recently been received from Madrid, Lisbon, and Alexandria. In four of the principal American cities, the recorded death-rate averaged 19.8, ranging from 18.4 in Baltimore, to 21.3 in New York. Diphtheria showed the greatest mortality in New York and Brooklyn; and typhoid fever caused 14 deaths in Philadelphia.

It appears from statistics published in the Registrar-General's return for the week ending Saturday, November 14th, that the annual death-rate was recently equal to 22.7 in Bombay, and 32.3 in Madras. The fatal cases of cholera were but 2 in Bombay and 1 in Madras; "fever" mortality showed the largest excess in Madras. According to the then most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 22.0 per 1,000, which exceeded by 2.6 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 24.2, showing a considerable increase upon the rate in the previous week; the 41 deaths included 19 from scarlet fever, and 8 from typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 17.2, and ranged from 13.2 in Copenhagen, to 20.7 in Christiania; diphtheria and croup caused 12 deaths in Christiania, 5 in Copenhagen, and 4 in Stockholm. In Paris, the death-rate was 21.4, showing a further increase upon the rates in recent weeks, and exceeding the rate in London by 1.1; the deaths included 36 from diphtheria and croup, 26 from measles, and 27 from typhoid fever. The rate in Brussels was 17.2, and 2 deaths from diphtheria and 1 from small-pox were reported. The 29 deaths in Geneva gave a rate of 21.2, 3 being referred to diphtheria and croup. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 20.6, the rates ranging from 16.6 in the Hague to 22.2 in Amsterdam; the deaths in Amsterdam included 7 from diphtheria and croup, and 5 from scarlet fever; small-pox caused 1 death in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 22.9, and ranged from 20.2 and 20.8 in Dresden and Berlin, to 26.2 in Munich and 27.2 in Prague. Small-pox caused 12 deaths in Vienna, 8 in Buda-Pesth, and 5 in Prague; the mortality from diphtheria and croup showed the largest excess in Berlin, Hamburg, Breslau, Munich, and Trieste. In three of the largest Italian cities the mean death-rate was 22.8, the rates being 19.1 in Turin, 23.7 in Rome, and 30.4 in Venice; small-pox caused 10 deaths in Venice and 2 in Rome. No returns have recently been received from Madrid, Lisbon, or Alexandria. In four of the largest American cities, the mean recorded death-rate was 19.2, the rates ranging from 17.0 in Philadelphia, to 20.4 in New York. Diphtheria-mortality was excessive in each of these American cities; typhoid fever caused the greatest mortality in Philadelphia and Baltimore.

It appears from statistics published in the Registrar-General's return for the week ending November 21st, that the death-rate was recently equal to 24.2 in Bombay, and 33.7 in Madras. Cholera caused 4 deaths in Bombay, and other diarrhœal diseases 36 in Bombay, and 40 in Madras; "fever" mortality showed the largest excess in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 23.0, and was 3.2 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St.

Petersburg was 24.5, showing a further slight increase upon the rates in previous weeks; the deaths included 15 from scarlet fever, 8 from "fever," and 7 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 21.0, ranging from 20.3 in Christiania to 21.4 in Copenhagen; diphtheria and croup caused 12 deaths in Christiania and 7 in Copenhagen, and scarlet fever 4 in Christiania. In Paris the death-rate was equal to 20.0, and lower than in any recent week; the deaths included 22 from diphtheria and croup, 17 from measles, and 14 from typhoid fever. The 212 deaths in Brussels gave a rate of 21.3, and included 6 from "fever," and 5 from diphtheria. The rate in Geneva was 21.2, one of the 29 deaths being referred to "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 21.7, the highest rate being 21.9 in Amsterdam, where the deaths included 9 from diphtheria and croup, and 3 from scarlet fever. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 24.4, and ranged from 18.5 in Dresden and 20.8 in Berlin, to 27.1 in Breslau and 28.7 in Prague. Small-pox caused 17 deaths in Vienna, 7 in Prague, 5 in Buda-Pesth, and 2 in Munich; diphtheria showed the greatest mortality in Berlin, and typhoid fever caused 7 of the 77 deaths in Trieste. The death-rate was equal to 24.0 in Turin, and to 31.1 in Venice; the deaths in Turin included 5 from typhoid fever and 5 from diphtheria and croup, and 13 of the 87 deaths in Venice were fatal cases of small-pox. In four of the largest American cities, the recorded rate averaged only 19.9, the highest rate being 21.9 in New York. Diphtheria mortality showed considerable excess in each of these American cities; and typhoid fever caused 10 deaths in Philadelphia, and 6 both in Brooklyn and in Baltimore.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Carlton Urban District.—Mr. Knight has to record a death-rate of 18.96 per 1,000 for this district in 1884, which is a higher rate than that for the previous year. This was owing mainly to an increased mortality from diarrhœa and measles, the former causing 13 and the latter 7 deaths. The diarrhœa prevalence Mr. Knight considers to have been greatly due to the exceptionally hot weather during the summer, but injudicious feeding, and other avoidable causes, had also their influence. The sanitary circumstances of the district were greatly improved during the year by the extension of the water mains of the Nottingham corporation, and by the completion of an effectual scheme of drainage. The means for the isolation of infectious disease seem to be very imperfect, and the health-officer has done well in calling special attention to the defect. The Basford Workhouse Hospital is a very broken reed to trust to, independently of the fact that non-pauper cases cannot legally be taken into such a hospital. The local board will be well advised if they take the question into consideration, and secure, either by their sole effort or by combination with adjoining sanitary authorities, the necessary hospital-accommodation for all classes of inhabitants in their district.

Chelsea.—Dr. Seaton records a death-rate of 21.8 per 1,000 of the population of this parish, but he is at some pains to determine the actual mortality by distributing the deaths in the many public institutions of Chelsea among the districts in which the various patients previously resided, and thus diminishes the death-rate by 1.0 in the 1,000. Zymotic diseases caused 360 deaths, or 3.8 per 1,000, 20 of which were from small-pox, 31 from diphtheria, and 21 from typhoid fever, while an epidemic of measles proved fatal in 112 cases. There were 88 fatal cases of diarrhœa, 3 of which were registered as due to English cholera. Under pressure of the aroused public opinion on the subject of cholera, much useful sanitary work was carried out, notably, the cleansing of cisterns, and providing for an efficient water-supply to about 380 closets. Dr. Seaton advocates a more thorough house to house inspection for the discovery of these and other nuisances, and calls attention to some cases of untrapped sinkstones in direct communication with the sewer, admitting sewer-gas into the houses, to the difficulty in dealing with them, more especially as experts on drainage were seldom agreed as to what was the proper remedy. He also refers to the useful work of the vestry in the removal of bodies to the Chelsea mortuary as a "boon to the parish," and a certain relief to the horrors of overcrowding.

West Firle Rural District.—Dr. Sanger has little beyond statistics of purely local interest to record in his annual report for 1884. There was no serious outbreak of epidemic disease during the year. Whooping-cough was prevalent in the earlier months amongst young children, of whom 3 died. An isolated case of erysipelas and one of spasmodic croup complete the list of deaths from zymotic diseases. A few cases of a light type of scarlatina occurred without serious result. The death-rate from all causes was 15 per 1,000, and the general health of the population was good. The abatement of some nuisances in various parts of the district is also recorded in the report.

Wavertree.—In Dr. H. Harvey's scanty report, it is stated that the death-rate last year was 18.4, and the birth-rate 39.5. Dr. Harvey gives some detailed statistics, of which the value is but small, except to those who chance to know the people of his district, their numbers, and their doings. We record, therefore, in his own words: "There were from diarrhœa and dysentery 22 deaths, from diphtheria 9, from croup 5, from measles 6, from scarlet fever 4, from whooping-cough 4, from enteric fever 3, from bronchitis or pneumonia 31, from phthisis 22, from heart-disease 13, and from all other causes 102 deaths."

Newton Abbott Rural, and Wolborough and Dawlish Urban Districts.—Mr. Harvey, the new medical officer of health for these districts, seems to be working *con amore* with his sanitary authorities. He has taken "purity" as his motto—purity of food, of air, of drinking-water, and of personal and domestic habits. His report for 1884, after a year's work in his new district, shows that he has kept the importance of this motto before his authorities; and he takes the opportunity of offering some general advice on sanitation, as well as in regard to particular sanitary defects throughout his district. Ventilation, even of the simplest character, of the dwelling, especially of the bedroom, he regrets to find is sadly neglected, and he seems to be inclined to leave a great deal of the responsibility for the prevalence of consumption at the door of imperfect ventilation. He also strongly advocates purity of water-supply, and records several instances of disease caused by contaminated water. He condemns the extent to which pigs are kept in the more populous parts of his district, as well as the manner in which they are housed, and points out the various directions in which his sanitary authorities are taking and should take action for the sanitary improvement of their districts. Mr. Harvey remarks on the great importance of suppressing zymotic diseases, especially among the young. He justly observes that it is not only the actual number of deaths that should be looked at, but also the fact that those who recover from an attack have received shocks to their systems which in most cases leave "an evil impress on the materials that compose the infantile form." Scarlet fever would seem to be considered endemic in Wolborough for years past. It prevailed in the district during the past year, but not in a fatal form. The death-rate in the Newton Abbott Rural District was 16.4 per mille (including 1.0 zymotic); in Wolborough, it was 13.8 (including .7 zymotic); and in Dawlish it was 17.7 (including .2 zymotic).

MEDICAL NEWS.

University of London.—M.B. Examination, 1885. Examination for Honours.

Medicine.—*First Class.*—H. B. Robinson (Scholarship and Gold Medal), St. Thomas's Hospital; E. J. Cave (Gold Medal), St. Bartholomew's Hospital; J. Elliott, B.Sc., St. Bartholomew's Hospital; J. W. Carr, University College.—*Second Class.*—J. H. E. Brock, University College; C. J. Arkle, University College; A. J. Jefferson, St. Thomas's Hospital; M. E. Pailthorpe, London School of Medicine for Women, and Royal Free Hospital; J. Swain, Westminster Hospital.—*Third Class.*—W. Pearce, B.Sc., St. Mary's Hospital; T. S. Short, King's College; W. T. Cocking, University College; C. B. Innes, St. Bartholomew's Hospital; P. P. Whitcombe, St. Mary's Hospital.—Obstetric Medicine.—*First Class.*—P. D. Turner (Scholarship and Gold Medal), University College; J. Elliott (Gold Medal), St. Bartholomew's Hospital; E. J. Cave, St. Bartholomew's Hospital, and F. Hinds, University College (equal); J. W. Carr, University College; J. Berry, St. Bartholomew's Hospital.—*Second Class.*—W. T. Cocking, University College, and H. B. Robinson, St. Thomas's Hospital (equal); P. W. Williams, Bristol Medical School; J. Calvert, B.A., B.Sc., St. Bartholomew's Hospital, and A. F. Davenport, University of Edinburgh and University College (equal); A. W. Dingley, University College.—Forensic Medicine.—*First Class.*—E. W. Goodall (Scholarship and Gold Medal), Guy's Hospital: P. P. Whitcombe (Gold Medal), St. Mary's Hospital; H. B. Robinson, St. Thomas's Hospital; E. J. Cave, St. Bartholomew's Hospital; W. H. Evans, B.Sc., University College; J. H. E. Brock, University College.—*Second Class.*—C. B. Innes, St. Bartholomew's Hospital; F. Hinds, University College, and R. M. H. Randell, Guy's Hospital (equal); J. W. Carr, University College; J. Swain, Westminster Hospital; J. Calvert, St. Bartholomew's Hospital.—*Third Class.*—W. A. Wills, Westminster Hospital; F. Lever, B.Sc., Guy's Hospital; J. Berry, St. Bartholomew's Hospital; C. J. Arkle, University College; J. Elliott, St. Bartholomew's Hospital.

M.D. Examination, 1885. Pass-list.

G. E. C. Anderson, B.S., Guy's Hospital; F. W. Bennett, Manchester Royal Infirmary, and Owens College; R. Black, London Hospital; W. H. Bowes, B.S., Guy's Hospital; S. Buckley, Owens College; H. Campbell, B.S., St. Bartholomew's Hospital; E. Clarke, B.S., St. Bartholomew's Hospital; W. W. Colborne, University College; J. R. Day, University College; W. A. Gostling, B.S., B.Sc. (Gold Medal), University College; J. H. Jones, Owens College; F. Knight, University College; A. H. N. Lewers, University College; A. Martin, Guy's Hospital; C. H. L. Meyer, B.S., Guy's Hospital; M. Parry-Jones, B.S., Guy's Hospital; F. G. Penrose, University College; E. S. Reynolds, Owens College; B. Rice, St. Bartholomew's Hospital; R. E. Rouse, St. Thomas's Hospital; T. H. Sawtell, St. Bartholomew's Hospital; T. W. Shore, B.Sc., St. Bartholomew's Hospital; H. Smith, St. Bartholomew's Hospital; R. H. S. Spicer, B.Sc., St. Mary's Hospital; W. Thorburn, B.S., B.Sc., Owens College, and Manchester Royal Infirmary; C. B. Voisey, Manchester, and St. Mary's Hospital; T. Wilson, B.S., University College.—Logic and Psychology only.—C. F. Bailey, St. Bartholomew's Hospital; F. H. Berry, Guy's Hospital; E. H. Booth, Guy's

Hospital; J. L. Hewer, B.S., St. Bartholomew's Hospital; G. R. Marsh, Guy's Hospital; P. F. Moline, University College; F. W. Mott, B.S., University College.

B.S. Examination, 1885. Pass-list.

First Division.—J. Berry, St. Bartholomew's Hospital; J. H. E. Brock, University College; J. W. Carr, University College; A. E. Price, Guy's Hospital; H. B. Robinson, St. Thomas's Hospital; J. H. Targett, Guy's Hospital.—*Second Division.*—R. D. Batten, St. Bartholomew's Hospital; R. W. Brogden, Guy's Hospital; C. D. Green, St. Thomas's Hospital; J. G. Harsant, Guy's Hospital; F. Hichens, London Hospital; F. Hinds, University College; A. J. Jefferson, St. Thomas's Hospital; R. Jones, M.D., St. Bartholomew's Hospital; F. Lever, B.Sc., Guy's Hospital; W. Pearce, B.Sc., St. Mary's Hospital; R. T. Williamson, Owens College.

B.S. Examination, 1885. Examination for Honours. Pass-list.

SURGERY.—*First Class.*—J. Berry (Scholarship and Gold Medal), St. Bartholomew's Hospital; H. B. Robinson (Gold Medal), St. Thomas's Hospital; *A. E. Price, Guy's Hospital; J. W. Carr, University College.—*Second Class.*—C. D. Green, St. Thomas's Hospital; J. H. Targett, Guy's Hospital; J. H. E. Brock, University College.—*Third Class.*—F. Hinds, University College. (* obtained the number of marks qualifying for a Gold Medal.)

M.S. Examination., 1885. Pass-list.

W. J. Collins, M.D., B.Sc., St. Bartholomew's Hospital.

Examination in Subjects relating to Public Health. Pass-list.

A. Newsholme, M.D., St. Thomas's Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, December 7th, 1885, and following days, the undermentioned candidates were successful.

For the Licences to practise Medicine and Midwifery.—T. Browning, Limerick; W. G. Chute, Tralee, co. Kerry; T. P. Codd, Dublin; A. R. T. Craig, Dundrum, co. Dublin; A. E. Davis, Rainhill, near Liverpool; J. J. Davoren, Ennis; C. Eccles, Drogheda; H. L. Finny, Howth, co. Dublin; E. Heard, Carrigtwohill, co. Cork; A. F. Keyworth, Bath; H. T. Knaggs, Dublin; M. B. Lyster, Athlone, co. Westmeath; J. Rogers, Elphin, co. Roscommon; W. W. Scott, Kingstown; J. S. Sergeant, Brigg, Lincolnshire.

For the Licence to practise Medicine only.—A. E. J. Barcroft, Kingstown, co. Dublin; J. Behan, Lixnau, co. Kerry; H. T. Bewley, M.B.Univ.Dub. Booterstown, co. Dublin; A. Butler, Dublin; J. Keatly, Dublin; W. Kiddle, M.B.Univ.Dub., Dublin; F. Parry, Kidderminster; E. R. Wawn, Redcar, Yorkshire.

For the Licence to practise Midwifery only.—J. P. Cavenagh, Dublin; E. G. Newell, M.B.Univ.Dub., Dublin.

At a special examination for the Licence to practise Midwifery, held on Wednesday, December 2nd, the undermentioned candidate was successful.

W. R. Hawkins, M.D.R.U.I., 1885.

The following Licentiate in Medicine of the College, having complied with the by-laws relating to Membership pursuant to the provisions of the Supplemental Charter of December 12th, 1878, has been duly enrolled a Member of the College.

J. E. Reynolds, M.D. (*honoris causâ*), Univ.Dub., Professor of Chemistry in the University of Dublin.

UNIVERSITY OF DUBLIN.—At the Winter Commencements, held in Michaelmas Term, on Thursday, December 17th, in the Examination Hall of Trinity College, the following degrees in Medicine and Surgery were conferred by the University Caput, in the presence of the Senate, the Right Hon. the Earl of Rosse, K.P., Chancellor of the University, presiding.

Bachelors in Surgery.—H. M. Brabazon, J. Craig, W. S. Dobbin, E. W. Gray, H. J. Hadden, G. Hilliard, H. F. Kingston, F. R. Newland, R. G. Patteson, H. F. Phillips, R. W. Studdert, G. W. Trouton.—*Bachelors in Medicine.*—R. C. E. Bolton, H. M. Brabazon, J. Craig, B. D. Dickson, S. G. Edge, G. Hilliard, H. F. Kingston, L. M. Mackintosh, W. V. Mac Mahon, F. R. Newland, R. G. Patteson, H. F. Phillips, R. V. B. Smyth, R. W. Studdert, G. W. Trouton, J. C. Weir.—*Doctors in Medicine.*—A. M. Archer, W. A. Ardagh, S. J. Barton, A. E. Dixon, R. K. Johnston, L. H. Kellett, W. Leah, J. C. Martin, H. Pollen, J. J. C. Watson.

The following honorary degree was also conferred.

Doctor in Medicine.—D. J. Cunningham.

Corrigendum.—In the pass-list for degrees in Medicine and Surgery in the University of Dublin published last week, the name of "G. W. Trouton" should be the eighth in order of merit, instead of seventeenth, as printed.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on December 7th, and following days, the undernamed gentlemen, having passed their final examinations for the letters testimonial, and taken the declaration, and signed the roll, were admitted Licentiates of the College.

C. R. Battersby, T. M. Bellew, P. P. Bhedwar, J. G. Boyce, C. Boyd, W. R. Chambers, H. D. Davenport, R. Elliott, E. J. Goode, I. P. Hartford, C. Hoey, W. A. Johnston, T. Kidd, R. J. Leeper, M. B. Lyster, P. T. Morressy, M. J. Ryan, A. S. Smith, W. P. Waters, D. T. Wylie.

Sixteen were stopped.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, December 17th, 1885.

Nielsen, Frederick William, Nordby, Stockton-on-Tees.
Thompson, Alfred William, 67, Queen's Road, Aston, Birmingham.
Thorpe, Vidal Gunson, 46, Talfourd Road, Camberwell.

The following gentleman passed on Thursday, December 24th, 1885.

Mariette, Ernest Paul Alphonse, 27, St. Stephen's Square, Bayswater.

The following passed the Examination in the Science and Practice of Medicine, and received certificates to practise.

Rigge, John Arthur, M.R.C.S., The Grammar School, Grays, Essex.
Trimble, Robert, Hill Top, West Bromwich.
Turner, Nathaniel Henry, M.R.C.S., 13, Redcliffe Gardens, S.W.

The following gentlemen passed on Thursday, December 24th, 1885.

Adye, William John Alexander, M.R.C.S., Bradford-on-Avon, Wilts.
Burns, Alfred Hugh, 1, Caroline Villas, Hanwell.
Cottell, Reginald James Cope, M.R.C.S., 26, Cheyne Row, Chelsea.

MEDICAL VACANCIES.

The following vacancies are announced.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant for six months. Gratuity, £20. Applications to the Secretary, 24, Finsbury Circus, by January 4th, 1886.

FRENCH HOSPITAL AND DISPENSARY, 10, Leicester Place, Leicester Square.—A Qualified Resident Medical Officer wanted for beginning of January. Salary, £60 per annum. Applications as early as possible.

GENERAL LYING-IN HOSPITAL, York Road, Lambeth.—House-Physician. Salary, £50 per annum. Applications by January 11th.

MONAGHAN DISTRICT ASYLUM.—Assistant Resident Medical Superintendent. Salary, £150 per annum. Applications by January 7th, 1886.

MONAGHAN LUNATIC ASYLUM.—Assistant Resident Medical Superintendent. Salary, £150 per annum, with apartments, fuel, rations, etc.; age not to exceed 32. Applications to Resident Medical Superintendent not later than January 7th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Dental Surgeon. Applications by January 15th, 1886.

PARISH OF LOCHS, Island of Lewis.—Medical Officer. Salary, £150 per annum. Applications by February 1st.

SUNDERLAND INFIRMARY.—Second House-Surgeon. Salary, £60 per annum. Applications by January 4th, 1886.

THE QUEEN'S HOSPITAL, BIRMINGHAM.—Vacancies for offices of Physician for out-patients, and of Casualty Surgeon. Honorarium, £50. Applications before January 23rd.

TUAM UNION.—Medical Officer, No. 1 Dispensary District. Salary, £120 per annum, and fees. Election on January 2nd, 1886.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House-Physician. Salary, £100 per annum. Applications to the Chairman of the Medical Committee by January 4th, 1886.

MEDICAL APPOINTMENTS.

BUXTON, Dudley Wilmot, M.D., M.R.C.P., appointed Assistant Anæsthetist to the Dental Hospital of London.

BULL, William C., M.A., M.B.Cantab., F.R.C.S., appointed Surgical Registrar to St. George's Hospital.

ELLIS, William Henry, M.R.C.S., L.S.A., appointed Consulting Surgeon to Sir Titus Salt's Hospital, Shipley, Yorkshire.

FREELAND, Ernest Harding, L.R.C.P.Lond., M.R.C.S.Eng., appointed House-Surgeon to the Royal Hospital for Women and Children.

LINDSAY, James A., M.D., Assistant-Physician to the Royal Hospital, appointed Attendant Physician to the New Consumption Hospital at Thronemount, Belfast.

PARKER, George, M.A. and M.D.Camb., M.R.C.S.Eng., appointed House-Surgeon to the Paddington Green Children's Hospital.

ROBERTS, W. Reginald, L.D.S.Glas., appointed Honorary Assistant Dental Surgeon to the Birmingham Dental Hospital.

WALKER, H. Secker, M.R.C.S.E., L.R.C.P.Lond., appointed House-Surgeon to the Durham County Hospital, Durham, *vice* Murray Robertson, M.B., resigned.

WYBORN, Samuel, M.R.C.S.Eng., L.S.A., appointed Medical Officer and Public Vaccinator to the 1st District, Windsor Union, *vice* E. S. Norris, M.D.

BIRTHS, MARRIAGES, AND DEATHS

The charges for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcements.

BIRTHS.

HOUCHIN.—On December 15th, at Durham House, Stepney, the wife of E. K. Houchin, L.R.C.P., of a daughter.

LAING.—At the Adyar, Madras, on November 29th, the wife of Surgeon-Major James Anderson Laing, of a daughter.

NEWTON.—On December 11th, at 114, Newhall Street, Birmingham, the wife of R. A. Newton, M.R.C.S., of a daughter.

SKRIMSHIRE.—On December 23rd, the wife of Charles Parnham Skrimshire, of a daughter.

THOM.—On December 29th, the wife of Alex. Thom, junr., M.A., M.D., and C.M., of a son.

MARRIAGES.

BARRETT—GLASSFORD.—At 13, West Princes Street, Glasgow, on December 23, by the Rev. John Orr, Leon Church, assisted by the Rev. Dr. Cameron, of Dunoon, William H. Barrett, to Kate, second daughter of the late A. M. Glassford, Liverpool and London.

DALLAS—READ.—On December 30th, 1885, at the Oratory, Brompton, by the Rev. J. B. Rowe, assisted by Rev. R. D. Beste and the Rev. S. Bowden, John Henry Langford Dallas, Esq., R.A., to Emma Jane, second daughter of T. Lawrence Read, of Petersham Terrace, Queen's Gate.

MACKLIN—BORTHWICK.—At St. Andrew's Church, Bombay, on November 19th, by the Rev. A. B. Watson, B.D., T. Thornton Macklin, M.B., etc., Ghazeabad, E.I.R., to Janet Hepburne, only daughter of Alexander Hay Borthwick, Ladiesyde, Melrose, Scotland.

DEATHS.

CALVERT.—On December 19th, at Southwell, Notts, Campion Calvert, M.R.C.S.Eng., aged 78 years.

MCEWEN.—At 49, Watergate Street, Chester, on Christmas morning, Allan Carveley McEwen, M.R.C.P., and M.R.C.S.Edin., aged 35.

ABORTION AND OTHER MALPRACTICES.—The county magistrates at Stonehouse are investigating a remarkable series of charges against a carpenter, named Charles Baldwin, and several other persons, who are alleged to have been guilty of malpractices which have had fatal results. About three weeks since, Baldwin was first charged with attempting an illegal act, and with causing the death of a woman named Bengy, and on the same charge William Henry Bengy was also arrested. As a result of subsequent inquiries made by the police, the case has assumed so serious an aspect, that the other arrests have been made. The Treasury have taken up the prosecution, and on Monday Baldwin was charged with having in October last murdered a child whose name is unknown; and three other persons, named Ellen Osborne, William Henry Medland, and Frances Ellen Medland, his wife, were charged with having conspired with Baldwin in the murder of this child. A further remand was applied for by Mr. Stanbury, and granted, until Monday next. Medland and Bengy were admitted to bail. The greatest possible interest is evinced in connection with the case. As Mrs. Medland was leaving the court, she threatened, now that she had been arrested, to expose other parties. Baldwin appeared thunderstruck when charged with the capital offence. The police state that they shall prove that the child was got rid of after being naturally born. Baldwin's house is situated on the banks of a millstream, and the bodies of about a dozen infants have been found in the stream during the past two years.

VACCINATION.—Dr. W. Williams has received a Government grant (sixth time) for successful vaccination in the Mold district of the Holywell Union. The amount of the grant is £31 15s.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Jonathan Hutchinson, F.R.S.: Lettsomian Lectures. Subject: On Some Moot Points in the Natural History of Syphilis. Lecture I.—The mutual relationships of the different forms of primary venereal sore: The causes of phagedæna in primary sores; On recurring chancres; On different forms of bubo, and on questions in reference to primary syphilis.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Eve: 1. Two Cases of Sarcoma of the Tongue; 2. Ectopia of Crop of Pigeon (card); 3. Large Calculus passed spontaneously by Female Child (card). Dr. Price: Malignant Disease of Œsophagus. Mr. Sutton: Joint-disease in Animals. Dr. Norman Moore: Cases of New Growth in Heart and Viscera. Mr. Fenwick: Tubercular Exfoliating Cystitis. Dr. Samuel West: Aneurysm of Mitral Valve. Dr. Hale White: Meningeal Hæmorrhage extending to Sheath of Optic Nerve (card). Mr. Lane: 1. Anatomical Variations in Pelvis (card); 2. Fracture into Ankle-joint without Displacement (card). Mr. Swinford Edwards: Carcinoma of the Bladder. At 9.30, Annual Election of Officers and Council.

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. W. H. Blenkinsop: On Inhalations in Pulmonary Diseases. Mr. T. Pickering Pick: Spreading Traumatic Gangrene.

FRIDAY.—Clinical Society of London, 8.30 P.M. Annual General Meeting for Election of Officers and Council. Sir Andrew Clark: On a Case of Desquamative Prostatitis, accompanied by the Discharge of Hyaline Tube-Casts. Mr. Barker: Ununited Fracture of the Clavicle, producing Writers' Cramp and Pain; Resection of the False Joint, and Wiring of the Fragments; Complete Union and Relief of the Nerve-Symptoms. Mr. Clutton: Large Cervical Spina Bifida undergoing Spontaneous Cure. Living Specimens.—Dr. Pringle: Symmetrical Guttate Scleroderma. Mr. Sympson (Lincoln): Multiple Cartilaginous Tumours.—West London Medico-Chirurgical Society, 8 P.M. Specimens, to be shown by Mr. H. Percy Dunn.—Bladder and Penis, showing a False Passage, two inches and a half in length, upon the Floor of the Urethra; Bladder and Penis, showing a Stricture of the Urethra, which has been divided by the Urethrotome; Portion of Small Intestine, showing the Effects of Strangulation. Clinical Cases.—Mr. Barratt: Case of Extroversion of the Bladder after Operation; Water-colour Drawings of the same in a Female. Dr. Savill: Two Cases of Myxœdema. Papers.—Dr. Pickett, in conjunction with Mr. Keetley: On a Case of Obstruction of the Bowels, with Gangrene of the Left Leg. Mr. J. R. Lunn: On Three Cases of Excision of the Tongue. Dr. J. B. Ball: On a Case of Infantile Scurvy.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.—Chelsea Hospital for Women 2 P.M.

TUESDAY .....St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 2.30 P.M.—St. Mark's, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Cancer Hospital, Brompton, 2.30 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern Central, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2.30 P.M.—National Orthopædic, 10 A.M.—King's College, 3 to 4 P.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 2 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2.30 P.M.

FRIDAY .....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—West London, 2.30 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.—Cancer Hospital, Brompton, 2.30 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F. 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1: Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S. 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and NOT to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

Elevation of Temperature.

Sir,—The following passage occurs in the report of Dr. Ord's introductory address, delivered at the meeting of the Medical Society of London, as appears in the British Medical Journal, of October 24th, 1885.

"Throughout the body we recognise two processes ever going on; the building up of tissues on the one hand, their disintegration on the other. The disintegration of tissues is clearly attended by the liberation of heat. Their upbuilding presents itself to me as necessarily attended by the consumption, or disappearance of heat, which assumes some other form of energy."

In the *Lancet*, of April 2nd, 1881, a case is recorded by me, which would tend to disprove that the upbuilding of tissue was necessarily attended by the disappearance of heat.

The case may be briefly described as that of a young soldier, who, while suffering from gonorrhœa, became the subject of a movable tumour in the abdomen, attended with hectic, which reduced him to a very low state, in fact, one of "skin and bone." The tumour was aspirated on several occasions, and a large quantity of pus withdrawn; in all, about fifty-six ounces. For some time the result was awaited with anxiety, which was prolonged, and increased by an abnormally high temperature. Long after convalescence had set in, and improvement was visible, when day by day added to his weight and strength, did the temperature range up to 103°. At first I attributed this to the absorption of matter, which had not been withdrawn, but after all signs of the tumour had disappeared, and when weight was increasing at the rate of three and four pounds weekly, did this elevation of temperature continue. The man repeatedly assured me that he was quite well, and that his only complaint was his increasing appetite. This elevation of temperature continued throughout the upbuilding of his once robust frame, and when the development ceased, his temperature became normal. Perfect health was restored, and the young man went out to India shortly afterwards, a fine specimen of vigorous manhood. In recording the case, I suggested that possibly the high temperature was caused in some measure by the rapid growth of tissue. I was aware at the time that there was a considerable weight of argument against my supposition, as, for instance, the temperature of young children, rapidly growing cancers of the breast, etc.; but with children, the upbuilding is, after all, a languid process, and the amount of liver work may be expended in keeping up a temperature of even 96° or 97°, while in the case of rapidly growing cancers, it would appear to me to be possible that low temperature and want of vitality might be a factor in the production of the cancer, and not the reverse.—Your obedient servant,

Coventry Park, Streatham. William Alexander, M.D.

Cider and Rheumatism.

Sir,—In reply to the enquiries of "Eczema," on the above subject, in the Journal of December 19th, I think I can speak with some amount of authority, after sixteen years' experience in a cider drinking district. I am not aware that there is any antagonism between cider and rheumatism to the extent mentioned by your correspondent, but in this neighbourhood, where cider and perry are the chief drinks of the lower and middle classes, chronic rheumatism is far less frequent than in districts where beer takes their place as the staple drink. Not only this, but many other complaints, such as dyspepsia, kidney, liver, and brain troubles, etc., which are common enough from beer drinking, never result from cider or perry drinking, even when carried to considerable excess. There are, of course, very many different kinds of both cider and perry, as there are various sorts of apples and pears, and some of them act on certain organs of the body in a special degree, and we find them often of great use, medicinally.

I believe the great purity of the liquid to be chiefly the cause of the superiority of these drinks over beer; and it seems to me a great pity that such a wholesome, agreeable, and sound beverage is not more commonly used by the people, other than just in the districts where it is made. Yet such is the case; and, as a rule, the stuff sold as cider or perry in the towns of England, outside these districts, is no more like the genuine article than is chalk like cheese. I would most strongly advise "Eczema," and, in fact, any one with whom beer does not agree, and who is obliged to fall back on washy claret or hock, to have some sound cider or perry, and begin taking it in small quantities at first so as to get used to it. I shall be most happy to answer any enquiries, and also to guarantee to anyone an almost unlimited supply of the real thing.—Believe me, yours truly, William Cox.

Winchcombe, Gloucestershire.

Tolerance of Beer in Hydrophobia.

Sir,—Some years ago, while abroad, I found that hydrophobic patients, while abhorring water, could and would take ale or porter, and so prolonged their life. Taking my cue from this, I tried lupulin. I cannot say that I saved life, I wish I could, but the remainder of life was free from spasms, the terror was absent, and the end peaceful. Bystanders and relatives seemed to appreciate what had been done, especially those who had been present in previous cases. Let it be clearly understood that I do not advocate inebriation—far from it. In those cases where ale or porter were given, not more than a pint was used in any case, and necessarily only in sips at a time. It was curious to watch a patient, to see the shudder at the glass, to watch the fearful mental effort to bring it to the lips, and then to see how easily the second dose was taken, and to mark the gratitude of the patient. If we cannot cure, may we not alleviate?—Yours truly, Henry Dalton, M.D.

Harrogate.

P.S.—I wrote on this same subject some few years ago.

Medical Book-Keeping.

"M.D." would find *The General Practitioner's Visiting List, Journal, Almanack, and Memo Book*, published by H. Silverlock, 92, Blackfriars Road, S.E., suit his purpose. It is convenient, compact, and time saving. It can be had in six months' parts.—Yours truly, M.R.C.S.

Sir,—With reference to the enquiry made by "M.D.," in the Journal of December 12th, I may state that the publisher is Mr. B. Allsop, Saltaire, Yorkshire, and that his advertisement appears regularly in the Journal.—I am, etc., M.B.M.A.

A Sufferer from Hernia.—The address of Messrs. Ody Hodge and Co. is 18, James Street, Oxford Street.

Life, a western newspaper, has discovered why it is that "uneasy lies the head that wears a crown." A newly arrived chiropodist from the old country announces himself as corn-doctor to the Court of Germany, and states that he has removed corns from several crowned heads of Europe.

An Appeal.

Sir,—Will you kindly insert in your paper an appeal to the medical profession for assistance for my poor father, S. F. Scarnell, L.A.C. (now in his 91st year), who has been bedridden eleven years last August. He was taken ill in November, 1865; since which time he has been unable to practice as surgeon. Dr. Watts, 105, Vassall Road, Brixton, who attended him in his first illness and ever since, kindly allows me to refer to him; and the visiting clergyman, Reverend Carrington, of St. Gabriel's, Newington Butts, will also recommend the case. His sole income is £20 *per annum*, kindly allowed him by the Medical Benevolent Fund. Trusting you will favour me—I am, yours gratefully,

19, Dante Road, Newington Butts, S.E. E. D. Bauer.

The Clinical Society and Gastrostomy.

Sir,—Will you kindly allow me space to correct an error in the report of the proceedings of the Clinical Society? In the debate that followed the reading of the papers on gastrostomy and jejunostomy, I am reported to have said that, "The most satisfactory results in the future would probably follow the operation of gastro-enterostomy." This, as it stands, would infer that I considered such an operation might be substituted for gastrostomy; whereas the remark applied to Mr. Golding-Bird's case of jejunostomy, in referring to which, I said Billroth had suggested gastro-enterostomy for cases of cancer of the pylorus, and I considered such an operation preferable to pylorectomy and thought it had many advantages over jejunostomy.—I am, sir, yours faithfully,

16, Upper Wimpole Street, W. Frederick Bowreman Jessett.

Messrs. Thomas Christy and Co., request us to state that the recent fire on their premises, at 6, George Yard, Aldgate, has caused no interruption of business; all orders being supplied from their warehouse, No. 2, George Yard.

India-Rubber in Eczema.

Sir.—I shall be much obliged if any reader can tell me the composition of a preparation of India-rubber or gutta percha which is used as a paint in the treatment of eczema. Also, where it is to be obtained, and how applied.—Truly yours, M.B.

Type-Writing as a Help to Medical Men.

In these days of high pressure, when every moment is of the greatest value, and must be made use of, any invention that will tend to save those golden moments must be hailed with satisfaction by those who feel that they have so much to accomplish in their short span of life. One of these time-saving inventions is "type-writing," and it has been recognised as a great boon by all who have made use of it. Authors of all kinds require printed proofs of their work before it finally appears as a readable book, and in most instances "press corrections" form a serious item in the bringing out of a book. But it is especially to the medical man who has papers to prepare for reading at meetings, lectures, etc., short articles to send to medical journals, that this method of copying will commend itself. He can at once see how his written matter will look in print. Papers that are to be read out at a meeting are, we are informed, more easily deciphered when printed in the plain, clear type of the "Remington" than even the neatest handwriting. A good many medical men have availed themselves for this purpose of the Type-Writing Office, Lonsdale Chambers, 27, Chancery Lane, which is carried on by Mrs. Marshall.

Alleged Indecent Assault by a Leeds Surgeon.

Sir,—May I be permitted to suggest to Mr. H. A. Allbutt, who is actively interesting himself in procuring a subscription for Mr. Heald, that, in addition to his appealing to the medical profession, he would probably meet with still greater success if he caused the residents of the districts where Mr. Heald practices in to be personally canvassed, and thus made the testimonial a still more representative one. I am officially desired to assure Mr. Heald that he has the fullest and heartiest sympathy of the members of The Medical Defence Union in this unfortunate occurrence. At a meeting held on Friday, December 18th, it was unanimously resolved "that the fullest sympathy of the Council of the Medical Defence Union be expressed to Mr. G. H. Heald in respect to the great annoyance he has suffered in consequence of the groundless charge recently preferred against him. Further, the Council is of opinion that Mr. Heald has fully and satisfactorily proved that there was not the slightest foundation for the alleged offence, and that he has the fullest confidence of the Council in his integrity and conduct."—I am, sir, obediently yours,

Charles F. Rideal,
17, Bedford Row, London, W.C. General Secretary.
The Medical Defence Union, Limited.

Phthisis and Practice.

Sir,—Could any of the numerous readers of the British Medical Journal suggest a suitable opening for practice in any healthy warm climate (but preferably not very far from England) for one with a phthisical tendency, or would any one having the same for disposal kindly communicate with

"Member," British Medical Journal Office.

Influence of Sex on Progeny.

The *Field* newspaper, of November 21st, gives two instances of the remarkable influence of the male on the outward characteristics of progeny.

In a case of hybridism between the coyote (prairie dog) and fox terrier bitch, all the five puppies were in colour like the coyote. There are few breeds of dogs in which the predominant (white) colour is so marked as in the fox terrier, and yet a single cross with the male coyote served to obliterate this outward characteristic, as well as some others, such as expression. The other instance was a cross between Cochin hens and a Dorking cock. The produce were in external characteristics Dorking, the legs being white and smooth, instead of yellow and feathered, all signs of the Cochin being lost in the first cross. When a buff Cochin cock was crossed with hens of another breed, the Cochin shape and colour and feathering of the legs remained through three generations.

Vaccination: Delay in Development of Vesicles.

Sir,—Several correspondents seem lately to have been interested in the delay of a few days before the vaccine-pustules developed. The *Medical Digest*, Section 87:6, shows that this delay has extended, in some cases, to months, and even years.—Obediently yours, Richard Neale, M.D.Lond.

60, Boundary Road, South Hampstead, N.W.

A Member.—The *Times*, of November 26th, contains letters on German vaccination.

F. H. L. asks where he can obtain copies of recent papers set at the competitive examinations for commissions as Surgeons in the Royal Navy.

From Children for Children.

The editor of *Little Folks' Magazine* has, within the last few days, distributed among the children's hospitals, in London and the country, a large number of gifts, received from his readers during 1885. These consist of dressed dolls, knitted articles, scrap albums, toys, and many hundreds of copies of coloured painting books, etc., which have come to hand from every quarter of the globe.

The Percusso-Punctator in Lumbago and Rheumatism.

Sir,—I have observed the paper published in the Journal of December 19th, by Mr. Brindley James, on the treatment of lumbago and rheumatic pains, by the use of an instrument called the percusso-punctator. I do not intend to detract in the least from the value of Mr. James's remarks; on the contrary, I agree with him in thinking that acupuncture is a valuable form of treatment in these ailments.

I only wish to say that his instrument is not a new one. Fifteen years ago, I used one almost identical with his, in the wards of Netley Hospital. It was brought to me from Germany, by a friend, and rejoiced in the high sounding name of the "Leben's-Wecker," or life-awaker. It was made of vulcanite, and the only difference in construction I can perceive is, that instead of the punctures being made through the medium of a screw, the motive power was an elastic band fixed to the handle, so that, by withdrawing the connecting rod, and then suddenly letting it go, the punctures were made, and the needles withdrawn instantaneously. The instrument was occasionally useful. I think it was the invention of a German quack; at all events, when I received it, there came with it a bottle of oil for inunction, with directions, and labelled "Oleum Baumsheidtii," whatever that means.

I expect the Leben's-Wecker is lying somewhere in the cupboard of my former office, in Netley Hospital, to the present hour.—Yours faithfully,

William Johnstone Fyffe, M.D.
Late Assistant Professor of Medicine, Army Medical School.
2, Rodney Place, Clifton.

Opium Poisoning through Mother's Milk.

Sir,—The case recorded by Dr. Evans, in the Journal of December 19th, is so unique and interesting, as well as important, that the whole circumstances of the case should be carefully considered, for much harm may be done by erroneous and hasty conclusions.

Some time ago I attended a lady, and had occasion to give opium for the after pains (which, by the way, I very seldom find necessary). On my visit next day the baby was completely insensible, could not be roused, pupils contracted, and, in fact, exhibited all the symptoms of opium poisoning. It recovered with difficulty.

This appeared so clear a case of opium poisoning through the mother's milk, for the nurse said she had most decidedly not given the child anything, that I determined to see about publishing the case. On calling, however, about a month afterwards, to make further enquiries, the mother told me that she did not dare to mention it at the time, but the nurse had given the baby a teaspoonful of her mixture to soothe it (equal to two or three minims of tincture of opium).—Yours truly,

A. H. Newth, M.D.

Dangers of Football.

Sir,—Will you allow me to say a few words in answer to "M.D.," and in defence of the Football Association. A day is fixed by which the ties in each round of the cup must be played off, which generally leaves about three clear Saturdays on which the matches may be played. The committee have given out, not once, but many times, that clubs which put off the match until the last available Saturday, must take all risks of weather, or any other circumstance which prevents the tie from being decided, and it was for this reason alone that the clubs referred to were disqualified. The question of the fitness of the ground had nothing to do with the matter.—Yours faithfully,

Audi Alteram Partem.

Primary Melanotic Carcinoma of the Liver.

Sir,—Will you kindly correct a mistake in the Journal of December 19th? The case reported to have been exhibited by me at the Pathological Society, as one of primary melanotic "*sarcoma*" of the liver, was an example of primary melanotic *carcinoma* of the liver. This slight misprint of a name is of great pathological importance, for a primary melanotic carcinoma of the liver is unique, a primary melanotic sarcoma is not.—Faithfully yours,

W. Hale White.
4, St. Thomas's Street, S.E.

A Caution.

Sir,—A person, calling himself Dr. Kütz, *alias* Cohn, *alias* Kühne, is making the round of the medical profession in London soliciting aid, and using, as I am informed, my name as introduction. He is about of middle height, has a greyish beard and moustaches, and wears glasses. This person called on me about eight months ago, giving a most pitiable account of persecution to which he has been subjected, stating also that he held the post of professor in the medical faculty of the University of Dorpat, etc. From information which I have since received from Dorpat, I feel convinced that he is a common impostor.—Yours obediently,

E. Klein.
94, Philbeach Gardens, Earl's Court, S.W.

Hyeres.

A correspondent writes:—I notice, in a late issue, that you speak of Hyères as an Island. It is true that there are islands of Hyères, but the health-station is Hyères, on the mainland, three miles from the sea. This distance from the sea is supposed to make Hyères specially suitable for some classes of disease, owing to the air being less exciting. The islands are used as summer resorts by the French, not at all by the English.

Habitual Constipation.

Sir,—Will any one kindly inform me if there is anything which will permanently relieve a state of habitual constipation? A patient of mine suffers dreadfully in this respect, and I have tried all kinds of aperients, but with only temporary relief.—Yours, etc.,

M.D.

*** Our correspondent will find the subject noticed at pages 545, 892, and 1140 of the last volume of the British Medical Journal.

The Lamp-Bath.

Sir,—I think those who use these baths might improve their safety, by a very simple plan, and that is to place a common wire dish-cover over the lamp. That, especially if the lamp were set in a plate, would keep the clothing, etc., clear of the flame.—Yours truly,

J. C.

Bacteriology.

Sir,—Is there any laboratory in London where practical bacteriology can be studied? If there be none in London, what Continental laboratories are recommended? Any information on the subject, as to nature of course, fees, etc., will be thankfully received by,—Yours faithfully,

Spirochæte.

*** There is no laboratory in London where instruction in bacteriology can be obtained. In Germany, courses are given, by Dr. Koch in Berlin, by Dr. Becker in Leipzig, by Dr. Frobenius in Munich, etc.

Explosive Drugs.

Sir,—It is well to remember the dangerous explosive and detonating qualities of even a small quantity of chlorate of potash and sulphur, rubbed in a mortar, as this is perhaps a combination which possibly might occur to some, seeking for a remedy in peculiar cases.—I am, sir, your obedient servant,

Chilton Polden. Charles Young, Surgeon.

Analysis of Drinking Water.

Sir,—Will any member please tell me the best work on the analysis of drinking water?—Yours truly,

A. P. Smith.
Shawbury, Salop.

Preliminary Examination in Arts of College of Preceptors.

Sir,—Can any of your correspondents kindly inform me the name and publisher of some elementary book on mechanics of solids and liquids, which is suitable for a student possessing only the minimum amount of mathematics (namely, *Euclid*, Book i., and elementary algebra up to and including simple equations) required by the above named examining body, in order to prepare for the College of Preceptors examination in mechanics, which, according to recent regulations of the General Medical Council, must be passed by all medical students before registration.—Yours faithfully,

Paterfamilias.

*** Deschanel's *Natural Philosophy*, Part I (Blackie and Co.); or Ganot's *Physics*.

A. M. W. asks:—How can a patient be helped to cure herself of biting her nails? Bitter tinctures have been tried in vain.

Syphilitic Alopecia.

Sir,—I would feel much obliged if any member who has had experience in the treatment of syphilitic alopecia will kindly give me any hints as to treatment. I have a patient under my care with well-marked secondary symptoms; eruption, sore throat, etc., but his principal trouble is owing to his hair, which comes out almost by handfuls. If it cannot be arrested he will, I am sure, be completely bald in a few weeks. The treatment he is under is corrosive sublimate, internally, and mild epispastic lotions to the head. I will feel much obliged to any fellow member who will give me his assistance.—Yours truly,

West Somerset.

J. McDonald.—There is no chemical or other substance known which destroys the roots of the hairs without "injuring or marking the skin." The best results are obtained by electrolysis, but the process is tedious, and necessitates many sittings.

Left-Handedness.

Sir,—With regard to the predisposition to use the left hand, the simple influences of life, especially in children, have been overlooked, in searching for a more scientific reason. All our voluntary actions, with a fixed purpose, are the results of imitation or education. An infant uses either hand indiscriminately, without any inherent preference for either, but is taught to use its right hand for domestic purposes. Again, in shaking hands, the fact of giving the left in preference to the right is due to imitative action, with a want of perception of the altered position of the opposite person, which is overcome by education, and the child's powers of observation becoming more developed. Again in complicated actions, the child follows the movements of the instructor, and so by imitation becomes perfect, and if the instructor happens to be left-handed, the pupil is nearly always the same. It is in this way that the peculiarities of parents are carried down to their children and recognised as imitations by others. Again, it is sometimes found that in some families only one is left-handed, and this only in some actions. In one case under observation, this was due to the child having a left-handed nurse, the others being nursed by a right-handed person; in another it was due to the right hand being for some time in an unfit condition. In conclusion, the tribe of Benjamin being left-handed, was most probably due to their ancestor having this peculiarity, and so handing it down to his descendants.—I am, etc.,

Charles Cressy.
Guy's Hospital.

Rheumatic Gout.

Sir,—I have for many years been subject to gout, and during the last six the attacks have been becoming worse. About nine weeks ago, after some premonitory symptoms, the pain became very severe, affecting the feet, ankles, knees, and hands. The pain was at times awfully intense, even when the part was quite at rest. Differing from former attacks, there was scarcely any swelling, except the knees and ankles, so little as only to amount to puffiness and very slight effusion; nor were there more than a few small patches of redness. The fibrous tissues surrounding the joints appeared to be principally affected. The pain was very severe indeed in the hands, in the metacarpus, carpus, and ligaments of the wrist. The tendons (flexors especially) suffered most with the thecæ. In the right arm, pain attacked the space between the internal condyle of the humerus and the olecranon, also the long tendon of the biceps at the shoulder, but did not affect any intermediate parts. After some active treatment at the outset, iodide of potassium and bicarbonate of potash were given, with aperients at intervals. The local treatment was almost entirely opiate; a mixture of two ounces of tincture of opium, and one ounce of hot water, was applied to the painful parts, by means of lint soaked in it; this was covered with gutta-percha tissue, wadding, and a flannel bandage. It always produced relief. Except torpidity of the bowels, and occasionally a taste of it in my mouth in the morning, no unpleasant effects were produced by the opium, while it insured sleep at night, unless disturbed by pain caused by some involuntary movement of the limb, or from the lint with the lotion having become dry. Blisters had a marvellous effect in relieving the pain in the hands. I must not forget to do justice to the old-fashioned many-tailed bandage which allowed the appliances to be renewed without lifting or moving the lint. I am now convalescing, but only expect slow progress at this season of the year,—I am, etc.,

W.

Cucaine in Prostatic Disease.

Sir,—I shall feel much obliged if any of your readers can kindly tell me the best way to use cucaine in a case of enlarged prostate, necessitating the use of the catheter nearly every hour. There is also great bearing-down pain and prolapsus of the rectum. The patient is 76 years old. As he lives in the country, he will have to apply it himself. I would be thankful for any suggestion that would benefit the patient, as he has had all the ordinary remedies, and nothing seems to have benefited him except morphine-suppositories.—Yours faithfully,

Leeds.

Small Children.

Sir,—In answer to Dr. S. J. Scott's inquiry (British Medical Journal, November 14th), I may tell the following case.

One of my sisters was delivered of twins, both females, in August, 1858, before term. One of these twins weighed about 22½ ounces; her hand, forearm, and arm, could easily pass through my mother's wedding ring—an unusually small one. The other twin weighed twice as much.

Both are still living. The larger one is married, and the mother of two children. She was delivered without great difficulty. The smaller did not marry; she remained small, but she is not a dwarf. She is very strong; her functions are quite right. I do not remember that she has been ever ill, but her catamenia came every third week. Bromide of potassium, taken every day for the week previous to the period, postponed them to the right time.—Yours truly,

A Foreign Physician.

Uric Acid Diathesis.

Sir,—In reply to "L.R.C.P.'s" request for suggestions as to the best dietetic and medicinal treatment for a case of uric acid diathesis, I would state that, in treating cases similar to the one he describes, I have found that the excess of uric acid in the system is diminished by the judicious use of aperients; a daily morning dose of Friedrichshall water is one of the most suitable purgatives. The skin should be stimulated by daily rubbing with cold water, which may (to commence with) be mixed with a fourth part of strong acetic acid. The patient should take plenty of outdoor exercise; he should live sparely; his food should contain only a limited amount of nitrogenous matter, and he must avoid red and effervescent wines, and malt liquors; but although a spare diet is suitable, he should take frequent small meals. A liberal use of water, or a mildly alkaline mineral water, is of the highest importance. As much as two quarts of pure water may be drunk daily for at least a fortnight with advantage. Its action in promoting the elimination of uric acid, and, at the same time, preventing it forming concretions in the renal tubules, or any part of the urinary tract, is obvious. From eight to ten ounces of water should be drunk at bedtime, and whenever a longer interval than usual has elapsed since the last meal.—Yours faithfully,

James Craig, M.B.

Llandudno.

The Durham Degree.

Sir,—Could any of your readers oblige me with information as to the best books to read for the practitioner's degree of Durham? also as to the class of questions asked, and the nature of the clinical examination?—Yours, etc., W. A. R.

Incontinence of Urine.

In reply to a "Country Member," I am attending a little girl, aged 7, who, until now, has never retained her urine by night nor day. When first consulted, on November 5th, she was ordered a quarter of a grain of extract of belladonna with a grain of sulphate of zinc three times a day. The belladonna was gradually increased until grain-doses were reached. At the end of three weeks, the nocturnal incontinence had ceased. At the end of four weeks, there continued still frequent escapes by day. Belladonna was now withdrawn, and three minims of liquor strychniæ with eight minims of liquor ferri perchloridi substituted. Three weeks more have now expired, and, on seeing the child on December 18th, I was assured that there had been no escape of urine by night, and only twice during the last week in the daytime. She is to continue the medicine. Belladonna seldom disappoints me when carried, for a time, to the maintenance of dilatation of the pupil.—I am, yours obediently,

Faversham. Edward Garraway.

Books for the Kyrle Society.

Sir,—May I ask for a few lines in your valuable journal to make known a want, which I believe many of your readers would gladly supply, if brought to their notice in your pages?

The Kyrle Society, through its Literature Distribution Branch, has frequent demands made upon it for books on hygiene, anatomy, and kindred subjects, for libraries, for the use of nurses, etc. Many works used by students during the earlier years of their medical studies are, on leaving the hospital, thrown aside or sold for a trifling sum. These would be most valuable to persons who are anxious to study, but have not the means to buy books, and who apply to the Kyrle Society for them. Though, through your columns, I would ask first for works of a scientific character, I may add that all books are welcome, good novels especially so.

Information can be obtained from the Honorary Secretary, Literature Distribution Branch of the Kyrle Society, 14, Nottingham Place, W. I enclose my card, and have the honour to remain, sir, yours faithfully,

A Member of the Kyrle Society.

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BOOKS, etc., RECEIVED.

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LETTSOMIAN LECTURES
ON
SOME MOOT POINTS IN THE NATURAL HISTORY OF SYPHILIS.

Delivered before the Medical Society of London, 1886.

By JONATHAN HUTCHINSON, F.R.S.,
Emeritus Professor of Surgery to the London Hospital College.

Lecture I.

The Mutual Relationships of the Different Forms of Primary Venereal Sore.—The Causes of Phagedæna in Primary Sores.—Hospital-gangrene.—On Recurring Chancres.—On Different Forms of Bubo, and on Questions in reference to Primary Syphilis.—Syphilis after Vaccination with Clear Lymph.

Mutual Relations of the Different Forms of Primary Venereal Sores.—I have long thought that, if the question in debate could be once clearly stated, the duality or unicity of venereal poisons would soon cease to be a moot point. We are pretty much agreed as to the facts, and the controversy is mainly as to what they imply. A dualist is, I suppose, one who holds that there exist two quite distinct and independent contagia, one of which produces a non-infecting sore, and the other syphilis. An unicist holds, somewhat differently, that the poison of the soft sore is a product of syphilis, and by no means independent. The difference after all is not great, nor clinically is it of much importance. No one thinks that there are two forms of syphilis, and no one doubts that there are two kinds of sores. Are they related and independent? that is all that we dispute about.

The fact which chiefly favours the creed of those who think that they are independent is, that the secretion of the chancroid is very contagious, and always produces a sore like itself. Bassereau, in the first instance, proved this by confronting his patients who had got chancroids with the persons who had infected them, and he found that the giver usually possessed a sore just like that which had been given. Since Bassereau's time, numberless experiments, especially those done in the course of what was called syphilisation, have abundantly proved his point. What was named syphilisation consisted in inoculating the secretion of a chancroid on the skin; the result was that a chancroid formed. It must be remembered, however, that it was done almost exclusively on those who had had syphilis.

Here was clearly a fallacy, for the patient might, in consequence of his prior syphilis, be insusceptible of fresh contagion. Danielsen, however, in Bergen, tried the practice on a number of lepers who had never had syphilis, and with similar results. He found that he could reproduce a soft sore over and over again, and that it was never followed by syphilis. In further proof that no syphilis was conveyed, it may be stated that one patient, who had undergone many inoculations without ill result, finally by accident received virus from a true chancre, and had, as a consequence, an attack of true syphilis. It might seem that the proof of specific distinctness was here given. It is necessary, however, at this stage to insist that there is an important difference between a specific contagium and a specialised contagium. By specific we denote that which is always, and under all conditions, the same, and producible only by its own seed, distinct in the same sense that wheat and clover are distinct. There may easily be many morbid poisons which are specialised, that is, which may, during a certain number of generations, produce conditions similar to those in which they had their origin, and which yet do not rise to the dignity of species.

All inflammatory products are probably, under favourable conditions, contagious. The gonorrhœal secretion produces gonorrhœa, that of erysipelas erysipelas, that of diphtheria diphtheria, and so on. It is probable, however, that each of the diseases may originate spontaneously, and quite independently of contagion. The contagia are, therefore, the products of inflammation. Further, it is highly probable that, in each of the diseases mentioned, the contagium may vary much in virulence, and that it is by no means always the same. Probably it is quite possible to breed them up to higher degrees of power and of special peculiarities. It is possible then that the poison which produces the chancroid is, after all, only a specialised product of inflammation, and not a specific virus.

Many facts seem to support the conclusion just hinted at, and to imply that soft sores are, after all, an appanage of syphilis. When care is taken in inoculation, unquestionably they seem to breed true; but this is not the case in those which we see in practice as the results of accidental contagion. If we place in one group as "soft" all the venereal sores which do not harden, and which do not infect the system, we shall find that but a very small proportion of them present what are considered the typical characters of the chancroid. We encounter a great variety of conditions and great differences in course, and are obliged to conclude that they agree in one feature only—the absence of hardness. The rounded form, punched out and ragged edges and grey base, are conditions not present in my experience in one of five of the venereal sores which do not harden.

It would be waste of time to attempt to describe the multiform character of non-indurated sores. Many of them are small, almost level with the surface, and have shelving edges. How rarely do we witness the inflammatory bubo tending to abscess which is said to accompany them. How short, as a rule, is their duration. Whilst the typical chancroid goes through stages, and usually lasts six weeks, a few dressings with iodoform suffice to cure in a week almost all the "soft sores" that we meet with in practice. Now and then, I admit, we encounter the true chancroid as graphically depicted by Mr. Lee, but it is very exceptional. This want of uniformity in conditions is a strong argument against specificity. Another equally strong argument is that the true chancroid on the genitals is seldom seen, excepting in those who have had syphilis already. If a person who has never suffered before contracts a venereal sore of any kind, it is highly probable that it will lead to syphilis. This fact, which I think many observers will confirm, is placed in a strong light by Mr. Morgan, of the Dublin Lock Hospital, who states that, of fifty-four patients who came under care for first attacks of venereal sores, fifty proved to have true syphilis. Thus it would seem that insusceptibility is an usual cause of non-occurrence of induration. In using this argument, I by no means wish to deny that the typical chancroid is sometimes seen in those who have never had syphilis.

Very important evidence as to origin of the chancroid, and of all non-indurated venereal sores, from syphilitic secretions, is afforded by at least two experimenters. Mr. Morgan, of Dublin, whose paper I have just quoted, inoculated with purulent vaginal fluid from those who had had syphilis, and found that he could with it produce the typical chancroid. From the sores thus produced, he could inoculate repeatedly and with sameness of results. With praiseworthy caution, he never inoculated excepting in those who had previously had syphilis; and thus, whilst his facts are conclusive as to the production of soft sores, they do not prove that syphilis might not very possibly have been produced at the same time had the soil been suitable. Mr. Lee had previously recorded the possibility of producing from indurated sores, by artificial irritation, a secretion which is purulent, and which is inoculable on the patient, producing a sore not distinguishable from chancroid. Mr. Gascoyen, Bidenkap, and others had, I believe, done the same. It is surely very difficult to get over these facts; whilst, to push the argument further, so far as I can see, all *a priori* probability favours the suggestion that non-indurated sores are produced by the secretion of true chancres, which have been changed in character either by the inflammatory process, or by the non-susceptibility of the tissues of the recipient.

Phagedæna.—A parallel of much importance might, perhaps, be drawn between the chancroid process and phagedæna. All will admit that syphilitic inflammations have a remarkable tendency to become phagedænic. This may occur in all stages of syphilis, and to all kinds of sores. It is not necessary that there should be any contagion of material from phagedænic sores; it is sufficient that there is syphilis, for syphilis in its purest form often leads to phagedæna. Phagedæna, as we see it in connection with syphilis, is almost invariably of spontaneous origin, or, in other words, caused by syphilitic inflammation, and not by phagedænic contagion. Its existence puts an end to all possible sexual exposure, otherwise we should probably often see it on the genitals as the result of contagion. There is every reason to believe that its products are contagious, and that they would probably produce phagedæna, and not syphilis. The specific virus of the latter is probably destroyed in the gangrenous process. When phagedæna spreads as such by contagion, we encounter it, as I shall have to assert directly, under other aspects, and not as a venereal disease. Now, the chancroid type of inflammation is possibly only a sort of minimised phagedæna, and differs from it only in degree. Its virus is probably produced under similar conditions, and it is curable under the same methods of treatment. The fact that a chancroid in a woman does not absolutely disqualify for sexual congress, makes it possible for it to be transferred as such by direct contagion. This fact it was which

misled Bassereau and his followers into the belief that the virus of these sores possessed specific individuality. Probably it is not so; and it is still likely that many chancroids originate spontaneously in the same sense that phagedæna does; that is, they result not from contagion from a sore of the same kind, but from a modification of a syphilitic inflammation by peculiarities of the individual. Be this as it may, it is to be freely admitted that chancroids are very contagious, and that they reproduce themselves with closely similar features. Their virus, if not specific, is at any rate well specialised.

Hospital-Phagedæna.—Closely connected with this topic, and of great clinical interest, we have the question of the origin of hospital-phagedæna from syphilis. It is not uncommon to see the disappearance of hospital-gangrene claimed as one of the triumphs of antiseptic practice. I hold this to be a mistake, and I have the less reluctance in saying so, because I feel sure that no one estimates the legitimate victories of antisepticism more highly than myself. Its great teacher and his school need no borrowed plumes. The truth respecting hospital phagedæna is, that it did not exist in one in ten of our hospitals at the time when antiseptics came into vogue. It is not a disease which is always with us, but rather one which comes occasionally, prevails extensively, and then disappears. It is not due to neglect of cleanliness, nor to atmospheric infection; it does not occur from overcrowding; but it is caused by a special form of contagious pus. All the facts as to its history support this creed. During our last epidemic of it at the London Hospital, one large ward alone of the whole surgical department remained exempt. It was not less crowded than the others, and it received precisely the same class of cases; but it, unlike the others, never took patients from the infected wards. Hence, its escape from contagion. That epidemic ended in 1864, and from that time onward there have been no cases whatever in the hospital. The origin of that epidemic was, I had good reason for believing, the admission of a case of syphilitic phagedæna into a surgical ward. The first case occurred in the next bed to this patient. Mr. Pollock told me that he had arrived at the same conclusion as to an epidemic of the disease in St. George's Hospital. I have mentioned these facts before on more than one occasion; but the following is a new one, and it gives them strong support. A few years ago, a boy was brought into the London Hospital in consequence of his having been attacked by phagedæna in a workhouse-infirmary. He was suffering from acute periostitis of the tibia. A free incision had been made, and this wound it was which had become gangrenous. Its edges were swollen, ragged, and discoloured, its surface covered with pultaceous secretion. It presented, in fact, a good example of what I had often seen during the epidemic referred to, and never since. I had commented at the bedside of the boy on the case, and I had mentioned my belief that hospital-gangrene usually began from syphilitic cases. We could find no suspicion of syphilis in the boy. A house-surgeon present afterwards gave me what was probably the correct information. There had been admitted under one of my colleagues a very bad case of syphilitic phagedæna from the same workhouse, only a little before the lad. On inquiry, I found that in the workhouse the man's prepuce had been slit up with the same instruments which, some time later, had been used for the boy's leg; it was possible even that the same sponges had been used. Here, then, to say the least, was a possible source of contagion. The suggestion that hospital-phagedæna takes its origin from syphilitic phagedæna, would fit well with the fact that it often prevails in military hospitals, especially when crowded, in time of war. These are just the places where we may expect to encounter occasionally neglected and unhealthy venereal sores.

If we admit that what I have stated is very probable, it becomes of interest to glance at the facts of the malady in question. Hospital phagedæna is very contagious, and it spreads by contagion only. The previous health of the patient matters nothing; nor the salubrity or otherwise of the ward. Excepting in varying degrees of severity, all its cases are alike; they tend to the same results, and are to be cured by the same means. It is a well specialised disease. It never leads to constitutional syphilis. Accepting the hypothesis of its syphilitic origin, we have then a parallel fact to what is observed in the case of the chancroid. A specialised contagium (pus) has been bred up, which can produce its like wherever inoculated, but which does not contain the virus of syphilis. Both the chancroid and the phagedæna are the products of a poison originating in a syphilitic inflammation, but which in neither case can induce syphilis. It is easy enough to see that, if once the particulate virus of syphilis have died out of a secretion, the latter may then be propagated over and over again without the slightest possibility of reproducing the defunct specific elements. It is not, therefore, to be wondered at, that neither the chancroid nor hospital-phagedæna, although appanages of syphilis, ever, when once negatively specialised, by any chance produces that disease.

It is a question about which there is still some debate, whether the infecting or the non-infecting sore is the more liable to phagedæna. My own experience would lead me to a very definite opinion, that almost all sores which are attacked by this process are true chancres, and that it occurs at a stage too late to prevent absorption. It is, in fact, a concomitant of a true syphilitic inflammation, and does not usually happen until induration has taken place. It denotes unusual susceptibility to the influence of the virus, and it is often followed by very severe secondary symptoms. I will by no means deny that the retention of irritating secretions, as in phimosis with concealed sores, may give rise to gangrene of the foreskin in cases where no syphilis exists. If, however, a typical phagedænic process be set up, and spread, I believe that it will almost invariably be in association with true syphilis. I have suggested that the chancroid process is allied to that of phagedæna; but it appears to be well specialised, and quite capable, under most circumstances, of maintaining its individuality. When once its peculiarities have been declared, the sore seldom deviates much from its type. If it do become aggravated, and spread at its edges, such spreading is only of the very mildest form of what we mean by phagedæna.

A knowledge of the fact that phagedæna usually goes with true syphilis is of much importance for purposes of retrospective diagnosis to those engaged in medical practice. Not unfrequently, with symptoms of visceral or nerve-disease, an examination of the genitals is made in order to seek for scars. Whilst some have assumed that scars on the penis, or its extensive malformation by bygone phagedæna, imply the probability of syphilis, others have asserted that they rather favour the belief that the disease was not true syphilis. My vote would go with those who regard them as important, though not conclusive, evidence of constitutional disease. I have very seldom seen scars on the penis in patients who had not had syphilis, and still more seldom the evidences of phagedænic action.

I am compelled also, as the result of personal observation, to deviate yet further from the popular creed, and to say that I should regard scars in the groin as also presumptive evidence of syphilis. Our rules of diagnosis have been, I cannot but think, far too definitely laid down on these matters. In private practice it is very rarely indeed that we have to deal with inflamed bubos. It so happens that, of late years, almost all the cases of suppurated bubo which I have seen were cases of syphilis. It is not, I believe, on the other hand, very exceptional for the typical chancroid to cause no enlargement of the glands at all. I really fear that I may be suspected of differing for the sake of it, but I am compelled to record the result of unprejudiced observation. That an uninflamed indurated sore will be attended by uninflamed indurated glands I fully admit; but the fact remains, that a great many infecting sores do inflame and suppurate, and when that is the case the glands will follow suit. Nor is this inflammation always the result of a mixed contagion; it often, I feel sure, results from personal proclivity in connection with a fairly pure syphilitic virus.

A series of cases of syphilis from circumcision, which I have recently, in association with my friend, Mr. Charles Macnamara, had an opportunity of investigating, is of much interest in reference to the question just discussed. We were shown a group of six infants, all of whom had constitutional syphilis, having been infected by the same operator in the rite of circumcision. In all the operations, the wound had reopened, and assumed the condition of a chancre. Two out of the six had double suppurated buboes in the groin, and two others had large masses of agglutinated glands. The children had all been healthy before the operation; and I cannot but think that their age had probably much to do with the unusual tendency to suppurative inflammation displayed. So also in the case of adults, is it not probable that age and personal peculiarities often exercise great influence on the tendency to inflammatory action? In the children just referred to, it is to be admitted that the sores had much inflamed also, and thus it may be fairly suggested that the contagion was probably mixed. I am not, at the present moment, inclined to dispute that point, my reason for adducing the cases being simply the practical one of showing that suppurated bubo and constitutional syphilis often go together, and that, as a consequence, we are on unsafe ground in believing that scars in the groin imply absence of constitutional infection.

The recognition of non-infecting venereal sores on other parts than the genitals, whether on the hands or elsewhere, is a matter of great difficulty. It is, indeed, so difficult, that the recognition is seldom or never attempted. There are, in fact, no characters by which, apart from the history, such a diagnosis can be made even probable. We

know that unhealthy ulcers may result from a variety of causes, and that they may easily cause gland-enlargements. It is not likely that our non-professional patients will ever volunteer, respecting any sore, on the hand or elsewhere, that it may possibly have been caused by venereal contamination. In the case of the hands of midwives and medical men, however, the case is different. In them, there is nothing disgraceful in the admission of exposure; and we ought, perhaps, looking at the facts as generally believed, to expect to see non-infecting sores as frequently as infecting ones. I suspect, however, that they are very rare. I have myself very seldom indeed seen sores on the fingers of surgeons which could be reasonably supposed to be due to vaginal infection, which did not prove to be true chancres. I do not recollect a single instance in which a sore on the hand, which was not a true chancre, produced a bubo in the armpit. Although I have treated possibly a hundred cases of chancre on the finger, I never yet was concerned with a suppurated bubo in the armpit in association with a venereal sore on the hand. This is a very remarkable fact, and may be held to indicate either that the so-called "soft sore" is rare on the fingers, or that it but rarely causes bubo. Probably both explanations are in turn true.

The following narrative bears in an important manner upon the above general statements. A surgeon in good health pricked his fingers severely in several places during an operation for removal of the cervix uteri. He knew at the time that he was pricking himself on the teeth of the vulsellum, but his patient was bleeding profusely, and he was obliged to persevere. One finger inflamed under the nail within a day or two, and, during the next week, five or six sores had formed on different parts of several fingers of his right hand. Various remedies, black wash, iodoform, etc., were used, but the sores became larger, and, at the date of a month after the accident, he came to me. The conditions were then very suspicious indeed. Although there was no definite induration, most of the sores had elevated swollen edges, and looked, so far as my experience went, just as if about to indurate. They were inflamed, rather deep, and very painful. One of them, under the nail at a finger-end, did not present an actual ulcer, and, in this respect, differed from four others, all of which were exactly alike. They were big enough to have allowed the pulp of the little finger to be put into them. Their edges were not in the least ragged; all were suppurating, but not freely. There was no bubo. I advised the free use of iodoform to some, and of black wash to others. We agreed to abstain from mercury, and wait events. The sores dressed with iodoform became healthy much more quickly than the others, and we soon laid aside the black wash, and used the former to them all. Dr. P. took his temperatures regularly, and carefully watched for eruption. No eruption ever appeared, and, one month later, all the sores were healed, and there was not the slightest hardness or duskiness of the scars. I then ventured to express, for the first time, a confident opinion that there was no syphilis in the case.

Looking at all the facts of this case, it seems very probable that the sores resulted from a quasi-specific venereal poisoning, and were non-infective chancres. The patient from whom the poisoning occurred was a young unmarried woman, who had borne a child, and who suffered from papillary growths in the canal of the cervix, attended by much discharge. She died after the operation, and no investigation could be made as to whether she had ever had syphilis. The likeness in the conditions of the various sores, their steady persistence for a certain time, and their final satisfactory disappearance under the persevering use of iodoform, are facts which all fit with the idea that they were non-indurated venereal sores (that is, chancroids). The absence of gland-enlargement goes, I think, for very little; since, as I have stated elsewhere, it would seem that such sores are but rarely attended by buboes of any kind.

Second Attacks.—In 1839, Ricord made the important observation that a person who had once had syphilis was not liable to have it again. Although he believed that exceptions to this law were possible, and was anxious to admit them, yet, up to 1858, he had met with none which satisfied his mind. In the following year occurred the first case in which he himself witnessed and treated two attacks of undoubted constitutional syphilis in the same patient. The interval was nineteen years. Although with the profession generally, and even with the public, the good news that no second attack was possible spread widely, I doubt whether it ever received the unquestioning acquiescence of any authorities. Diday recorded many exceptional cases, and thought that the second attack occurred when the first was incomplete, and in some sense supplemented it. Thus, if the patient's skin had suffered in the first and his mucous membranes escaped, the reverse would be the case in the second. Later on, Gascoyen and Fournier published many exceptional cases. I have myself seen many in which the patient's narrative was clear that he had had a former attack, and several in which I myself attended the patient in both. It is, I think, now generally accepted that second attacks after considerable intervals are not very uncommon; but, at the same time, that Ricord's law holds good in reference to a very large majority. The exceptions—that is, second attacks—are probably not more frequent than in the case of variola and measles. Diday's supposition that they supplement the first has not been confirmed by other observers, nor does there exist any trustworthy evidence as to the nature of the modifications which they manifest. Sometimes they are very slight, and sometimes very severe; but exactly the same differences are observed between attacks which are the first which the patient has had.

As a rule, when a patient contracts syphilis a second time, it is after an interval of many years, and after, apparently, very perfect recovery. Neither of these statements is, however, absolutely true; I have seen a well characterised indurated chancre due to fresh contagion, within a year of the first, and before the patient was well rid of his symptoms. I have repeatedly seen them in those who still suffered from reminders of their former attack. It has been proved by experiment that in occasional instances fresh inoculations on patients suffering from syphilis may produce a certain degree of induration, although as a rule they fail. On this point, Mr. Lee has some valuable observations.

The Lettsomian lectures were delivered before this Society on the same topic as that I have now ventured to take, nearly thirty years ago, by one whose memory is regarded, I am sure, by not a few present with feelings of affectionate regret. Mr. De Méric, in dealing with the question of second infections, then spoke very strongly, and although he did not deny their possibility, affirmed that no reliable case was on record. This statement led to the publication, by Mr. William Allingham, of a case which had been recently under his observation, so extraordinary that I might have failed to give it the attention which it deserves, were it not that I have had, as just stated, in my own practice, one almost exactly parallel. A gentleman contracted a chancre in February, and took mercury until the hardness disappeared, but no longer. In May he had rash and sore throat, and again took a short course of mercury. Having left it off for a month or more, he returned, in July, with another chancre, which he believed to be the result of fresh contagion, which was not in the site of the former one, and which presented the most characteristic induration. This sore yielded but slowly to mercury, and was followed by rupia, and eventually by periostitis. It is obviously, in such cases, impossible to say whether or not the second sore is the cause of constitutional symptoms, or whether it in any way modified or augmented the effects of the first. It is always quite possible, after such a short period, that all that follows may be the result only of the first sore. I do not, however, see any reason why we should doubt that second attacks may complicate previous ones; indeed, I think I have witnessed facts which very strongly indicated that such a mixture had occurred. If it be objected that these second attacks, especially after such very short intervals, constitute a feature of clear departure, in the case of syphilis, from what we witness in the exanthemata, I must rejoin that we must not feel too sure of that. It is by no means certain that closer observation may not show that in these latter the specific poison of each is, in rare instances, capable of breeding again in the blood after very short intervals. Some of the facts as to vaccination certainly favour that suspicion. Be that as it may, however, we must take the facts as to syphilis as we find them; and candid observers will, I feel sure, not unfrequently encounter most startling exceptions to general rules.

I am precluded by want of time from mentioning cases in proof of second attacks; for I should have to produce a considerable series, and their details are long. I may, however, venture to produce one, and may assure my audience that I have several in which the evidence is just as good. I attended, almost twenty years ago, a young surgeon for syphilis. The disease hung about him, and it was two years before he finally left off mercury. He then married, and he had one or more healthy children. After an interval of about eighteen years, he came to me with a chancre on his upper lip, contracted, as he supposed, from a scratch by a broken vaccine-tube. This chancre was a very large one; and it was attended by a large bubo, and was followed by a most copious eruption. It was, indeed, one of the most severe attacks of syphilis which I have seen for some time.

Incubation-Periods.—It may seem strange that, after the amount of attention which the natural history of syphilis has received from many excellent observers, the length of the incubation-period of chancre should still remain a moot point. The differences of opinion are, however, very great. Thus, Ricord said that induration occurs

most frequently during the first or second week after contagion; never before the third day, nor after the third week. Sigmund, of Vienna, dealing with 261 observations, found only three with an interval as long as three weeks, and none with longer; whilst in as many as seventy-one it was only nine days. Other observers have given longer periods; and Mr. Berkeley Hill, with unwearied love of accuracy, and making use only of experimental inoculations, has constructed for us a table which seems to prove that the average period is twenty-four days, the extremes being ten and forty-six. This table comprises thirty-seven cases. Fournier and Clerc give it as twenty-one days. It is admitted that neither differences in the source of contagion nor in the part affected make any difference in the length of the period during which the poison remains quiet. If I were to speak from my own experience only, I should be inclined to make the incubation-period longer than any of the observations just quoted, and am obliged to admit that the statements of Sigmund and Ricord are almost inexplicable. I can only suppose that there has been some misunderstanding as to what phenomena constitute the limits of that period, or that it has even been counted, not from the date of the contagion, but from the first appearance of a sore. In this last supposition I am countenanced by Dr. Taylor, of New York, the very able editor of the last edition of Bumstead's work. If by incubation-period we mean, as I contend we ought to do, the interval between contagion and the production of an induration which can be diagnosed, then I believe we shall seldom find it less than five weeks, and more often six. If we date to the first appearance of a sore, then it will be a week or ten days shorter, for the development of hardness takes that time. In these statements, we of course put aside the very numerous cases in which a sore is present almost from the first, the chancre having been a mixed one. To this class I would unhesitatingly assign all in which the period is said to be short, for it is not the fact that the soft sore always shows itself directly after contagion. I believe that the incubation-periods of uncomplicated infecting sores are far more regular than is supposed. When the data are obtained from the statements of patients, they are obviously exposed to much fallacy. Many and many a time has a patient, who had assigned a period so short as to be, to me, incredible, admitted, in cross-questioning, that he had also exposed himself to risk a few weeks earlier than the occasion he had mentioned. As regards unusually long periods, there is always the same doubt as to correctness of testimony. It will be seen that, in Mr. Hill's tables of intentional inoculation, in no case was the period longer than forty-six days, or rather more than six weeks. No aberrant case, either in the direction of very long or of very short periods, that would bear investigation, has ever come under my own notice. I will briefly cite the following facts from my own observation, and leave them to make their own impression on your minds.

In the case of a medical man who vaccinated himself in the forearm from a syphilitic infant, the punctures, which had quite healed, became irritable on the twenty-first day, and were well characterised chancres on the forty-first.

In another series of cases of vaccination-syphilis, eleven patients received the virus on the same day. In all, the punctures, or vaccine-vesicles, healed; and in all they became irritable at the end of the fifth week, and were well indurated at the end of the eighth. In a father and son, it was especially noted that the irritation at the site of puncture began on the same day.

The following cases are also from my own note-books.

1. A married physician, Dr. A., on one single occasion went astray. He carefully observed all that followed, and it was not till the forty-second day that a pimple under the prepuce was noticed. A chancre developed itself, and syphilis followed.

2. A surgeon of much experience gave me the following fact; the circumstance occurred to himself. He had intercourse of a suspicious nature on one occasion only. He observed nothing whatever on the penis until five weeks and three days had elapsed, when he found a small papule. This soon after became indurated, and was followed by secondaries.

3. About the same time I had another patient, who had a chancre after a single intercourse, and who alleged that he was certain that there was no visible sore until five weeks after the exposure.

4. A well-trained observer (M.B.Lond.) exposed himself to the risk of syphilis on a single occasion, on March 4th, and then anxiously noted the results. On the morning after connection, he had a little abrasion on the prepuce close to the glans. He used lead-lotion, and in three days it healed. It remained quite sound until the second week in April, when it began to look a little dusky. On April 17th it was decidedly swollen, and just beginning to ulcerate. On April 23rd it was definitely indurated, and showed in the centre a group of minute ashy-grey ulcers. At this date he had no rash, and no appreciable enlargement of the glands. There being not the slightest doubt that the induration was specific, I now directed him to take mercury. The course of events here illustrated is, I think, a very usual one. A small sore was noticed almost immediately after exposure, which healed in a few days. Then followed a four weeks' period of rest, and then inflammation about the little scar, and specific induration. It will be seen that seven weeks had passed before the induration was marked.

5. A young gentleman was brought to me by his uncle, suffering from syphilis. The first ailment had been gonorrhœa, and soon after this was cured, and whilst he was still under medical treatment, a chancre had shown itself. His guardian said that he could forgive the lad having been led astray, but that he felt keenly his untruthfulness, for he persisted in saying that he had exposed himself to risk only once. The surgeon who had treated the gonorrhœa had said that this story must be false, because he had during a whole month frequently inspected the penis, and was certain that there had been no trace of a chancre until five weeks after the advent of the urethral discharge. I was obliged to explain that I did not think sufficient allowance had been made for the incubation period, and that, in all probability, the lad's statement was correct. My assurance on this point not only did the lad an act of justice, but was a source of real gratification to his guardian.

6. In another case a young gentleman was exposed to risk of contagion but once. He caught a gonorrhœa, which developed immediately. Nearly five weeks after the exposure two sores showed themselves on the skin of the penis, and one on that of the abdomen, between the umbilicus and pubes. They all assumed the condition of large indurated chancres, and severe secondary symptoms followed.

Recurrent Chancres of False Indurations.—In connection with the doctrine as to second infection, it is very needful to appreciate the fact that chancres may recur. I believe that I was myself the first to draw attention to the very curious group of cases which illustrate this fact but two years after my brief notice of it; and, quite independently, M. Fournier wrote a far more complete account of the phenomena. Briefly, it is quite possible, and not a very rare occurrence, for indurations to develop, in the retrocoronal fold of the prepuce, which assume the most exact resemblance to hard chancres, but which are not consequent on any fresh contagion. They occur to those who have had syphilis, and usually, but not invariably, on the site of former chancres. They may happen repeatedly to the same individual, and cases in which this occurs afford the clearest proof that they are not newly contracted sores. They may occur at very various periods after syphilis, but usually within five years. Thus they are not to be associated with the phenomena which are definitely tertiary; at any rate, not so in many instances. Nor do they, as a rule, resemble tertiary gummata in the tendency which the latter have to grow irregularly, and to a large size; nor do they usually break down or slough-like gummata. For the most, they retain throughout the most exact resemblance to the ordinary collared chancre, and they are often wholly without ulceration. For myself, I have never, with one exception, seen them in any other position than that mentioned, the fold of mucous membrane just behind the corona, the most ordinary position for the best characterised primary sores. No doubt the development has something to do with the anatomical peculiarities of this part. Under mercurial treatment they melt away very quickly, and they are, I think, rarely attended by enlargement of glands, and never followed by constitutional disease.

The case in which a chancre, not on the penis, recurred, was one in which disease had been due to vaccination. In this instance about four years after the first disease, one of the scars, which had for long been perfectly sound, again inflamed, and became dusky and slightly hard at its edges. Mercury very quickly, as a rule, but not always, takes away these recurrent chancres, and they are not, I believe, usually attended by any other proofs of tendency to recrudescence of the constitutional taint. I have known at least one instance in which a gentleman had his chancre indurate again repeatedly during several years, and generally with about a year's interval between the attacks, and yet he remained otherwise in perfect health. I am not sure that, in some cases, the induration may not subside spontaneously, but I have never tried the experiment of leaving them without treatment.

I will relate, as an illustration of this occurrence, a case which I have seen this morning, and with the particulars of which you, Mr. President, are cognisant, for it was on your kind suggestion that I saw the patient. This gentleman, in 1882, had warts, which were cut away. He inoculated the wounds before they had healed, and

ıad sores, which were followed by sore throat, loss of hair, and sores ıt the anus. For these he took specifics very mildly. Then followed hree years of good health, and then a return of the chancres. At he present time, he has two small collar-chancres in the reflected pre- ›uce. They are as hard as cartilage; one of them, he is certain, is xactly in the site of a former sore, but respecting the other he is not o sure. Circumstances, into the detail of which I need not enter, nake him feel sure that he has not contracted fresh sores.

On Induration as a Symptom and on Syphilis without Chancre.—That we have been in the habit of attaching far too much impor- ance to the condition of induration as an almost essential charac- eristic of the initial lesion of syphilis, the observers of to-day are, I hink, pretty well agreed. When a sore takes on induration, it is, rovided, first, that the patient has never had syphilis before, and, econdly, that no caustic has been used, a certain indication of coming yphilis. But the absence of induration goes for very little in the ay of evidence, and it may vary in degree and in duration within ery wide limits indeed. In many cases, it lasts only a very short ime, and is only very doubtfully marked; in others, it may, in size nd duration, simulate a new growth. In women, it is often very ill ıarked, and its characters vary much in relation to the special tissue ffected. Such being the admitted, I may say, the every-day facts, it ı necessary to use this symptom with great caution in the diagnosis f syphilis. How variable in character, for instance, are the initial ›sions as we observe them on the fingers of surgeons. I have more ıan once seen severe syphilis follow a midwifery chancre, which was ever more than a little dusky, scaly spot, not so large as a threepenny- it, and never in the least excoriated.

If, however, we admit all this, we may still hesitate to admit that yphilis can begin without any chancre whatever. Yet for practical urposes that is the conclusion to which we must come. In other ords, there are cases in which the closest scrutiny, aided by a patient ho is not only candid but skilled as an observer, wholly fails to iscover any initial lesion. These cases divide themselves into two groups, ıose in which an attack of gonorrhœa preceded the constitutional ymptoms of syphilis, and those in which no local disease of any kind as observed. Both of these groups are, I believe, fully recognised y most authorities. Respecting the last, it is undoubtedly possible, ıdeed, in most instances, probably true, that a chancre had been esent and had escaped recognition. Thus in the mouth, and pecially on the tonsil, a sore, which was really the primary one, may ›t have been noticed until other symptoms appeared, and may then ıve been counted as part of the secondary group. I have seen several stances of this. On the genitals in women very frequently, and in men metimes, a small indurated sore may cause such slight irritation that s existence is never discovered. But, making every possible allow- ıce for such sources of fallacy, there still remain a few cases in which reful observation from the beginning has quite failed to find a sore, ıd in which every possible region has been searched. I recollect veral of this kind in which medical men were the patients. In these, ere was no cause for concealment, since exposure to risk was fully mitted, and the nature of the final disease recognised, and yet no ıe to the original sore could be made out. If we still, as a matter of pothesis, cling to the belief that there must have been a sore, these ses, in their practical bearing, remain very important. Is it possible at intra-urethral chancres may occur without pain, without gns of obstruction, without external hardening, and without dis- arge? Such is the suggestion of some, but it does not seem very obable.

Gonorrhœa-Syphilis.—The frequent occurrence of cases in which philis follows what was considered to be only gonorrhœa, suggests the itability of recognising what we might call gonorrhœa-syphilis. It is own to all that Hunter regarded the poison of gonorrhœa as identical th that of syphilis, and, no doubt, it was the occurrence of cases such I now refer to which had caused his belief. There is no danger now that e name I have proposed should mislead any into adopting again his oneous generalisation. Cases of gonorrhœa-syphilis must be familiar all who have opportunities for observation. The urethral inflam- ıtion is exactly like that of gonorrhœa, and by no means suggests a ethral chancre; and, in many cases, the urethra has been examined refully with the hope of discovering local induration or a tender spot thout result. I could cite several cases of this kind from my own te-books, but I shall probably employ our time more convincingly reminding you of the observations of others.

Mr. Lee relates, from Mr. Marston, a case in which two soldiers ntracted gonorrhœa, on the same day, from the same woman. Both nained under observation from the second day, the discharge hav- commenced immediately after exposure. One of them, who had d syphlis before, recovered without any other symptoms than those of gonorrhœa, but in the other syphilis followed. In the latter, Mr. Marston passed sounds, and tried to discover a local induration, but without avail. The woman who had infected these men was the subject of a cutaneous syphilide, and had vaginal discharge, but no sores could be discovered in her.

In connection with these cases, Mr. Lee quotes the opinions of Mr. Pearson and of Swediaur, both of whom held strongly that syphilis not very infrequently followed a urethral discharge indistinguishable from gonorrhœa, and wholly without the occurrence of chancre.

Mr. Hill has recorded an interesting case, in which the only initial lesion discovered was a general hardening of the whole penile urethra (presumably with gonorrhœal discharge). In explanation of these facts, it may be admitted at once, that there is nothing in the least improbable in the supposition that the particulate virus of syphilis may exist in gonorrhœal pus. If a patient, the subject of secondary syphilis, should contract gonorrhœa, no doubt the virus would pass into the discharge, since we know that it is present in the blood, and finds its way into all products of inflammation. Witness its presence in the transparent lymph of the vaccine vesicle. Given, therefore, a person suffering from both gonorrhœa and syphilis, what would be the probable result of contagion? Very likely, as is often seen, a gonorrhœa immediately and a chancre four or five weeks later; but if the latter were omitted, it is still conceivable that the gonorrhœa might allow the absorption of the virus. Possibly, the acute inflammation of the urethra may act in preventing the local adhesive inflammation, which constitutes the conspicuous part of a chancre. This seems a more probable hypothesis than that the virus is absorbed directly, without the intervention of any sore at all. It is to be noted that in gonorrhœa-syphilis there occurs usually definite induration of the inguinal glands. A certain number of experiments have, I am aware, been tried with negative results, in the inoculation of gonorrhœal pus from the male urethra, the patient being the subject of syphilis. M. Basset, as quoted by Hill, inoculated in this way six persons, without result. It is not improbable that the poison of syphilis is under such circumstances, much diluted, and perhaps placed under disadvantages. It is impossible to accept the evidence of such experiments as conclusive, when we remember how frequently vaccination from syphilitic infants proves innocuous, whilst it succeeds with virulence in a few. Tarnowsky (also quoted by Hill) inoculated eighteen times with the purulent discharge from the vagina of a syphilitic woman, who had no local sore. Only once did he succeed in producing a chancre, which was followed by syphilis. Mr. Morgan, in his experiments, very properly declined the responsibility of inoculating non-syphilitic subjects; and I should certainly, for one, regard a repetition of the experiments of Basset and Tarnowsky as wholly unjustifiable.

Syphilis conveyed in Vaccination with Clear Lymph.—A question which was a few years ago in dispute, but which has, I may say unfortunately, been finally set at rest, is the possibility of conveying syphilis by translucent vaccine-lymph. The belief that it was necessary to draw blood, or, at any rate, to allow the vesicle to drain after emptying it, and thus permit the escape of fresh leucocytes, can no longer be entertained. One of our own profession, with that enthusiasm for knowledge which Hunter displayed in a parallel experiment, made himself the victim, and placed the facts beyond the reach of doubt. The facts of the case are probably known to many present; but as they may be new to some, I may be permitted to relate them. They came under my personal cognisance, but, for obvious reasons, I do not mention names. The gentleman to whom I refer vaccinated his own arm repeatedly, and in many places, from syphilitic infants, being very careful on every occasion to use only clear lymph. On the first two occasions he failed, but on the third he succeeded, and three indurated chancres were the result, followed in due course by constitutional symptoms. The incubation-periods I have already mentioned, the punctures inflamed on the twenty-third day, and were well indurated on the forty-first. It is impossible not to admire the self-devotion which prompted to this experiment, and especially to the perseverance and repetition of it. Had that repetition not taken place, and had a report of results been given to the world after the first two trials, how strong would have been the conviction of all in the truth of the creed that pure lymph, even from infected vaccinifers, is safe. Not often, probably, has our science had so near an escape of being encumbered by a false fact.

The interest of this demonstration does not end with its relations to the practice of vaccination. It proves that the virus of syphilis may exist in a perfectly clear fluid, and in company with that of another specific fever. We know from experiments that if the purulent secretion of soft sores be filtered so as to get rid of pus-cells, it is no longer inoculable. The converse is probably true of the virus of

syphilis. The contagium of the one is pus, that of the other the particulate micro-parasites of a specific fever.

Now, Mr. President and Gentlemen, permit me, in conclusion, briefly to recapitulate. We have concerned ourselves this evening almost solely with the more exceptional of the phenomena which occur in connection with primary sores. We have glanced at the topics of incubation-periods; of recurring induration; of the occasional absence of the usual conditions in primary sores; and at the explanation of the differences presented by different sores of venereal origin. I have tried to reconcile the doctrines of the dualist and the unicist by showing that both are in a sense right, with, however, an abiding protest that there is but one syphilis. I have spoken also of the relations of phagedænic action to syphilis, expressing a belief, which I have often expressed before, that syphilis is in truth the parent of almost all phagedæna. By reference to this doctrine, I have tried to explain the origin of hospital-gangrene. Lastly, I have mentioned briefly the sad, but important and final, proof, that clear vaccine-lymph may contain the virus of syphilis. On most of these topics, it has been my pleasant duty to rest my conclusions quite as much on the observations and opinions of others as my own. Although I have not often, under the exigencies of the occasion, found time to mention names, yet I may now say that the excellent works of Henry Lee, Berkeley Hill, Fournier, and Bumstead, have been laid under constant requisition in preparing the statements which I have made this evening. Although I cannot pretend that there are no differences of opinion, it has been a great pleasure to note a very general unanimity of testimony on most points.

A LECTURE
ON
THE EXCITING CAUSES OF DISEASE.

Delivered before the Edinburgh Health Society.

By BYROM BRAMWELL, M.D., F.R.C.P.Edin.,
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(Concluded from page 6.)

In order to understand the measures which should be taken for the prevention and stamping out of these specific infectious and contagious diseases, it is essential to realise that the germs which produce them are not, so far as we know, generated *de novo* (afresh), but that they are always transmitted from some pre-existing case of the same kind. The poison of scarlet fever always comes from a pre-existing case of scarlet fever, that of small-pox from a pre-existing case of small-pox, and so on. If, then, you can destroy all the poison which is given off from every case, for instance, of scarlet fever, and not allow any of it, while still active, to come into contact with any susceptible person, you will ultimately succeed in stamping out the disease. It must, however, be remembered that the poison of some of these diseases is very tenacious of life, that it may lie long dormant; and that, for this and also other reasons (notably, that the poison is invisible), it is not always possible for us to trace the exact source of infection, or to put our finger on the pre existing case.

The most important means of stamping out the specific infectious and contagious diseases are as follows.

1. *Isolation of the Sick.*—Thorough isolation can seldom be properly carried out in a private house, and is simply impossible in the houses of the poor, where all the members of the family live in one or two rooms. Unless thorough isolation can be carried out, it is generally advisable, in the case of such diseases as scarlet fever and small-pox, which are both very infectious and very fatal, to send the patient to hospital. I am speaking generally; the special nature and circumstances of each case must be taken into account.

To provide the necessary hospital-accommodation, most of our large towns have fever-hospitals. As you are probably all aware, our Edinburgh fever-hospital, which was, until quite recently, connected with the Royal Infirmary, has been—most properly, I think—taken over by the town, and will henceforth be managed by the Public Health Authorities, and supported by the rates. I do most sincerely hope that, whatever additional rate it may be necessary to impose, there will be no complaining or demurring at it. Had time permitted, I would have liked to have read to you a lecture by Sir James Paget, in which he shows the costliness of sickness and the enormous money-loss which the nation annually sustains from sickness due to preventable disease.[1] Now, if this is true of the nation as a whole, it is surely true of each one of its corporate parts; in short, it can, I think, be conclusively shown that any sum, however large, which is legitimately spent in the arrest and prevention of infectious disease, is well invested and well spent money. I strongly hold that it is a sound and good financial policy to provide for cases of fever and infectious disease the best hospital-accommodation, the best medical skill, the best nursing, and the best feeding and medical appliances which can be procured. Unless a fever-hospial be conducted on the most approved principles, and officered by the highest class of officials (and that, I need not say, necessitates a large expenditure), the public will not feel full confidence in it, and will not make use of it; and the very object for which it is provided, namely, the isolation of the sick and the arrest of infectious disease, will be defeated.

Satisfactory isolation in a private house is only possible when that portion of the house in which the patient is placed can be thoroughly cut off from the remainder. There must be no passing backwards and forwards between the general body of the house and the sick-room. Those who nurse the patient must submit to be isolated too. The sick-room should be cleared of all unnecessary articles of furniture; curtains and bed-hangings should be removed; free ventilation is essential, and care must be taken that the air from the sick compartments does not blow into the rest of the house.

2. *Destruction of the Poison which is given off from the Body of the Patient.*—This is a very important point. When, as in whooping-cough, the poison is given off in the breath, free ventilation, which dilutes it, and the frequent use of the steam carbolic spray in the sick chamber, are the best means which can be employed. When the poison is given off, as it is in cholera and typhoid fever, from the bowel, a powerful antiseptic—a solution of corrosive sublimate is probably the best—should be freely mixed with the evacuations before they are discharged into the house-drains. When, as in scarlet fever, the poison is contained in the particles of skin which are thrown off from the surface of the body, frequent washing with an antiseptic solution, and the inunction of carbolised oil, are probably the best means which can be employed.

The patient must, of course, be confined to the sick chamber until all risk of infection is passed. The medical attendant is naturally the person who decides this point; and in forming an opinion it is always right to err on the side of caution, and to keep the patient strictly isolated for several days longer than may at first sight appear absolutely necessary.

After the patient leaves the sick-room, it, together with all articles of clothing, furniture, bedding, etc., must, of course, be thoroughly disinfected. Books, playthings, etc., which have been in contact with the patient, must be either disinfected or destroyed. But to go fully into this and other points would require much more time than we have at our disposal this evening.

I cannot, however, leave this part of the subject without reminding you that we citizens of Edinburgh are fortunate in this respect, that we have only to make a request to the local health-authority, and we can have our houses, rooms, furniture, bedding, etc., disinfected for us. I would strongly advise any of you who are so unfortunate as to have cases of infectious disease in your houses, to avail yourselves of this assistance. You must remember that to carry out the process of disinfection thoroughly and satisfactorily, special knowledge and skill—which few private persons, unless they be medical men, possess—are required. If the assistance of the proper authorities were always called in, we should not hear complaints, as we now not unfrequently do, of bedding and articles of clothing, which have been used by persons suffering from infectious disease—such as scarlet fever—being aired and shaken close to the windows of a neighbouring dwelling, a most dangerous proceeding, which cannot be too severely condemned.

3. *Individual Sanitation.*—The third great means of preventing and arresting the spread of infectious disease is the most careful attention to cleanliness, drainage, and all other sanitary matters by each individual for himself.

The wise saying, "If you want a thing well done, do it yourself," is specially applicable to health matters. Public sanitary authorities and sanitary associations are all very well in their way—and far be it from me to say one word which would appear even to lessen their value and importance—but they can never take the place of individual effort. Unless each member of the community attend, so far as his knowledge enables him to do so, to the sanitary arrangements of his own house and premises, we shall never have that im-

[1] An Address on the National Value of Public Health (BRITISH MEDICAL JOURNAL, June 21st, 1884).

proved and perfect sanitary condition at which we are aiming, and which is so much to be desired.

4. *Public Sanitation.*—The fourth great means of preventing and arresting the spread of infectious and contagious diseases is the proper regulation of sanitary matters by the public authorities who have charge of and are responsible for the public health, such as the regulation of the drainage and water-supply, the proper cleansing of the streets, the prevention of overcrowding, the suppression of all forms of nuisance, the compulsory notification of infectious disease, the provision of ample and suitable hospital-accommodation for cases of infectious disease, of suitable means for the removal of infectious cases from their own homes to hospital, of disinfecting dwellings, bedding, clothing, etc.

I need not say that, to carry out all these requirements, an intelligent and active medical officer of health, who should be independent of private practice, and an adequate staff of inspectors and assistants, in addition to an enlightened and energetic health authority, are absolutely necessary. Nor need I add that we citizens of Edinburgh are fortunate in having all those matters provided for us in a remarkable degree.

5. *Production of Insusceptibility to Infectious Disease.*—The fifth great means by which an infectious disease may be arrested or stamped out is by rendering the population insusceptible to it.

As yet there is only one disease which can be with certainty controlled in this way, namely, small-pox, by vaccination and revaccination; though the illustrious Frenchman—M. Pasteur—to whom the world is already deeply indebted for his many remarkable observations and researches, has within the past few weeks claimed to have discovered a means of inoculation by which a person who has been bitten by a mad dog can be protected against that terrible disease, rabies or hydrophobia.

As you are doubtless all aware, compulsory vaccination meets in some parts of the country with vehement opposition. It is impossible this evening to attempt to enter fully into this question, which is one of national interest. But if I do not weary you, I would like very briefly to mention the leading arguments and counter-arguments, and to ask you to think over them, and to consider the matter carefully for yourselves. The question is certain to come up before the next or some future Parliament; and it is of the utmost importance that the mass of the population should be thoroughly informed as to its merits; more especially since, by the extension of the franchise, the power of influencing legislation has been largely placed in the hands of those who have not perhaps as yet given any serious consideration to the question, and are not therefore, without further information, in a position to form a sound judgment upon it.

Three main objections are advanced against compulsory vaccination. They are as follows.

a. It is an Unwarrantable Interference with the Liberty of the Subject.—Against this argument, I would say that an epidemic of small-pox is infinitely more destructive than an epidemic of dynamite explosions; and since, as we all know, the Legislature, backed by the unanimous voice of the country, has quite recently enacted, with unprecedented rapidity, the most stringent legislative measures against dynamite explosions, this argument falls to the ground.

b. Vaccination does not Protect against Small-pox.—Against this argument I have no hesitation in saying, that the results of the compulsory vaccination and revaccination, both in this and in other countries, are absolutely conclusive. I would ask any of you who wish for further information to study these statistics and results for yourselves, feeling confident that no unprejudiced person, who is capable of weighing evidence, and who carefully goes into the subject, can come to any other conclusion than that which, I may without exaggeration say, is the opinion of the overwhelming majority of the medical profession.

c. The Remedy is worse than the Disease.—It is alleged that grave injury is caused by vaccination, and that serious disease is propagated by it. Now, I do not deny that serious disease has occasionally been propagated by vaccination; but I say that such cases are infinitely rare, and do not occur provided that the lymph is selected with reasonable care, and the operation performed with reasonable care and skill. The danger of propagating disease by a carefully performed vaccination is, in my opinion, infinitesimal, while the benefits which the operation confers can hardly be exaggerated. Against the careless and improper performance of vaccination, the common law provides a remedy, just as it does against any other form of medical malpractice.

It is alleged that the opinion of the medical profession on this question of compulsory vaccination is valueless, for the doctors, it is said, are prejudiced. It is suggested that we medical men support compulsory vaccination, because it brings us in some few miserable half-crowns. In Edinburgh, where the medical profession is proud to be held in high esteem, such an argument, I feel sure, would be scouted by the public. I need not say that we indignantly repudiate such an imputation. If any of you should hear such an argument advanced, I would ask you to indignantly repudiate it for us. I would ask you further to meet the argument on its own low ground, and to say that epidemics of small-pox would pay us infinitely better. Further, I would have you ask whether it is alleged that we medical men care less for the health and lives of our own children than other people—whether it is supposed that we would be so inhuman as to vaccinate our children if we thought that there was any real practical risk of communicating serious or loathsome, or indeed any disease whatever, to them by means of the operation.

The Prevention of Cholera.—Before concluding these remarks on infectious and contagious diseases, I am anxious to say a few words with regard to the prevention of cholera, which, as you all know, has during the past two years worked terrible havoc and desolation in the southern parts of Europe. I do not want to be an alarmist but to be forewarned is to be forearmed; and it is more than likely that the epidemic which is happily now subsiding may, during the summer or autumn of next year, again burst forth in France, Italy, or Spain; and, should it do so, it is not at all improbable that it may be carried to our shores.

Cholera, as you all know from the newspaper-reports, is one of the most dreadful scourges which affect mankind. I never shall forget the terrible three weeks' experience which I went through during the autumn of 1866, when, as a medical student, I was called upon to assist my father, who was in large practice in a North of England seaport town, which was very severely attacked by the disease. But my object is not to frighten you with an account of the disease, but to endeavour to give you some practical hints as to the precautions which it is advisable to take should we unhappily be invaded by it.

I very strongly agree with those who think that cholera is one of those diseases which is, in all probability, propagated by a living germ. The great German pathologist, Professor Koch, has, as probably most of you know, actually claimed to have demonstrated the germ (the cholera-bacillus); though other authorities—notably the English Cholera Commission—stoutly oppose his views. It would be out of place to enter here into the merits of that most interesting and important question; but, be that as it may, there are, I think, weighty reasons for supposing that the poison is a living organism.

No reasonable man doubts that cholera is carried from place to place by persons who are affected by it; that it follows the lines of communication of traffic. It is also proved that it is propagated by drinking water which has become contaminated by the evacuations of cholera-patients; further, although the disease is not directly contagious in the sense that scarlet fever and small-pox are, it is admitted that the evacuations from the bowel contain the cholera-poison, just as the evacuations from a case of typhoid fever contain the typhoid poison; washerwomen, for instance, who handle the bedding and linen which have been soiled by the cholera-evacuations, have been known over and over again to be attacked by the disease. Some of our army-surgeons seem to think that in India, which is the birthplace of the disease, the poison may be conveyed from place to place through the atmosphere; but that this ever takes place in this country seems, to say the least of it, very doubtful. Further, the cholera-poison—as indeed the poison of almost all of the specific contagious diseases which I have previously spoken of—delights in filth; this is undoubtedly one cause of the terrible way with which some of the continental towns have been decimated by the disease. Now, if you have thoroughly grasped these fundamental facts with regard to cholera, you are in a position to understand the more important precautions which it is necessary to take to ward off and prevent the disease.

It is impossible at this late hour to go into full details, but the following are the most important points.

1. Persons coming from an infected district should be inspected, and, if they present any suspicious symptoms, they should be isolated in hospital, and placed under medical observation and treatment. Ships, for example, coming from an infected port, are regularly inspected; if any actual cases of the disease have occurred, or if there have been any cases of suspicious illness during the voyage, they are placed for a time under observation in quarantine, and the sailors and passengers are not allowed to land until proper measures of disinfection have been adopted, and until the medical officer—representing the port sanitary authority—is satisfied that they may be allowed to land and mix with the population without risk or danger. In many of our sea-

ports, floating hospitals are provided, for the purpose of isolating suspicious cases of infectious disease.[1]

Almost all the best authorities now recognise the uselessness of sanitary cordons, and of general and indiscriminate methods of quarantine.

The most thorough isolation of the first cases which occur in any district is essential; after the disease has assumed the proportions of an epidemic, isolation is, of course, impossible.

2. The most scrupulous attention should be given to sanitary arrangements, both by private persons and by public authorities. It is unnecessary, after what has been said in the previous parts of this lecture, to dwell on this most important means of diminishing the severity of an epidemic of cholera should it unfortunately arise. It is, however, with great satisfaction that I can assure you that our local sanitary authority seems fully alive to the importance of this matter. Never since I have known Edinburgh, have our wynds and alleys, which are the sort of places in which the cholera poison might be expected to chiefly locate itself and propagate, appeared to me to be in such good sanitary condition, as they have been during the past year.

3. In times of epidemic, every member of the community should look carefully after his own health, and should endeavour to keep it in the highest possible state of efficiency. In particular, the diet should be plain and simple; all foods should be thoroughly cooked; articles of food, such as unripe or rotten fruits, which are likely to cause intestinal irritation, should be rigidly avoided. Anything which produces gastro-intestinal irritation and diarrhœa is a most powerful predisposing cause of the disease. All depressing causes, such as over-fatigue, exposure to cold, excesses of all kinds, anything in short which exhausts the nervous energy, or lowers the vitality and resisting power of the system, should be carefully avoided; for they undoubtedly predispose to the disease. The wearing of a flannel belt round the bowels is highly recommended by many experienced authorities. Amongst the predisposing causes there is none more potent than fear; persons of a nervous temperament, and those who are afraid, should leave the infected locality. No water should be drunk which has not been previously boiled, for the cholera-poison is usually distributed through water, and boiling is the most effectual way of destroying it. Milk and other fluids, which could by any chance be contaminated with the cholera-poison, should also be boiled. The ventilation of private houses, both the sleeping and sitting-rooms, must be carefully attended to.

4. Should any symptoms of illness arise, medical advice should be immediately summoned. Diarrhœa is usually the first symptom. There is some difference of medical opinion as to the treatment of cholera, but I altogether agree with those who think that the diarrhœa should be immediately stopped by appropriate remedies. This was the treatment which was adopted in my own case (for I was attacked with this symptom, which may or may not have been the commencement of cholera, that I cannot say); and it is the treatment which I should again adopt were I to be again attacked with any manifestations of the disease. During an epidemic of cholera, every one should apply to his medical attendant, and have the appropriate remedies ready in his house; much depends on the early treatment, for the disease is one which runs a very rapid course, severe cases often proving fatal within a few hours.

5. Thorough disinfection of the cholera evacuations; thorough disinfection, or, better still, destruction (burning) of all linen, bedding, etc., which has been soiled by the evacuations, or been in contact with the patient; thorough disinfection of infected dwellings, etc., should be carried out. Patients affected with cholera, and houses in which there are cases of cholera, should be kept scrupulously clean. The cholera-evacuations should, immediately after being passed, be mixed with a strong disinfectant; a solution of corrosive sublimate or of persulphate of iron is probably the best; or after being received in a vessel containing sawdust, they should be immediately burned. Linen bedclothes, etc., which have been in contact with cholera-patients, or soiled with cholera-discharges, should be immediately immersed in boiling water, or in an antiseptic solution, and should be then boiled. Should the nurse or attendants become soiled with the cholera-evacuations, the dress should immediately be changed and disinfected, and the parts of the body which have been exposed to the contagion, or better still, the whole body, carefully washed with an antiseptic solution.

Before meals, care should be taken that the hands are scrupulously clean; dishes, glasses, knives, forks, etc., should be immersed in boiling water before being used.

From what I have said, you will have perceived that *(a)* the isolation of early cases, *(b)* the destruction of the poison given off from infected persons, and *(c)* scrupulous attention on the part of every individual to avoid introducing any living cholera-germs into his own person, through food and drink, together with *(d)* the avoidance of all predisposing causes, and *(e)* attention to general sanitary matters, are the chief means by which we endeavour to limit the spread of this disease.

My Lord Provost, Ladies, and Gentlemen,—I had hoped, when I began to think over the subject of this lecture, that I might have been able to tell you something about the indirect or predisposing, as well as of the exciting, causes of disease; but that is both a large and important subject, and to treat it at all satisfactorily would occupy at least another hour. I dare not attempt to trespass further on your patience this evening. In conclusion, I can only say that I do most sincerely trust that the information I have given you may prove of real helpfulness and usefulness, to some of you at least, in the conduct of your future lives.

[1] The Tyne Sanitary Authority, of which my father was for many years the medical officer, was one of the first, I speak under correction, but I think I am right in saying the first, sanitary authority to adopt this arrangement, the great value of which I had many opportunities of observing during the four years and a half I was Visiting-Physician to the Tyne Floating Hospital.

FURTHER RESEARCHES ON CHOLERA.

By R. KOCH, M.D.,
Professor of Hygiene in the University of Berlin.

Speech at the commencement of the Second Conference on Cholera, held at Berlin on May 4th, 5th, 6th, 7th, and 8th, 1885.

(Concluded from page 8.)

It is only in the matter of experiments on animals that advance has been made, Nicati and Rietsch having succeeded in infecting dogs and guinea-pigs by injection into the duodenum of cholera-dejecta, or of pure cultivations of the comma-bacilli. These experiments have been repeated and confirmed here in the Sanitary Institute, and also by Babes, Flügge, and Watson Cheyne. Rietsch and Nicati at first believed that the infection could only be brought about by arresting the flow of bile; and therefore they ligatured the ductus choledochus. However, they afterwards found that the experiment succeeded without this ligature. Our experiments also were performed partly with and partly without ligature of the ductus choledochus, and gave the following results. Of ten guinea-pigs, in which the bile-duct was tied, and then cultivations of the comma-bacilli injected into the duodenum, six died of cholera in the first two days; the remainder died later, as the result of the ligature. You see here, preserved in alcohol, the abdominal organs of such a guinea-pig, which survived the injection, but quickly lost flesh, and died on the ninth day after the operation. The gall-bladder is enormously distended, as is also the ductus choledochus above the point of ligature. There is no trace of peritonitis in this case. In another guinea-pig, which died on the twelfth day after the operation, the gall-bladder had burst, and the abdominal cavity was filled with bile. The two remaining guinea-pigs died as the result of twist and closure of the intestine, in consequence of peritonitic adhesions in the immediate neighbourhood of the seat of ligature. In these experiments it struck me that, the better the operation was performed, and the less extensive the manipulations, so much the less chance was there of the animals dying of cholera. Of the eighteen animals in which the injection was made into the duodenum, without ligature of the gall-bladder, thirteen died of cholera.

At the same time, control experiments were also made by injecting other forms of bacteria, for example, micrococcus prodigiosus, various forms of bacilli, etc., into the duodenum of guinea-pigs. Of these animals, in which the bile-duct was not tied, none died. This shows that the operation is not of itself dangerous to the animals. Klein asserts that the guinea-pigs in these experiments did not die of cholera, but of septicæmia. But, according to my experience, the danger of septicæmia after this very simple operation can be excluded with certainty, and one must proceed very clumsily to lose the animals from septicæmia.

In this set of experiments also (without ligature of the bile-duct) the results are so much the less positive, the less the disturbance, and the less the intestine is squeezed or torn in searching for and pulling forward the duodenum. Hence the experiment succeeds only exceptionally when one limits oneself to opening the abdominal cavity only to a small extent, and making the injection into the coil of intestine first exposed, instead of into the deep-lying duodenum. Of six guinea-pigs which were operated on in this way, only one died of cholera, the rest remained alive. The same experiment was then performed on four rabbits, without any of them dying or even becoming ill.

Although, therefore, a process analogous to cholera in man can be produced in the digestive tract of animals by injection of comma-bacilli into the duodenum, nevertheless, one must admit that this mode of infection corresponds very slightly to the natural process of infection. It is by no means an insignificant injury to open the abdominal cavity and search for and pull forward the duodenum, in order to introduce the infective material into this part of the intestine. I have, therefore, made every effort to infect the animals in a natural manner, and my attempts have been finally successful. It seems to me not unimportant to describe the way which ultimately led to the positive result. The earlier experiments had already shown that the comma-bacilli were killed in the stomach; for, if one feed animals with choleraic fluids, or with cultivations, and kill them after some time, one does not find any comma-bacilli in the stomach or intestine. They have died in the stomach. But the absence of infection could not be due to this cause alone; for in the injection into the duodenum the stomachic digestion was avoided, and, nevertheless, the infection did not always succeed. I have, therefore, in order to gain some idea of the conditions which come into play here, made a number of preliminary experiments, confining my observations to guinea-pigs, as these animals seem to be particularly susceptible to the cholera-infection. In the first place, it was necessary to study more minutely the natural digestive conditions in guinea-pigs. If one examine a recently killed guinea-pig, the stomach is found to be at all times filled with a firm mass of food, so that if anything, for example a fluid, be introduced into the stomach, it cannot at once pass through it. I had at first supposed that, if a large quantity of fluid containing bacilli were injected into the stomach of these animals, this fluid could be forced through the stomach; but I very soon convinced myself that this is quite impossible, for the stomach would be burst sooner than the thick firm mass which fills it could be forced to one side. In contrast to the stomach, the small intestine in guinea-pigs is almost empty. The contents of the stomach have a strongly acid reaction, the mucous contents of the small intestine are alkaline; but the cæcum, which is very large in these animals, has again distinctly acid contents; so that it is only in the small intestine that there would be any opportunity for the comma-bacilli to grow and increase. In order to learn something as to the time which the ingesta take to pass through the stomach and intestine, guinea-pigs were fed with different kinds of food alternately, with carrots and hay. In animals killed from one to two hours after the change of food, it was seen that the foods do not mix in the stomach, as is the case in digestion in man, but that they are pushed through the stomach slowly in layers in the order in which they are taken in, so that a red layer of carrots follows, and is sharply marked off from a dark-greenish layer of hay, or *vice versâ*. The food passes remarkably rapidly through the small intestine into the cæcum. This could be very distinctly seen by feeding the animals with colouring matters.

If, for example, a quantity of Chinese ink were injected into the stomach, one could follow with yet greater distinctness the passage of the food in layers through the stomach, and notice that the colouring matter, as soon as it had passed through the pylorus, could be found in a very short time in the cæcum. Similar experiments were made with small blue glass beads, and it was found that the beads passed through the stomach in a comparatively short time, but only with the layers of food with which they entered it, and that they then wandered through the small intestine very quickly, probably in a few minutes, to remain in the cæcum for a considerable time. For example, in one experiment, 250 beads were administered, and the animal was killed in three hours. At that time, only half the beads were present in the stomach, the small intestine did not contain a single one, while a large number were present in the cæcum. An experiment in which the animals were fed with anthrax-spores is also worthy of mention. It might be assumed that beads are bodies from the behaviour of which in the stomach and intestine one could not draw conclusions as to the behaviour of bacteria. Four guinea-pigs were fed with large quantities of anthrax-spores. One of these animals was killed after two hours and a half, and the contents of the stomach, small intestine, and cæcum were tested in plate-cultivations in nutrient gelatine as to the presence of anthrax-bacilli. In this case, many anthrax-spores were found in the stomach and also in the small intestine, and some spores had even reached the cæcum; thus, in the short space of two hours and a half, the mass of food had passed through the stomach and small intestine. A second animal was killed after three hours; the number of spores in the stomach was already markedly less; in the small intestine, they were still numerous, as also in the cæcum. The third guinea-pig was killed after three hours and a half, and then the stomach contained only a few spores; in the small intestine, they were much less numerous than in the other cases, but, in the cæcum, there were considerable numbers. In the fourth animal, killed after five hours, there were only very few spores in the stomach and small intestine; in the cæcum, on the other hand, they were very numerous.

From these experiments it was evident that pathogenic bacteria, when given to a guinea-pig as food, pass the stomach and small intestine surprisingly quickly, but nevertheless remain long enough in the stomach to be destroyed by the gastric juice, unless they be in the resisting resting stage, like anthrax-spores.

It was now necessary to attempt to get bacteria free from spores, such as the comma-bacilli, to pass uninjured through the stomach. In order to render this possible, fluid containing bacteria was made up into pills, which were covered with keratin; and, as this method failed, other substances, such as collodion, caoutchouc, paraffin, etc., which are insoluble in the stomach, were used as coating materials, but all in vain. Thereupon, I attempted to destroy the acid reaction of the stomach, if only for a short time. In the first place, I ascertained what doses of the alkaline fluid could be borne by guinea-pigs without injury. A 5 per cent. solution of carbonate of soda proved most suitable for the purpose, and five cubic centimètres of this fluid could be administered without any noticeable bad effect. If, then, a sample of the contents of the stomach were removed by means of a catheter, it was found, as shown in a number of experiments, that even for three hours the reaction of the contents of the stomach remained alkaline. When we had ascertained this, we at once proceeded to feed animals, whose gastric juice had in this way been rendered alkaline, with cholera-cultivations, or to inject the same into the stomach by means of a catheter. In the first experiment, seven guinea-pigs were employed. These received five cubic centimètres of the soda-solution; and some time afterwards, in order not to bring the cholera-bacilli immediately into contact with the soda-solution, ten cubic centimètres of meat-infusion, in which cholera-bacteria were growing, were administered. These animals appeared quite well afterwards. As, even later, nothing seemed to be wrong with them, they were killed after twenty hours, and the contents of their stomach, intestine, and cæcum were examined by gelatine-plate cultivations. In six of the seven animals, the cholera-bacteria could be demonstrated in the small intestine. The experiment had thus in so far succeeded, that the cholera-bacilli had passed uninjured through the stomach; but they had not set up any disease in the animals. The experiment was then repeated in this way: two guinea-pigs received 2 per cent., and six guinea-pigs 5 per cent. of soda-solution; and then the cholera-bacilli. These animals also remained quite healthy. From these results, it was at least evident that there was no danger in introducing a syringeful of a 5 per cent. solution of soda into the stomach. Finally, a third experiment was made with four guinea-pigs, which also received, first a 5 per cent. solution of soda, and then the cholera-bacilli. These animals likewise remained healthy; but one of them appeared ill next day, looked shaggy, and did not eat. On the following day, it was very ill. It exhibited very peculiar symptoms, which were already known to me in the case of animals infected by injection into the duodenum. There was a paralytic weakness of the posterior extremities; the animal no longer supported itself on its hind legs, but lay quite flat, with its limbs stretched out. The respiration was weak and slow. The head and extremities were cold, the pulsations of the heart hardly perceptible, and the animal died after it had lain for a few hours in this condition. Immediately after death, an examination was made, and the most marked choleraic changes were found in the intestinal canal. The small intestine was markedly reddened, and full of a flaky, watery, colourless fluid. The stomach and cæcum also did not contain, as usual, firm masses, but a large quantity of fluid. Diarrhœa had not occurred; and, corresponding to that fact, there were still firm balls of fæces in the rectum. The examination with the microscope and with gelatine plates showed that the contents of the small intestine contained a pure cultivation of numerous comma-bacilli. Now, it was very striking that, of nineteen animals, only one had become infected, and this by chance an animal which had aborted immediately before the infection. On *post mortem* examination, it was found that the abdominal walls were very flaccid, and the uterus still greatly enlarged. This led me to the idea that either the abortion *per se*, or perhaps its unknown cause, had acted on the other abdominal organs, more especially on the small intestine, in such a way as to produce a temporary relaxation, with arrest of peristaltic movement; and thus had rendered it possible for the comma-bacilli to remain longer, and gain a footing in the intestine.

In order to produce a similar condition experimentally, alcohol, chloral, morphine, atropine, and opium were employed in the form of subcutaneous and intraperitoneal injections, and it was found that opium answered the purpose best; opium must, however, be adminis-

tered to guinea-pigs in a special manner. Incredible doses can be given internally to these animals without producing any appreciable effect. This fact may, to a certain extent, find an explanation in the previously described conditions of the food in the stomach. The dose of tincture of opium administered cannot at once come into action, because it at first remains among the large quantity of food present in the stomach, and is only gradually absorbed; hence a sure administration of the drug is not possible, and I have therefore preferred to introduce it by injection into the peritoneal cavity, which is very easily carried out, and without danger.

I employ opium in the form of tincture, and in the dose of 1 cubic centimètre to every 200 grammes of the body-weight of the animal. After such a dose, a marked narcosis occurs in a very short time, and lasts for half to one hour, after which the animal becomes as lively as before. Thirty-five guinea-pigs were experimented on by introducing the soda-solution and the cholera-cultivation into the stomach, and subsequently injecting tincture of opium; of these, thirty died of cholera. The clinical symptoms and the *post mortem* appearances were the same as in the case of the guinea-pigs where the injection was made into the duodenum, and of the guinea-pig before mentioned, which died after the introduction of the soda-solution and cholera-cultivation alone.

If the dose of the soda-solution or of the cholera-fluid be reduced, the result is somewhat more uncertain. Thus, for example, fourteen guinea-pigs were fed with 5 cubic centimètres of the soda-solution, and then with a fluid containing only one-third of a drop of the cholera-cultivation. Of these only seven died of cholera, the remaining seven remained well.

In yet another experiment, in which the dose was still further reduced, twenty-seven guinea-pigs were employed, of which only seven died. In all, eighty-five guinea-pigs have up to this time been infected in this way with cholera, and have always died with the same characteristic symptoms and *post mortem* appearances. I will only mention in addition, that one can also successfully carry the infective material from one animal to another. In the place of the cholera cultivation, the contents of the small intestine of a guinea-pig which had died of cholera were administered to another, which in like manner died of cholara.

Very remarkable results are also obtained when other bacteria are administered to these animals along with the soda-solution and tincture of opium, in the same manner as in the case of the cholera-bacilli.

Finkler's bacilli can also kill guinea-pigs by this method of infection, but they are not so virulent as the cholera-bacilli, for of fifteen animals infected therewith only five died. The *post mortem* appearances were also different in this case from those which died of cholera. The intestine was indeed likewise filled with a watery fluid, but it had a pale grey appearance; the vessels were not nearly so markedly injected as in the cholera animals, and the intestinal contents had a penetrating putrefactive smell, which corresponded exactly to the smell produced by Finkler's bacteria in nutrient jelly.

The curved bacilli, cultivated by Deneke from old cheese, were also tried, as well as those obtained by Miller from a hollow tooth, which latter are apparently identical with Finkler's. Of fifteen animals infected with Deneke's bacilli, only three died; of twenty-one infected with Miller's, only four.

The guinea-pigs which survived these experiments were afterwards fed with cholera-bacilli, and all succumbed to the cholera-infection.

Pathogenic bacteria which, under ordinary circumstances, do not act on guinea-pigs from the intestine, can be made to do so by the use of this method; as, for example, anthrax-bacilli free from spores, and the previously mentioned Brieger's bacteria. Others, such as the bacteria of chicken-cholera, of osteomyelitis, of rabbit septicæmia, and of erysipelas, produced no effect under these conditions. The bacilli of typhoid fever even, which have not as yet been successfully inoculated on animals, gave a doubtful result, and hence the experiments with them must be repeated.

I would only mention, in addition, that attempts were made in other ways to set up, in the intestine, conditions suitable for the development of the cholera-bacteria. For example, we gave animals castor-oil and croton-oil, or fed them with yeast, in order to set up an intestinal catarrh. Further, we have injected turpentine-oil, tincture of iodine, glycerine, alcohol, etc., into the peritoneal cavity, and, in a few cases, have had successful results therewith; by the use of alcohol, we were most successful in making the animals susceptible to the cholera-infection, but, as a whole, the effect of alcohol was not so good as that of tincture of opium.

We can now conclude, from these experiments on animals, that the cholera-bacteria possess very potent pathogenic qualities, and are able to show them when they enter uninjured into the intestine, and find it in a condition in which they can obtain a footing and develop. In guinea-pigs, these conditions can only be produced artificially; but, in man, the conditions of gastric digestion are quite different from those in the guinea-pig. The human stomach is not constantly filled with a strongly acid fluid, like the stomach of our experimental animals. Probably, it is often in a condition in which the contents have a neutral or even alkaline reaction; for example, always after the end of true gastric digestion, and the passage of the chyme into the small intestine.

To Professor Ewald, who has recently busied himself with this question, I am indebted for some interesting facts with regard to this point. He found that, when water was introduced into the empty stomach by means of the stomach-tube, it remained for a considerable time neutral, or even took on an alkaline reaction. At the same time, the quantity of water present in the stomach gradually diminished, showing that the stomach was constantly emptying a certain quantity of its contents into the small intestine. Possibly this slow diminution of the water might also be produced by absorption from the stomach, but in about one hour to one hour and and a half there was suddenly a rapid diminution of the fluid in the stomach, even before an acid reaction had occurred. Evidently the pylorus had then opened, and permitted the passage of the gastric contents into the small intestine in large quantities. If we now assume that cholera-bacilli were accidentally present in this water, they would undoubtedly have entered the duodenum in a living state, and might there have possibly brought about a cholera-infection. In man, therefore, artificial preparations are not necessary for infection, as they are in the case of the lower animals.

It may also be further concluded from this, that man will not, as a rule, behave quite in the same manner according to the condition of the gastric digestion. The different individual predisposition of man depends, perhaps, in great part on the state in which gastric digestion happens to be when the infective material entered the stomach; further, on the state of the intestine, whether it perhaps more or less nearly approaches the condition in which the intestine of guinea-pigs is after the injection of tincture of opium. In this way, we obtain a certain conception of the mode of infection; and I doubt not that by further experiment in this direction we shall arrive at further results, and perhaps be able to clear up much which is as yet dark to us. Further, now that we have succeeded in infecting animals through the stomach, we shall be able to test experimentally the effect of medicines on the cholera-process.

As I have already formerly stated to you, we can only imagine the action of the cholera-bacilli which do not pass into the blood, to be by the production of a poisonous substance belonging to the group of ptomaines, which is absorbed, and then acts on the organism as a whole. In order to obtain some basis in fact in regard to this view, I have busied myself in trying to demonstrate the poisonous products of the cholera-bacilli which we must suppose to exist; but these investigations have not as yet advanced far. Only so much has already been found, that it is possible to make cultivations of comma-bacilli, which act intensely poisonously, and which, when injected into the animals subcutaneously, or into the peritoneal cavity, produce in a few minutes the same set of symptoms which occur in animals sick of cholera in one to two days after injection, namely—semiparalytic weakness of the hinder extremities, coldness of the head and of the limbs, and slowing of respiration—conditions which are generally followed by death in a few hours.

I may add a few remarks on other experiments which do not stand in immediate connection with the infective experiments. In the first place, with regard to the resisting power and vitality of the cholera bacteria. On this point experiments have recently been made by Nicati and Rietsch, and by Babes. We have also again taken up this question, and have in the first place tried to learn how long the cholera-bacteria retain their vitality in well, river, and canal water, in fæces and in the contents of cesspools; and our experiments have shown that cholera-bacilli mixed with well-water can be demonstrated therein up to thirty days afterwards. In the water of the Berlin Canal they remained alive only six to seven days, mixed with fæces only twenty-seven hours, and in the contents of cesspools they could no longer be demonstrated after twenty-four hours.

Experiments have also been made to keep the cholera-bacteria alive for some time on articles of clothing, as, for example, linen, cloth, etc., in a moist state. As far as we have as yet gone with these investigations, we have found that the vitality of the cholera-bacteria is not of very long duration. They were already dead after three to four days.

At our first conference I mentioned, as you will remember, the

rikingly rapid death of the cholera-bacilli in the dry condition, and ointed out the practical bearings of this peculiar circumstance. My tatements were at first much doubted ; but all trustworthy observers ave convinced themselves of their accuracy, and I may take this pportunity of reiterating the statement, and beg that the most exensive use of this fact be made in combating this pest.

With regard to disinfection, I can report some results obtained with arbolic acid. The cholera-bacteria are killed in a few minutes in uids containing 5 per cent. of carbolic acid. Sulphate of iron, ulphate of copper, and other metallic salts, are also potent, but ot nearly so certain, because a more or less considerable part is preipitated by constituents of the nutrient solutions. This would aturally also occur in disinfection of the cholera-dejecta ; hence I ive the preference decidedly to carbolic acid.

Finally, I would direct your attention to an observation with regard o the action of the cholera infective material on man.

Ample experience in this direction was supplied to us in our former conerence, by facts with regard to the infection of those persons who have o do with cholera-linen, and many examples of this kind were furished during the last epidemic in France and Italy. It was therefore ot impossible that, in working with the cholera-bacilli, an unintenional infection might occur. Bearing this in mind, all precautions ere adopted to prevent this danger during the cholera-courses held ere in the Sanitary Institute. But in spite of all our care an infection id occur, which fortunately has not been followed by bad conequences. Before I give the details of this case, I will remind you hat some investigators have made infective experiments on themelves. Thus Bochefontaine, in Paris, swallowed cholera-dejecta in he form of pills, without becoming infected with cholera ; Klein, acording to an announcement in the *Indian Medical Gazette*, when he rrived in Bombay, drank a fluid which was supposed to contain holera-bacilli. Apart from the fact that in these cases it was not at ll proved that the true cholera-bacteria were present in the material aken, the negative results prove, of course, nothing, as it is extremely robable that a healthy stomach, during the period of digestion, estroys the bacilli, and therefore it is not to be expected that, when holera-bacilli are introduced into the human stomach, infection ust follow in every case. But, even though the results of the exeriments had been positive, they would have been just as little conincing, because they were done in places where infection could have ccurred in other ways.

An experiment of this kind, performed in a place subject to cholera, an only have any force when the infection concerns, not a single inividual, but a number of men at the same time ; because then the robability that all who were taken ill were infected in consequence of n accident apart from the experiment, becomes so much the less the reater the number of those infected. Hence I lay great value on the istance of cholera-infection cited by Macnamara, which I may recall o your recollection at this time.

I have corresponded with Macnamara himself with regard to this ase. The statements in his work on cholera with regard to it are omewhat short. For instance, he does not say where the case occurred ; he mentions no names ; but he might have reasons for doing o. I have been always assured in Calcutta, where there was much alk of this case, that it is a fully trustworthy observation, and that he facts were exactly as Macnamara reported. He himself has written ne that he is at any time ready to make privately more exact comunications on the subject, which must remove every doubt ; hence I m convinced that everything occurred as Macnamara has stated, and hat this observation can be unhesitatingly accepted as of scientific alue. In the *Dictionary of Medicine*, Macnamara makes the followng statement with regard to it.

"By an accident"—what sort of an accident it was is not mentioned—cholera-dejecta became mixed with water. This water remained for a hole day exposed to the heat of the sun, and was then drunk by ineteen persons, five of whom were taken ill with cholera within hirty-six hours."

As I have been assured, after special inquiry, almost no cholera was resent at that time, and particularly in the place where this accident appened. Further, all the persons acquainted with the Indian conitions, to whom the case was known and whom I questioned with reard to it, had no doubt that these individuals were taken ill really in onsequence of drinking the water contaminated with cholera-dejecta.

In our case of cholera-infection, observed during the cholera-courses, e had to do not with an illness affecting a number of individuals, ut only with the infection of one person. Nevertheless, this case is f great significance, because it occurred at a place and at a time when very other source of cholera-infection, than the manipulation of the holera-bacilli, was absolutely excluded, and because this is as yet the only case in which in Germany the true cholera-bacilli have been demonstrated in the dejecta of one suffering from cholerine.

The physician in question (whose name and place of residence you will, of course, excuse my mentioning) had been five days in Berlin, when he was attacked by slight digestive disturbance, accompanied with diarrhœa. The evacuations were loose, and occurred several times a day ; so that his condition excited no alarm. But, on the last day of his attendance here, more frequent quite thin watery evacuations occurred. He thought, however, that he was able to travel, he did so, and reached home, but was then seized with a true attack of cholerine. For two days he had very frequent watery and colourless stools ; there were great weakness and unquenchable thirst ; the urinary secretion was reduced to a minimum. True cramp of the calves of the leg did not occur ; but there was marked contraction of the sole of the foot, and cramp in the toes. As he felt too weak to examine his evacuations himself, he put a small quantity in a well-cleaned flask, and sent it here. The vessel was sent off in the evening, arrived here on the following morning, and was at once investigated. As the transit only occupied a night, and that in the cold season of the year, the contents could not have been materially altered by the transport. The investigation of the dejecta, which was made by means of cover-glass preparations, and also by plate-cultivations and cultivation in cupped slides, showed by each method the presence of very numerous true cholera-bacilli. One of the pure cultivations of cholera-bacilli shown to-day came from the dejecta of this case. I will only mention, in addition, that the disease passed on to recovery. The diarrhœa ceased, but there remained for a long time a marked weakness. I cannot omit to point to this case as a warning to those who experiment with cholera-bacilli, and who do not go to work with the greatest caution.

As the question of the presence of a resting form of cholera-bacilli is down in our programme, I will say a few words with regard to it. On account of the importance of this question, I have still done my utmost to find something which could be looked on as a resting stage of the cholera-bacilli, analogous to the spore-formation of other bacilli ; but I have, just as in my former investigations on this point, only obtained negative results. All the statements as yet made by other observers on the resting forms and spore-formation depend evidently on errors. Thus Ceci believed that he had observed spores in the cholera-bacilli. He looks on the bacilli which almost regularly occur in old cultivations, and which show an unstained spot in the middle after staining with aniline dyes, as spore-bearing. These peculiarly stained bacilli also struck me in my first cultivations ; but I very soon convinced myself that the part of the bacillus which remains unstained is not the result of the formation of a spore, but arises when the bacillus becomes somewhat thicker or fatter. Probably, as the result of this, swelling occurs in consequence of absorption of water, and a separation of the plasma takes place into a thicker, more intensely staining part, at the ends of the bacilli, and a less concentrated substance lying in the middle. A similar appearance is observed in the bacteria of rabbit-septicæmia, which constantly take on the stain in such a way that the middle is little or not at all stained. As in the case of the cholera-bacteria, this appearance only occurs in old cultivations ; one must look on it as a form of involution, or as an alteration in the dying and dead bacilli. What is decisive in favour of this view is the fact that cultivations which contain bacilli of this kind are not in the least more resistant to hurtful influences, such as dryness, heat, and chemical substances, than are the ordinary comma-bacilli. Ceci has also himself found that his apparently spore-bearing bacilli died after a very short time when they were dried, and were, therefore, not in a resting form.

At this opportunity I may also mention, as curiosities, that Klein thinks he has observed longitudinal division in the cholera-bacilli ; and that, according to Ferran, the cholera-bacteria belong to the cycle of development of a fungus, a peronospora. Both these supposed discoveries rest on erroneous interpretations of the involution forms of the cholera-bacilli.

Although a true resting-stage of the cholera-bacteria has not as yet been found, and does not seem to exist, nevertheless other experiences enable us to explain the temporary quiescence of a cholera-epidemic, which may last at times for months, or even through a whole winter. The cholera-bacilli can, in contrast to their slight resisting power to dryness, retain their vitality under certain conditions for a long time in a moist state. It has already been found by Nicati and Rietsch that the cholera-bacteria may remain alive for eighty-one days in the harbour-water of Marseilles. We have found, on testing old cultivations made on agar-agar, that, even after 144 days, cholera-bacteria capable of development were still present in these cultivations. Only on examination after 175 days were the cultivations found to be dead.

One can, accordingly, easily understand that in the superficial

layers of the ground, in swamps, etc., the cholera-bacteria may find conditions in which they may, just as in our moist agar jelly, and perhaps much better, be preserved from death for five months, or even longer.

INFLAMMATION OF THE MUCOUS LINING OF THE FALLOPIAN TUBE, WITH PURO-FIBRINOUS EXUDATION.

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In subacute or chronic pyosalpingitis, an exudation containing many pus-cells is secreted by the altered mucous lining of the Fallopian tube. The fluid so effused may escape into the uterus, and be expelled. It may, however, be detained in the tube itself, and, accumulating, distend this structure. The disease is, in the majority of cases, secondary, and appears most commonly to accompany those inflammations of the genital tract which are of a specific nature, gonorrhœal or syphilitic. It rarely develops as an independent disease in females previously healthy, yet it may accompany simple inflammation of the uterine lining in persons of a strumous habit of body, or those otherwise debilitated.

In inflammation of the mucous membrane of the Fallopian tube, with puro-fibrinous exudation, there is usually, in the early days, some elevation of temperature and increased frequency of pulse. The disease, however, may exist for months with no other subjective signs than pain and a varying amount of purulent discharge. In the later days, when fluid has begun to accumulate in and distend the tube, and inflammatory changes are apt to invade the surrounding structures, symptoms of a definite and truly characteristic nature invariably develop; and it is to these more especially that I now wish to draw attention.

Pain is a constant and troublesome symptom. Its seat and character, however, vary according to the extent and manner in which the pelvic nerves severally become involved. It is more or less constant or periodic, and is usually referred to that iliac region in which the diseased condition is to be detected. If both Fallopian tubes are the seat of change, as is commonly the case when the disease is due to specific inflammatory extension, pain is complained of in the neighbourhood of both groins. In many cases, the attacks of pain are periodic, lasting six or seven days, with an interval of immunity of like duration. The onset of the recurrence is generally accompanied by a feeling of faintness. The pain, as a rule, is materially altered by position, the patient experiencing relief and a feeling of comfort when lying on the affected side. It is aggravated by the upright posture and by locomotion; and a dragging sensation is often developed when the patient is lying on the opposite side to that on which the disease exists. Sometimes there is backache; occasionally there are sharp cutting pains in the vagina; usually there are radiating pains referred to the inside or outside of the thigh—as far as the knee—corresponding with the side on which the change in the Fallopian has arisen. Menorrhagia is the symptom, however, which is most likely to attract special attention; but, depending as it does upon an interference with the nerve-supply to the uterus, it seldom appears until the distension of the Fallopian tube has become marked, and the condition unmistakable. The hæmorrhage, as a rule, when once established, is more or less constant. Considering the close proximity of the pelvic viscera to each other, and the manner in which each derives its nerve-supply, it is not to be wondered at that change arising in one of these organs is more or less likely to affect and influence the functions of the others. In pyosalpingitis, there is usually a frequent desire to pass urine; but, during the time of hæmorrhage, the patient is likely to experience a difficulty in emptying the bladder, it being essential to strain much, and call into action those volitional muscles which may aid in the performance of the act. In some cases, there may even be complete retention of urine. It is but seldom that pain is complained of during the time of voiding urine; but, should the patient be obliged to retain the urine longer than usual, so that the bladder becomes somewhat distended, pain will be felt in the region of the diseased tube. Sometimes there is diarrhœa; occasionally there is pain before voiding motions, more especially if the rectum be loaded, and the disease exist in the left Fallopian tube, which may, by inflammatory adhesions, have become closely attached to the lower bowel. In a few cases, stiffness of the thighs is to be noted. In those cases in which there is frequent desire to pass urine, cold aggravates the condition.

CLINICAL MEMORANDA.

RELATIVE PROTECTION OF VACCINATION AND SMALL-POX.

Five years ago, I had occasion to revaccinate one hundred and fifty boys, between nine and fourteen years of age. On examining their arms on the eighth day, I noticed nine boys with primary vaccine vesicles, the same as if they had been vaccinated for the first time. On making inquiries into the cause, I found that each boy had been vaccinated when a baby, and had suffered from small-pox afterwards.

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FATAL CONVULSIONS DUE TO ROUND WORMS.

By a strange coincidence, the mail brought me the Journal of October 31st, containing an annotation on the above subject (p. 842), about three hours after I had made a medico-legal investigation of a similar case.

B., aged 3, a Hindu child, was suddenly seized with convulsions, at 4 A.M., on November 20th, 1885. The day before, she had been running about as usual, but would eat little or nothing. The arms were extended, and the mouth tightly closed. There was no vomiting. She died about 11 A.M. The necropsy at 1 P.M. showed some pleuritic adhesions at the right base, but the lung-substance was healthy. The stomach and small intestines were practically void of food, but the latter contained large quantities of common round worms, in some places to be felt or seen as lumps through the intestinal wall. The other viscera were healthy. The brain was carefully examined, as the child had received a blow on the head the week before, but no cerebral lesion could be found. By exclusion, therefore, the worms seemed necessarily to be regarded as the primary cause of death.

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NOTES ON A CASE OF HÆMOPTYSIS.

The perusal of the report of Dr. West's paper on hæmoptysis, read before the Medical Society on December 14th, has induced me to make this communication.

My patient was an active healthy looking man, aged 42. He commenced to spit up blood, without any warning, whilst sitting over a fire on the evening of November 29th. He spat up three or four ounces of bright frothy blood during the night, and the hæmoptysis continued next day, at intervals of a few hours, to the amount of five or six ounces each time. In the morning, I had ordered one-drachm doses of sulphate of magnesia every four hours, but in the evening I thought it right to make some further effort to arrest the hæmorrhage. Accordingly, I injected into the deltoid muscle seven and a half minims of a solution of Bonjean's ergotine (gr. j in ℥ 2½), and in a few minutes the hæmoptysis had quite ceased, and it did not return during the night. Next day, however, the blood-spitting recurred at intervals of a few hours. On two more occasions I injected ergotine, and each time the hæmoptysis ceased in a few minutes, and the interval between the attack and the next was prolonged. On the fifth day, as I could not be present often enough to control the hæmorrhage by repeated injections of ergotine, I determined to try the effect of hazeline, and ordered half-drachm doses every two hours as long as the hæmoptysis continued, and then every four hours. The man soon ceased to cough up blood, but when the frequency of the dose of hazeline was reduced, the hæmoptysis returned. Next evening, whilst the patient was spitting up blood in larger quantity than before, I repeated the dose of hazeline every hour as long as the blood-spitting continued, and when it had ceased, as it very soon did, the dose was taken every two hours for twenty-four hours. The patient continued to take hazeline, in gradually diminishing doses, for the next few days, and all that he spat up was a little dark phlegm.

My opinion of the power of ergotine in arresting hæmorrhage from the lungs is not based upon this case alone.

When I was house-physician at the Royal Chest Hospital, and at St. Bartholomew's, I used almost always to inject from three to five grains of ergotine in cases of serious hæmoptysis, and I can remember only one case (of very profuse hæmorrhage in a case of advanced phthisis) in which it failed to be of signal service in arresting the bleeding. It is advantageous to follow the injection by one of morphia in many cases, with a view of keeping the patient more completely at rest.

My experience of hazeline in the treatment of hæmoptysis is not so large, but in this case it certainly appeared to me to control the hæmorrhage in a remarkable manner in a short time, and I shall be glad if this communication shall lead to its more extended trial in similar cases.

Robert J. Collyns, Dulverton.

QUINSY AND THE RHEUMATIC DIATHESIS.

THE account in the JOURNAL of December 5th by Mr. Fitzmaurice of his case of "Quinsy followed by Rheumatism," is suggestive, in some particulars, of pyæmia. The diagnosis of subacute pyæmia from acute rheumatism is occasionally difficult, for I have seen the latter associated with suppuration in the neighbourhood of joints. As further evidence to the connection between rheumatism and suppurative sore-throat, the following case may be taken with that of Mr. Fitzmaurice.

I was called on January 23rd to C. C., aged about 20, unmarried, and delivered her, by version, of a stillborn child, which had been allowed by the midwife to become impacted in the pelvis. This patient had suffered from rheumatic fever years before. After delivery, she remained weakly for some time, with occasional diarrhœa and a perspiring skin. The wrists were also painful and swollen, and a soft systolic mitral murmur was heard. The perspiration and pain varied from day to day. On February 23rd, being then free from rheumatism, she complained of sore led lumps on the shins and fore-arms—erythema nodosum. On March 2nd, I was informed she was nearly suffocated with a swollen throat, aud found both tonsils inflamed. Matter came subsequently from one side. During March, she again suffered from rheumatism in the wrists and acid perspirations; but in April she was out and well.

FORTESCUE FOX, M.B.Lond., Strathpeffer Spa, N.B.

I HAVE just had a case of acute rheumatism following quinsy in a railway porter, aged 35. This was his second attack of rheumatism, but his first of quinsy. The quinsy rapidly yielded to ten-grain doses of salicylate of soda; and about the fourth day after the throat-symptoms were better, he commenced to suffer with acute rheumatism. All the joints were affected. The temperature never rose higher than 101° Fahr.; and, bearing in mind Professor Latham's views, I restricted his diet to milk. The sweating was great, and the smell decidedly rheumatic. For a week, I gave him salicylic acid in ten-grain doses every two hours, and often every hour. It produces its full physiological effect, but had not the slightest effect on the rheumatism. I then gave him drachm-doses of potassium bicarbonate, with half a drachm of citric acid to make it effervesce. This, with a hypodermic injection of a quarter of a grain of tartrate of morphia at bedtime, quickly relieved him.

This case is, I think, significant of the fact that the quinsy was cured by the sodium salicylate; it did not prevent the rheumatism. This is only the second case of acute rheumatism following quinsy I have met with in over eighteen years' practice; and the first case (four years ago) was uninfluenced by sodium salicylate, but yielded to alkalies. Quinsy, if treated by aconite or sodium salicylate, will save all the trouble and discomfort of gargles, poultices, or paints; and if the case be seen early, is rapidly cured; even some cases that seem hopeless and doomed to suppuration soon yield.

Another point is, the value of morphine given hypodermically in those cases; a good night is ensured, and the pain is sometimes relieved by one injection. Seven years ago, I had a troublesome case of quinsy, that would suppurate, in a young farmer; the patient was a bad bearer of pain; an injection night and morning kept him easy, until I could puncture and evacuate the pus.

W. EASBY, M.D., Peterborough.

THERAPEUTIC MEMORANDA.

DIPHTHERIA AND TOLU VARNISH.

"THE longer a man lives, the fewer murmurs he hears," were the words of Professor Gairdner on applying his stethoscope over a suspected heart; and, at the risk of seeming equally paradoxical, I may say, in reference to Dr. Lord's case of "diphtheria cured by tolu varnish," reported in the JOURNAL of December 12th, 1885, "the longer a man lives, the fewer cases of diphtheria he sees."

Dr. Lord appears to forget that diphtheria is a constitutional disorder, in which the local symptoms are not primary, but secondary; and to conclude that every sore throat with greyish-looking patches on the tonsils, having gangrenous edges—uncorroborated by other and more important evidence—is diphtheria, can only result in discomfiture to ourselves, and in mischief to the community.

Diphtheria, when it occurs, is not to be checkmated by three or four applications of tolu varnish, boracic acid, carbolic acid, or creasote in glycerine, each of which has had its day, and, being weighed in the balance, found wanting. Cases of ulcerated sore throat like Dr. Lord's, so ephemeral, and subdued so easily, would probably give a similar result by the use, twice daily, of Messrs. Maw's "wooden penholder" in its native simplicity; and must not be confounded with that diphtheria introduced into, and multiplied in, the system, which, in spite of the most skilful constitutional aud energetic local treatment, has robbed the profession of a Valleix, Foulis, Rabbeth, and a Frances Helen Prideaux. ALEX. YOUNG MORTON, M.D., Drymen, Stirlingshire.

TOXIC ACTION OF CUCAINE.

Two months ago W. R., a mason, came to me to have removed from his eye a minute fragment of steel which had entered it from his chisel, whilst employed in dressing stone.

As a preliminary, I applied a few drops of a two per cent. solution (fresh) of cucaine to the injured eye. Suddenly, about two minutes afterwards, and just as the eye was losing its sensibility, the patient became deadly pale, reeled in his chair, and would have fallen to the floor had I not supported him. He was quite pulseless, and it was with some difficulty that he was brought round. It was fully half an hour before he was able to go home; even then he felt giddy.

The patient was 25 years of age, perfectly healthy, and had never fainted before as far as he was aware.

Huntly. ALEXANDER THOMPSON, M.B.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GENERAL INFIRMARY, LEEDS.

A CASE OF CHRONIC EFFUSION INTO THE VENTRICLES OF THE BRAIN, WITH OPTIC NEURITIS.

(Under the care of Dr. CHURTON.)

[Reported by T. WARDROP GRIFFITH, M.B.Aberd., Resident Medical Officer.]

THE patient, a man aged 29, was admitted on February 9th, 1885, complaining of pain in the head and persistent vomiting. The symptoms dated from the preceding July; and the history he gave was, that one day he suddenly fell forwards, but did not entirely lose consciousness. He was unable to get up for a few minutes, and then felt giddy and confused. Again, the same day, the same thing happened; and since then he had had about a dozen such attacks. Inquiry into his previous health showed that it had been good, though not robust. He had always been subject to "sick headache and vomiting." No history could be obtained of his infancy; but, from examination of photographs taken when he was a lad, it would appear that his eyes had always been somewhat prominent. There was a pretty strong phthisical history in the family. No history of syphilis could be made out.

On admission, the patient complained of pain referred mainly to the occipital region and the back of the neck, which varied much, being sometimes dull, and at other times intensely severe. Vomiting was an essential and increasingly prominent symptom. His gait was uncertain, but not ataxic; he would walk well for a few steps, and then lurch off to one side, usually the left. The superficial reflexes were well marked. The myotatic phenomena were all exalted. His sight was as good as ever it was, though occasionally he used to have diplopia. His eyes were rather prominent, and there was some insufficiency of both internal recti. The pupils were dilated, and acted to light, and with accommodation. In both eyes there was well marked papillitis, evidenced by great swelling of the discs, with blurring of their margins and considerable obscuring of many of the vessels, which latter were large. No hæmorrhages were seen. The refraction was markedly hypermetropic. The patient was discharged on April 14th, and readmitted on May 2nd.

His general condition was then worse; he was more inclined to mope. It was thought that his eyes were more prominent, but this was doubtful. When he closed his eyes naturally, the left globe was not entirely covered. The facial lines were more marked on the right side than on the left. His sight was worse; he could read Jäger 20. With the ophthalmoscope, the centres of the discs were seen to be pale and shining, the lamina cribrosa being exposed; but otherwise the above description substantially applied to their condition at this date.

On May 4th, he had powerful spasmodic twitching of the right side of the face, the mouth was drawn to the right, and there was strong

closure of the right eye. He appeared partly conscious during the attack, which lasted a few minutes; and at the end of it there was copious sweating of both sides of the face, and, to a less extent, of the rest of the body. He had a dozen such attacks prior to his death, which occurred on May 14th. He had sunk into a semicomatose condition. Respiration ceased about five minutes before the last beat of the heart was made out. The temperature throughout the time he was under observation was normal.

The treatment adopted was mainly palliative, the only point made out being that one-drachm doses of liquid extract of ergot seemed to relieve the pain in the head.

The necropsy was made nineteen hours after death. The head was large and symmetrical; the cranium was very thin all over, and the roofs of the orbits were in part membranous. The markings produced by the cerebral convolutions were singularly distinct, the ridges between adjacent depressions being raised and serrated. There were no abnormal adhesions of the dura mater; no meningitis; no excess of subarachnoid fluid; no appearance of tubercle; no blocking of venous sinuses. The brain was uniformly large. On turning it base upwards, the wall of the third ventricle was found to be much expanded, both in front and behind the optic commissure, which latter was, as it were, stretched and flattened on the cupola formed by the floor of the third ventricle. This cupola had very thin walls; and, on its being punctured, a large amount of perfectly clear cerebro-spinal fluid escaped. The lateral ventricles were also found much enlarged, and the foramen of Monro admitted the point of one's finger. The iter was of its usual size; but the fourth ventricle was distended, and the floor was covered with a thick gelatinous layer, as if the lining membrane were œdematous.

The patency or otherwise of the foramen of Magendie and central canal of the spinal cord was not observed; but that they were not patent was inferred as probable from the fact, that no fluid escaped by them from the fourth ventricle, where it was pent up at some pressure.

Microscopic examination of the optic nerves showed the usual appearances of inflammatory change, there being great nuclear proliferation and a want of proper definition of nerve-fibres. Sections were not made further back than the commissure.

The middle ears were normal. The right facial nerve, at its point of leaving the cranial cavity, was rather pink, and slightly thicker than the left. It was not examined microscopically.

Remarks by Dr. T. Wardrop Griffith.—The strong resemblance of this case, in its symptoms and signs, to those in which an intracranial growth has been demonstrated in the *post mortem* room, is an interesting feature in the case. One might have derived assistance from the largish head and somewhat prominent eyes, in the absence of signs of rachitis. The main point of interest in the case, however, it appears to me, is the presence of an intense form of optic neuritis, without, so far as could be made out, either clinically or on careful *post mortem* examination, the slightest signs of inflammatory changes in the membranes, or the presence of tumour, and for which the only obvious cause was increased pressure within the brain.

Dr. Allbutt, in a series of lectures delivered in 1868, referring mainly to children, inclines strongly to the belief that neuritis is usually the first stage in the optic atrophy of simple dropsy of the brain, stating, at the same time, that in this he differed from Graefe.

In the most recent edition of Gowers's *Medical Ophthalmoscopy*, it is stated that neuritis is quite the exception, and is usually slight when present, but that Wildbrand and Binswanger have recorded a case in which it was considerable.

In the absence of a microscopic examination of the facial nerve, I make no further remark on the facial spasms than that, from the naked-eye appearance of the nerve, I incline to the belief that it was due to a neuritis.

Bequests and Donations.—The Norfolk and Norwich Hospital has received £1,000, for the Sustentation fund, under the will of Mr. T. W. George, of East Carlton.—The Right Hon. Katherine Anne, Viscountess Cranley, has bequeathed one moiety of £1,000 Consols to the Hospital for Consumption and Diseases of the Chest at Brompton.—Miss Maria Hebden, of Compton Terrace, Islington, has bequeathed £100 to the Holloway and North Islington Dispensary, £100 to the British Home for Incurables, and £100 to the Earlswood Asylum for Idiots.—Miss Margaret Heald has bequeathed £100 to the Stockport Infirmary, and £100 to the National Hospital for the Paralysed and Epileptic.—University College Hospital has received £127 10s., making a total of £600 for the year 1885, from the People's Contribution Fund.—Mrs. G. E. Master has given £100 to the Charing Cross Hospital.—The Committee of the Sick and Accident Fund at the Tilbury Docks have given £50 to the Gravesend Hospital.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 5th, 1886.

J. Syer Bristowe, M.D., F.R.S., President, in the Chair.

Two Cases of Sarcoma of the Tongue.—Mr. F. S. Eve showed two specimens of sarcoma of the tongue. Connective-tissue tumours of the tongue were, he said, extremely rare. One of the specimens was from Hunter's collection; in this case, there was no line of demarcation from the tissues of the tongue, but the mucous membrane was unaltered, except that there was some hypertrophy of the papillæ. The microscopic structure was that of a fibro-sarcoma, but had some resemblances to that of a peculiar form of lympho-sarcoma described by Mr. Jonathan Hutchinson as a congenital growth. The second tumour was a distinctly encapsuled fibrous tumour, containing many spindle-cells.

Malignant Disease of Œsophagus.—Dr. Parry Price showed a specimen of malignant disease of the œsophagus from the body of a man, aged 57. Dysphagia had been present for about eight months before death, and during that period emaciation became pronounced. The lymphatic glands became enlarged in both posterior triangles and axillæ. The necropsy showed that these growths were directly continuous with a large mediastinal tumour. The œsophagus opposite the bifurcation of the trachea contained a large malignant ulcer, the base of which was adherent to the bronchus. There was a secondary deposit in the liver.—Mr. Symonds said that, when he saw the patient during life, the most interesting point in the case was the great enlargement of the superficial lymphatic glands.

Injuries and Diseases of Joints in Animals.—Mr. J. Bland Sutton, after observing that dislocations of joints were rarely seen in animals, and that there were few recorded cases, exhibited an example of old unreduced dislocation of the hip-joint from a cat. The epiphysis of the head of a femur taken from a two-year-old horse was also shown. After an accident, the horse could walk without lameness, but when trotted it always limped. It lived for many months. At the *post mortem* examination, it was found that movement had taken place between the neck of the bone and the rough surface of the epiphysis, which had in consequence become eburnated, and, in places, as smooth as porcelain. Other specimens were referred to. A specimen of pulpy degeneration of the synovial membrane of the knee-joint of a capybara was exhibited, and a case of Pott's disease in a monkey was mentioned. Of all forms of joint-disease, however, Mr. Sutton said that none were so frequent, or zoologically so widely distributed, as osteo-arthritis. Specimens illustrating the affection were shown in the vertebral columns of a snake, a llama, and a horse, and in the knee-joint of an antelope. Specimens were preserved in the museum of the College of Surgeons, establishing its existence in the ostrich, lion, and white bear; he had also seen specimens in cats and dogs; and in the museum of Trinity College, Dublin, was a skeleton of the extinct megaceros, said by competent observers to present traces of this affection. It was probably the most ancient and widely diffused joint-disease concerning which there was any positive evidence. A curious symptom associated with the disease in animals, and probably in human beings, was early loss of teeth, due to abnormal absorption of the alveolus. Paraplegia, caused by diseases affecting the spinal column, was very frequent in animals. In rickets, paraplegia arose from two causes; in very young animals, from actual softening of bone, causing the vertebræ to yield under the weight of the body: at puberty, if rickets affected an animal, especially the carnivora, the epiphysal lines of the vertebræ bulged, and the spinal cord was compressed, as by a tumour. An interesting case occurred in a tiger, which, six years before, had received an injury to the atlas. The fracture never repaired, except by fibrous tissue; but exuberant callus, and the gradual yielding of the transverse ligament, allowed the odontoid process to compress the medulla, and produced complete paraplegia. A case of dislocation of the atlas, which produced slow progressive paraplegia, was also shown in an ichneumon. A case of paraplegia in a civet-cat was shown to be due to disease of the cord itself, associated with sclerosis of the nerves. The animal was also interesting, in that its fore-paw was the seat of a typical perforating ulcer. These researches, he argued, tended to show that there were few diseases of joints, except perhaps gout, peculiar to man.—Dr. Norman Moore observed that in the child no such projection into the spinal canal, as described by Mr. Sutton, had been observed. The close resemblance between the paralysis occurring in dogs after distemper, and diphtheritic paralysis was striking—Dr. Goodhart observed that the edges of the ulcer were thickened, and inquired whether it had

been examined microscopically, as the ulcer might be due to new growth.—Dr. DAWSON WILLIAMS observed that stringhalt had recently been attributed to peripheral neuritis, and inquired whether Mr. Sutton could state the condition of the nerves in his cases.—Mr. SUTTON said that the epiphysal plates in man were very small and insignificant as compared with those seen in certain animals. This would account for paraplegia never being thus produced in children. He had observed, in all the cases of perforating ulcer which he had seen, that there was much thickening of the edges of the ulcer. Stringhalt was a term applied to an assemblage of cases due to a variety of causes, to disseminated sclerosis in some cases, while in others it was observed, as he had stated in his paper, in relation with rheumatoid arthritis.

Cancer of Heart.—Dr. NORMAN MOORE showed three cases of cancer of the heart, with microscopic sections. 1. From a man, aged 41, who died of general cachexia, after an illness of five months. The heart contained several masses of a firm whitish new growth imbedded in its substance, and extending from the pericardium to the endocardium. The largest mass was in the anterior part of the upper wall of the left ventricle. Under the microscope, the new growth showed a well marked epithelial structure with abundant dense stroma, and beyond the edges of the nodule it penetrated between the muscular fibres. A new growth of exactly similar features was found on the surface and in the substance, but not in the bronchi, of both lungs; in the muscular substance of the diaphragm, in the lumbar glands, and in the kidneys. The nervous system and the alimentary canal were without any traces of new growth. There were many masses of new growth in both kidneys; and, as the earliest symptom of the disease was pain in the loins with a very tender spot in the right lumbar region, it seemed probable that the primary growth was that in the kidney. 2. From a man aged 57, who died of general cachexia with great enlargement of the liver, after an illness of about eight weeks. The heart contained a single mass of firm, whitish new growth, in the upper part of the anterior wall of the right ventricle. Microscopic sections showed large epithelial cells in a dense stroma. A new growth of identical character was found in small, flat whitish patches on the pleura and peritoneum, in large and numerous masses in the liver, in several masses in each kidney, in both suprarenal bodies and in the lumbar glands; while in the middle of the œsophagus there was an ulcerated patch of new growth, measuring an inch by an inch and a half, with several very small masses, higher up and lower down in the œsophageal wall. The lymphatics along the lower half of the œsophagus were also infiltrated, but the new growth in the œsophagus gave rise to no distinct symptoms. The rest of the mucous surface of the alimentary canal and the mesenteric glands were free from new growth. It seemed probable that in this case the carcinoma was primary in the œsophagus. 3. From a woman, aged 64, who died of general cachexia with numerous cutaneous tumours, after an illness of about four months. The heart contained many masses of new growth, and there were some on the parietal layer of the pericardium, as well as on the visceral layer, in the muscular substance of the heart, and on the inner surface of the ventricles. The growth was a carcinoma, with an abundant but not very dense stroma; and a new growth of the same microscopic characters was found in numerous nodules in the skin, in the cervical glands, in the lungs and on the pleuræ, in numerous peritoneal nodules, in all the glands along the aorta, in the substance of the spleen, but only on the surface of the liver, intestines, and the stomach, in all the abdominal lymphatics, in both kidneys, and around the uterus and ovaries. It seemed probable that the nodules in the skin were the primary growth. During life, no symptoms were observed in any of these cases pointing to the new growth in the heart. They were all carcinomata of somewhat rapid growth, all probably under six months; and it was worthy of note that in all, the kidneys, as well as the heart, contained carcinoma. Out of eighteen other cases of carcinoma of the œsophagus, recently examined in the *post mortem* room at St. Bartholomew's Hospital, carcinoma of the heart was found in two others, and in both these carcinoma of the kidney was also present.—Dr. PYE-SMITH recalled an observation made by Dr. Wilks, who had pointed out the frequency with which, in pyæmia, the kidneys and the heart were affected at the same time.—Mr. BOWLBY said that in two cases of malignant disease of the œsophagus which he had recently examined after death, secondary growths had occurred in the kidney. He thought Dr. Moore had done well to call attention to the frequency with which secondary deposits in the kidneys occurred in cases of intrathoracic cancer.—The PRESIDENT did not think that there was any special connection between deposits in the heart and kidneys, and suggested that, when this occurred, it was owing to the disease being very widely spread. He also commented on the absence of clinical symptoms.—Dr. NORMAN MOORE thought this absence of symptoms very remarkable, and referred to the death of Queen Katharine of Arragon, which was due, as he supposed, to melanotic sarcoma, but was so sudden as to have been attributed to poison.

Exfoliating Cystitis.—Mr. HURRY FENWICK showed a specimen of exfoliation of the mucous membrane of the bladder in a case of tubercular disease of the pelvis, ureter, bladder, and urethra. The man had suffered for four years from right renal colic and frequent micturition. Mr. Walter Coulson performed nephrotomy. The patient died of subacute peritonitis. The right kidney was a well marked example of strumous disease. The mucous membrane and submucous coats of the bladder were everywhere detached, except at the trigone.

Aneurysm of the Mitral Valve.—Dr. SAMUEL WEST showed a specimen of aneurysm of the mitral valve from a male patient. He had had rheumatic fever at the age of 14, and he died at the age of 34, after an illness of eight weeks, marked by pains in the joints, œdema, irregular pyrexia, dyspnœa, strabismus, and nystagmus; there were a double aortic murmur and a systolic murmur heard at the apex and behind. At the necropsy, an area of softening was found in the right lobe of the cerebellum, and there were infarcts in the spleen and kidneys. The heart weighed twenty-one ounces. There were vegetations on the aortic valve, and in the middle of the aortic cusp of the mitral valve was a small opening partly filled by vegetations, and from the ventricular surface a polypoid mass depended; the surfaces against which this polypus rubbed were covered with small vegetation; the aperture led into a large pouch, which projected into the left auricle. There was also an aneurysm in the posterior portion of the undefended spot, which projected into the right auricle. He referred to three other cases in which the presence of calcareous aortic vegetation had led to the formation of an aneurysm at the point where the vegetations rubbed. In all the cases, the aneurysms became visible at the outside of the heart, between the aorta and pulmonary artery. The specimens he further pointed out were all examples of aneurysms occurring in the fibrous tissue of the heart; aneurysms occurring in the muscular tissue were far more uncommon.

Card-Specimens.—Dr. HALE WHITE: Hæmorrhage into the Sheath of Optic Nerves.—Mr. F. SWINFORD EDWARDS: Carcinoma of Bladder.—Mr. ARBUTHNOT LANE: Fracture of Tibia and Fibula into the Joint.—Mr. F. S. EVE: 1. Large Urinary Calculus expelled *per Urethram* by a Girl; 2. Ectopia of Crop of a Pigeon.

Annual Meeting.—The officers and council proposed by the retiring council were elected. The report of the council was read by the Honorary Secretary, Mr. BUTLIN; it stated that the position of the Society was very satisfactory, both in regard to its financial resources, the number of members, and the interest shown in its meetings.—On the motion of Dr. CHARLES WEST, seconded by Dr. THOMAS BARLOW, the report was adopted, and ordered to be printed.—Mr. T. W. HULKE moved a cordial vote of thanks to Dr. Goodhart, the retiring Honorary Secretary; this was seconded by Dr. W. B. HADDEN, and carried by acclamation.—Dr. GOODHART replied in suitable terms.—A vote of thanks to the retiring Vice-Presidents and members of Council was moved by Dr. PYE-SMITH, seconded by Mr. SWINFORD EDWARDS, and carried unanimously.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, NOVEMBER 7TH, 1885.

C. SPENCE BATE, F.R.S., President, in the Chair.

Necrosis of the Jaw after Measles.—Mr. COTTERELL showed a large sequestrum which he had lately removed at the Children's Hospital, Paddington Green, from the mouth of a child 3½ years of age, who had been ill with measles six months before.

Removal of Blade of Tooth-forceps from the Right Bronchus.—Sir WILLIAM MAC CORMAC gave an account of the following case. A domestic servant, aged 24, applied to Mr. Sanders, of Barnstaple, requesting the removal of a number of diseased stumps, and the insertion of an artificial denture. Chloroform was administered by Mr. Jackson, a surgeon of Barnstaple; several molar stumps were extracted, and Mr. Sanders then attempted to remove the right upper second bicuspid, but met with an unusual amount of resistance, and the forceps slipped. On reapplying them, and using a little more force, the palatine blade snapped off close to the joint, and disappeared. The patient was at once seized with difficulty of breathing and lividity of the face, and it appeared for a time as if she would die of suffocation. It being evident that the fragment had entered the larynx, prompt measures were taken to favour its expulsion; the patient was inverted, and an emetic given, but without success. The alarming symptoms gradually passed off, and, during the next five or six weeks, the patient suffered only from paroxysmal cough, pain on the right of the

sternum opposite the second intercostal space, and dyspnœa on exertion. These symptoms becoming more marked, with bloody expectoration and evident loss of strength, the patient was at last, seven weeks after the accident, sent to London, and admitted into St. Thomas's Hospital. The auscultatory signs pointed to the presence of the foreign body in the right bronchus. Chloroform having been administered, Sir William Mac Cormac exposed the trachea from the cricoid cartilage almost to the sternal notch, divided the isthmus of the thyroid body, and made an opening an inch and a half long into the windpipe. On passing down a probe, the steel fragment could be distinctly felt in the right bronchus, at a distance of about four inches from the lower end of the wound, and about an inch and a half beyond the bifurcation of the trachea. A polypus-forceps was then introduced, and, after a great deal of difficulty, caused by the wedge-like shape and smooth surface of the fragment, it was at length seized and extracted. It measured an inch in length. The patient had some slight bronchopneumonia, but made an excellent recovery.

Some Points in the Pathology of Cystic and Encysted Solid Tumours of the Jaws.—Mr. F. S. Eve read a paper on this subject. After briefly noticing the clinical character of multilocular tumours of the jaws, Mr. Eve referred to a lecture which he had delivered at the Royal College of Surgeons in 1882, and which was published in the British Medical Journal (January, 1883), in which he had shown that these tumours probably originated in epithelial ingrowths, invading the bone in the vicinity of teeth. This conclusion had recently received some confirmation from the observation of Malassez, that epithelial remains, probably of the enamel-organ, existed normally in the periodontal membrane. These tumours were a modified form of epithelioma, and were decidedly, though not in a high degree, malignant. The cyst-formation resulted from colloid degeneration and vacuolation of the epithelium; and the remains of cell-walls, together with undissolved threads of protoplasm, produced the appearance of a reticulum in the central cells of the columns and alveoli of which the tumour was composed; these, in many instances, were bounded by a layer of columnar cells. These peculiarities gave the tumours a resemblance to the rudimentary enamel-organ, on the type of which they were formed. Two views might be held regarding the mode of formation of the reticulum in the middle layer of cells of the normal enamel-organ. That generally entertained was, that the cells were compressed by the collection of fluid between them. The other, which Mr. Eve believed to be the correct explanation, was that the protoplasm of the cells underwent degeneration and solution. The latter was certainly true of these cystic tumours, and he had also observed "signet-ring" cells, and other evidences of degeneration and vacuolation of cells in the normal enamel-organ. Mr. Eve then described some cases of solid tumours of the jaw which were surrounded by a bony capsule, and might clinically simulate cysts. The first was a case of encysted solid tumour of the lower jaw, in a man aged 24. It had existed four years, but had not increased in size for three years. It was composed of small compressed, or angular, epithelium, with, in places, large columnar enamel-like cells, and scattered bands of dentine-like structure; no return had taken place two years after its enucleation. Case 2 was a museum specimen of malignant tumour, removed by Mr. Heath from the lower jaw of a man, aged 32. It was composed of sarcoma-like tissue containing masses and columns of epithelium. It was not encapsuled, and was only alluded to as presenting in its minute structure some relation to the preceding. Case 3 was an encapsuled fibro-sarcoma of the lower jaw in a boy, aged 15. A mass of bone, surmounted by a nodule of enamel, projected from above into the cavity containing the tumour. Vertically placed elongated cells, resembling odontoblasts, were found on parts of the surface of the tumour. A similar case was recorded by Duplay, in which the crown of a tooth occupied the bony capsule enclosing a fibrous tumour of the lower jaw. It was convenient to place these tumours in a separate class corresponding to the odontomes embryoplastiques of Broca, but their origin in all cases from aborted teeth was open to doubt. In conclusion, Mr. Eve made some remarks on the relations of the different varieties of odontomes. It appeared to him that Broca's group was not really a homogeneous one, but included types of various pathological formations; the odontomes coronaires and radiculaires being simply forms of hypertrophy, whilst the odontomes embryoplastiques and odonto-plastiques must be regarded as true tumours.—A short discussion ensued.

Burmah.—Dr. William Alexander has published a very interesting account of Burmah and the Burmese in the illustrated *Naval and Military Magazine*. Dr. Alexander lived for some years in that country.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT.

November 18th, 1885.

Walter Dickson, M.D., President, in the Chair.

Raynaud's Disease.—Mr. A. D. Murray described the case of a boy, aged 3, who had been fairly healthy all his life. Mr. Murray had operated on him for club-foot some months before the attack. The last division of tendon took place on December 29th, 1884, after which the leg was put in irons. He remained in good health until March 4th, 1885, when, in the afternoon, he began to scratch the left knee and thigh. Shortly afterwards, he began to cry, and said his leg was sore. His mother then took off the instrument and boot, and noticed a slight discoloration on the upper and inner part of the knee, not as large as a sixpence. It quickly extended down as far as to where the padding of the splint had reached. About 7 p.m., an angry red line was noticed round the discoloration. Next morning, the patch was much larger and darker. On the evening of March 5th, the discoloration extended from about three inches above the knee to about two inches below it on the inner and under surface of the joint. No other part was affected. The child was suffering great pain in the diseased part, and also complained of pain in the extremities. The pulse was extremely rapid and irregular. The breathing was very quick. The temperature was below the normal. The surface of the body was palpably cold. In the course of an hour, both feet had become black and much swollen. In about an hour more, the hands and arms had assumed a dusky hue, and were much swollen. On the morning of March 6th, another discoloured patch appeared on the back of the left thigh; and, towards the afternoon another came on the left cheek. By this time, the feet and hands were quite gangrenous; all pain left the child about 10 o'clock, and he died at 10.30 p.m. The urine appeared normal. The disease spread so rapidly in the arms, that the progress could actually be watched.

Empyema: Thoracentesis.—Dr. W. H. Blake related this case. The subject was a little girl, aged 10. Empyema developed after acute pleuritis. The presence of pus was determined by the use of the hypodermic needle, and the chest was freely laid open in the eighth space posteriorly. The case terminated in complete recovery. The operation was performed in a crowded cottage, with no skilled nursing, and no antiseptic precautions.—The discussion which followed was chiefly in reference to diagnostic signs of the presence of pus, and to the choice of the position for incision. Dr. Brett, Mr. Fisher, Mr. Cayley, and Mr. Murray took part; and Dr. Blake replied.

Osteo-sarcoma of the Left Knee.—Mr. Webster related this case. It occurred in a girl, aged 13½, who, whilst at a children's party, fell over a scraper, and injured the knee. The case was seen by Mr. Leslie Bates with Mr. Webster. The joint was aspirated, but only a little sanious fluid evacuated, and amputation was performed. The child, however, never really rallied, and died on the third day.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

Thursday, December 17th, 1885.

G. S. Brady, M.D., F.R.S., President, in the Chair.

Fibro-sarcoma.—Mr. E. A. Maling showed a large fibro-sarcoma which he had removed from the breast of a woman. The tumour had recurred, and had been removed three times within two years, the health of the woman not being at all affected.

Calcareous Degeneration of Eyeballs.—Mr. Hopgood showed a number of eyeballs containing large masses of calcareous deposit, resulting from old injuries.

Perforating Sarcoma of Skull.—Mr. Maitland exhibited the brain and skull of a man who had died from this disease. The skull showed an aperture six inches in diameter, through which the tumour protruded. The membranes were intimately adherent to the brain. The patient showed very few symptoms during life, but he had occasionally suffered from violent epistaxis. A secondary growth was found at the base of the skull. The microscope displayed spindle-cells of a large type.

Inversion of the Uterus.—Dr. Dixon, who read a paper on this subject, dealt with the given theories as to the cause of the occurrence. He gave the history of a case which had been under his care, and which had resisted repeated attempts to return the uterus with the hand. The patient was then kept perfectly quiet for a month, before using Aveling's instrument. This was then applied, and reduction effected within a few hours, and the patient quite recovered. Dr. Dixon

deprecated the resort to amputation until a patient trial had been given to the above mentioned instrument.

Vaginismus.—Mr. E. A. MALING read the history of a case which had been cured by Marion Sims' operation, after local treatment with belladonna, etc., and the administration of bromide of potassium, had proved of no avail.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, DECEMBER 4TH, 1885.

T. EVELYN LITTLE, M.D., President, in the Chair.

Madura Foot.—Dr. E. H. BENNETT exhibited a specimen of madura foot, which had been presented to the museum of the University of Dublin, by Surgeon Burke, of the Indian Medical Service. The specimen was obtained by amputation for the relief of the disease, which occurred in a coloured woman, an inhabitant of Central India. Dr. Bennett said he could add nothing to the description of the disease, which had been fully given by Carter, in his splendid monograph. On first examination of the fistulous openings which abounded all over the misshapen member, a few dark grains of fungous growth could be discerned, which led him to refer the specimen to the melanic variety.—Dr. HENRY KENNEDY asked if the disease was chronic, and if the patient suffered much.—Dr. BENNETT said the disease was extremely painful; at all events, in the present case it was sufficiently so as to compel the woman to allow her foot to be amputated by a military surgeon.

Milky Fluid from a Case of Ascites.—Dr. DUFFEY exhibited a specimen of milky fluid removed by paracentesis during life from the peritoneal cavity of a single woman, aged 52; and also portions of the viscera from her body. The case was one of chronic diarrhœa of five months' duration, during the last six weeks of which there was, in addition, ascites. The abdomen was tapped three times. On each occasion, a milky fluid was withdrawn. Erysipelas supervened after the last tapping; and the woman, who had become very weak and emaciated, died. On *post mortem* examination, the parietal peritoneum was found to be thickened and opaque, and, as well as the costal pleura, sprinkled over with small white fibrous nodules, which were likewise plentifully bestrewed over the greatly thickened omentum, and the serous envelope of the intestine. In Douglas's pouch there was a considerable deposit of nodules, which, in some places, had coalesced, and looked like caseous masses commencing to soften. There were enlarged glands in the lesser omentum, and in the vicinity of the cæcum. Numerous small ulcers were found in the cæcum itself and the adjoining portion of the large intestine; and both segments of the valve were much thickened and ulcerated. The thoracic duct and its branches appeared quite normal. Dr. Duffey believed the case to be one of tuberculosis, but he could not say what was the cause of the colour of the fluid, or what connection, if any, there was between it and the chronic peritonitis. The fluid was not chylous. So far as the circumstances went, the case seemed to support the conclusion recently advanced by M. Letulle, to the effect that a chronic inflammatory element was the most constant character in the genesis of such chyliform effusions.—Dr. FOOT had a case of this kind, in which he tapped the patient four times, for effusion into the peritoneal cavity. Mr. Scott analysed the fluid, and found in it 25 per cent. of sugar, and a notable quantity of urea; which he expected, as the man was suffering from parenchymatous nephritis and general dropsy. But his limbs and scrotum had to be punctured, which was done without any bad results, and the fluid which issued from these punctures, of which he made about 150, was as limpid as dew. On the other hand, the fluid that came from the peritoneal cavity was like milk and water; and similar fluid came up from the man's stomach. By the four tappings, twenty-four quarts of this milky fluid were taken from him. The specific gravity of it was from 1.004 to 1.006. He determined the white colour to be due to white blood-cells, granules, and corpuscles, which had been originated by the chronic inflammation of the peritoneal cavity. The man had had hepatitis, having been addicted to drink, and also had disease of the kidneys.—Dr. HENRY KENNEDY, Professor BENNETT, Mr. STOREY, and the PRESIDENT also joined in the discussion.—Dr. DUFFEY, in reply, said he believed most analyses that had been made of the kind of milky fluid in question had shown the presence of sugar. In his case, the fluid had not been examined for sugar. Dr. Foot's case bore out the view, that a great many cases of this kind were due to chronic peritonitis. A microscopic examination of a portion of the fluid drawn off at the second tapping showed some epithelioid cells and exudation-corpuscles. There was no microscopic evidence of bacilli.

Tumour of the Internal Saphena Vein.—Dr. J. K. BARTON made a communication on a tumour of the internal saphena vein. It was about the size of a pullet's egg, and was evidently formed by an expansion of the coats of the vessel. It was filled with a clot so firm and adherent to the lining membrane, that it could with difficulty be separated.—Dr. HENRY KENNEDY remarked that several years ago he saw some remarkable tumours in the insides of the veins of cattle which had been attacked with pleuro-pneumonia. Where the animal lived for six or eight weeks, the disease ran into phthisis, with an immense deposit of tubercle, and the great veins leading to the heart were obstructed with distinct tumours adherent to the coats of the veins, and as large as marbles.—Dr. MACSWINEY regarded the case as one of a venous thrombus occurring in a man of feeble circulation and sedentary habits, which, instead of breaking up and being carried through the circulation and creating emboli, hardened and coagulated.—Dr. BARTON, in reply, said the specimen exhibited a varicose condition of the vein of more than ordinary interest from the exceedingly deformed character and aneurysmal appearance.—Dr. FOOT said that the kidneys were typical examples of the contracted granular kidney, as described by Richard Bright. The heart was hypertrophied, weighing 32 ozs., the hypertrophy chiefly affecting the left ventricle. Neither valvular disease nor atheroma of the aorta was present, but the surface of the heart was covered with a regular sheet of pericardial exudation.

Cerebral Apoplexy.—Dr. MACSWINEY exhibited the brain of a man, aged 60, who had died from rupture of an intracranial vessel. He was a labourer; and, a few hours before the fatal attack, he complained of pain in his head. That did not deter him from continuing his work, and he was in the act of levelling a wall with a crowbar when he fell. When persons came to his assistance, he was conscious and could speak, but was unable to walk; but consciousness and power of speech rapidly left him, and, in two hours after the attack, he was brought to the hospital in an insensible condition. His face was pale, and his pupils contracted and immovable, but he had not stertorous breathing. His pulse was feeble and rapid. He passed a quantity of urine, which trickled to the floor. His left upper and lower extremities were almost tetanically contracted. He lived about fourteen hours after his first seizure. After death, the convolutions on the left cerebral hemisphere were found very much flattened, and there was considerable subarachnoid effusion of blood on their surface. The base of the brain was occupied by a very large effusion of blood, which had burst through the arachnoid, and was effused into the arachnoid space. When the loose blood had been removed, it was found that, on the left side, there was an aneurysmal dilatation of one of the branches of the internal cerebral artery, which had given way. There was a very large hæmorrhagic focus, which had torn through the white substance of the frontal convolutions, and excavated a large cavity, which was filled with clotted blood, and the sides of which were formed of projections of lacerated brain-substance. The ventricles had not been opened, but he had no doubt that there was blood in them. He had no doubt that the efforts the man was making were the cause of the rupture.

Osteomalacia.—Dr. E. H. BENNETT exhibited specimens taken from a patient who had been under his observation for several years before her death, and during the entire period of her disease. The case was exceptional in this, that, while the woman was comparatively young, being at her death about 39 years of age, pregnancy had not occurred as the starting point of the disease, nor were the conditions of life such as could be assigned as the cause. She had lived as upper nurse in most comfortable situations and in various climates, in England, Ireland, and France. The chain of events in the progress of the disease was spontaneous fracture of the left clavicle, after union of this its refracture, a fracture of the shaft of the humerus at its upper extremity, followed at intervals of several months by successive fractures of the same bone in its upper half, each fracture uniting well and in the usual time for healthy bones. During the treatment of the last of these accidents, just as the repair was completed, the shaft of the femur on the same side broke in its upper half as the patient turned in bed. At this time, she suffered severe pains in the lower limbs and back, and particularly in the right thigh; she could not bear the restraint of a Liston's splint, and milder means were adopted, but the patient suddenly died from failure of the heart. Her fingers had become remarkably clubbed at the ends, while the nails were corrugated, but there was no evidence of phthisis. The bones, which had been the seat of pain as well as those that were broken, presented a red mottled appearance, and were so softened that a scalpel could easily be thrust through their tissue. The medulla was, however, fatty, and free from red colorisation. The kidneys were studded everywhere with fine amorphous grains of dull white particles of gritty sand, against which the edge of the knife grated, but there was no free sand or calculus in the ureters or bladder. These grains were

found to be composed of mixed phosphate and carbonate of calcium—to be, in fact, bone-earth. The liver and spleen were free from disease. The heart was very small, thin, and soft, and evidently fatty.—After some remarks by Dr. BYRNE, Professor BENNETT, in reply, said, in the present case, a tendency to repair had shown itself at the seat of the fracture, while the disease progressed elsewhere; whereas it was one of the characteristics usually met with in osteomalacia, that fractures did not unite. Here, a repair took place, and yet the repairing material subsequently underwent degeneration.

OBSTETRICAL SECTION.

FRIDAY, NOVEMBER 27TH, 1885.

T. MORE MADDEN, M.D., President, in the Chair.

Pathological Specimens.—Dr. KIDD showed a double Fœtal Monster, aged about five months, which had been forwarded to him by Dr. Leeper, of Armagh.—Dr. J. A. BYRNE exhibited an Ovarian Tumour which he had removed about a week since from a patient in St. Vincent's Hospital.—Dr. KIRKPATRICK exhibited a Fibro-myomatous Polypus removed from a multiparous woman in Sir P. Dun's Hospital.—Dr. MACAN showed a somewhat similar Polypus removed from a patient under his care in the Rotunda Hospital. He also exhibited an eight months' Fœtus with general Anasarca and curious folds on the skin.

President's Address.—The President of the Section, Dr. T. MORE MADDEN, delivered his opening address on "Recent Progress in Obstetric and Gynæcological Medicine."

Axis-Traction in Instrumental Delivery, with Description of a Simplified Axis-Traction Forceps.—Dr. NEVILLE detailed the various instruments by which it had been attempted to give effect to the principle of axis-traction in instrumental delivery. Tarnier not only exposed the defects of the ordinary forceps, but was also the first to construct a part which answered to the true demands of theory. The main defects of Tarnier's most recent model consisted in its complexity, amounting to clumsiness, and its cost, which was prohibitive to a general practitioner. Some of the chief modifications of Tarnier's forceps were exhibited and explained, Professor Simpson's being that best known in this country. The forceps should be constructed so as to allow the whole force employed to be exerted in the axis of delivery, and so as to leave the spontaneous movements of the head uninterfered with. All who had hitherto devised a true axis-traction forceps had adopted Tarnier's plan of using steel traction-rods, permanently attached by pivot joints just below the fenestræ of the blades. Yet such rods were certainly open to many objections, which would make it very desirable, if the same results could be otherwise attained, to do without them. They added to the cost and complexity of the instrument, made it more difficult to introduce, prevented the shanks from being passed well back towards the perinæum without danger of injuring it during delivery, and introduced the chief difficulty in all these forceps, that of securing them in some neat and effective manner to the rest of the traction-apparatus. The forceps which he exhibited was without such traction-rods, but he had the very high scientific sanction of Mr. G. F. Fitzgerald for stating that mechanically it gave the same results in another way. The forceps to which the traction-apparatus was applied might be Barnes's, Simpson's, or other double-curved forceps, according to individual preference; but the author on many accounts preferred Dr. Barnes's. Immediately beneath the lock a curved steel bar was fastened rigidly to the handles, and projected backwards sufficiently far to reach the imaginary continuation of the axis of the blades. At this point, a pivot joint, admitting free motion in the horizontal plane of the forceps, connected the traction-bar with another short one, which terminated in a joint so arranged as to permit motion in a plane perpendicular to that allowed by the first joint. From this point, the traction-apparatus was continued onwards into a transverse traction-handle, with which it was connected, exactly as in Simpson's axis-traction forceps, by a rotatory joint. The advantages claimed by the author for this instrument were, that it was much simpler, cheaper, more portable, and easier of application than any of the modifications of Tarnier's forceps, while possessing all their merits; that it got rid of the disadvantages of traction-rods within the vagina; that the traction-apparatus consisted of one piece, which could be immediately applied after the blades had been locked; and that the same instrument might, by means of this apparatus, serve either as an axis-traction or an ordinary double-curved forceps.—Dr. MACAN thought Dr. Neville gave too much credit to Dr. Tarnier, and too little to Hubert, Hermann, and others, who had been working at the same problem of axis-traction before him. He did not attribute the same importance as Dr. Neville did to the special construction of Tarnier's forceps allowing rotation, because he believed that rotation could, and often did, occur within the blades of the forceps without their partaking in it. He had himself used Dr. Neville's forceps in several cases in the Rotunda Hospital, and found it answer extremely well. The elimination of traction-rods he considered a very great improvement; and the ease with which the traction-apparatus could be applied, as well as its portability, were distinct improvements. It would be the better for having some kind of indicator, which would show the exact direction in which to apply traction.—Dr. ATTHILL said that the instrument devised by Dr. Neville appeared to him to be the best and simplest axis-traction forceps he had yet seen. He was not, however, an advocate of axis-traction forceps. He objected to the compression-screw, which seemed a necessary part of them all. It might cause such a pressure on the child's head that death would follow. He had used Tarnier's first model when he was Master of the Rotunda, but found it so complicated and difficult to apply when the head was above the brim, that he had abandoned it.—The PRESIDENT said the Society was indebted to Dr. Neville for the very practical axis-traction forceps he had shown. He doubted, however, whether axis-traction would long continue to be practised. Tarnier's instrument he considered entirely too complicated.—Dr. NEVILLE, in reply, argued that, from a practical point of view, the principle of axis-traction had been amply vindicated by the fact that, with few exceptions, it had been recommended and advised by the leading obstetric authorities at home and abroad. Among English authorities might be cited Dr. Barnes and Dr. Playfair. Axis-traction saved force by economising it, and the maternal tissues were saved from an injurious and needless pressure. The action of the fixation-screw was not, in his opinion, so injurious as Dr. Atthill thought it might be. Practically, it had not been found to injure the child, and was, indeed, only intended to keep the blades from slipping by the opening of the handles during the application of traction. It should not be called a compression-screw, for, if properly used, it had nothing to do with compression. While fully recognising the great value of the old forceps, he would not like to commit himself to stating that it was incapable of improvement.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, DECEMBER 16TH, 1885.

ALEXANDER OGSTON, M.D., President, in the Chair.

Congenital Blindness from Optic Atrophy and Pigmentary Retinitis.—Professor DYCE DAVIDSON gave an account of a number of cases of congenital blindness from optic atrophy and pigmentary retinitis, which occurred in four families, members from three of which were shown at the meeting. In the first, a family of six, the third, fourth, and fifth, a boy, aged 14, and two girls, aged 10 and 8, were quite blind; while the first, second, and sixth had normal sight. In the second family of five, the fourth had pigmentary retinitis, while the rest saw well. The parents were first cousins. In the third family of six, the second, third, and fourth suffered from pigmentary retinitis, while the first, fifth, and sixth were healthy. The fourth family had five members, of which the first and third were deaf-mutes with pigmentary retinitis, the second and fourth were deaf-mutes, and the fifth was healthy. Nystagmus was a rare coexisting condition. Consanguinity of parents was present in one instance. Syphilis was suspected in two of the families; it was absent in one, and doubtful in one. Contraction of the field of vision was generally very marked.

Some Uses of Ergotine.—Dr. FRANK OGSTON read a paper on some uses of ergotine.

New Ophthalmic Instruments.—Dr. MACKENZIE DAVIDSON exhibited and explained the uses and mode of employment of several new ophthalmic appliances, namely, Mr. Priestley Smith's ophthalmoscope, his models of the eye, showing anomalies of refraction and the effect of accommodation, and his sliding diagrams to illustrate accommodation, refraction, and strabismus; Snellen's method of determining colour-blindness; and Lindley Johnston's trial-frames and spectacles.

Deformity of the Mouth and its Mechanical Treatment.—Dr. WILLIAMSON showed models of a case of deformity of the mouth, in which the lower front teeth projected forwards and to the left side in front of the teeth of the upper jaw, the arch of which was much smaller than that of the lower. The patient was a girl, aged 16, and nothing had been done in consequence of the unpromising nature of the case. The upper arch was first expanded by means of Coffin's split plate, and an upper lateral incisor brought into line. Two lower bicuspids were then extracted, and the lower teeth brought in by means of a frame with two arms, a long and a short, and composed of a steel-wire imbedded in vulcanite. These arms were hooked, and so placed that, when brought together by means of wire connecting them and twisted

up, pressure was produced upon the front of the lower teeth, bringing them inwards. At the same time, the upper front teeth were pressed out in the usual way, so that the appearance of the face was considerably improved. The deformity was hereditary; and another sister, aged 22, presented a similar but less marked condition, the left lateral incisor and canine above biting inside the lower teeth. By the pressure of screws in a vulcanite plate against the two teeth, they were brought into position in a month.

Papilloma of Bladder.—Professor DAVIDSON exhibited a specimen of papillomatous tumour of the bladder. The growth occurred in a gentleman, aged 50; it was of two years' duration, and probably sarcomatous. The right ureter was obstructed by the growth, and the corresponding kidney totally destroyed. The left kidney was slightly cirrhotic. Death ensued from hæmorrhage and consequent exhaustion.

REVIEWS AND NOTICES.

ON BEDSIDE URINE-TESTING: a Clinical Guide to the Observation of Urine in the Course of Work. By GEORGE OLIVER, M.D.Lond., etc. Third Edition. London: H. K. Lewis. 1885.

IN the preface, the author, Dr. OLIVER, of Harrogate, states that the second edition formed no more than the nucleus of this, the third edition of his guide to urine-testing at the bedside. Being himself impressed by the importance of a routine and systematic examination of the urine, he seeks in this volume not only to point out the right path, but to show, by precept and example, how it may be most easily trodden. This is, indeed, the laudable object of the whole system of urine-testing with test-papers, which he has presented to the profession as a means of rendering routine examination of the urine possible.

A careful study of his method will probably convince any unprejudiced observer that in Dr. Oliver's test-papers we have a cleanly, convenient, quick, and, as a rule, trustworthy, method of determining morbid states of the urine. As qualitative tests, they are convincing and absolutely satisfactory. The two tests for sugar leave nothing to be desired in this respect. In the one case, a paper (rather less than half the size of an ordinary litmus-paper), which has been charged with a suitable quantity of indigo-carmine (sulphindigotate of sodium), is boiled with a little distilled or soft water until a deep blue solution is obtained; a drop of urine is then added, the test-tube boiled again for a few seconds, and then kept warm. In a few more seconds, if the urine contain much sugar, the blue will darken to violet, then to purple, which will change to red, reddish yellow, and finally to light yellow. On slightly agitating the tube, the play of colours is reversed, and the fluid again becomes blue. This reaction, which is of great beauty and delicacy, appears to be but little known, though described by Muhler many years ago, and published in this country in so well known a work as the translation of Neubauer and Vogel's book on the urine, made for the New Sydenham Society. The other test-paper for sugar—the cupric test-paper, a double paper, one piece being charged with "tartrate of cuprammonium," and the other with carbonate of soda—gives very neat results if the directions be precisely followed; but, if more than one drop of urine be added, no reaction may be obtained. It is probably not generally known that, if a very weak mixture of Fehling's solution in water be used, the addition of a considerable quantity of saccharine urine—say fifteen or twenty minims to one minim of Fehling's solution in sixty of water—causes no precipitate; while, if one minim be added, the reaction is obtained with great precision and neatness. This cupric test-paper is rather less convenient than the indigo-carmine test-paper, as the layer of India-rubber by which the two pieces are joined is difficult to remove, often, in curling up, fixing itself on the side of the test-tube, from which it is with difficulty detached without breaking the tube—as, indeed, often happens.

It is very questionable whether Dr. Oliver is not asking too much of his method to expect it to give quantitative results. He states that, in his own hands, he thus obtains reliable observations; and we have, by careful trial, satisfied ourselves that, with the indigo-carmine test, an approximate estimation may be made. Long practice may have made Dr. Oliver very perfect in the application of the method; but, setting aside any objections which might be raised on the ground that the accuracy of the method depends on the quick recognition of a delicate difference in colour, the time consumed appears to be not less than that needed to obtain a thoroughly trustworthy estimation with Fehling's solution.

These two test-papers, the indigo-carmine and the cupric, seem to be the most successful, and to give the most reliable results. The two test-papers for albuminuria are ingenious and neat, and, where used with great care, may seldom lead to error. On the whole, however, it may be doubted whether they possess any advantage over simple acidification and boiling for ordinary clinical work. In the citric acid test-papers, a convenient method of acidification is supplied. By the use of litmus-papers, the degree of acidity of urine may, with care, be ascertained.

The test for bile in urine is, we believe, original. It depends on the fact that peptones are precipitated from their solution in water by bile in the presence of acids. Dr. Oliver states that he has met with no other urinary constituent, normal or abnormal, which precipitates peptones. By the use of this method, he has found that the amount of bile-salts present in the normal urine of the same individual varied at different periods during each twenty-four hours; the maximum was during periods of fasting; after a meal, the quantity decreased, the minimum being reached about three hours after; that is to say, elimination of bile by the kidney was the converse of the flow into the duodenum. Exercise increased the elimination.

The work is very suggestive, and will well repay perusal; and a more extended experience of the test-papers will probably greatly increase their popularity with the profession, perhaps at present rather hindered by the difficulty of obtaining them except at an almost prohibitive price.

VON ZIEMSSEN'S HANDBOOK OF GENERAL THERAPEUTICS, Vol. III. On RESPIRATORY THERAPEUTICS. By Professor M. J. OERTEL, M.D., of Munich. Translated from the German, with a preface and notes, by I. BURNEY YEO, M.D., F.R.C.P., Professor of Clinical Therapeutics in King's College, London, etc. London: Smith, Elder, and Co. 1885.

THIS invaluable series of treatises on therapeutics grows apace, and each volume is of the highest value. This volume is larger than the two which have preceded; and this is to be understood, in the words of the translator, as a "timely and unmistakable testimony of the importance which is attached in Germany, at any rate, to the methods therein described of treating diseases of the respiratory organs." The subject is one that has evidently excited great interest in France and Italy, judging from the extended bibliographical references to French and Italian literature. The historical part, which is subdivided into five periods, is very interesting, dating, as this method is made to do, from the time of Hippocrates. The *modus operandi* has not materially changed, unless the introduction of the various spray-producing contrivances constitutes so striking an innovation; but the treatment by the addition of gases, such as oxygen, or by alterations in the temperature (refrigerant treatment) or density of the air inhaled, is essentially modern. This method is probably, as suggested, in its infancy, but it is a vigorous one, and of great promise. The various modifications of the first spray-producer of Sales-Giron are very fully described and compared, and the merits of the cold and steam sprays are exhaustively discussed. Evidence is given of the penetration of the pulverised matter or liquid into even the ultimate ramifications of the bronchi, based on a series of experiments on human beings and animals.

The employment of inhalations is common enough, not only by medical men, but by the public; but the advantage of a systematic treatise on the subject is obvious. The indications for the use of the various medicated sprays are carefully compiled, and every endeavour is made to make their administration less empirical and more scientific. There is, as might be anticipated, a tendency to generalise this method of treatment, and to give a category of the diseases in which it *may* be employed, rather than those in which it is more strictly applicable. Inhalations are not, however, admissible exclusively in diseases of the respiratory tract. There are many drugs which, from their nature, are more conveniently, and sometimes more efficaciously, administered by these means than by way of the stomach, or by subcutaneous injection; such, for example, as chloroform, nitrite of amyl, etc., where the desired effect is more or less purely constitutional; and it is possible that this method might advantageously be extended to some drugs habitually given by other channels. A case of ulcerative endocarditis is described, which was successfully treated by inhalations of a "pulverised" solution of bicarbonate of soda, the salt being directly conveyed to the heart after absorption. Inhalations, again, may consist either of the vapour of water or other substance, or of a liquid which is converted into a spray sufficiently fine to follow the current of inspired air. Solid bodies may be inhaled in the form of an impalpable powder, or as fumes, or in aqueous or other

solution, the latter being converted into a spray. The object of the inhalations may be either to obtain a constitutional effect, or they may be directed to the production of some local result, stimulant or anodyne, astringent or demulcent, solvent or styptic, or antiseptic. Here, then, we are furnished with the means of acting directly on the respiratory tract with a thoroughness not attainable probably by any other means. The more modern views on the pathology of tuberculosis, diphtheria, etc., render recourse to this class of applications all the more seducing; but experience alone can show whether the hopes based on theoretical considerations are to be justified by increased and more efficient control of the pathological processes which affect more particularly the respiratory tract.

The second part of the work is devoted to the physical part of respiratory therapeutics, comprising changes in the density of inspired air, and of the air expired into. A copiously illustrated description is given of the various apparatus contrived for the purpose of modifying the atmospheric pressure, from the complicated apparatus of Schnitzer or Geigel, to the accordion-bellows of Fränkel. The general effect of breathing compressed air is to distend the lungs and thorax, and a perceptible augmentation of chest-girth is said to follow even one application. It is easily imagined from this action that caution is required in its use; but the most brilliant results are said to have been obtained in the case of lungs bound down by pleuritic adhesions or false membranes, where an increase of as much as a thousand cubic centimètres in the vital capacity of the lungs has been observed. By the penetration of condensed air into the lungs (from one-thirtieth to one-sixtieth of an atmosphere being the pressure most commonly employed), additional space is created for the complemental air, varying according to the elasticity of the lungs, the expansibility of the thorax, and the applied pressure.

In Waldenburg's experiments, a strong, healthy man, after the deepest inspiration, measured as a maximum across the chest, at the level of the nipples, 98 centimètres; after inspiration of air compressed to one-sixtieth of an atmosphere, the measurement was one hundred centimètres, and when the air was compressed to one-fortieth of an atmosphere it was 101.5 centimètres; so that the expansion of the thorax and the lungs, with moderate compression, increased by 3.5 centimètres.

The immediate effect of expiration into compressed air is due to the introduction of an impediment into the expiratory current. The expiratory air must overcome this more or less completely in order to escape, while some portion of it is always retained in the air-passages and the lungs. In performing this task, the expiratory muscles encounter a greater strain than in ordinary expiration, as the pulmonary air must be submitted to a pressure which will overcome the tension of the air in the apparatus. If the density of the air in the apparatus be superior to the expiratory pressure, then expiration cannot be accomplished, and the result is apnœa in the position of forced inspiration. Lesser degrees of pressure, when insufficient to prevent, retard the respiratory act; but the author alleges the remarkable fact, that even conditions of pressure which retard respiration are yet followed by increased activity and energy of respiration, though the precise significance of this assertion is doubtful. It is, however, questionable how far this fact can be utilised from a therapeutic point of view. With regard to the inspiration of rarefied air, it is said to afford a methodical gymnastic exercise, and to strengthen the inspiratory muscles. Expiration into rarefied air causes an increased volume of expired air, the increase being derived from what is called in normal lungs the "residual" air. This difference is more marked in emphysematous patients, often to an extraordinary degree; and these patients experience marked and immediate relief from this mode of treatment.

The effect of breathing compressed air is to increase intrapulmonary pressure, and so lead to stronger contraction of the heart, and consequently greater activity. Waldenburg maintains that compensatory hypertrophy of the heart may thus be produced; and to this he attributes many of his remarkable and permanent therapeutic successes.

The good effects once hoped from systematic inhalation of oxygen gas are declared not to be obtainable, or only to a very slight extent, and in a limited class of cases. Except in accordance with Dalton's law, the quantity of oxygen in the blood depends upon the amount of hæmoglobin present to absorb it, and consequently the proportion of oxygen in the air respired has little influence on the quantity absorbed. Increased absorption can only be obtained under increased atmospheric pressure, as in the pneumatic chambers. Nor is ozone better adapted for therapeutic practice; on the contrary, it is irritating to the mucous membranes, and may give rise to very unpleasant symptoms in consequence. Moreover, it cannot reach the blood in its active condition, and if it could, it would only exercise a disturbing influence upon the constituents of the blood, instead of any therapeutic effect. The apparatus, and the indications for and mode of employment of the pneumatic chambers, are very exhaustively described, and copious references are given to all the known literature on the subject.

Considered as a whole, this volume constitutes a valuable collection of observations and theoretical considerations on the subject of respiratory therapeutics, embracing all that has been done in this branch up to the present. Such a work, judiciously treated, cannot fail to excite renewed interest in a promising department of therapeutics, and to stimulate physicians to more extensive use of these means, and more systematic clinical observation of the results obtained. At present, these methods are possibly more suggestive than practical, except in the restricted sense in which they have been employed from time immemorial; yet no subject offers a better and more promising field for investigation.

The translation is well up to the high standard hitherto obtained, and the translator's notes are very useful as confirming or modifying the views of the author.

Burr's Medical Index.

A READY-REFERENCE or ready-memory index is to the physician and the surgeon a desideratum, the value of which increases with its completeness. Few, if any, have a greater need for the systematic arrangement and filing of letters and papers of all kinds so as to admit of certain and easy access, than the busy medical man. The Burr Index Company, Hartford, Connecticut, U.S.A., have produced and introduced into this country an index adapted to the special use of physicians and surgeons for the purposes, it is stated, of the annotation of particular references to matters found in text-books, medical treatises, reviews, journals, tracts, etc.; and for the entry of notes on peculiar diseases, or facts culled and observations made in actual daily practice, etc.; in short, for the preservation of memoranda of all kinds which it is desirable to lay by for ready reference.

The Medical Index, which is a strongly half-bound 4to book, is arranged with a projecting alphabet printed in gold letters on morocco leather (red and black alternating) folded over sheet steel. The gold letters are printed on both sides, projecting one-half of an inch from the edges of the leaves, just even with the covers of the book. When the book is open, the whole alphabet can be seen at a glance from either side, at any letter from A to Z, together with the combinations of each letter, as shown by the cut on the first page. It can be used with either hand for any length of time, without turning the covers of the book. Thumb-holes are cut in the edges of the leaves, in which appear combinations for all names in use, and are so arranged, when the index is opened at any letter of the alphabet, that the combinations of each letter appear in full (as shown in the cut under E.), and do not conflict with the combinations of any other letter of the alphabet. The combinations are also printed in the body of the book to locate the entry of names or subjects. The location of any name can be found without any experimental turning of the leaves: for example, to find the word etiology, it is only necessary to turn to E, when the combination ET is seen at once, and only one turn of the hand is required to find the page. The same plan is used throughout the index. The Medical Index is designed expressly for the use of physicians, surgeons, and medical students, with the combinations and spacing specially arranged for medical terms. It is ruled with columns for names or subjects, and reference matter, with printed headings, designating the entry of the name or subject, and reference matter, and in order to thoroughly adapt this work to the physicians' and surgeons' needs; and we are told that no amount of labour has been spared—particularly to effect the proper spacing, an arduous work, requiring long, specific, and accurate study and calculation,—no idle "guess work." Among other things, the aid and advice of studious old physicians who have kept daily memoranda for periods of from a score to two score years and more, have fortunately been obtained toward perfecting the index; and careful scrutiny of their various note-books has revealed the relative quantities of space occupied under various headings. To illustrate: the studious physician will find that he needs five times as much spacing or blank leaves, under the subject-initial letters Ab, Ca, In, Ov, Sy, Ut, as under some other letters. Some of the special features claimed for Burr's Indexes are these: first, all subjects and names are indexed by the first two letters; second, the first two letters are printed on the page where the subject is to be entered; third, it has nearly 400 divisions of the alphabet, while the vowel-system has a possible division of 130. The work is printed on fine white writing-paper ruled with faint lines. Burr's Indexes, by reason of their great completeness and their special arrangement to suit par-

ticular requirements have won for themselves in America a lasting reputation, and we much mistake if their good qualities do not ensure for them great favour in this country. They will prove without doubt of very considerable value to the medical practitioner, and will serve his needs with greater completeness than any other work of the kind which we remember to have seen. The work is made also to any required size, and issued in any particular binding. The agent for its sale in this country is Mr. H. Kimpton, 82, High Holborn, London.

NOTES ON BOOKS.

Voënna-Meditzinsky Jürnal (Military Medical Journal), September, 1885, Part cliv. Edited by Dr. N. J. KOTLOFF.—Dr. E. Salishtcheff brings to a conclusion his careful researches on Topographical Anatomy of the Male Perinæum. Dr. D. Kosorotoff briefly but clearly describes an Epidemic of Contagious Conjunctivitis, which he treated, with good results, by ice-water and alcoholic lotion. He finds Gräfe's cauterisation very harmful. Dr. S. Kiriokoff writes on Camp-Diarrhœa (*Lagernyi Ponos*), observed by him near Odessa. From the study of clinical facts, he draws the conclusion that the disease is caused by bacillus malariæ, and is nothing else but febrile intermittent diarrhœa. The number contains also parts of Dr. A. A. Alexëëvsky's experimental work on Transfusion of Defibrinated Blood in Septicæmia; and of Dr. Feodosieff's clinical experiments on Cold Wet Rubbings; as well as of Dr. A. P. Korkunoff's inaugural work on the Influence of Various Conditions on the Excretion of Albumen in Nephritis. [A report on this interesting work may be found in the *London Medical Record*, November, 1885, p. 467.] Dr. A. Michelsen's report on Practice in the Borisovsky Ophthalmic Station during 1884; Dr. P. T. Tieger's paper on Diet (or rather Starvation) of the Tenth Division in 1884; Dr. M. O. Perfilieff's able review of Russian surgical works for 1884; and a collection of reports from German, French, and English periodicals, complete the September issue of this official journal, which we would readily call useful, if we were able to forget that the subscription to it is still compulsory for every military medical man in Russia, in spite of all protests, weak and strong.

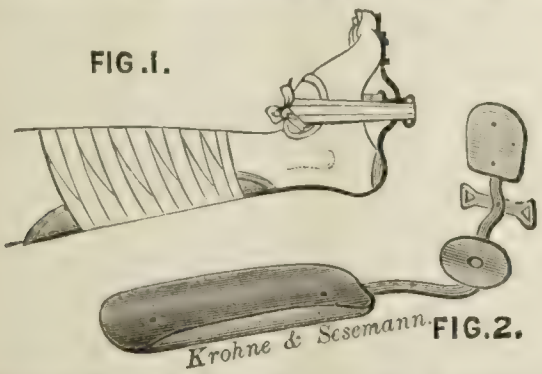
REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW SPLINT FOR PLANTAR VARUS AND ALLIED DEFORMITIES.

By ROBERT JONES, L.R.C.P., M.R.C.S.Eng.,
Honorary Assistant-Surgeon, Stanley Hospital, Liverpool.

I VENTURE to bring before the notice of surgeons a cheap and useful splint for application to the foot after division of the plantar fascia. It is a modification of a splint with which Mr. Thomas sometimes treats disease of the ankle. It is made of iron, the foot-stem being curved with the concavity pointing towards the sole. To this stem is attached a crossbar with holes at each end, through which the bandage is introduced in order to forcibly pull the foot straight. A large pad of cotton-wool is placed on the prominent dorsum, its position being often changed so as to avoid the risks with which continuous pressure threatens the tissues over thinly clad bones.

FIG. I.



Krohne & Sesemann. FIG. 2.

The advantages offered by the splint are its simplicity, ease of application, and efficiency. The portion of the sole operated upon is always in view, and if any bands of fascia become tight as the foot becomes stretched, they can be divided, the splint remaining *in situ*. It can be procured from Messrs. Krohne and Sesemann, of London, and Mr. Critchley, of Liverpool.

LOEFLUND'S MILK-FOOD PREPARATIONS.

THE importance of obtaining a good and uniformly reliable substitute for mother's milk in cases in which, from any cause, the natural supply fails, is so generally recognised as to call for little comment. It is sad to reflect that the infant-mortality in all large towns is so high—a circumstance attributable, in a very great measure, to the poor quality of much of the cows' milk supplied by ordinary vendors. That a good article may be obtained, under exceptional circumstances, and when special care is taken, we are quite prepared to admit; but still, in many cases, it will be found necessary to fall back on preserved preparations. Loeflund's Preserved Milk, from the Bavarian mountains, is a reliable form, and deserves a trial. It is prepared without the addition of sugar or of antiseptics. It has a pleasant taste, and is a very valuable addition to ordinary milk, increasing greatly its nutritive properties. The Kinder-milch recently introduced by the same firm is preserved by the addition of a concentrated extract of malt made from wheat. It is free from starch-materials and cane-sugar, and contains 33 per cent. of maltose. The Condensed Cream Emulsion, another excellent preparation intended as a substitute for cod-liver oil, consists of cream obtained from the best milk of the Bavarian Alps, combined with malt-extract, and condensed in a vacuum. All these milk-foods are of much value, and are likely to come largely into use, especially in the treatment of diseases peculiar to children.

CASCARA SAGRADA.

WITH reference to the introduction of rhamnus purshiana (cascara sagrada) to the British Pharmacopœia, Messrs. Parke, Davis, and Co. call our attention to the fact that they made the first inquiries, and procured the first shipment of the drug ever made, in the year 1877. It is indigenous to northern California. They have forwarded to us a copy of their working bulletin for the collective investigation of cascara sagrada, which contains a great mass of scientific and clinical information on the subject; and they first brought this valuable drug to the notice of the British medical profession at the meeting of the British Medical Association in Cork in 1879, and repeatedly since then. For the liquid extract of cascara sagrada and the cascara cordial of this firm, its original introducers, the agents are Messrs. Burgoyne, Burbridges, Cyriax, and Farries, wholesale druggists, 16, Coleman Street, London, E.C. The efficiency of these preparations is tried and well known.

THE JAFFRAY HOSPITAL.—On the occasion of a luncheon, given to the executive committee of the Hospital Saturday movement of Birmingham by Mr. Jaffray, at the Jaffray Suburban Hospital, Alderman Cook, M.P., on behalf of the committee, presented to Mr. Jaffray a handsome illuminated address, recording their warm appreciation of the magnificent gift which he had recently made to the town of the hospital for chronic diseases. Mr. Jaffray briefly acknowledged the presentation, which he said was quite unexpected, and announced the receipt of a draft for £1,250 from Mr. Cregoe Colmore, the cost of a bed.

THE DECLINE OF ZYMOTIC DISEASES.—An important supplement to the annual report of the Registrar-General has just been issued, showing the extent to which zymotic diseases have prevailed in the last ten years. It is asserted that, since the enforcement of the Vaccination Acts, there has been a gradual and notable decline in the mortality from small-pox. The decline in the mortality from scarlet fever was very considerable, the annual deaths per million having fallen from 972 to 716. The decline under the heading of measles has been much less considerable, being only from 440 to 378. The deaths from fever, including typhus, enteric fever, and ill-defined forms of continued fever, fell from an annual average of 885 per million to 484, a decline of no less than 45 per cent. This is held to be the most satisfactory of all the declines shown in the table, not only because it is the greatest in amount, but because enteric fever is, of all diseases, putting aside the effect of vaccination upon small-pox, the one which is most directly and largely affected by sanitary measures. Therefore, the decline in mortality under this heading is the best test available of the efficacy of sanitary administration, careful sewerage, better water-supply, and other sanitary improvements.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 9th, 1886.

REFORM IN THE TREATMENT OF THE SICK POOR.

WE have heard much of late of some of the defects of the Metropolitan Asylums Board, and there is a general tendency among the local visitors and boards of guardians to complain of their outlay. In this outcry, ratepayers generally are naturally prompt to join, nor would we be disposed to do anything to discountenance a close check upon the expenditure of this, or any other public body. Public vigilance and the free play of public opinion, duly enlightened, afford the best remedies for anything like extravagance, inefficiency, or abuse in the administrative proceedings of any elective board. It is a main advantage of local representative institutions that, from their very nature, they readily admit the application of this remedy; and the more direct the form of representation, the more immediate the contact of the governing body with the ratepayers, who are directly concerned in their expenditure, the less the probability of the growth or continuance of any kind of abuse. It is probably a defect in the constitution of the Metropolitan Asylums Board that its mode of election is indirect, and that it has not sufficiently frequent opportunities of contact with the ratepayers who are its constituents, or means and stated occasions of explaining and submitting to criticism the principles by which the Board is guided, the methods on which it acts, and the results of its action. The more the proceedings of the Metropolitan Asylums Board, as of any other representative council, are canvassed, and the more direct its contact with its real constituents, the sounder will be its policy and the better its work. Meantime, it is exceedingly satisfactory to read in a statement made on the best authority, and without any kind of prepossession, facts which show that the results of the movement for reform of workhouse infirmaries, in which it was our happiness to play an active part, have been, in every respect, more beneficient than could have been anticipated. Of the enormous boon conferred upon the multitude of sick persons who have been relieved from the thraldom of the workhouse-master, and whose illness has been treated on the true principles of hospital-administration, there can, of course, be no question. The inmates of the metropolitan sick-asylums of London are not only the pauper-sick, but the sick poor without stigma of pauperism, who, suffering from contagious diseases, are now promptly, humanely, and efficiently cared for. No capital in the world can compare with London for the humanity and the success with which this great work of mercy is carried out.

Those who choose to turn back to the records of the Workhouse Infirmaries Commission, and compare the revelations which were then made of the neglect, the discontent, want of nursing, and the blind absence of classification or discrimination, which characterised the treatment of the sick poor in the workhouse, will be able to realise the vast reform which was thus effected, and have cause to bless the names of those medical men and of those medical journals who rapidly brought about, and efficiently carried through, this great reform, with the aid and countenance of statesmen such as Villiers, Gathorne Hardy, and Goschen. There is, however, another and economical side of the question which, of course, requires constant and close attention. We put out of view the immense saving to the community which is effected by the whole bulk of sanitary legislation during the last twenty years, and it would not be easy to allot to each particular measure its share in the enormous economy realised—an economy estimated at not less than a million and a half sterling annually. There is, however, another highly important result which is being achieved, to which we are very glad to see prominence given in an authoritative statement which is published in the *Charity Organisation Review* of November 16th. It is discussed in the valuable paper on the "Out-relief System," by Mr. J. H. Allen, J.P. Mr. Allen quotes the statement of one who has been a relieving officer in St. Pancras for upwards of twenty years; and it is in the course of this gentleman's accurate and able statement of the improvements in the out-door relief department of St. Pancras, that we find this valuable evidence. St. Pancras, it will be remembered, was one of the parishes in which out- and in-door, and medical relief generally, were most attacked by Dr. Anstie and Mr. Ernest Hart, whose report on the nursing and treatment of sick poor in the St. Pancras Workhouse was couched in drastic language, which led the Guardians of St. Pancras to convoke a public meeting of the whole body of metropolitan guardians to protest against the condemnation thus pronounced. These, and other active forms of opposition to the reforms demanded broke down so completely, that they powerfully aided the rapid and successful attainment of the object in view.

Here are now the words of the experienced relieving officer of St. Pancras, at the end of twenty years. He refers first to the wretched condition of the poor, to whom out-relief was often administered to the extent of £600 weekly; and he mentions that out-relief has been reduced in St. Pancras from the large sum of £32,000 a year, in 1871, when the country was in the height of prosperity, to £10,000 last year, and it is still going down at the rate of £30 a week, in spite of all the bad times through which we have been passing. He goes on to say that the system of giving temporary relief, such as meat, wine, and brandy, etc., was then so bad, that the poor used all sorts of artifices to get a medical order; and, the relieving officer having no time to visit or inquire, they were perfect masters of the situation, and well knew it. There was an average of sixty applicants each morning. He adds that the many dispensaries recently established, and the granting of convalescent orders, by the Charity Organisation Society, to the poor, for whom they were intended, has done much to decrease the number of applicants for medical relief, which in the majority of cases was the beginning of continuous relief. He continues as follows.

"At that time, there was no parish infirmaries for the sick poor; consequently, they had to be treated at home, and in some instances I have known men dying on account of their wretched surroundings, the improperly cooked food, and the inability of the medical officer to order them the treatment which was necessary. The Infirmary, built at Highgate, has been of the greatest assistance to the guardians, and a great blessing to the poor; for now a person found sick in the

morning by the relieving officer, can be comfortably placed in the infirmary the same afternoon; and, in my opinion, these infirmaries are one of the great causes of the reduction of outdoor relief.

"There were then no parochial hospitals for small-pox and fever; and during the epidemic of 1870, many sad scenes came under my notice. I have seen three or four people dead in one room, other members of the family ill at the same time, and no place to remove them to. Now, the system of removing the sick poor, to either the infirmary, small-pox or fever hospital, is simply perfect. Proper ambulances, with nurses, are provided, in place of the old rickety cabs; and to this system is partly due, to my mind, the reduction of the death-rate in St. Pancras.

"I should like now to give you two typical cases of imposition, which are by no means uncommon, and show the necessity of parish infirmaries. A man named P., who could cough whenever he liked, and who was always dreadfully ill whenever he came before the Committee (frequently having to be assisted out of the board-room), was for a very long time allowed outdoor relief in money, bread, meat, and brandy, a medical certificate being obtained each week for the brandy. It happened one night that I had to visit a dying man, and hearing someone singing next door (the chorus of the song was, 'The guardians are jolly good fellows'), I looked in, and saw that it was Mr. P. himself, suddenly restored to health. He had been entertaining some friends, and they were all more or less drunk, with the parish money. Of course the relief was at once stopped, and Mr. P. was no worse off. Had he been sent to the infirmary, the fraud would soon have been detected."

Very little need be added by way of comment to this pregnant statement. It is a characteristic result of all really good work that it is not only good in itself, and leads to corresponding results in a manner directly aimed at and foreseen, but that its indirect results are equally fertile and productive. The result of the *Lancet* Workhouse Infirmaries Commission and Report is embodied in our present institutions. The efficient provision for the sick poor in the manner sketched out by Dr. Anstie, Mr. Hart, and Dr. Rogers, and carried out by them, through the voluntary organisation of the Workhouse Infirmaries Association, of which they were the honorary secretaries, has not alone led to all that was anticipated by giving efficient and kindly treatment to those who needed it. It has put an end to a vast and demoralising system of mendicity and imposition, characteristic of the old disorderly method which combined excessive almsgiving with unnatural infliction of unintended hardship. The Metropolitan Asylum and Infirmaries system has recently been investigated by the Municipal Commissioners of Paris, and their report fully coincides with the impression here expressed; and they have referred to these asylums as types and models for municipal imitation in other cities of the world. Here, then, at least, is a piece of medical and social reform of which the medical profession has reason to be proud, and which is producing results of continuous beneficence. Amid so many administrative failures and legislative disappointments, it is satisfactory to be able to put one's finger upon a piece of good work which has realised even more than the results anticipated.

PROBLEMS IN SYPHILIS.

On Monday evening last, Mr. Jonathan Hutchinson delivered the first Lettsomian Lecture for the present year before the Medical Society of London, which was crowded by Fellows anxious to hear what the lecturer had to say in elucidation of some doubtful points in the natural history of syphilis. The great importance, from a social and even from a medico-legal aspect, of some of Mr. Hutchinson's observations, renders them particularly valuable, as well as interesting; the more so as syphilis, with its sequelæ, is unfortunately a disease which no medical man in practice is long without having to treat, and which is, moreover, of weighty import in the happiness, or rather unhappiness, of families and individuals. In so far as the lecturer's original views are concerned, they must necessarily open up fresh ground for discussion; and it will only be by means of prolonged and exhaustive clinical observation that these questions can be hoped to be set at rest.

Mr. Hutchinson commenced the lecture by a discussion of the vexed question of the relationship of the soft and the indurated chancre. According to him, we must see in the former only the effect of an attenuated syphilitic virus—attenuated, that is to say, by passage through or into the tissues of persons not constitutionally susceptible of the virus; and, in support of this view, he quoted the experiments of inoculating (1) persons who had already been the subjects of syphilis, and in whom the inoculation of the secretion of a syphilitic chancre produced a sore indistinguishable from the simple soft chancre; and (2) the inoculation of non-syphilised persons with the purulent vaginal secretion of a woman under the influence of syphilis generally, with similar results. His own experience, indeed, went to prove that the typical soft sore was of rare occurrence in patients free from previous syphilitic taint; and the presence of a sore on the genitals, other than an abrasion, was in itself highly presumptive of syphilis.

Passing on to the subject of phagedæna, or hospital gangrene, Mr Hutchinson said he was disposed to attribute this, in its origin, much more to the pernicious influence of syphilis on inflamed tissues, than to any neglect of hygienic precautions. He had been enabled, in several instances, to trace the commencement of an outbreak to contamination from a phagedænic syphilitic sore; and the disease was markedly more prevalent in military hospitals in time of war, where the alleged predisposing causes were peculiarly likely to be found. This theory of the etiology of phagedæna will, doubtless, be received with considerable diffidence; the more so since, from the nature of things, it must be exceedingly difficult to substantiate. It is not supposed that syphilis is transmitted with the phagedænic inflammation, but primary sores which take on that form in the first instance are, he said almost invariably specific in their nature.

Mr. Hutchinson's interesting observations as to the occasional recurrence of induration in the retrocoronal sulcus, often on the site of the original sore, and without fresh infection, are already known to the profession, as also their confirmation by M. Fournier. Although comparatively of rare occurrence, the importance of recognising the possibility of its supervention cannot be overlooked.

The present views on the subject of suppurating buboes also require revision, in the light of certain cases observed by the lecturer, whose experience enables him to affirm that, contrary to the rule laid down in text-books, suppuration is in reality common in buboes following an indurated sore on the penis, especially when the latter, from some cause or another, becomes inflamed. Indeed, he regards the presence of scars in the groin (as on the penis) as proof presumptive of the patient having had syphilis.

Since Ricord, in 1839, made the important observation that one attack of syphilis conferred an immunity against subsequent infection, this view has met with general acceptance; but Mr. Hutchinson quoted several instances in his own practice and elsewhere where undoubted re-infection had taken place with the usual sequelæ, after a lapse of some years, and even in one or two instances while the patient was still apparently suffering from the effects of the first attack.

Passing on to the subject of the duration of the incubation-period of syphilis, he said he could only account for the discrepancies between the periods assigned by the earlier writers and those which he himself had been enabled to observe in numerous cases, where the date of infection admitted no doubt, by supposing that there had been some misunderstanding as to what constituted the limits of the incubation-period. For his own part, he was inclined to consider that the primary sore made its appearance most frequently between the fifth and six weeks after infection.

Touching the vexed question as to the possibility of the transmission of the syphilitic virus by means of perfectly clear vaccine lymph, free from any admixture of pus or blood-corpuscles, he thought that recent events proved that infection might be so produced. The case he quoted, of a medical man who deliberately vaccinated himself from children under the influence of syphilis, with the result of ultimately producing a well marked attack in his own person, is, however, open to the objection that the lymph may not have been as free from pus or blood-corpuscles as alleged, particularly as the first two attempts were unsuccessful. Mr. Hutchinson, however, looks upon this fact as an example of how narrowly a false assumption escaped being promulgated, and does not admit that the experiment allows of any doubt.

Whatever view may be entertained with regard to the significance of Mr. Hutchinson's observations and deductions, one cannot but recognise and applaud the painstaking care and labour which he has brought to bear on the elucidation of these difficult problems, problems so complex, indeed, that many of them only admit, and only will admit, an approximative conclusion.

THE OXFORD MEDICAL SCHOOL.

Oxford has lagged very far behind its sister University in making proper provision to meet the needs of a medical faculty. Until a recent period, at least, there has been no organisation for the teaching of Medicine and Surgery, nor the sciences upon which they are based; n fact, there has been no school of medicine in Oxford. Within the last few years, however, a gradual development has been taking place; arrangements have been made to provide systematic instruction in Anatomy and Physiology; and the appointment of Dr. Burdon Sanderson to the Professorship of Physiology showed that Oxford is willing to appoint, and able to attract, teachers of the highest eminence in their special departments. A statute, which is now under the consideration of the Convocation of the University, and which there is every reason to believe will shortly receive its final ratification, will place the regulations for degrees in medicine on a satisfactory footing. At a meeting held on December 8th, 1885, Convocation accepted, without dissent, a series of amendments, presented by the Hebdomadal Council, and embodying the suggestion of members of the medical faculty, both in London and in Oxford. Sir Henry Acland, the Regius Professor of Medicine, expressed his general approval of the statute; and Mr. Bruce Clarke, in the name of the medical graduates resident in London, thanked the Hebdomadal Council for the entirely satisfactory and liberal spirit with which it had met and accepted their suggestions, and stated that all the provisions of the statute met with their approbation. Some further amendments remain to be discussed, but the statute has now taken the shape which it will in all probability finally retain.

Under the new regulations, any student who has passed the examination for the degree of B.A. may proceed to the degree of M.B., for which there are three examinations; but, as the first of these three examinations is in Chemistry (including Organic Chemistry), Physics, and Biology (Botany and Comparative Anatomy)—subjects already taught and tested in the natural science schools—the number of examinations is in practice reduced to two for those who have taken these subjects in the science schools for the B.A. Further, the subjects of the next examination, to be called the First M.B., are Anatomy and Physiology; and students who take a second class in Physiology (Natural Science) will be excused further examination in Physiology; so that any average student of the class, who would be likely to enter at an university, would, if he takes up Natural Science, obtain a pass degree, perhaps even low honours in three years; and would then have to pass examinations only in Human Anatomy and in the subjects of the final examination to obtain the degree of M.B. The subjects at the final or second M.B. examination will be Medicine, Surgery, Midwifery, Pathology, Forensic Medicine and Public Health, and Materia Medica and Pharmacy. A wide latitude has been wisely allowed to the student in the choice of the time when he will submit himself for examination in the last named subjects. Materia Medica and Pharmacy. He will be permitted to take up these subjects at any period of his career; and it will not be surprising if, as at Cambridge, many students defer the examination until some time after they begin to have a practical acquaintance with drugs in hospital practice. Indeed, it is not proposed to bind the student by any of those hard rules, as to the intervals to be allowed between examinations, which operate so injuriously in the University of London. It will be permissible to pass the three special examinations for the degree of M.B. at any time, provided only that they be taken in regular order. This will be a great boon to men who have done medical work in London or elsewhere before entering at Oxford, as, immediately after obtaining the B.A. in Natural Science, they will be able to pass the First and Second M.B. Examinations in quick succession. It has been determined that, as the latter examination includes the subject of Surgery, it shall entitle the successful candidate to the degree of B.S. (Bachelor of Surgery), as well as that of M.B.

The degree of Doctor of Medicine will be conferred later; the doctorate cannot be obtained in any other faculty earlier than the thirty-ninth term, and that period has therefore been fixed as the earliest at which it will be advisable to grant the degree of M.D. The candidate for this degree will be required to read a thesis, which must be published as a guarantee of its character, and may be any work or paper which receives the approval of the Board of the Faculty of Medicine, and which has been published within two years of the time at which it is offered, and since the candidate took the degree of M.B. The degree of Master in Surgery will be granted in the twenty-seventh term from matriculation, that being the earliest period at which the degree of M.A. is granted; the candidate will be examined in Surgery, but the exact limits of the examination will be left to the Board of the Faculty of Medicine to determine. As soon as this Board, which is in process of formation, has been completed, it will proceed to draw up proper schedules in all the subjects and branches.

The University of Oxford is one of the prides and glories of this country; she has been a generous mother to many of the greatest names in English literature and politics, and her evident determina-

tion to take her rightful place towards the teaching of medicine, will be a source of strength to the profession, both directly and indirectly. A student may in future enter at Oxford knowing that in six years, or even, if he be possessed of unusual diligence, in five years, he may obtain a degree in Medicine and Surgery; he will find provision made for systematic and practical instruction in the Natural Sciences, in Physiology, and in Anatomy. For instruction in Medicine and Surgery he will doubtless still proceed elsewhere. The teaching of the art of treating disease must be mainly objective; and the student must therefore always incline to learn his art clinically in the great centres of population, for where many men are there are many diseases.

A CASE of hydrophobia, under the care of Dr. Mitchell Bruce, died in Charing Cross Hospital this week.

OWING to the great prevalence of scarlet fever in Leicester, the elementary schools of that town have, on the recommendation of the officer of health, been closed for a period of three weeks instead of the usual short Christmas holiday.

IT will be seen, with satisfaction, that the grounds on which we urged a revision of the sentence on the homicide Patrick have prevailed with the Crown, and that the result of further investigation has led to a conclusion that this epileptic homicide could not be legally responsible for his acts.

VACCINATION IN THE AUSTRIAN ARMY.

THE Austrian Minister of War has ordered compulsory vaccination with calf-lymph for the whole of the Austrian Army. The order will be carried out with all expedition.

PIGMENTARY XERODERMA.

AT a recent meeting of the Medical Society, at Vienna, Dr. Kaposi showed a little girl attacked by pigmentary xeroderma, a very rare disease, which he described for the first time in 1870. It is observed in children of one year old, and at the beginning of their second year.

ST. JOHN AMBULANCE ASSOCIATION.

A PROMISING centre of the St. John Ambulance Association has been formed at Douglas, Isle of Man, under the presidency of his Excellency the Governor. Subsections are being established at Castletown and Peel, and in the neighbouring districts. A centre has also been formed at Belfast.

RARITY OF HYDROPHOBIA IN BERLIN.

M. PAUL GIBIER, in a letter to the Académie de Médecine, acknowledging the honour of a reward conferred on him, for his researches on hydrophobia, adds that when in Berlin he applied at the Veterinary School to have a mad dog, in order to pursue his researches, he was told there had not been a case of rabies for the last three years. Nevertheless, dogs are as numerous in the streets of Berlin as elsewhere, only they are all muzzled.

ALCOHOLIC PARALYSIS.

IN the current number of *Brain*, Professor Dreschfeld has some interesting further observations on alcoholic paralysis. He has found that Magnus Huss, who is generally credited with having been the first to describe a paralytic form of chronic alcoholism, was preceded by thirty years by Dr. James Jackson in the United States. The latter wrote in 1822. Dr. Dreschfeld has clinically divided this affection into two groups, alcoholic ataxia and alcoholic paralysis—a classification followed by Lowenfeld, Moëli, Schulz, Krücke, and Strümpell. Alcoholic paralysis is a multiple peripheric neuritis.

CUCAINE AND SEA-SICKNESS.

CUCAINE has been much recommended as a remedy for sea-sickness, for which its peculiar anæsthetic influence, when applied to the mucous membranes, appears to offer a plausible prospect of success. More recent reports of trials do not, however, confirm this hope. Valuable in many other ways, it appears to be as powerless against sea-sickness as any of the long list of remedies which have preceded it in short-lived reputation for the purpose.

AMBULANCE WORK IN BURMAH.

A CLASS for the Volunteer Artillery at the Rangoon branch of the St. John Ambulance Association, instructed by Dr. T. F. Pedley, Medical Officer of the Corps, has been examined by the Bishop of Rangoon, who holds the degree of Doctor of Medicine, and twelve members have been reported to St. John's Gate as entitled to certificates. The male classes held last year at Rangoon have recently been re-examined, and the Bishop is now instructing a large class of ladies, wives of officials, merchants, and others.

SIR JOSEPH FAYRER.

WITH the New Year's wishes, which his friends will offer to Sir Joseph Fayrer, they will this year be able to add their hearty congratulations on the honour which he has just received in being elected a foreign corresponding member of the Academy of France. To this high distinction is to be further added his recent election as an honorary member of the Société Royale de Médecine Publique de Belgique.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.

THE northern branch of the Brighton, Hove, and Preston Dispensary was formally opened last week. It was stated by Mr. G. F. Hodgson, at the inaugural ceremony, that the building had cost rather more than £3,000, but at present the sum received in respect to the cost was something less than £300. He did not, however, doubt that the charitable public of Brighton, Hove, and Preston, would support this valuable charity as they had done hitherto.

POLLUTION OF THE LEA.

THE polluted condition of the River Lea, which of late has created considerable discussion, will form the subject of a Bill to be introduced by the Hackney Local Board, who seek to remedy the existing state of the river, by compelling the Tottenham Local Board of Health to divert their sewage into the sewers of the Hackney Local Board, from whence it will be carried into the sewers of the Metropolitan Board of Works, for discharge into the River Thames at Barking.

UNSANITARY DWELLINGS.

DR. DYKE, the medical officer of Merthyr Tydvil, on Wednesday last called the attention of the local board to the fact that, although he had reported about 100 cellar-houses in the last quarter as unfit for habitation, there were many hundreds yet to be reported on. These under-dwellings were places in which diseases were most prevalent and most fatal.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

A MEETING of this Society was held at 11, Cavendish Street, on Tuesday last, the president, Dr. Norman Kerr, in the chair. A paper on Inebriety in Austria was read by the Chevalier de Proskow-Marstorff, of Vienna, President of the Austrian Society for the Study and Cure of Inebriety. In Moravia, it was sought to reduce the proportion of brandy-shops from its present figure of 1 for 222 persons to 1 for 500. In Vienna, in 1884, 6,555 drunkards had been arrested, 5,771 males and 784 females. The taxes on liquors were only one-twenty-second of those in Britain. The Austrian Parliament had recently passed a law to check inebriety. Dr. A. Peddie, Edinburgh, read an exhaustive paper on the Habitual Drunkards Act, showing how it was inefficient

and not adequate to accomplish the objects desired. Dr. Peddie advocated the discontinuance of the provision requiring the declaration of an applicant for admission to a retreat before two magistrates, a simple agreement with the executive of the institution being sufficient. He also proposed Government inspection of all patients in homes, and especially emphasised the need for committal to a home of dipsomaniacs unwilling to enter of their own accord. A discussion followed, in which Dr. Farquharson, M.P., Dr. Stretch Dowse, Canon Barker, Dr. Longhurst, Mr. Holthouse, and Mr. Morgan, took part.

DEATH UNDER CHLOROFORM.

THE death of a patient, when under the influence of chloroform, has occurred this week at Turnstall. The facts, as given by Mr. Spanton, of Hanley, at the inquest held on the body, were as follows. That he had attended the deceased, who was suffering from abscess of the bladder. On two occasions he had administered anæsthetics to the deceased, the first for the purpose of examination, and the second with a view to an operation. The deceased came out of these applications sufficiently well to justify a third application for an examination and operation. On Sunday, the chloroform was applied in the usual way for the third time by another surgeon, who assisted witness, and in about three minutes the subject became pale, and it was found that the heart had ceased to beat. Every possible effort was made to resuscitate him, but without avail. A verdict was given according with the evidence.

LEGISLATION CONCERNING OPEN SPACES.

THE question of open spaces for the public in the metropolis will come before Parliament in three Bills. The widest reaching is one for the enlargement of Hampstead Heath by the addition to it of about 274 acres, being the lands known as "Parliament Hill," "Parliament Fields," the "Elms Estate," and the "East Park Estate." The Corporation of London also propose to bring forward a Bill to enable the Ecclesiastical Commissioners to transfer to them the land known as "Gravel Pit Wood" at Highgate, and certain other land at Kilburn, and to throw open the same for the use of the public. The Kensington vestry, while asking for powers to acquire about four acres of land in the parish of St. Mary Abbot, also propose to appropriate as a recreation-ground any of the above four acres which may not be required for the purposes of the parish.

OBSCURE CASE OF HYDROPHOBIA.

A CURIOUS case of hydrophobia has lately occurred. M. René Raffin (of Montagne, in the Department of the Loire) last week exhibited the first symptoms of hydrophobia. His medical man advised him to start at once for Paris, to be treated by M. Pasteur. During the journey, he had an attack, and halted. The next morning, he continued the journey, arrived at Paris, and was admitted at the Hôtel-Dieu. Immediately after his entrance, he had another attack, and died six hours afterwards. The parents do not remember that the sufferer had been bitten by any dog. A bulldog, of which M. Raffin was very fond, had suddenly disappeared about five months ago. M. Pasteur was not in the hospital when M. Raffin was admitted, and therefore could not examine him.

PATHOLOGICAL SOCIETY OF LONDON.

AT the thirty-seventh annual meeting of the Pathological Society of London, held on January 5th, the following gentlemen were elected as officers and council for the year 1886:—*President:* John Syer Bristowe, M.D., F.R.S. *Vice-Presidents:* Henry Charlton Bastian, M.D., F.R.S.; William Cayley, M.D.; *Thomas Henry Green, M.D.; George Johnson, M.D., F.R.S.; *William Morrant Baker; John Whitaker Hulke, F.R.S.; *Sydney Jones; Thomas Pickering Pick. *Treasurer:* John Wood, F.R.S. *Honorary Secretaries:* *Sidney Coupland, M.D.; Henry Trentham Butlin. *Council:* *Robert Edmund Carrington, M.D.; *David White Finlay, M.D.; *James Frederic Goodhart, M.D.; *Walter Baugh Hadden, M.D.; Arthur Edwin Temple Longhurst, M.D.; Norman Moore, M.D.; Felix Semon, M.D.; Seymour J. Sharkey, M.B.; Francis Charlewood Turner, M.D.; Samuel West, M.D.; Arthur E. J. Barker; *Anthony Alfred Bowlby; William Watson Cheyne; Henry Hugh Clutton; Frederic S. Eve; Cuthbert H. Golding-Bird; *John Hammond Morgan; Henry Morris; Samuel G. Shattock; *Charters James Symonds. The gentlemen whose names are marked with an asterisk were not on the council, or did not hold the same office, during the preceding year.

CLINICAL SOCIETY OF LONDON.

THE following are the names of the officers and council proposed for election for the year 1886. The ballot will be taken at the annual meeting this evening (Friday). The gentlemen whose names are marked with an asterisk (*) were not on the council or did not hold the same office during the preceding year. *President:* Thomas Bryant, Esq. *Vice-Presidents:* James Andrew, M.D.; W. Cayley, M.D.; *S. Wilks, M.D., F.R.S.; *Sydney Jones, Esq.; T. P. Pick, Esq.; *Sir H. Thompson. *Treasurer:* Christopher Heath, Esq. *Council:* *R. E. Carrington, M.D.; S. Coupland, M.D.; *F. G. D. Drewitt, M.D.; A. W. Edis, M.D.; W. Ewart, M.D.; D. W. Finlay, M.D.; *W. B. Hadden, M.D.; F. de Havilland Hall, M.D.; F. Semon, M.D.; *W. J. Tyson, M.D.; John Williams, M.D.; H. H. Clutton, Esq.; J. N. C. Davies-Colley, Esq.; *W. Harrison Cripps, Esq.; Clinton T. Dent, Esq.; A. P. Gould, Esq.; J. Warrington Haward, Esq.; Henry Morris, Esq.; *Walter Rivington, Esq.; *John Wood, Esq, F.R.S. *Honorary Secretaries:* Stephen Mackenzie, M.D.; Rickman John Godlee, M.S.

BUTTER ADULTERATION.

THE special committee of the British Farmers' Association, appointed to consider the frauds in spurious compounds purporting to be butter, have presented their report, which has been adopted by the Council, in which they recommend, as elements of safety, (1) the registration of all manufactories of fats intended for human consumption, such as "margarine," "butterine," or compounds containing fatty ingredients not extracted from milk; and (2) that all such manufactured compounds, imported or sold in the United Kingdom, in whatever package contained, shall be branded by the officers of Excise with a distinctive Government mark, at a small charge; and that any omission in this respect shall be punishable with a heavy penalty.

SIR J. CRICHTON BROWNE.

THE announcement that the honour of knighthood has been conferred upon Dr. J. Crichton Browne will be welcome to his large body of friends, and to the speciality in which he occupies so prominent a position. Dr. Crichton Browne has, from an early period of his professional career, won for himself a prominent position as a psychologist and an administrator; as a scientific student and literateur he has achieved distinction. His work at the Wakefield Asylum stamped him as a man of more than ordinary power and capacity, and of remarkable initiative. His selection at an early date as Lord Chancellor's visitor was a first tribute to his reputation and capacity, although it removed him from the scientific professional career in which he was well qualified to shine, and took from psychological medicine in this country one of its most active and fertile researchers. Recently, Dr. Crichton Browne has rendered a notable public service by his energetic insistance on the attention to physical education in schools, and by the prominence which he gave to the discussion of what is known as overpressure. The Conservative party hailed with particular interest his vigorous reports; and, in conferring the present distinction, the ministers have certainly been well advised. The Home Secretary has, on more than one occasion, found the skill and experience of Dr. Crichton Browne of great value and public service in judicial questions outside the duties of his immediate office.

QUADRUPLE AMPUTATION.

It may be interesting to our readers to know that a very unique specimen has just been added to the Museum of the Royal College of Surgeons. Mrs. Robertson, of Dundee, who was suffering from idiopathic gangrene, had quadruple amputation successfully performed by Mr. John R. Begg, of that city. A few months afterwards, she was sent to London, where Mr. Heather Bigg devised a set of four artificial limbs, which gave such perfect results that she was able to walk with ease, and to gain a livelihood by the sale of fancy articles which she made with the false hands. She died at the commencement of last year, and the four limbs, mounted on a lay-figure, have been placed in the museum.

FINGER-MARKS AND MURDER.

Our Paris correspondent forwards particulars of a remarkable trial for murder held recently at Rodez, in the south of France, where a self-accuser was proved to be innocent, and the true criminal detected by medical evidence. Last August, a woman, named Mélanie Vieu, went to register the death of a child, which she had wrapped up in her apron. The registrar examined the child, as is customary, and observed finger-marks on its throat. The mother then declared that she had strangled her infant. She was sent to prison ; but Dr. Desmont, who had been directed to examine the body of the child, stated that it had certainly been strangled, but not by its mother. Her hand was more delicately formed than that of the murderer, which had left its impression on the child's neck. The fingers of the guilty party must have been short and thick, the index-finger being unusually short, and apparently devoid of a nail, defects which the witness indicated as valuable clues for the discovery of the murderer. Mélanie Vieu finally admitted that the murderer was a man called Bonuet, and that she was his servant. The accused was arrested, and his index-finger was found to be one centimètre shorter than the average length of that member, and its nail had been destroyed by accident or disease. Bonuet was sentenced to six years' imprisonment.

THE CHOLERA IN ITALY.

The following statistics with regard to the cholera-epidemic in the peninsula last year and this are given by the *Italie*. Last year, it attacked 44 provinces and 858 communes, but that in 20 of the provinces the cases were very mild. Altogether there were 27,030 cases and 14,299 deaths. During the past year, the epidemic attacked 27 provinces and 152 communes, the provinces in which it was worst being Parma, where there were 313 cases and 202 deaths, Ferrara, Reggio, Massa, Rovigo, Genoa, Modena, and Venice. But the full force of the epidemic seems to have spent itself in Sicily, as, out of the 6,397 cases and 3,409 deaths which occurred in the whole kingdom, 5,535 cases and 2,959 deaths took place in the town and province of Palermo.

PHYSICIAN AND POET.

The Russian profession has lately lost one of its most remarkable members. Dr. Dmitry Egorovitch Min, late Professor of Forensic Medicine, and Prosector at the Moscow University, died on November 1st, at the age of sixty-seven, after a long illness. Born at Riatan, he was educated in the Commercial Academy in Moscow, and then entered as a student in the Medical Faculty of the Moscow University. Having most successfully completed his curriculum, he received the appointment of House Physician to the Ekaterinensky Hospital. In 1856, he was appointed Lecturer on Hygiene, and, two years later, Professor of Forensic Medicine ; the latter office being held by him up to his retirement, on account of impaired health, in 1878. Dr. Min created the Medico-Forensic Museum in Moscow, and educated the first experts for reformed law courts ; and, at the same time, constantly showed what immense good may be diffused by an honest, devoted, unselfish medical man, in his difficult struggle with egotism, greediness, and corruption, embodied in factories, mills, official and private schools, and all other Augean stables of the period, which he visited for the sake of inspecting and cleansing. Full as his life was of labour, he found time for translating Rokitansky's *Handbook*, and for editing a medical journal (conjointly with Professor Polunin). He was a poet, and one of a high stamp. Familiar with English, German, French, and Italian, as with Russian, Greek, and Latin, he presented Russian literature with excellent translations (in verse and with learned commentaries) of Shakespeare's *King John*, Byron's *Don Juan* and *Siege of Corinth*, Schiller's *Song of the Bell*, Torquato Tasso's *Liberated Jerusalem*, Dante's *Divine Comedy* (all three parts), etc. He remained true to poetry up to his very last day. Lying prostrate and speaking with difficulty, he asked for the *Divine Comedy*, and, with trembling hands, turned over the leaves, to add a new commentary or to further improve the translation.

COBRA-POISON.

A paper by Dr. R. Norris Wolfenden, giving the results of a very thorough and careful chemical examination of the poison of the Indian cobra (*Naja Tripudians*), was read at the Royal Society on December 17th. Dr. Wolfenden appears to have shown conclusively that the poisonous properties of the venom are due to its albuminous constituents, and that it does not contain any alkaloidal body nor any poisonous acid. The toxic properties of the venom are lost when the albuminous bodies are completely removed by processes well known to chemists, or are destroyed by the action of permanganate of potash, which oxidises the albuminous bodies into oxysulphonic and other allied acids. Three kinds of albumen are present in the venom. Two of them, globulin, which is in largest quantity, and syntonin, act upon the respiratory centre ; while the third, serum-albumen, which exists only in very small quantities, probably produces paralysis of the motor centres. Whether the poisonous properties of these albumens are due to some peculiarity of their constitution, or whether some hypothetical poison is linked with albumens of ordinary constitution, has not been ascertained ; but the possibility of the proteids of the venom being themselves poisonous is rendered more probable by the observations of Schmidt-Mulheim and Albertoni, who have shown that ordinary peptone, injected into the blood, may produce poisonous effects, causing a remarkable fall in blood-pressure, and destroying the coagulating power of the blood.

A HETERODYMIC MONSTER.

Drs. Montaré and A. W. Reyes having been commissioned by the Havana Academy of Medicine to examine a double monster, have communicated their report to a Cuban medical journal, accompanying it with a rough sketch of the subject. Following the French classification of such monsters as consist of one perfect individual with an imperfect and much smaller accessory individual attached to the anterior surface of the trunk by means of a pedicle, Dr. Montaré refers the present case to the group heterodymia, the "parasite" having a head and thorax but no pelvis, the other two groups being heteropagia, where both head and pelvis exist, and heteradelphia, where there is no head. The perfect child was a girl, and appeared to be in good health and well developed ; she was seven months old at the time of the examination. The pedicle was soft and flat, and attached in the median line between the xiphoid cartilage and the umbilicus. The accessory individual was of an irregular ovoid shape, the smaller end, representing the head, being upwards. It was more than a foot in length, and measured 9 inches round the head, and $7\frac{3}{4}$ inches round the narrowest part, or neck. The cranial bones could be distinctly felt, also a lozenge-shaped fontanelle. There were a circlet of hairs round the top of the head, two rudimentary eyebrows, a soft imperforate nose, and a minute perforation encircled with hair representing the left eye. The right eye, however, was represented by one end of a mucous groove, which ran downwards to another transverse groove representing the mouth, the right third of which was perforated. In this part was a small mucous excrescence representing

the tongue, and a triangular tooth, which latter had come through when the child was five months old. The elements of a vertebral column, and hard prominences representing the upper extremities, could be distinguished under the skin. When the parasite was manipulated, the hairs became more erect, and the skin resembled the cutis anserina; the "upper extremities" also became more prominent. This was likewise remarked when the child was taking the breast. The parasite could be pinched without attracting the child's attention, and it had occasionally had knocks and scratches without apparently awakening any consciousness of pain in the child, though, after it had been much handled, the mother said that the child had seemed unquiet throughout the day. The mouth certainly secreted some saliva, which dribbled from it. No vascular sound or movement could be detected. A medical friend of the writer, Dr. Govantes, is anxious to try the effect of vaccination of the parasite, but Dr. Montaré thinks it doubtful if this can be successfully performed.

MIRYACHIT.

UNDER this name, Drs. W. Hammond (see BRITISH MEDICAL JOURNAL, April, 1884, p. 758) and Armangué y Tuset (*Mimicismo ó neurósis imitañte*, Barcelone, 1884) describe a neurosis of which we have before spoken, and which consists in the patient irresistibly imitating all sounds and movements made by his neighbour or neighbours (and which is undoubtedly identical with the Javan *lata* or *latak*, as Dr. R. Neale stated in the JOURNAL, May, 1884, p. 885, or with Beard's "jumping"). Etymologically, the term *miryachit* is decidedly a failure, originating from a defective knowledge of Russian. *Miryachit*, or, as it should be written, *mirïatchit*, means literally "he or she fools," or "plays the fool." It is derived from the verb *mirïatchitje*. The verbal noun is *mirïatchenïë* (fooling, or playing the fool); he or she who *mirïatchit*, is *mirïasha*. Hence—if it be desirable to retain a Russian word—it would be more sensible to call the disease *mirïatchenïë*, as it is called in Russian, instead of *miryachit* (he fools). In the *Vratch*, No. 36, 1885, p. 602, Dr. Jankovsky publishes an interesting note on an epidemic of this curious neurosis, which has come under his observation in the Littoral District of Eastern Siberia. He first came to be acquainted with *mirïashas* in this way. One fine evening in 1876, shortly after he had been appointed surgeon to the 1st Eastern Siberian Infantry Battalion, a *feldsher* (assistant-surgeon) on duty hurried to him with a startling information that fourteen "mad" soldiers had been brought to the hospital. On his arrival, the author really found a crowd of the patients, and, naturally enough, addressed to them the question, "What is the matter with you?" To his greatest astonishment, all fourteen addressed him in chorus, "What is the matter with you?" He tried then to put the interrogation in another way, "What ails you?" The answer followed again, "What ails you?" In short, every word of the medical man was simply echoed by every one and all of the patients. On examination, he found, in every individual case, increased apex-beat, rapid pulse, extreme mobility of the limbs (especially of the hands), somewhat increased cutaneous sensibility, dilatation or contraction of the pupils, gay disposition, laughter, or smiling, without any reason whatever, etc. While the author was examining the patients, an officer in command arrived, and informed him that all the men had had for their supper potatoes with hemp-oil, the latter being bought of a Corean hawker. On hearing the word "oil" (*maslo*) spoken by their commander, all the soldiers suddenly went on with repeating "Oil, oil, oil," in all possible manners, in spite of all entreaties and injunctions. In view of the fact that one of the patients vomited, and after vomiting ceased to "fool," the author ordered emetics and purgatives in every case. The patients slept quietly through the night, and on the next morning all were well, being able to only vaguely recollect the events of the previous day ("as if in a dream"). An inquiry elucidated that the Corean oil-merchant was a *mirïasha*, and that "fooling" attacked only those soldiers who had seen and spoken to him. Another case of multiple *mirïatchenïë* was observed by Dr. Jankovsky in Vladivostok in 1878, in four children of one family, aged from 3 to 7 years. Sporadic cases of "fooling" were met with by him very often. As a rule, the disease is chronic, and apt to spontaneous remissions. It begins mostly under the influence of contact with a *mirïasha*, but sometimes is hereditary. It attacks only natives and "well acclimatised" immigrants, and here again only children and subjects of a "low intellectual level." The general health of the *mirïasha* remains intact. The disease usually does not interfere with the occupation of the patient. It is obviously a form of "epidemic male hysteria."

SCOTLAND.

PROFESSOR GEDDES, the Professor of Greek in the University of Aberdeen, has been appointed by the Duke of Richmond and Gordon to be Principal of the University, in room of the late Principal Pirie.

HOSPITAL SUNDAY IN ABERDEEN.

THE usual annual collection on behalf of the Aberdeen Royal Infirmary was made on the first Sunday of the year, and the sum collected was about £680.

ABERDEEN UNIVERSITY CHRISTMAS RECESS.

THE Christmas recess began on Thursday, the 24th ult., and the medical and other classes were resumed on Tuesday, January 5th. Some of the students have been busy, during this period, in preparing a dramatic representation, the proceeds to be added to the fund for the recreation ground.

THE OUTBREAK OF SMALL-POX AT PENICUIK.

WE are glad to observe that the outbreak of small-pox at Penicuik is at an end. An intimation by the local authority states that the village is now entirely free from small-pox.

EDINBURGH ROYAL INFIRMARY.

THE annual meeting of the subscribers to Edinburgh Royal Infirmary was held on Monday, in the Council Chambers, Edinburgh, and was presided over by Lord Provost Clark. The six managers (who retire annually) were reappointed for another year. The report submitted showed that, during the year, 25,000 out-patients had attended in the various waiting-rooms, and had received the advice of the medical and surgical officers and specialists; the surgical cases had received all necessary dressings and appliances at the expense of the infirmary. The number of cases treated in the wards was 7,854, of whom 3,717 were dismissed recovered or cured, 2,485 were dismissed relieved, 676 were dismissed on other grounds, while 479 died in the infirmary. The number of patients in the hospital at the close of the year (October 1st) was 497. During the year, 419 cases of infectious disease (including 81 of scarlet fever) were treated in the fever hospital of the infirmary; 2,974 medical cases and 3,964 surgical cases were treated in the wards. Nearly all the children treated were in the surgical wards. The daily average number of cases in the hospital was 595, the greatest number at one time being 650, and the smallest 497; the average period of residence for each patient was 27.6 days. In the previous year, the number of patients treated in the wards was 7,624, and the average daily number of indoor cases 599, the greatest number being 645, and the smallest 512. The contributions of patients from localities were, from Edinburgh 3,931, from Leith 642, and from the country 2,784; the average period of residence was 28.6 days. In the year ending October 1st, 1885, 88 deaths occurred within forty-eight hours from admission. The percentage of deaths among those treated in the wards was 6.3, or, deducting deaths which occurred within forty-eight hours of admission, it was 5.1. In the fever hospital, 2 deaths occurred within forty-eight hours of admission; the percentage of deaths in the fever wards was 8.8. In the Convalescent Hospital,

Corstorphine, 901 patients were received, or 42 more than in the preceding year; the average number admitted each month was 71, the average daily number resident was 51, and the average period of residence was 19.5 days. As to the financial report, it was stated that during the year £17,337 had been received in legacies or donations of over £100, and of this there remained £6,286 after meeting a large sum of extra expenditure for building fund, excess of ordinary expenditure, etc. The ordinary income was £28,679, as compared with £26,796 in the preceding year, and showed an increase of £1,882, mainly made up of increased revenue from investments and increase from students' fees. The report on the nursing department was of a very satisfactory nature. Various other matters were entered into, and the report was adopted by the meeting.

GLASGOW SAMARITAN HOSPITAL FOR WOMEN.

LAST Monday the Glasgow Samaritan Hospital for Women was formally opened by Sir Archibald Campbell, M.P., of Blythswood, at 67, South Cumberland Street, Glasgow. Sir Archibald Campbell, in performing the ceremony, remarked that the hospital they had met to inaugurate was the only one of its kind in Scotland. Its object was to receive a special kind of cases, and to keep them free from contagious diseases; and that was more likely to be arrived at in a hospital, where they were now to be treated by men who had given a very considerable amount of experience, and who had taken the working of the hospital into their own hands. He therefore hoped the hospital would flourish, and the efforts of the medical men would be rewarded by many recoveries; and that even the small beginning would enable them to give adequate accommodation for the class of patients to be treated. Dr. Nairne afterwards made a statement regarding the nature of the diseases to be treated in the institution. The hospital was then declared open.

IRELAND.

MR. KENNY, M.P.

AT a recent meeting of the North Dublin Guardians, Mr. Kenny, M.P., an infirmary medical officer, applied for seven days' leave of absence, commencing next Tuesday, in order that he might attend the opening of Parliament. The request was granted, the hon. member agreeing to pay a substitute. An opinion was expressed that the hon. member could scarcely hold in a satisfactory manner the two positions of Member of Parliament and medical officer to the North Dublin Workhouse, where his daily attendance was required. It would be most inconvenient for Mr. Kenny to be coming to the guardians every fortnight or so for leave of absence. A Nationalist guardian expressed an opinion that whenever Mr. Kenny required leave he would get it. The Nationalist guardians have a majority on the board.

NEW DRAINAGE SCHEME FOR BELFAST.

THE Main Drainage Bill has been lodged in Parliament, and comprises provisions for authorising the Town Council to make the high level intercepting sewer, and the outfall works for the discharge of the sewage of all the borough, or such parts thereof as may from time to time be sewered in compliance with the general plan. Powers are also taken to borrow £150,000, and also other moneys for carrying out the main drainage-works for effectually sewering all the borough, and diverting from the Lagan the sewage which now flows into it; the general-purposes rate not to exceed eightpence in the pound. There are also further powers for the removal and prevention of nuisances and infectious diseases, the amendment of the building regulations, and as to markets, cemeteries, etc. The drainage-scheme, as adopted by the Corporation of Belfast, is a complete one, designed to relieve the entire borough, the only point of difference being as to the order of procedure regarding its component parts. After the construction of the common outfall works, the borough surveyor is of opinion that the natural course is to proceed first with the high level intercepting sewer, for the following reasons. The greater portion of the sewage of the borough will, by this means, flow down to the outfall by gravitation, and thus the amount of sewage to be raised by pumping will be proportionally reduced. The recurrence of flooding in some of the low lying districts of the town, occasioned by the insufficient capacity of the low lying sewers, will be abated. The high level sewer is the one which gives the greatest facilities for removing sewage from the polluted streams flowing through the vicinity of the large mills and other densely populated portions of the town. This, as a question of actual sanitation, is of primary importance. This sewer, as the borough surveyor points out, intercepts, in its course, the sewage of the southern portion of the borough, which contributes largely to the pollution of the upper portion of the Lagan. Further, if the high level sewer be not constructed in advance of that of the low level, some of the most urgent district drainage in the higher portions of the town must remain in abeyance, unless many costly and otherwise unnecessary sewers be made, extending down to the low level system. Although the capacity of the low level sewer is sufficient for a future extended district, it would not be adequate to deal efficiently with the sewage of both the present high and low areas. Without the relief afforded by constructing the high level sewer in advance, the works of the low level sewer would be rendered more costly and difficult, owing to frequent and rapid discharges of immense quantities of storm-water, which could only be removed by enormous pumping power, or allowed to escape into the River Lagan after flooding the trenches with water. The scheme seems an excellent one, and in every way suited for the requirements of a town like Belfast.

THALLIN.—Recent numbers of the *Centralblatt fur die Med. Wiss.* (No. 52), and the *Berliner Klin. Woch.* (No. 52) contain each important articles on thallin. The first is by Tschistowitsch, of St. Petersburg, on the effect of thallin on the animal organism, namely, on dogs and on frogs, and on fermentation. The effects on dogs are as follows. 1. On healthy dogs, thallin sulphate, in doses of from 0.02 to 0.2 gramme (.3 to 3 grains) per kilogramme of body-weight, has no constant result upon the temperature. 2. In feverish dogs thallin always causes an energetic lowering of the temperature, proportionate to the dose given, of between .5° Cent. and 3° Cent., which effect lasted from two to six hours, and the temperature rose very gradually afterwards. No vomiting was observed. 3. The blood-pressure, after a moderate dose, was not lowered to a degree worthy of notice. 4. The heart's action became slower, and the blood-pressure less, after a moderate dose; not constant after a small dose, sufficient to lower the temperature. These effects were constant after doses of more than 0.05 grm. (.7 grains) per kilogramme of weight. 5. The lowering of the blood-pressure after thallin depends upon the peripheral vasomotor apparatus, and in a lower degree, upon the heart directly; this is shown by five experiments. The effects on frogs were these. 1. After minute doses under the skin in non-curarised frogs, the heart's action is first quickened, then slowed. After larger doses, it is slowed from the first, the contractions and pauses being both lengthened. This effect followed quicker in curarised frogs. 2. The blood-pressure in either case sinks. The fermentation experiments showed that thallin delays the artificial digestion of fibrin, and also the alcoholic fermentation of grape-sugar, thus resembling chinin and kairin. Further, it delayed the ammoniacal fermentation of urine. In the *Berliner Klin. Woch.*, Professor Ehrlich and Dr. Laquer conclude their paper on the continued administration of thallin in typhoid fever with its effects. Sixteen cases were treated by small doses of 0.04 to 0.1 grm. (.6 to 1.5 grains), every half-hour or hour. In all the cases, the temperature was brought permanently to normal in four or five days on the average. The tolerance of the individual must first be ascertained by small doses of one-tenth to half a grain, gradually made stronger, if necessary. The individual disposition towards thallin being known for any particular dose, the dose may be repeated without fear, at very short intervals. Antipyrin is more insidious in this respect, and depressing effects may follow unexpectedly, as Jaccud also remarks (*Bulletin de l' Acad. de Méd.* No. 43). Thallin was found most effective in early cases of typhoid; it is best given in pills, hourly by day, and every two hours by night. The authors conclude by saying that there are grounds for assuming that thallin acts as a specific in early typhoid fever.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 20th day of January, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 17th, 1885.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on January 20th, April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

The Committee is also glad to receive reports of cases of the following conditions, memoranda and forms for which have been prepared, and may be had on application. PAROXYSMAL HÆMOGLOBINURIA, ALBUMINURIA IN THE APPARENTLY HEALTHY, SLEEP-WALKING, ACUTE GOUT, and special forms of PUERPERAL PYREXIA.

The "Sleep-walking" form may be filled in by a non-medical person if necessary.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in the preliminary discussions conducted by the Branches.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the above district will be held, by invitation of Dr. Amsden, at the Essex County Asylum, Brentwood, on Wednesday, January 27th, 1886, at 2.30 P.M. Previously to the business of the meeting, Dr. Amsden has kindly offered to escort the members round some of the wards of the asylum. Dr. Elliston, President of the Branch, will preside. Programme and Business Agenda:—1. To arrange the place and date of the next meeting, and to nominate a member of the district, resident in or near such place of meeting, to take the chair thereat, provided the President of the Branch does not attend. 2. To elect an honorary secretary for the year 1886. The following papers have been promised:—1. On the Administration of Medicines by Injection into the Rectum, by the President. 2. On Fits, by W. B. Hadden, Esq., M.D., of St. Thomas's Hospital, London. 3. The Treatment of Acute Mania by Hyoscyamine, by G. Amsden, Esq., M.B., Medical Superintendent, Essex County Asylum. 4. The Necessity of a Medical Defence Fund in connection with the British Medical Association, by J. Sinclair Holden, Esq., M.D., Sudbury. 5. Dr. Hadden will exhibit some sections showing Naked-eye Changes in the Spinal Cord, and some drawings of Brain and Cord Diseases. Gentlemen intending to be present, or wishing to read a paper, or show a case, are requested to communicate with the Honorary Secretary not later than January 25th.—WM. THOS. JACKMAN, Honorary Secretary, Coggeshall, Essex.

SOUTHERN BRANCH.—The next meeting of the South Wilts District will be held at the Angel Hotel, Salisbury, on Wednesday, January 20th, at 2 o'clock. Luncheon will be provided at 1 o'clock at 3s. 6d. a head, not to include wine. Members intending to be present are requested to communicate with the Honorary Secretary, H. J. Manning, Laverstock, Salisbury.

DUBLIN BRANCH.—The ninth annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Thursday, January 28th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and Council for the ensuing year will be elected by ballot, and any other necessary business transacted. Dr. E. H. Bennett, President-elect, will deliver the annual address. The annual dinner of the Branch will be in the College Hall, at 7 P.M., on the day of the meeting. Dinner-tickets for members who purchase their tickets on or before Wednesday, the 27th instant, 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1. —RICHARD A. HAYES, M.D., Honorary Secretary and Treasurer, 56, Merrion Square South, Dublin.—January 6th, 1886.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Action of Aceto-phenone.—The Therapeutic Value of Terpine.—The Literature of Cholera.—French Law on Drugs.—General News.

M. LABORDE has studied the action of aceto-phenone on patients when administered in relatively small doses. M. Dujardin-Beaumetz, in a recent communication to the Biological Society, stated that this substance produces sleep accompanied by vertigo and headache. A cubic centimètre, according to M. Laborde, injected under the skin of a guinea-pig, produced a torpid comatose state, from which the animal did not recover. A dose sufficient to produce sleep results in death. Respiration is rapidly quickened, and becomes irregular; the heart-beats are fewer in number; the animal starts convulsively; it gradually grows colder, and dies. The effect of aceto-phenone on dogs is quite different; hypodermic injections do not produce any effect on them, but if they swallow the solution, vomiting follows. Intravenous injections quickly produce sleep; a cubic centimètre renders the animal anæsthetic, also analgesic, and death ultimately ensues. At the necropsy, congested patches are observed, also blood infiltrated into the renal parenchyma, due probably to a general alteration of the blood. In addition to these symptoms there is a general lessening of blood-tension. Aceto-phenone, called by M. Dujardin-Beaumetz hypnone, always produces local irritation; the nerve nearest the area of injection loses its irritability and its sensibility; the muscles which it supplies lose their contractility. It produces anæsthesia of the cornea when injected between the eyelids, but violent ophthalmia follows. MM. Dubois and Bidaud have observed that aceto-phenone, when administered before chloroform, induces sleep; a four per cent. chloroform mixture is sufficient, otherwise one of eight, ten, or twelve per cent. is necessary. An hour afterwards the animal wakes up, and a fresh injection of hypnone is necessary if it have to be sent to sleep again.

Among the principal objections to the medical use of turpentine, and the bodies extracted from it, are their insolubility in water, their

smell and their taste. The bihydrate of turpentine, known as terpine, is free from these defects. M. Lépine, Professor at the Lyons Faculty of Medicine, has suggested its use. MM. Dujardin-Beaumetz and Guelpa at the Cochin Hospital, M. Germain Sée at the Hôtel Dieu, M. Goyraud at Montpelier, and M. Masius at Liège, have given it a trial. Terpine is perfectly inert when administered to human subjects in normal health. M. Lépine has observed, through experiments on dogs, that it produces renal disturbance, albuminuria, and hæmaturia; it quickens the respiration, and renders it unequal; it also raises the temperature. Death ensues when a dose of fifteen centigrammes to every 1,000 grammes of the animal's weight is given. Neither M. Guelpa nor M. Jeannet have observed these results, although they have made several experiments with terpine. Monkeys, guinea-pigs, rabbits, dogs, fowls, and frogs may be considered refractory to the action of terpine. Turpentine administered to patients acts on the bronchial mucous membrane, the kidneys, and nervous system. A dose of from twenty to thirty centigrammes increases bronchial secretion, renders sputa more fluid, and facilitates their expulsion. Doses of from eighty centigrammes to one gramme provoke contraction of the vessels of the mucous membrane, arrest hæmorrhage, and lessen or stop bronchial secretions. The same dose of terpinol lessens intense expectoration, relieves dyspnœa produced by accumulated bronchial secretion, and calms the cough in cases of bronchial dilatation, pulmonary cavities, and emphysema. At the onset of phthisis, it stops hæmoptysis. In large doses, this substance is a desiccating and hæmostatic agent. Terpine, like turpentine, modifies the urinary secretion. M. Lépine attributes to it diuretic properties, and these he utilises in chronic nephritis. He administers terpine in doses of from 20 to 60 centigrammes, keeping them low, in order to avoid the appearance of albuminuria and hæmaturia, which he observed in his experiments on dogs. MM. Jeannet and Decamp have continued these experiments, and obtained negative results. They gave terpine to one of their patients during fourteen days; the urine contained the normal proportions of uric acid, phosphoric acid, and chlorides; there was slight diuresis, which might as probably have been produced by the alcohol contained in the solution of terpine as by the action of that body. Terpine relieves and cures neuralgic affections. It can be given in the form of powder enclosed in wafers, or in pills of from 10 to 15 centigrammes. As it is barely soluble in water, the following formula of M. Germain Sée is the most satisfactory: Alcohol from 85 to 250 grammes, water 30 grammes, terpine 10 grammes, given in doses of three teaspoonfuls a day; an acid syrup should be added, or bitter orange-peel, in order to disguise the taste. In whatever form terpine is prescribed, it should always be taken just before meals. Gastric disturbance is thus probably avoided, especially when it is necessary to give large doses. M. Lépine guards against these dangers by adding syrup of catechu to promote its diuretic action. He prescribes this compound in white wine.

A new contribution to the literature of cholera, which attracts some attention, has just been published by G. Carré, 142, Boulevard St. Germain; it is entitled *Histoire du Choléra aux Indes Orientales avant* 1818, by Dr. J. Semmelink, formerly chief physician to the army of the Dutch Indies. Dr. Semmelink reviews the works written on the sanitary condition of the East Indies. With regard to the Dutch possessions in the East Indies, the author affirms that Asiatic cholera did not break out on the vessels of the East India Company, nor at Batavia, until 1816, when the English handed over the island of Java to the Dutch. He has examined the written documents of the two past centuries, and has not met with any information proving that Asiatic cholera appeared at Bengal, or in other parts of East India, before 1830. Dr. Semmelink passes on to the nineteenth century, and differs from M. Fauvel who, at the conference of Constantinople in 1866, maintained that the epidemics of cholera in different parts of the East Indies had died out at the end of the last century, years before the terrible visitation of cholera at Jessorah in 1817. Dr. Semmelink quotes from MacRae, Jacobus Reiner Vos, James Johnson, James Annesley, Macnamara, and other authorities who have written on the sanitary condition of India, and demonstrates that cholera had not disappeared during the period instanced by M. Fauvel as being free from cholera. Dr. Semmelink terminates his valuable volume by comparing cholera nostras and Asiatic cholera. "The first," he says, "is limited to the locality where it originates; it is nearly always sporadic, but, under some circumstances, it may assume the epidemic form. Asiatic cholera, on the contrary, always appears as an epidemic and is transmissible. The anatomical lesions are the same in both Asiatic cholera and cholera nostras. The latter is rarely fatal if well treated, and if the hygienic surroundings be fairly good; but in the torrid zone, where the natives are in dreadful poverty, and are deprived of medical treatment, this form of cholera is a terrible scourge."

Dr. Mahé has been awarded a prize of 5,000 francs (£200) by the Académie des Sciences for his *Mémoire sur la Marche et l'Extension du Cholera Asiatique des Indes Orientales vers l'Occident dan le dix derniere années et sur quelques conséquences qui en resultent.*"

The French chemists and druggists have founded a Société de Prévoyance de Pharmacie, which constitutes a syndical chamber to defend their interests. This society has proceeded against François Raymond, Jules Reynaud, and Pierre Lott, shirt-makers, because they made flannel shirts impregnated with a substance recommended for rheumatism, sciatica, gout, neuralgia, and bronchitis. The druggists considered this substance was essentially pharmaceutical, and, according to law, claimed 1,000 francs (£40).

The model of the statue to M. Broca, chosen by a committee appointed for the purpose, is by a deaf and dumb sculptor, M. Chopin; it bears the motto, "L'homme passe, la science reste" (Man passes away, science is eternal).

A work on sanitation by M. A. Mille has just appeared; it treats in a serious spirit, and with great completeness, the sanitation of cities with regard to water-supply, sewers, irrigation, etc. He describes the systems of irrigation adopted in the South of France, Grenada, Valencia, and Italy. He also enters into the question of the pollution of the English rivers, especially the Thames and the Mersey; likewise the application of new theories at Dantzic and Berlin.

M. Socquet's statistics on suicide and crime in France have been honourably mentioned by the Académie des Sciences.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

New Year's Day in the Infirmaries.—Royal Infirmary Statistics.—Bequests to Charities.—Professor Cleland on Science-Teaching.

THE occasion of New Year's Day was made the opportunity of recognising the very valuable services which the nurses in our large hospitals render to the patients of these institutions. At the Belvidere Fever Hospital, a special entertainment was provided for them, and I was glad to see that some of the members of the Health Committee attended, and spoke of the very admirable way in which the nurses had carried out their arduous and dangerous duties. At the Royal Infirmary, there was the usual meeting of the managers with the nurses. This commendable custom has been followed for some years, and the proceedings of last week were in no way wanting in the good feeling and harmony that have always characterised these gatherings. The present matron, Miss Wood, is universally liked, and she is doing everything to uphold the high state of efficiency to which the nursing staff was brought by her predecessor, Mrs. Strong. A very suitable address was delivered to the nurses by Dr. Yellowlees, on the essential characteristics of a good nurse, which, he thought, were embodied in the three qualities of obedience to her superiors, authority over her patients, and kindness of manner and heart.

The Chairman of the House Committee gave, at the meeting, some details of last year's work at the Royal Infirmary. The number of cases treated as in-door patients was 5,052, with a mortality of 9.6. This is slightly in excess of last year, but for a general hospital, must be regarded as very satisfactory. The accident-cases numbered 2,340, of whom 1,100 were taken into the house, the remainder being treated as out-door patients. If the dispensary patients be added to the in-door cases, we have the large number of 36,000 persons who have received the benefits of the charity. This is a large percentage of the population of the city, and gives some idea of the amount of material at the disposal of the staff for clinical teaching; and yet the number of students attending the school is comparatively small.

The charities of Glasgow and the neighbourhood have benefited by the will of the late Mr. Galbraith to the extent of £3,500. Both of our infirmaries come in for a large share of the bequest.

Last week, we had the meeting of the Educational Congress, held under the auspices of the Scottish Educational Institute. An excellent paper was read by Professor Cleland, on the Position of Science in Education. He warmly advocated the powers of a scientific education in bringing out the observing powers in early life, and he did not hesitate to point out the deficiencies in our Scotch universities in reference to this matter. There are many difficulties in the way of carrying out such a reform as he advocates, though I think all will agree with him as to the need for it.

NEWCASTLE-UPON-TYNE.

[FROM OUR SPECIAL CORRESPONDENT.]

Clinical Society.—Vacant Coronership.

THE Newcastle-upon-Tyne Clinical Society commenced its 1885-86 session in October. Dr. Limont was elected President; Dr. Oliver Vice-President; Dr. Campbell, Secretary; and Mr. Black, Treasurer. This Society was formed six or seven years ago to meet the convenience of practitioners whose consulting hours prevented them from attending the meetings of the Pathological Society. From a very small beginning it numbers now nearly one hundred members. At the October meeting Dr. Beatley showed a very rare specimen, namely, a horse-shoe kidney, removed *post mortem* from a patient in the Somerset County Asylum. Mr. Black showed a mammary scirrhus and sequestra from a diseased hip-joint. The subjects discussed, so far as this session include, the inoculation of syphilis, phosphorus poisoning, intussusception, cirrhosis of the liver, etc. Dr. D. Drummond opened the discussion on cirrhosis, and illustrated his remarks with very good microscopical sections. The question as to the administration of stimulants to patients has lately been under discussion at the infirmary. One member of the committee, a local leader of the teetotal movement, raises the question whenever the accounts come up for consideration. The question was referred to the Medical Board, who went to considerable trouble, and compared the cost of stimulants in several London and provincial hospitals, and showed the amount spent in Newcastle was below that of other hospitals doing similar work and getting equally good results. The staff took a firm position, and through their chairman, Dr. Philipson, expressed their opinion that it was unjust they should be periodically troubled about this question, when upon them rested the responsibility of the welfare and lives of the patients.

By the death of Mr. Hoyle, the post of coroner for Newcastle has become vacant. Several candidates are already in the field—Mr. Hoyle, junior, deputy coroner, who has performed the duties of the post for the last few years (his father having been an invalid); Mr. H. W. Newton, Surgeon, Alderman, and ex-Mayor of the city; Dr. Luke Armstrong; and Dr. Hardcastle. The office is the gift of the corporation, so that Mr. Newton will have to resign his seat in the Council before he can obtain the post. Dr. Armstrong and Dr. Hardcastle occupy good professional positions in the town; the former being surgeon to the infirmary, and the latter surgeon to the gaol and workhouse. The appointment will probably rest between Mr. Hoyle and Mr. Newton, the former having influence through being deputy coroner, and the latter through being one of the oldest as well as most active members of the Council.

CORRESPONDENCE.

DIPHTHERIA AND SANITATION.

SIR,—I have received a copy of the *Islington Gazette*, containing Dr. Tidy's provisional report on the fatal cases of diphtheria which have occurred in that parish. Dr. Tidy commences his report by a very clear explanation of the proper position of a medical officer of health as the adviser of the vestry, and it is most satisfactory to note that this explanation was well received. Dr. Tidy, as the responsible adviser of the Vestry, claims to be a learner in respect of the etiology of diphtheria; and no doubt, when he has had full opportunities for observation and inquiry, we may expect from him a report of more than usual interest.

It has become so customary of late for people to ascribe what are usually termed preventable illnesses to defects in house-sanitation, that an adviser of a sanitary authority, whose medical knowledge and experience lead him to question the dogmatic statements of a certain class of sanitarians, runs some risk of being regarded either as a heretic, or wanting in zeal as a public officer.

I may, however, venture to say that we who protest against the spirit of easy acquiescence, which reduces the study of the causes of disease to such extreme simplicity, are not one whit the less desirous of promoting in every legitimate way improvements in sanitation, especially in the construction and ventilation of water-closets and house-drains; but we are very doubtful whether the public interests are best served by indiscriminately attributing to defects in house-drainage illness which more probably owes its origin to other causes. For instance, scarlet fever is now-a-days frequently attributed to defects in drainage, and, as a preventive measure, people are advised to have their house-drains reconstructed. But the evidence connecting scarlet fever with drainage defects (if it can be said to exist at all) is probably of the most slender kind; on the other hand, the number of epidemics which have been traced with certainty to milk, proves conclusively that there is a definite proportion of risk in consuming unboiled milk. But, if the fear of scarlet fever have been made use of to induce householders to have their drainage improved, it places us at an immense disadvantage in our endeavours to impress on them the need for adopting the continental practice of boiling their milk.

As regards the particular question which has just now been raised in public, namely, the connection of diphtheria and house-sanitation, it must be remembered that the question is not whether "throat-illness" is sometimes caused by bad drainage, but whether defects of drainage can be said to be a common cause of the specific disease, diphtheria. My own experience on this point is instructive, but there should be much wider, and consequently more valuable, experience available at the present time obtainable from at least two sources, namely, the medical department at Whitehall, and the towns in which the notification of infectious diseases is carried out.

1. During the last six years, the officials of the medical department of the Local Government Board have at intervals been using their exceptional opportunities for the study of this obscure disease. Have they in the towns, villages, and country districts which they have inspected on account of diphtheria found the drainage, excrement and refuse removal or disposal to be especially bad?

2. There are now about thirty towns in which the notification of infectious diseases, including diphtheria, is being systematically carried out, and in some I know that careful inspections of houses are made when diphtheria is reported. Does the experience of the medical officers of these towns lead them to the conclusion that, in a large proportion of the houses, defects of drainage exist?—Your obedient servant,

EDWARD SEATON, M.D.

35, George Street, Hanover Square.

PROPORTION OF CASES OF RUPTURED PERINÆUM TO DELIVERIES.

SIR,—I am preparing for the press a little work on rupture of the perinæum, with a report of 350 successful operations.

I am desirous of ascertaining, as far as possible, the relative frequency of this accident to the number of women delivered in the public hospitals of England, as compared with Germany, France, Italy, America, and Russia.

Can any one tell me who will be best able to aid me so far as England is concerned?—Very truly yours,

60, Via due Macelli, Rome. J. H. THOMPSON, M.D.

TREATMENT OF TRANSVERSE FRACTURE OF THE PATELLA.

SIR,—No person can justly complain of a criticism, whether it be favourable or hostile, if the weapon of knowledge be used with judgment and amenity. Your correspondent "F.R.C.S." has, from his shelter, made an assault on Dr. Cooper, from which his modesty might have protected him. "F.R.C.S." writes: "Every London surgeon knows the benefit conferred by division of the rectus element, while the vasti only pull laterally." I should hope, sir, that the London surgeon (who can scarcely be elated at the knowledge of an elementary anatomical fact accorded him by his champion) has a better knowledge of anatomy than your correspondent, who disposes of the subject by stating what is erroneous. That the vasti fibres are in distinct conjunction with those of the rectus, is most undoubted; and, in addition, the vasti, more especially the vastus internus, send from their anterior aponeuroses certain strong fibres in front of the patella, somewhat closely adherent to its proper aponeurosis, derived from the main tendon. That these must be acted on by the contraction of the anterior and adjoining fibres of the vasti in their contraction, can plainly be demonstrated. There can be no hesitation in concluding that those bands are an important element as a factor in displacement, and it is for this reason that I have adopted the operation by open wound.

From a prolonged and attentive study of the cause of difficulty in adjustment, and from the success obtained in two cases where I was enabled to adopt the treatment alluded to, I am firmly persuaded that it allows perfect apposition of the fragments, and that, if immediate adjustment be obtained, osseous union will follow. There is no subsequent inconvenience occasioned by the section of the tendon. A limited passive motion of the joint in four weeks showed no separation of the fragments. Walking was not permitted for twelve weeks.

The following are the steps to be adopted. An Esmarch's bandage having been applied to the limb, a vertical incision, four inches in length, is made, commencing one inch above the base of the patella,

through skin and fascia down to tendon. The coverings having been reflected, a transverse incision is made through the tendon, carefully avoiding its posterior investment at the centre of the incision, or three inches above the patellary base. The anterior fibres of the vasti, which are found to act on the aponeurotic bands which cause the upper fragment to revolve on its own axis, and thus produce gaping at the site of fracture, are now divided as much as may be necessary. The fragment is then found to lie evenly in its position.

Strict antiseptic precautions, physiological pressure, and avoiding the disturbance of reparative processes, ensure a speedy healing of the wound. No hæmorrhage of any consequence is to be apprehended.—I am, etc.,

ROBERT L. SWAN, F.R.C.S.I.,
Member of the Court of Examiners, Royal College of Surgeons in Ireland; Surgeon to the Dublin Orthopædic Hospital.

LITHOTOMY OR LITHOTRITY IN MALE CHILDREN.

SIR,—Professor Annandale, in his paper "On a New Procedure for the Removal of Small Calculi from the Bladder in Male Children," in the BRITISH MEDICAL JOURNAL of January 2nd, draws attention to a question which, in many surgical minds, is still an unsettled one; namely, whether a little boy suffering from a very small stone should be relieved by lithotomy or by lithotrity. Perhaps all surgeons are agreed that a male child suffering from a large, or moderately large, stone had better be cut; and the only question is, whether the incision should be perineal or suprapubic. But if the stone be really small, Professor Annandale represents a large number of the profession when he says, "It is quite possible to seize and crush a stone in the young male bladder by means of a small lithotrite, but it is not so certain to insure the complete removal of the fragments after the proceeding, as evacuating catheters are still made too large to pass along the young male urethra."

Formerly, lithotrity has not been considered a suitable operation for children, owing to the unfitness of their bladders for the residence of fragments of stone, and of the urethra for the expulsion of sharp-edged pieces. Now, however, that lithotrity at one sitting (by which is meant the crushing and complete evacuation of the calculus at a single sitting) is accepted, as yielding, in the adult, far better results than the older or many-sitting method, it is not unlikely that the single-sitting operation may prove even superior to lithotomy in children. And it is in connection with this interesting point that I would direct attention to two important papers in the *Indian Medical Gazette* (May, 1884, and June, 1885), by Surgeon-Major Keegan, where he details forty-two cases of lithotrity in children, with one death. He uses small evacuating tubes and lithotrites, from No. 7 to 12 of the English scale, made by Messrs. Weiss and Son, of London, and thoroughly pulverises and washes out the stone at one operation. His stones weighed from 5 to 308 grains.—Yours, etc.,

G. BUCKSTONE BROWNE.

GLASGOW MEDICAL SOCIETIES.

SIR,—In the last issue of the *Glasgow Medical Journal* there appears a letter, signed "Observer," which speaks of the Glasgow Medico-Chirurgical Society as "in rather a decaying condition," and uses the term "defunct" in regard to it as the result of certain alleged causes. One of these is the placing in its offices, and on its Council, of those who never did any work for it, and who did not even attempt the heavy duty of forming part of the audience. I agree with "Observer" in deprecating this. He also hints at a kind of indolent indifference on the part of the secretaries; when, in speaking of the selection of office-bearers, he says, "the easy and lazy way is to look down the list, and put down the names as they occur." Well, this is better than being influenced by personal antipathies, though I suspect it originates solely in the imagination of "Observer."

Now, one of the strongest proofs of the vitality of the Society is supplied by its survival, with a full membership, under very adverse and peculiar circumstances. I can point to the fact that for some years its secretaries—I mean the acting ones (I am not referring to those in office at present, at least not exclusively)—have been not only active members of another society, but office-bearers in it, and to all appearance doing their utmost, which was not much, to foster the latter at the expense of what Dr. Macleod calls the Parent Society. I admit that the Society should not have permitted this, but it was done; and during the years in which I had the honour of being its president, I felt that it was a very undesirable state of affairs. Moreover, only very feeble attempts were made to report in the journals the proceedings of the elder Society, while full reports of long debates were forwarded from the younger one. In no society of the kind in Glasgow is the criticism more free or more fair; it is such as no one need fear, except a few tender-skinned individuals, who always seem to suffer when any favourite notion of their own is questioned.

Of late years, there has appeared a kind of proprietary society, or limited liability society, for its numbers are restricted, and usually it bears the name of a well-known physician; and, so far as I can learn, is conducted like a class with a number of tutors, who are very unctious towards each other. Another similar body is formed or being formed. Now, I do not join Dr. Macleod in deprecating this. It is one indication of professional life and activity. I join him cordially, however, in the call which I heard him make for short practical papers, and I feel certain that under his able supervision the parent Society has a long and vigorous life before it. No one is more capable of infusing into it a renewal of energy. Lately, its meetings have been interesting and instructive.—I am, etc.,

JAMES MORTON, M.D.

TEREBENE.

SIR,—On perusing Dr. W. Murrell's observation in the BRITISH MEDICAL JOURNAL of December 12th, upon terebene as a remedy in chronic bronchitis, I tried its effect, and can confidently confirm his statement from my personal experience. My object in now addressing you is, however, but incidentally connected with the therapeutic action of the drug. I wish to point out the fact, well known to persons who have resided in India, that there is a distinct turpentinish taste in the fruit of the mango, although this does not in the least degree interfere with its delicious flavour, except when grown under exceptionally unfavourable conditions. The moment I smelt and tasted terebene, I at once recognised precisely the same difference between its flavour and that of pure turpentine as exists between the special turpentinish flavour in the mango and the flavour of turpentine pure and simple. In short, it would seem almost certain that the special flavour discernible in the mango depends on the actual presence of terebene.

Under these circumstances, I venture to suggest, through the medium of your columns, that medical officers or pharmaceutical chemists, at present serving in India, should endeavour to obtain the active principle from the mango tree, the ubiquity of which would render the experiment easy and inexpensive, whilst it might furnish us with an article even superior to pure terebene derived from the action of sulphuric acid on turpentine, as described by Dr. Murrell. I need hardly point out that many parallel cases are on record, in which the superior efficacy of what may nominally be the same drug depends on its being obtained from one out of several distinct natural sources.—I am, sir, your very obedient servant,

London. G. C. WALLICH, Surgeon-Major, Retired List.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

SIR,—Will you permit me to briefly recapitulate the remarks I made during the discussion on Mr. Keetley's excellent paper on Antiseptic Surgery at the West London Hospital? In the report in your JOURNAL, it is stated that "Mr. Benham remarked upon the low mortality of the cases in which no antiseptics had been used," whereas I pointed out that "notwithstanding the low mortality in certain operations performed non-antiseptically, the suffering and long period before convalescence of the patient as compared with the antiseptic treatment, makes it the more reason why the latter should be adopted; and that statistics of the mortality of cases are not the only test to be considered of the advantages to be derived from antiseptic surgery." Apologising for troubling you with the above remarks,—I am, sir, yours truly,

R. FITZROY BENHAM.

Baron's Court, S.W.

CUCAINE IN THE EAR FOR NEURALGIA.—Notwithstanding the various antineuralgic remedies—to say nothing of "nervines" and "pain-killers"—a successful method of relieving the pain of obstinate facial neuralgia has long been a great desideratum. Dr. de Coninck, of Ledeberg-lez-Gand, writes to the *Scalpel* that an application of a 1 per cent. solution of hydrochlorate of cucaine by a camel's hair brush or a dropper to the bottom of the external auditory canal, arrests the pain of neuralgia of the facial nerve, and, indeed, any pain in the temporal region, instantaneously. He has not found this treatment of the same value in neuralgia of the fifth nerve, but suggests that perhaps some other point of application may exist for this nerve. Dr. de Coninck has employed this method of treatment for a month—he does not say on how many cases—and has "never failed to obtain the most marvellous success." If the neuralgia return, the application can be repeated.

NAVAL AND MILITARY MEDICAL SERVICES.

PENSIONS IN THE ARMY MEDICAL SERVICE.

SIR,—The following information may be of some use to the profession, especially the military portion of it. The Royal Warrant, dated June 10th, 1884, lays down the rate of pay and pension to be drawn by medical officers, and it leads one to believe that, after twenty years' full pay service, they can retire on "retired pay" at the rate of twenty shillings *per diem*, with corresponding increase after each five years' further service; and a very liberal pension it is "could one only get it." But, first, there is income-tax to be deducted, at the rate of "8d. in the pound," not that one grumbles so much at that, but there are also "agency fees" to pay to army agents, who draw it at the rate of "6d. in the pound," or, in other words, "the pound a day dwindles down to 18s. 10d." Furthermore, a declaration has to be made every quarter before a justice of the peace that the pensioner is not in any employment of profit in any Government service, either at home or abroad; this, I understand, being with the object of "stopping his retired pay" should he be so. Perhaps some medical M.P. might ask for information on the subject.—I am, sir, yours truly, BAWBEE.

ARMY MEDICAL STAFF.

A PROBABLE CANDIDATE asks: 1. What would be the probable cost of living at Netley *per mensem?* 2. Cost of uniforms? 3. Could money be saved the first year by a temperate liver? 4. How long after first commission before one could afford to keep a wife? 5. Is the army as good as private practice for a man who has simply his pay to live on?

THE NAVY.

THE following appointments have been made at the Admiralty:—J. D. M'FEELY, to be Surgeon and Agent at Killybeg; H. H. M. SEDGWICK, Fleet-Surgeon to Portsmouth Yard; J. N. J. O'MALLEY, Fleet-Surgeon to the *Excellent;* E. D. WINTER, Surgeon to the *Indus*, additional, for the *Woodcock*.

ARMY MEDICAL SERVICE.

SURGEON-MAJOR A. C. GAYE has been promoted to be Brigade-Surgeon, *vice* F. W. Moore, who has been granted retired pay. Surgeon-Major Gaye entered as Assistant-Surgeon, October 11th, 1859; became Surgeon, March 1st, 1873; and Surgeon-Major, February 12th, 1875. He was engaged in the operations in the Malay Peninsula, under Major-General Colborne, in 1875-76, and was at the capture of Kinta, was mentioned in despatches, and received the medal with clasp. He also has the Afghan medal for his services with the Southern Afghanistan Field Force, under Major-General Phayre, in 1880. He is at present serving at the Kirkee Station Hospital, Bombay Presidency.

Surgeon-Major J. A. SCOTT has also been promoted to be Brigade-Surgeon, *vice* A. J. Ferguson, who has been granted retired pay. His commissions are dated: Assistant-Surgeon, October 11th, 1857; Surgeon, March 1st, 1873; and Surgeon-Major, March 11th, 1875. Surgeon-Major Scott was present in the New Zealand war, in 1861-62, and in the campaign against the Boers in 1881. He is at present serving on the Bengal Establishment, in medical charge of the station-hospital at Umballa.

Brigade-Surgeon G. S. DAVIE, M.D., on the Bengal Establishment, has obtained leave of absence to England for six months on medical certificate.

Surgeon H. J. PEARD, serving in Bengal, is to have medical charge of the Lock Hospital and civil station of Barrackpore, *vice* Surgeon-Major A. B. Seaman.

Surgeon J. O. G. SANDIFORD, M.D., also serving in Bengal, is to have medical charge of the Lock Hospital and civil station of Dum Dum, *vice* Surgeon W. Babtie, M.B.

Surgeon D. WARDROP, M.D., also serving in Bengal, is appointed to the civil medical charge of Chuckrata, in addition to his other duties.

Surgeon-Major A. L. BROWNE, M.D., on the Madras Establishment, is directed to proceed to England by the troop-ship leaving Bombay on or about January 8th. He was to proceed to Deolali on January 5th, for duty on board ship.

Surgeons-Major R. P. FERGUSON, W. J. CAMPBELL, and Surgeon D. R. HAMILTON are transferred from the Bombay to the Madras Command from the 12th November last.

Surgeon-Major RICHARD ALLEN, M.R.C.S.Eng., of the Royal North Lancashire Militia, died on December 23rd, after a short illness, at his residence at Preston.

INDIAN MEDICAL SERVICE.

SURGEON S. LITTLE, M.D., Bengal Establishment, officiating Civil Surgeon at Beerbhoom, acted as Second Resident Surgeon, Presidency General Hospital, from September 25th to October 6th.

Surgeon J. A. NELIS, Bengal Establishment, assumed charge of the civil medical duties of Hazara, on November 17th, relieving Brigade-Surgeon G. Farrell.

Surgeon G. F. NICHOLSON, M.D., Bengal Establishment, Civil Surgeon, was transferred from Murree to Rawalpindi, where he assumed charge of his duties on November 3rd, relieving Surgeon D. St. J. D. Grant, transferred.

Surgeon D. St. J. D. GRANT, Bengal Establishment, on transfer from Rawalpindi, assumed Charge of the Civil Medical Duties of Mardan, on November 9th, relieving Surgeon J. Lewtas, M.B.

Surgeon-Major J. W. CLARKSON, of the Bombay Establishment, has returned from furlough to duty, as Deputy Sanitary Commissioner, Western Registration District.

The services of Surgeon H. GREAMY, M.D., and A. O. EVANS, both of the Madras Establishment, are placed at the disposal of the Public Department.

Surgeon J. A. BURTON, Madras Establishment, is ordered to do general duty in the Eastern District, on relief of the medical charge of the Native Infantry Depôt and European Artillery Veteran Company Hospital at Pallaveram.

Surgeon-Major C. R. G. PARKER, Madras Establishment, is appointed to the officiating medical charge of the 10th Native Infantry, during the absence, on other duty, of Surgeon F. C. Reeves.

Surgeon F. BURNESS, Bombay Establishment, is appointed to act as Residency Surgeon at Baroda, in addition to his own duties.

Surgeon-Major A. H. WILLIAMS, M.B., Bengal Establishment, has been granted leave of absence for two months, in extension, on medical certificate.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

DR. RINGWOOD, KELLS UNION, AND THE LOCAL GOVERNMENT BOARD (IRELAND).

IN the JOURNAL of August 22nd, 1885, we gave an account of the persecution to which Dr. Ringwood, the medical officer of the Kells Workhouse, was subjected consequent on his reporting on the unsanitary condition of the workhouse, and the very large amount of sickness produced thereby. The hostility of the majority of the guardians was carried so far as to lead them to memorialise the Local Government Board (Ireland) to dismiss this gentleman.

The department (so we learn) has just given its decision on the facts submitted to them, and it is to the effect that the medical officer is exonerated from all blame, and commended for the fearless and honest manner in which he has performed his duty. The Local Government Board (Ireland) has always manifested the desire to support its medical officers, and in consequence is much honoured and respected in the sister Isle.

VACCINATION FEES AND REGULATIONS.

SIR,—I am anxious to learn if an union clerk is at liberty to detain my quarter's salary as workhouse and district medical officer and public vaccinator for entering in the vaccination-register the name of one child vaccinated one week before the time mentioned in my vaccination-contract. I might say the district is thinly populated, and it was done at a distant station for the purpose of keeping up a supply of lymph, which is very difficult to do. Kindly inform me what steps should be taken to ensure payment.

I might also say that isolated cases of small-pox have occurred in an adjoining district a short time before.—I am, sir, yours truly, X. Y.

*** The appointments of workhouse and district medical officer being entirely distinct from that of public vaccinator, we cannot see how the salary attaching to the former appointments can properly be withheld for any supposed irregularity in the performance of public vaccination. But the vaccination of a child one week in advance of the public periodical attendances is not regarded as an irregularity by the Local Government Board, for we know that some of their inspectors frequently recommend it, in order that the children brought together on the first day of the contract attendances may at once be done from arm to arm; and under Article I (1) and (2) of the Order in Council of February 18th, 1868, special provision is made for the legal performance of vaccination at other places than the station, and at other times than the contract dates. The first clause of the Article governs the case in question, the reason for so performing the vaccination being a special one, and the need for performing it elsewhere than at a station which does not open until a week later being obvious. But in order to ensure payment, and to comply fully with the terms of the Article, a note should be entered in the Vaccination Register stating the reason for the departure from the strict lines of the contract. If any difficulty still remain as to payment, the circumstances had better be submitted to the Local Government Board.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BIRMINGHAM.—Dr. Hill says, in reference to the sanitary work of the year 1884, "the gross total of nuisances abated is no fewer than 22,585, to effect which it has been necessary to take out only 183 summonses, or only half of the number of the previous year." More than 5,000 drains were put in order, either by trapping where no trap formerly existed, by the resetting of the drain-trap, by its replacement by a better kind, or by the removal of obstruction in the pipes. There were 1,984 houses cleaned on account of their dirty state. Upwards of 1,500 sinks, which were directly connected with the drains, were severed. Paying regard to the fact that such strides in practical sanitary progress as are here represented have been continued now for some years, there remains no room for wonder that the health of the Birmingham district, as reported by Dr. Hill, is fast improving. The average annual death-rate during the six years, 1873-1878 was 25.0 per 1,000 of the population, while in the six years 1879-1884 it was only 20.9, though the density of the population has increased by 7.7 persons to the acre since 1873. The successive annual death-rates from fever also are interesting. These rates per 1,000 of the population, since 1870, have been .63, .53, .54, .57, .56, .4, .38, .38, .22, .21, .16, .21, 20, .19; a series in keeping with what might have been expected. And yet the infantile mortality was, in 1884, as high as 174 per 1,000 of registered births, and the zymotic rate as high as 3.2 per 1,000 of the population. Dr. Hill discusses in detail the various factors concerned in the determination of the results expressed in these figures. Summer diarrhœa is, he says, to be credited with nearly as much mortality as all the other six diseases of the

zymotic class put together. Small-pox, too, has been, as it was also last year, fatally prevalent in the borough, 64 deaths having been ascribed in 1884 to this terrible and loathsome disease. The true meaning of infantile diarrhœa has yet to be learnt, but it is reasonable to suppose that it will be less frequent the more wholesome the air, the water, and the food, are rendered. In regard of small-pox, we know that it may be practically abolished by vaccination and revaccination; and the people of Birmingham do but afford another illustration of this truth, for Dr. Hill finds that Mr. Mason's well known statistics bearing upon the protective influence of vaccination are very closely paralleled by statistics similarly collated at Birmingham. Dr. Hill's enormous tale of nuisances got rid of, while it argues well for the activity of the sanitary officials, at the same time indicates the extent of sanitary improvement which was required in the borough. The sanitary authority are deserving of all praise for the sweeping character of the sanitary reform which they are carrying on; and one and all must be congratulated on the lasting benefits which are thus being secured to the inhabitants of the district.

Builth Rural District.—After reading through Mr. T. F. Herring's annual report for 1884, we are driven to the conclusion that the population of his district is stationary. This is not actually mentioned, but it is stated that "the birth-rate, calculated on the population as estimated in 1881, is 24.56," and again "the death-rate, calculated on a population of 6,758, is 12.28," while further on, we gather from a table that the population at all ages was returned in 1881 at 6,758. It would be well were such a fact stated in as many words. The death-rate is probably satisfactory. Only 3 of the 83 deaths registered in 1884 are attributed to zymotic disease, but the phthisical rate is high. Many hygienic requirements are being attended to in matters of drainage and water-supply, and it is pleasing to read of the stress laid by the medical officers upon thorough ventilation of schools.

Glanford Brigg Rural District.—Mr. J. B. Moxon writes clearly, succinctly, and evidently as a result of great thought, concerning his charge, the rural population of North Lincolnshire. The mortality in 1884 was 18.9, and the birth-rate 31. In regard to the latter, it is noteworthy that, in the ironstone-villages, crammed, as they are, with young married persons, and containing a very small aged population, the birth-rate has been fully 50 per 1,000. In the other villages of the district, the birth-rate, on the average, has been a little under 29 to the 1,000—"a certain proof that either the earnings of the agricultural labourers are not sufficient to justify marriage, or that numbers of the young marriageable people have left their homes for distant places." The high infantile mortality of these ironstone-villages depends upon causes such as the following: errors in diet, exposure to cold, neglect of medical advice at the beginning of disease, overcrowded and heated bedrooms, and the manifold evils which flow from the ignorance, and often the intemperance and other vices, of parents. In 1884, it was as high as 200, but this was largely owing to an epidemic of diphtheria. Despite every effort to check the spread of this disease, 51 persons died of it, while 14 died of croup. Mr. Moxon adds: "There is no doubt in my mind that every one of the latter cases was essentially one of diphtheria, and, therefore, that 65 deaths took place from this fearful disease." These deaths were more numerous in the ironstone-villages than in any other part. This terrible plague has, however, effected one good; it has stirred the sanitary authority to institute a considerable number of hygienic changes at the instigation of the medical officer of health. The inspector of nuisances, also, has been busy in applying himself to remedies for 60 cases of defective sewers or want of sewers, 22 cases of want of privies, removal of pigs from objectionable situations, water-supply in seven places, and numerous other sanitary defects. Tables of carefully elaborated statistics are appended to the report.

Hebburn.—The vital statistics of this district for the year 1884 stand thus: birth-rate, 40.17; death-rate, 16.10; infantile mortality, 16.24; zymotic rate, 2.33. There is one satisfactory feature to record: the death-rate has fallen almost continuously since 1878, when it was as high as 29.2. There were 31 cases of small-pox in the year 1883, and only 4 in 1884; and Mr. Sweet adds: "I have no doubt whatever that this difference is entirely owing to the fact that the local authority have erected an infectious diseases hospital, which, though only temporary, has been the means of enabling the medical department to take immediate steps for the isolation of the cases, the fumigation of the infected premises, and the prevention of the spread of the disease. In no case did infection spread." The fever-rate during the last six years has been as follows: .6, .36, .51, .34, .39, and .06 per 1,000. The infantile mortality, as shown above, is high, and Mr. Sweet publishes some sound advice to parents, whom he holds largely responsible for it.

Lytham.—This district returned a death-rate for the year 1884 of 18.5 per 1,000. The rate was only 12.0 in 1883, 10.1 in 1882, and 13.8 in 1881; and the large increase during 1884 is due, Dr. Fisher says, to an exceptionally large number of deaths which occurred among elderly persons. Out of a total of 92 deaths, 37 were at ages above 60. The infantile mortality, however, was also higher than it has been of late years. The zymotic rate was 1.1. Two cases of enteric fever are recorded, and "both were clearly traceable to defective house-drainage." Six cases of scarlet fever occurred, all in visitors; and, Dr. Fisher says, "in all instances, as far as can be ascertained, the disease was imported." There was one death from diarrhœa. The inspector of nuisances has unquestionably done much valuable work.

Maidstone.—A death-rate of 15.343 per 1,000 is recorded by Mr. M. A. Adams, in his annual report for 1884, with satisfaction. Zymotic diseases produced a rate of 1.78 per 1,000, and included 3 deaths from small-pox, 6 from measles, 10 from whooping-cough, and 27 from summer diarrhœa. Maidstone seems to be especially liable to prevalences of summer diarrhœa, and Mr. Adams considers that the cause is doubtless to be found in the low-lying damp situation of the town, the two main factors which foster diarrhœa being heat and dampness of soil. Mr. Adams has no important event to record in regard to the sanitary progress of the borough, but he brings into bold relief the advantages of the new Infectious Diseases Hospital. He shows that the new building has been not only a blessing, but, in reality, an economy; for not only have 76 per cent. more sick persons been provided for in the utmost comfort, and kept from spreading disease in the town, but a saving of 30 per cent. has been effected. As regards the water-supply, Mr. Adams strikes a note of warning. For the greater part of the year, the water-company's water was very good; but in July, owing to the long continued drought, the company had to supplement their supply from the Medway. The great danger of such a proceeding is manifest when it is known that, a few miles further up the river, it receives "the foulest of sewage," and might thus, on occasion, be the means of spreading cholera or fever broadcast. The private wells still remaining in the town are also looked upon by the health-officer with just suspicion.

Borough of Keighley.—Mr. Arthur Roberts is directing sound sanitary changes in this borough, and he is evidently receiving good help from the inspectors of nuisances. He still has to beg his sanitary authority for a disinfecting chamber, and for an infectious diseases hospital; observing that he is certain they will "come to the conclusion that such a hospital would not only be a saving of disease, suffering, and death, but would also be a means of saving a great deal of money, far more than the outlay. Here, indeed, is a safe investment for corporations, and the money is returned in double and treble interest to the ratepayers." The birth-rate of the borough in 1884 was 32.5. The death-rate was 21.1. The zymotic rate was 2.03, to which there are, as contributing factors, 12 deaths from measles, 4 from diphtheria, 6 from whooping-cough, 28 from diarrhœa, and 6 from fever. Of the 28 deaths from diarrhœa, 26 were in children under 5 years of age. The phthisical rate stood at 2.6. These figures show that Mr. Roberts is doing well in urging his authority to extend their influence for the bettering of the sanitary condition of their borough.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,906,446 persons, 5,554 births and 3,464 deaths were registered during the week ending Saturday, December 12th. The annual rate of mortality, which had been 21.3 and 20.2 per 1,000 in the two preceding weeks, was 20.3 during the week. The rates in the several towns, ranged in order from the lowest, were as follow:—Bradford, 15.3; Brighton, 15.9; Leicester, 16.9; Sunderland, 17.5; Bristol, 18.7; London, 18.8; Norwich, 18.9; Halifax, 18.9; Birmingham, 19.6; Wolverhampton, 19.8; Portsmouth, 20.1; Hull, 20.7; Birkenhead, 20.7; Derby, 20.9; Salford, 21.0; Preston, 21.3; Leeds, 21.6; Cardiff, 22.0; Huddersfield, 22.1; Blackburn, 22.3; Sheffield, 22.5; Nottingham, 22.7; Newcastle-upon-Tyne, 23.5; Manchester, 24.1; Liverpool, 24.6; Oldham, 25.2; Plymouth, 27.5; and the highest rate during the week, 31.8 in Bolton. In the twenty-seven provincial towns, the death-rate averaged 21.5 per 1,000, while, as before stated, it did not exceed 18.8 in London. The 3,464 deaths registered during the week in the twenty-eight towns included 111 which were referred to whooping-cough, 109 to measles, 42 to scarlet fever,

32 to "fever" (principally enteric), 29 to diphtheria, 24 to diarrhœa, and 5 to small-pox; in all, 352 deaths resulted from these principal zymotic diseases, against numbers steadily increasing from 273 to 285 in the six preceding weeks. The zymotic death-rate was equal to 2.1 per 1,000. In London the zymotic rate was 2.2, while, in the twenty-seven provincial towns it averaged 1.9 per 1,000, and ranged from 0.0 in Birkenhead and Huddersfield, to 3.2 in Nottingham, 3.4 in Liverpool, and 3.8 in Salford. The fatal cases of measles, which had increased in the seven previous weeks from 62 to 123, declined again to 109, and showed the largest proportional fatality in Nottingham, Salford, and Oldham. The 111 deaths referred to whooping-cough corresponded with the number in the preceding week, and caused the highest death-rates in Portsmouth and Bolton. The fatal cases of scarlet fever, which had been 42 and 40 in the two previous weeks, were again 42 during the week under notice; this disease was proportionately most fatal in Leeds and Plymouth. The 32 deaths referred to "fever" showed a decline of 17 from those recorded in the preceding week, and showed the highest proportional fatality in Newcastle-upon-Tyne and Norwich. The 29 fatal cases of diphtheria in the twenty-eight towns exceeded by 3 the number recorded in the previous week, and included 20 in London and 5 in Liverpool. The 24 deaths from diarrhœa showed a further decline from recent weekly numbers. Of the 5 fatal cases of small-pox during the week in the twenty-eight towns, 2 occurred in Liverpool, 2 in Bristol, and 1 in London (exclusive of 2 of London residents from this disease registered in the Metropolitan Asylum Hospitals situated outside Registration-London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the five preceding weeks from 90 to 69, had further fallen to 56 on Saturday, December 12th. The admissions, which had been 11, 12, and 13 in the three previous weeks, declined to 6 during the week under notice. The death-rate from diseases of the respiratory organs in London was equal to 5.2 per 1,000, and was considerably below the average. The causes of 79, or 2.3 per cent. of the 3,464 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,906,446 persons, 4,543 births and 3,289 deaths were registered during the week ending Saturday, December 26th. The annual rate of mortality, which had been 20.3 and 23.0 per 1,000 in the two preceding weeks, declined during the week under notice to 19.3. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 13.6; Leicester, 14.2; Hull, 15.1; Norwich, 16.0; Halifax, 16.2; Birmingham, 17.3; Huddersfield, 17.3; London, 18.0; Bristol, 18.2; Wolverhampton, 18.4; Bradford, 18.7; Portsmouth, 19.0; Plymouth, 19.2; Leeds, 19.3; Salford, 20.5; Sunderland, 20.8; Derby, 21.5; Manchester, 21.7; Oldham, 21.9; Sheffield, 22.0; Newcastle-upon-Tyne, 22.1; Liverpool, 22.4; Blackburn, 23.6; Preston, 24.4; Nottingham, 24.7; Cardiff, 25.8; Birkenhead, 26.3; and the highest rate during the week, 28.4 in Bolton. In the twenty-seven provincial towns, the death-rate averaged 20.4 per 1,000, against 18.0 in London. The 3,289 deaths registered during the week in the twenty-eight towns included 126 which were referred to whooping-cough, 122 to measles, 55 to scarlet fever, 30 to "fever" (principally enteric), 24 to diphtheria, and 4 to small-pox; in all, 395 deaths resulted from these principal zymotic diseases, against 352 and 419 in the two preceding weeks. The zymotic death-rate was equal to 2.3 per 1,000. In London the zymotic rate was 2.6, while in the twenty-seven provincial towns it averaged 2.1 per 1,000, and ranged from 0.0 in Wolverhampton, and 0.5 in Blackburn, to 3.3 in Salford, 3.9 in Nottingham, and 6.6 in Bolton. The fatal cases of whooping-cough, which had risen from 42 to 124 in the six preceding weeks, further rose during the week under notice to 126, and caused the highest death-rates in Brighton and Bolton. The deaths referred to measles, which had been 109 and 140 in the two previous weeks, declined to 122, and showed the largest proportional fatality in Birmingham and Nottingham. The 55 fatal cases of scarlet fever showed a further increase upon recent weekly numbers, and caused the highest death-rates in Leicester, Sunderland and Preston. The fatal cases of "fever,", which had been 32 and 49 in the two preceding weeks, declined during the week under notice to 30, a lower number than in any week since the end of August last; this disease was proportionally most fatal in Salford. The 24 deaths referred to diphtheria in the twenty-eight towns showed a decline of 6 from the number in the previous week, and included 14 in London, 2 in Liverpool, and 2 in Salford. Of the 4 fatal cases of small-pox during the week, 3 occurred in Liverpool, and 1 in Bristol. The death of a London resident from small-pox was recorded in the Metropolitan Asylum Hospital ship *Atlas*, outside Registration-London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the seven preceding weeks from 90 to 50, had further fallen to 48 on Saturday, December 26th; the admissions, which had been 6 and 13 in the two previous weeks, fell to 9. The death-rate from diseases of the respiratory organs in London was equal to 4.9 per 1,000, and was considerably below the average. The causes of 85, or 2.6 per cent., of the 3,289 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

During the week ending Saturday, January 2nd, 6,322 births and 4,360 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,906,446 persons. The annual rate of mortality, which had been 23.0 and 19.3 per 1,000 in the two preceding weeks, rose again to 25.5 during the week under notice. The rates in the several towns, ranged in order from the lowest, were as follow:—Hull, 16.0; Brighton, 17.7; Sheffield, 18.4; Sunderland, 19.6; Derby, 19.8; Leicester, 21.5; Cardiff, 21.5; Bradford, 21.7; Bristol, 22.2; Norwich, 22.9; Birkenhead, 23.0; Leeds, 23.3; Newcastle-upon-Tyne, 23.5; Birmingham, 24.2; Oldham, 25.2; Huddersfield, 26.3; Wolverhampton, 26.4; London, 26.5; Portsmouth, 26.7; Plymouth, 26.8; Blackburn, 26.9; Bolton, 27.5; Liverpool, 27.9; Salford, 27.9; Preston, 28.1; Manchester, 29.5; Halifax, 31.7; and the highest rate during the week, 36.8 in Nottingham. The death-rate in the twenty-seven provincial towns averaged 24.8 per 1,000, and was 1.7 below the rate recorded in London, which, as before stated, was 26.5 per 1,000. The 4,360 deaths registered in the twenty-eight towns included 497 which were referred to the principal zymotic diseases, against 419 and 395 in the two preceding weeks; of these, 168 resulted from whooping-cough, 163 from measles, 49 from diarrhœa, 41 from diphtheria, 38 from "fever" (principally enteric), 34 from scarlet fever, and 4 from small-pox. These 497 deaths were equal to an annual rate of 2.9 per 1,000. The zymotic death-rate in London was equal to 3.6, while in the twenty-seven provincial towns it did not average more than 2.3 per 1,000, and ranged from 0.0 in Norwich, Wolverhampton, and Halifax, to 4.7 in Bolton, 6.2 in Plymouth, and 6.9 in Nottingham. The deaths referred to whooping-cough, which had steadily risen in the eight previous weeks from 42 to 126, further rose during week under notice to 168, and showed the largest proportional fatality in Cardiff and Bolton. The fatal cases of measles, which had been 140 and 122 in the two previous weeks, rose to 163 during the week, and caused the highest death-rates in Bolton, Nottingham, and Plymouth. The 49 deaths from diarrhœa showed a further increase upon recent weekly numbers. The fatal cases of diphtheria, which had been 30 and 24 in the two preceding weeks, rose to 41 during the week under notice, and included 25 in London, 3 in Birmingham, and 3 in Salford. The 38 deaths from fever exceeded by 8 the number in the previous week; this disease was proportionally most fatal in Preston and Portsmouth. The fatal cases of scarlet fever, which had been 43 and 55 in the two preceding weeks, declined to 34, and caused the highest death-rates in Leicester and Birkenhead. Of the 4 fatal cases of small-pox recorded in the twenty-eight towns during the week under notice, 2 occurred in Liverpool, 1 in London (exclusive, however, of 5 deaths of London residents from this disease in the Metropolitan Asylums Hospital ship *Atlas* situated outside Registration London), and 1 in Bristol. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily declined from 90 to 48 in the seven preceding weeks, further fell to 41 on Saturday, the 2nd instant; the admissions, which had been 13 and 9 in the two previous weeks, further declined to 2. The death-rate from diseases of the respiratory organs in London during the week was equal to 7.8 per 1,000, and exceeded the average. The causes of 133, or 3.1 per cent., of the 4,360 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, December 26th, 783 births and 560 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,269,170 persons. The annual rate of mortality, which had been 23.7 and 24.1 per 1,000 in the two preceding weeks, declined to 22.9 during the week, but exceeded by 3.6 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 10.6 in Leith, 18.7 in Dundee, 21.0 in Edinburgh, 23.3 in Greenock, 23.9 in Aberdeen, 24.9 in Glasgow, 26.6 in Perth, and 35.2 in Paisley. The 560 deaths registered during the week included 42 which were referred to the principal zymotic diseases, against 55 and 49 in the two preceding weeks; of these, 12 resulted from whooping-cough, 9 from scarlet fever, 9 from diarrhœa, 6 from diphtheria, 4 from measles, 2 from "fever," and not one from small-pox. These 42 deaths were equal to an annual rate of 1.8 per 1,000, which was 0.5 below the average zymotic rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates during the week under notice were recorded in Paisley, and Perth. The deaths from whooping-cough, which had been 12 and 7 in the two preceding weeks, rose again to 12, and included 9 in Glasgow and 2 in Aberdeen. The fatal cases of scarlet fever, which had risen in the three previous weeks from 5 to 15, declined to 9, of which 5 occurred in Glasgow, and 2 in Edinburgh. The 6 deaths referred to diphtheria were 2 less than the number in the preceding week, and included 5 in Glasgow. The 4 fatal cases of measles exceeded the number returned in any recent week; 2 occurred in Paisley. The 2 deaths from "fever" were returned in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 6.4 per 1,000, against 4.9 in London. The causes of 90, or 16.1 per cent, of the 560 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,269,170 persons, 828 births and 528 deaths were registered during the week ending January 2nd. The annual rate of mortality, which had been 24.1 and 22.9 per 1,000 in the two preceding weeks, further declined to 21.6, and was 4.9 per 1,000 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 17.7 in Dundee, 18.4 in Aberdeen, 19.1 in Edinburgh, 19.8 in Leith, 23.2 in Glasgow, 26.1 in Greenock, 27.3 in Paisley, and 29.9 in Perth. The 528 deaths registered during the week under notice in these Scotch towns included 13 which were referred to whooping-cough, 8 to "fever," (principally enteric), 6 to diarrhœa, 3 to scarlet fever, 2 to diphtheria, and not one either to measles or small-pox; in all, 32 deaths resulted from these seven principal zymotic diseases, against 55, 49, and 42 in the three preceding weeks. These 32 deaths were equal to an annual rate of 1.3 per 1,000, which was 1.6 below the average zymotic death-rate during the same period in the twenty-eight English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Aberdeen and Glasgow. The deaths from whooping-cough, which had been 7 and 12 in the two preceding weeks, further rose to 13, of which 9 occurred in Glasgow, 2 in Edinburgh, and 2 in Aberdeen. The fatal cases of fever, which had declined from 9 to 2 in the three previous weeks, rose again to 8, and included 4 in Glasgow and 3 in Edinburgh. The 6 deaths from diarrhœa were also fewer than those returned in recent weeks. The fatal cases of scarlet fever, which had been 15 and 9 in the two preceding weeks, further fell to 3 during the week under notice. Of the 2 deaths referred to diphtheria, 1 was recorded in Glasgow and 1 in Dundee. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.1 per 1,000, against 7.2 in London. As many as 88, or 16.7 per cent., of the 528 deaths registered during the week in these Scotch towns, were uncertified.

HEALTH OF IRISH TOWNS.

During the week ending November 30th, the number of deaths registered in the sixteen principal town-districts of Ireland was 394. The average annual death-rate represented by the deaths registered was 23.8 per 1,000 of the population. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 10.3; Belfast, 26.2; Cork, 18.2; Drogheda, 25.4; Dublin, 24.7; Dundalk, 13.1; Galway, 30.3; Kilkenny, 16.9; Limerick, 21.6; Lisburn, 33.8; Londonderry, 23.2; Lurgan, 10.3; Newry, 21.1; Sligo, 9.6; Waterford, 30.1; Wexford, 25.7. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.4 per 1,000, the rates varying from 0.0 in eleven of the districts to 3.6 in Londonderry; the 13 deaths from all causes registered in that district comprising 2 from whooping-cough. Among the 110 deaths from all causes in Belfast, were 1 from scarlatina, 2 from whooping-cough, 1 from ill-defined fever, and 1 from diarrhœa; and the 28 deaths in Cork comprised 4 from scarlatina, and 1 from enteric fever. In the Dublin registration-district, the deaths registered during the week amounted to 170. There were only 11 deaths from zymotic diseases registered in Dublin. Thirty-one deaths from diseases of the respiratory system were registered; they comprised 22 from bronchitis, and 4 from pneumonia. The deaths of 14 children under 5 years of age (including 10 infants under one

year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 1 by epilepsy, 12 by other diseases of the brain and nervous system, and 13 by diseases of the circulatory system. Phthisis caused 30 deaths, and cancer 2. One accidental death and one case of suicide were registered. In 22 instances, there was "no medical attendant" during the last illness.

In the week ending December 7th, the total number of deaths registered in the sixteen principal town-districts of Ireland was 364. The average annual death-rate represented by the deaths registered was 22.0 per 1,000 of the population. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 36.1; Belfast, 19.3; Cork, 18.8; Drogheda, 16.9; Dublin, 24.4; Dundalk, 34.9; Galway, 13.4; Kilkenny, 4.2; Limerick, 17.5; Lisburn, 29.0; Londonderry, 26.7; Lurgan, 15.4; Newry, 21.1; Sligo, 28.9; Waterford, 32.4; Wexford, 8.6. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in eleven of the districts to 5.2 in Armagh; the 7 deaths from all causes registered in that district comprising 1 from whooping-cough. Among the 81 deaths from all causes in Belfast were 2 from whooping-cough, 2 from diphtheria, 2 from enteric fever, and 3 from diarrhœa; and the 29 deaths in Cork comprised 1 from measles, 2 from scarlatina, and 1 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 167. Twenty deaths from zymotic diseases were registered in Dublin; they comprised 2 from scarlet fever (scarlatina), 8 from whooping-cough, 1 from diphtheria, 2 from diarrhœa, 2 from erysipelas, etc. Forty deaths from diseases of the respiratory system were registered; they comprised 27 from bronchitis and 7 from pneumonia. The deaths of 13 children under 5 years of age (including 12 infants under 1 year old) were ascribed to convulsions. Ten deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 8 by diseases of the circulatory system. Phthisis caused 20 deaths, tubercular meningitis 12, and cancer 2. Five accidental deaths were registered. In 1 instance the cause of death was uncertified, and in 21 other cases there was "no medical attendant."

In the week ending December 12th, the total number of deaths registered in the sixteen principal town-districts of Ireland was 427. The average annual death-rate represented by the deaths registered was 25.8 per 1,000 of the population. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 28.3; Cork, 27.3; Drogheda, 25.4; Dublin, 30.3; Dundalk, 13.1; Galway, 33.6; Kilkenny, 0.0; Limerick, 16.2; Lisburn, 24.2; Londonderry, 32.1; Lurgan, 15.4; Newry, 21.1; Sligo, 14.4; Waterford, 13.9; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.2 per 1,000, the rates varying from 0.0 in Limerick, Londonderry, Waterford, Galway, Kilkenny, Drogheda, Wexford, Lisburn, and Armagh, to 5.1 in Lurgan. Among the 98 deaths from all causes in Belfast were 2 from measles, 3 from scarlatina, 1 from whooping-cough, 1 from diphtheria, etc. In the Dublin Registration District, the deaths registered during the week amounted to 210. Twenty-six deaths from zymotic diseases were registered in Dublin; they comprised 1 from measles, 4 from scarlet fever, 2 from typhus, 8 from whooping-cough, 2 from simple continued and ill-defined fever, 3 from enteric fever, 3 from diarrhœa, etc. Forty-seven deaths from diseases of the respiratory system were registered; they comprised 29 from bronchitis, 8 from pneumonia, and 3 from croup. The deaths of 14 children under 5 years of age (including 11 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 10 by other diseases of the brain and nervous system (exclusive of convulsions), and 16 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 29 deaths, mesenteric disease 5, and cancer 2. Seven accidental deaths were registered. In 2 instances the cause of death was "uncertified," and in 28 other cases there was "no medical attendant."

In the week ending December 19th, the number of deaths registered in the sixteen principal town-districts of Ireland was 482. The average annual death-rate represented by the deaths registered was 29.1 per 1,000. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 27.1; Cork, 32.4; Drogheda, 38.1; Dublin, 33.5; Dundalk, 21.8; Galway, 37.0; Kilkenny, 12.7; Limerick, 29.7; Lisburn, 19.3; Londonderry, 19.6; Lurgan, 20.5; Newry, 7.0; Sligo, 4.8; Waterford, 11.6; Wexford, 42.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.0 per 1,000, the rates varying from 0.0 in ten of the districts to 10.3 in Lurgan; the 4 deaths from all causes registered in that district comprising 2 from scarlatina. The 114 deaths from all causes in Belfast comprised 1 from measles, 4 from scarlatina, 1 from typhus, 1 from whooping-cough, 1 from ill-defined fever, 3 from enteric fever, and 2 from diarrhœa; among the 50 deaths in Cork were 2 from scarlatina, 1 from typhus, and 1 from ill-defined fever; the 22 deaths in Limerick comprised 1 from typhus, and 1 from whooping-cough; and the 11 deaths in Londonderry comprised 1 from typhus, and 1 from enteric fever. In the Dublin Registration District, the deaths registered during the week amounted to 233. Thirty-two deaths from zymotic diseases were registered in Dublin; they comprised 3 from scarlet fever, 15 from whooping-cough, 6 from enteric fever, 3 from diarrhœa, etc. Fifty-seven deaths from diseases of the respiratory system were registered; they comprised 33 from bronchitis and 12 from pneumonia. The deaths of 16 children under five years of age (including 14 infants under one year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 2 by epilepsy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 19 deaths, mesenteric disease 5, and cancer 6. Eight accidental deaths (including 4 from burns or scalds) were registered. In thirty-five instances there was "no medical attendant" during the last illness.

HEALTH OF FOREIGN CITIES.

It appears from statistics published in the Registrar-General's return for the week ending November 28th, that the annual death-rate recently averaged 28.3 per 1,000 in the three principal Indian cities; it was 26.0 in Calcutta, 27.3 in Bombay, and 32.3 in Madras. Cholera caused 10 deaths in Calcutta and 1 in Bombay; "fever" mortality showed the largest excess in Calcutta and Bombay. According to the most recently received weekly returns, the annual death-rate averaged 23.8 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and was 2.5 above the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 24.4, and almost identical with the rate in the two preceding weeks; the deaths included 19 from "fever" and 18 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 22.5, and ranged from 21.0 in Copenhagen to 25.2 in Christiania; the 62 deaths in the last-mentioned city included 14 from diphtheria and croup, and 10 from scarlet fever. In Paris, the death-rate was 21.9; 38 of the deaths resulted from diphtheria and croup, 21 from measles, and 15 from typhoid fever. The 190 deaths in Brussels included 4 from diphtheria, and 3 from scarlet fever, and were equal to a rate of 22.6. In Geneva, the 27 deaths, including 2 from "fever" and 1 from small-pox, gave a rate of 19.7. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 22.8, the rates ranging from 17.8 in the Hague to 29.1 in Rotterdam; scarlet fever caused 5 deaths in Amsterdam, and diphtheria and croup 3 in Amsterdam and 3 in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 24.9, and ranged from 20.7 in Dresden and 22.1 in Berlin, to 28.7 in Trieste and 31.8 in Prague. Small-pox caused 20 deaths in Vienna, 8 in Prague, and 8 in Buda-Pesth; "fever," 11 in Hamburg and 8 in Trieste; and diphtheria-mortality showed the greatest excess in Berlin, Hamburg, and Trieste. The mean death-rate in three of the principal Italian cities was 24.5, the rates being 22.3 in Rome, 23.5 in Turin, and 31.8 in Venice; small-pox caused 13 deaths in Venice, and malarial fever 19 in Rome. No returns had recently been received from Madrid, Lisbon, or Alexandria. In four of the largest American cities, the rate averaged 19.3, and ranged from 18.0 in Baltimore to 20.6 in New York. Diphtheria and typhoid fever caused more or less mortality in each of these four American cities.

It appears from the statistics published in the Registrar-General's return for the week ending December 5th, that the death-rate recently averaged 26.4 per 1,000 in the three principal Indian cities; it was 23.8 in Calcutta, 23.9 in Bombay, and 33.6 in Madras. Cholera caused 4 deaths in Calcutta, and diarrhœal diseases showed the greatest mortality in Madras; the death-rate from "fever" was highest in Madras and Calcutta. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-two of the largest European cities averaged 24.6, and was 4.4 in excess of the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 24.2, and scarcely differed from the rate in the previous week; the 430 deaths included 52 from diarrhœal diseases, 15 from scarlet fever, and 15 from "fever." In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 21.2, ranging from 14.2 in Christiania to 23.1 in Copenhagen; diphtheria and croup showed more or less fatal prevalence in each of these three cities. In Paris, the death-rate rose to 24.0, showing a marked increase upon the rates in previous weeks; the deaths included 45 from diphtheria and croup, 30 from typhoid fever, 19 from measles, and 62 from infantile diarrhœa. The 167 deaths in Brussels were equal to a rate of 19.9, and included 7 from diphtheria and croup, besides 16 from diarrhœal diseases; the rate in Geneva was 21.2. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.5, the rates ranging from 22.8 in the Hague to 28.8 in Rotterdam; in Amsterdam 11 deaths resulted from diphtheria and croup, and 3 from scarlet fever. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 24.8, and ranged from 20.5 in Dresden and 22.3 in Berlin, to 29.2 in Hamburg and 30.3 in Prague. Small-pox caused 21 deaths in Vienna, and 13 in Prague; diphtheria caused the greatest mortality in Dresden and Hamburg, and typhoid fever caused 9 of the 76 deaths in Trieste. The death-rate averaged 29.4 in three of the principal Italian cities, and was equal to 27.0 in Rome and 29.3 in Venice; small-pox caused 11 of the 82 deaths in Venice and 2 in Rome, and typhoid fever showed more or less fatal prevalence in each of these three Italian cities. No returns had recently been received from Madrid, Lisbon, or Alexandria. In three of the largest American cities the mean recorded death-rate was not more than 18.8, the several rates ranging from 15.6 in Baltimore to 19.4 in New York and Brooklyn. Diphtheria caused considerable mortality in each of these American cities, and 6 deaths were referred to typhoid fever in Brooklyn.

It appears from statistics published in the Registrar-General's return for the week ending December 12th, that the death-rate was recently equal to 24.5 in Bombay, and 25.1 in Calcutta. Cholera caused 8 deaths in Calcutta, and the mortality from "fever" showed a far greater excess in Calcutta than in Bombay. According to the most recently received weekly returns, the average annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities was 22.4, and exceeded by 2.1 the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 27.1, showing a considerable increase upon the rates in previous weeks; the 428 deaths included 19 from scarlet fever, and 10 from "fever." In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 20.3, and ranged from 18.1 in Copenhagen to 25.2 in Christiania; the high rate in the last mentioned city was due to the 62 deaths, including 15 from diphtheria and croup, and 4 from scarlet fever. In Paris, the death-rate was equal to 22.1, a decline from the rate in the previous week; the 951 deaths included 39 from typhoid fever, 32 from diphtheria and croup, and 19 from measles. The 193 deaths in Brussels, of which 10 resulted from diphtheria and croup, were equal to a rate of 23.0. In Geneva, only 18 deaths were reported, and the rate was 13.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.3, the rates ranging from 21.3 in the Hague to 24.8 both in Amsterdam and Rotterdam; the 175 deaths in Amsterdam included 8 from measles, and 9 from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 24.8, and ranged from 20.1 in Breslau and 21.8 in Berlin, to 30.5 in Trieste and 34.7 in Prague. Small-pox caused 14 deaths in Prague, 18 in Vienna, and 10 in Buda-Pesth; diphtheria caused the greatest mortality in Hamburg and Dresden. The death-rate was 23.5 in Rome, and 28.2 in Venice; the deaths in Rome included 17 from malarial fever, 4 from typhoid fever, and 1 from small-pox; in Venice, 21 of the 79 deaths resulted from small-pox. In four of the largest American cities, the mean recorded death-rate did not exceed 19.3, the rates ranging from 17.2 in Baltimore, to 21.6 in New York; typhoid fever caused 11 deaths in Philadelphia, 9 in Brooklyn, and 7 in New York; diphtheria caused excessive mortality in each of these American cities.

It appears from the statistics published in the Registrar-General's return for the week ending December 19th, that the death-rate was recently equal to 25.6 in Calcutta, and 26.9 in Bombay. Cholera caused 9 deaths in Calcutta, and "fever" mortality showed the largest excess in Bombay. According to the most recently received weekly returns, the average annual death-rate per 1,000 persons estimated to be living in twenty-two of the largest European cities, was equal to 23.8, and exceeded by only 0.8 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 25.7, and showed a decline from the rate in the previous week; the 457 deaths included 42 from diarrhœal diseases, 27 from scarlet fever, and 17 from "fever." In three other northern

cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 18.2, and ranged from 17.3 in Copenhagen to 19.2 in Stockholm; the 45 deaths in Christiania, although only giving a death-rate of 18.3, included 10 from diphtheria and croup, and 4 from scarlet fever. In Paris, the death-rate was equal to 21.4, showing a decline from the rates in recent weeks; the deaths included 35 from diphtheria and croup, 23 from typhoid fever, 22 from measles, and 6 from small-pox. The 166 deaths in Brussels, of which 7 resulted from diphtheria and croup, and 5 from "fever," were equal to a rate of 19.8. In Geneva, the rate did not exceed 15.3, and no zymotic death was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 21.7, the highest rate being 21.9 in Amsterdam, where 9 deaths resulted from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.4, and ranged from 21.1 and 21.5 in Dresden and Berlin, to 31.1 in Buda-Pesth, and 31.2 in Trieste. Small-pox caused 17 deaths in Vienna and 11 in Buda-Pesth; diphtheria showed the greatest mortality in Berlin, Hamburg, Dresden, and Trieste. The death-rate averaged 25.3 in three of the principal Italian cities, and was equal to 21.1 in Turin, 25.1 in Rome, and 36.5 in Venice; small-pox caused 12 deaths in Venice, and typhoid fever 9 in Turin, 6 in Rome, and 3 in Venice. In four of the largest American cities, the mean recorded death-rate was only 19.2, the rates in the several cities ranging from 15.5 in Baltimore to 21.4 in New York. Diphtheria showed considerable mortality in each of these American cities; and typhoid fever caused 12 deaths in Brooklyn and 10 in Philadelphia.

It appears, from statistics published in the Registrar-General's return for the week ending December 26th, that the death-rate recently averaged 28.7 per 1,000 in the three principal Indian cities; it was 23.9 in Bombay 27.9 in Calcutta, and 38.6 in Madras. Cholera caused 10 deaths in Calcutta, and diarrhœal diseases 30 deaths in Calcutta, 31 in Bombay, and 55 in Madras; the mortality from "fever" was very excessive in each of these three Indian cities, but greatest in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty of the largest European cities averaged 25.1, and exceeded by 3.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 27.5, and showed a further increase upon the rates in recent weeks; the 490 deaths included 62 from diarrhœal diseases, 22 from scarlet fever, and 18 from "fever." In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 23.2, and ranged from 21.1 in Christiania to 24.2 in Copenhagen; the 52 deaths in Christiania included no fewer than 16 from diphtheria and croup, and 7 from scarlet-fever. In Paris, the death-rate was 23.5, showing an increase upon the rates in recent weeks; the deaths included 45 from diphtheria and croup, 60 from infantile diarrhœa, and 18 from typhoid fever. The 159 deaths in Brussels were equal to an annual rate of 18.9, and included 8 from diphtheria and croup. In Geneva the 26 deaths, of which 4 resulted from infantile diarrhœa, gave a rate of 19.0. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.3, the rates in the several cities being 23.9 in Rotterdam, 26.3 in the Hague, and 27.0 in Amsterdam; measles caused 18 deaths in Amsterdam, and diphtheria and croup 5 in the Hague, and 12 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.4, and ranged from 21.2 in Berlin and 22.2 in Dresden, to 30.5 in Prague, and 31.6 in Hamburg. Diphtheria (including croup) showed the greatest mortality in Hamburg, Buda-Pesth, and Berlin. Small-pox caused 11 deaths in Vienna, and 4 in Buda-Pesth. The mean death-rate in three of the principal Italian cities was 25.4, the rate being 23.1 in Turin, 25.1 in Rome, and 32.2 in Venice; small-pox caused 13 deaths in Venice, 2 in Rome, and 2 in Turin; the deaths referred to typhoid fever were 6 in Turin, 5 in Venice, and 4 in Rome. In four of the largest American cities, the recorded rate averaged only 19.6, and ranged from 17.5 in Baltimore to 21.8 in New York. The mortality from diphtheria was excessive in each of these American cities; and typhoid fever caused 15 deaths in Philadelphia and 8 in Brooklyn.

It appears, from the statistics published in the Registrar-General's return for the week ending January 2nd, that the annual death-rate recently averaged 28.7 per 1,000 in the three principal Indian cities; it was 23.9 in Bombay, 27.9 in Calcutta, and 38.6 in Madras. Diarrhœal diseases caused 55 deaths in Madras, 31 in Bombay, and 30 in Calcutta, in addition to 10 fatal cases of cholera; "fever" mortality showed the largest excess in Calcutta and Madras. According to the most recently received weekly returns, the annual death-rate in twenty of the largest European cities averaged 25.1, and was slightly below the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 27.3, and showed a slight decline from the rate in the previous week; the 485 deaths included 16 from scarlet fever, 11 from "fever," and 4 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 18.6, the highest rate being 20.3 in Stockholm; the 44 deaths in Christiania, giving a death-rate of but 17.9, included 12 from diphtheria and croup, and 5 from scarlet fever. In Paris, the death-rate was 23.8, and scarcely differed from the rate in the previous week; 47 of the deaths resulted from diphtheria and croup, 37 from typhoid fever, and 13 from measles. The 150 deaths in Brussels were equal to a rate of 17.9. In Geneva the 29 deaths, of which 2 resulted from "fever," were equal to a rate of 21.2. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.9, the rates ranging from 18.1 in the Hague to 27.0 in Rotterdam; in Amsterdam, the deaths included 11 from measles and 8 from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.1, and ranged from 21.2 in Berlin and 26.2 in Munich, to 32.2 in Hamburg, 33.7 in Prague, and 35.3 in Trieste. Small-pox caused 18 deaths in Vienna, and 13 in Buda-Pesth; diphtheria caused the greatest mortality in Berlin, Hamburg, and Dresden, and "fever" in Hamburg. The death-rate averaged 23.1 in three of the principal Italian cities, and was 17.6 in Turin, 24.0 in Rome, and 35.7 in Venice; small-pox caused 14 deaths in Venice and 3 in Rome; while 8 deaths from typhoid fever and 9 from diphtheria and croup occurred in Turin. In four of the largest American cities, the recorded rate did not average more than 19.6, and ranged from 16.9 in Baltimore to 22.3 in New York. Diphtheria caused 42 deaths in New York, 14 in Brooklyn, 11 in Baltimore, and 9 in Philadelphia; scarlet fever showed the greatest mortality in Brooklyn.

QUEEN'S COLLEGE, GALWAY.—The following scholarships have been awarded for the session 1885-6 in the Faculty of Medicine: Fourth year, Eaton W. Waters; third year, Henry Smith and J. Stewart; second year, Joseph Eldon and Joseph J. Loftus.

OBITUARY.

JAMES GORDON, M.D.

DR. JAMES GORDON, a well known and much respected practitioner in Old Aberdeen, died on December 23rd, aged 76. He was medical officer of the parish, and had also been Provost of Old Aberdeen. A man of kindly disposition, he was greatly esteemed in the community where he spent the greater part of his days. He took a keen interest in church matters, being a zealous member of the Free Church.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, December 31st, 1885.

Christopherson, Cecil, Grove House, Blackheath.
Fellowes, William Edmund, Newcastle-on-Tyne.
Lyndon, Arnold, 186, Adelaide Road, South Hampstead.
Maloney, William Robert Nuttall, Melbourne, Australia.
Young, Charles Wheeler Forrest, 58, the Chase, Clapham Common.

The following passed the Examination in the Science and Practice of Medicine, and received certificates to practise.

Jowers, Reginald Francis, M.R.C.S., 27, Old Steyne, Brighton.
Simcock, George, Mile End, Landport.

MEDICAL VACANCIES.

The following vacancies are announced.

CHELSEA HOSPITAL FOR WOMEN.—Resident Medical Officer. Salary, £60. Applications by January 11th.

EVELINA HOSPITAL.—House-Surgeon and Surgeon for Out-patients. Salary, £70. Applications by January 28th.

FRENCH HOSPITAL AND DISPENSARY.—Qualified Resident Medical Officer. Salary, £60. Applications early in January.

GENERAL LYING-IN HOSPITAL, York Road, Lambeth.—House-Physician. Salary, £50 per annum. Applications by January 11th.

HALIFAX INFIRMARY.—Junior House-Surgeon. Salary, £50. Applications by January 11th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Dental Surgeon. Applications by January 15th.

PARISH OF LOCHS, Island of Lewis.—Medical Officer. Salary, £150 per annum. Applications by February 1st.

SCARBOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, £80. Applications by January 18th.

STAFFORDSHIRE GENERAL INFIRMARY.—House-Surgeon and Secretary. Salary to commence, £100. Applications by January 20th.

THE QUEEN'S HOSPITAL, BIRMINGHAM.—Vacancies for offices of Physician for out-patients, and of Casualty Surgeon. Honorarium, £50. Applications before January 23rd.

WOLSTANTON AND BURSLEM UNION.—Medical Officer. Salary, £25. Applications by January 15th.

MEDICAL APPOINTMENTS.

BIDEN, Charles W., L.R.C.P.Lond., M.R.C.S.Eng., late House-Surgeon, appointed Resident Obstetrical Officer to Charing Cross Hospital, *vice* W. H. Haw, M.R.C.S.Eng.

FARRER, George A., M.R.C.S.Eng., of Brighouse, Yorkshire, appointed a Certifying Surgeon under the Factory and Workshops Act, *vice* Robert Farrar, M.R.C.S.Eng., M.R.C.P.Ed., resigned.

FOOKS, Henry, M.R.C.S.Eng., L.S.A.Lond., appointed House-Surgeon to Charing Cross Hospital, *vice* F. O. Stedman, M.R.C.S.Eng., L.S.A.

FREEMAN, C. Delamark, L.S.A.Lond., appointed House-Physician to Charing Cross Hospital, *vice* H. O. Grenfell, L.S.A.

HEWITT, Frederic W., B.A., M.B.Cantab., Anæsthetist to Charing Cross Hospital, appointed Assistant Anæsthetist to the Dental Hospital of London.

LYNES, John, M.R.C.S.Eng., L.S.A.Lond., appointed House-Surgeon to Charing Cross Hospital, *vice* C. W. Biden, L.R.C.P.Lond., M.R.C.S.Eng.

NORTON, R. R., L.R.C.P., M.R.C.S., appointed Medical Officer of Tottenham and Edmonton Dispensary, *vice* J. Bunting, M.R.C.S., L.S.A., resigned.

STEDMAN, F. Osmund, M.R.C.S.Eng., L.S.A.Lond., late House-Surgeon, appointed House-Physician to Charing Cross Hospital, *vice* W. T. Wallington, L.S.A.

SYKES, E. J., M.D., C.M.Edin., appointed Medical Officer of Tottenham and Edmonton Dispensary, *vice* J. Bunting, M.R.C.S., L.S.A., resigned.

WALTERS, F. Rufenacht, M.D., B.S.Lond., F.R.C.S.Eng., appointed Honorary Surgeon to the Westminster General Dispensary, *vice* Dr. J. H. Waters, resigned.

THE Middlesborough Guardians have increased the salary of Mr. George Longbotham, the medical officer to the workhouse, from £150 to £225 *per annum.*

BIRTHS, MARRIAGES, AND DEATHS.

The charges for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

PESKETT—PESKETT.—On December 29th, 1885, at St. Mary's Church, Leyton, Essex, by the Rev. Alfred Peskett, M.D., assisted by the Rev. Charles Edmunds, Vicar-designate of All Saints, Arthur William Chalmers Peskett, M.A., M.B.Cantab., son of the late William Peskett, M.D. (Surgeon-Major, Indian Army) to Edith Jane, younger daughter of Alfred Peskett, M.D., Leyton, Essex.

TIDY—CORBETT.—At. St. John's Church, Peshawur, on December 7th, 1885, by the Rev. Charles Gillmore, assisted by the Rev. Worthington Jukes, Major Arthur Grey Tidy, of the Dorsetshire Regiment, second son of the late General Thomas Holmes Tidy, to Ethel Cochrane, younger daughter of Deputy Surgeon-General W. H. Corbett, Medical Staff.

DEATHS.

HAZEL.—On January 3rd, at 71, Oakley Square, N.W., George Hazel, M.R.C.S.Eng., aged 64 years.

HILL.—On November 5th, at his residence, No. 2, Oxford Street, Oldham, Robert Bryden Hill, M.D., B.Sc.Edin., aged 32.

KING.—On January 2nd, suddenly, at No. 6, Albion Street, Hull, Kelburne King, M.D., F.R.C.S., Surgeon to the Hull Royal Infirmary.

PAGE.—At St. Ann's, Carlisle, on January 5th, 1886, William Bousfield Page, F.R.C.S., J.P. Cumberland, in his 69th year.

SCOFIELD.—On January 2nd, at his residence, 19, Grosvenor Street, Bath, of angina pectoris, W. J. J. Scofield, M.R.C.S., F.L.S., formerly of Birmingham, and recently of Hampstead, aged 56.

PHYSICAL EDUCATION AT HAWARDEN.—On December 31st, 1885, a lecture on "Healthful Exercises" was given in the Boys' School, Hawarden, to the members of the Hawarden Young Men's Society (of which the Rev. Stephen E. Gladstone, Rector of Hawarden, is the President), by Mr. Alexander, Director of the Liverpool Gymnasium. Mr. H. J. Gladstone, M.P., presided; and the company included the Right. Hon. W. E. Gladstone, M.P., and Mrs. Gladstone, and several members of the family; the Rev. E. C. Wickham, Head Master of Wellington College; etc. The lecturer delivered a short address, in which he contrasted the education given in English and Continental schools. Dwelling on the benefits of a thorough gymnastic training, he advocated the use of very light apparatus, as tending to more effectually develop the trunk of the body; and deprecated overdevelopment of the limbs, as taught by the foreign systems. He alluded to the influence of physical training upon the national character, and urged that it should have a place in our system. The various systems were ably represented by the lecturer's pupils, with vocal and instrumental accompaniments. At one point, the lecturer demonstrated the strength of the fingers by raising his body from the ground by a suspended ring until level with the chin, and also the still more surprising feat of raising and holding the body in a horizontal position by the aid of one finger alone. The chairman, in proposing a vote of thanks, alluded to the benefits that he had received from his gymnastic training at Oxford. Mr. W. E. Gladstone personally thanked Mr. Alexander for his interesting lecture, and alluded to the interest which he felt in anything that pertained to the physical well-being of the community.

AMBULANCE TEACHING IN COLLIERY DISTRICTS.—Attention is called by Surgeon-Major Hutton to the necessity of having at every colliery an ambulance class for instruction in first aid to the injured. In a letter which he has addressed to the daily press, calling attention to the fact that at the Taylor Pit, near Wigan, which on Tuesday last was the scene of a serious colliery explosion, many of the workmen had attended the classes of the St. John Ambulance Association, and were able to render useful and valuable assistance in the way of dressing the burns, and rendering the poor fellows comfortable until the arrival of the medical men. This want becomes the more apparent when it is considered that in ten years ending with 1884, out of 11,165 deaths that occurred, 2,562 were due to explosions, while 4,582 were due to falls of roofs and sides, and 4,021 to other causes.

HOW TO TAKE A PILL.—It is very common for patients, especially women, to say that they cannot swallow pills, as they "go the wrong way," or "stick in their throat." A useful suggestion has been made by Dr. Samuel E. Wells, of Maryland, U.S.A., who observes that the common habit of throwing the head backward, and endeavouring to swallow the pill in that position, is often accountable for the difficulty; for if, while eating food, the head is thrown back, some difficulty in swallowing will be experienced. He therefore directs patients, when swallowing a pill, to look downwards—for instance, to keep the eyes fixed on the toes; and he finds that this simple manœuvre is commonly attended with success.

LONDON SANITARY PROTECTION ASSOCIATION.—At a meeting of the Council of this Association, held last Friday at their offices, 1, Adam Street, Adelphi, Mr. E. B. Ellice Clark, M.Inst.C.E., was appointed Consulting Engineer to the Association, in succession to the late Professor Fleming Jenkin. The Association, which has been in existence now five years, consists of more than 1,000 members, amongst its numbers being many of our most eminent surgeons and physicians, and by no means a small sprinkling of well known engineers and architects. Each member has the sanitary arrangements of his house carefully examined and tested by one of the Associations' engineers at frequent intervals.

FISHERMENS' VIEW OF RIVER POLLUTION.—The conservators of the Yorkshire Fishery District, in their annual report, state that it is patent and notorious that all our large rivers are becoming more and more the sewers of every description of pollution, and the evil will never be remedied until the health of the population dwelling on its banks is seriously affected by the miasma. They trust that the new Parliament about to assemble will shortly give attention to the adoption of such measures as will tend materially to lesson the evils of river pollution.

DONATIONS AND BEQUESTS.—The London Temperance Hospital has received £500 from a benefactor whose name is not given, "instead of a legacy."—Dr. William Augustus Guy has bequeathed £250, and a moiety of the "residue" of his real and personal estate after the death of his wife, to the King's College Hospital Convalescent Institution, and £250 to King's College Hospital.—The Norfolk and Norwich Hospital has received £100 under the will of Mr. Robert Edward Butcher.—Mrs. West Braman has given £50 to the Kent County Ophthalmic Hospital, Maidstone.

FLATULENT DISTENSION.—Dr. Wands, of Indianapolis, states that he has found the following simple mixture, originally recommended by Dr. Brown, and highly praised by Dr. Charles D. Meigs, very useful in flatulent distension, after abdominal operations. One ounce of manna and one drachm of aniseed, infused in eight fluid ounces of water; the infusion, after standing for half an hour, is strained, and four drachms of carbonate of magnesia added. A wineglassful of the mixture is ordered to be taken every three hours until the bowels act.

REMOVAL OF A BROKEN PESSARY.—A woman having broken a glass pessary in the vagina, and a severe vaginitis having been set up by the fragments comminuted by the efforts at removal, Dr. Lewis (*Coll. and Clin. Record*, U.S.A.), threw into the vagina, by means of a syringe, a mixture of plaster-of-Paris, and after two or three days removed the mass, the solidified mixture having fixed in it the various pieces of glass.

UNIVERSITY OF CORDOVA.—The following appointments have been made to the new Free University of Cordova:—*Rector:* Don Angel de Torres. *General Secretary:* Don José Calderon. *Dean of the Faculty of Medicine:* Don Leon Torrellas. *Secretary:* Don Manuel Lopez Comas. *Dean of the Faculty of Pharmacy:* Don F. de Borja Pavon. *Secretary:* Don Enrique Villegas.

TREATMENT OF THE PAROXYSMS OF WHOOPING-COUGH.—To cut short the paroxysm in whooping-cough, Professor Da Costa recommends the inhalation of—℞ Sodii bromidi, gr. xx; axt. belladonnæ fluidi gtt. ij. The spray to be inhaled just prior to occurrence of the paroxysm. In the interval, quinine should be pushed up to the point of tolerance.

IN MEMORIAM.—Old patients and friends have raised a memorial to the late Mr. W. Ebden, of Haughley, Suffolk, who died in 1884, by recasting the tenor bell of the church, at an expense of about £30. In addition to the old inscription, the following has been added:—"This bell was recast in memory of W. Ebden, surgeon, forty-three years resident in this parish.

PUERPERAL ANTISEPSIS.—The subject chosen by the last-elected member of the Barcelona Medical and Chirurgical Academy, for his inaugural discourse, was Puerperal Antisepsis. The substances he advises are bichloride of mercury, sulphate of copper, oxygenated water, and carbolic acid. In addition to these, he mentions biniodide of mercury, which he thinks likely, on further trial, to prove the most efficacious of all.

MEDICAL MAGISTRATES.—Mr. Howel Rees, of Cwmamman, Carmarthenshire, has been placed on the Commission of the Peace for the county of Glamorgan.—Mr. Robert N. Robson, M.R.C.S.Eng., has been placed on the Commission of the Peace for the city of Durham.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St. George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Clinical Evening. Living Specimens at 8 o'clock. Mr. A. Boyce Barrow: Cases of Varicocele treated by Excision. Dr. Isambard Owen: Case of Recovery from Albuminoid Disease. Dr. C. E. Beevor: Cases of Athetosis. Mr. Walter Pye: Case of Diffuse Lipoma.—Odontological Society of Great Britain, 8 P.M. Casual communications by Messrs. Field, A. S. Underwood, S. J. Hutchinson, and D. Hepburn. President's Valedictory Address.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Gostling: On the Increase in Number of White Corpuscles in the Blood in Inflammation, especially in those Cases accompanied by Suppuration. Dr. Mitchell Bruce and Mr. Bellamy: On a Case of Removal of a Tumour from the Roots of the last Cervical and first Dorsal Nerves.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. John Phillips and others. Dr. Herman: On the Production of the Shape of the Oblique Pelvis of Naegelé. Dr. Braithwaite: A Case of Extra-uterine Gestation treated by Laparotomy, in which the Placenta never came away. Mr Knowsley Thornton: A Case of Removal of both Ovaries during Pregnancy. Dr. Lewers: A Case of Circumscribed Sarcoma of Uterus and Vagina.—Epidemiological Society of London, 8 P.M. Discussion on Dr. Edwardes's paper on the Report of the German Vaccination Commission.—Royal Microscopical Society, 8 P.M. Mr. G. F. Dowdeswell On the Microbe of Chicken-Cholera. Mr. A. H. Bennett: Fresh-Water Algæ of the Lake-District. Mr. J. W. Stephenson: On Central and Oblique Light in Resolution.—Hunterian Society, 8 P.M. Dr. Stephen Mackenzie: On Tetany. Dr. Carrington: Cases illustrating the Treatment of some of the Complications of Acute Rheumatism.

FRIDAY.—Society of Medical Officers of Health, 7.30 P.M. Dr. Swete: The Suction of Sewer-Gas into the Water-Supply a Fertile Cause of Enteric Fever.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and NOT to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

BAD DEBTS.

SIR,—The grievance ventilated by "Victimised," in the JOURNAL of December 19th, must be felt more or less by every general practitioner, in whatever class of society his practice may lie; and, accordingly, it is the interest of every one to attempt to find a remedy.

There undoubtedly exists, in every rank of society, a certain number of people who systematically attempt to evade payment for medical attendance; generally by changing their medical attendant when they have incurred considerable liabilities to him; sometimes, especially in London and other large towns, by changing their residence to another district, and leaving no address at which they may be found.

In some cases, there can be no valid objection to summoning such persons for the debt in the county court, a process which can be adopted at no great cost, and with very little personal trouble, by means of an agent. In others, when for various reasons such a procedure may be inadvisable, one must fall back upon the help of one's brother practitioners in organising some united action. The scheme of an association for the whole of London, with a committee to inquire into individual cases, seems to be rather cumbrous, and probably rather expensive. A more effective method seems to me to be the formation of local associations for different districts in London and throughout England. Each association would embrace all the practitioners willing to join it in the district; and, as the cost would be very little, and every one would benefit by the action of the association, there would be no reason why every practitioner in each district should not become a member. Each local association would have as secretary one of its members; and it would be the duty of each member to forward to the secretary every quarter, or every half year, the names and addresses of every person in the district whom he considered a defaulter to himself. Every quarter or half year the secretary would collate, and print for private circulation among the members, the names and addresses of defaulting residents, with the name of the practitioner to whom such person was indebted; and every member would undertake not to attend professionally any person who was a defaulter in respect of any other member. To avoid unpleasantness, every communication to such persons would be made officially through the secretary; and there might be a committee to whom defaulters could appeal if they desired. The cost of administering such an association would be very small; it would be limited to the printing, quarterly or half yearly, of a list of names and addresses, and a certain amount of stationery and stamps; which, divided among all the members, would mean a very small annual subscription. And, if well administered, it would conduce largely to the entire abolition of bad debts. Of course, the scheme is only traced in outline in this letter, but there would be no difficulty in filling in the details of the working of such associations; in London, some method of interchange between the different associations would be necessary.—I am, yours, etc,

ALBERT WESTLAND.

Belsize Park, N.W.

A CENTENARIAN.

SIR,—The following instance of extreme old age may interest some of your readers. On November 9th last, died H. P., said to be 109 years of age by his wife and children; and when registering the death, his granddaughter insisted upon that age being entered. However, in several conversations which I had with the old man, he invariably stated that he was just 18 years of age in the year of the great rebellion, namely, 1798. This would bring his age down to 105 years exactly.

The old man retained all his faculties to the last; and, though bedridden for the last two years of his life, proudly boasted that he had never taken an ounce of "doctor's medicine" in his life. That H. P. was a man of extraordinary vitality is proved by the following fact. Twenty years ago, being a youngster of 85 or so, whilst returning home one winter evening from a fair, he was set upon and beaten by some rowdies, and left lying upon the road insensible. When found the next morning, after a night of severe frost, he was quietly sleeping, his hair being so frozen to the road that it had to be cut off. This terrible exposure did not cause him any subsequent inconvenience whatever; according to his own statement, he went about his work next day, as if nothing had happened. Strange to say, he had not a grey hair in his head.—I am, etc.,

A. G. YOUNG, M.B.

Sunnymount, Whitecross, County Armagh.

Syphilitic Alopecia.

Sir,—In answer to "West Somerset," respecting syphilitic alopecia, I would remark that the constitutional treatment which his patient is under is the cure for the alopecia, the hair will grow again, but, by way of expediting its reappearance, I am in the habit of shaving the head daily for a week (when the baldness is very marked), and galvanising the scalp daily, till the hair has grown to the length of an inch. This starts fresh life into the bald patches, the new hair appearing as down at first, soon becomes stronger, and, as a rule, of a different shade to the old hair, generally darker.—Faithfully yours,

11 and 12, Clement's Lane, London, E.C. G. Houlton Bishop.

Material for Ambulance Lectures.

Sir,—I have been requested to give a course of ambulance lectures to a lay class, of both sexes. I shall be glad of any information as to the scope and general lines to be followed in such lectures and demonstrations; also, the names of any writers whose works on the subject would be of use to me.—I am, sir, yours faithfully,

Gil Blas.

Dysidrosis of the Feet.

Sir,—With reference to this troublesome infirmity or offensive discharge, will you be so good as to reproduce, on my behalf, the following extract from a curious but very comprehensive old book, named *De Morbis Cutaneis*, by Daniel Turner; London, 1714. Discussing in his tenth chapter, the sensible and insensible perspiration of the body, the faults that occasionally rise from, or vitiate, the same, he says, anent this feature of it, that "for stinking and sweaty feet, the author of the *Hercules Medicus*, says the best remedy is to sprinkle the socks with the pulv. tutiæ, pumicis cin. cupri sive martis, scoriæ ferri ejusdemque limaturæ. But let those" (he adds) "who want to be trying these experiments, observe diligently what has been premised in the earlier part of this chapter as well as what here follows."

"Sometime" (saith Panarolus) "sweating of the feet doth very much torment people, for which I can tell them a speedy remedy, namely, if they put some powder of myrtle into their linnen socks, but let them have a care they fall not into worse diseases by the cure of this: as I have seen, for this execution preserves from many diseases, and should rather be promoted than anyways checked."

"A noble German in the court of our Serene Prince, advised with a physician about the sweating and stinking of his feet, who orders for him, socks dipt in red wine, wherein alum was dissolved; and prescribes him pills of aloes and other medicaments to divert the humour otherways, also an electuary of drying and sometimes diaphoretic medicines, which might keep his body secure of the putrifaction or any superfluous humidity. The socks gave great and present help, for the soles of his feet were so thickened and indurate, that no sweat could get out afterwards. But the pills and the electuary did not answer the physician's end. In few months some small faintings and unusual giddiness followed. The nobleman came after to Geneva, in the year 1674, and . . . . universals being premis'd, two issues were made in his legs, his feet were washed for a month in a Lixivium made of some detersive and mollifying medicines. I ordered him to walk much, and by these means the former effluvia being recalled to their wonted outlets, his threatening symptoms ceased and he was restored to health."

What some of these substances are or were I do not know; but combinations of pumice stone, copper and iron filings are still used, I believe, in this connexion by some old practitioners, and I have myself employed salt and alum in the same complaint, with advantage, while on the march with troops in India. I also find methylated spirits *alias* wine—red or otherwise matters not—recommended by one of your correspondents, while the distinguished physician who presides so ably over a neighbouring clinique, and through whose courtesy I have been able to attend the same for several weeks back, relies on boracic acid and oleate of zinc in the treatment of this malady, and German military surgeons cure their patients with salicylic acid. In other words, all use detersive or mundifying materials, and so it comes to pass that we have not improved very much, if aught at all, on the remedies that were employed in this disease 211 years ago.—I am, sir, your obedient servant,

Auriol Road, W. Wm. Curran.

Hydrophobia amongst Bitches and Mongrels.

Sir,—A popular notion prevails that rabies is more prevalent among mongrels than among pure-blood dogs, and also that females are more liable to the disease than males. If this be so, and popular beliefs seldom exist without some foundation of experience, the obvious remedy is to reduce the number of female dogs, a process which could be easily effected by a largely increased tax on that sex. Such a measure could be followed by desirable results: directly, causing the destruction of female puppies in the litters, indirectly, cutting off the sources of supply, the future mothers, and remotely throwing the breeding of dogs into the hands of comparatively few, thus ensuring more careful attention to selection of progenitors, and so eliminating mongrels from existence.

As it is, every house, in town or country, may be a centre from which dogs, pure or mongrel, can be scattered broadcast over the land. A prohibitory tax on female dogs need not prevent any dog lover enjoying his pets; it would simply limit him or her to keeping male animals; of course, special regulations would be made to meet the requirements of masters of hounds, sportsmen, private or professional dog-breeders, etc., etc. We should then no longer have dogs turned by the thousand into the lethal chamber yearly. Irrespective of thus diminishing the dangers of hydrophobia and of improving the canine race, public decency would be protected from outrage were female dogs seen less frequently in our streets.—Your obedient servant, Cynophilist.

Removal of Stains of Condy's Fluid.

Sir,—As it seems not to be generally known that the stains of "Condy's Fluid" may be readily removed from linen, etc., by immersion in urine for a short time, the publication of the fact in the Journal may be useful. The stains of many fruits may be removed by the same means.—I am, etc.,

C. C. C.

Unbreakable Clinical Thermometers.

Sir,—Please allow me, through the medium of the Journal, to ask any of the members who have tried Immisch's patent metallic thermometers, kindly to give their opinion upon them, as to their general accuracy and portability. The ordinary glass clinical thermometers are, in practice, a constant source of inconvenience, owing to their fragility, besides frequently going out of order in some particular.—Yours faithfully, Amithill.

Cucaine in Prostatic Disease.

Sir,—One is tempted to ask your correspondent, "Leeds," whether, among the "ordinary remedies" which he has tried are included: 1, perfect cleanliness of the catheter; 2, the use of an antiseptic lubricant (such as Lund's oil); 3, washing out the bladder with warm antiseptic lotions (such as quinine or permanganate of potash). These, if not already thoroughly attended to, may give greater relief than the use of cucaine.—Your obedient servant, F.R.C.S.

Sir,—In answer to "Leeds's" inquiry, I may say I used this remedy some time ago in a case of urgent vesical tenesmus attending an attack of congestion of a hypertrophied prostate. I injected a 4 per cent. solution to the prostatic urethra through a fine catheter, but failed to give relief. A bougie containing two grains of the drug might be tried. Your correspondent will probably find that faradisation of the sphincter ani and levator ani will cure the prolapsus.—Yours faithfully, Leslie Phillips, M.D. Brux.

Norton House, 393, Moseley Road, Birmingham.

Sir,—I would suggest the use of a 4 per cent. solution of cucaine made with 25 per cent. of glycerine. The patient must inject a drachm of this through the catheter, after drawing off his urine, once or twice a day, according to the effect produced. I would ask "Leeds" whether he has well weighed the advantages to be derived from prostatectomy (*vide Lancet*, July 11th, 1885), or prostatic puncture? For this seems to me to be a case likely to derive great benefit from one or other of these procedures.—Yours faithfully, Swinford Edwards.

Wimpole Street, Cavendish Square, W.

Sir,—I think your correspondent, "Leeds," will find bougies of cacao-butter, containing one-fourth to half a grain of cucaine, very useful for his patient. In several cases of enlarged prostate, and of frequent micturition from other causes, I have found these bougies act satisfactorily. I am indebted to Dr. Robert Miller, my assistant, for the suggestion.—Yours faithfully,

Brighton Parade, Blackpool. George C. Kingsbury, M.A., M.D.

"Drugging in the Dark."

Sir,—I am surprised at no more immediate response to Dr. Mackay's letter on the above subject; it strikes a key-note to which I for one give a willing echo, in the hope that from others will be a prolonged one.

What are the phenomena of disease, but the struggles of life-force against invasion? which, if placed in favourable circumstances, would, in the vast majority of cases, be successful though no form of drug were administered. If the mass of the medical profession be not impressed with this conviction, their experience is against mine, which, assuming to be average, Dr. Mackay does incalculable service by endeavouring to draw into discussion the most involving and serious of all medical subjects. There are, we know, or assume by experience, many malignant affections inborn of the general constitution, and at some particular age, or influence over atoms, probably these failing as the result of some flaw of paternity or embryotic life; even against these, we see Nature making faint efforts which prolong life, but in ailments occurring in a life free from transmitted disease, elastic Nature promotes compensation with astonishing facility; witness sthenic hypertrophy of the left ventricle to balance impeded circulation through the capillaries in uræmia; and if the poison increase, and the condition of the patient at length become hopeless, conservative life-force still continues its action in fits of perspiration, diarrhœa, and vomiting; so, one by one or together, are sister organisations brought by Nature into assistant outlets of the poison; and thus, by vicarious vital actions, the kidney is partially compensated to the prolongation of life, and the admission of lucid intervals.

Again, of gall-stones, can anyone conceive another mode (except by probably fatal ulceration) by which gall-stones could be passed into the outlet-bowel than by the very means Nature adopts for their expulsion, that is, relaxing depression almost to collapse, and persistent vomiting?

Other examples of conservative life-force I will just name, simple but characteristic. Some particle obtrudes on the eye; the lacrymal glands immediately excrete, and the flow ceases at once on removal of the offence. An offensive substance gets into the stomach, and is forthwith vomited; but if baffled of this, purging is brought into assistance.

Gout, though this may, and no doubt does, indicate a highway to ulterior evil, who doubts that, in almost all instances, its outbursts postpone that ultimate evil?

Such examples of life-force being conservative to life are innumerable in the compensating play of internal organs, and even more obvious ones occur to the sight in the repair of external lesion; but here I may remark one of the many indications that man amongst men was evidently intended to cultivate the duties of humanity in assuaging the afflictions of disease and violence, for "mankind in all ages have sought in herbs and minerals relief from their diseases;" and by instrumental assistance only can human bones be favourably united, so homely cultured art is a work clearly allotted to man; and whilst comparing the mode of union in man of fracture, with that in the feræ naturæ, we see in the one mutual assistance invoked; we see in the other, as it were, the Divine care of a ready temporary union, the means of the injured obtaining food and instinctive protection; but though man was no doubt intended to cultivate the healing art, the sooner that art discards the incubus drugs as an accepted necessity in every disease the better.—Your obedient servant, Probe.

Prospects of Medical Practice in Australia.

Sir,—Having just returned from Australia, I may perhaps be able to back up "A Member's" letter. "Verbum Sap." says he has never been in Australia, but has heaad most glowing accounts of practice done there. I was in practice for one year in a large district with no medical man nearer than in a 150 miles distant town. I was the Government Medical Officer, and had a hospital of twenty-one beds. I received for the hospital £150 *per annum*, for the Government post; Government vaccination fees 2s. 6d. My book for the year shewed £1,500, expenses, for horses and my own "keep" etc., £700. I often had to ride fifty or one hundred miles over rough country. Although I lived quietly and tried to make money, in spite of being actually knocked up by the rough hard work, the bad debts were so numerous that I found at the end of the year I was a few (very few) pounds to the good. Believe me, sir, a man going to Australia, must be ready for a miserable solitude, hard and dangerous long rides, and such petty annoyances as snakes, mosquitoes, etc. I speak of New South Wales and Queensland. Of course a good practice in a large town is pleasant, but the large towns are as full of medical men as Harley Street. After four years of colonial experience I would say to all, "Do not go to Australia without plenty of capital at your command," and I am quoting my seniors in saying this.—I am, etc., Hodie.

Dr. Imlach's Case of Pregnancy in Double Uterus.

Sir,—As the patient with pregnancy and double uterus on whom Dr. Imlach performed hysterectomy with such signal success was sent into hospital by me, and I assisted at the operation, I think it my duty to protest against Dr. Steele's criticism which you published on November 14th. Dr. Steele admits that he was not present at the operation. He must also admit that he received an invitation, and that it was his duty to have been present. It is easier to play the part of candid critic after the event than to assist in the work of the hospital, but even that part should be played fairly.

While the patient was under my care, I became convinced by careful examination that natural labour was an impossibility, for the pelvis was completely blocked by an immovable tumour, and the cervix was beyond reach. My opinion was that the obstruction was a fibroid tumour, and I placed her under the care of Dr. Imlach, fully expecting that Porro's operation was necessary, and for the diagnosis to be further confirmed by more than myself. In consultation, Dr. Imlach, without disagreeing with my diagnosis, said that we should not exclude the possibility of the tumour being a dermoid ovarian cyst pressed down into the pelvis; with this probability I acquiesced. I may here add that all those who were present at the operation agree with me that Dr. Imlach's account published in the Journal of October 10th is fair and accurate. The case was not "mistaken as one for ovariotomy," and the suggestion that "hysterectomy might have been resorted to on a subsequent occasion" was not needed, as Dr. Imlach performed it to prevent a fatal termination by hæmorrhage or septicæmia.—Yours faithfully, John Butler Edis,

Honorary Assistant Surgeon, Hospital for Women, Liverpool.

169, Islington, Liverpool.

Pure Terebene.

Sir,—Any scale into which Dr. Murrell, as a therapeutist, throws the weight of his authority, deserves professional attention. I have used pure terebene pretty freely for two years at least, and, from my experience, my opinion of its value corresponds almost exactly with Dr. Murrell's. Year after year only adds to my belief that, in giving opiates for cough, etc., we are adhering to a barbarism in medical art, the like of which we have often thrown aside in other diseases during recent years.

Dr. Bond, at page 1184, tries to entangle his "patent terebene," wherein there is much untransformed oil of turpentine, with pure terebene; but, for medical purposes, I would strongly counsel the use of the latter and not the former. In phthisical diarrhœa, and in some cases of dysentery, the impure terebene seems to me (perhaps from its astringency), preferable. In pharyngeal, in laryngeal, and in several thoracic troubles, I use terebene as a "dry" inhalation. As its volatility is almost equalled by that of encalyptol, I usually combine the two, for no other reason than the hope that one may confound an enemy against which the other may be powerless.

As humanity dislikes being muzzled with inhalers, London dog fashion, throughout daytime, this remedy by my plan is at work chiefly when the patient is in bed. A square foot of Gamgee absorbent-cotton is placed upon the reversed portion of the bed-coverings, or at the edge of the pillow; upon this two or three teaspoonfuls of the mixture are sprinkled on retiring, and repeated when necessary. The repetition is, however, seldom required, except in cases of severity, before early morn. The patient, by this mode, is in noways hampered; he is constantly inhaling a stimulating expectorant with an agreeable balsamic odour; above all, he is always in a fairly aseptic atmosphere. In no ailment is terebene more obviously beneficial than in phthisical dyspnœa, though, of course, towards the end of some cases nothing avails, not even nitrite of amyl capsules.

We are told that carbolic acid does not volatilise freely. That may be; nevertheless, for the requirements of the physician it is, as a dry inhalation, of noticeable service. Let me, to give point to this fact, cite a case.

Last year I attended a man who was suffering severely from bronchiectasis. The malodorous atmosphere of his bedroom was unbearable. One tablespoonful of carbolic acid was poured every six hours upon gauze-cotton, which was placed on the floor at his bedside. In a short time his attendant ceased complaining, his friends visited him freely, and he began to regain condition and strength.—Yours faithfully, R. C. Appleton.

The Bar House, Beverley.

Lippitudo.

A correspondent, in a recent number of the Journal, asks advice as to the treatment of ophthalmia tarsi, the lippitudo of old writers. The plan I have found most useful in chronic cases, and also in granular lids of long standing, is to evert the lids and scarify the lining membrane very thoroughly with a sharp lancet.

For the succeeding twenty-four hours, they should be bathed frequently with a weak lotion of boroglyceride and water (1 drachm to 2 ounces), after which it is well either to blow on to the diseased surface a little very finely levigated alum daily, or to paint the lids every night with a little of the yellow oxide of mercury ointment (3 grains to 3 drachms), using benzoated lard in preference to vaseline, which often irritates. On no account apply nitrate of silver, and avoid tobacco-smoking. Ophthalmia tarsi, or blepharitis, usually begins as eczema, and when at the commencement should be treated as such; but even these recent cases are generally benefited by copious and frequent bathing with warm water and boroglyceride. When the lids are granular, they should, after free scarification, be gently rubbed once a day with the mitigated sulphate of copper; and, of course, in every case, all irritating eyelashes should be carefully pulled out.

Last year, I had a particularly obstinate case of granular lids in a young Chinese lady, the result of purulent ophthalmia (to which Eastern races are extremely prone), which readily yielded to the above plan, after having for long resisted all other treatment. I need hardly add that there is nothing original in the course suggested, but I imagine, from your correspondent's letter, that it is not universally known.—I am, etc., Charles E. Fitzgerald, M.D.

Folkestone.

Errata.

In the Journal for January 2nd, page 10, column 2, line 25, omit "were," between "its valves," and "closed." In line 40 read "endothelial lining."

A B C.—We see no reason for not charging ordinary fees.

Popular Physiology of the Eye.

Inquirer.—Huxley's *Physiology*, published by Macmillan; Helmholtz's *Scientific Essays*, published by Longman; an Address by Sir H. Acland, republished privately.

Analysis of Drinking-Water.

Sir,—Your correspondent, Mr. A. P. Smith, in the Journal of January 2nd, does not state if he wishes for the name of the best work on quantitative or qualitative analysis. If the latter, he will, I think, find all he requires from page 163 to 172 of Wilson's *Handbook of Hygiene*, fourth edition, J. and A. Churchill. For quantitative analysis, he will find Wanklyn's text-book on water-analysis necessary. I may add that the cost of apparatus, etc., for a complete quantitative analysis would be from £15 to £20.—I am, sir, yours truly,

C. E. Abbott, M. O. H. Braintree Rural District.

Noel House, Braintree, Essex.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. C. E. Abbott, Braintree; Dr. J. Morton, Glasgow; Mr. A. Teevan, Melbourne; Mr. P. Boobbyer, Nottingham; Mr. R. F. Owen, Liverpool; Mr. H. J. Manning, Salisbury; Dr. Norman Kerr, London; Mr. W. Thwaites, Bristol; Dr. W. H. White, London; Mr. G. Houlton Bishop, London; Mr. R. L. Swan, Dublin; Our Glasgow Correspondent; Mrs. R. B. Hill, Oldham; Our Aberdeen Correspondent; Dr. Herman, London; Mr. Symonds, London; Dr. Tatham, Salford; Dr. R. Savage, London; Our Dublin Correspondent; Dr. R. T. Cooper, London; Dr. Grant Bey, Cairo; Mr. J. Marshall Lamb, Kudat, North Borneo; Dr. Suckling, Birmingham; Dr. J. W. Langmore, London; Mr. C. G. Wheelhouse, Leeds; Dr. Haughton, London; Mr. Brown, Ealing; Mr. A. Alexander, Liverpool; Mr. Somers, Ratholowney, Ireland; Dr. S. Hamill, Norfolk; Mr. T. B. Moffit, Netley; Mr. J. Prankerd, Bath; Mr. Cresswell Rich, Liverpool; Dr. Leslie Phillips, Birmingham; Dr. Bradley, Dudley; Mr. W. Brenton, Adelaide, South Australia; Mr. G. Wasse, North Tawton; Mr. R. Fitzroy Benham, London; Mr. Morrant Baker, London; Mr. G. Buckstone Browne, London; Mr. Carter, Cambridge; Mr. P. W. MacDonald, Dorchester; Mr. J. H. Crocker, Patricroft; Mr. Skene Keith, Edinburgh; Mr. J. W. Jeram, Cosham; Dr. C. Haig-Brown, Godalming; Mr. J. Oliver, London; Sir E. Lechmere, London; Dr. J. H. Thompson, Rome; Mr. W. Allard, Tewkesbury; Mr. E. Atkinson, Leeds; Dr. J. J. Bailey, Marple; Mr. Shirley Murphy, London; Mr. J. M. Booth, Aberdeen; Dr. J. Lindsay Porteous, Kirkcaldy; Dr. Maxwell, Woolwich; Dr. Kingsbury, Blackpool; Mr. Dodd, Tredegar; Dr. D. A. D. Monté, London; Mr. Bateman, York; Mr. C. W. Biden, London; Mr. H. Tomkins, Leicester; Mr. F. Page, Newcastle-upon-Tyne; Messrs. Lane and Brimacombe, Brighton; Mr. G. A. Farrer, Brighouse; Mr. Gascoin, Caerlem; Mr. R. Woodhouse, London; Mr. J. West, London; Dr. E. Seaton, London; Mr. J. Bryden, Hawick; Mr. Davies, Tenby; Dr. Barnardo, London; Mr. P. H. Dawkins, Henley-on-Thames; Dr. J. W. Moore, Dublin; Dr. E. Sykes, Tottenham; The Secretary of the Royal Medical and Chirurgical Society, London; Mr. G. F. Elliott, Hull; Mr. A. De W. Baker, Dawlish; Mr. S. Edwards, London; Our Edinburgh Correspondent; Our Paris Correspondent.

BOOKS, etc., RECEIVED.

The Medicines and Medicinal Agents of the British Pharmacopœia, 1885, with the Doses and Notes for the Information of Prescribers. By Clay and Abraham, Pharmaceutical Chemists. Liverpool: W. H. Syerman. 1885.

Transactions of the Sanitary Institute of Great Britain. Vol. V. Congress at Glasgow, 1883-84. London: Office of the Sanitary Institute, and W. E. Stanford. 1885.

Cassell's National Library; Warren Hastings. By Lord Macaulay. London, Paris, and New York: Cassell and Co. 1885.

An Introduction to Practical Bacteriology, Based upon the Methods of Koch. By Edgar M. Crookshank. London: H. K. Lewis. 1886.

The Field and Limitation of the Operative Surgery of the Human Brain. By J. B. Roberts, M.D. Philadelphia: Blakiston and Co. 1885.

Reaction of the Substances. By F. J. M. Page. London: H. K. Lewis. 1886.

Transactions of the American Surgical Association. Vol. III. Edited by J. Ewing Mears, M.D. Philadelphia: Blakiston and Co. 1885.

The Light of Life; or, the Secrets of Vegetable and Animal Development. Edited by Joseph John Kain. First Edition. London: Wyman and Sons. 1885.

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AN ADDRESS
ON
LANOLIN:
A NEW BASIS FOR OINTMENTS.

By OSCAR LIEBREICH, M.D.,
Professor of Materia Medica in the University of Berlin.

GENTLEMEN,—In presenting to you the substance lanolin as a new basis for ointments, I am far from declaring that all questions touching its pharmacological uses are entirely solved. Lanolin is so peculiar a substance, that its varied employment will doubtless bring many new qualities to light—qualities which, as can already be foretold, belong neither to glycerine-fats nor to mineral oils. However, the investigations I have made enable me to assert even now that lanolin is in every way a thoroughly efficient preparation for use in treatment by salves and ointments, and that it answers many requirements which the glycerine-fats and mineral oils (such as vaseline) at present employed have not been able to fulfil satisfactorily.

The use of plasters and ointments, which at different times was considered but a subordinate therapeutic method, has lately again been drawn into the domain of scientific research; treatment by local application being now esteemed of great value in various kinds of disease. If in what follows I speak of fats, these must be distinguished from the fatty substances so-called in a strictly chemical sense. To quote Kekule's admirably precise definition: "The group of fatty substances embraces all bodies in which we can suppose the carbon atoms to be arranged in the simplest possible manner;" while, in a closer sense, those substances are called fats which are separated into glycerine and fatty acids by chemical decomposition. It seems to me that, from the pharmacological point of view, this classification is too narrow, and that the qualities common to a series of substances formed in the animal organism can be better examined by the help of a different arrangement.

I would designate as fats all those substances—and they are chiefly ethereal combinations—the chemical decomposition of which produces fatty acids of the stearic acid group, or of the oleic acid group. Thus a series of substances that evidently have a close physiological connection with each other are brought under one head. According to this classification, protagon, the existence of which has been again clearly demonstrated, would be counted among the fats, as also would the lecithines, in spite of the nitrogen they contain. The group of substances known under the term wax (principally combinations of fatty acids and monatomic alcohols) are thus also to be classed among the fats, although their physical qualities differ from those of glycerine-fats, and though the lerotin acid won from wax is a special characteristic of these substances. Cetaceum, too, the fat of cetyl-alcohol, thus clearly belongs to the fats, though it differs widely from wax in its physical qualities.

A discovery made in the year 1868 by Fr. Hartmann[1] and E. Schulze[2] was of great value to me in my investigations. These gentlemen found that fatty acids, combined with cholesterine, occur as fats of a peculiar nature in the fat of sheep's wool; and, later on, E. Schulze was able, also, to demonstrate the existence of isocholesterine combined with fatty acids. We have here a series of fats previously unknown in connection with the animal organism.

It is well known that cholesterine is a substance very frequently found in the animal organism. It is the more remarkable, therefore, that little attention should have been given by physiologists to these observations of Hartmann and Schulze. I must not omit to mention that these combinations have been known as pure chemical substances since Berthelot's excellent researches in 1860. Berthelot succeeded in obtaining the most varied cholesterine-fats by heating cholesterine and fatty acids; and he even suggested that this fat might be found to play a part in the animal organism,[3] though he brought forward no proofs in support of this idea.

[1] Hartmann, *Ueber den Fettschweiss der Schafwolle in chemischer und technischer Beziehung.* Inaug.-Diss. Göttingen, 1860.

[2] E. Schulze, Ueber die Zusammensetzung des Wollfettes. (*Zeitschrift für Chemie*, 1870, S. 453.) *Bericht das deutsch. chem. Gesellschaft*, 1872, S. 1075.

[3] Berthelot, *Chimie Organique.* Paris, 1860, Tom. I, page 161. "D'après diverses observations, il ne paraît pas impossible que quelques-uns de ces éthers, le composé stéarique notamment, existent soit a l'état normal, soit à l'état pathologique dans l'économie animale."

The discovery of isocholesterine made by E. Schulze leads at once to the supposition that the cholesterine-fats may possess the varied qualities characteristic of the glycerine-fats.

Their presence in sheep's wool having been demonstrated, the question arose whether this was to be considered an isolated occurrence, such as the presence of cetaceum in the skull of the physeter, and in the coccygeal gland of the goose (glandula uropygii),[4] or whether the fats were as widely distributed as the glycerine-fats.

In tracing these peculiar fats in the animal organism, I was assisted by the reaction for cholestol (a substance closely related to cholesterine), discovered by Liebermann.[5] The reaction is an exceedingly simple one. The fat to be examined (and but a very small quantity is needed) is dissolved in acetic anhydride (not to be confounded with anhydrous acetic acid). By an addition of concentrated sulphuric acid a pink colour is formed, which quickly changes to a decided blue and green. Great care must be exercised in pouring in the acid. The less acid is used, the clearer the reaction will be. My supposition, that the cholestol reaction would be found practicable for cholesterine-fats, was confirmed by experiment. Cholesterine-fats, in which no trace of free cholesterine could possibly be contained, showed the cholestol-reaction with perfect distinctness.

On the other hand, I proved by experiment that glycerine-fats of the most varied compositions do not show the cholestol-reaction. I must also mention that protagon, lecithine, cetaceum, and beeswax gave negative results.

The tissues containing keratin were first subjected to examination. I will mention human epidermis, hair, vernix caseosa, whalebone, tortoiseshell, horn-shavings (cow), the beak of the jay, feathers of geese, hens, turkeys, pigeons, of the fantailed pigeon, bristles of the hedgehog and of the porcupine, hoof and warty excrescence on the leg of the horse, horny substance of the sheep's foot, hair of the *Bradypus cucullinger*. In all these keratin tissues I was enabled, by help of the cholestol-reaction, to trace cholesterine-fat, which I obtained by extraction with chloroform. In the case of the penguin only no trace was found.

I did not rest satisfied with this reaction alone, but made use of the quality peculiar to cholesterine-fat to absorb above 100 per cent. of water. To this quality, which was first and exquisitely demonstrated in the fat obtained from wool, I have given the name "lanosation," and I was able to show that almost all the fats won from the above-mentioned substances possess it. I also proved by experiment that a mixture of glycerine-fats and cholesterine did not lanolise.

If fat from superficial fascia be subjected to extraction, the fat either shows no cholestol-reaction at all, or else one so transitory, that it need not be taken into account. On the other hand, a very decided cholestol-reaction was obtained in the case of a fat obtained from the kidney and the liver, and in that of a fat obtained from the blood of a rabbit. Whether the fat belongs to the kidneys and other organs themselves, or whether its origin is in the blood, is a question that must be left to future investigation.

I then proceeded to examine the question whether the cholesterine-fats belong to the tissue as such, or whether, as is generally assumed, they are produced by glandular secretions. The most widely diffused theory on this subject is, that the feathers of birds are oiled from the glandula uropygii. In Chapter 21, De Peruncto, of the work *Kaiser Friedrich II*, we find the statement that the coccygeal gland serves to oil the feathers so that water may better flow off from them; and further, that the gland is supposed to possess poisonous qualities.[6] This view, which, in the book of Frederick II, refers chiefly to hawks, has been maintained down to the present day, as can be seen by the investigation of Robby Kossmann "On the Sebaceous Glands of Birds."[7] I will by no means deny that the secretion of the gland, when brought to the surface o the feathers and there dried, may possibly assist in rendering them supple. But, on the strength of my investigations, I can affirm with equal weight that the liquid secreted by the gland serves, on the contrary, to free the feathers from too great a profusion of fat, or, at least, to spread the fat secreted by the feathers evenly upon them.

[4] De Jonge. *Zeitschr. für Phys. Chem.* 1879.

[5] C. Liebermann, Ueber das Qychinoterpen. (*Bericht der Deutsch chem. Gesellschaft.* 1885, page 1803.

[6] Reliqua librorum Friderici II Imperatoris, de arte venandi cum Auibus, cum Manfredi regis additionibus.—Cap. XXXI. De peruncto. "Juuamentum enim hujus peruncti est recipere a reliquo corpore humiditatem virulentam, quam receptam et in ipso congregatam, auis cum opus fuerit, comprimendo cum rostro suo suget et cum eodum rostro pennas suas et ungues perungit, quatenus pennæ melius possint resistere madefactioni, aqua enim pluens super pennas peruuctas minus adhæret eis et integrius et lubricabilius descendit et pennæ saniores servantur."

[7] Robby Kossmann. Ueber die Talgdrüsen der Vögel. Literatur und Kritik (*Zeitschrift für Wiss. Zoologie*, von Siebold und Kölliker. 1871. P. 569 und 571).

There are some birds without any coccygeal gland, many species of parrot, and the fantailed pigeon.[8] The feathers of these birds have a far less shiny appearance, and it was of importance, therefore, to discover whether cholesterine-fat were contained in the feathers of the fantailed pigeon. Experiment proved this to be the case; though, it is true, the quantities found were but small. The conclusion seems justified that these birds need no coccygeal gland, since the secretion of fat from the feathers themselves is insignificant. We even see that the columba militaris performs its flight in spite of rain; and, as it too possesses no coccygeal gland, it must be able to secrete from the feathers sufficient fat to protect it from "madefactio." Since birds are not furnished with any sebaceous glands in the skin except the coccygeal gland, I am justified in supposing that the fat is formed in the feathers simultaneously with the keratin.

As regards hairs, it is generally believed that the fat contained in them is secreted from the sebaceous glands. In the case of sheep, the sebaceous and sudoriferous glands are so numerous, that these animals cannot help the conclusion whether intracellular or additional fat ever occurs alone. However, cholesterine-fat is also found in the bristles of pigs, and also in the prickles of the hedgehog; and we know that these animals only possess sebaceous glands in a stunted condition. An abundance of fat occurs in the quills of the porcupine. But, to my regret, I have not been able to ascertain whether here, too, the glands are defective.

In forming a conclusion, it was very important to select an animal the hair of which is furnished with absolutely no sebaceous glands. Such an animal is the sloth (*Bradypus cuculliger*); the few hairs from the fur of this animal, which I was able to obtain, showed the cholestol-reaction.

No doubt, the sebaceous glands furnish fat for the surface of hairs, and are able to keep them supple; but this fat is very different from the fat contained in, and formed by, the keratin-substance. In support of this assertion, I may mention that Dr. Lassar has observed a case where, in spite of excessive secretion from the sebaceous glands, the hair was found dry and hard.

An experiment which I made with a goose is also in favour of my theory. The fat of its coccygeal gland was subjected to examination. The cholestol-reaction was extremely slight, a result agreeing with the experiments of de Jonge, who found in this gland a cetaceum-like fat. In the fat of the superficial fascia surrounding the coccygeal gland, there was absolutely no cholestol-reaction; whilst, in the fat obtained from the feathers, the reaction clearly showed the presence of cholesterine-fat.

Another and more decisive proof of the occurrence of cholesterine-fat in keratin-cells is found in the fact, that there is an abundance of cholesterine-fat in the hoof and the warty excrescence on the leg of the horse, though here there are no glands to secrete fat.

Nevertheless, I am not prepared to deny the possibility that keratin-tissue containing another fat than cholesterine may occur here and there; I can only say that the penguin is the only case of this kind I have met in the course of my investigations. Some other fat seems to take the place of cholesterine-fat in the horny tissue of this animal.

According to the view expressed with much clearness in Virchow's *Cellular Pathology*,[9] and which must be borne in mind for all investigations of fats, the fat of the animal organism may be considered either as the normal contents of the cells, or as transitory fat in the cells—for instance, in the intestinal-epithelium cells; or, again, it may be present as necrobiotic fat after the destruction of the cells, as, for instance, in the case of milk. It is extremely probable that cholesterine-fat will be found to have its place in this classification. The ease with which it is made into an emulsion leads me to think that it would pass easily into the intestinal epithelium; the proof must be left to future investigation. I do not feel justified in assuming that cholesterine-fat is present in the keratin-cells, or in the granular layer of the epidermis, from which the keratin-cells are produced. But if we assume that the keratin-cells which are destined to be exfoliated are destroyed through necrobiosis, we must consider cholesterine-fat a necrobiotic fat—such as butter, for instance.

[8] *System der Pterylographie*, v. Christian Ludwig Nitzsch. Halle. 1840. P. 55. "Wohl aber fehlt sie (die Bürzeldrüse) mehreren amerikanischen Papageien, vor denen ich frische Stücke zu wiederholten Malen untersuchen konnte, z. B. dem Psittacus rufirostris Illig. domini censis, leucocephalus, ochrocephalus Dufresnii, menstruus, purpureus, was um so auffallender ist, da die meisten anderen Arten, unter denen einige den erwähnten sehr nahe stehen, eine recht vollkommene Bürzeldrüse besitzen. Solche scheinbare Anomalien giebt es indess noch mehrere, und ich erwähne von mir bekannt gewordenen den Mangel der Drüse bei Columba coronata und C. militaris, sowie bei Argus giganteus, Vögel, deren nächste Verwandte mit derselben sehr wohl versehen sind."

[9] Rudolf Virchow, *Die Cellularpathologie*, Berlin, 1871, p. 404.

Eleïdin,[10] a peculiar substance, the chemical nature of which has not yet been clearly established, is present in the granular layer of Auffhammer, and was first described by Ranvier. Waldeyer supposes it to be related to the hyalin of Von Recklinghausen. Ranvier,[11] Zabludowsky, and Unna, on the other hand, suggest that it is connected with the formation of keratin; but the micro-chemical reactions stated by Ranvier, Waldeyer, and Unna speak more in favour of the albuminous nature of eleïdin. I cannot feel as certain as Ranvier that we have not here a fatty substance. I think it probable that the substance described as eleïdin by all these authors is made up of a mixture of albumen and cholesterine-fat.

All these investigations were undertaken by me from the pharmacological point of view only. Of late, increased attention has very justly been given to treatment by ointments and plasters. The substances made use of up to the present are glycerine fats, and, of late years, mineral fats, such as vaseline, which is obtained from the waste products of petroleum-distillation. The *Pharmacopœia Germanica* has even admitted as a basis for ointments, paraffin ointment, which is produced by a mixture of solid and liquid paraffin. Well-founded objections have been raised to the employment of this substance.

Quite apart from the fact that the absorption of medicaments, when mixed with pure fat, is but imperfectly effected, fat-ointments are subject to decomposition, which may lead to irritation of the skin. It is true that vaseline does not decompose, but it prevents the entrance of medicaments into the skin, so that even poisonous substances, when mixed with vaseline and rubbed into the skin, produce neither local nor general symptoms of poisoning.

Paraffin ointment must be considered as still less efficacious than vaseline. Even when most carefully prepared, its component parts separate out after a time, and nothing is more certain than that the ointments, ointment of iodide of potassium, etc., in their present form of paraffin-ointments, are totally without effect. I have always advised the old-fashioned mode of preparation with fresh fat in the case of these ointments.

I was surprised to find the extreme ease with which cholesterine-fat can be rubbed into the skin; since it has its origin in keratinous tissue, I think it likely that this absorption is in connection with the rapid passage into the skin. To the combination of this neutral fat with water, I have given the name of "lanolin."

I owe the pure material necessary for my investigations to the kindness of Messrs. Jaffé and Darmstädter, of Charlottenburg, who manufacture lanolin by transforming the wool-fat into a milk, and then subjecting it to centrifugal action. By this process a thin milk and a thick cream are obtained, just as when milk is subjected to centrifugal action; and the cream contains lanolin in a pure condition.

The pure fat (pure lanolin) has its place, as already described by Berthelot, between resin and fat; and it has a capacity of absorbing water unapproached by any substance known to me. More than 100 per cent. of water can be kneaded with it, the result being a light yellow very plastic ointment. Lanolin is not soluble in water; but, by the addition of soap and alkali, a decided milky emulsion is at once formed. One of its most important characteristics is its perfect neutrality. Lanolin is with difficulty decomposed by the action of alkalis; hence, its self-decomposition is impossible.

It is noteworthy also that this fat combines easily with glycerine, and that, in this combination, it can with ease be mixed with every other fat. In this way, a great variety of agreeable cream-like ointments can be produced.

Lanolin has a slight smell. Of therapeutic experiments, I may mention that, in contrast to fat or vaseline-ointments, a 5 per cent. carbolic lanolin-ointment rubbed on the hand produces, after one or two minutes, a numb feeling without irritation.

The absorption of lanolin-sublimate ointment (1 in 1000) is so rapid that, a few minutes after the application, the characteristic metallic taste is observed.

These observations clearly indicate the efficiency of lanolin as a basis for ointments.

[10] Waldeyer: Untersuchungen über die Histogenese der Stirngebilde insbesondere der Haare und Federn. *Beiträge zur Anatomie und Embryologie*, Festgabe für Jacob Henle, Bonn, 1882.

[11] *Comptes Rendus*. 1879. Vol. i, p. 363.

A New Polish Hygienic Journal.—The first number of the Polish hygienic monthly, *Zdrowie*, has just appeared in Warsaw; it is edited by Dr. Polak.

Testimonial to a Lady-Doctor.—Dr. Victoria Antushevitch has received a testimonial from the Orel Zemstro, Viatko Government, for her zealous and humane professional work at that locality.

AN ADDRESS
ON
SOME POINTS REGARDING ACUTE RHEUMATISM REQUIRING INVESTIGATION.

Delivered at the Annual Meeting of the North Wales Branch.

By STEPHEN MACKENZIE, M.D., F.R.C.P.,
Physician to, and Lecturer on Medicine at, the London Hospital.

It may seem to some present that acute rheumatism is not a peculiarly suitable or interesting subject for collective study; they may think it is a common and fairly well understood disease. It will be my purpose to show that it is a subject standing peculiarly in need of such investigation. A large number of keen and accurate observers have devoted time and patience to its study; it is always with us, and yet little is known of its pathology. It is still unsettled whether it is a disease of the nervous system, or whether it is a poison circulating in the blood. We have accumulated by patient individual observation, and by the careful study of the disease in our hospitals, with all the advantages of modern appliances and means of research, an enormous amount of information concerning acute rheumatism; but it is admitted by the most thoughtful minds, that our knowledge is inadequate and disjointed. It is necessary to turn in a new direction for the information required to fill up the blanks in our knowledge, and to gather into some store-house, where it can be sifted and weighed, the great harvest of facts concerning the disease scattered over the country, in the case-books and minds of those who do not, as a rule, publicly record their experience. The information that is especially needed at the present stage of our inquiry, is that which it is not in the power of those who, in the main, have done most to investigate the disease to afford. The great bulk of our recorded experience of acute rheumatism has been, as I have already stated, derived from the study of the disease as seen in hospitals. Of the hospital-patient nothing is personally known by the observer as regards antecedents, and the accounts furnished by the patients themselves of their previous habits, health, and diseases, are at least shortcoming. Many engaged in general practice are as accurate and competent observers, and as close reasoners, as the hospital physician and teacher of medicine. They have, moreover, advantages not shared by him. They have known many of their patients all of their lives; they are acquainted with the family, and see how its tendencies manifest themselves in the different members; they are able to observe how any illness is modified by the known habits, previous illnesses, and idiosyncrasies of the patient; and, lastly, they see the patient after the illness is over, and are able to observe the residua of the disease, the manner in which these clear off, or the impress left on the constitution of the patient, permanently or for a time. The points, therefore, to which I shall direct attention, are chiefly those on which information is required at the hands of those who know most of the individuality of the patient, and who are able to look upon him more in the light of a person than as "a case."

There is one matter of investigation which ought to be entirely within our reach, and that is, the geographical distribution of rheumatism within the British Isles. Very little is really known on this point. Senator, on the authority of Hirsch, makes the statement: "In many parts, indeed, as in Cornwall, Guernsey, and the Isle of Wight.....the disease appears to be either unknown or excessively rare." (Ziemssen's *Cyclopædia*, vol. xvi, page 15). This was, of course, written some years ago. As regards the Isle of Wight, I recently applied to Dr. Sinclair Coghill for information on this point, and he has informed me that though, owing to the instability of the temperature and the dry subsoil, the disease is very much less common than in many parts of Scotland and England with which he is familiar, yet rheumatism, both acute and chronic, is neither unknown nor excessively rare either in the regular inhabitants, or in those who go to the Isle of Wight in search of health. I hope the day will come when we may be able to take a health-census; when we can get every practitioner in the British Isles to record, on a particular day, the number of cases of certain diseases actually under his care. Connected with the distribution of the disease is another point on which information is needed—its seasonal prevalence. This has been worked out in particular localities (On the Seasons of the Year and the Prevalence of Acute Rheumatism, by Henry S. Gabbett, M.D., *Lancet*, October 20th and 27th, 1883), but requires to be corrected by the experience of different places where the conditions of soil, humidity, etc., are widely different. If the whole of the medical profession in the Principality would combine to answer these two questions, what a solid contribution it would be to medicine!

Those, again, engaged in family practice may see a different phase of the disease from that which is met with in hospital experience, for they see it in all classes of the community. I do not believe that the disease presents any important differences in the peer and in the peasant; but what is more important is, that those engaged in private practice see more of the milder phases of rheumatism, for it is obviously the more severe cases that seek and obtain admission to our hospitals.

Whatever view be taken of the nature of rheumatism—whether it be regarded as a neurosis, or as a poison introduced from without, or generated within, the body of the patient, or whether a mixed neuro-humeral view is held—all are agreed that there is some individual proclivity or peculiarity, inherited or acquired, which determines that, certain exciting causes being in operation, rheumatism occurs in some persons, and not in others. In what does this individual peculiarity consist? Are there any outward and visible signs by which this rheumatic tendency can be recognised?

I am afraid that any attempt to connect rheumatism with any physiognomical peculiarities or temperament has received its death-blow at the hands of Mr. Jonathan Hutchinson, who has shown what confusion has existed in the use of the terms diathesis and temperament, and has demonstrated to us that the criteria of temperament practically resolve themselves into a matter of complexion or colouring (*The Pedigree of Disease*, Churchill, 1884). I know no individual peculiarities which enable us to recognise an inherent tendency to rheumatism; but I think most will agree with me that persons of a sanguine type are much more prone to rheumatic manifestations than persons of dark complexion. That this individual peculiarity is usually inherited, I think we shall most of us agree; but whether the offspring inherit a direct tendency to acute and subacute rheumatism, or merely a basic arthritic tendency or diathesis (Duckworth), which may eventuate in rheumatic fever, osteo-arthritis, or gout, according to the circumstances in which the individual is placed, is a question on which probably opinions will be found to differ. If any criteria can be discovered whereby this arthritic temperament, whether in its limited or in its widest meaning, can be recognised, it will be a signal service to medicine; and it is those who can study families as a whole from whom we must expect help. In spite of the study of temperaments and diatheses being out of fashion, I cannot but believe that much gain will result from an attempt to connect family tendencies with personal peculiarities that reveal their existence.

There is another way by which we may possibly arrive at the conclusion that our patients have a tendency to acute rheumatism; and that is, by a study of the other illnesses from which they have suffered, and of the common ailments to which they are liable. Our conception of rheumatism is too apt to be narrowed to the type of rheumatic fever. Thanks to the writings of Dyce Duckworth, Ord, Barlow, and others, our conception is expanding. From acute to subacute rheumatism we pass without a gap, admitting that the two are the same in kind, though differing in severity. From subacute rheumatism, we pass, by easy gradations, to inflammations of single joints and myalgia. But there are a number of other conditions or symptoms which, whilst they sometimes occur with undoubted manifestations of rheumatism, sometimes occur alone, and may act as "revealing symptoms."

Take the case of a girl, aged 17, who came to my outpatient department last Wednesday. She came complaining of aching pains in her joints, which she had experienced for a fortnight. Examination showed no swelling or redness of any articulation, but I found, on exploration of the chest, mitral incompetency, with a dilated and hypertrophied left ventricle. In reply to my question, her mother said she had never had rheumatic fever, but she informed me she had St. Vitus's dance three years ago, and that she was now troubled with a succession of white bumps, "like nettlerash," in her skin. Who could doubt that the heart-disease, chorea, uticaria, and flying articular pains, were alike expressions of the rheumatic diathesis?

This case conveniently introduces the subject of the relationship of chorea to rheumatism. It is a matter on which opinions differ widely. That the relationship is a close one I have no doubt, and I think I have elsewhere brought forward some strong evidence on this point (*Trans. Intern. Med. Congress*, 1881, vol. iv, p. 97). Dr. Octavius Sturges has certainly done good service, by showing how

necessary it is to correct our preconceived opinions on this point by studying the incidence of rheumatism in our patients apart from chorea. But the relative frequency with which chorea develops in patients actually suffering from acute rheumatism, and conversely, where rheumatic fever develops during the course of an attack of chorea, has no parallel, so far as I am aware, in the history of other acute diseases. If we take inflammatory diseases, as pneumonia or bronchitis, or peritonitis (an inflammation of a serous membrane), or if we turn to the specific fevers, we find no such close association, unless, indeed, we except scarlet fever; but then, curiously enough, scarlet fever stands intimately related to rheumatism. Here let me emphasise the fact that rheumatic manifestations are often not nearly so well marked in the joints in children as they are in the adult, and that we often find endo- and pericarditis in children in whom only the most trivial arthritic affection can be detected. It is not unfrequent in chorea to find evidence of heart-disease where no history of rheumatism can be elicited; it may be that the child has been lame for a day or two, or has complained of pain in the limbs, but the mother has had her mind relieved by the old woman's theory that they were "growing pains," as if pain were a natural incident to growth.

Turning now to *minor ailments*, there is much to be worked out with regard to them. Let us take tonsillitis. It is a well known fact that acute rheumatism is often ushered in with sore-throat. Sometimes this is a more or less diffused inflammation of the fauces and pharynx, but often the inflammation localises itself in the tonsil. Some patients have a sore-throat with each succeeding attack of acute rheumatism. It is noteworthy that, in the "Preliminary Report on Acute Rheumatism," by our lamented friend, the late Dr. Mahomed, it is noted that, in the returns there analysed, in 25 per cent. of the cases tonsillitis preceded the acute rheumatism. Are there any peculiarities by which rheumatic tonsillitis can be discriminated from tonsillitis due to other causes? and are we justified in regarding our patient with tonsillitis as liable to rheumatism?[1]

The association between migraine and rheumatism has been pointed out by the late Dr. Anstie, and by Dr. Hughlings Jackson. How far are we to look upon sick headaches, of a recurring kind, as expressions of rheumatism? and does this little "nerve-storm" indicate that rheumatic fever is a nervous cyclone?

There are certain skin-diseases which certainly stand in close relationship with rheumatism. Urticaria is one of these. Undoubtedly, urticaria owns other causes; but it occurs too frequently in association with acute rheumatism, as compared with other acute diseases, for this to be devoid of significance. The various forms of erythema, again, are more or less generally admitted to be associates of rheumatism. Erythema marginatum is seen not rarely with rheumatic fever, as, also, is erythema papulatum. I have known erythema papulatum to give rise to endocarditis without any joint-affection. Erythema nodosum differs so much from the other forms of erythema, as to be held by many as a distinct disease, and occupies a curiously unsettled nosological position. Having, a short time ago, a case of erythema nodosum under my care, in which subacute rheumatism supervened, and knowing the discrepant statements made by writers as to its association with rheumatism, I was myself led to make a collective investigation on a small scale. With the assistance of a gentleman connected with St. Bartholomew's Hospital, and the Registrars of Guy's, St. Thomas's, and the London Hospitals, I obtained particulars of 108 cases of this disease or symptom. Of these 108 cases, in 17, or 15.7 per cent., there co-existed acute or subacute rheumatism; besides which, in another 17 cases, or 15.7 per cent., there were arthritic pains, not the merely local pain of the eruption. If we include these in the rheumatic category, we have 31.4 per cent., associated with rheumatism. Further, sore-throat (including one case of tonsillitis) was present in 11 cases, though this symptom was not especially inquired for. Finally, in 19 cases, or 17.5 per cent., there was evidence of heart-disease, and in 5 of these the endocarditis developed during the attack. One patient had had three attacks of erythema nodosum, each coinciding with an attack of rheumatic fever. To my mind, this evidence points in the strongest possible manner to the inference that erythema nodosum is an expression of rheumatism. There is no other disease to which erythema nodosum stands in similar relationship. I admit, of course, that in many cases it will be the only evidence of rheumatism. But, if true, the knowledge must prove valuable for prognosis and prophylaxis; though, as regards treatment, owing to the nature of the cutaneous lesion, antirheumatic remedies cannot be expected to have the same striking results as are seen with regard to the arthritis and pyrexia. Then, again, there is a certain form of purpura which, in my opinion, is certainly rheumatic—the peliosis rheumatica of Schönlein. I have collected notes of about twenty cases of this form of purpura, which I hope shortly to publish, and which, I believe, will show that it has features distinct from other forms of purpura. Some of these cases have occurred concurrently with acute rheumatism; some of them have been in persons who previously have had undoubted acute rheumatism, with resulting permanent heart-disease; but in others no definite rheumatism could be demonstrated. From the similarity of the symptoms in the last group to those in the first group, I have no doubt of their rheumatic nature; but nothing short of the continuous observation which can only be carried out by those engaged in family practice can conclusively settle this point, for the subsequent history of such cases is of equal importance to that preceding the attack. The value of the recognition of the conditions I have named as frequent, or, if you prefer, as occasional, manifestations of rheumatism, lies in this, that they act as "revealing symptoms" indicating diathesis or proclivities; they may be the shadows cast by coming events.

As regards the actual attack of acute rheumatism, there are one or two remarks I should like to make. In the first place, we must be sure of our diagnosis. To many, this, perhaps, does not appear to be a matter of pressing difficulty; and I admit that, in most cases, the recognition of acute rheumatism is an easy matter. Yet I am quite convinced, and others have made the same observation, that first attacks of acute rheumatoid arthritis, or rheumatic gout, are sometimes mistaken for rheumatic fever. I have seen several cases in which I, in common with others, have thought the disease to be rheumatic fever, but the patient has come under observation with a second or subsequent attack, in which the deformity characteristic of rheumatoid arthritis has been present, and persisted. Only last week, I saw a girl, aged 8, who was said to have rheumatic fever. But she had had the joint-affection five or six weeks; it had been remarkably persistent in the affected joints; the wrists had a pulpy feel; there was just perceptible swelling of some of the phalangeal articulations; there had not been the excessive sweating of rheumatic fever (though this is often wanting in children); and lastly, but most important of all, the heart was unaffected. I believe the case to be one of acute rheumatoid arthritis; and the appreciation of this is extremely important, both for its treatment and prognosis.[2] It is pretty frequently found in cases of pulmonary phthisis that the patient is stated to have had what is called rheumatic fever. That they have had some acute articular disease may be assumed, but that it was genuine acute rheumatism is negatived by the unfrequency with which organic heart-disease is found in such cases, either at the bedside or at the *post mortem* table. Dr. Sutton, who has drawn attention to this point, has further expressed a belief that rheumatoid arthritis and phthisis (and also insanity) are prone to occur in the same families; and thus it is rendered probable that the acute arthritis in these cases of phthisis is of the nature of rheumatoid arthritis, and not rheumatic fever. Dr. Laycock, it will be remembered, described an arthritic tubercular cachexia. On the other hand, it is not to be denied that cases which begin with genuine acute rheumatism, associated with heart-disease, do later pass into a condition of rheumatoid arthritis. Dr. Ord has recorded such a case (BRITISH MEDICAL JOURNAL, 1880, vol. i, p. 158). It is, moreover, believed by Dr. Sutton that there is a form of rheumatoid arthritis with which endocarditis does occur. The relationship of acute rheumatoid arthritis to acute rheumatism is one of the many points requiring further investigation.

In every case that we take to be acute rheumatism, we should carefully examine into the integrity of the nervous system. We are all exceedingly apt to overlook that for which we do not especially look. It has been shown by Ord, Dyce Duckworth, Barlow, and Hadden, that muscular paralysis, anæsthesia, glossy skin, and other changes of a neurotrophic character, are sometimes present in rheumatism. The facts are important, whatever interpretation we put upon them. It is uncertain whether they lend support to the neurotic origin of rheumatism, or whether they should be looked upon as quasi-accidental associations, similar to the nervous disorders occasionally met with in the exanthemata and in febrile diseases. We are all familiar with the vexed question of the arthropathy associated with tabes dorsalis. It is not improbable that some cases which appear to be acute rheumatism may really be due to lesions of the spinal cord. I have recorded a case which was sent into the London Hospital as one of rheumatic fever, and which proved to be an affection of the spinal cord, probably acute central myelitis (*Brain*, vol. vi, p. 95).

Passing now to the heart, we want information as to the causation

[1] A valuable piece of therapeutic evidence has been furnished on this point by my friend, Dr. Joseph Hunt (*Lancet*, March 11th, 1882), who shows the marked influence of salicylate of soda in cases of acute tonsillitis.

[2] The case under observation in the hospital proved a very intractable form of rheumatoid arthritis.

of the heart-disease which is sometimes present before the advent of the first attack of acute rheumatism. In some cases, as suggested by the late Dr. Mahomed, this may originate as a primary dilatation, and the valvular insufficiency may be caused by stretching of the auriculo-ventricular orifice, and a secondary valvulitis. This yielding of the muscular wall of the heart may possibly be due to a latent weakness of the organ connected with the rheumatic diathesis, or, more probably, is brought about by the debilitating influence of anæmia. On the other hand, there can, I think, be no doubt that, in the majority of cases, the heart-disease which is found before the first attack of acute rheumatism, or discovered when the patient comes under care for chorea or some other disease, is really due to a rheumatic endocarditis occurring in childhood, when often the arthritic manifestations are so trivial as to escape attention. Another point, as regards the heart, is the following. Is there any evidence that organic heart-disease develops, or rather manifests itself, subsequently to an attack of acute rheumatism in which no evidence of heart-affection was discoverable? We know that, in chorea, absence of murmur is no proof of absence of endocarditis. We have *post mortem* evidence that vegetations are present on the valves in cases in which no murmur was heard during life. We sometimes find heart-disease in patients who have had rheumatic fever, but whose hearts were not believed to be affected during the attack. Are we justified in assuming, at the end of an attack of acute rheumatism, in which, throughout, there has been no murmur, no pericarditis, and no enlargement of the heart, that our patient's heart has escaped? Can any who have had the opportunities tell us of cases they have watched throughout where there has been no sign of heart-disease during an attack of rheumatic fever, but in which, some weeks or months later, the signs of valvular disease, or of yielding of the heart's chambers, became evident, without, of course, the intermediation of a fresh attack or relapse of the rheumatism, or of severe post-rheumatic anæmia? Further, we want information as to the proportion of cases in which a murmur, which becomes audible in the course of an attack of acute rheumatism, permanently and completely disappears. We know that murmurs which we assume to be due to endocarditis do disappear, but in hospital practice it is impossible to estimate with what frequency. Does a murmur in such cases ever disappear for a time, and then reappear and become permanent? We want to know, in fact, whether valvulitis undergoes a cure in some cases; and whether, in other cases, a valve which is swollen and gives rise to a murmur, in the course of its subsequent shrinking, ever reaches that stage where apposition occurs and murmur is heard, before finally reaching that stage of permanent retraction where the segments of the valve can no longer meet, and permanent murmur results.

A point to which attention has been directed in our inquiry is as to whether any permanent contraction, deformity, or disorganisation of joints, ever occurs as a sequel to an unequivocal attack of rheumatic fever. We all know that, in the overwhelming majority of cases, the joints are left free and supple after the attack; and those who are in the habit of opening and examining the joints of patients after death, agree in telling us that acute rheumatism leaves no structural changes by which we can ascertain its previous existence. We are apt to assume that, if ankylosis or disorganisation of a joint take place, the disease was not rheumatic fever, but pyæmia, or some other disease; but in the same way that, if a patient recover from an attack of tubercular meningitis, most jump to the conclusion that the meningitis was not tubercular. We want information about the joint-troubles which supervene upon acute rheumatism, if such be really the case.

Lastly, a few words with respect to the effects of treatment. The results of treatment ought to be most easily tested by those who see the patient early in the attack, and where the patient remains under the same hygienic conditions throughout. In hospital-practice, the patients are taken from one set of conditions, and placed under quite different ones, always probably a change for the better, even though it entails a certain temporary exposure. Moreover, in hospital-practice, we do not get the patient, as a rule, until the disease has lasted for at least two or three days, often longer, and treatment of some kind has in most cases been previously adopted. The cases, therefore, are not the most suitable to test therapeutic experience. The fact that at least several days have elapsed before the patient comes under treatment in hospital takes away, in a great measure, our chief of testing the value of treatment in the matter most important of all, namely, that of preventing heart-disease. It is important to remember that the heart-disease in acute rheumatism, in the great majority of cases, develops very early in the attack, as pointed out particularly by Sir William Gull and Dr. Sutton in their valuable study of the natural history of rheumatism. Let me illustrate this by some figures. In 1875, when medical registrar to the London Hospital, I carefully examined into this point. Of 133 cases of acute and subacute rheumatism admitted into the wards that year, in only 11 cases, or in 8 per cent., did a murmur make its appearance in patients whose hearts were entirely free from suspicion of disease on admission; and, of these 11, in 3 only did the murmur persist at the time of the patient's discharge; whereas, of the 133 cases, 116 had a murmur on admission. Of 68 first attacks of rheumatic fever (which are the most important test of this point), a murmur was present in 54 when the patient came into the hospital; that is to say, of patients admitted into hospital with first attacks of acute and subacute rheumatism, in 79 per cent. the heart was affected before the efficacy of any treatment could be tested. I think these facts are sufficient to show that the effects of treatment in preventing heart-disease will have to receive an answer by those who see the patient at home, at the very commencement of the attack.

In touching on these points, it must not be concluded that they alone require elucidation. Time prevents my dealing with more. Enough has been said, however, to show how incomplete is our knowledge, and I hope to indicate some directions in which our inquiries should be prosecuted. We ask especially those engaged in family practice to come to our aid; one and all can help. The individual observations and facts require collating, tabulating, and comparing; and, finally, careful inductions must be drawn, which, if each step in the collective investigation be honestly and carefully performed, cannot fail to advance our knowledge and benefit the community. We cannot take the excuse of press of work and want of time. Experience teaches us that it is the busy men who help us most in these inquiries. This is as it should be; the busiest men have the largest experience, and the busiest men are as a rule the best men; for in our profession, as in others, success generally comes to the fittest. But we want the help of all; of the young practitioner, with his few and well-observed cases, and of the old and honoured members of our profession, whose experience would be valuable, if it could only be collected.

THE EARLY TREATMENT OF CONVERGENT STRABISMUS.

Read before the Harveian Society.

By W. ADAMS FROST, F.R.C.S.,

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This form of squint is such a common affection, its pathology has been so long known, and its treatment by division of one or both internal recti is so universally recognised, that a communication on the subject of its treatment might seem superfluous. Although, however, all are probably prepared to admit that convergent strabismus in young persons is nearly always the result of hypermetropia, and that it can be cured by division of the internal recti, I do not think that the following propositions meet with so universal an acceptance, although they are equally true, and of even greater importance—namely:

1. That concomitant convergent strabismus seldom recovers spontaneously.
2. That a squint which is constant leads in a few months to great and progressive impairment of the vision of the squinting eye.
3. That the majority of cases, if seen sufficiently early, can be cured by correcting the hypermetropia with glasses.

The two factors which seem to underlie the pathology of the affection are—first, that the acts of accommodation and convergence are associated; and can, therefore, be used together with a less expenditure of nerve-force than is required to use either separately. Secondly, that convergence is independent of the conjugate movements of the eyes.

In the natural condition, accommodation and convergence must go hand-in-hand, if binocular vision is to be maintained. Thus, in looking at a distant object, neither the one nor the other is used; but, in proportion as the object is brought nearer, so is a greater effort of both required, the two always increasing *pari passu*.

In hypermetropia, however (owing to the shortness of the antero-posterior diameter of the eyes), the accommodation is required even for distant objects; and, as the amount employed for this purpose only places the eyes in the condition from which the normal eye starts, it follows that this amount is always required by the hypermetrope in excess of that required by the emmetrope.

I presume we may take it as an accepted physiological law, that acts

which, under normal conditions, are always used together, can be so used with a less expenditure of nerve-force than if they be used separately. That this is the case with regard to the functions we are considering, can be proved experimentally ; if an attempt be made to read, through convex lenses, a page of print placed at their focal distance (so that convergence is called into play without accommodation), fatigue is soon experienced ; if, on the other hand, a similar experiment be made with a pair of prisms, of suitable strength, placed with their bases inwards (so that accommodation is required without convergence), the result is the same. If, however, the lenses and prisms be combined, so that neither function is required, no discomfort is felt.

The possessor of hypermetropic eyes has, therefore, three courses open to him. 1. He may put forth extra nerve-force, and use the amount of accommodation which is required to correct his hypermetropia, without using any excess of convergence ; in this case he will experience fatigue. 2. He may not use the amount of accommodation necessary to correct his error, in which case his vision will be defective. 3. He may use the required amount of accommodation, but, in order to economise nerve-force, use his convergence at the same time ; in this case he will acquire a convergent squint. It is with this third condition that we are now alone concerned.

The need for this saving of nerve-force will, of course, be most felt when the available accommodation is most nearly exhausted—that is, in near vision ; hence, at first, the child only squints when the attention is directed to a near object. He soon learns, however, that, by squinting, he is enabled to see with less effort, and he then converges when looking attentively at any object. The internal recti, now almost constantly receiving nervous stimulation in excess of their opponents, become hypertrophied, and predominate over them, and the squint, which was occasional, becomes constant.

So far we have considered the squint as a binocular affection, as it really is ; that it appears to affect only one eye at a time is the result of our second factor—namely, the independence of convergence and the conjugate movements. The connection of the muscles with the nervous system is such that an impulse can by no possibility be sent to a single muscle, but the two eyes must necessarily act together ; thus, both may be turned to the right or left, or both may be turned inwards—convergence. If, now, a certain degree of convergence be produced—say, equal to a rotation inwards of each eye 15°—this will not in any way prevent the eyes being turned to either side while that amount of convergence is maintained ; thus, if the eyes be turned to the left, so that the left eye is straight, the right will be rotated inwards 30° ; and, if the right be straight, the left will squint to the same extent.

If the hypermetrope were to allow each eye to be rotated inwards to the same extent, as the result of convergence-impulse sent to the internal recti, the object looked at would not be seen clearly, because its image would not fall upon the yellow-spot in either eye ; to avoid this, without altering the amount of convergence used, both eyes are turned to one side, so that the corresponding eye has its visual axis directed to the object, and the other takes up the whole of the squint. If the eye which is directed to the object be covered, the other fixes it, and the covered eye squints. If it be a matter of indifference to the patient which eye he uses, when the covered eye is uncovered the eyes remain in the position which they occupied at the moment, and the squint is then said to be *alternating*. Usually, after a time, the patient develops a preference for using one eye (most frequently the right), and the squint is then said to be fixed in the other. When this is the case, although the working eye can still be made to squint by covering it, and making the other fix an object, yet, directly it is uncovered, the eyes return to their original position.

We may now leave the preliminary part of the subject, and pass to our first proposition, namely, that a convergent concomitant squint seldom recovers spontaneously. The *a priori* probability of this proposition is so great, and it is in such accord with experience, that it would be unnecessary to insist upon it, were it not for the widespread popular belief that children squint from imitation, caprice, naughtiness, or some such cause, and that they may "grow out of it"—a belief that, I am sorry to be obliged to add, is not always discouraged by medical men with that vigour with which all error should be opposed. Children never squint from these causes, and probably could not do so if they tried ; and (setting aside a few possible cases of very young infants who develop a temporary convergence from intestinal or cerebral irritation) a squint always means that the subject of it is hypermetropic. A squinting governess, who is not unfrequently held to have produced squinting in her pupils from imitation, might be more correctly looked upon as a test to discriminate between those of her pupils who were and those who were not hypermetropic ; for the former would almost certainly imitate her peculiarity, while the latter would not.

Even useless and injurious habits acquired in childhood are not readily unlearned, but when the habit is formed for a distinct and definite purpose, and the conditions which led to its formation are still present, its abandonment becomes almost an impossibility. But even if it could be shown that spontaneous recovery did occasionally occur, it would be unjustifiable to wait for it if my second proposition be true, namely, that a squint that is fixed in one eye leads in a few months to great and progressive impairment of vision in the affected eye.

To ascertain the frequency with which amblyopia occurs from this cause, I have examined my case-books at St. George's Hospital for the last four years ; a large number (41 per cent. of the whole) were too young for the visual acuteness to be estimated, and in a few the notes were imperfect ; of the remainder, no fewer than 60.6 per cent. had amblyopia of the squinting eye. It is the occurrence of this amblyopia which renders the advice, which is so often given, to postpone treatment till the child is older, so dangerous. This procrastination leads every year to the loss of hundreds of eyes which ought not to be lost—a result the blame of which often falls on the wrong shoulders, for frequently neither patients nor friends are aware of the defective vision of an eye which no attempt is ever made to use ; no sooner, however, has the squint been rectified by an operation, than an interest is taken in the long neglected organ, its powers of vision are tested, it is found with dismay that the eye is practically blind, and the operator is, not unnaturally, blamed for a result which his earlier aid would have prevented.

The amblyopia never comes on while the squint is alternating. I have seen a squint remain in this condition for seven years, with perfect vision in each eye ; more rarely, a squint which is not truly alternating does not lead to amblyopia, because the one eye is used for near, and the other for distant, vision ; but, with these exceptions, a squint probably always leads to amblyopia. Hence the importance of ascertaining whether a squint is alternating or fixed, and of not postponing treatment when it is in the latter condition.

We pass now to our third proposition: that the majority of cases can be cured in the early stage without an operation. Broadly speaking, I should say that cases in which the squint is occasional, and many in which it is alternating, can be cured by correcting the hypermetropia. It is, of course, necessary that the glasses should be worn constantly, and care must be taken that they are so fitted that the patient cannot look over or under them, which children are very apt to do—a sufficiently obvious precaution, but one which is often neglected by the optician. A good indication as to the probability of a cure being effected without an operation, is afforded by the use of atropine. If, when all accommodation is rendered impossible by atropine, the squint diminishes or disappears, it will almost certainly cease when excessive accommodation is rendered unnecessary by correction of the hypermetropia.

Cases of squint naturally divide themselves into those who are, and those who are not, old enough to wear glasses. I think that glasses may with advantage be given much earlier than was the custom till quite recently. I have frequently ordered them for children three and a half years old, and sometimes for even younger ones, and have never seen any reason to regret having done so. When the child can wear glasses, I would order them for every case in which the squint is diminished by atropine ; and in others when it is alternating, if it is considered desirable to postpone operating. When glasses cannot be worn, treatment may be postponed as long as the squint is really alternating. As soon as it ceases to be so, it must either be rectified by an operation, or the working eye must be kept covered for an hour or two every day, in order that the other may not become amblyopic. It must be borne in mind that this has no curative effect on the squint, for the covered eye squints behind its shield to the same extent that its companion did ; it is merely intended to ward off the amblyopia, or to cure its slighter degrees. When a squint diminishes or disappears under atropine, but the child is too young to wear glasses, it has been proposed to keep the eyes constantly under the influence of a weak solution of atropine ; there are, however, two serious objections to this course ; in the first place, general toxic symptoms occasionally arise ; and, in the second, accidents may easily arise from the defective sight. Especially is this the case among the children of the poor, who are often left to themselves or in the charge of a child not much older.

In conclusion, the points upon which I would particularly insist are the following. 1. The cure of a squint is important, not merely for cosmetic reasons, but because it is essential for binocular vision, and because, if neglected, the sight of the squinting eye will

be very seriously impaired. 2. Treatment must on no account be postponed when the squint has ceased to be alternating. 3. The majority of cases, if seen sufficiently early, can be cured by correcting the hypermetropia.

THE TREATMENT OF PROFUSE HÆMOPTYSIS.

Read before the Medical Society of London.

By SAMUEL WEST, M.D.,
Physician to the Chest Hospital, Victoria Park, etc.

In choosing the treatment of profuse hæmoptysis as a subject to bring before the Society, I was guided by the somewhat personal desire of gathering the experience of others, rather than by the thought that I could import into the subject anything new.

I have endeavoured, in dealing with this question, to state the problem as it presents itself to my mind, and I have avoided speaking of my own experience.

Even though there may be nothing new to say upon them, there may still be, I think, a use in considering now and then subjects of such great practical importance; and though profuse hæmoptysis is not, as diseases go, a very common affection, still it is one upon which everyone should have formed an opinion upon which he is prepared to act, when the occasion arises, for there is then but little time for thinking. I would ask, therefore, that this paper should be regarded rather as an introduction to a discussion, than as an expression of personal views.

Hæmoptysis in phthisis may be slight or severe. Of the severe forms, some are fatal. Of fatal hæmoptysis, we may say that the pathology is established. It is due to the rupture of an aneurysm of the pulmonary artery, or of an eroded vessel; and, although it is conceivable that copious hæmorrhage might occur from the bronchi from many small vessels,—as in the stomach, sometimes, without any lesion gross enough to be recognised by the naked eye,—still such cases are extremely rare. These aneurysms or ulcerated vessels are found in cavities, and hence severe hæmorrhage occurs but rarely, except in chronic forms of phthisis.

All profuse hæmoptysis is not fatal, and we may infer that profuse non-fatal hæmoptysis is due to the same lesions as the fatal, for these reasons: first, that no clinical difference, except in regard of the result, distinguishes those cases which die from those which recover; secondly, that pathological evidence proves, beyond doubt, that both these lesions (namely, aneurysm and erosion of vessels) may cure. The pathology of slight hæmoptysis is very obscure, and must, from the nature of things, remain so. Such cases do not die; but there is good reason for believing that even slight hæmoptysis must be referred to similar, though less extensive, gross disease.

In discussing the treatment of hæmoptysis, we need only consider the cases in which it is profuse, for slight hæmoptysis requires no definite treatment.

The pathology of these more serious forms of hæmoptysis is, as I have said, established. The question we have to discuss, then, is by what means we may best control bleeding from vessels diseased in the way described.

Whatever be the pathology, the general treatment of profuse hæmoptysis must be the same as that of profuse hæmorrhage from other parts of the body. Rest, absolute of the body as a whole, and of the part diseased so far as possible, is the main essential principle; and, with this object, the patient will be kept in the recumbent position, speaking will be prohibited, cough checked, and excitement avoided, or, if present, controlled by drugs. So far as these conditions can be fulfilled by drugs, they will, for the most part, be met by the use of opium, which is as indispensable in most cases of profuse hæmoptysis as in profuse hæmorrhage from other parts.

The action of the so-called hæmostatic remedies is, however, in the face of the present pathological views of hæmoptysis, most difficult to understand. The hæmostatics fall into two groups—the topical astringents, and the vascular constringents. Chief among the former group are perchloride of iron, alum, gallic and tannic acid, and acetate of lead; but, powerfully as these remedies act when applied directly to the bleeding surface, it is difficult to see how they can produce the same local effect when administered by the mouth. To take perchloride of iron, for example, it is hard to comprehend how a few minims of a dilute solution introduced into the stomach can produce an effect which the undilated solution can only effect when applied directly to the bleeding surface. If they really do act at all, it must be, like the remedies of the second group, by vascular constriction.

Of this second group, the prominent remedies are digitalis and ergot. Both of these drugs produce contraction of the peripheral arteries; and, if hæmoptysis were due to capillary oozing, they might, by contracting the vessels, cut off the blood from the capillaries, and control the hæmorrhage; but knowing, as we now do, that profuse hæmoptysis is not due to capillary oozing, but to gross lesions of fairly large vessels, the usefulness of these remedies becomes open to grave question.

The effect of constringing the peripheral arteries would be, in great measure, to increase the quantity and pressure of the blood in the arteries of larger size; but, as the lesion is nearly always in them, this is the very place where there should be the least blood and the lowest blood-pressure, and we might expect, *a priori*, that these remedies would increase rather than check hæmorrhage. Digitalis, at any rate, is admitted, I think, now to be of little or no service, unless it be given in doses large enough to make the patient sick; and then its action becomes that of a nauseant and depressant, rather than a stimulant.

The great efficacy of ergot in uterine hæmorrhage probably accounts for its introduction as a remedy for bleeding elsewhere; but ergot acts not only upon the vessels, but also most powerfully upon the muscular tissues of the uterus, in which the vessels run such a course that its contraction leads to their closure by mechanical compression. In the lungs, however, there is no contractile tissue so placed that it can act in this way; and if ergot act upon the smaller vessels only, the same objections arise to its use that have been already urged against the use of digitalis. There is great difference of opinion upon the question of the use of ergot, which it would be unwise to disregard. If ergot act not alone upon the small arteries, but also, as has been suggested, upon the veins, producing dilatation of them and a fall in blood-pressure in consequence, there may be an explanation in this action of the good which follows, as is stated in some cases, the administration of this drug.

In considering the treatment of hæmoptysis, this very important fact has to be borne in mind, namely, that hæmoptysis tends to stop of itself; and it is very difficult to make adequate allowance for this in estimating the value of drugs. If, then, the pathology of hæmoptysis seems to discredit the drugs upon which chief reliance is at present placed, it will be well to consider whether it gives any other more promising indications for treatment.

When hæmorrhage from a surgical wound ceases, the result is due, first, to closure of the vessels by contraction of the muscular coat; and, secondly, to the clotting of the blood, aided, and in the case of large vessels rendered possible only, by the great fall in the blood-pressure which profuse hæmorrhage induces. In the case of profuse hæmoptysis, the muscular coat in the place of hæmorrhage is so diseased that it has lost all power of contraction, and the effect of vascular constringents acting upon the peripheral branches would be to dam the blood up, and so increase the bleeding. The first indication cannot, therefore, be met. Nor can the second, for there is no drug which can be relied on to increase the clotting power of the blood; for though most of the astringents have this effect when applied directly to the source of hæmorrhage, we have no evidence that they do so when administered by the mouth. Hence we must trust to the intrinsic clotting power of the blood determined in the required place by the lesion of the vessel, and by contact with the surrounding tissues. The third indication we may, however, endeavour to fulfil in various ways by imitating those effects upon blood-pressure and circulation which severe hæmorrhage naturally induces. What is required is, that the circulation in the affected portion of the lungs should be as slow as possible, in order to give the blood time to clot, and that the blood-pressure should be as low as possible, to give the clot formed time to consolidate *in situ*. These effects we may endeavour to obtain by acting upon the vessels, or upon the heart, or upon both combined.

As the chief danger of hæmoptysis is due to local effects of the hæmorrhage, rather than to the loss of blood, and as profuse hæmorrhage leads to the conditions of circulation most favourable to its cessation, it would seem that, in free blood-letting from artery or vein, we possess a means of rapidly inducing the condition we require. Accordingly, copious bleeding was a much vaunted remedy of past times for all severe internal hæmorrhage; and, though probably rightly but little employed in the present day, still it may not be out of place where the dangers are as imminent as in profuse hæmoptysis or in apoplexy, for by no other means can the same rapid and sure result be produced. But without free blood-letting, which can only be available in such very special cases as those just indicated, an attempt may be made to reach the same end, not by removing the blood from the body, but by detaining it in some part of the body distant from the

seat of hæmorrhage. Junod's boot, by gigantic dry cupping, provided a mechanical means of doing this, though it is probable that its action is not simply mechanical, having regard to the advantage which is often derived in the slighter degrees of hæmorrhage or congestion of the lungs and other viscera by the use of a few dry cups. In the vessels of the cutaneous and abdominal systems, we have reservoirs large enough to contain a great portion of the blood of the whole body, and capable, therefore, of producing a considerable effect upon the blood-pressure and circulation, if we possess the means of calling them into action. This may be the explanation of the use of free purgation, for the mere loss of fluid is not sufficient to account for the benefit which frequently results from it. I do not know that diaphoretics have been much employed in hæmoptysis; but it is possible that they might be of advantage in some cases, though, with the exception of pilocarpine, their action is, as a rule, too slow.

In pilocarpine and nitrite of amyl, we have drugs which produce a very considerable vascular dilatation throughout the whole body; and these remedies may be found of service, though I do not think they have been thoroughly tried. Nitrite of amyl is a cardiac stimulant, and its action is very transient, and on both these accounts it would appear to be inferior to pilocarpine.

The objection which might be urged against both of these remedies, namely, that they dilate, not the vessels of the abdomen or of the skin only, but of the whole body, and therefore of the lungs as well, is not, I think, insuperable; but the value of these drugs must be settled by actual observation.

In counterirritation, we have a means of producing vascular dilatation in the skin; but, to be effectual, it would seem necessary that it should be very extensive, unless its action be not mechanical, but reflex.

By the remedies above referred to, an attempt is made to fulfil the conditions indicated upon the circulation by means of the vessels. We may now turn to those which produce the same effect through the heart—to the group of cardiac depressants as well as to those of nauseating or depressant emetics.

Of the cardiac depressants, the only one that is freely used is tartar emetic. This must be administered until marked depression is produced, and it is a remedy, therefore, which requires to be carefully watched. Of the nauseants, ipecacuanha has been highly vaunted. Trousseau used it largely, and praised it highly, quoting Baglivi, who, 150 years before, wrote of it as a specific, "Radix ipecacuanhæ est specificum et quasi infallibile remedium in fluxibus dysenteriis aliisque hæmorrhagiis." Trousseau was in the habit of giving it even until it produced emesis, and, he stated, with great benefit—although it might be thought, *a priori*, that vomiting was an effect it would be desirable to avoid.

One other method of treatment remains for consideration, to which I venture to think sufficient importance is hardly attached, in writings, at any rate, upon hæmoptysis. I refer to the question of dieting. It is the rule of thumb practice with many physicians in hæmoptysis, to place their patients upon a restricted diet. Knowing the close relation between the lungs and stomach which exists through the nerve-supply, it is not irrational to expect a detrimental effect upon the lungs by an overloaded or irritated stomach, and the harm which experience proves to often revert from these conditions is usually referred to reflex action. But careful dieting is not only requisite because of the risks which improper diet may introduce, but because, when rationally employed, it becomes a real means of active treatment of the diseased condition. The principles of restricted diet advocated by the late Mr. Tufnell for thoracic and abdominal aneurysms, and which often have such signal success, are, with the necessary modifications, equally applicable to the conditions of the lungs upon which profuse hæmoptysis has been shown to depend. The object held in view is to reduce the quantity of blood, while not affecting its quality. This is effected by rigidly restricting the diet to the smallest quantity requisite for the healthy nutrition of the body while at absolute rest, and reducing to the lowest possible limit especially the amount of fluid taken daily. I do not propose to go farther into the details of treatment by dieting. I will only add that, by itself or in combination with drugs, it yields very valuable results.

One of the secondary advantages of this line of treatment seems to be that, while reducing the amount of the blood, it also increases, it appears, when combined with absolute rest, the clothing power of the blood, and, therefore, increases the possibilities of permanent cure.

The principles of treatment which have been considered may be briefly summarised as follows.

1. *Rest* (*a*) of body generally, (*b*) of part diseased. Many of the indications under this heading will be met by the use of opium.

2. *Hæmostatics.*—(1) The topical astringents; (2) the vascular constringents. Topical astringents cannot be applied to the bleeding part of the lung, and if they act at all, it must be only as vascular constringents.

The belief as to the use of the vascular constringents in pulmonary hæmorrhage is probably based upon an incorrect theory of the pathology, and reasons have been given why they can be expected to do but little, if any, good. Ergot was probably introduced on account of its efficiency in controlling uterine hæmorrhage; but it is shown that the necessary conditions for its action do not exist in the lungs unless their action be by vascular constriction, and this is probably ineffectual.

As the risk of death in profuse hæmoptysis is not so much from loss of blood as from suffocation, and as profuse hæmorrhage tends to bring about of itself the conditions most favourable to its cessation, an attempt may be made to imitate these conditions in treatment. When a vessel is divided hæmorrhage ceases (1) from contraction of the vessel; (2) from clotting of the blood, aided by the great fall in blood-pressure which severe hæmorrhage induces.

1. *Contraction of the Bleeding Vessel.*—The vessel is so diseased in hæmoptysis, that its muscular coat can no longer act at the diseased spot, and therefore this condition cannot be fulfilled.

2. *Clotting of the Blood.*—There is, so far as I am aware, no drug which, by internal administration, can increase the clotting power of the blood.

The effect upon the blood-pressure can be imitated in various ways.

1. By free blood-letting from artery or vein. This old-fashioned method of treatment is as rational in cases of suffocative hæmoptysis as in apoplexy, for in both cases the risk to life is not from the loss of blood, but from the mechanical effects of the hæmoptysis upon the organ involved.

2. If blood-letting be inapplicable, the same end may be aimed at by detaining the blood in some part of the body other than the part diseased; (*a*) for example, mechanically, as by the use of Junod's boot, or free dry cupping; (*b*) or by dilating some of the great vascular systems of the body, and making them act as temporary reservoirs for the blood; (*a*) the abdominal system (purgation); (*b*) the cutaneous system; counterirritation; possibly pilocarpin, or even nitrite of amyl. These two drugs dilate the vessels throughout the whole body, and might possibly be of great service. Some objections in theory to their action have been considered.

3. The blood-pressure may be further influenced through the heart: (*a*) by means of the cardiac depressants, of which antimony is the most reliable; (*b*) by the nauseating emetics, though their action upon the heart is probably only a part of a more general action. Of the emetics, ipecacuanha was much used by Trousseau.

4. Lastly, dieting is of great importance. The principle of absolute rest and restricted diet, which is the essence of Tufnell's treatment for aneurysm of the thorax and abdomen, is equally applicable and useful in pulmonary hæmoptysis.

Instead of giving a long list of drugs, or discussing in detail the various methods of treatment of hæmoptysis, I have endeavoured in this paper to ascertain the conditions which have to be fulfilled, and to indicate the essential principles which should guide our choice of remedies. I have purposely avoided speaking of my own experience, desiring rather to elicit that of others; and, although some of the lines of treatment are, it is true, open to the objection that they are so far speculations, still it cannot be denied that our present treatment of hæmoptysis is far from satisfactory, and perhaps, from the nature of things, may be doomed to continue so. Speculation may, perhaps, suggest lines of treatment which experiment may follow out, and of the value of which observation alone is the true test.

A Case of Longevity.—According to the *Sibicsky Vestnik*, there lives in Irkutsk a man, Grigory Korolkoff, who has reached the age of 120. In 1858, he became a Tomsk burgess, the pertaining official document showing that he had been aged 93 at the time. Mr. Korolkoff is still quite hale and hearty, his sight being in best order.

A Curious Boy.—A correspondent living in Dorpat writes to the *Olevik* (a Livonian periodical) that on October 12th a destitute lad, clad in rags, and looking ill, had been brought to a local almshouse. The lad had lived several years at the town, and had been known to many inhabitants. Two hours later, he was safely delivered of a healthy male infant—"to the greatest surprise of all who knew him," the correspondent gravely adds.

Central London Throat and Ear Hospital.—The winter course of lectures instituted by the medical staff last November, will be resumed on Thursday, January 21st, by Dr. Dundas Grant, assistant-surgeon to the hospital.

BRITISH MEDICAL ASSOCIATION.

FIFTY-THIRD ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

CLINICAL INVESTIGATION OF THE MERITS OF VARIOUS METHODS OF PRACTISING RETINOSCOPY.

ad in the Section of Ophthalmology and Otology at the Annual Meeting of the British Medical Association in Cardiff.

By A. STANFORD MORTON, M.B.,

geon to the Royal South London Ophthalmic Hospital, and Clinical Assistant to the Royal London Ophthalmic Hospital;

AND JAMES W. BARRETT, M.B.,

monstrator of Physiology in King's College, London, and Clinical Assistant to the Royal London Ophthalmic Hospital.

E have noticed, for some time, that many ophthalmologists practise inoscopy by different methods, some working at the optic disc, and ers at the macula lutea, and that they order glasses for patients the strength of the results obtained by retinoscopy at either point. me, however (Mr. Lang), have asserted that retinoscopy at the ic disc gives results which differ materially from those obtained the macula lutea, and that retinoscopy at the latter place gives the y reliable result.

The object of ordering spectacles for any patient with a lesion of refction, is to correct such lesion of refraction as influences the accurate ussing of rays at that part of the retina by means of which best ion is obtained, namely, the macula lutea; and although, in some es, the axis of vision of the eye does not coincide with the optic s, still, whatever means be adopted for ascertaining the refraction the eye, the spectacles ordered must be made so as to correct the on of refraction in the visual axis, and retinoscopy at the macula ea would then seem, on *a priori* grounds, to be the only reliable ans of ascertaining the defect of refraction (required to be known). Since, however, there is no comparison between the great ease with ich retinoscopy can be effected at the disc, and the relative difficty attendant on it when practised at the yellow spot, it would be great advantage to all workers, if the estimation by retinoscopy the lesion of refraction at the disc could be considered as equivalent hat at the macula lutea, or else the exact difference between them determined. That there must be a difference between the results ained at the two places, is evident from the construction of the eye, l our first endeavour to estimate it was made as follows.

Assuming that the diagrammatic eye is the emmetropic eye, it is y to ascertain by mathematical construction the difference between results which should be given by retinoscopy at the disc and at yellow spot in that eye. Then, if an observer find the refraction the eye by retinoscopy at the disc, he can simply subtract or add nown amount, and so find that at the macula lutea. It would be ally possible by calculation to find the exact difference between results given at the two places for every degree of myopia and permetropia, so that a table might be constructed showing how ch must be deducted from, or added to, the results given by retinopy at the disc in order to find the refraction in the visual axis.

But such calculation is based on the assumption that all cases of hypertropia and myopia are due to shortening and lengthening respectively he antero-posterior dimensions of the eye. Whilst, however, it is bable that they are generally so caused, yet obvious exceptions, such swelling of the lens, may occasionally be met with. Moreover, it yet to be shown that astigmatism at the disc is equivalent to astigtism at the macula lutea. It further depends for its accuracy on the umption that the distance from disc to yellow spot is constant for eye of given refractive character; at present, as far as we aware, there is no warrant for denying or affirming this assumpn, but it nevertheless opens to view another source of fallacy.

Still, the advantages of being enabled to estimate refraction in such simple and easy way would have been so very great, that we ght have issued such a table had we not found, in the course of experiments, another factor which wholly destroyed the value of s method. This factor is the "physiological pit or depression in optic disc" to which reference will be made later in this communion.

There now remained but one means of estimating the difference between the results given at the two places, namely, the method of experiment which was accordingly adopted. We have examined the refractive condition of thirty eyes, of which four were hypermetropic, eighteen were hypermetropic and astigmatic, four myopic and astigmatic, whilst four were characterised by mixed astigmatism.

The ages of the patients are noted in the attached table.

The examination has been conducted as follows. First, the distant vision (Snellen test-types at six mètres distance) was estimated for each eye. Then, in fourteen cases, an effort was made to find the refraction at the disc by retinoscopy. The patient being directed to look at some point distant from five to ten mètres, and to keep the eyes fixed on that point, we so placed ourselves that we, on throwing light into the eye with the mirror, illuminated the disc.

Then a solution of atropine, two grains to the ounce, was applied to each eye three times a day for four days. At the end of this time, retinoscopy was practised again at the same place and in the same manner as before, and also at the macula lutea. The macula was found by directing the patient to look at the small hole in the centre of the retinoscopy mirror, whilst a screen was placed in front of the other eye.

When retinoscopy was finished, the glasses so ascertained to be required were tried with the Snellen types, and the resulting vision noted.

In four cases, we were unable to try these glasses until the effect of atropine had passed off, and in two other cases no after-vision was noted. The mirrors used in these experiments were two in number; one of us (A. S. M.) using a plane mirror, the other (J. W. B.) using a concave one of focal distance of twenty-five centimètres. Retinoscopy was effected at a distance of a little over one mètre in all cases.

The numbers given in the tables represent the independent and harmonious results obtained by the two observers, and no number represents the result obtained by either observer alone.

In those few cases where we differed, the observations were repeated independently again and again, until the source of fallacy was discovered. Since the cases given were nearly all astigmatic, and only two were characterised by irregular astigmatism, it follows that the estimation of the lesion of refraction by retinoscopy amounted to the estimation of the correction needed in the meridians of the greatest and least error respectively.

This has been effected by first finding these meridians, and then systematically working with trial spherical glasses in that meridian until the movement of the shadow was just reversed. The other meridian was then treated in exactly the same way.

It will thus be seen that we never used cylinders whilst practising retinoscopy. The glasses used in ascertaining the after-vision have been determined from a consideration of the results of retinoscopy at the macula lutea.

The following table affords an opportunity of giving information on several important points.

Retinoscopy at the Optic Disc without any previous use of Atropine.—A reference to the table (see next page) will show that there was a marked difference in the results given by retinoscopy at the optic disc, before and after the application of atropine in the fourteen eyes so examined.

As a rule, the error of refraction noticed before atropine was applied was much less than that given afterwards in the case of hypermetropes; whilst in the case of myopes it was about the same or somewhat greater. There are, however, one or two exceptions to the latter rule. It will further be noticed that in some cases astigmatism was manifest after atropine had been applied, but was not so prior to its application.

Thus, in eyes (11) and (12), retinoscopy before atropine gave a correction of + 7 D and + 8 D respectively. After atropine was applied, the results given were for (11) vertical meridian + 7.5 D and horizontal + 8.5 D, and for (12) vertical meridian + 8 D and horizontal + 9 D.

In those cases where the astigmatism was discovered prior to the application of atropine, the amount nearly always differed from that found to exist after atropine had been applied.

Thus, in eye (23), before atropine was applied, the correction in the vertical meridian was —5 D, and in the horizontal —3.5 D, whilst after the use of atropine it was —5.5 D in the vertical, and —4.5 D in the horizontal.

Apart from these measurements, we desire to point out that in some cases the results varied so greatly within a few minutes, under exactly the same circumstances, that we found it difficult to get any definite result at all without the use of atropine; and the figures here given, obtained in that way, are only approximate, since precision was impossible. It follows, then, that retinoscopy at the disc, without the

No.	Condition of Eye, and Age of Patient.	Vision.	Retinoscopy at Optic Disc, without Atropine. Axes. Vertical	Horizontal	Retinoscopy at Optic Disc, with Atropine. Axes. Vertical	Horizontal	Retinoscopy at Macula Lutea, with Atropine. Axes. Vertical	Horizontal	After-vision. With Atropine	Without Atropine.
1	Hypermetrope, age 9	$\frac{6}{36}$	+1.25 D	+1.25 D	+2.5 D	+3 D	+2.25 D	+2.75 D	—	Vc+1.5 D=$\frac{6}{9}$.
2	,, ,,	$\frac{6}{36}$	+1.25 D	+1.25 D	+2.75 D	+2.75 D	+2.75 D	+2.75 D	—	Vc 1.5 D $\frac{6}{9}$.
3	,, ,, 15	$\frac{6}{9}$, Hm. 2.5 D	+6 D	+6 D	+8 D	+8 D	+8 D	+7.5 D	Vc+7 D=$\frac{6}{6}$	—
4	,, ,,	$\frac{6}{9}$, Hm. =2.5 D	+6 D	+6 D	+8 D	+7.5 D	+7.5 D	+7.5 D	Vc+6.5 D=$\frac{6}{6}$	—
5	,, ,, 13	$\frac{6}{9}$ partly	—	—	+4 D	+4 D	+4 D	+4.5 D	Vc+4 D=$\frac{6}{6}$ well	
6	,, ,,	$\frac{6}{9}$ partly	—	—	+4 D	+4.5 D	+4 D	+4.5 D	Vc+4 D=$\frac{6}{6}$ well	—
7	,, ,, 13	$\frac{6}{9}$	—	—	+5.5 D	+6 D	+5.5 D	+6 D	Vc+6 D=$\frac{6}{6}$	—
8	,, ,,	$\frac{6}{9}$	—	—	+5.5 D	+5.5 D	+5.5 D	+6 D	Vc+6 D=$\frac{6}{6}$	—
9	,, ,, 11	$\frac{6}{9}$ partly	—	—	+6 D	+6 D	+6 D	+6 D	Vc+6 D=$\frac{6}{6}$	—
10	,, ,,	$\frac{6}{9}$ partly	—	—	+6 D	+6 D	+6 D	+6 D	Vc+6 D=$\frac{6}{6}$	—
11	,, ,, 8	$\frac{6}{9}$ partly	+7 D	+7 D	*Down and In* +7.5 D	*Down and Out* +8.5 D	+7.5 D	+8.5 D	Vc+$\frac{6}{1}$ D = $\frac{6}{6}$ cy. axis vert.	$\frac{6}{6}$ partly.
12	,, ,,	$\frac{6}{9}$ partly	+8 D	+8 D	+8 D	+9 D	+8.5 D	+9.5 D	Vc+$\frac{7}{1}$ D = $\frac{6}{6}$ cyl. axis vert.	$\frac{6}{6}$,,
13	,, ,, 16	$\frac{6}{9}$, Hm. 2 D	*Down and In* +2.75 D	*Down and Out* +2.5 D	+3.5 D Vertical	+4 D Horizontal	*Down and In* +4 D Vertical	*Down and Out* +4.5 D Horizontal	Vc+3.5 D = $\frac{6}{6}$	fairly.
14	,, ,,	$\frac{6}{18}$, Hm. 2 D =$\frac{6}{9}$ badly	+4 D	+3.5 D	+5 D	+4.5 D	+6 D,	+5.5 D	Vc+4.5 D = $\frac{6}{6}$	$\frac{6}{6}$,,
15	,, ,, 11	$\frac{6}{12}$	Vertical +5.5 D	Horizontal +7 D	*Down and In* +8 D	*Down and Out* +9 D	*Down and In* +8	*Down and Out* +9 D	Vc+$\frac{8}{1}$ D cy. = $\frac{6}{6}$ axis vert. or 85° in.	—
16	,, ,,	$\frac{6}{9}$	*Down and In* +6 D	*Down and Out* +7.5 D	+7.5 D	+9 D	+7 D	+9 D	Vc +$\frac{7}{1}$ D cy. = $\frac{6}{6}$ axis 70° in.	—
17	,, ,, 15	$\frac{6}{12}$	—	—	+3 D	+2.5 D	+3.5 D	+2.75 D	—	—
18	,, ,,	$\frac{6}{18}$	—	—	+2.75 D	+1 D	+3.5 D	+1.5 D	—	—
19	,, ,, 13	$\frac{6}{18}$	—	—	+5 D	+6 D	+6 D	+8 D	Vc+4.5 D +2 D cy. axis 70° in. = $\frac{6}{6}$	$\frac{6}{6}$ fairly.
20	,, ,,	$\frac{6}{24}$	—	—	+4.5 D	+5 D	+6 D	+8.5 D	Vc+4.5 D +2.5 D cy. axis 70° in. = $\frac{6}{6}$	$\frac{6}{6}$,,
21	,, ,, 14	$\frac{6}{12}$	—	—	−1.25	−.50	Vertical +1.5 D	Horizontal +1.25 D	Vc+.75 D = $\frac{6}{12}$	some irregular astigmatism.
22	,, ,,	$\frac{6}{9}$	—	—	+1.25	+1.25	+2 D	+1.75	Vc+1 D = $\frac{6}{6}$	—
23	Myope, age 16	—	Vertical −5.5 D	Horizontal −3.5 D	Vertical −5.5 D	Horizontal −4.5 D	−5 D	−4 D	—	Vc−$\frac{4}{1}$ D cy. $\frac{6}{6}$ axis 0.
24	,, ,,	—	−3.5 D	−3 D	−3.5 D	−2.75 D	−2.75 D	−1.75 D	—	Vc−$\frac{2}{1}$ D cy. $\frac{6}{6}$ axis 0.
25	,, ,, 11 ,, Staphyloma	$\frac{6}{36}$	—	—	*Down and In* −9 D	*Down and Out* −6 D	*Down and In* −9 D	*Down and Out* −5 D	Vc−4.5 D −4 cy. 40° out = $\frac{6}{18}$	—
26	Staphyloma	$\frac{6}{36}$	—	—	Vertical −9	Horizontal −6	Vertical −9	Horizontal −5	Vc−4.5 D −4 D cy. axis 40° in. = $\frac{6}{18}$	—
27	Mixed Astigmatism, age 17	$\frac{6}{12}$	*Down and In* −2 D	*Down and Out* +3 D	*Down and In* −.75 D	*Down and Out* +3.5 D	*Down and In* −.75 D	*Down and Out* +3.5 D	Vc+3 D −4 D cy. 50° out = $\frac{6}{12}$	$\frac{6}{9}$
28	,, ,,	$\frac{6}{12}$	−2.25 D	+2.25 D	−1 D	+3 D	−.75 D	+3.75 D	Vc+3 D −4.5 D cy. axis 20° out = $\frac{6}{12}$	
29	Mixed Astigmatism age 24	$\frac{6}{12}$	—	—	+.75 D	−2.25 D	+1.25 D	−1.5 D	Vc+.5 D −1.75 D 60° down and in =	$\frac{6}{6}$ partly.
30	,, ,,	$\frac{6}{9}$ badly	—	—	+.5 D.	−1.25 D	+1.25 D		Vc+.5 D −.75 ver. (?) = $\frac{6}{6}$	$\frac{6}{6}$,,

previous instillation of atropine, is probably an unreliable means of determining the refractive character of any eye.

Why should this be? The patient looks at a point distant from five to ten mètres; his ciliary muscle then (apart from lesion of refraction) ought to be contracted to an extent of only .2 D to .1 D. The exact cause of the varying results given seems to us to be very difficult of full explanation, but on this point the experiments recently made in the physiological laboratory of King's College, on the Velocity of Accommodation by one of us (*Journal of Physiology*, vol. vi, 1885, by James W. Barrett), throw some light.

We have already remarked that, whilst examining eyes in this manner, the patient's gaze being directed on a distant object, the results given changed within a few minutes, whilst the external conditions were not in any way altered. Sometimes there was a variation in the results given, of as much as 1.5 D; and yet the patient all this time declared that he was looking at, and could see, the distant object clearly.

During the course of the experiments, just referred to, made on Velocity of Accommodation, it was found that, though relaxation of the accommodation-apparatus was effected with great rapidity if the observer looked from a very near point to one very far off—in fact, with such rapidity that the exact time occupied in the change was to rapid for measurement by the instrument used—yet, if relaxation wer effected by looking from a point distant 33 c. m., to an infinitely fa point, not only did it take a measurable period, but in some cases ab solutely failed to occur. That is to say, the apparatus never full relaxed. This fact was fully established by observations on the eye of two emmetropes and one myope.

The explanation of this anomalous result seems to be, that th sudden release from extreme tension of the accommodation in the firs case overcame some obstacle which volition was unable to surmoun in the second. But, whatever may be the explanation, this fact stand out clearly, that the accommodation-apparatus of these eyes was i some cases not relaxed when vision was directed to the most distan objects, that is, when the eye received parallel rays of light; an that, even when relaxation was completed, it was effected with som difficulty, unless aided by sudden relief from great tension.

We have noticed further that it is not unfrequent to find hyperme tropes of low grade, whose vision is $\frac{6}{9}$, actually temporarily improve by the use of negative glasses, and whose distant vision has becom $\frac{6}{6}$ with the use of a − 1 D glass. Yet these people, with a myopi of practically 1 D, never complained of their distant vision, whic

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they considered perfect. Their near vision alone troubled them. It is, however, possible that where a concave glass improved their vision, they had preferred somewhat indistinct vision to using their accommodation; but, when the hypermetropia was increased by a concave lens, and their distant vision thus made very bad, they had to use their accommodation, and then obtained increased visual acuity.

The tendency of all these facts is to show that it is not in the least necessary to have complete relaxation of the accommodation-apparatus in order to get very fair vision for distant objects, and that the ciliary muscle may be very materially contracted, and the patient be yet in no way conscious of anything imperfect regarding his distant vision. In fact, it would never have been noticed in the experiments referred to, had it not been for the delicacy of the objects used. When, too, it is remembered how very seldom in modern urban life the most distant objects are looked at, and how very limited is the practical range of accommodation, it seems justifiable to assert the existence of an urban functional myopia (to which attention has been recently drawn by Brudenell Carter) dependent in no way on structural lesion, but merely on educational use of the ciliary muscle. It was not present in one young hypermetrope (Hm. 1), whose accommodation-velocity was estimated, whilst it was present in the two older emmetropes, and in the myope.

Whether children of such people would have any further predisposition to myopia than others, is a point which might be noted; but, since the causes of functional and organic myopia are different, it would seem that this would not have much influence, although, again, myopia is assumed to be a development of civilised urban life.

It should be here mentioned that we have found that retinoscopy cannot be practised at the macula lutea except atropine, or some similar drug, has first been applied to the eye, because of the small size of the pupil, and of the dim reflex obtained from the fundus.

The Difference between Retinoscopy effected at the Optic Disc and at the Macula Lutea.—1. An examination of all the twenty-two hypermetropic eyes examined gives the following results.

1. In seven (2, 6, 7, 9, 10, 11, and 15) the results given by retinoscopy were exactly the same at both places.

2. In one case, the difference between the two sets of results was 1 D or less, and the astigmatism remained practically unaltered; while the results given at the disc indicated a higher grade of hypermetropia than those given at the macula lutea. Such a case is No. 1.

3. In six cases, the results given were the same as the last, except that the degree of hypermetropia indicated at the disc was less than that indicated at the macula by from .5 D to 1 D. Such cases are Nos. 12, 13, 14, 17, 18, and 22.

4. In the remaining cases (Nos. 3, 4, 5, 8, 16, 19, 20, and 21), the astigmatism indicated at the two places differed, the difference varying from .5 D to 2 D. In some of these cases, the total difference was very great, notably in case 21, where myopia was indicated at the disc, whereas at the macula lutea hypermetropia was found to exist.

In the four eyes characterised by myopia (23, 24, 25, and 26), the myopia was, on the whole, found to be greater at the optic disc than at the macula. The difference in the amount of astigmatism at the two places varied from 0 to 1 D. Cases 25 and 26 are noteworthy, since staphyloma in the region of the optic disc increased the myopia in that region by 1 D in a meridian situated down and out, but did not materially increase that in the opposite meridian. Of the four eyes characterised by mixed astigmatism, with the exception of 27, in which the results at both places were the same, a difference was found to exist in the amount of astigmatism (from .25.75 1 D) indicated at the two places, and also in the absolute measurements given.

From a further analysis of the cases examined, it will be seen that, of the sixty meridians estimated, in twenty-three (38.3 per cent.) there was absolutely no difference between estimation at optic disc and macula. In thirty-one (51.7 per cent.), the difference was 1 D or less; whilst in the remaining six (10 per cent.) the differences amounted respectively to 1.25, 1.5, 1.75, 2, 2.75, and 3 D.

From these figures, it will be seen that, in a certain number of cases, retinoscopy at the two places gives an identical result; in a larger number, the results differ slightly; whilst, in a few, very material difference exists; and that, apparently, the results more nearly agree in cases of hypermetropia of moderate or high grade than in other lesions of refraction. It might at first be considered anomalous that retinoscopy at the disc should, on the whole, indicate a greater amount of myopia and a less amount of hypermetropia than is indicated at the macula lutea. We can only attempt to explain this fact by supposing that the physiological pit in the disc causes the difference, and so gives rise to the conflicting results here manifested.

During our work, we have found very great difficulty in determining the exact part of the disc in which to practise retinoscopy, since a very slight alteration of position often alters the result very materially; that is to say, we found that retinoscopy gave different results when practised on different parts of the disc.

On the Method of Practising Retinoscopy.—We have found that a little over one mètre is about the most convenient distance at which to practise. If this be taken as the distance from the glass which just overcorrects, then, theoretically, a glass about .75 D less refracting power should give the necessary correction.

We have rarely found it necessary to alter a cylinder determined by retinoscopy, but have been compelled to lower the spherical glass sometimes as much as 1.5 D in the case of hypermetropes, in order to get best vision; the average being about .75 D.

In the case of myopes, the full spherical correction has been found of most service in obtaining good after-vision, together with the cylinder determined by retinoscopy.

We believe that the variation of the amount to be so deducted or added, is owing to the difficulty of determining exactly when the shadow is reversed, since it is very much easier to do so in some eyes than others. We have found that the movements of the shadow can be determined more easily at a greater distance than one mètre, but that the labour to the patients of walking to put glasses into the frame then becomes excessive.

On the Best Form of Mirror and the Nature of the Light.—The smaller the image of the flame formed on the retina, the more readily are its movements perceived. Hence it is that, with ordinary Argand burners, the flame of which is usually much higher than it is broad, the vertical shadow is much more difficult to define than the horizontal. In order to get accurate results, we have therefore used the smallest possible flame with which we could illuminate the retina, and have derived from so doing great assistance. We desired then to find a mirror which would illuminate the retina from about one mètre distance, with the minimum amount of flame. We accordingly took three mirrors, one plane, one of twenty-five centimètres' focal distance, and one of forty centimètres' focal distance, and determined their relative value as follows. Using one, we found the minimum flame with which a distinct shadow could be seen on the eye, and then tried the other two, and found whether the flame could be lowered further, or had to be raised in order to see the movement distinctly. We found that the mirror of forty centimètres answered best; then, and somewhat less in value, was that of twenty-five centimètres' focal distance, whilst the plane mirror was much inferior to both. The advantages of the plane mirror are that it can be used at a considerable distance (two to four mètres), and that then, of course, no deduction need be made in ordering glasses; but the disadvantages of working at such a distance are obvious, and more than counterbalance any advantages. On the other hand, the mirror of twenty-five centimètres' focal distance diffuses light too much at one mètre, consequently a large flame must be used, and difficulties are somewhat increased. The mirror of forty centimètres' focal distance enables the worker to use the minimum amount of flame, but hardly diffuses light enough at one mètre; and one of thirty-six centimètres' focal distance is the ideal retinoscopy mirror, because the rays from the lamp, which are reflected from the mirror, cross at a distance of about sixty centimètres from the eye, and when they reach it, produce an illuminated area of just sufficient diameter to allow of retinoscopy being satisfactorily performed. Those who have the ordinary retinoscopy-mirrors of twenty-five centimètres' focal distance should not trouble to change them, as, with care, they answer very well, but we would recommend anyone getting a mirror in future to get one of about thirty-six centimètres' focal distance.

Difficulty in determining the exact point at which the shadow is reversed, probably explains the fact that sometimes we had to add or deduct variable amounts to those given by retinoscopy, in order to get best vision. These difficulties may be reduced by taking the precautions already mentioned, but, after these have been taken, sources of fallacy remain.

Very often, even in cases of simple astigmatism, when one shadow is nearly overcorrected, movement occurs in the opposite one, and interferes with an accurate determination of the point of reversal. This is probably due to the fact that the axis in which retinoscopy is being practised is not the axis required. In other words, a case of simple astigmatism in retinoscopy is resolved into an axis of greatest and of least error of refraction.

We have found that, unless the meredian in which retinoscopy is being effected correspond to the one or the other of these, difficulty arises in the way indicated. A similar difficulty arising in some cases, even when they do correspond, is, we believe, due to irregular astigmatism, and for it there is no remedy.

Conclusions.—1. In order to be perfectly accurate, retinoscopy must

be practised at the macula lutea, and with the aid of some such drug as atropine.

2. Retinoscopy at the optic disc does, in the majority of cases (especially hypermetropia), give approximately correct results, and that, from the great ease with which it can be effected, it is justifiable in cases such as post polar cataract, where it is necessary to learn the refractive character of the eye approximately, and where retinoscopy at the macula lutea is difficult, or impossible to practice.

3. Retinoscopy, without the previous use of atropine, is unreliable; but it would seem from these experiments that, if the drug cannot be employed, approximately correct results may be obtained at the optic disc in the manner previously indicated. The glass which reverses the shadow may generally be ordered.

4. If the best possible results with least trouble be required, it should be practised with a mirror of thirty-six centimètres' focal distance, used at a distance of a little over one mètre, with as small a flame as possible, the patient being directed to look at the small hole in the mirror, a screen being placed in front of the other eyes.

5. The two meridians of greatest and least refraction respectively should be steadily worked out, until just overcorrected. The difference between the two results gives the cylinder required, which cannot vary more than .5 D. If retinoscopy be correct, the spherical glass may require lowering or increasing slightly in hypermetropia and myopia respectively, the former requiring more alteration than the latter.

6. The glasses so determined should be tried under atropine, and, if correct, should then be obtained and worn at once.

ON A CONDITION OF THE INNER SURFACE OF THE UTERUS, AFTER THE BIRTH OF THE FŒTUS, OF PRACTICAL IMPORTANCE.

By J. STUART NAIRNE, F.F.P.S.G., Glasgow.

In the Journal for October 10th, there is a very instructive and interesting note by Dr. Braxton Hicks on the above subject. I am very glad, indeed, that this condition has attracted the notice of such an eminent physician; but I would have been still better pleased if he had given a little credit to some small observations of my own on the same subject. As a matter of fact, the condition of the internal surface of the uterus after delivery has come, on various occasions, before the Glasgow Southern Medical Society, and has been commented on by those present at the meetings. I would refer only to the minutes of the meeting of that Society on March 6th, 1884, where Dr. Napier, in almost exactly the same words as Dr. Braxton Hicks, described the same kind of mistake as to the placenta. This discussion arose on a point of uterine pathology, which I had formerly embodied in a short paper in the British Medical Journal of January 17th, 1880, as a description of the *post partum* painful spot. Again, in a note which occurs in the Journal of May 9th, 1885, on a case of Dr. K. N. MacDonald's, I have pointed out, whether correctly in that case or not, the very same facts that Dr. Braxton Hicks mentions. Briefly, these facts are (1) that, after the birth of the child, the internal surface of the uterus is thrown into such a condition as to simulate the projection of the placenta into that organ; and (2) that this projection may be mistaken for adherent placenta. With regard to the first of these points, then, Dr. Hicks says: "……for this inner membrane is not unfrequently resting loosely on the muscular coat beneath, so that, when the fingers are pressed against it, it glides over the subjacent part, so as to feel very like a portion of the placenta. ……Where nodules of inflammatory deposit occur in the same case, there is a great similarity to the placenta, I mean where the placenta has been removed." In the discussion on my paper, reported in the *Glasgow Medical Journal*, April, 1884, Dr. Napier says: "When, for any reason, the hand has to be introduced into the uterus after labour, the spot indicated may be easily felt. It is distinctly elevated, and probably about a couple of inches in length and breadth. On first detecting this elevation, Dr. Napier mistook it for an adherent portion of placenta……" In the second place, that this elevation may be mistaken for placenta, is shown clearly enough by the latter part of the quotation from Dr. Napier's remarks. Dr. Hicks says: "I was on the point of mistaking this loose lining of the womb for the placenta." In my note on Dr. MacDonald's case, I say: "I am aware that on various occasions, when it was thought that the placenta was not entirely removed, on account of feeling the elevation, it was really removed."

It is not altogether a matter of priority that causes me to bring this up; neither is it because we are quite at one in regard to the real pathological condition of the uterus, because evidently we are not; but we are quite at one that there is a *post partum* condition of the internal surface of the uterus which is fraught with the danger of being mistaken for adherent placenta; and the importance of such a fact, I also plead, must be my excuse for the present communication.

A CASE OF UNUSUAL MALPOSITION OF VISCERA IN A NEW-BORN CHILD.

By JOHN PHILLIPS, B.A., M.B.Cantab., M.R.C.P.,
Senior Assistant-Physician to the Chelsea Hospital for Women; Physician to the British Lying-in Hospital.

On May 29th last, I was requested to perform a *post mortem* examination upon a child, which had died without apparent cause twenty minutes after birth. The arrangement of the viscera found was of such a peculiar nature that they appeared to me worthy of record.

The child in question was the fifth of an otherwise quite healthy and normally formed family, and there was no family history of deformity discoverable. The child was born at full time, and the labour normal in every way, occupying two hours. The mother experienced a fright two days before the labour, but this could have had no influence on the condition of things present. When born, the child gave a few feeble cries, and, by dint of artificial respiration, was kept alive for twenty minutes.

Post mortem Examination.—The body was that of a well nourished and well formed female child, weighing seven and a half pounds. The abdomen was slightly flattened, but no malformation could be detected externally. On removing the anterior chest-wall in the usual manner, the appearance roughly shown in Fig. 1 presented itself. The whole of the space usually occupied by the left lung, the heart, and large vessels, was filled with intestines, the upper third being composed of large bowel, stained of a greenish-brown hue, the lower two-thirds being made up superficially of small intestines, of a pinkish hue. The right side contained at its apex the thymus gland; below

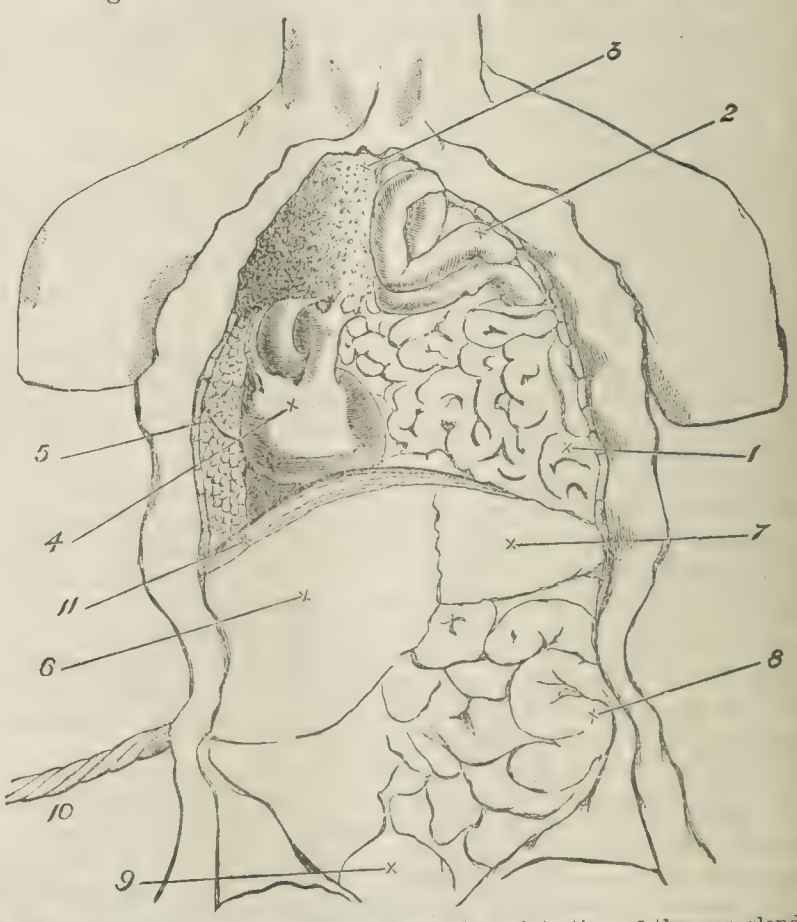


Fig. 1.—Superficial view. 1 small intestines, 2 large intestines, 3 thymus gland, 4 heart displaced, 5 right lung, 6 right lobe of liver, 7 left lobe of liver, 8 large intestines, 9 bladder, 10 umbilical cord, 11 diaphragm.

that, the heart and large vessels; and, to the right of these latter, the right lung, trilobed, but in a condition of almost complete atelectasis. On raising the small intestines, the stomach came into view, lying on the diaphragm, with one or two coils of large intestine covering its

pyloric end; at its cardiac end was the spleen, in its usual relation with that organ; while, behind and below, the left lobe of the liver

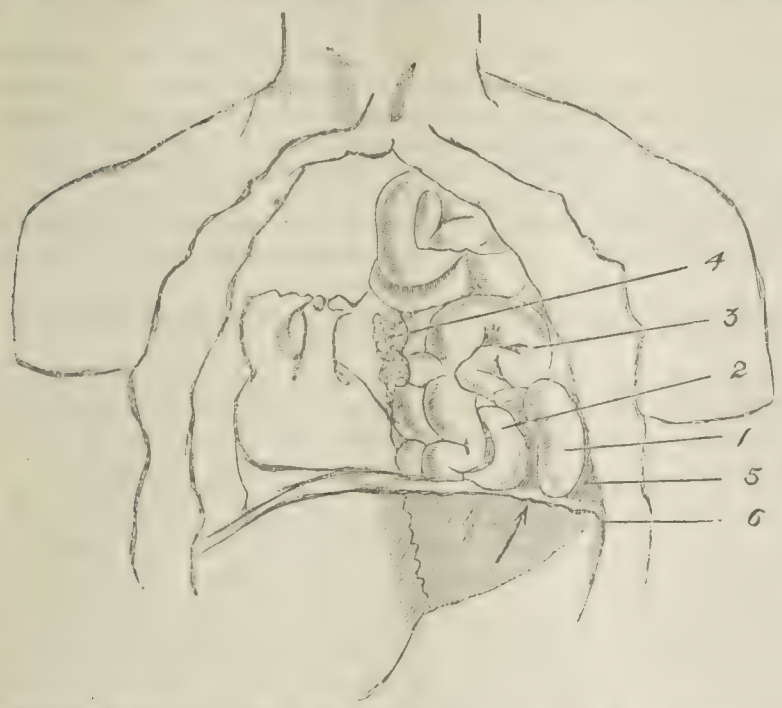


Fig. 2.—Deep view. 1 spleen, 2 cardiac end of stomach, 3 large intestines, 4 rudimentary left lung, 5 left lobe of liver, 6 diaphragm. The arrow denotes the situation of the congenital opening.

could be seen passing through a large congenital deficiency in the posterior part of the left side of the diaphragm. Towards the median line, and attached to the vertebral column by fibrous tissue, was a small bilobed yellowish body, evidently the undistended left lung. The abdominal cavity was occupied by the right and part of the left lobe of the liver, and the remainder of the large intestines and bladder.

I carefully examined the remainder of the body, but failed to find any other abnormality.

CASE OF SPASMODIC ASTHMA CURED BY ELECTRICITY.

By E. PAGET THURSTAN, M.D., Southborough, Tunbridge Wells.

W. H., aged 42, a coachman, formerly an officer's servant, sent for me in March, 1884. The patient had been in Malta and Jamaica (Newcastle). He had always had perfect health, and was a florid-faced man, inclined to be stout, with congested capillaries on the cheeks. He had been married eleven years, and had no family. His father had gout; four brothers and one sister were alive and well, except that the eldest brother suffered from gout. One brother died, aged 34, two years after an operation for stoppage of the bowels. One sister died suddenly in the night, aged 19, though a fine healthy looking girl, it was said, of apoplexy. Five brothers and sisters died as children, one in a fit. Three years ago he had bronchitis in November, which lasted five weeks, very severely. He recovered perfectly, and had no return, though considerably exposed to weather, until September, 1883. He then gradually began to feel short of breath. One day he walked to the railway station, and could not get up the hill to go home (half a mile) and was obliged to have a cab. For ten weeks from that day he did no work, and was under a club doctor, who prescribed ethereal tincture of lobelia. He did not improve, and his mistress sent him to her own medical man, who treated him for two or three weeks. He became a little better, and went to work again, but in ten days was as bad as ever. After being on the sick list a few days, and not improving, he tried a much advertised nostrum. At first he felt great relief, and wrote a testimonial for the local agent of the nostrum, which has since been published far and wide. Within a very few days, however, the new remedy failed to do him good; and finally, after a long trial, he gave it up.

When he came under my care he had attacks of dyspnœa, with intervals of comparative, and sometimes almost complete, ease. The attacks of dyspnœa most frequently began about 3 or 4 A.M., and lasted until 8 or 9 in the evening; they were very severe. There was an indistinct cardiac impulse in the epigastrium; the area of cardiac dulness was increased, and extended lower than and to the right of its proper position. The aortic sounds were not very loud, and were heard only to the right of the mid-sternal line. There was no murmur or reduplication of sounds. The pulsation of the carotids was very distinct. Rhonchi were audible over the subclavian region on the right side, and very occasionally on the left, but resonance was normal. There was some enlargement of the liver and spleen. The bowels acted regularly, but he had a feeling of fulness and drowsiness after meals, and flatulence; latterly these had been better, as he had been omitting cabbage and green vegetables, cheese, pastry, etc., from his dietary, having discovered, by experience, that a supper, including these, was a certain prelude to a severe attack of dyspnœa. He had always been moderate in the matter of drinking.

On March 24th, 1884, after using an interrupted current with bichromate of potash cell daily for a fortnight along the edge of the sterno-mastoids, from the level of the jaw to the sternum, he was free from dyspnœa; but the pulsation of the carotids in the neck continued, and rhonchi were still to be sometimes heard under the right clavicle. He had not been free from attacks for so long a while, since November, 1883; he could now run up hill without distress.

On April 4th, after continuing this treatment for a month, the rhonchi had disappeared. There were no attacks of dyspnœa, the pulsation of the carotids was less, and he felt quite well. He returned to work as a coachman.

In August, 1885, I accidentally saw him, and he told me that, though exposed to a severe east wind the day after he again mounted the box, he had remained free from bronchial attack, and that he had been in daily work ever since I last saw him, and had had no return of dyspnœa.

REMARKS.—Cases of this kind are precisely those of which vendors of quack medicines love to get hold: cases where medical men have tried and failed to alleviate symptoms, and yet where there is no organic disease. My view of the case was that it was irritation of the phrenic nerves, occurring in a gouty subject. As he was dieting himself, and his bowels were acting regularly, there seemed no occasion for medicine. The rapid improvement must have been due to the electricity, I think, as it was so marked, and in such contrast to the previous failures. The permanence of the relief shows how purely functional the disorder was, and at the same time shows that a disturbance may last many months, and yet prove not to have had any organic origin.

TOXICOLOGICAL MEMORANDA.

POISONING BY CARBOLIC ACID.

THE Rev. G. B. H., aged 81 years, chaplain to the Chelmsford Infirmary, is in the habit of carrying a small vial of brandy, to take in case of faintness. On November 25th, he had, by mistake, an ounce vial of carbolic acid (Calvert No. 5); of this he swallowed a mouthful, about three drachms. He quickly discovered his mistake, and applied to the matron of the infirmary for help. She gave him some olive-oil first, afterwards some mustard and water. When I saw him, he was unconscious; his mouth was open, and he was breathing with difficulty. That was about twenty minutes after swallowing the acid, and he had not vomited. It took me about ten minutes to get and introduce the stomach-pump. It was then about half-past one o'clock. At first I found I could extract nothing; I therefore pumped in a quart of warm water, and then pumped it out again; I continued to pump a quart of warm water in and out, until the fifth quart was pumped in; then he vomited. I had to take out the tube, lest he should be choked, as he was still unconscious. As the washing smelt very strongly of the acid, I reintroduced the tube, and continued washing out the stomach as before, until I had done so for the ninth time. Then he opened his eyes in a semiconscious condition. I next pumped in half a pint of warm milk with an ounce of brandy, and the patient was put to bed. As consciousness returned, he began to retch; the stomach would keep nothing down for twenty-four hours. I feared I should lose my patient from exhaustion; I tried enemata of peptonised beef-tea, but the constant retching and prostration did not permit their retention. The mouth and throat looked as if cauterised, and doubtless the œsophagus and stomach were in the same condition. The irritation of the throat made swallowing very painful, and constant coughing helped to make matters worse. Ice, iced-milk, with pepsine, and pancreatine (Benger's preparations) were persevered with for about ten days, when the patient had a little solid food for the first time. He left the infirmary on the fourteenth day for his own home. The temperature kept about 102° Fahr. during the first four days, the urine did not lose its peculiar green colour for three days.

Remarks.—The termination of this case is very satisfactory, considering the age of the patient and the quantity of acid swallowed. The particular point I wish to bring before the profession, is the difficulty of getting all the carbolic acid out of the stomach. The washing smelled of the acid until the ninth time; it seemed nearly free then, and then it was that the patient first showed any signs of consciousness; and in half an hour afterwards he was fully conscious. The difficulty of removing the acid will be understood when it is remembered that it does not easily mix with water, and is much heavier than it, and so will lie at the lowest part of the stomach, and probably escape the tube; under these circumstances, the only trustworthy guide will be the smell of the water when pumped out. This case leads me to draw the following conclusions; that, for carbolic acid, though there be enough of the poison absorbed from the stomach into the blood to cause profound unconsciousness and collapse, yet, if the stomach be thoroughly washed out, the patient will revive and probably recover. I had the assistance and advice in the management of the case, of the following gentlemen: Messrs. Carter, Nicholls, Waller, and Wheeler, members of the medical staff of the Infirmary. William Bodkin, M.D., Chelmsford.

OBSTETRIC MEMORANDA.

A CASE OF SPONTANEOUS DELIVERY, WITH ARM AND HEAD-PRESENTATION.

Mrs. M.'s sixth labour began on Sunday evening, December 12th, when the waters broke. Her husband immediately sent for the midwife, but some delay occurred, owing to her being engaged on another case. When she came she found the os of the size of a sixpence, and projecting from it were about two inches of funis. There was no perceptible pulsation in the cord, and the midwife could not discover the presentation. The case was temporarily left, and visited during the Monday. In the evening of that day the midwife sent for Mr. Appleford, who, on arrival, found the left arm projecting from the vagina. The funis was down, flabby, and pulseless, and the face was low down in the pelvis. The pains were prolonged and very severe; the woman looked extremely anxious, and felt in fear of death. Progress was made with each succeeding pain, and in a few minutes from the time Mr. Appleford entered the room the child was born, with the left hand, face, and funis, struggling for first place. The child was of course born dead, but there were no signs of decomposition. The placenta was expelled almost immediately, and the woman has since done well. All her previous labours have been normal, and nothing unusual has occurred during pregnancy.

Dr. Herman visited the patient on the next day, and made the following measurements. The child weighed seven pounds, and measured nineteen and half inches in length from vertex to heels. The pelvis of the mother measured between the anterior superior iliac spines eight and a half inches, iliac crests eleven inches, external conjugate seven inches.

This case is interesting, as showing the large margin that exists between what the natural forces ordinarily effect in labour, and what they are capable of effecting under difficulty. Although the measurements are not so complete as they might have been, they are enough to show that the child was of average size, and the pelvis certainly of not more than average dimensions, and yet the child was born without assistance in the very unfavourable position above described.

S. H. Appleford, L.R.C.P., M.R.C.S., and
G. Ernest Herman, M.B.Lond., F.R.C.P.

COMPLICATED LABOUR: PROLAPSE OF UMBILICAL CORD.

The following case is of more than usual interest, showing complications seldom met with. Mrs. W. sent for me at an early hour in the morning, and I found a head-presentation, through an os very little dilated. The vagina was dry, and the pains were neither frequent nor regular. I ordered a dose of castor-oil, and told the nurse to send when she found her patient becoming worse. This took place in four hours; and then I found the head not entering the brim, but becoming crushed out, and a fold of the umbilical cord before it. Owing to the *succedaneum*, the exact state of presentation was difficult to discover. The cord was protruding, and the life of the child was in imminent peril; therefore, I at once introduced my right hand, ascertained how the head lay, and put on Simpson's long forceps; one blade over the left frontal bone, the other over the corresponding occiput. After bringing down the forehead, and turning it into the proper axis, the birth was easily accomplished. The child, although in a dangerous state at birth, lived.

Irrespectively of the complications in this case, I have always found prolapse of the funis best treated by the forceps. Statistics show how large is the infant mortality in these cases; and this simply arises from allowing the cord to be crushed. The idea of returning the prolapsed cord into its supposed former position, as recommended by some obstetric writers, is an absurdity, or would require forefingers at least a foot long. In a complicated case like this, great care is required in adjusting the forceps; but, with one blade on the frontal bone well up, and the other on the opposing occiput, with caution, there need be little difficulty. James Brydon, M.D., Hawick.

TWIN-GESTATION: SECOND TWIN BORN SEVEN WEEKS AFTER FIRST.

At 9.30 A.M., on October 21st, I received an urgent call "to go and see Mrs. G.'s baby," the messenger saying she feared it would die ere I arrived. I soon reached the house, and found Mrs. G. had been unexpectedly delivered of a child on October 18th by a midwife. The child was a premature infant of about seven months, well formed, but small, and so weakly that I concluded it would not live through the day; I gave instructions as to nursing, etc., but it died the same afternoon at 4 P.M. I did not examine the mother. On the following Monday, October 26th, the husband requested me to visit his wife, as she was not doing well. He stated she had much pain, which the midwife said was "only wind." I found the woman doing apparently well, but the "stomach" (to use the nurse's phrase) "had not gone down." On external examination, I distinctly felt the movement of a fœtus *in utero;* and, on auscultation, could distinguish the fœtal heart-sounds.

Inquiring of the nurse (the midwife had given up the case as convalescent), I ascertained the patient had, on Sunday, October 18th, been suddenly seized with labour-pains at 10 A.M., and the child was born about 3 P.M.; the after-birth came away easily, and all went well with the exception of "curious moving and pain," which the midwife said was "only wind."

I told the husband and patient that there was another child, and, judging from the appearance of the one that had died, this would not arrive at full time for about six weeks. The patient did well, came downstairs at the expiration of a fortnight, and was able to do light house-work.

On November 19th, I was summoned about 8 P.M. Labour was just commencing. The os not having dilated, I returned home, and called later, when I was able to diagnose a breech-presentation. The pains were feeble, but, seeing no cause to interfere, I waited till about 2.45, when the breech and body were delivered. All pains then ceased, and the head was firmly impacted in the pelvis. I feared the child was dead, as the heart-beat could not be felt, although I had distinctly felt fœtal movements just before the rupture of the membranes, about 2 A.M. Ergot and brandy having been given, and external pressure applied without success, I delivered the head by traction (forcible), and endeavoured, by artificial respiration, etc., to restore the fœtus, which was a fine female of full time, but without avail. The after-birth came away easily, and the mother made rapid recovery, being able to walk, as I afterwards heard, a distance of four miles, in less than a month.

I have ventured to report this case, believing it to be of interest for the following reasons: 1, the early delivery of the first fœtus with a separate after-birth; 2, the presence of the second being overlooked by the midwife; 3, its retention *in utero* thirty-five days after the birth of the first; and 4, the convalescence of the mother in the interval between the two births.

James C. Pincott, M.R.C.S.E., etc., Romford.

CLINICAL MEMORANDA.

INFECTIOUS SORE-THROAT.

I read with pleasure Dr. Mantle's article on infectious sore throat in the British Medical Journal of 21st November. I have had several cases under my charge last year, presenting symptoms similar to those described. I believe that all my cases originated from exposure to smells, from bad sanitary arrangements, and I looked on the disease as closely allied to typhoid fever, and I thought that some of the cases were instances of abortive typhoid. I believed the sore-throat was non-infectious. One case was that of a servant-girl, who told me that two other girls had left the same service during the previous three months suffering from the

same disease. The cause of the sore-throat, etc., from which these patients suffered was no doubt smells, which reached the room in which they slept, through an iron pipe that communicated with a drain leading into the town sewage-pipes.

My object in writing this is to draw attention to another form of sore-throat, common at least in some localities, very infectious, not complicated with rheumatic symptoms, and the origin of which, so far as I am aware, is not traceable to any of the ordinary causes of typhoid fever. During January last, I had several cases of this disease under my care. The first patient I saw was a child aged 3 years, who had been ailing for two days, when serious symptoms set in. On my first visit I found the temperature 103.6, the pulse small, quick, difficult to count, 130; the tonsils swollen and coated with a whitish deposit, not so thick or tough as the false membrane of diphtheria. The child improved, and was fairly well in three weeks. The treatment I adopted was to paint the throat with astringent solutions, and to give, internally, sulphate of quinine and aconite. The temperature in all the cases lowered rapidly after taking quinine and aconite. In one patient, the inflammation spread along the Eustachian tubes, and gave rise to intense earache. In none of the cases was there any albuminuria, or any symptoms of rheumatism.

Were these cases of mild diphtheria? I had the misfortune to suffer from a slight attack, and I think the symptoms, although resembling those of diphtheria, were not really those of that disease.

The following evidence is interesting, as it demonstrates beyond a doubt that in these cases the infection (micro-organism or whatever it may be) is given off from the patient and floats about in the atmosphere.

One patient, a mild case, told me that during the time he suffered from this complaint, persons living in the same house knew whether or not he had been in a room, and approximately for how long, by simply smelling or breathing the tainted atmosphere for a few seconds. This statement I doubted until I received convincing proof that such was the case. After this patient had breathed the air in a room of about 18 × 12 × 11 feet for fifteen minutes, the air was so tainted, that the persons referred to felt it distinctly disagreeable one hour after his leaving the room.

JAMES CRAIG, M.B., Llandudno.

VACCINATION.

DURING March, April, and May, 1883, there was an epidemic of small-pox at Hingoli, Deccan. I was in medical charge at the time. The larger number of patients were from among the non-official population.

The following table shows how the cases and deaths were distributed.

	Confluent.	Semi-confluent.	Ordinary.	Modified.	Mild.	Mixed.	Total. Admitted.	Total. Died.
Having marks of previous small-pox, but none of vaccination	1	—	—	—	—	—	1	1
Having marks of vaccination	—	—	—	16	4	1	21	—
Having no marks of vaccination	15	8	85	25	20	—	153	7
TOTAL	16	8	85	41	24	1	175	8

Nearly all of the patients under the third classification were from the non-official classes, over whom, in the Nizam's dominions, there is but little control in the matter of vaccination, and of whom numbers were attacked with the disease who were not brought to the cantonment-hospital for treatment; while, of the official classes, who are supposed to be vaccinated, the whole of those attacked are included in the table, and almost all are under the second classification.

In fact, the disease ran riot and appeared in its worse forms among the unvaccinated, but was held in check by, and, when it did appear, was comparatively harmless among, the vaccinated community.

J. F. SARGENT, Surgeon-Major I.M.D., Bedford.

LONDON HOSPITAL, WHITECHAPEL.—On the occasion of the opening for inspection of the new nursing-home adjoining this institution, the matron, Miss Eva Lückes, was presented by the 150 nurses of that institution with a writing-table, "in grateful recognition of the care and kindness" they had experienced at her hands.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ST. VINCENT'S HOSPITAL, SYDNEY.

COMPOUND COMMINUTED FRACTURE OF THE SKULL: ABSCESS ON THE DURA MATER: HERNIA CEREBRI: ABSCESS IN THE BRAIN: OPERATION: RECOVERY.[1]

(Under the care of Dr. W. ODILLO MAHER, Surgeon to the Hospital.)

THE notes of the case, prior to admission, have been kindly supplied by Dr. Lovell. He reports as follows.

On March 3rd, Florence M., aged 4½ years, fell off a balcony on to a cemented yard, about twelve feet; she was unconscious when taken up. When seen by me two hours after the accident, she was suffering from concussion. She vomited blood shortly after the accident, and there was some bleeding from the nose. Below the right frontal eminence was a lacerated wound about three-quarters of an inch long; the eyelids were swollen, and there was considerable bruising of surrounding parts; brain-substance was present between the gaping edges of the fractured frontal bone. As far as could be ascertained, without enlarging the wound, the fracture of the skull was of a very limited extent. The wound was dressed with iodoform and absorbent wool; a mercurial purge was ordered, the head shaved, and an ice-bag applied. During the night, about six hours after the accident, convulsions chiefly left-sided, came on; these passed off towards morning, and she remained in a semiconscious condition, occasionally showing symptoms of irritation, for three days. The wound discharged some offensive matter for a few days, then granulated and healed. Along with this the general condition improved, and at the end of a week it looked as though she were going to recover without further trouble. Fourteen days after the accident vomiting came on, and was followed by convulsions. The site of the injury did not show any evidence of trouble within, but there was high temperature, followed by remissions. This condition continued for some time, and, believing that there was matter forming below the scar, I advised an operation, or her removal to hospital for treatment.

The child, the day after her admission, was thin, pale, and weak, lying on her left side, her arms flexed, her back arched forwards, and her knees bent. She was very irritable and restless, complaining much of pain in the head, principally in the occipital region, and crying peevishly when touched or spoken to. In the scar, which was about three-quarters of an inch long, was a small opening, from which came a small quantity of thin purulent discharge. On passing a probe into this opening, bare bone could be distinctly felt. The child was placed under anæsthetic, a free crucial incision was made over the seat of injury, and a triangular piece of loose depressed dead bone removed, thus allowing fully half a drachm of thick fœtid pua to escape from the surface of the dura mater. The dura mater was thickened, but apparently uninjured, and the pulsations of the brain could be distinctly felt. The surface of the dura mater and the flaps were now thoroughly washed with a solution of carbolic acid (1 in 20), and the wound was dressed antiseptically with carbolic gauze.

The child remained in an irritable condition, with rapid pulse, and a temperature above 99°, though the wound looked healthy; and, on May 15th, there was a hernia cerebri, about the size of a pigeon's egg, covered with thick greenish yellow lymph, and pulsating freely; temperature, 99.2°; pulse, 115.

Upon enlarging the wound, and dissecting up the flaps, a piece of dead depressed impacted bone was with some difficulty removed. The flaps were brought together over the hernia with silver sutures, and an India-rubber drainage-tube inserted between the skin and the hernia. The operation was performed under the spray, and the wound dressed with carbolic gauze. The child improved after this operation.

On May 17th, antiseptic dressings were discontinued on account of a fœtid discharge from the wound, which, on the following day, was more copious, though the hernial protrusion was less marked.

On May 20th, the sutures and drainage-tube were removed; the flaps were adherent at parts, granulating at others. From this date her progress was most satisfactory. Her memory was excellent, and she sang songs she used to sing before the accident.

[1] A Report of this Case was recently read before the Medical Section of the Royal Society of New South Wales.

On May 16th, the skin had united over the hernia cerebri, which had now disappeared; the pulsations of the brain could be distinctly felt, but the discharge was slight.

On June 5th, though the child was apparently quite well, two small openings remained, from which there was occasionally a rather copious flow of fœtid pus.

She was discharged on June 22nd, and on July 9th was, with the exception of a discharge from the wound, quite well.

On August 1st, the patient was suddenly seized with convulsions, which, when the patient was seen half an hour later, were rhythmical, and confined to the muscles of the left side of the face, the lids of both eyes, the flexors of the left arm, the flexors and pronators of the left forearm, and the internal rotators of the left thigh. The convulsions of the face were more marked than those of the upper extremity, and those of the upper extremity were more marked than those of the lower. The eyes were rolled up, and the pupils contracted to light. The mother stated that pus had flowed freely from the opening during the past few days. She was immediately re-admitted to the hospital, and Dr. Fairfax Ross administered an anæsthetic. Whilst the anæsthetic was being administered, some pus, smelling strongly of sulphuretted hydrogen, flowed from the small opening in the wound, and it was concluded that this came from an abscess in the brain; although the brain could be distinctly felt pulsating, it seemed probable that there was an abscess in the frontal lobe, which communicated through a sinus with the external opening. Even a fine probe passed through the external opening met with resistance in every direction, until raised perpendicular to the vault of the cranium, when it passed almost of its own weight, downwards and backwards, for about 1¼ inches, without meeting with any resistance. On withdrawing the probe, it was black for about half an inch from the point, the colour being due to the formation of sulphide of silver when the silver probe came into contact with the sulphuretted hydrogen in the abscess-cavity. Feeling confident that the lower end of the probe had been in the abscess-cavity, Mr. Maher passed a grooved silver director in the same direction, having to use some force to get it through the opening in the dura mater. When it had passed in about an inch, pus, smelling strongly of sulphuretted hydrogen, ran up the groove, staining the silver black. The director passed on for about half an inch without meeting with any resistance. A narrow-bladed knife was passed along the director into the brain for nearly an inch and a half, when thin yellow pus came with such force, that for some time the knife could not be removed, lest, the pus escaping too rapidly, a hæmorrhage should result, owing to the too sudden diminution of intracranial pressure. When the force with which the pus came diminished, the knife was withdrawn, making a cut about a quarter of an inch long in the cicatrix. Pus continued to flow so freely, that hæmorrhage was still feared; and, to check the flow of pus, the child's head was turned to the opposite side until a siphon syringe, containing a warm solution of carbolic acid (1 in 40) was prepared. Then the nozzle of the syringe being passed into the abscess-cavity, the solution was allowed to flow gently. At first only pus came, but by degrees the quantity of pus became less and less, and, finally, the carbolic solution returned perfectly clear. To explore the size of the abscess-cavity, I allowed a probe to pass into it. It passed downwards, backwards, and inwards for at least two and a half inches before meeting with any resistance. The resisting substance had a soft feel, and the point of the probe could not have been far from the posterior part of the cribriform plate of the ethmoid. The quantity of pus was variously estimated by those present at from one and a half to two ounces. An India-rubber drainage-tube, about one and a half inches in length, was introduced, and the carbolic solution, filling the abscess-cavity, could be seen to rise and fall in the tube with each pulsation of the brain. The wound was dressed with carbolic gauze. The patient had, after the operation, hemiplegia of the left side. Six hours later, she had regained consciousness, but had partial hemiplegia of the left side; but, on the morning after operation, she had regained complete power over the left side. The wound was redressed under an anæsthetic, the abscess-cavity being gently washed out by means of a siphon syringe, with a warm solution of carbolic acid (1 in 40). A Greenhalgh's India-rubber stem pessary, from the end of which about an inch was cut off, was used as a drainage-tube. The discharge was slight, and smelt sweet. Twenty grains of bromide of potassium were ordered to be taken every fourth hour.

On August 3rd, the wound was redressed, but the drainage-tube was not removed; a warm solution of carbolic acid (1 in 40) was gently syringed down it by means of a siphon syringe; the sides of the abscess-cavity appeared closed over the end of the drainage-tube; the discharge was slight; there was no hemiplegia.

On August 4th, the wound was redressed, and some iodoform was dusted down the drainage-tube; the wound was sweet. The patient was doing well, appetite was good, and the tongue clean. The dressings were renewed on August 5th, 8th, and 9th; on the last date, the drainage-tube was removed for the first time since the day after the operation, and shortened. On looking down the canal left by the drainage-tube, the brain could be seen pulsating along the sides of the canal, which had a tendency to fall together.

On August 15th, when the drainage-tube was removed, the side of the canal in which it was at once fell together; the patient was doing well.

On August 21st, the wound was healed, and the patient, who was apparently quite well, was allowed to get up. Since the abscess had been opened, the child had been kept lying on her right side, with the wound in the most dependent position. The pulsations of the brain could be seen and felt, and they became very marked whenever the child grew excited. The temperature, since the abscess had been opened, had never been more than 99.6° F., and the pulse had varied between 100 and 150.

September 3rd. The patient was discharged perfectly sane and well.

October 13th. The child remained in perfect health. Her sister assured Mr. Maher that she was not altered in disposition, and he was himself unable to detect any defect, either mental or physical. Mr. Maher expresses his thanks to his colleagues for their able and valuable assistance.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 12TH, 1886.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

On the Increase in Number of White Corpuscles in the Blood in Inflammation, especially in those Cases accompanied by Suppuration. By T. P. GOSTLING, M.R.C.S., L.R.C.P.—Observations of Virchow, Nasse, and Malassez on the increase in number of white corpuscles in the blood in different inflammatory conditions were alluded to. The estimations recorded in this paper by the author had been made with a Gowers's hæmacytometer, and the results were given in percentage numbers of red, and in relative numbers of white corpuscles, the normal number being taken as 1 white to 333 red corpuscles, as stated by Dr. Gowers. Estimations had been made in the following cases: Case 1, iliac abscess; Case 2, pelvic cellulitis and probably abscess; Case 3, suppurating white leg; Case 4, suppurating tonsillitis; Cases 5 and 6, white swelling treated by the actual cautery; Cases 7, 8, 9, and 10, empyema; Cases 11, 12, and 13, phthisis; Cases 14 and 15, serous pleurisy; Case 16, lobar pneumonia; Cases 17 and 18, typhoid fever; Case 19, acute rheumatism. In the iliac abscess, Case 1, ten observations were made on separate days before the abscess was opened. The first half of these estimations showed the relative average number of white to red corpuscles to be 1 to 160; the second half 1 to 101. The abscess was then opened, and the proportion immediately fell to 1 to 383; after which there was a slight increase and then a steady decrease to the normal proportion, as was shown by the following averages: 1 to 203, 1 to 223, 1 to 252, and 1 to 358. In Case 2, which was one of pelvic cellulitis and probably abscess, there was found, for a long period, a large increase in the number of the white blood-corpuscles. As was shown by the averages given below, these covered a period of eighty-four days, and each average was made from five estimations: 1 to 148, 1 to 172, 1 to 150, 1 to 158, 1 to 167. During the above period, grave symptoms existed; but on May 15th, these began to improve, and at once the relative number of white corpuscles decreased to 1 to 250, and on May 19th reached the proportion of 1 to 366. It was thought that an abscess in this case had discharged by the bowel, and, if so, the sudden fall would correspond with that seen in Case 1. Analogous conditions were found in the other cases. The new series of observations were from cases of phthisis (Nos. 11 and 12), in both of which cavities secreting pus existed in the lung. Cases of serous pleurisy, acute rheumatism, typhoid fever, pneumonia, and cauterisation, were also considered with reference to the proportion of white corpuscles. The following conclusions were drawn. 1. White corpuscles are increased in number in suppurative inflammations, especially when accompanied by tension. 2. They are slightly increased in parenchymatous inflammations. 3. They are not increased in inflammations accompanied by serous or sero-fibrinous exudation.—The PRESIDENT congratulated Mr. Gostling on having accomplished a work of such great labour and accurate observation. The physical

demonstration of the changes of the blood in inflammation had hitherto been very incomplete.—Dr. SYDNEY RINGER remarked that Mr. Gostling seemed to him to have demonstrated the increase of white corpuscles in the blood in inflammation; and of the origin of this excess there were two chief hypotheses—that they were formed in the blood itself, or that they were absorbed from the suppurating parts. He agreed with Mr. Gostling in inclining to the second. If that were so, it led almost of necessity to the conclusion that the corpuscles multiplied after escaping from the blood-vessels.—Dr. O'CONNOR inquired if there was any diminution in the normal number of the red corpuscles.—Dr. GEORGE THIN said that there could be no doubt that the white corpuscles, after leaving the vessels, did multiply. In his own examinations of the cornea of rabbits, published about ten years ago, he had fixed them with osmic acid, and had observed them in all the stages of subdivision and multiplication. The question whether the white corpuscles were ever formed from the tissues was one of deep interest and keen controversy. He did not wish to pretend to decide it, but he thought that certainly no decisive evidence had been brought forward to show that pus originated from the tissues.—Mr. VICTOR HORSLEY thought that Mr. Gostling had certainly demonstrated the important point that increase of white corpuscles was connected with tension. If the question of their origin at a particular inflamed part were at issue, the first thing to do would be to compare the blood of the artery supplying the part with the blood of the vein coming from it. There was no support offered by the facts of Mr. Gostling's paper to the theory that pus originated from fixed tissues, and that was in accordance with Mr. Dowdeswell's conclusions.—Dr. ANGEL MONEY had made some observations on the blood in phthisis and empyema, and quite agreed with the results of Mr. Gostling's most laborious researches. He was rather surprised that Mr. Horsley should seem to overlook the possible reabsorption of white corpuscles by the lymphatics.—Dr. S. COUPLAND felt much indebted to Mr. Gostling for his facts, but remarked that he had not made the source of the increase of white corpuscles quite clear, and that had been felt by Cohnheim to be the most difficult point.—Dr. DOUGLAS POWELL inquired how early in the case of iliac abscess Mr. Gostling had begun his observations. He said that it was fifteen days before the abscess had been opened; but was it before any collection of pus could be proved to exist? That was an important point, because tension was an important factor in the reabsorption of pus. Clinical experience did not find such reabsorption common.—Mr. HOWARD MARSH considered that, in surgical cases, abscesses were very commonly absorbed, and sometimes very quickly.—M. BRYANT agreed on this point of surgical experience; he had certainly seen pints of pus absorbed.—Dr. RINGER suggested that in these cases the pus-cells of the abscesses had degenerated and changed their character before absorption; and to this Mr. H. MARSH agreed, and Dr. D. POWELL intimated that it was not to such cases that he was referring.—Mr. GOSTLING, in reply to Dr. O'Connor, had only to refer to the very numerous tables of his observations which were hung on the walls, and showed the number of red corpuscles as very nearly normal—if, indeed, any exact normal standard could be attained. He had found a very marked increase in the white corpuscles before any distinct evidence of abscess-formation could be obtained, both in the case of iliac abscess he had observed, and also in the two cases of white swelling before they had been treated by cauterisation.

On a Case of Removal of a Tumour from the Roots of the Last Cervical and First Dorsal Nerves. By J. MITCHELL BRUCE, M.D., F.R.C.P., and EDWARD BELLAMY, F.R.C.S.—The object in bringing this case before the Society was that it might possibly be of value in demonstrating the spinal origin of the ulnar nerve, as far as regarded its relation with the brachial plexus. Mrs. W., a lady aged 54, and very stout, consulted Dr. Bruce about two years ago, with acute pain in the right arm, rapidly increasing; and with paralysis of the muscles supplied by the ulnar nerve and hyperæsthesia of the integument supplied by its cutaneous branches. The symptoms became so serious that entire loss of power of the arm ensued, with serious affection of her health. About eight months before the operation, a tumour was noticed about the middle of the lower portion of the posterior triangle, cropping up just above the collar-bone, steadily increasing in size, firm, incompressible, almost immovable, and giving great pain on manipulation. In November, 1884, it was therefore determined to cut down on the tumour, in order to ascertain its nature. An incision was made, such as would be adopted for ligature of the subclavian in its third stage; but, owing to the great depth and accumulation of fat, a vertical incision along the posterior border of the sterno-mastoid was added, and the growth readily reached. The great blood-vessels were carefully held out of the way, and the brachial plexus exposed, the cords of which were "frayed" out over the tumour. After some careful dissection, a growth, springing apparently from the under surface of the large cervical and first dorsal nerves, was come upon just at their emergence from the intervertebral foramina, passing beneath the subclavian artery, and jutting into the superior aperture of the thorax. No nerve-trunk seemed to pass through it, and it was readily enucleated. A full account of the tumour was given in the paper; it was of a sarcomatous type. Almost immediately after its removal, the patient lost the peculiar lancinating pain, but she had complete paralysis of the arm, owing to the free handling of the cords of the plexus during the operation. After the parts had thoroughly healed, the constant current was applied, increasing to fifty Leclanché's cells, and by degrees perfect restoration of function was effected. In February, 1885, however, the patient was attacked with right hemiplegia, and died in the following October.—The PRESIDENT congratulated Mr. Bellamy on the success of his surgical treatment, and inquired if any *post mortem* examination had been made to confirm the suggestions in the paper that the hemiplegia was due to embolic plugging of an artery, and that the immediate cause of death was large hæmorrhage into the medulla.—Mr. BELLAMY replied that no *post mortem* examination had been made.—Mr. BRYANT detailed his experience of a case almost exactly parallel to the one under discussion, and which at the time he had thought unique, as he could find nothing like it on record. A lady had had pain for five years in her left arm, extending over the outer surface and the dorsal aspect of the forearm: there was wasting of the flexors of the forearm. The possibilities of a supernumerary rib or an exostosis were considered. Two months later, a hard immovable tumour just above the clavicle became clearly perceptible; it was extremely tender; and, in consultation with Mr. George Pollock, an exploratory operation was advised. The incision made was the same as in Mr. Bellamy's case, and a tumour was found sessile on the upper trunk of the brachial plexus on its posterior aspect. The sheath of the nerve was divided, and the tumour readily enucleated from a rough capsule. The pain was at once changed in character, but did not disappear for another two months, and the power was gradually recovered. Dr. Goodhart made a microscopic examination of the tumour, and at first thought it a blood-clot, but came afterwards to consider it as probably a soft sarcoma in which were several hæmorrhages.—Dr. BEEVOR thought these cases very interesting from a physiological and medical point of view, as helping to illustrate the origin of the nervous supply to the muscles of the arm. He should be particularly interested to learn whether any of the muscles of the upper arm were affected by these tumours.—Dr. O'CONNOR related a case of acute pain in the arm, which was traced to a spiculum of bone projecting from a vertebra, and relieved completely after Mr. Godlee had removed the spiculum. It was considered probable that a lesser pain in the other arm was due to a small growth on the other side of the spinal column.—Mr. W. H. H. JESSOP inquired if there were any mydriasis observed in these cases, as Ferrier had succeeded in tracing one point of its nervous origin to the second dorsal nerve both in monkeys and men; to the first dorsal nerve in the dog. Of the two parts composing the mydriatic nerve, one passed in front of the subclavian, and one behind and above, then they ran upwards together.—Mr. VICTOR HORSLEY asked what had been the method of progress of the paralysis and anæsthesia before the operation; after the operation, any conditions must necessarily have been complicated by the handling of the brachial plexus.—Dr. ANGEL MONEY referred to a case in which Dr. Hughlings Jackson had observed wasting of the muscles supplied by the ulnar nerve, along with mydriasis.—Mr. STANLEY BOYD, who had been present at Mr. Bellamy's operation, remarked that the deep position of the tumour rendered its handling difficult, and that there was undoubted proof that the slight squeezing of the nerve-trunks by forceps which had been necessary, had produced some paralysis, and should serve as a lesson for their very gentle handling.—Mr. BELLAMY, in reply, said he was very sorry that the absence of Dr. Mitchell Bruce had unfortunately left him unable to answer the questions which had been addressed to him. He had seen hardly anything of the case except at the time of operation.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 8TH, 1886.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Case of Acute Prostatitis, with Discharge of Hyaline Cylinders resembling Renal Cylinders.—Sir ANDREW CLARK read particulars of this case. A medical man, in average health, was suddenly seized with pains in the limbs and loins; there was frequent desire to pass urine, and scalding when it passed, with pain at the anterior ex-

tremity of the urethra. The urine rapidly became bloody, accompanied by much dysuria and tenesmus. No evidence of disease, other than that in connection with the urinary organs, could be discovered. The urine, examined by the naked eye immediately after its discharge, exhibited numerous minute thread-like fragments. Under the microscope, they were seen to consist of hyaline cylinders, in several instances covered by patches of leucocytes. On standing, the urine deposited a mixed sediment in a thin even layer. The specific gravity of the urine was 1022, its reaction acid, and it was slightly albuminous. The sediment contained uric acid crystals, oxalate of lime, blood-discs, patches of epithelium from the bladder, leucocytes, flask-shaped hyaline bodies, and hyaline cylinders. The crystalline constituents appeared to have been formed in the urine subsequent to its discharge. On examination *per rectum*, the prostate was found to be much enlarged, and very tender to the touch. The patient was soon afterwards seen by Sir James Paget, and the symptoms of the local disorder had become aggravated. By degrees the uric acid, oxalate of lime, and larger hyaline casts disappeared from the urine. A small quantity of albumen, however, remained, and on standing, the sediment showed much mucus, and small hyaline cylinders with flask-shaped hyaline bodies. After eight days' illness, at the close of micturition there was discharged a pultaceous mass of mixed mucus and phosphates, and this discharge continued for nearly a fortnight in steadily diminishing quantities. The patient entirely recovered after being ill a little more than a month. During the last six years, the only symptoms that had arisen had been such as he himself ascribed to imperfectly developed gout. The important point in these cases was the discharge through the urine of hyaline moulds of the vesicles and smaller ducts of the prostate. Before finding the connection between the cylinders and the flask-shaped bodies, Sir A. Clark was inclined to think the latter originated in the kidney; but further study of the case, and two others similar to it, and examination of the prostate after death, had convinced him of their prostatic origin. These cases with prostate casts in the urine might be only curiosities of medical experience, but since in none of the standard works on urinary affections, nor in any monographs dealing with diseases of the prostate, could any reference be found to the discharge of hyaline cylinders in prostatitis, and without careful examination they might very easily be mistaken for cylinders originating in the kidney, he had thought the case was of sufficient importance to bring it before the notice of this Society.—The PRESIDENT said it was pleasing to see a physician taking an interest in a case which was usually considered as belonging rather to surgical diseases. One could recognise by the eye these bodies in prostatitis, but there was no microscopical evidence that they were casts of the prostatic ducts themselves. He would like to ask Sir Andrew Clark in what way one could be saved from the fallacy of mistaking these casts for renal casts.—Dr. GREENFIELD, of Edinburgh, said it was his misfortune to have arrived too late to hear the whole of Sir Andrew Clark's paper, and he felt he must apologise for venturing to speak on the subject, but he thought he could raise some parallel cases. He had seen lately four cases with concretions exactly like those found in prostatitis, concretions which resembled corpora amylacea. The cases consisted of two girls, a young woman, and a boy aged 7. In the boy, these bodies appeared in the urine intermittently. In the females, they also appeared from time to time. In one case he had found after death a large number of these bodies, in the kidney. They varied much in character; some were small and hyaline, with fine lamination, some gave a deep stain with carmine, some with magenta, and some with iodine. The subject was a comparatively new one to him. He had not met with these cases often. He merely brought these cases forward as presenting a condition worthy of being considered side by side with prostatic concretions in the urine. He had found these bodies recently in two cases of cancer. He thought they might occur widely in many pathological conditions.—Dr. GLOVER asked whether Sir A. Clark's patient had a well-defined attack of gout?—Sir ANDREW CLARK, in reply, said no, but the patient considered himself gouty. He presented symptoms of a varying kind, which he (Sir Andrew Clark) thought could only be assigned to the circulation of acid in the blood. The question which his paper suggested was, by what means could one distinguish hyaline casts or cylinders as coming from the prostate gland or from the kidney? He thought the case, upon the first examination, to be one of acute nephritis. The cylinders looked exactly like those occurring in acute renal congestion, but upon a second investigation he found some little flask-like bodies attached to the hyaline cylinders. The prostate was troubled. The urine was healthy, *plus* a little albumen. He felt it was more a case of prostatic disease. He had not published the case at the time (some years ago), as he was anxious to discover if any other symptoms showed themselves; nothing had, however, arisen. In other cases he had seen symptoms of a similar character. To Mr. Bryant's question his answer was, that one could not discover the nature of the cylinders from their aspect; one could not even be sure if the prostate were their seat of origin, unless these hyaline moulds were found associated with the hyaline cylinders. In women's urine, he had always found starch-like bodies. Whether it was that they used violet powder, or some such substance, but somehow or other the starch-like bodies were always there.—Dr. GREENFIELD said he should like to state, as he thought he had not made it sufficiently plain, that the cases he had mentioned were those of Bright's disease.

Large Cervical Spina Bifida undergoing Spontaneous Cure.—Mr. CLUTTON read notes of this case. The patient was the younger brother of a case in which he had successfully treated a lumbar spina bifida by the glycero-iodine injection, and the particulars of which were reported to the Society in 1882. Both cases were shown as living specimens last November. The mother had had ten children, of which the ninth and tenth were affected as above mentioned. The latter was born in 1885 with a spina bifida in the cervical region of the spine, of which the size and position were demonstrated by means of a photograph. It was six inches and a half in diameter, and rather cuneiform in shape, with the apex directed upwards. The coverings were thin, but completely covered with skin. It could be reduced in size by pressure, and filled again when the child cried. A considerable aperture could be felt in the vertebral arches. It was thought to be a simple running goître, from the fact that there was a perfect cutaneous covering without any ulceration, median furrow, or central depression, that it was translucent in every part of its surface, and that there were no paralytic symptoms. When five weeks old, the cyst was found to be much smaller, and its coverings quite soft and flaccid. No treatment of any kind had been adopted, and yet the communication with the interior of the vertebral canal had become occluded. From that time till December, it diminished in size, when the child died, from causes unconnected with the spina bifida.—Mr. SHATTOCK showed the specimen, which was obtained from the *post mortem* examination. The posterior part of the cord was involved with protrusion. The chief part of the latter was constituted by a closed sac of fibrous tissue found with the posterior wall of the sac, behind the protruded portion of the spinal cord.—Mr. GOLDING BIRD said he should like to ask of what the child died, as it seemed to him the photography was as fatal as the operation.—Mr. R. W. PARKER thought this was not a straightforward case of spina bifida. In the report of the committee last year appointed to investigate spina bifida, there were cases of a precisely similar kind. Mr. Thomas Smith and Mr. Holmes had drawn similar conclusions to himself. He thought the attempt of spontaneous cure was not so successful as when injection had been adopted. Many recoveries had followed treatment, and he thought, therefore, that treatment was more favourable than spontaneous recovery.—Mr. J. H. MORGAN asked what changes did the tumour undergo? It was said that at a certain period the tumour began to shrink. Were the changes due to healthy processes, or to inflammatory changes? He had assisted Mr. Holmes at an operation in a case similar to the one under discussion. The tumour was situated very high in the dorsal region. The child was a few weeks old. A ligature was placed round the tumour, which was removed. The state of the patient became very critical, and the child died in a few hours.—Mr. CLUTTON in reply, said the child died from causes unconnected with the cyst, from diphtheria, or some intercurrent affection. Mr. Parker had said it was not a pure case of spina bifida; it might be a meningocele or myelocele; but these cases of spina bifida varied; they sometimes contained the cord, and sometimes an expansion of the cord. Had the case survived, he believed the tumour would have become quite small, and undergone spontaneous cure. It might have been laid open without endangering the life of the child. No difficulty presented itself in the diagnosis. There was tremendous impulse on coughing; the tumour had become considerably smaller, and finally it gave no impulse when the child cried.

Multiple Cartilaginous Tumours.—Mr. SYMPSON (Lincoln) showed the patient, a boy, aged 7 years, and described the case. There were firm nodulated growths occupying the tendons of the latissimi dorsi and trapezii muscles, the right deltoid, and right sterno-mastoid muscles. In March, 1885, when first seen by Mr. Sympson, he had pains at his right shoulder and scapula, and could not separate his arm from his side. The tumours in the right arm, and posterior margins of each axilla, were then elastic and larger than now. He had fallen six months before, and hurt the right shoulder, shortly after which the first swelling appeared over the scapula. The boy

had always been healthy ; his parents and two sisters were also living and healthy. He was treated with iodide of potash and ammonio-citrate of iron, and was now free from pain, and had less difficulty in moving his arms. All the tumours were smaller and much more dense than when first observed.—Mr. HUTCHINSON, who spoke for a small committee which had examined the case, thought it might be called one of myositis ossificans ; the condition chiefly affected the latissimus dorsi and slightly the trapezius. It affected the muscles, for the most part, in lumpy plates. The growths were very lumpy, like walnuts ; they were usually in long spinous processes. They might easily have been mistaken for bony plates, but were not simply ossifications of the muscles. There was no proof of abnormal ossification anywhere independent of that at the insertion of the muscles. In the boy's loin was a saddle of bone, so that he could not bend his back. The latissimi dorsi were quite united to the ribs. In the neck, the bone extended to the occiput. There was no ossification in any anterior muscle of the trunk. The right humerus was fixed, possibly by the ossification of muscles inserted into the armpit. There was still a little movement of the left shoulder.—The PRESIDENT remarked that the matter poured out at the first, where now were the lumps of bone, was then quite soft. The thanks of the members were due to Mr. Sympson for his trouble in bringing the case before the Society.

Annual Meeting.—The usual business of the annual meeting was transacted.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 9TH, 1885.

ALFRED MEADOWS, M.D., F.R.C.P., President, in the Chair.

Specimens.—Dr. THOMAS SAVAGE showed two specimens of hæmatosalpinx, successfully removed by abdominal section ; also a large sacculated kidney containing pus and several large calculi. It had been successfully removed by a vertical incision outside the rectus muscle on the right side, the pedicle being transfixed with a pin, and secured by a *serre-nœud*.—Dr. EDIS showed a sacculated kidney, which he had successfully removed from a patient in the Chelsea Hospital for Women. It was removed by abdominal incision in the middle line. The size of the tumour rendered this operation preferable to the lumbar incision.—Dr. MEADOWS, Mr. LAWSON TAIT, Dr. BANTOCK, and Dr. ROUTH, made remarks.—Mr. LAWSON TAIT showed a large solid tumour of the breast, which had been growing for nearly twelve years ; also a large soft œdematous myoma of the uterus, weighing thirty-eight pounds. The patient was progressing favourably.

On Exploration of the Uterine Cavity in Cases of Menorrhagia.—Dr. EDIS read a paper on this subject. The author desired to draw attention to the urgent necessity of this proceeding, when dealing with cases of severe persistent or recurrent uterine hæmorrhage. The subject was one of great interest, and often one of great anxiety to the practitioner. There was a tendency to treat metrorrhagia as if it were a special disease, in place of regarding it merely as a symptom of many and various conditions. A correct diagnosis was the first and most important element of successful treatment, which otherwise was mere guess-work. Speaking generally, there was almost invariably some local cause when the hæmorrhage was really severe. Cardiac, hepatic, or renal disease might be present as a complication, or independently, and should always be taken into consideration. Uterine hæmorrhage might be aggravated by the injudicious use of alcoholic stimulants; more especially was this the case about the time of the menopause. The author had repeatedly witnessed cases where the mere abstention from alcohol had been sufficient to arrest a profuse hæmorrhage, which had been going on for months, and threatened even the patient's life. In attempting to form a rational diagnosis, it was of great importance to get a careful and exact history of the details of the case. Before proceeding to local investigation, the heart, lungs, liver, and other organs, should be carefully examined, and inquiry made into the habits of the patient. A careful pelvic exploration should follow. Then, if after consideration of all the facts of the case, the presumption were, everything else being excluded, that there was some intra-uterine complication, the practitioner was not justified in allowing the patient to go on bleeding indefinitely, without giving her the benefit of further assistance. The author, in general, effected dilatation by dividing the cervix with the metrotome or scissors, either alone, or in conjunction with the employment of tents or other dilators. It was advisable, after operation, to irrigate with some appropriate antiseptic lotion, morning and evening, for a few days. In cases of persistent hæmorrhage, due to retention of the placenta, following a miscarriage, the cervix generally remained sufficiently patulous, or was so readily dilatable, that no difficulty was experienced. Where, however, only a small portion of the placenta had been retained, and the case allowed to go on for several successive weeks or even months, the cervix might be found so contracted, as to necessitate the introduction of laminaria tents over night. In such cases, incision should never be resorted to, this method being reserved exclusively for cases of small fibroid or fibroid polypi in the interior of the uterus. The author related several interesting cases to exemplify his meaning, and to show that, until the cavity of the uterus had been explored, a correct opinion could not be formed as to what method of treatment should be adopted. He would lay stress upon the importance of dilating the cervix and exploring the interior of the uterus in all cases where hæmorrhage from the organ persisted unnaturally, and where the ordinary medicinal agents failed in affording relief, and there was no evidence of any condition external to the uterus sufficient to explain the persistence of hæmorrhage. —Dr. AVELING had observed that, in cases requiring dilatation where something existed in the uterus capable of being removed, the cervical canal was either dilated or dilatable ; this peculiarity had been noticed by Harvey. In these cases, he preferred to use his own dilators. Where the os was rigid and contracted, a more gradual method was better.—Dr. ROUTH believed that Dr. Edis's paper was eminently practical, but he took exception to one or two points. As to rapid dilatation of the uterus, it did not always succeed when the uterus was rigid; and after all it was not a rapid, but a long and tedious process, requiring an anæsthetic. He preferred the sea-tangle-tents used with proper precautions, and always collected and prepared his own. In regard to those cases of metrorrhagia in which nothing could be found after exploration, it should be remembered than an ulcerated or excoriated condition of the mucous membrane need not be restricted to the os or external portion of the cervix, but might extend up the uterine cavity. It was quite in keeping to suppose that a congested state of the liver would have the same effect on the uterine mucous membrane as was the case in piles, causing them to bleed and enlarge. The last objection he could take was to the incision of the cervix. The danger to the patient from septic poisoning was greatly increased by such a measure.—Dr. BARNES thought no law in therapeutics more clear than that which dictated direct examination of an organ at fault if it could be effected. The endeavour to do so was made, in the case of other organs, by percussion and auscultation. The uterus offered the incontestable advantage of being directly accessible. A narrow condition of the os externum was a frequent factor in cases of hæmorrhage. Great benefit was often derived from simply enlarging this opening by a strictly limited incision. The immediate effect was to relieve local engorgement. It also afforded a ready escape for imprisoned blood-clots and mucus, and gave free access for exploration and the application of topical remedies. It was also useful in many cases of intra-uterine polypus and fibro-myoma of the body of the uterus.—Dr. THOMAS SAVAGE found Hegar's dilators to be very unsatisfactory. Laminaria tents were much more efficient, but were sometimes followed by disastrous consequences. In several cases in which he had suspected a portion of the ovum to be left behind, he had thoroughly swabbed out the uterine cavity with pure carbolic acid, and found that such a course would often prove sufficient for cure.—Dr. BANTOCK was compelled to dissent from Dr. Edis on one or two minor matters. He did not approve of incising the internal os after partial dilatation, for the purpose of removing a small fibroid tumour, because it would be impossible to control the subsequent extension of the laceration of the divided tissues consequent on the forcible extraction of such a hard body as a fibroid tumour. He had met with cases exactly corresponding to those narrated by Dr. Edis, and it was quite easy for him to support his views. He thought it was a mistake to mix glycerine with iodine or carbolic acid when the full effects of either remedy were desired, for in both instances the caustic effect was in this way reduced to a minimum, if not wholly removed. Especially was this the case with carbolic acid. He was not prepared to assent to the doctrine that a cervix which was the subject of even extensive disease of a non-malignant character, but the result of chronic catarrh, etc., should not be subjected to dilatation. These were just the cases in which he obtained the most satisfactory results from dilatation and the subsequent daily introduction of a strip of lint saturated with glycerine for ten to fourteen days.—Mr. LAWSON TAIT considered the use of sponge-tents to be, of all the methods of dilatation, the most dangerous, and had long since given them up. Hegar's dilators he considered extremely risky, and their employment was as exhausting for the operator as for the patient.—Dr. EDIS replied.

THE will of Mr. Thomas Coe, F.R.C.S.Eng., of Bury St. Edmunds, has been proved, and duty paid on £21,000.

MEDICAL SOCIETY OF LONDON.

W. M. Ord, M.D., F.R.C.P., President, in the Chair.

Monday, January 11th, 1886.

Clinical Evening.

The Cure of Varicocele by Excision.—Mr. A. Boyce Barrow read a paper on this subject. He preferred employing a free incision, with strict antiseptic precautions, protecting the cord by means of two long steel needles which separated the veins to be operated on from the other structures. He had operated now in ten or twelve cases, which had all turned out well so far.—Mr. A. Pearce Gould thought that such a free incision was an unnecessary severity, and for his own part he preferred the subcutaneous ligature and division of the diseased veins. He alluded incidentally to the possible atrophy of the testicle after this operation, and to the distressed mental condition which sometimes accompanied anything abnormal in the sexual apparatus.—Mr. Bernard Pitts had early learned to be very chary about operating in these cases, and only did so when the patient wished it for the purpose of being admitted into the services.—Mr. Swinford Edwards said he generally employed the method known as "Ricord's," and the average stay in the hospital was ten days.—Mr. J. Hutchinson, junr., said that atrophy of the testicle was certainly possible, and this had, apparently, taken place to some extent in the case Mr. Barrow had shown.—Mr. Barrow, replying, said that under antiseptic precautions little or no danger attended free incisions, and that the operation was thereby rendered much simpler.

Enormously Enlarged Liver.—Dr. Isambard Owen showed a patient whose liver, when he first consulted him in 1884, was enormously enlarged, extending down to Poupart's ligament, on the right side. There was also slight jaundice, together with increased flow of urine. No signs of phthisis were present. The spleen was not notably enlarged. He had diagnosed it as a case of albumenoid liver, and treated it with alkalies, adding ten-grain doses of iodide of potassium. The enlargement had steadily increased in size, as shown by diagrams produced.—Dr. Pringle had had two cases, almost identical in character with the one before them, due to syphilis.—The President said that the case, as described, differed in several points from pure albumenoid disease of the liver, and he did not see clearly on what basis the diagnosis was made.—Dr. J. Kingston Fowler, alluding to the absence of any signs of syphilis, said that when the disease attacked the viscera, the other tissues might escape. Moreover, he had never heard of amyloid degeneration attacking the liver without involving the spleen.—Dr. Barrow had had a nurse under his care, with a similar liver, and at the same time she had syphilitic disease of the bones of the leg.—Dr. Owen, in reply, admitted that some other beside the albuminoid condition might be present.

Athetosis.—Dr. Beevor showed a case of athetosis in a woman, aged 20, which had followed an attack of hemiplegia, after convulsions. The movements were confined to the left side. The patient still had epileptic fits from time to time. He suggested that the disease might be due to damage short of destruction of motor cells in the cortex.—Dr. Stretch Dowse said it was strange that no mention was made of the disease in the text-books before Dr. Hammond, of New York, spoke of it in 1871.

HARVEIAN SOCIETY OF LONDON.

Thursday, January 7th, 1886.

T. Morton, M.D., President, in the Chair.

Inhalation in Pulmonary Diseases.—Under the head of inhalation, Dr. W. H. Blenkinsop described two allied processes: vaporisation, where dry heated air was generated; and fumigation, where drugs or scents were volatilised and diffused. The latter was useful in purifying a sick room, but was of comparatively little value in the treatment of pulmonary diseases. The cases benefited by these auxiliary modes of treatment were croup, bronchitis, and pneumonia, among acute diseases; phthisis, circumscribed gangrene of the lung, and chronic bronchitis, and pneumonia, among chronic disorders; and, lastly, whooping-cough, asthma, influenza, hay-fever, and many throat-affections, among diseases of a mixed type. Great stress was laid upon the advantage of heated dry air over steam, and of dry over moist medications. By moist vaporisation or inhalation, in whatever class of diseases, the air-passages were charged with an undue amount of aqueous vapour, which rendered the mucous membrane sodden, lessened the calibre of the air-tubes, and caused much urgent dyspnœa. The tissues also became relaxed, the respiratory function was interfered with, and suppuration was encouraged. The characters of the various inhalers now in use was explained and commented upon. In addition to the author's disbelief in moist medication, objection was taken to every apparatus which required the process of respiration to be, as it were, reversed, and carried on with effort. And, to meet these, and the various drawbacks of attempting, in the ordinary manner, to inhale drugs which were only partly volatile, the author advocated an apparatus which he believed would meet most, if not all, of the present difficulties.—A discussion followed, in which the President, Dr. Maguire, and Dr. Alderson took part.

Spreading Traumatic Gangrene.—Mr. T. Pickering Pick stated that his main object in bringing this subject before the notice of members of the Society was to insist upon the necessity of immediate amputation; for he believed that, although the opinion of surgeons on this point had materially changed during the last twenty-five years, there was still a certain amount of hesitation, on the part of some surgeons, until it was too late. In cases of spreading traumatic gangrene, no arrest of the process or line of demarcation was ever set up, and therefore cases, if left to themselves, invariably proved fatal; and Mr. Pick believed that it was the duty of the surgeon to amputate, even where obliged to cut through infiltrated and implicated structures; and he showed, by a narration of three cases, that, even when this was done, a favourable issue might be obtained. Mr. Pick did not believe that the disease was due to an infective organism; for success attended early amputation, the disease occurred sporadically, and there was no evidence of infection, nor, when one case occurred in a ward, did it spread to the other patients, and, lastly, there did not appear to be any period of incubation. He suggested that the disease might be due to the formation in great abundance of the bacteria of decomposition, which, acting on the planes of cellular tissue, infiltrated and irritated by the putrefying discharges originated from the original decomposition at the seat of the wound, produced a putrefaction almost, if not quite, contemporaneous with the mortification. He illustrated his remarks by the narration of five cases, which had occurred in his own practice; three of these had recovered, and two died, one of exhaustion and the other on the seventeenth day from pyæmia. In not one of the five cases had there been any return of the spreading gangrene in the stump; but in two of the cases there was slight sloughing of the edges of the flaps, and in one case extensive sloughing of the infiltrated cellular tissue through which the line of incision in the amputation had been carried. He concluded, therefore, that in cases of spreading traumatic gangrene, amputation must be performed at once, and, if possible, above the infiltrated tissues; but, if this could not be done, he did not believe that the presence of œdema and infiltration of the parts through which the line of incision had to be carried need form an insuperable objection to the operation.—A short discussion followed.

CAMBRIDGE MEDICAL SOCIETY.

Friday, December 4th, 1885.

G. M. Humphry, M.D., F.R.S., President, in the Chair.

Chronic Onychitis.—Mr. Laurence Humphry showed a patient, aged 53, a married woman, suffering from chronic onychitis. All the nails of both hands were attacked. The nails were opaque, thickened, and heaped up, the edges and surface broken up, irregular, and filled with dirt. There was no skin-eruption or soreness by the side of the nail. There was no evidence of gout or syphilis.

The Aspirator in Pleurisy.—Mr. Hodson (Bishop Stortford) related two cases of recovery from empyema in which the aspirator had been used, and a case of pleurisy with an unusually large serous effusion, which had been treated in the same way.—Dr. Ransom referred to the case of a child under his care, in which sudden death occurred at the time of operation, after a few ounces of fluid had been withdrawn.

Fracture of Atlas and Axis.—Mr. Francis described a case which had been under the care of Mr. Carver. W. P., aged 50, was admitted into Addenbrooke's Hospital on October 8th, 1885. He had fallen backwards off a ladder, a distance of 20 feet, striking the upper and back part of his head against a plank. He was unconscious for a few minutes. He lay in bed with his head thrown slightly back and fixed in the middle line; rotation caused pain. He had perfect control over his sphincters. The pupils were equal. Paralysis was complete in both upper limbs and the left lower limb, and there was slight loss of sensation. He complained of pain about the third and fourth dorsal spines. Pulse 80; temperature 97°. For a month he made steady progress, and regained much power in his limbs, and the anæsthesia disappeared. His head still remained fixed, and he was much troubled with constipation. On November 4th, the temperature rose considerably; profuse acid sweats and acute migratory pains

and tenderness in the joints succeeded, and finally effusion took place into the right knee-joint. He became delirious at night, and suffered from constant pain at the back of the neck. The paralytic symptoms returned, and in four days was complete, and he lost control over his sphincters; bed-sores rapidly developed, and he died thirty-seven days after the accident. At the necropsy, a few small collections of pus were found between the muscles of the neck. The posterior part of the ring of the atlas was broken off; the axis was also fractured; the line of fracture passed through the posterior part of the atlanto-axial articular surfaces, between the pedicles and the body of the vertebra, the arch being separated from the body. There was no displacement, and no sign of repair. Mr. Francis observed that the symptoms and rapid progress of the patient soon after admission, taken with the results of the necropsy, would incline him to the view that the paralytic and other symptoms were due rather to spinal concussion than to any continued pressure on the spinal cord, though the absence of medullary symptoms would be unusual. Again, the return of the paralysis with medullary symptoms during the last eight days was hard to explain. A point of great interest in the case was the development of rheumatic symptoms.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 1ST, 1886.

R. E. CARRINGTON, M.D., President, in the Chair.

The Difficulties of Diagnosis in certain Cases of Cerebral Tumour.—The author (Dr. HALE WHITE) first related particulars of a case in which no cerebral symptoms whatever were known to be present during life, but in which, at the necropsy, the presence of a tubercular mass in the cerebellum was quite accidentally discovered. Then full particulars were given of an interesting case of tumour in the frontal lobe. In this patient, for a long time, the only symptom was headache, and it was not till a short period before death that the presence of optic neuritis was discovered. The patient died suddenly, without the advent of any other than these two symptoms. The next case related was one of a woman in whom a tumour, in the region of the occipital and temporo-sphenoidal lobes, existed; it was about the size of a Tangerine orange, and produced no symptoms whatever that could with certainty be referred to its presence. It was concluded from these three cases that tumours might exist in the cerebellum, frontal lobes, or occipital region, and be very difficult of diagnosis. The presence of paralysis of some of the cranial nerves did not necessarily forbid the diagnosis of the presence of a tumour in this region; for, if it were of a very great size, its pressure might compress the nerves at the base of the skull against the bone. Tumours in the region just indicated had no special symptoms, such as paralysis; therefore, for their diagnosis, the physician was entirely dependent upon the general symptoms, namely, headache and optic neuritis, vomiting occupying an intermediate position, being partly a general and partly a special symptom of tumours near or in the cerebellum. Even the combination of headache and optic neuritis did not conclusively prove the existence of a cerebral tumour; for a case was brought forward in which both of these symptoms existed, and were both due to anæmia, the patient rapidly recovering on treatment with iron. Still the combination of these two symptoms should make one extremely suspicious. The form of headache most likely to be associated with cerebral tumour was next discussed, and it was pointed out how frequently, without care, a mistake might be made with myopic patients, who often complained of dimness of sight and headache. The next question raised was as to the means of diagnosing the kind of tumour, but it was pointed out that this was not of so much importance as to diagnose its presence, because one's duty to a patient was always to give large doses of iodide of potassium.—Dr. PURVIS moved a vote of thanks to the author of the paper, and gave an interesting account of a case in which the diagnosis lay between embolism and hysteria.—Mr. CABLE, in seconding the vote of thanks, related several cases of cerebral tumour.—Dr. ERNEST CLARKE made some suggestive observations with regard to optic neuritis in cerebral tumours.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

T. WHITEHEAD REID, F.R.C.P.Ed., in the Chair.

Purulent Pericarditis.—Mr. T. F. RAVEN related a case of purulent pericarditis, where, after three aspirations of the pericardium, incision and drainage were proposed, but declined by the patient. After death, two quarts of pus were found in the pericardium. Allusion was made to the two only successful cases on record—those of Dr. Samuel West and Professor Rosenstein. In both these instances, the pericardium had been incised and drained. The necessity of this procedure was insisted on. Some remarks were made upon other recorded cases of purulent pericarditis, and the *pulsus paradoxus*, and the theory of its production was adverted to. Finally, some remarks were made upon the operations of aspiration and incision of the pericardium, and some statistics were quoted.

Treatment of Large Glandular Swellings.—Mr. F. TREVES read a paper on the nature and treatment of big masses of enlarged glands. He gave it as his opinion that, whilst what might be called ordinary enlargement of glands could be treated successfully and without difficulty, either by excision or by scooping out, excessive enlargement of glands presented grave difficulties for the surgeon. These usually terminated fatally if left untouched. Excision was dangerous, and scooping out in many cases impossible. In spite of the difficulties, however, Mr. Treves recommended that these masses should be attacked by excision or scooping, or both combined, as the case required; and, if necessary, by repeated operations. Mr. Treves deprecated the practice of allowing glands to attain a large size, and thought they should be removed in an earlier stage—in fact, treated like any other growing tumour. Sea-air and hygienic means should be combined with the active local treatment.

Electricity in Diagnosis.—Dr. DE WATTEVILLE showed some electric apparatus constructed, with various improvements, by Thistleton (of London), for the use of medical practitioners. He then spoke of the use of electricity in diagnosis, explaining what was meant by the "reaction of degeneration." It consisted of a characteristic group of alterations in the normal response of nerve and muscle to electric stimuli. The excitability of nerve was diminished or abolished; that of muscle was diminished or abolished to faradic stimuli; first increased, then diminished to galvanic stimuli. Degenerating muscles reacted more readily to the positive pole than was normal, and their contractions were more sluggish. Taking ordinary facial paralysis of peripheral origin as an example, the speaker showed how the presence or absence, or the incompleteness of degenerative reactions, could be used to frame a prognosis in each case. Where the changes in the reactions were fully developed, four to six months would elapse before a restoration could take place; where they were incomplete, about two months. When no electric change was found, the case was a mild one, and a spontaneous cure might be expected within one month. A case of paraplegia was shown, on whom some of the methods of galvanisation were demonstrated.

REVIEWS AND NOTICES.

THE MAMMALIA IN THEIR RELATION TO PRIMÆVAL TIMES. By OSCAR SCHMIDT, Professor in the University of Strasburg. With Fifty-One Woodcuts. London: Kegan Paul, Trench, and Co (International Scientific Series).

THE author of *The Doctrine of Descent and Darwinism* has produced a thoughtful and valuable manual on the highest group of living animals. The greater part of this work is purely morphological, and treats of questions of great interest to any thinker, but not within the scope of medicine, nor directly bearing on human anatomy. The large number of new extinct mammalian forms discovered in the tertiary geological formations during the past thirty years, has formed a rich diet for the minds of comparative anatomists, food which has not as yet been entirely digested by the consumers. We may note the numerous new species of fossil ungulates which seem to form perfect links between the living species of horse, tapir, and rhinoceros, or to represent primitive undifferentiated types, ancestors of those three mammals. There is much material for reflection in the discovery of gigantic animals, such as the Elasmotherium of the Volga Basin, and the Brontotherium and Dinoceras of the Rocky Mountains, huge, unwieldy, rhinoceros-like or elephant-like creatures, remarkable not so much for their colossal skulls, with massive bony protuberances, as for the extreme relative smallness of their brains. They must literally have suffered from want of brains; such a notion is perfectly scientific, although climatic and geographic changes have played an important share in their extinction.

A subject more directly associated with the comparative anatomy of man is the variation of dentition in progressive types. This has long been recognised in the highly specialised teeth of the living elephant as compared with the more generalised and more numerous teeth of the older forms Mastodon and Dinotherium. Amongst the carnivora, the older and many-toothed canidæ may be compared with the newer felidæ, which possess fewer teeth. For long it has been suspected

that the dentition is undergoing a similar change in our own species.

"Imperfect as are our statistics on this point," the author observes, "this much is certain, that the cases of disappearance or loss of teeth most frequently concern the so-called wisdom-teeth, and then the outer incisors. We do not of course know how often the question has applied to the actual and complete loss of the teeth, or only to some interference with the teeth cutting the gum, occasioned by a limitation of the necessary space. However, it must be remembered that the shortening of the jaw stands in direct correlation with the reduction of the dentition."

Nevertheless, Professor SCHMIDT reminds us that dentition is not everything, and that the cat is not intellectually higher than the dog with his older-fashioned teeth. In man, the development of the intellectual faculties, especially since the introduction of cooking, has deteriorated the anatomical weapons for the acquisition of food; but reason, acquired with speech, has brought about a kind of atavism or reversion, so that he has become more independent of the direct effects of his natural surroundings. He, in fact, does not let his teeth spoil, and takes pains to preserve them. Still, the nature of his food may act steadily upon the development of his jaws, and ultimately crowd out some of his teeth for ever.

The woodcuts of bones and teeth are large and very clear; they are especially suitable for enlargement as diagrams for lectures. We cannot overlook some singular oversights in revision of the letterpress. Professor Flower is repeatedly called Professor Flowers, and the reader is informed that the small living species of hippopotamus, Choeropsis, "is met with in Siberia." It is a far cry to Loch Awe, but from Siberia to Liberia it is yet farther.

LECTURES ON DIETETICS AND DYSPEPSIA. Delivered at the Owens College School of Medicine. By Sir WILLIAM ROBERTS, M.D., F.R.S., F.R.C.P., Professor of Medicine in the Victoria University; Consulting Physician to the Manchester Royal Infirmary. London: Smith, Elder, and Co. 1886.

IN these five short lectures, Sir WILLIAM ROBERTS has given us much interesting and useful information on the etiology, varieties, symptoms, and treatment of dyspepsia, conveyed in a light readable style. The author seems to infer that much of the gastric derangement of civilised man is due to the extreme variety of his dietary, and points to the monotonous diet of the animals, especially the herbivora, as a type from which man has wilfully departed. We are, however, allowed to hope that this departure from the normal may be, perchance, the outcome of an "infallible instinct and collective wisdom," and so, after all, serve some useful purpose. Sir W. Roberts's collection of facts bearing on the influence of stimulants (tea, coffee, alcohol, etc.) on digestion are well worthy of remark; the more so as they run counter to many hitherto accepted ideas on the subject. His theory, too, of the reasons which have led mankind to so universal an adoption of one or the other or all of these articles, is extremely ingenious. It is certainly novel to be told that, while alcohol has but a feeble inhibitory effect on gastric digestion, beef-tea and its congeners are most powerful in that direction, hence that soups are only suited for people of good average digestive capacity. Many useful hints are given for the choice of a dietary in cases of irritative dyspepsia, and many erroneous ideas on this and kindred subjects authoritatively contradicted.

PATHOLOGICAL MYCOLOGY. An Inquiry into the Etiology of Infective Diseases. By G. SIMS WOODHEAD, M.D., F.R.C.P.Ed., Assistant to the Professor of Pathology in the University of Edinburgh, etc.; and ARTHUR W. HARE, M.B., C.M., Assistant to the Professor of Surgery in the University of Edinburgh, etc. Section 1. METHODS. With Sixty Illustrations. Edinburgh: Young J. Pentland. 1885.

THIS volume, which is intended, as we gather from the wording of the title, to be the first part of a work on a very large subject, the etiology of infective diseases, is in fact a handbook for the biological department of a pathological laboratory. After a few introductory remarks on the various ways by which micro-organisms may obtain entrance into the economy, and on the mode in which they produce their characteristic effects, the authors immediately proceed to give detailed descriptions of the apparatus, and the methods in use, for the cultivation and discrimination of various species of micro-organisms. The various plans upon which micro-organisms may be rendered visible in microscopic sections of tissues are well and fully described, and directions are then given for making and sterilising potatoes, bread-paste, cultivating fluids, and nutrient meat-peptone jelly and Agar-Agar. A short chapter on the separation of micro-organisms from living and dead tissue is followed by an appendix, containing descriptions of the mode of growth of many of the common species of micro-organisms; and the volume concludes with a classified bibliography, which, though by no means complete—and the authors are too well acquainted with the magnitude of the literature to put it forward as anything of the kind—will be exceedingly useful. The volume is copiously illustrated, many of the plates being coloured; some of these drawings are excellent, but in other cases clearness, as it will seem to many readers, has been sacrificed to a supposed artistic effect. This criticism applies especially to certain of the drawings of cultivations in test-tubes; indeed, in some cases (Figs. 37, 41, 42), it is not easy to understand what the artist intended to represent; the drawing given to illustrate the method of inoculating test-tubes (Fig. 34) shows a method only applicable to organisms which do not liquefy gelatine, and does not appear faithfully to represent in a minor detail the description at the foot. The coloured microscopical drawings are excellent, as are those of growths on potato. The broad effects of mucor, aspergillus, and torula growing on bread-paste are cleverly reproduced, and the sketches of apparatus, made in some cases from photographs, are as good as could be desired. The book is undoubtedly calculated to be very useful to the student, and, if kept carefully corrected and up to date, ought to become a standard work for the laboratory.

DIE KRANKHAFTEN ERSCHEINUNGEN DES GESCHLECHTSINNES. Eine Forensisch-psychiatrische Studie von Dr. MED. B. TARNOWSKY, Professor an der Kaiserlichen M. Med. Akademie in St. Petersburg. Berlin: 1886.

ON MORBID MANIFESTATIONS OF THE SEXUAL INSTINCT. By Dr. B. TARNOWSKY.

IN this little treatise, an octavo of 152 pages, the author describes and classifies the perversions of the sexual appetite which he has met with, or of which he has read. Such perversions frequently appear in insanity, and occasionally their victim comes of his own accord to ask the help of a physician. At other times, they give rise to medico-legal inquiry. Hence medical men cannot avoid paying attention to them. Dr. TARNOWSKY has evidently had some experience in such cases, and has shown great diligence in consulting authorities. A list of works is given at the end, which fills four pages.

The work is written in language only intelligible to medical men and jurists, for whom alone it is intended. Hence there is no fear that it will ever gain the distinction of being hawked about in the streets. Moreover, it is totally devoid of pruriency: the details are plain, and not alluring. Such a work opens a curious chapter in the pathology of human nature. Ordinary men either shrink from such a subject, or approach it in a morbid and sentimental state of mind, which has been the cause of foolish legislation and bewildered application of the law. It is of some moment that such questions should be considered by men of a sober and reflective turn of mind, and on this account the book is useful. Subjects so painful need to be treated with the utmost dryness, and in purely technical language.

NOTES ON BOOKS.

Transactions of the Willan Society of London, a Society for the Study of Dermatology and Syphilis. Edited by JAMES STARTIN. Vol i. (London: Printed for the Society by Harrison and Sons, St. Martin's Lane.)—This publication contains reports of many interesting cases of skin-disease, as well as several good monographs, among which we may notice a contribution by Dr. C. R. Drysdale "On the Prognosis and Treatment of Syphilis."

A Guide to the Examination of the Urine, designed chiefly for the use of Clinical Clerks and Students. By J. WICKHAM LEGG, F.R.C.P. Sixth edition. (London: Lewis, 1885.)—This well known handbook, as it is one of the oldest, so is it also one of the best guides which the medical student can use at the bedside. The new edition has been slightly expanded, but the work has lost nothing of its practical character, as Dr. Legg has throughout kept in view the wants of students, and the possibilities of clinical chemistry, and has not aimed at attaining the minute accuracy desirable in a handbook for a chemical laboratory.

Manuel de Technique des Autopsies. Par BOURNEVILLE et P. BRICON. (Paris: Lib. du *Progrès Médical*. A. de la Haye et Lecrosnier. 1885.)

—This small volume has two objects; to point out the defects in the existing arrangements in France with regard to *post mortem* examinations, and to furnish a guide for the practice of such examinations on a complete consecutive system. The first part of the volume is devoted to an account of the arrangements in existence in Germany, Russia, Hungary, Belgium, Holland, Switzerland, Italy, Spain, and Scotland (England is barely mentioned). It is stated that at Liège, Kiel, Munich, Tübingen, Leipsic, Vienna, Prague, Buda-Pesth, Bâle, Berne, Amsterdam, Utrecht, Coimbra, and St. Petersburg, the hospital authorities possess the right to make a *post mortem* examination. At Brussels, if the family of the deceased object to the examination, they are called upon to pay the hospital for the treatment. At Lyons, a very good arrangement exists; that is to say, the examination is made unless the family make a formal declaration in writing. It is added that, in those towns where the necropsy is obligatory in the case of patients dying in hospital, it is performed with great frequency on persons dying in private houses. At the cemeteries of certain towns there are *post mortem* rooms in connection with the mortuary, where such examinations can be made. A short account of the splendid pathological institutions of Germany and Switzerland is given, and is illustrated by plans of the buildings used for pathological investigation at Heidelberg, Halle, and Bâle. The second part of the volume contains a very full and elaborate description of the method of conducting a complete *post mortem* examination. It is illustrated by diagrams of the cerebral circulation, of the convolutions, and of the transverse sections of the cerebrum recommended by M. Pitres. These illustrations are very useful, and ought to be found on an enlarged scale in every room used for necropsies. The work is, on the whole, admirably compiled, and is the most complete extant guide to the subject.

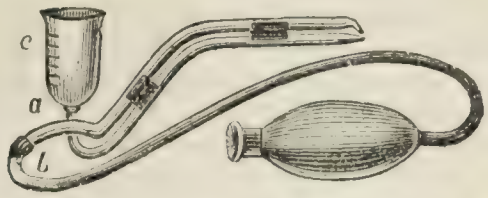
REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW SPRAY-PRODUCER.

A NEW spray-producer, designed by Dr. Hodgkinson, deserves to be widely known. Its ingenious construction will be easily understood by a reference to the accompanying drawings. The fluid-tube being continuous with the bottom of the bowl which receives the medicament, the whole quantity can be used, even the last drop being sucked up. The illustration shows the instrument adopted for use as a post-nasal spray producer; a nozzle, arranged in the converse fashion,



directs the spray downward into the larynx, and a third form of nozzle sends the spray directly backward on to the pharynx. Other advantages claimed for the apparatus are the curving of the distribution tubes, so as to avoid loss of fluid by dropping, and the single hand-ball whereby the distribution of the spray can be kept under control, and the waste incurred by spraying during expiration is avoided.



The instrument is constructed of glass; it is, therefore, exceedingly fragile, and not well suited for use in children, as a rough grasp will fracture the tube, but, for adults, the apparatus presents many advantages; it is light, portable, easily adjusted, and by its use medicaments can be directed with certainty to the part of the naso-pharynx affected, or into the larynx.

CHARCOAL FILTER.

MESSRS. MAWSON AND SWAN, 20, West Grainger Street, Newcastle-on-Tyne, are the manufacturers of a new filter, the filtering medium of which consists of pure animal charcoal of various grades of fineness, supported on and covered by glass wool, which is extremely pervious to water, and not liable to decomposition. The whole is held in position by a plate, mechanically secured, which can be removed at any time for cleansing. The advantages claimed for this filter are, that the filtering medium, being arranged in strata differing in fineness, removes the most subtle impurities as well as the coarser but less dangerous. There are no tubes, joints, or blocks through which water might pass unfiltered; it admits of being easily cleaned and renewed at home, and the filtration is both efficient and rapid. These filters, which are constructed both of glass and earthenware, vary in price from 4s. 6d. to 35s.

THE PERCUSSO-PUNCTATOR IN LUMBAGO AND RHEUMATISM.

SIR,—I feel it due to myself to reply to the letter of Dr. W. Johnstone Fyffe which appeared in your columns of January 2nd, as its contents would seem to imply that my instrument, the percusso-punctator, instead of being an invention of my own, was simply the plagiarism of that of a "German quack." It is pretty evident that medical men, totally unknown to each other, but fully awake to the practical utility of acupuncture in the treatment of various affections, would be likely to apply their ingenuity in devising improved means for its application. But I can vouch for having never even heard of any such mechanical contrivance before I had produced my percusso-punctator, on the utility of which I read a paper last summer at Cardiff before the British Medical Association; and it was not till December 21st that Dr. Neale, the talented author of the *Medical Digest*, informed me of the existence of a German device for the same purpose, but entirely differing from mine in construction and in *modus operandi*. Years ago I had devised a needle for the treatment of sciatica, which Messrs. Down Bros., of St. Thomas's Street, made for me, and which can be attached to a battery, thus facilitating the passage of an electric current through the integument. But I beg to call Dr. W. J. Fyffe's attention to the fact that his "German quack" never seems to have dreamed of adapting his instrument to the use of this powerful auxiliary in connection with acupuncture; and I defy him to produce any instrument ever exhibited for sale at any instrument-maker's offering this highly important combination. This gentleman seems also under the impression that my instrument differs from that of his "quack" solely in using screw-motive instead of spring-motive power. Now, I beg to inform him that I never intended to screw my needles like gimlets into my patients. I apply acupuncture by percussion in the normal manner, the utility of the screw being to regulate the length of the needles, and consequently the depth of puncture contemplated; as it is evident that a deeper puncture would have to be effected over the gluteal region, for instance, than over the temporal.

I make no exaggerated claims to originality in acupuncture, which, in itself, is as old as the hills, but simply as to its practical application; nor do I claim to have been the first experimentalist in this field. A gentleman, whose name I do not recall just now, produced, some time ago, a very elaborate instrument called the "Percutor," which, by the way, was not a puncturing, but a percussing, instrument only, connected, it is true, with electric action, but solely to cause the vibration of a small conical ivory hammer, terminating in a point, which came in contact with the skin. I inspected this instrument at its maker's, Messrs. Weiss, in the Strand, and fully satisfied myself that it had nothing to do with acupuncture proper, and that I could, with a clear conscience, claim complete immunity from even the suspicion of plagiarism for my own *modus operandi*, which I had devised and placed in the maker's hands already before hearing of this.

I feel confident therefore, that Dr. W. J. Fyffe will feel relieved in his mind at what, I trust, will satisfy him that I have never contemplated usurping his "German quack's" claims to originality; and no less so that my reply will also satisfy those members of the profession who have read our respective letters in your valuable columns, and who will, no doubt, consider me justified in thus vindicating myself from any unjust aspersions as to plagiarism.—I remain, sir, yours faithfully,

J. BRINDLEY JAMES, M.R.C.S.

47, Jamaica Road, S.E.

ST. BARTHOLOMEW'S HOSPITAL.—The Preliminary Scientific Exhibition of £50 for one year has been awarded to Mr. Olive.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 16th, 1886.

THE LIMITS OF EXACT KNOWLEDGE IN MEDICINE..

RECENT years have witnessed a notable advance in the exactitude of our knowledge in the domain of medical science. The microscope pioneered the way, and gave a precision to our knowledge of the healthy tissues and of their changes in pathological conditions, which, without its aid, would have been impossible, and indeed inconceivable. Other instruments of precision have successively emerged from inventive brains; and the ophthalmoscope, laryngoscope, sphygmograph, cardiograph, specula of various kinds, otoscopes, uterine endoscopes, and various other mechanical contrivances, too numerous to mention, have all contributed their quota to the growing exactness of medical science. We no longer, like the ancients, theorise learnedly upon impalpable hypotheses, or invent humours and fluxions to suit the exigencies of our ignorance. We are impatient of assertions which cannot be brought to the touchstone of the senses, and we desire to handle and see whatever claims inclusion among the truths of our art.

Within reasonable limits, this tendency is wholly admirable. Medical science has long suffered, and not altogether unjustly, under the imputation of haziness and inexactitude; and the public fully realise that imperfection of knowledge inevitably entails uncertainty in practice. The plain and palpable methods of the surgeon command wider and readier confidence than those of the physician, which too often indicate the diffidence of uncertainty and indecision. Whatever tends to more precise knowledge, surer prognosis, and more definite therapeutics, is worthy of our acceptance and gratitude. Yet we must be on our guard against expecting that medical science can ever reach a degree of precision comparable to the mathematical or physical sciences. Human nature is an indefinable entity, eluding analysis and defying definition. Just as no two faces amid the myriads of th human race are perfectly alike, so no two constitutions have a perfect identity of balance and of tendency. The human frame, including, as it does, so many various organs and different systems, presents an infinite complexity of conditions, and an infinitely variable response to disease. We know nothing of disease itself apart from diseased organisms, but the variable character of epidemics leads us to conjecture that morbid forces are themselves infinitely variable. If the orce of disease be thus uncertain, and the *vis medicatrix naturæ* in each individual be equally incalculable, we have a sufficient explanation of the necessarily tentative character of our prognosis and therapeutics. The utmost precision is attainable, and undoubtedly will be attained, in diagnosis and morbid anatomy; but, in the majority of instances, prognosis and therapeutics cannot rise beyond a high degree of probability.

The striving after exactness, in itself so laudable, may become a serious snare if it leads to the neglect of sources of knowledge which, however admittedly imperfect, are nevertheless capable of affording valuable help and guidance to the practitioner. It must be within the observation of everyone, that the ablest diagnosticians are by no means universally the most successful therapeutists. Indeed, a high degree of skill in the detection and definition of disease is very frequently found in conjunction with a neglect or contempt for many therapeutic measures which are the all-important matter to the patient. Many practitioners, on the other hand, with little pretensions to scientific eminence, often achieve distinguished success in their profession, simply by the exercise of a vigorous common sense and by the half-instinctive adoption of remedial measures which they could not fully justify on any grounds capable of precise definition.

The growing definiteness of modern physical and biological science tends to render us impatient of all general and inexact modes of expression. If a man talk much of constitutions, temperaments, diathesis, family tendencies, and the like, we are prone to suspect him of quackery and imposition; yet no one can doubt that these terms veil great truths, indeterminable, no doubt, by scale or balance, and unresponsive to microscope or sphygmograph, but all-potent to influence prognosis and treatment. Who can define exactly what is meant by the "erethic constitution?" We know that it implies a certain instability of function, an undue responsiveness to external conditions, a want of adaptability to an altered environment; but we are ignorant of its cause and explanation. Yet our ignorance on this point does not prevent us from predicting with certainty that an individual of this type will not bear sudden changes of climate well, nor from advising that, before all things, he should secure rest, quiet, and comfort. We speak of delicacy of constitution, meaning a proneness to disorganisation of function and an incapacity for the quick repair of structural damage; and, although the expression is altogether vague, it affords us a certain idea, capable of much service in dealing practically with such cases. We talk of a neurotic temperament; and the expression, however inexact, gives us a clue to symptoms and to treatment. To talk of the "strumous diathesis" may provoke a smile on some faces, but it may be doubted whether we can afford to discard such terms. The tendency is now to define disease as far as possible by structural changes, but the method is open to two objections: first, that many diseases leave no structural changes appreciable by our present methods of observation; and, secondly, that it is far from certain whether the most precise description of structural change furnishes an adequate account of disease. Morbid anatomy describes results, but is silent regarding processes and tendencies. If a certain morbid product were invariably the result of the same morbid process, and gave rise to the same train of symptoms, this method of pathological nomenclature would be unassailable; but both conditions are frequently absent.

The influence of mind on bodily function is another element which is indefinable, but yet of vast importance. That mental conditions powerfully influence physiological and pathological processes, probably through the vaso-motor system, is undeniable, yet it is an influence which we cannot weigh or predict. The unexpected sight of a

face or a letter may turn the scale of life or death when it is hovering in the balance, but the most profound knowledge of physiology or psychology would be inadequate to afford the data for precise prediction in such a case. The fact that a sudden gust of passion may impart poisonous properties to the milk of a nursing mother is one of many mysterious facts, which show us how hopeless is the attempt to confine human nature within the limits of a narrow materialism.

We have said enough to show that, while greater exactitude in our knowledge is highly desirable, we are not justified in neglecting sources of information which, although indefinite, are capable of affording us valuable guidance. Medicine was an art before it was a science; and, just as a large proportion of our best knowledge was empirically acquired, so, as far as we can at present see, it must, to a large extent, continue to be empirically employed. The *tactus eruditus* of the surgeon has its analogue in the instinctive recognition of hardly appreciable symptoms, and the equally instinctive application of imperfectly understood means to ends which characterise the physician of largest experience and most successful practice.

THE ABUSE OF MEDICAL CHARITIES.

THE efforts of Dr. Rentoul, of Liverpool, to direct public attention to the abuse of medical charity in that city, have brought about a public movement, which has fortunately secured the assistance of some of the most thoughtful, as well as the most prominent, citizens of Liverpool. A brief account of the proceedings is given on another page. None can doubt the necessity of some proceedings by which the excessive strain upon the public benevolence and the generosity of medical men should be relieved. The figures given in the case of Liverpool are very striking. A statement signed by 100 members of the medical profession sets out that 253,000 persons received medical treatment at the eighteen local charities last year, 0,000 at the parish infirmaries, and 4,500 by medical men at their private residences. The last figure is in itself rather remarkably suggestive, and it is difficult to understand how, in the presence of such an excess of eleemosinary help, medical men should find it necessary to supplement the public benevolence by an amount of private and systematic free relief which admits of being estimated in statistical statement. The figures may or may not admit of rectification, and some speakers at the meeting, which we report elsewhere, called them in question. Substantially, however, they may probably be admitted to be true, for a very similar state of things has been found to prevail in London and in many other great cities, and there is every reason to believe that there is at least as great an abuse of medical charities in Liverpool as elsewhere. We in London are inclined to look, in this, as in many other matters, to the great provincial cities for good leading examples of social reform. They are more compact, they are better organised, the leading members of the community are better known to each other, and have greater facilities through the municipal organisations of working in union throughout the whole area to be dealt with. A similar effort made at the instance of Sir Charles Trevelyan, Mr. Stansfeld, Mr. Stephen Fuller, and others, with the aid of Mr. Holmes, Dr. Alfred Carpenter, Dr. Joseph Rogers, and other medical men in London, have by no means met with the success which was anticipated, owing largely to the want of harmony among the leaders of the public charitable institutions in the metropolis, and the difficulty of covering with sufficient rapidity the whole area to be dealt with. To be thoroughly successful, a movement such as this needs not only the hearty co-operation and watchful administrative aid of the medical profession, but it should have the cordial assistance of the friendly societies and of the public charities. A good system of provident dispensaries, safeguarded against the abuses to which these institutions are themselves liable, must tend to the relief of the public purse, and to the establishment of independent and self-relying habits among the working classes; but such dispensaries need to offer the same facilities for transfer as do the friendly societies among working men, and this cannot be arranged unless the working is on a tolerably large scale, and covers a considerable district. Moreover, the governing bodies of the free charities should understand that provident medical institutions are not antagonistic to their charities, but are intended to relieve them from incumbrances, and free them from abuses.

It is almost indispensable for the success of a large select system of provident dispensaries that the out-patient department of the medical charities should guard their doors with more intelligent exactness than they do at present. The lax administration of the outdoor department of hospitals is a serious obstacle to medical providence on the part of the working classes; and, until it is well understood that a reorganisation of the lax system of administering medical relief at hospitals is an indispensable corollary of medical providence among the industrial population, the provident movement is seriously handicapped.

The meeting at Liverpool, under the auspices of Sir W. B. Forwood and Canon Lefroy, and with the aid of Mr. Reginald Harrison, Dr. Hamilton, and a large number of other medical men, begins with favourable prospects, and, it may be hoped, that the difficult problem in hand will be successfully solved by them. It is an excellent feature in the programme that the chairmen of the committees of the various hospitals, and the president of the Medical Institution, have been invited to form part of the executive committee. It was stated, in the course of the meeting, that the labours of the Manchester Provident Society had materially diminished the number of applications at the hospitals of that city, who were considered able to pay for the medical relief they obtained. In 1875, it is stated they stood as high as 42 per cent., and to have been reduced now to 14 per cent. It was reported that there are now nine medical provident societies established in Manchester, and that they are self-supporting The payments to medical officers connected with them amounted £2,000 annually, and it is alleged that they have undoubtedly relieved the hospitals of undue pressure upon their resources, and have helped to carry out the principle of providence which they are founded to support. We trust that the Liverpool Association may be at least as successful, and may avoid the rocks on which similar enterprises have foundered. At any rate, good results are likely to follow from an intelligent co-operation of the leading members of the medical profession with social workers, such as Sir W. B. Forwood, in the attempt to substitute habits of providence for that evil custom of postponing provision for the day of sickness, and relying upon charity and upon the generosity of the medical profession, which for many millions of our population has taken medical aid out of the category of the things for which the million think it necessary to make any sort of payment.

MEDICINAL wines imported into Jersey are, it has been decided by a test case, recently heard before the Jersey Royal Court, while free from the medicine-stamp which obtains in England, subject under the insular law of that country to the same import-duty as regulates the import of liqueurs.

THE SUBSOIL AND WELL-WATERS OF ROME.

SOME time since, our Roman correspondent favoured us with an account of those of the ancient water-supplies of the imperial city which have been preserved or restored to the inhabitants by the reconstruction, in more modern times, of the conduits by which they are brought from the mountain lakes or streams. Of the fourteen aqueducts built under the Republic and Empire, four only remain, of which the Acque Marcia and Vergine retain their original designations, and the Felice and San Paola have been renamed. A full description of these, and of others of a less satisfactory character, with a number of analyses, had already appeared in a series of papers by Dr. Pinto, in the *Bullctino della Commissione Speciale d'Igiene del Municipio di Roma;* and, in the number of that publication for last August, we find a paper by Professor Cannizaro on the ground- and well-waters, which, notwithstanding the public supply, are still much used. The paper, which, with tables, plans, sections, and maps, occupies the entire number of the *Bullctino*, is of great interest, partly from the light it throws on the course and pollution of the ground-waters in an old inhabited site, and partly as showing the methods of analysis employed by a chemist of world-wide reputation, but which differ considerably from those in favour in this country.

So far as the unaided senses can judge, the well-waters of Rome are, he tells us, with few exceptions, satisfactory—that is, colourless, odourless, and tasteless, decidedly agreeable, and slightly alkaline from fixed alkali. The chief exception is the Acqua Argentina alla Marrana di S. Giorgio, which owes its characters to contamination by the waste-waters from the gas-works.

Cannizaro's analyses were limited to the determination of the fixed residue, chlorine, nitrates, "organic matter," and hardness, with examination for nitrites, ammonia, and phosphoric acid. The ammonia was determined by treating the water with caustic soda and sodic carbonate, allowing the precipitate to fall, decanting, and Nesslerising in the usual manner. Some waters gave no colour whatever, and none more than a very faint tint, with the single exception of the Argentina.

For nitrites, Cannizaro employed Griess's test, which is not only very delicate, but quite characteristic. To the water acidulated with dilute sulphuric acid, a few drops of sulphanilic acid are added, and, ten minutes later, a few of hydrochlorate of naphthylamine. If nitrites be present, even one part in a million, a coloration, varying from a rose to a marked red, appears immediately, or after some time. The Argentina actually gave a precipitate, the water itself being of a deep red. This test is capable of being applied quantitatively.

The examination for phosphoric acid was conducted in the usual manner, and, with few exceptions, the waters yielded abundant precipitates with ammonium molybdate.

Clark's process was employed for estimating the hardness; but, as is the practice on the Continent, the results were stated in parts per 100,000. Two series of observations were made on twenty-five cubic centimètres and on ten cubic centimètres of the several waters, with the remarkable result, not, we believe, hitherto noticed, that the smaller quantity always gave a higher estimate, higher by 25 to 75 per cent. than when the larger was taken.

Further examinations, in which the calcium and magnesium carbonates were determined by weighing, gave results closely agreeing with those obtained by the soap-test on twenty-five cubic centimètres of water, showing that the ten cubic centimètres are too small a quantity for accuracy. Cannizaro intends to follow out the subject with a view to ascertaining the cause of this discrepancy.

For chlorine, Cannizaro employs Volhard's process as modified for the examination of potable waters by Professor Mauro, and Drs. Piccini and Nasini. To 100 cubic centimètres of the water acidulated with nitric acid is added a measured excess of a centinormal solution of silver nitrate. The excess of silver is titrated with a centinormal solution of thiocyanate of ammonia, and the chlorine calculated from the silver-nitrate consumed. The nitrates were determined by Tiemann's modification of Schulze's method, the gas (NO^2) being collected over a solution of caustic soda, previously boiled, in a tube graduated to tenths of a cubic centimètre. Their quantity was always large.

For estimating organic substances he prefers Kubel's process, as sufficiently exact, and far easier than those which aim at greater precision. Its results have been very constantly confirmed by micrological examinations conducted by Professor Marchiafava and Dr. Celli.

Besides the so-called Sallustian waters, which are spring-waters of a high degree of purity issuing from the Travertine, a volcanic rock, there is beneath the entire area of the city a stratum of water at depths varying from 15 to 30 feet, a true ground-water, flowing in every direction from the suburbs to the Tiber. The difference in composition between the two waters—the Sallustian and the subsoil—is striking; for example, while in two wells fed from the former the solids in parts per 100,000 were 39.6 and 33, the hardness 25.12 and 21.5, the chlorine 1.207 and 1.388, and the nitric acid 1.832 and 1.912, in a couple of wells sunk into the ground-water the solids were 81.8 and 111.2, the hardness 66.55 and 81.35, the chlorine 14.058 and 14.004, and the nitric acid 26.759 and 30.797. That these large amounts of impurities are taken up by the water as it flows riverwards through a soil sodden with the filth of successive generations during 2,000 years, is clearly shown by Professor Cannizaro's analyses of various series of wells, taken in order in the direction of this underground current. In one case, the proportion of fixed solids in 100,000 was found to be 48, 57, 73, and 120. In another and longer series, while the hardness varied irregularly between 2 and 39, ending with 28, the fixed residue steadily and regularly rose from 39 to 112.

The conclusion to which the author comes is that, however agreeable to the taste and eye these subsoil-waters may be, they are fouled by sewage and other organic matters derived from the soil and streets of the city, that their use ought to be discontinued. To the text are appended a number of tables giving the results of his analysis in full, a diagram exhibiting the elevation of the ground-level and the ground-water, a splendid map of the city, and several beautifully drawn and coloured sections showing the relative position of ancient cloacæ and modern sewers, the depth of the ancient roadway beneath the present street, and the level of the ground-water in each case. From these, too, we learn that the new sewers now in process of construction are egg-shaped, with massive masonry, and galleries running along the invert.

A FURTHER death of a patient when under chloroform is reported at the Infirmary, Newcastle-on-Tyne, of which we shall no doubt receive particulars in due course.

LATE advices from Gibraltar state that cholera was increasing at Algesiras, which is six miles distant, across the Bay, from the British colony.

THERE has been a great falling off in the collections of the Hospital Sunday Fund at Liverpool, which is attributed, in a great measure, to the unfavourable state of the weather.

IT is announced that the honour of knighthood has been conferred upon Mr. W. B. Dalby, aural surgeon and lecturer on aural surgery at St. George's Hospital.

A SMALL-POX epidemic having declared itself in the slums of Marseilles, the Municipality have ordered the immediate creation of eight vaccine dispensaries. The mayor of that city has telegraphed to M. Pasteur and to the Veterinary Establishment at Alfort for vaccine-matter for the municipal medical officers.

THE Hungarian Minister of Education has asked M. Pasteur if he will receive a medical man sent by the Hungarian Government for the purpose of receiving instruction in the prophylaxis of hydrophobia. M. Pasteur has readily consented to the request; and Professor Babes, of Buda-Pesth, will probably be accordingly sent to Paris.

PROFESSOR VICTOR HORSLEY, of London, reported, at a recent meeting of the Biological Society of Paris, his researches on the relation of the removal of the thyroid gland to the pathogenesis of myxœdema. His communication was listened to throughout with marked interest by the members of the Society.

THE death-rate at Cairo is now unprecedentedly high, having reached over sixty per thousand. It is believed that this is chiefly owing to the polluted state of the water-supply. The canal from which pipes run to supply the city is being drained, in hopes of reaching the root of the evil.

PARKES MUSEUM OF HYGIENE.

A LECTURE on "The Working of the Separate Sewage Systems" will be delivered at the Parkes Museum, 74A, Margaret Street, on Thursday, January 21st, at 8 P.M., by Mr. R. T. Grantham; Professor W. H. Corfield, M.A., M.D., in the chair.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Library of the College will be closed on Friday, January 15th, for the purposes of the Pass Examination of the Membership, for which 80 candidates have entered.

GRESHAM LECTURES.

LECTURES on the Treatment of Disease will be delivered on January 19th, 20th, 21st, and 22nd, 1886, by Dr. E. Symes Thompson, at Gresham College, Basinghall Street, E.C. Lecture 1, on Tuesday, January 19th, will discuss general principles of treatment; Lecture 2, Wednesday, January 20th, on change of air; Lecture 3, Thursday, January 21st, on the medicinal treatment of disease; Lecture 4, Friday, January 22nd, on external treatment.

COLLECTIVE INVESTIGATION IN THERAPEUTICS.

THE Connecticut State Medical Society has been applying the collective system of investigation to some new remedies. It finds that convallaria ranks second to digitalis, being less reliable and effective. It has little diuretic and no cumulative action. While admitting that Jamaica dogwood has hypnotic properties, the Society thinks that it is of little therapeutic value. It regards cascara sagrada a valuable remedy in constipation.

"NON-ALCOHOLIC WINES."

A FIRM of manufacturers of "non-alcoholic" wines, Messrs. Turley, who are said to have done an extensive business, were lately summoned by the excise authorities at Birmingham for selling intoxicating liquors without a licence. These wines (port and sherry), though guaranteed free from alcohol, were found, on analysis at Somerset House, to contain respectively 17 and 19 per cent. of alcohol.

ROYAL MEDICAL BENEVOLENT COLLEGE.

WE understand that the total amount of the York collections in aid of the Royal Medical Benevolent College, to which we recently referred, is £26 1s. 10d. A considerable number of such collections in various towns and cities would materially aid this important medical charity, which stands in need of all the assistance that can be given to it.

PREVENTION OF RABIES.

IT is stated that the present stringent police regulations with regard to dogs will be withdrawn on the 17th of January, when the term of sixty days will have expired. During the time the regulations have been in force, about 17,000 dogs have been suffocated at the Dog's Home at Battersea.

INCREASED COST OF LUNACY.

IT is officially reported that the pauper lunacy charges for England for the year 1885-86 are £478,500, an increase on the previous year of £17,500; for Scotland the charges are £84,500, being an increase of £500; and for Ireland, £98,200, an increase of £2,810.

PRACTICE AND THEORY.

THE *Sanitary Record*, in mentioning that Professor Koch has opened a new course of hygiene, which is for the first time an integral portion of the medical studies of the University of Berlin, observes that there certainly can be no better field for the operations of sanitary science than Berlin, where the weekly death-rate is a very high one.

DR. DE PIETRA SANTA.

THE Statistical Prize (Prix Montyon) for 1885 has been awarded by the Académie des Sciences to Dr. Prosper de Pietra Santa, the editor of the *Journal d'Hygiène*, for his researches on typhoid fever in Paris from 1875 to 1884. We have the more satisfaction in recording this award, because, it will be remembered, the first part of the work which has gained this high distinction—that covering the period from 1875 to 1882—was communicated in the first instance to the annual meeting at Worcester of the British Medical Association, and was published in 1883 in the columns of the JOURNAL.

CREMATION.

THE cremation of another human body has been effected at the Crematorium, Woking—namely, that of a lady of mature age, whose weight exceeded fourteen stone. The remains were enclosed in an elm coffin, and the incineration was perfected in ninety minutes. The ash of the body weighed three pounds. Dr. Sadgrove M. Saunders, the Medical Officer of Health for the City, in reporting the circumstance at a meeting of the City Commission of Sewers on Tuesday, called attention to the fact that this was the third body which had been so dealt with by the Cremation Society, and marked a distinct advance on the present method of burial.

HARVEIAN SOCIETY OF LONDON.

THE following is a list of the names of gentlemen proposed by the Council as officers of the Society for the year 1886. *President:* *J. Hughlings Jackson, M.D., F.R.S. *Vice-Presidents:* Malcolm Morris, Esq., Charles Vasey, Esq., *T. Bryant, Esq., *J. Cavafy, M.D. *Treasurer:* Thomas Buzzard, M.D. *Honorary Secretaries:* J. Ernest

Lane, Esq., *E. Clifford Beale, M.B. *Council:* G. P. Field, Esq., F. Otley Lovell, Esq., P. Kirkpatrick Picard, M.D., W. H. Platt, Esq., Henry Power, Esq., T. Gilbart Smith, M.D., John Williams, M.D., *J. S. Brookfield, M.D., *Arthur W. Edis, M.D., *W. Ewart, M.D., *T. Morton, M.D., *H. W. Page, Esq. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

THE following members were elected as officers and councillors for the year 1886, at the annual meeting on January 11th. *President:* *T. Charters White, Esq. *Vice-Presidents* (Resident): George Gregson, Esq.; Henry Sewill, Esq.; *S. J. Hutchinson, Esq. (Non-Resident): Richard White, Esq. (Norwich); Andrew Wilson, Esq. (Edinburgh); *Richard Rogers, Esq. (Cheltenham). *Treasurer:* James Parkinson, Esq. *Librarian:* Felix Weiss, Esq. *Curator:* *Storer Bennett, Esq. *Editor of the Transactions:* *Frederick Canton, Esq. *Honorary Secretaries:* David Hepburn, Esq. (Council); Robert H. Woodhouse, Esq. (Society) *Willoughby Weiss, Esq. (for Foreign Correspondence). *Councillors* (Resident): William St. George Elliott, Esq.; Augustus Winterbottom, Esq.; Samuel Cartwright, Esq.; Morton A. Smale, Esq.; J. Howard Mummery, Esq.; Arthur S. Underwood, Esq.; *C. J. Boyd Wallis, Esq.; *E. G. Betts, Esq.; *J. F. Corbett, Esq. (Non-Resident): W. E. Harding, Esq. (Shrewsbury); Robert Reid, Esq. (Edinburgh); J. R. Brownlie, Esq. (Glasgow); J. H. Whatford, Esq. (Eastbourne); *F. H. Balkwill, Esq. (Plymouth); *George Brunton, Esq. (Leeds). The gentlemen whose names are marked with an asterisk are new officers and councillors.

MANCHESTER MEDICAL SOCIETY.

THE following office-bearers for 1886 were elected at the annual meeting held at the Owens College, January 13th. *President:* James Hardie, M.D. *Vice-Presidents:* Julius Dreschfeld, M.D.; Charles Edward Glascott, M.D.; George William Smith; Alfred William Stocks. *Treasurer:* David Little, M.D. *Secretary:* Frederick Armitage Southam, M.B. (242, Oxford Road, Manchester). *Other Members of Committee:* Edward Stanmore Bishop; Charles James Cullingworth, M.D.; William Young Martin, M.D.; Siegmund Moritz, M.D.; Philip Henry Mules, M.D.; Frederick Morris Pierce, M.D.; Charles Jeremiah Renshaw, M.D.; Thomas Wemyss Rhodes, M.D.; James Ross, M.D.; William Japp Sinclair, M.D.; William Yeats, M.D.; Alfred Harry Young, M.B. (The above, with the past presidents of the Society, and two representatives of the Council of Owens College, form the Committee.) *Library Committee:* Abraham Matthewson Edge, M.D.; Abraham Emrys-Jones, M.D.; Siegmund Moritz, M.D.; James Ross, M.D.; William Yeats, M.D. *Auditors:* Samuel Johnston Graydon, M.D.; Alexander Hill Griffith, M.D.

OBSTETRICAL SOCIETY OF LONDON.

AT the January meeting of this Society on Wednesday last, the President announced that the case of Dr. Heywood Smith had been duly considered by the Council, which had come to the conclusion that it was not justifiable to put in force the law by which Dr. Smith's name might be removed from the list of Fellows, but had passed a resolution that, "having heard Dr. Heywood Smith's explanation of his conduct in the Armstrong case, it is resolved that the Council emphatically disapproves of his action in that case." Mr. Drage, of St. Bartholomew's Hospital, exhibited a specimen of rupture of the uterus; the rent ran along the left side, beginning close below the fundus, and extending through the cervix and further downwards for one inch through the vagina. The patient, a woman, aged 36, had a very pendulous abdomen; the labour began easily, and the pelvis was large. After a few hours the placenta was found presenting, the fœtal head lying above it; an alarming amount of hæmorrhage had occurred. When the fœtus had been removed, Mr. Drage found that his hand passed into the peritoneal cavity amidst coils of intestine. The patient died half an hour later. Dr. Galabin exhibited a specimen of a tumour which presented at the os uteri, and was enucleated early in the autumn; the tumour had not recurred. Dr. Galabin believed that it was cancerous. Dr. Lewers brought forward a specimen of sarcoma of the uterus, with nodules in the vagina. Dr. Herman read a learned paper, "On the Production of the Shape of the Oblique Pelvis of Nægelé," which provoked an active discussion, in which several obstetricians who have contributed to our knowledge of pelvic deformities took part. A second contribution was read; its author was Dr. Braithwaite, and it was entitled "A Case of Extra-uterine Gestation treated by Laparotomy, in which the Placenta never came away." The question of a possible absorption of a placenta in these abnormal cases was discussed after the reading of this paper.

CLINICAL SOCIETY.

AT the meeting of this Society, on January 8th, Sir. Andrew Clark gave an interesting account of a case which he denominated one of desquamative prostatitis, in which there was a discharge of hyaline cylinders, resembling renal cylinders. Mr. Clutton read notes of a large cervical spina bifida, which was undergoing spontaneous cure, when death from diphtheria supervened; and Mr. Sympson, of Lincoln, showed a boy, aged 7, the subject of myositis ossificans, in whom large bony growths occupied the tendons of the latissimi dorsi, trapezii, and other muscles, so that a large saddle of bone was formed in the loin, preventing all bending of the back. The growths had begun about sixteen months before, as soft swellings, which had since become smaller and more dense. The boy was otherwise healthy. Mr. Hutchinson and other members were appointed as a committee, to examine and report upon the case. The usual business of the annual meeting was also transacted. The scrutineers appointed to supervise the ballot reported that the list of officers nominated by the Council, had been adopted. The list was published in the BRITISH MEDICAL JOURNAL of January 9th, page 80. The report of the Council for 1885, stated that the Society now consisted of 307 resident and 102 non-resident members; that 33 new members had been elected, against 5 only who, by death or from other causes, had ceased to be members, and that Sir G. Burrows, Bart., and Mr. J. Simon, C.B., had been elected honorary members. Dr. Herbert Davies and Dr. T. P. Heslop, two ordinary members, and Professor Frerichs of Berlin, and Professor Pantaleone of Rome, two foreign honorary members, had died during the year. The Society's funds were slightly less than at the same date in the previous year, a fact due to the exceptional cost of the last volume of the *Transactions*, in which were two important communications that added largely to its value; namely, the verbatim report of the debate on Charcot's joint-disease, and the valuable report of the Committee on spina bifida. Two Committees, one on Charcot's joint-disease, and the other on myxœdema, were still at work. The treasurer's balance-sheet stated that the amount of stock standing in the names of the trustees, at the end of the year, was £600. Mr. Cripps thought the Society should be congratulated upon the report. The last volume was an extremely valuable one, especially with regard to the report on spina bifida. It was evident this Society was doing good. In these days of financial depression, it was very pleasing to find that the funds of the Society were in so favourable a condition. He moved that the report of the Council, and the audited balance-sheet, be received, adopted, and printed in the next volume of the Society's *Transactions.* The proposition was seconded by Dr. Angel Money, and carried unanimously. Dr. James Anderson proposed a cordial vote of thanks to the retiring officers of the Society; Dr. B. O'Connor seconded the proposition, which was carried unanimously, and acknowledged by Mr. J. H. Morgan, who said that the work of the general members of the Council was a mere sinecure, as the president and secretaries worked with so much assiduity, that they rendered the

labours of others a pleasure rather than a task. Nevertheless, he must thank the president and the members generally for the vote just passed. Under the present favourable auspices, he was confident the Society might justly look forward to a career of uninterrupted prosperity.

PATIENTS' NAMES AND PATIENTS' SECRETS.

A GERMAN practitioner has been sentenced to a fine of £75 for "unauthorised publication of secrets." He seems to have been exorbitant in his fees; but the offence with which he was charged was that of displaying in a public refreshment-room a bill of fees to a certain gentleman, which set forth that the attendance was on his wife for a "sexual complaint." The laws in most continental countries distinctly recognise the obligation of medical men to keep the secrets of patients whom they attend professionally, and are, as a rule, duly enforced, when necessary. If an English practitioner were to be guilty of such "infamous conduct in a professional respect" as the German above-mentioned, it would probably be a very much more difficult matter to punish him. We do not see how he could be charged under the criminal law, though a civil action for malicious libel might possibly lie. As to what the Medical Council might do under the circumstances, it would perhaps be somewhat rash to speculate—at all events, if the case came under the notice of that August body without previous sifting in a court of law. The question is based upon the great principle that the individuality of a private or hospital patient is sacred; and though the case may, and often ought to, be published in a medical book or paper, for the benefit of humanity, it is always advisable to omit the patient's name.

METROPOLITAN HOSPITAL ACCOMMODATION FOR SMALL-POX.

IN his twelfth monthly report, November 9th, Dr. Dudfield referred to the divergent views of the Local Government Board and the Asylums Board on the question of the proper mode of providing hospital accommodation for cases of small-pox in the present *inter*-epidemic period. The managers, as represented by Sir Edmund Currie—influenced by the new report on Fulham Hospital by Mr. W. H. Power, wherein it is stated "that the excess of small-pox in the neighbourhood of the hospital was quite and specially remarkable at a time when the total admissions to hospital had not exceeded nine"—are desirous of closing the hospitals in London against small-pox, reserving only one ward at the Eastern and the South-Eastern Hospitals respectively, for severe cases, and of sending all cases, if practicable, to the ships. The Local Government Board, on the other hand, "concur with Dr. Bridges," their Medical Inspector, Poor-Law Department, in thinking it objectionable to close the hospitals in London, and to retain the hospital ships for use. Dr. Bridges favours the plan "to close the ship hospitals, and to meet all the cases that may occur in the wards attached to each of the five London Fever Hospitals, which have been appropriated to small-pox;" a plan which, no doubt, as Dr. Bridges states, "presents the fewest difficulties, and would be by far the most economical." Dr. Dudfield now further notes that the difference between the authorities has not, so far as is known, been arranged; and he observes, with reference to this, that if the views propounded by Mr. Power, supported as they are by Dr. George Buchanan, the Medical Officer to the Local Government Board, be well founded, it would be better to face any reasonable amount of "difficulty," and to bear any reasonable amount of expenditure, rather than to incur the risk of stirring into activity the still but dead embers of the epidemic, by treating in London hospitals any cases of small-pox that can be removed to the ships. Dr. Bridges, he adds, does not see any objection to the treatment of twenty to twenty-five (mixed) cases at each hospital, the Royal Commission's limit being "thirty or forty" (severe) cases, a number six to eight times as great as that which, *pace* Mr. Power, is said to have caused the epidemic prevalence of small-pox in the vicinity of the Western (Fulham) Hospital, in 1884.

ORAL TEACHING OF THE DEAF AND DUMB.

THE method of oral teaching of the deaf and dumb, which restores them to direct communion with their fellow-creatures, has so many humanitarian and social advantages, that we have for many years pointed with satisfaction to the growing success with which it is adopted. We see that, at the annual meeting of the Deaf and Dumb Asylum, Old Kent Road, this week, the committee mentioned that, five years since, they made the attempt at teaching the pure oral system, securing a new staff of teachers not acquainted with the finger-and-sign system. Since then, ninety children have been so taught; and the committee have come to the conclusion that, so far as possible, the oral system of teaching shall be adopted in schools for children from seven years of age. Those not capable of receiving instruction orally will still be taught by the silent system. Recently, the children at the oral branch of the asylum at Ramsgate performed in an excellent manner in a pantomime, on which occasion a girl born deaf and dumb, now thirteen years of age, recited in a most audible manner five verses referring to the season and the benefits of the asylum. This is a triumph of science and common sense, and we earnestly hope that this method of teaching will become universal, not to say exclusive.

CARDIFF MEETING OF THE BRITISH MEDICAL ASSOCIATION.

THE local Reception Committee have published a statement of receipts and expenditure in connection with a meeting of the committee held in Cardiff on October 29th. It is of a highly satisfactory character. The local subscriptions, which were headed by a donation of £200 from Dr. Edwards, President, amounted to £870 received from 170 subscribers. The expenditure amounted to about £700, leaving a balance of £174. The principal outlay was on the *soirée*, on which £480 was expended, £217 for refreshments, and £147 for decorations, etc. The surplus outlay on the dinner amounted to £97; the cost of the museum was £80, of which the advertisements and sale of catalogues recouped £60, leaving a net cost of only £20. Of the balance of £174 6s. 5d. which remained in hand on closing the accounts, a sum of 50 guineas was voted to Dr. Sheen for his energetic and devoted services as Honorary Local Secretary of the annual meeting, to be expended in a manner most agreeable to Dr. Sheen's wishes. To this was added an illuminated address, expressing the opinion of the Committee of the services so rendered. It was resolved that the balance, after paying all liabilities and expenses in printing and circulating statement of account, should be sent as a contribution to the Medical Benevolent Fund. A cheque for 100 guineas has accordingly already been forwarded to the Treasurer of the Fund.

MATERIA MEDICA AT THE COLLEGE OF PHYSICIANS' EXAMINATION.

THE paper set on January 6th for the first examination for the licence, on materia medica, medical botany and pharmacy, seems to have been drawn up in accordance with the views recently expressed by persons engaged in teaching, as to the undesirability of expecting students, often in their first year, to answer questions on the recondite details of the physiological action and therapeutical uses of drugs. The paper before us certainly does not sin on that head, although, of course, we have no assurance that this part of the ordeal may not be reserved for the *tête-à-tête* which takes place subsequently. As a matter of fact, it is probably far more essential for the medical man to be acquainted with the properties of therapeutical agents than with the pharmaceutical details of their manufacture, except in so far as the chemistry of the substance is concerned. Nothing certainly can be more usefully relegated to the past than the custom of asking for a list, say of the leaves, or the seeds, or what not, contained in the *Pharmacopœia*, a correct answer to which would only be an idle test of cramming powers. It is the more to be regretted, because the same question, somewhat modified, would be eminently practical, as, for example, a list of the emetics, diuretics, etc. An instance of this kind of demand occurs in the

present paper, where a table of the "fixed oils" is required, together with a question as to what substance is "derived" from olive oil. A very suitable question in future examinations would be as to the number and importance of the errors contained in the last edition of the *British Pharmacopœia*. On the whole, we do not think that any complaint can fairly be made of undue difficulty so far as the paper goes. If a student be unable to satisfy the examiners on such questions as these, it certainly augurs badly for his subsequent success. It is, however, open to much question whether the student, at this early stage of his medical education, can be expected to be capable of appreciating the uses of medicines in the treatment of diseases which he knows only by name, or to have mastered even the rudiments of prescribing in its therapeutic relations.

STIMULANTS AS RETARDING DIGESTION.

A CORRESPONDENT writes: The extended consumption of one or the other of this class of substances points to the existence of some beneficial effect to be derived therefrom, although what this consisted in it has been difficult to say, judging otherwise than subjectively. Sir William Roberts, of Manchester, has lately suggested an ingenious hypothesis, which offers a plausible explanation of their use. Man, in a state of nature, would derive his sustenance presumably from materials which, from their being raw, or at any rate imperfectly cooked, would be necessarily but slowly digested and assimilated. With civilised communities, on the contrary, everything is done with the view of facilitating digestion, by the removal of indigestible parts of the food, or by submitting them to processes which favour the action of the juices with which they are to be brought into contact. Under these circumstances, it is quite possible that digestion and assimilation may proceed at a speed not only unnecessary, but even disturbing, to the equilibrium of the organism, and provocative of waste. The employment of alcohol, tea, coffee, etc., would tend to correct this undesirable acceleration of the assimilative processes; for Sir W. Roberts has proved, by a series of carefully conducted experiments, that their effect is powerfully to retard the action of the various digestive ferments on the foods; and it may be that the instinctive sense of the benefit thereby derived lies at the root of the yearning of all civilised nations for such substances. Again, some condiment, such as common salt, is added, to restore sapidity to articles from which the salts have been removed in the process of cooking; and, taken in excess, it only throws extra work on the organs of excretion.

THE PREVENTION OF MYOPIA IN SCHOOL CHILDREN.

IT is now tolerably well established that shortsightedness is developed and increased in a certain direct relation to the amount of school-work done by children. For the prevention of myopia, Fuchs, of Liège, in a prize essay, quoted in the *Birmingham Medical Review*, gives the following directions. First in importance is the arrangement and lighting of the schoolroom.

"The principal windows in England should look to the south or south-east. The long axis of the room should run north and south. Every scholar should, from his place, be able to see some portion of the sky. Light from above is the best, and, except in hot climates, glass roofs are very advantageous. The chief light must come from the scholar's left side. The height of the top of the window from the floor should not be less than two-thirds the width of the room. The total window-surface should bear to the area of the floor a proportion of at least 1 to 5. In artificial lighting by gas, every burner must have a glass chimney and a shade, the latter arranged to reflect the light down upon the desk, and to screen the scholar's eyes. There should be about one burner to every four scholars."

It is most important that the eyes should not be approximated too closely to the book. The proper position is that in which the shoulders and pelvis are parallel with the edge of the desk, and the head upright or bent but slightly forward. As to the construction of desks and seats, there must be several sizes, to suit scholars of various ages; the distance between seat and desk, in the vertical dire tion, must be but little greater than the distance between the elbow and the ischial tuberosity. The edge of the desk must overhang the seat about 2 inches; the scholar can then sit upright. The surface of the desk must slope about 1 in 5, to obviate the bending forward of the head; and the breadth should not be less than 15½ to 16 inches. All stooping should be avoided, and the types used must be perfectly legible.

SCOTLAND.

THE Public Health Committee of Edinburgh Town Council have resolved to set aside twelve beds in the new Fever Hospital for the treatment of aggravated cases of whooping-cough.

LOW DEATH-RATE IN EDINBURGH.

AT a meeting of Edinburgh Town Council held on Tuesday, on the Medical Officer of Health's report being submitted, it was stated by Baillie Russell that the death-rate for 1885 had been 16.9, as compared with 18.6 in 1884, and 19.0 for the average of the preceding five years.

ROYAL MATERNITY HOSPITAL.

THE arrangements at the Royal Maternity and Simpson Memorial Hospital, Edinburgh, for the ensuing three months, are as followsl Professor Simpson is succeeded by Dr. Angus Macdonald as visiting physician, while Dr. Underhill will succeed Dr. Hart as assistant-physician. The present resident house-surgeons, Messrs. Robert Stewart, M.A., M.B., and C.M. (James Scott Scholar, 1885), and R. C. McWatt, will be succeeded by Messrs. T. W. Dewar, M.B. and C.M., and D. Macbeth Moir, M.A., M.B., and C.M.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.

THE monthly report of the Royal Edinburgh Hospital for Sick Children showed that, during December, 105 patients were treated in the institution. Of these, 63 were in the hospital from the previous month, and 42 were admitted during December. The average daily sick was 63; the cases discharged from the hospital relieved were 7; and 30 were discharged cured. At the dispensary, 346 patients were treated, and 8 were vaccinated, making in all 354. Of the new cases, which numbered 159, 124 were from the city, 30 from Leith, and 5 from the country. Thus the number of patients treated at the hospital during the month was 459.

PRACTICAL INSTRUCTION IN FEVERS, EDINBURGH.

THE important question as to practical instruction in fevers for students of medicine attending the Edinburgh School, continues to engage the attention of the various authorities concerned. At a meeting of the Town Council, held on Tuesday, various deputations were received, who appeared for the different parties interested. Professors Grainger Stewart, Rutherford, and T. R. Fraser, represented the university authorities, and various officials of the Students' Representative Council appeared for the students; both these deputations addressed the Town Council, and had some questions put to them by members of the Council. The medical officer of health also submitted a statement on the subject, and the extramural lecturers relied upon their previous representations to the Council. The suggestions of the different parties differed considerably in detail, but all were unanimous in urging the importance of a settlement of the subject, which will efficiently provide for complete practical instruction in this important class of diseases. The matter was remitted to the Public Health Committee for further consideration.

ABERDEEN ROYAL INFIRMARY.

THE committee, appointed by the managers of this Institution, have called in the aid of Mr. H. Saxon Snell, the eminent authority on hospital construction, with a view to considering as to the sufficiency

of the present site, and as to the possibility of constructing a really efficient, and sufficiently commodious hospital, from the present building. Mr. Snell considers it possible so to alter the present building as to obtain a hospital for 250, or even 300 beds, with suitable air space, etc. The present front building would be used for administrative purposes, while the ward accommodation would be provided in three large parallel detached pavilions, with connecting corridors, running out at right angles behind. This extension would cost about £20,000.

VOLUNTEER AMBULANCE IN ABERDEEN.

A PUBLIC meeting was held in Aberdeen on Saturday last, to consider the question of the formation of a volunteer ambulance corps for students of medicine in Aberdeen. There was a large and representative attendance, and there seems every prospect of the necessary funds being raised to begin and carry on the scheme.

THOMSON SCIENCE LECTURES IN ABERDEEN.

THE Thomson Science Lectures in Aberdeen are at present being delivered by the Rev. Mr. Macmillan, F.R.S.E., of Greenock, the subject being a botanical one. In his earlier lectures Mr. Macmillan referred to the distribution and organisation of mosses, in geological times as well as at the present day.

DUNDEE ROYAL ASYLUM.

AT a quarterly meeting of the Directors of Dundee Royal Asylum, held on Monday, the report submitted showed that there were 282 patients in the institution. The financial report submitted showed that there was a decrease of £1,342 in the amount received for the board of patients during the last nine months of 1885, as compared with the last nine months of 1884.

HEALTH IN PERTH, 1885.

THE annual mortality of the City of Perth during 1885, was 17.24 per 1,000, the total number of deaths for the year was 540, of whom there were 23 uncertified, while 93 or 17.9 per cent. of the entire mortality occurred in public institutions. The death-rate, therefore, compares very favourably with that of several preceding years, thus, in 1884 it was 20 per 1,000, in 1883 it was 19, and in 1882 it was 24. The medical officer of health, in his report, ascribes this largely to improved sanitation. During the year there were outbreaks of whooping-cough, scarlet fever, and typhoid ; these were limited, however in their extent, and the latter was so clearly traced to milk propagation as to be easily dealt with. Twenty-nine per cent. of the entire mortality was of children under five years of age, and thirty-two per cent. of adults over sixty years of age.

IRELAND.

THE Belfast Dispensary Committee have unanimously recommended an increase in the salary of Dr. Murray, their medical officer, from £150 to £175 per annum.

DR. ANDREW WILSON, F.R.S.E., Examiner in the Faculty of Medicine of the University of Glasgow, has been appointed an Examiner in Botany in connection with the Intermediate Education Board for Ireland.

THE LATE MR. JOLIFFE TUFNELL.

IT is proposed to erect a tablet in Christ Church Cathedral, Dublin, in memory of this well known surgeon. The subscription is limited to £1, in order that many of his old friends may embrace this opportunity of joining in an affectionate remembrance of him. Mr. W. I. Wheeler, of 27, Lower Fitzwilliam Street, Dublin, is the Honorary Treasurer, and will receive and acknowledge subscriptions.

COUNTY ANTRIM INFIRMARY.

DURING the past year, 461 intern and 1,486 extern cases were treated at this hospital, while 47 operations were performed with a very low mortality. Many improvements have taken place during the past year, and a complete system of drainage has been carried out in a most efficient manner. The nurses have been trained in conjunction with those of the Thompson Memorial Home, and lectures have been delivered in the latter institution by Dr. St. George, the resident surgeon.

THE LATE DR. BEVERIDGE.

THIS gentleman recently died from typhus fever, and the following resolution has been adopted by the members of the Kingscourt Dispensary Committee, in reference to his untimely decease : "That we beg respectfully and sincerely to express our deepest sympathy with the friends and relatives of our late lamented medical officer, Dr. E. F. Beveridge, and we deplore his too early removal from amongst us. That the secretary be directed to send copies of the above to the relatives of Dr. Beveridge."

DEATH OF DR. ARCHIBALD NAPIER KIDD.

DR. KIDD died on January 1st at his residence at Caledon, County Armagh, aged 46 years. The deceased gentleman had been in bad health for some time past, and recently the guardians of the Armagh Union sanctioned the appointment of another practitioner to discharge his duties during his absence. The funeral, which was attended by a large number from Armagh, Caledon, and Tyrone, arrived at St. Mark's Church, Armagh, on January 5th, most of the shops being closed, and his remains were laid in their last resting-place beside those of the late wife of the deceased.

CORK UNION.

THE following report of the committee appointed to examine into the medical arrangements of the house was adopted at a late meeting of the guardians. "With reference to the question submitted to the committee, as to any alteration that may be desirable in the medical arrangements of the house consequent on the resignation of Dr. Magner, we consider that it is desirable to separate the offices of resident physician and apothecary; and with this view we recommend that the Board appoint a resident medical officer at a salary of £100 a year with residence and rations, and also a non-resident pharmaceutical chemist, at a salary of £70 a year ; the resident physician to take medical charge of the house during the absence of the visiting medical men ; to visit all the hospitals at night, and to go around the house with the visiting physicians daily, and take their instructions as to the treatment of the several patients ; the pharmaceutical chemist to compound all the drugs required for the use of the house, except patent medicines, and to make up all prescriptions." The committee believe that, if a thoroughly competent and efficient man be appointed to this latter office, the saving in the cost of medicines will, in a short time, much more than pay his salary.

WATER-SUPPLY OF TUNBRIDGE WELLS.—The fashionable metropolis of Kent, as Tunbridge Wells has been termed, can now boast of an illimitable supply of pure water, consequent on the opening on Wednesday of its new and enlarged waterworks. Briefly described, the reservoir, which is situate at Penbury, about four miles from Tunbridge Wells, is seven acres in area, has a depth of 27 feet, and will hold 45,000,000 gallons. It has been designed, and plans prepared by Mr. W. Brentnall, M.I.C.E., the engineer and surveyor to the local board, the cost of the undertaking being £33,000. The negotiations for these waterworks were opened up as far back as 1875, but owing to the nonfulfilment of contracts, and several law suits attendent thereon, the completion of the scheme has been several times delayed, somewhat to the injury of the town, which, on several occasions, has been dangerously short of water, owing to the absence of proper storage accommodation. The opening of the works on Wednesday, it should be added, excited great public interest.

LEEDS SCHOOL OF MEDICINE: ADDRESS BY SIR SPENCER WELLS.

THE seventh annual dinner of the Past and Present Medical Students of the Leeds School of Medicine—now the Medical Department of the Yorkshire College—took place at Leeds, on Friday, January 8th, and was more largely attended than any previous dinner. Sir Spencer Wells, who began his medical studies at the Leeds School, occupied the chair, and was supported by many of the leading practitioners of the town and neighbourhood—past students—and by many of the present students, who greeted him very cordially. We have received tolerably full notices in the Leeds papers; but as the reports of the principal speech of the evening, by Sir Spencer Wells, in proposing the toast, "The Medical Department of the Yorkshire College," are naturally much abbreviated in the newspapers, we have obtained a full report, as it will be of interest to many of our readers.

Sir Spencer said: Gentlemen,—You who know so well, and value so highly, the present proud position of the Leeds Medical School, especially since its union with the Yorkshire College—a union which has resulted in advantage to both—which has associated science, art, literature, and general culture with special attainments, may still hear with interest some of my own recollections of the School fifty years ago—of its founders or early teachers, of some of the men who were fellow-students, and of the way they then worked, without many of the advantages which the students of our own time enjoy.

And I should like to begin (by way of encouragement to some of the younger men) by saying that I very much doubt if any one of the youngest here can be entering upon the study or practice of our profession with a smaller probability of a successful career than I had when, a lad of 18, I went to live in the house of Mr. Marsden (then one of the parish surgeons), with some idea of a formal apprenticeship. I was at once set to work—dispensing medicines, keeping day-book and ledger—and was taken by Mr. Marsden to the workhouse and to poor patients, and to several midwifery cases. It may surprise some of our students of to-day (perhaps not so much here as in London) when they hear that before I was 19 years old I had attended a great many of the poor women of Leeds in childbirth. Mr. Nunneley was the colleague of Mr. Marsden at the workhouse; and I did some minor surgical work there, and obtained permission to visit the practice of the old Infirmary. In October, 1836, I began to attend the lectures on anatomy and physiology by Mr. Teale and Mr. Garlick, the demonstrations by Mr. Price and Mr. Nunneley, and did some work in the dissecting-room, then in the East Parade, close to the old Infirmary. I also attended a course of lectures on materia medica by Dr. Hunter, of which I have no very distinct recollection, nor many notes. But I do remember going in for the written examination for the prize in that class, with Birkbeck Nevins, now a distinguished physician in Liverpool, as my chief competitor; and I suppose the fact that he beat me, and got the prize, impressed it on my memory. It certainly has not lessened the friendly feeling with which, whenever we meet, we greet each other as old fellow-students. Of Teale's lectures, I still have full notes. I have looked them over lately, and I can say of them now, what I believed then, that they are fully up to the knowledge of the day, and sometimes in advance of it. I have never heard a more pleasing lecturer since; and the kindness Mr. Teale showed me when his pupil, and his friendship in after years—continued by his son, your own distinguished teacher—are among the most gratifying events of my professional life. Another of your professors—Price—is the son of Price, one of the founders of the Leeds School of Medicine, who was Demonstrator of Anatomy in my first year. He was an excellent demonstrator. He went over the ground again and again, until he felt sure that we all understood him, and he always managed to light up his "dry bones" with some practical interest. Braithwaite, father of another of your teachers, and founder of the famous *Retrospect*, was not then attached to the school, but I made his acquaintance in a curious way, and he taught me a lesson which I have never forgotten. As it may be useful to some of you, you will perhaps excuse me if I indulge in what may be called gossip. One evening, a farmer rode up to Mr. Marsden's, who was the nearest medical man, to beg him to go at once and see a girl who was very ill. Marsden was not at home, so I offered to go. The farmer hesitated, but he was very anxious, so he said, "Well, lad, get on my horse, and I'll go on for our doctor, Mr. Braithwaite." So I rode to a small farmhouse near Chapeltown, and found a room full of people, and a girl insensible on the bed. I remember having her clothes loosened and opening a window, and, when she began to shiver, trying to make her swallow a little brandy and water. Then Braithwaite arrived, and very soon took me into another room, after saying to her mother "Give her two teaspoonfuls more of that brandy and water!" But as soon as we were alone, he said, "It was very wrong to give her brandy and water. It is the first stage of some eruptive fever. But a teaspoonful won't make any difference, and it will show that I did not differ from you. If I had," he said with a kind smile, "perhaps they would not believe either of us!" There was something in this way of treating a junior—so much good feeling mixed up with so much knowledge of human nature—that I have many times since, when consulting with juniors, followed, or tried to follow, Braithwaite's example. I must not say much more of the other men of that day, although I well remember some of the operations and clinical lectures of Samuel Smith, at the Old Infirmary, and can fully support all that Mr. N. Price said of him in his address four years ago. Many of my fellow students have finished their course. Heaton, who afterwards became physician to the Infirmary, I often met in after-years. He died some five years ago, after a career of great use to his townsmen. But the men who (since the time of the Heys, Teale, Price, Garlick, S. Smith, Nunneley, and Braithwaite) have made the reputation of the Leeds School, and have risen to eminence, are men of a later date. Some of them are present, and I need not mention their names. Of my old friend Priestley, I may say that he and I, after I left Mr. Marsden and Leeds, were pupils of the late Michael Thomas Sadler, of Barnsley, a very able man, whose example and advice I have always valued, and whose friendship only ended with his life. His son is here to-night, worthily bearing his father's name. I still look upon the time I spent at Barnsley, and in Leeds, with the utmost gratitude; and I most fully concur in what Sir J. Paget said in his inaugural address, twenty years ago, on the opening of the new buildings of your school: "As a constant rule, the best students, and they who have proved themselves the best, not only in the schools but in after life, have been those who in the beginning of their studies, and for the most part before attending lectures, have been pupils in provincial hospitals, or with active and intelligent general practitioners, who have enabled them to see practice every day, and helped them to study it. . . . . The best students are those who have from first to last, and always, combined the study of actual practice with that of the principles and foundations of our profession; or who, if they have begun with one of these, have begun with practice, and then studied the principles together with it." It was a conviction that a sort of shorter apprenticeship would be of great advantage to students, which led to the regulation in the scheme for the combined diploma of the two London colleges, which permits one winter and two summer sessions of the prescribed course of study to be passed, while "receiving instruction as a pupil of a legally-qualified practitioner holding such a public appointment, or having such opportunities of imparting a practical knowledge of medicine, surgery, or midwifery, as shall be satisfactory to the two colleges." Gentlemen, I trust that many of the students of the present and the future will take advantage of this regulation; and that the students of this school, and of the other provincial schools, will not be content with keeping up with the London schools, but will, in a spirit of generous rivalry, endeavour to win the race, and be first in the study of the science and practice of the art which benefits all mankind. Men of science, as Dumas said of Laplace and Cuvier, "know a happy life. Animated by the love of truth, indifferent to the enjoyments of fortune, they have found their recompense in public esteem." Pasteur said of Dumas, that he represented "true merit in a true democracy"—a democracy which permits every individual to give the world the *maximum* of his efforts. "And why," asks Pasteur, "should there be alongside of this productive democracy another which is sterile and dangerous, and which (under I do not know what pretext of chimerical equality), dreams of absorbing and annihilating the individual in the State? This pseudo-democracy has a worship for mediocrity. It suspects whatever is superior. It might be defined as the league of all who want to live without working, to consume without producing, and to obtain posts without being trained for them, and honours without being worthy of them." May this never be said of the students of the Yorkshire College; may you all be true workers; may you all deserve the posts and the reputation you obtain, and find your "recompense in public esteem."

THE ABUSE OF MEDICAL CHARITIES IN LIVERPOOL.

THE formation of a Provident Medical Association for the benefit of the working classes of Liverpool, and the introduction of the Manchester system for checking the abuse of the medical charities, was considered at a public meeting convened on Tuesday last, over which Sir W. B. Forwood presided, and at which there were present Drs. Gee, Steele, Cormack, Bell, Steeves, and Shearer, and Messrs. Townson,

Howie, W. Johnson, Reginald Harrison, etc., and a number of the clergy and others.

The CHAIRMAN, in his opening remarks, said the question which they were met to consider was one which had been fully brought before their notice by Dr. Rentoul, who stated that no fewer than 298,000 patients had gratuitous medical relief and advice *per annum* in the city of Liverpool. This was not only a severe tax upon the generosity of the medical profession, but was doing a great deal to pauperise the poorer classes of the town. He had before him a document, signed by 100 members of the medical profession in Liverpool, saying "that last year 253,000 persons received treatment at 18 local charities, 40,700 at the parish infirmaries, and 4,500 by medical men at their private residences, and agreeing 'that it was a great abuse of the Liverpool hospitals, and that a well-organised and properly conducted medical association would be a great benefit to the working classes and to those engaged in the promotion of self-help and thrift.'" The Manchester Provident Society, in 1875, in the first year of its operations, found no less than 42 per cent. were able to pay for the medical relief they obtained, which now, under their operations, were reduced to only 14 per cent. The nine medical provident societies in Manchester, with 19,000 paying members, and which paid the medical men connected with them £2,000 annually, were self-supporting, and had done much to relieve the hospitals and inculcate habits of thrift amongst the working classes. The Chairman, in conclusion, stated that the number of medical relief societies was 48, with no fewer than 233,000 members, receiving an annual income of £42,549.

Canon LEFROY moved a resolution in favour of the establishment of such a provident association, which was supported by Mr. REGINALD HARRISON, Dr. HAMILTON, and others.

Mr. REGINALD HAIGH, and two or three other gentlemen present, disputed the fact that such a large proportion of the people of Liverpool received gratuitous medical aid.

An amendment was moved that the question be referred back for further consideration, but was lost by a large majority.

Dr. GEE moved the appointment of an executive committee, of which the chairmen of the committees of the various hospitals, and the president of the local Medical Institution, were invited to form a part.

Mr. T. M. PATTERSON seconded the motion, which was carried unanimously; and a vote of thanks to the chairman terminated the proceedings.

THE MEDICAL MANAGEMENT OF PUBLIC SCHOOLS.

A MEETING of the medical officers of public schools was held on Tuesday, January 12th, at the rooms of the Medical Society, Chandos Street; Dr. FULLER, of Lancing, in the chair.

A paper was read by Dr. FLETCHER, of Highgate, on "The Management of Athletics in Our Public Schools."

In the course of his remarks, Dr. Fletcher said the paper was undertaken with a view to finding out the different methods of employing the hours of recreation at various schools, and what steps were taken with a view towards making boys enter into games. A printed form of questions had been sent round to different schools, and over 100 replies had been received, containing much valuable information. Outdoor exercises and games were advocated, but with care and supervision. Many valuable remarks on healthy training for boys were given, and physical education, it was contended, required studying as much as intellectual education. The various branches of sport were all alluded to, and great weight was given to each in turn, especially cricket and football, fives and gymnastics, drilling, swimming, and running. The moderate use of the cane was advocated, in place of keeping a boy in to write impositions; and fagging at cricket was held up as totally distinct from any form of bullying. Great stress was laid upon the boy who will not enter into any game, the so-called "loafer;" and it was strongly urged that such a boy should be stamped out from our schools, unless he did not enter into games because of ill-health. Taking a so-called constitutional walk for exercise was strongly decried, for boys who would always leave the playground for a walk were apt to get on to filthy objectionable talk on the unknown laws of nature, often getting hold of filthy books or translations; and now that for a penny they could buy the *Pall Mall Gazette* as published last July, they would not require any further indecent literature. In conclusion, some very sound practical advice was given how that the medical men, by entering with interest into the boys' games, may be able to give them help in matters of healthy training, and may show them how, by abstaining from all fleshly lust and vices, they improve their chance of success in games and in the battles of life.

A hearty vote of thanks to Dr. Fletcher was moved by the PRESIDENT; and it was proposed by Mr. NOBLE SMITH, and seconded by Surgeon-Major EVATT, that the Council take steps to print the paper, and circulate it amongst the various public schools of England.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council was held at the College on Thursday, the 14th instant. The minutes of the ordinary Council held on the 10th ult. were read and confirmed.

The Council authorised the purchase, for the Museum, of nine models of fossil Pterosaurians from Munich.

The President reported the result of the last meeting of Fellows and Members; and the resolution carried at that meeting was read, on which Mr. Macnamara moved, by permission of the Council, without giving notice, "That a committee be appointed to ascertain and report to the Council the views of the Fellows as regards the advisability of Members being allowed to vote for the election of Fellows as members of Council." This was seconded by Mr. Thomas Smith. An amendment was moved by Sir James Paget, and seconded by Mr. Cooper Forster, "That the consideration of Mr. Macnamara's motion be deferred until after the report of the Committee on the conditions of admission to the Fellowship shall have been presented to the Council." The amendment was carried *nem. con.*, and, on being put as a substantive motion, was also agreed to *nem. con.*

The senior Vice-President announced that the President, Mr. Savory, had accepted the office of Hunterian Orator for 1887, and accordingly he was declared duly appointed.

COLLECTIVE INVESTIGATION COMMITTEE.

LIST OF RETURNS RECEIVED DURING THE MONTH OF DECEMBER, 1885.

Border Counties Branch: X, R. Walker, M.D.
East Anglian Branch: X, C. B. Plowright.
Glasgow Branch: X, W. S. Fleming, M.D.
Gloucestershire Branch: X, D. H. Forty; Intemperance, G. A. Cardew.
Lancashire and Cheshire Branch: Manchester District: X, O. J. Kaufmann.
Metropolitan Counties Branch: I, M. G. Biggs (2); IV, R. Lord, M.D., A. Ogier Ward; X, D. R. Pearson, M.D., J. Black, F.R.C.S., H. F. Lancaster, M.D., G. Eastes, M.B.; F.R.C.S.; XIII, Intemperance, G. Eastes, M.B., F.R.C.S.
South-Eastern Branch: West Surrey District: I, C. H. Brown; III (2), X, XIV (3), T. Frederick Pearse, M.D. East Sussex District: X, H. Algernon Hodson.
South Midland Branch: X, J. Maunsell, M.D.
Yorkshire Branch: I, Norman Porritt.
Jersey: X, A. Dunlop, M.D., H. Le Cronier (2).
Nantes: X, T. P. Pons (2).

The returns to the International inquiry-paper will be acknowledged in the next monthly list.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 20th day of January, at 2 o'clock in the afternoon.

Tuesday, January 19th, 1886.—Scientific Grants Committee, 5.30 P.M.; Premises Committee, 6.30 P.M.; On appointment of Committees, 7.30 P.M.—*Wednesday, January 20th*, 1886. Committee on Branch Organisation, 10.30 A.M.; Journal and Finance Committee, 11.30 A.M.; Council, 2 P.M., at Exeter Hall.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 17th, 1885.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA,	ACUTE RHEUMATISM,
OLD AGE,	CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in re-

lation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

The Committee is also glad to receive reports of cases of the following conditions, memoranda and forms for which have been prepared, and may be had on application. PAROXYSMAL HÆMOGLOBINURIA, ALBUMINURIA IN THE APPARENTLY HEALTHY, SLEEP-WALKING, ACUTE GOUT, and special forms of PUERPERAL PYREXIA.

The "Sleep-walking" form may be filled in by a non-medical person if necessary.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in the preliminary discussions conducted by the Branches.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the above district will be held, by invitation of Dr. Amsden, at the Essex County Asylum, Brentwood, on Wednesday, January 27th, 1886, at 2.30 P.M. Previously to the business of the meeting, Dr. Amsden has kindly offered to escort the members round some of the wards of the asylum. Dr. Elliston, President of the Branch, will preside. Programme and Business Agenda:—1. To arrange the place and date of the next meeting, and to nominate a member of the district, resident in or near such place of meeting, to take the chair thereat, provided the President of the Branch does not attend. 2. To elect an honorary secretary for the year 1886. The following papers have been promised:—1. On the Administration of Medicines by Injection into the Rectum, by the President. 2. On Fits, by W. B. Hadden, Esq., M.D., of St. Thomas's Hospital, London. 3. The Treatment of Acute Mania by Hyoscyamine, by G. Amsden, M.B., Medical Superintendent, Essex County Asylum. 4. The Necessity of a Medical Defence Fund in connection with the British Medical Association, by J. Sinclair Holden, M.D., Sudbury. 5. Dr. Hadden will exhibit some sections showing Naked-eye Changes in the Spinal Cord, and some drawings of Brain and Cord Diseases. Gentlemen intending to be present, or wishing to read a paper, or show a case, are requested to communicate with the Honorary Secretary not later than January 25th.—WM. THOS. JACKMAN, Honorary Secretary, Coggeshall, Essex.

SOUTHERN BRANCH.—The next meeting of the South Wilts District will be held at the Angel Hotel, Salisbury, on Wednesday, January 20th, at 2 o'clock. Luncheon will be provided at 1 o'clock, at 3s. 6d. a head, not to include wine. Members intending to be present are requested to communicate with the Honorary Secretary, H. J. MANNING, Laverstock, Salisbury.

DUBLIN BRANCH.—The ninth annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Thursday, January 28th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. Dr. E. H. Bennett, President-elect, will deliver the annual address. The annual dinner of the Branch will be held in the College Hall, at 7 P.M., on the day of the meeting. Dinner-tickets for members who purchase their tickets on or before Wednesday, the 27th instant, 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1. —RICHARD A. HAYES, M.D., Honorary Secretary and Treasurer, 56, Merrion Square South, Dublin.—January 6th, 1886.

OXFORD AND DISTRICT BRANCH.—The next meeting will be held on Wednesday, January 27th, at 3.30 P.M., at the Radcliffe Infirmary, Oxford. Members who have papers to read or cases or specimens to show are requested to communicate with one of the secretaries on or before January 23rd. Dinner will be provided (at a charge of 5s.) at 6 o'clock, after the meeting, for those members only who intimate their intention of dining to one of the honorary secretaries, on or before January 25th.—Dr. DARBISHIRE, 60, High Street; and Mr. MORGAN, 42, Broad Street, Oxford.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE third meeting of the session was held on Thursday, December 17th, at the Hackney Town Hall; Mr. F. WALLACE in the Chair.

Papers.—Short papers on an unusual case of Asphyxia and on two cases of Malignant Disease were read by Mr. MAJOR GREENWOOD, jun., and an informal discussion ensued.

The meeting adjourned after the usual votes of thanks.

LANCASHIRE AND CHESHIRE BRANCH: INTERMEDIATE MEETING.

AN intermediate meeting of this Branch was held at the Mechanics' Institute, Ashton-under-Lyne, on Wednesday, December 16th, 1885, at 2.30 P.M.; present, Dr. BARRON, President, in the chair, and sixty-two members.

Papers.—The following papers and communications were read:

1. Dr. Cullingworth: Two Cases of Abdominal Section for the Removal of Small Intrapelvic Tumours of the Ovaries and Adjacent Parts.
2. Dr. Imlach: On Pelvic Hæmatocele.
3. Dr. Dreschfeld: On Alcoholic Paralysis.
4. Mr. G. A. Wright: On some forms of Obstruction of the Nasal Passages.

Medical Defence Society.—Dr. WILLIAM ARMSTRONG read a paper on the urgent need for Systematic Medical Defence, and proposed the following resolution:

"That, in the opinion of this Branch, it is desirable that a Medical Defence Society should be formed in connection with the British Medical Association; and that a committee be appointed to inquire into the practicability of the scheme, and report to the annual meeting at Lancaster; the committee to consist of the following gentlemen: the President, Dr. Barron, and the Honorary Secretary, Dr. Glascott, *ex officio;* Dr. Armstrong, Dr. Watkins, Dr. Edwin Rayner, Mr. Hughes, Dr. Royle, Dr. Shuttleworth, Dr. De Vere Hunt, and Dr. Lenihan."

The resolution was seconded by Dr. WATKINS, and carried unanimously.

Dinner.—At 5.30, the members of the Branch, to the number of thirty-two, dined together, under the presidency of Dr. Barron, at the Wheatsheaf Hotel.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Epilepsy consequent on Ocular Injury, Cured by Enucleating the Injured Eye.—The Influence of Water and Fluids on Nutrition.—Three Cases of Rupture of the Heart.—Is Leprosy Contagious?—Dr. Dechambre.—The Action of Accto-phenone.

AT a recent meeting of the Academy of Medicine, M. Galezowski read notes on a case in which epilepsy resulted from the loss of an eye, consequent on an accident during hunting; the eye was reduced to a stump. Six years later epilepsy declared itself, and the left eye, hitherto perfectly healthy, exhibited hæmorrhagic neuroretinitis. MM. Vulpian, Hardy, Gueneau de Mussy, and Legrand du Saulle, were consulted. It was decided in consultation to enucleate the damaged eye. The epileptic attacks, which had been of daily occurrence, disappeared. The patient's general health and the sight of the left eye improved, although it remained imperfect. M. Galezowski attributed the cerebral disturbance that existed to sympathetic reflex action; he believed that inflammation was transmitted by the vessels and vasomotor nerves. In another instance, observed and reported by the same oculist, there were also sympathetic phenomena exhibited under the form of neuroretinitis, accompanied by obliteration of the vessels of the retina. The patient was 47 years of age; he had lost the eye when 8 years old; nearly forty years subsequently the seat of the eye became tender, and touching it produced pain; also sympathetic symptoms were manifested in the healthy eye. In the eye which was enucleated six years after the hunting accident, both the choroid and the vitreous body exhibited osseous degeneration. There was also lymphoid infiltration in the tissues of the optic nerve, and its fibres were reduced to fine filaments. The walls of the vessels were atheromatous and thickened, so much so in some places, that they were quite obliterated.

At a recent meeting of the Societé Médicale des Hôpitaux, M. Debove read a memoir on the influence of water on nutrition. He observed that there was a diversity of opinion on this subject. Some authors maintained that the absorption of water encourages the formation of adipose tissue, others asserted the contrary. Physiologists have helped but little to elucidate the question. M.

Debove suggested that human subjects should be given an identically similar diet daily, until the same quantity of urea was regularly eliminated, and the bodily weight did not vary; then double and treble the quantity of fluids should be given. This treatment could scarcely be adopted with healthy people, because the monotony made the diet repugnant. M. Debove overcame this difficulty by subjecting a male hysterical patient to this treatment. It was suggested to him that he should always have the same diet. On July 6th, he had 200 grammes of meat (not quite half a pound), 600 grammes of bread (rather more than one pound), 1 litre of tisane. On July 22nd, 4 litres of tisane was added to this diet. On August 22nd, he was limited again to 1 litre of tisane. During these experiments, the quantity of urea eliminated varied but very slightly; the weight of the patient was also almost stationary. M. Debove concluded that the absorption of water had not any influence on the formation of adipose tissue, nor on the quantity of urea eliminated, consequently none on the combustion of albuminoid substances. M. Albert Robin observed that other experiments on record demonstrate that imbibing a large quantity of water increased the elimination of urea, and therefore influenced the process of nutrition. M. Dujardin-Beaumetz maintained that M. Debove's conclusions were opposed to physiological data hitherto demonstrated. Schiff had shown that the digestive functions of the stomach were increased by the presence of water. The *Codex* admitted that the action of pepsine was intensified by the addition of water; water therefore aided the process of digestion. M. Guyot objected that a hysterical patient was a bad subject to experiment on, and the results proved nothing in reference to healthy subjects. In his practice, he had observed a considerable number of patients grow thin by having less water given to them. M. Hayem observed that nutrition was disturbed in hysteria; therefore a hysterical patient could only furnish doubtful results. M. Labbé stated that water absorbed between meals is fattening, but during meals large quantities can be absorbed without producing the same effect. M. Debove, in answer to the above criticisms, stated that the experiments mentioned by M. Robin were not accepted by a considerable number of scientists, whose names it was not necessary to mention. With regard to Schiff's experiments and the Codex, they were laboratory experiments, and could not be accepted in opposition to results obtained by clinical experiments on living subjects. M. Debove did not believe that the process of nutrition in hysterical patients differed from that of healthy subjects. At a future meeting, he would prove his assertion.

At the same meeting, M. Albert Robin read notes on three cases of rupture of the heart. He began by stating that rupture of the heart, caused by sclerous myocarditis, resulting from vascular lesions, was generally observed in elderly people, and was not preceded by any symptoms, but caused sudden death. In the three instances in question, there was rupture of the left ventricle. There were no long standing symptoms indicative of heart-disease. A short time before the fatal illness, the patients had attacks resembling those of angina pectoris, distress in the cardiac region, dyspnœa, and pain along the left arm. Between the attacks, auscultation did not reveal any cardiac lesion. At the necropsy, sclerous myocarditis was observed. The rupture was gradual, not violent and sudden, and from outwards inwards. The symptoms of heart-rupture differed from that of extravasation of blood into the pericardium. With this latter affection, the patient was seized with orthopnœa. On auscultating, a slapping noise was heard; and death occurred in a few hours.

At a recent meeting of the Academy of Medicine, M. Vidal read his report on M. Zambaco's (of Constantinople) memoir on leprosy. M. Zambaco has collected the history and antecedents of a considerable number of lepers in Turkey. In about every fourteenth, there was one hereditary cause; but M. Zambaco believes the general causes of leprosy to be poverty, bad hygienic conditions, bad meat and fish used for food. He disbelieves in the contagion of leprosy. M. Dujardin-Beaumetz, during a recent visit to Constantinople, saw the patients who furnished the material for M. Zambaco's pamphlet. There are 300 lepers at Constantinople; half of this number are free, the other half are confined in a house for lepers situated in the middle of the cemetery of Scutari, on the coast of Asia. The lepers cannot leave their place of confinement, but outsiders can visit it, and it is considered lucky to turn a corn-mill with a hand on a leper's hand. The lepers have wives, some are afflicted with leprosy, others are perfectly healthy women. Their children remain a long time in the establishment, but no case of contagion has been observed. The 200 lepers who are at liberty, meet every Thursday at M. Zambaco's house. Many of these lepers have healthy wives, and not one instance of leprosy being communicated from husband to wife has been recorded. M. Vidal terminates his report by observing that M. Zambaco does not consider hereditary influence as a very important factor in the etiology of leprosy; he has only observed it in about every fourteenth case. Salt fish can scarcely be considered an active agent, inasmuch as there are 116,000 lepers in the East Indies, and among them there are many Brahmins, whose religion forbids them to eat fish. Climate does not explain the appearance of leprosy; it is observed in all countries, at the equator, and in the northern countries. Leprosy is certainly not contagious in the same way as syphilis; if it be contagious, the incubation-period may be very long. A Brazilian medical man, a friend of M. Denergie, who had practised at Pernambuco, had seen a considerable number of lepers. After he had retired from practice, and was living in France, he was attacked with leprosy, at the age of 65—another instance of tardy incubation. A Frenchman visited a country where leprosy was endemic, two or three years after he had returned to Paris he became leprous. The following is an instance of another character in which contagion cannot be traced. A lady, living at Nice, who had never left France, married an inhabitant of Nice, who, soon after marriage, became leprous. Six years subsequently, she contracted the same disease.

Dr. Dechambre, well known from his connection with the *Dictionnaire Encyclopédique des Sciences Médicales*, has died of cerebral hæmorrhage. He was 74 years of age.

In our last letter we gave a summary of the researches made on aceto-phenone. M. Vulpian has subsequently presented to the Academy of Sciences a memoir from MM. Mairet and Combemale, on the properties of aceto-phenone, the substance studied by M. Dujardin-Beaumetz and Bardet, and believed by them to have decided hypnotic action, which might be utilised in practice. The researches made by MM. Mariet and Combemale prove, on the contrary, that its hypnotic action is very slight, and that aceto-phenone has very toxic properties, and its use may be dangerous. Experiments made with it on animals resulted in visceral lesions, pulmonary apoplexy and hæmorrhage.

CORRESPONDENCE.

THE HOUSE OF JOHN HUNTER.

SIR,—The house which John Hunter built in 1764 on his own freehold at Earl's Court, Kensington, together with the grounds, dens, etc., so little changed since his day, will soon be obliterated; and those members of the profession who care once again to visit the home of "the greatest man in, the combined character of physiologist and surgeon, that the whole annals of medicine can furnish" (Sir William Lawrence), should go to Earl's Court House without delay.

When Frank Buckland visited this historical spot on June 23rd, 1871, he wrote, "I almost imagined I was in the presence of the great man himself, so little is the place changed." A full account will be found in *Land and Water*, July 6th, 1871, and also in Buckland's *Log-book of a Fisherman and Zoologist*, 1875.

The memory of John Hunter will always be kept up by his immortal discoveries in surgery, physiology, and natural history; by his Museum at the Royal College of Surgeons; and by the window in the parish church of Kensington; but many will lament the demolition of that "Home," in which he worked so vigorously for nearly thirty years.—Yours faithfully, JOHN J. MERRIMAN.

45, Kensington Square, W.

*** With this letter, Dr. Merriman has kindly forwarded some engravings of John Hunter's house.

MR. JONATHAN HUTCHINSON'S LETTSOMIAN LECTURE ON SOME MOOT POINTS IN THE NATURAL HISTORY OF SYPHILIS.

SIR,—In the issue of the BRITISH MEDICAL JOURNAL of January 9th, you print Mr. Hutchinson's lecture on syphilis, which, like everything published by that gentleman, is full of information, and most suggestive with regard to certain pathological questions which are at present ill- or mis-understood. I am, however, sure that Mr. Hutchinson will not object to my drawing his attention, and that of his readers, to some of the evidence which he quotes in support of his arguments, when explaining certain phenomena not yet accounted for. Before doing this, I desire to thank him for the compliment he pays me by quoting from my work on syphilis.

In the first place, Mr. Hutchinson, in order to show a connection between the non-infecting venereal sore and constitutional syphilis, quotes some experiments made by the late Mr. Morgan, of Dublin. That gentleman stated that he was able to produce what Mr. Hutchinson terms the "typical chancroid," if he inoculated on the patient herself or other syphilitic persons, her purulent vaginal discharge provided that the person furnishing the discharge was syphilitic. Mr. Hutchinson does not refer to the experiments of the late Mr. G. G. Gascoyen, which, in my opinion, greatly invalidate the accuracy of Mr. Morgan's experiments. I would point out also that as yet no one has succeeded in obtaining Mr. Morgan's results by repeating his experiments. On the contrary, Mr. Gascoyen, who was a most careful and unprejudiced observer, put Mr. Morgan's experiments to the test, by carrying out a series of inoculations of purulent vaginal discharge in twenty syphilitic women, except that he always made his inoculations of vaginal pus on the patient herself, and never transferred it to another individual. Mr. Gascoyen failed, in nineteen of his patients, to produce a sore at all. He succeeded in the twentieth, but found, on careful examination, that in this one instance he had overlooked the presence of a sharply cut sore at the entry of the vagina. Hence he concluded, and in my opinion rightly, that the inoculable purulent discharge was contaminated with chancrous pus, and that when the purulent discharge was not so contaminated it was not inoculable. This experience of Mr. Gascoyen, which has not been upset by other observers, is recorded on pp. 366-7 of the second edition of *Syphilis and Local Contagious Disorders*. Further, my experience does in no way accord with Mr. Hutchinson's statement, that "the true chancroid on the genitals is seldom seen, excepting in those who have had syphilis already." On the contrary, I have seen both, in public and in private practice, frequent instances of the rounded punched out ulcer, with ragged edges and grey base, developing in persons who have never had venereal disease before, and in whom no constitutional disease followed.

It is interesting to find that soft non-infecting chancres of the hands and fingers are so rare, as Mr. Hutchinson's very great experience shows them to be, by the fact that he does not recollect to have seen a single case in which a sore on the hand, which was not a true chancre (by which, I presume, he means a constitutionally infecting sore), produced a bubo in the armpit. This statement emboldens me to narrate a case which came, some years ago, within my experience. A gentleman of great intelligence, familiar with syphilis, and now a well-known metropolitan surgeon, at the time my house-surgeon, unfortunately pricked his finger while circumcising a patient with soft chancres. At the site of the prick a soft sore formed, which was followed by a suppurating bubo of the epitrochlear gland, and which, after incision, developed into a typical soft chancre with pus inoculable on its bearer. This gentleman recovered from his sores in the usual time, and never had the smallest sign of constitutional syphilis, either before this experience or subsequently.

In Mr. Hutchinson's remarks on what he terms "gonorrhœa-syphilis," he maintains that syphilis is often preceded by "urethritis" exactly like a gonorrhœa, without ulcer or induration. Mr. Hutchinson refers to Pearson, Swediaur, and Lee, and also to a carefully recorded case of Marston's, adding, as corroborative evidence, a reference to a case of mine, recorded in *Syphilis and Local Contagious Disorders*, p. 88, where the only initial lesion was a general hardening of the whole penile urethra. While thanking Mr. Hutchinson for the honour he has conferred on me by this quotation, I desire to remonstrate against the addition Mr. Hutchinson has made of the words, "presumably with gonorrhœal discharge." There was no gonorrhœal discharge at all detected; indeed, the absence of purulent discharge was a marked feature, and I have to apologise for not having more strongly insisted on this in the record of the case. Had I done so, Mr. Hutchinson would not have adduced this case as one of "gonorrhœal syphilis," a form of syphilis so rare in my experience that I have always supposed, when such cases come before me, that the syphilitic initial lesion had been overlooked. At any rate, I desire to state my disagreement with Mr. Hutchinson when he remarks that urethritis exactly like gonorrhœa is a frequent initial symptom of syphilis.

Before concluding, I would wish to draw attention to another important statement of Mr. Hutchinson's, in support of which he quotes a single example. It is, that syphilis may be conveyed in the clear lymph of a vaccinal vesicle. By this I understand Mr. Hutchinson to mean that the syphilitic poison is contained in the serum and not in the cells (blood-discs or leucocytes), which float in clear lymph. The case quoted is that well known to those who study syphilis, as well as to many others. But in the record of this case it is not stated that the contagious lymph was examined microscopically. It is well known that lymph, clear to the naked eye, may yet contain corpuscles in numbers easily found by the microscope. In taking exception to Mr. Hutchinson's statement, I only desire to remind medical men that evidence hitherto collected would indicate that the syphilitic contagion is in the corpuscles, and not in the serous fluid in which the corpuscles float. I have no wish to imply that the serum of a syphilitic vaccinifer may be safely used for vaccinating healthy children.

I may be permitted to add that my fellow-author of the second edition of *Syphilis and Local Contagious Disorders*, Mr. Arthur Cooper, fully agrees with me in what I have urged in this letter.—I am, etc.,

BERKELEY HILL.

LITHOTOMY OR LITHOTRITY IN MALE CHILDREN.

SIR—In the JOURNAL of January 9th, Mr. Buckstone Browne, in a letter bearing the above title, calls attention to the question whether lithotrity at one sitting may not prove to be a superior operation to that of lateral lithotomy in young children. A little over a year ago, I had an opportunity of comparing the two operations in a boy 10 years old. From this boy I removed a small stone in the ordinary way early in the autumn of 1884; and six months later, on his being brought again to the hospital with a return of his symptoms, I crushed and removed at one sitting a stone, the fragments of which weighed over fifteen grains. Both operations were successful, but the difference between the boy's condition after each was most striking. After the lithotomy, although he had no bad symptom, he was confined to his bed for a fortnight or three weeks, suffering from what is necessarily an annoyance, namely, the passage of urine through the wound; whereas, after the lithotrity, it was much against his will that he was kept in bed for three days. From the time of the operation, he expressed himself as feeling quite well and comfortable; he had no pain whatever, nor trace of cystitis, and left the hospital within the week without a sign of urinary trouble. Hitherto, I had done lateral lithotomy for all cases of stone in the bladder of the male under puberty, which, as we all know, is a most successful operation, and I have not since had an opportunity of repeating the operation of lithotrity in so young a subject. Too much importance should not, of course, be attached to a single case; but I venture to think that lithotrity at one sitting for stones of moderate size may be practised with advantage in boys at an age much younger than that which has usually been considered as the limit.—I am, sir, yours faithfully,

W. J. WALSHAM.

A NEW START IN PHYSIOLOGICAL RESEARCH.

SIR,—Under the above heading, the *Times* of January 8th quoted a paper by the Rev. Malling Hansen of great interest, and devoted a leading article to the same subject. I am the last person to detract in any way from the work of Mr. Hansen, who has been fortunate in having material at his disposal for carrying on a daily inquiry on a large scale regarding growth in children, but I shall be obliged if you will do me the justice of stating that the idea is not original.

For over fifteen years, I have been accumulating similar facts regarding growth in children. I published a rather crude paper in the BRITISH MEDICAL JOURNAL in 1876, with the hope of setting others to work on the same lines; and a further paper in the *Lancet*, October 16th, 1880, which has been quoted by Sir Crichton Browne in the *Book of Health*, by Professor H. P. Bowditch, of Harvard, in a paper on this subject, read before the American Medical Association in 1881, and by others. Professor Bowditch is probably the leading anthropologist in America, but I must mention Dr. Evetzky, of New York, as having, in 1881, read a paper relating to children under one year of age, the observations being made in the New York Infant Asylum; and a valuable paper by Dr. G. W. Peckham, of Milwaukee, in the same year, which, however, is more on the old anthropometric plan of one record, than the continuous and frequent observation of the same children.

The work which I commenced, and which others like Mr. Hansen are now carrying forward, opens up questions relating to growth and disease of the deepest interest and widest importance.

It is rather for lack of time than from disinclination that I have not of late pursued the subject so closely, but it is a pleasure to find my old hobby gradually working its way to the front, and dignified by a leader in the *Times*.—I am, sir, yours, etc.,

6, Seymour Street, W. PERCY BOULTON, M.D.

PRESENTATION.—Mr. C. Biddle, of Merthyr Tydfil, has been presented by the members of the Police Force who have attended his course of ambulance lectures given in connection with the St. John Ambulance Society, with a handsome diamond ring, as a New Year's gift.

THE ST. JOHN AMBULANCE ASSOCIATION AND ITS MEDICAL STAFF.

SIR,—It is well known how much the success of the St. John Ambulance Association has depended on the gratuitous and devoted services of the medical profession in these kingdoms. It is a great mental fatigue for a medical man in practice to give up his hours to lectures and to teach the public. No other profession does so self-sacrificing a work. But the governing body of the Association do very little to return the services of the medical men. Thus, if a medical man give two courses of lectures, each course worth five guineas, he is made an honorary life-member; but, if anybody subscribe £5 5s., he becomes a life-member *de facto*. Thus, apparently it takes ten guineas' worth of lectures to buy what five guineas can obtain.

I suggest the following changes to the Association. If a medical man is paid for his lectures, it is simply a matter of business, and no compliments are needed on either side; but, if a medical man give honorary service, he should have honorary reward.

A. I propose that the St. John Ambulance Association form in their Association a distinct "Medical Staff of the St. John A. A.," and publish the list annually in their annual report.

B. When a medical man gratuitously gives a course of five lectures, or an examiner examines five classes without charge, make him "Surgeon Medical Staff St. John Ambulance Association."

C. If he continue, and give, say, five such courses, make him "Staff-Surgeon Medical Staff," etc.

D. If, after continued service, he still works on, make a list of "Chief Surgeons," and place him in it.

E. Give a bronze badge to the first grade, a silver to the second grade, and gold to the third grade; and a vellum diploma in each case.

The cost of these proposals would be very trifling; and they would be, I think, very acceptable.—Yours, "UNAPPRECIATED."

INDIA AND THE COLONIES.

INDIA.

AN INDIAN HORROR.—From a tabular statement showing the destruction of human and animal life by wild animals and snakes, during the year 1884, as compared with the previous year, it appears that there was a slight decrease in the former. The number of human beings killed was 22,425, against 22,905. On the other hand, the number of cattle killed was 49,672, against 47,478. The decrease in the loss of human life was general throughout India, except in Bengal, Burmah, and Kurg. The number of deaths caused by wild animals was 2,795, against 2,838, of which 59 were killed by elephants, 831 by tigers, 229 by leopards, 114 by bears, 265 by wolves, 32 by hyenas, and 1,266 by other animals. These latter include in the returns from Bombay, such small deer as scorpions and lizards, and also mad dogs and crocodiles, whilst in those from Bengal, the North-West Provinces and Oudh, 140 deaths are attributed to alligators, sharks, and crocodiles. The number of deaths from snake-bite were 19,629, against 20,067. Of the cattle killed, 47,944 were killed by wild animals, and 1,728 by snakes. Bengal heads the list with 12,397 animals killed, Madras follows with 9,065, in the North-West Provinces and Oudh 8,409 were killed, next comes Assam with 6,670, and then the Central Provinces with 4,372. The losses in the other provinces, though somewhat serious, were but trifling compared with the above. Tigers and leopards are by far the most destructive of the wild animals, as the former killed 19,680, and the latter 19,699, during the year. The number of wild animals destroyed was 23,775, against 19,890, whilst the number of snakes killed, fell from 412,782 to 380,981. The amount given in rewards for the destruction of both wild beasts and snakes was 2,46,525 rupees, against 1,74,355 rupees, the increase being due to the larger number of wild animals for which rewards were paid. In the Rungpur district of Bengal alone, 495 tigers were killed by professional shikaries.

CHOLERA IN THE CITY OF POONAH.—Cholera is daily increasing in the city of Poonah. From the 10th to the 19th ult., sixty persons were attacked, out of which forty cases have proved fatal.

THE first prize for the most appropriate design for the hospital at Delhi has been awarded to Captain Porter, R.E., who has sent in drawings of a handsome edifice thoroughly in harmony with the Mogul architecture of the city.

AT a meeting held recently at Cuttack, in connection with the Countess of Dufferin's Fund, it was announced that Rai Boidyanath Pundit bears the whole cost of a female dispensary to be named the Lady Thompson Dispensary, and managed exclusively by lady-doctors, under a ladies' committee. Other subscribers have voted 10,000 rupees towards an institution for the training of female nurses.

THE LAHORE MEDICAL SCHOOL.—It was stated at the annual meeting of the Lahore Medical School, on the 16th ult., that there are at present 220 students in the school, of whom 124 are in the native class, who are taught in Hindustani, 66 in the English class, and 30 in the female class. During the past year, eleven students passed the final examination of Licentiate in Medicine of the Punjab University, most of whom entered the Government service as assistant-surgeons; and twenty-five others passed the necessary examination to become hospital assistants. The principal of the school, Dr. Burton Brown, spoke highly of the services which were being rendered by Dr. E. Bielby, the lady-superintendent employed by the Lahore Municipality and the Government conjointly to superintend the Lying-in Hospital, and to instruct the female students of the medical school in midwifery and the diseases of women. Twelve ladies attended Dr. Bielby's lectures during the past year.

SANITATION OF BOMBAY.—The memorandum of the Army Sanitary Commission upon the Bombay Municipal Report for 1883-4 is published in the December number of the *Bombay Government Gazette*, dated August 5th, 1885, confirms in the strongest manner the testimony of Drs. Klein and Gibbes as to the absence of proper drainage and sewerage, and the pollution of the water-supply, which, in the opinion of those commissioners, explains the spread of the cholera epidemic of 1883. These districts, say the commissioners, which are the special points of cholera, are densely peopled, badly supplied with water, undrained. The sewage, passing into the subsoil (and has done so for the last twenty years), not with a view to getting rid of it, but hiding it from view, festers, and pollutes earth, air, and water; and, when cholera comes, people die. The Sanitary Commission justly lays great stress upon the extreme apathy of Bombay as to its sanitation, and points out that this presidency, which is almost a permanent seat of cholera, constitutes itself a standing menace to imperial commerce; for, with such facts on hand, European Boards of Health have a reasonable pretext for insisting on subjecting the commerce of India to quarantine proceedings. The question is one of imperial as well as of local importance; and the attention of the Imperial Government ought certainly to be directed towards strengthening the hands of those who insist that the sanitation of Bombay, its water-supply and drainage, need urgent, immediate, and large reform.

THE Bengal Branch of the Countess of Dufferin's National Association for affording medical aid to the women of India, was inaugurated at a meeting presided over by Sir Rivers Thompson, at Calcutta, on December 10th. The total subscriptions to the fund, from all sources, for the month of November, amounted to 45,312-11-2 rupees.

NEW SOUTH WALES.

MEMBERS OF THE MEDICAL PROFESSION IN THE NEW SOUTH WALES PARLIAMENT.—The profession is now more numerously represented in the Parliament of New South Wales than at any previous time. By the recent summons to the Legislative Council, of the Honorables C. K. Mackellar and J. M. Creed, and the election to the Legislative Assembly of Drs. Tarrant, Renwick, Wilkinson, and Ross, there are now six members of the medical profession engaged in legislative work.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.

THE report of the Committee of Management of the Devonshire Hospital and Buxton Bath Charity, adopted at the annual meeting on January 2nd, shows that during the year 1885 2,489 in-patients were admitted, practically the same as in the previous year; of this number, 2,238 are reported as having been discharged improved, and 62 remained on the books at the end of the year. The number of out-patients admitted during the year was 260, or twelve fewer than admitted during the previous year. The average number of patients daily resident in the hospital has been 153.5. The average number of days in the hospital per patient, 22.6. The average cost per day of each patient during the past year has been fractionally above 2s. 1¾d., or about 3¾d. less than that of the previous year. It was shown that, of the 2,489 cases under treatment in the past year, only 79 were without some form or degree of rheumatic complication, thus bringing the much larger number of cases within the special remedial action of the

Buxton mineral water. There had been an outlay on the baths of £346 13s. 3d. Dr. Robertson has again been unanimously re-elected Chairman of the Board of Trustees and Committee of Management.

EDINBURGH PROVIDENT DISPENSARY.

THE report read at the last annual meeting of this institution showed that the number of consultations at the dispensary was upwards of 10,000, and visits to the patients' homes about the same. No fatal case had occurred in the midwifery department, in which the death-rate since the opening of the institution had been two in upwards of 2,000 cases. The income was £139, leaving a small balance in hand. It was stated that this was the first provident dispensary in Scotland. The Lord Provost presided, and it was resolved to endeavour to raise an endowment fund for the institution.

NAVAL AND MILITARY MEDICAL SERVICES.

JOSEPH HEATH, M.B., A.M.D.

THE Army Medical Department has to deplore the loss of a young and promising officer, Dr. Heath, A.M.D., in the Burmah expedition. On the 9th instant, three officers, of whom he was one, were attacked by mounted Burmese. Lieutenant Armstrong received two bullet-wounds; Dr. Heath gallantly lifted the wounded officer, and was carrying him out of reach, when he was shot down. His head was hacked off, and carried away. Dr. Heath was a young man in the early prime of life, twenty-nine years of age, and had only been four years in the service. His gallantry was characteristic of the traditions of the department of the profession to which he belonged; and his loss will be deplored, while his example will be long held in honour and respect.

ARMY MEDICAL STAFF.

SIR,—In reply to the queries put by "Probable Candidate," I have the honour to state that:

1. He can live at Netley on his pay, but only with great care.
2. Uniform for Netley about £27, and about another £20 on being gazetted.
3. Money could be saved in the first year if no uniform had to be paid for, but the doing so would involve a deal of self-denial and loss of the chief charms of the service, namely, *bonhommie* and *camaraderie*.
4. The writer has kept a wife throughout his service, but a good deal depends on the wife.
5. The army, as a speculation, is not as good as private practice, but as a career in which to enjoy life it is much better.

I would recommend "Probable Candidate" to choose a civil career. The army is not a line of life likely to be palatable to the highly "domesticated" or parsimonious individual. I enclose my card, and have the honour to remain, yours obediently,

MEDICAL STAFF.

THE RANK OF RUSSIAN MEDICAL OFFICERS.

SIR,—In the discussions as to the rank and status of military medical officers, some of your correspondents mentioned that the Russian medical officers had definite military titles, such as colonel, major, etc. I was unwilling at the time to question these statements, because nobody can to-day answer from month to month for the changes going on in the various medical services in the world. The feeling of unrest which seems, from the letters in your columns, to affect our own officers is by no means limited to them. Everywhere in Europe the same feeling exists. It is the waiting, as it were, for sunrise after a dark and unhappy night. France, for years the most accurately crushed out of military medical services, has to-day, thanks to forty physicians in her Commons House, a measure of autonomy in her service which makes her free as any medical corps in Europe. Italy has crowned her long struggle with definite military rank, and a definite organisation for her medical corps; and we shall be all disappointed if her highly interesting army and her medical service do not do well in any trial. Switzerland has an entirely autonomous corps, more logically organised than even Germany, and her officers are men of great self-reliance and high *morale*. Germany, with her splendid system of war mobilisation, is not nearly so interesting as a peace-study; and Austria, once the most oppressed of services, is to-day hoping for, if she have not received, a large measure of home rule.

I have lately returned from a visit to Russia, and my very first word should be one of hearty thanks, for excessive kindness, to the Russian medical officers. There is no service in Europe with less officialism, less desire to conceal, or with more open desire to show everything to the stranger. Russian medical officers have not military rank in the way I understand it; namely, they are not called Colonel, Major, and so forth. But their rank-system is easily understood. The entire official class, whether military, naval, or civil, however employed, be they law officers, revenue officers, education officers, police, court officials, provincial governors, etc., are all graded and classed in Russia, but not by a military standard. There is in Russia an ideal standard of rank called the "Tchin," or official grading. This grading runs from the highest official in the land downwards by regular gradations to the lowest-graded official. In this gradation-list, there are fourteen or fifteen steps or grades. Into this ideal scheme all officials fit, be they civil or military.

Thus it would be wrong to say that a Russian Deputy Surgeon-General ranked with a Colonel, or that a Russian Colonel ranked with a Deputy Surgeon-General. Neither is the case. But both officials together rank in the sixth class of the Tchin. In this same gradation list the medical profession ranks, and justly, I believe. The profession of medicine, be it in civil, military, or naval employ, is simply graded in this scale from the high ranks downwards to the lowest; and, so far as I am aware, they are equitably graded.

What you must remember is, that the military scale of rank is not the standard. Also, please note that as every official, and almost every one in Russia, is an official, is graded so that in social and official life it is not the question of any one official class, riding roughshod over another, but all are vertically graded in the same scale.

Where it protects the official medical man is, that he has not to fight alone and single-handed against military domination, but all official classes combine with him to keep the military in their place. The military class cannot ignore the medical man's rank, because by so doing they would upset not his status only, but the whole official world who sink or swim in the same boat in this respect.

Germany is very similarly organised, and in all the highly organised continental countries the large body of graded officials protect the similarly graded physician against being crushed out. In America, and many other democratic or so-called free countries, this official grading does not exist. Society is freer; that is to say, they swim in it who can; who cannot, perish. We at once see then why American medical officers took military rank.

The American civil medical man, *per se*, is not officially graded. He may be of any or of no status. Medicine, as such, gives him no definite social grading. Now place him in daily or hourly contact with a highly organised and most accurately graded service like an army, and say where he will be. Be he skilful as Hippocrates he will be nowhere. Be he devoted as an angel he will be crushed out. Be he meek and submissive, or arrogant and domineering, it is all the same. His life will be made bitter and intolerable because he will be "out of the swim" with his daily companions. There is no official class to sympathise with him. No one to whom he can appeal for justice, as the military class combine against him to guard their rights.

There is only one defence open to him, that is, to use the weapons of offence employed against him as a means of defence. He accepts himself military rank, and the bayonet-charge is met by the bayonet, and not with the umbrella of the general practitioner.

This seems to me the reason why American and Swiss, and Italian and Dutch, medical officers take rank. A graded officialism does not exist, and they guard themselves by military status. You must have either one or the other. They are opportunists if you like, but they guard their *morale*. Even in a republican army this protection is needed, for the more the social status of the officers of an army sinks to the average level of the people, the more frantic will be the efforts of the possessors of the rank to preserve its exclusive value, and hence they use it with frightful power on all within their clutches.

In a highly aristocratic army, with feudal traditions, and composed of a *noblesse* class, military rank is not clung to with such intense eagerness. Officers so recruited have status without it; but for a middle class officers' corps made up of the sons of the poorer officers, the smaller clergy, general practitioners of law and medicine, and the larger shopkeepers, to them military rank is of intense value, and with them social life for outsiders becomes very intolerable. I suppose in the armies of democracies officers come from these classes largely.

Indian official life is, of course, largely the same as the Russian type as to grading, the only difference being that, in a weak moment, the official Englishman choose the army rank as a standard, and divided people by grades relative to that scale; but the Russians were wiser; they devised an ideal scale, and graded the officers of the army into it. This, I think, showed great intelligence, and it prevents friction, and places all State servants on a more equitable basis. The whole of this rank question is very interesting study in sociology, and we must regard it as a phase in the evolution of the medical profession, an evolution now in active operation.—I am, etc.,

Woolwich. G. J. H. EVATT, M.D., Surgeon-Major, Medical Staff.

THE NAVY.

THE following appointments have been made at the Admiralty during the past week: E. D. MINTER, Surgeon to the *Lion*, additional, for disposal; T. E. H. WILLIAMS, Surgeon to the *Terror*.

The Lords Commissioners of the Admiralty have awarded the Greenwich Hospital pension of £50 a year for fleet-surgeons and surgeons, rendered vacant by the death of Staff-Surgeon J. K. Ballard, to Deputy Inspector-General J. G. T. FORBES. Mr. Forbes entered the Royal Navy January 27th, 1849, and retired with the rank of Deputy Inspector-General November 8th, 1875. He was engaged at the destruction of the Fatshan flotilla of war-junks June 1st, 1857, during the war with China; was promoted and specially mentioned for his services at the capture of Canton, December 1857 (medal with two clasps).

ARMY MEDICAL SERVICE.

SURGEON T. S. BARRINGER, of the Honourable Artillery Company of London, has retired into the Veteran Company, with the honorary rank of Surgeon-Major, and permission to retain his uniform.

Mr. C. N. LEE, M.B., has been appointed Acting Surgeon to the 1st Newcastle and Durham Engineer Volunteers.

Acting Surgeon G. S. D. KNOWLES has resigned his appointment in the 3rd (the Buchan) Volunteer Battalion of the Gordon Highlanders (late the 3rd Aberdeen Volunteers). Mr. Knowles's commission was dated December 1st, 1875, although he did not join the 3rd Aberdeen till October 1st, 1877.

Surgeon R. SMYTHE, of the 4th Volunteer Battalion of the South Wales Borderers (otherwise the 3rd Monmouth Volunteers) has been granted the honorary rank of Surgeon-Major.

Acting Surgeon T. H. B. RODWELL has resigned his appointment in the 4th Volunteer Battalion of the Norfolk Regiment (formerly the 4th Norfolk Volunteers), which corps he joined March 24th, 1880.

Quartermaster WILLIAM PIKE has been placed on retired pay, with the honorary rank of Captain. He entered the Army Hospital Corps as a Lieutenant of Orderlies June 9th, 1877, and was made Quartermaster of the Medical Staff from July 1st, 1881. Captain Pike has the medal for the China war in 1857-58, and the medal and clasp for the Zulu war in 1879, during which he was in the engagement at Ulundi, and was mentioned in Dr. Temple's report for his useful services.

Deputy Surgeon-General R. A. CHAPPLE, having completed a tour of foreign service on the Madras Establishment, will proceed to England during the trooping season of 1885-86.

Surgeon-Major R. P. FERGUSON is appointed Senior Medical Officer of the station-hospital at Belgaum, Madras Presidency.

Surgeon-Major W. J. CAMPBELL is to do duty at the station-hospital at Belgaum.

Surgeons-Major T. M. KIRKWOOD, W. T. MARTIN, M.D., and R. W. O'DONNELL will, on arrival from England, do general duty under the orders of the Deputy Surgeon-General of Her Majesty's Forces, Eastern District, Madras.

Surgeon W. H. BEAN, on arrival from England, will do duty at the station-hospital at Bellary, Madras.

Surgeon H. G. HATHAWAY, on arrival from England, will do duty at the station-hospital at Cannanore, Madras.

INDIAN MEDICAL SERVICE.

THE services of Surgeons W. DEANE, J. SYKES, and J. ARMSTRONG, all of the Bengal Establishment, have been placed at the disposal of the Government of India, Home Department, for duty with the Camp of Exercise.

Surgeon G. T. THOMAS, of the Madras Establishment, is posted to the medical charge of the Henzada district, Burmah.

Surgeon C. T. RUNDLE, M.B., Madras Establishment, is transferred from Henzada to the medical charge of the Toungoo district, Burmah.

The services of Dr. R. ROMANIS, Chemical Examiner, British Burmah, have been placed at the disposal of General Prendergast.

The services of Surgeons H. GREANY, M.D., and A. O. EVANS, Madras Establishment, have been replaced at the disposal of the Military Department.

Brigade-Surgeon R. E. PEARSE, Madras Establishment, is appointed to officiate as Deputy Surgeon-General, with temporary rank, *vice* Deputy Surgeon-General J. M. Donnelly, who has been appointed Principal Medical Officer to the Burmah Expeditionary Force.

The services of Surgeon-Major J. P. STRATTON, M.D., Bombay Establishment, are replaced at the disposal of the Provincial Commander-in Chief from the date of his relief from his appointment under the Government of India, Foreign Department.

It has been notified from the India Office that the following allotments have been made from the Bombay Medical Retiring Fund for the present year:—Surgeon-General D. WYLLIE, M.D., £252; Brigade-Surgeon H. O. THOROLD, £210; Surgeon-Major M. M. MACKENZIE, £210; Deputy Surgeon-General W. P. PARTRIDGE, £168; Surgeon-Major W. R. BUTLER, £168; and Surgeon-Major W. NIVEN, £168. The allotments to Messrs. Mackenzie, Partridge, Butler, and Niven, however, have lapsed to Government, these gentlemen having received a refund of their subscriptions.

Surgeon-Major H. ATKINS, of the Bombay Establishment, has retired from the service, which he joined as Assistant-Surgeon January 24th, 1855, attaining to the rank of Surgeon-Major January 24th, 1867. He has no war-record.

Surgeon-Major E. P. BURROWS, Bombay Establishment, retired, died on January 1st at Crediton, Devon, in his 54th year.

CAMP OF EXERCISE, DELHI.

THE following are the medical officers who have been detailed for duty with the Camp of Exercise at Delhi now proceeding:

NORTHERN FORCE.

Principal Medical Officer: Brigade Surgeon A. F. Bradshaw.

General Hospitals, British Troops: In medical charge, Brigade-Surgeon J. Inkson. Doing duty, Surgeon-Major F. Johnson, Surgeons S. Townsend, C. L. Josling.

General Hospitals, Native Troops: In medical charge, Surgeon-Major G. C. Chesnaye. Doing duty, Surgeons D. B. Spencer, H. J. Dyson.

No. 1 (British) Field Hospitals: In medical charge, Surgeon-Major A. Brebner. Doing duty, Surgeon-Major R. Blood, Surgeons W. B. Day, R. Fowler, G. T. H. Thomas.

No. 2 (British) Field Hospitals, Right Division: In medical charge, Surgeon-Major F. Johnson. Doing duty, Surgeon R. J. S. Simpson.

No. 8 (Native) Field Hospital: In medical charge, Surgeon-Major C. F. Oldham.

No. 9 (Native) Field Hospital: In medical charge, Surgeon-Major J. E. C. Ferris. Doing duty, Surgeon C. B. Hunter.

No. 10 (Native) Field Hospital, Right Division: In medical charge, Surgeon R. N. Stoker. Doing duty, Surgeon G. Jameson.

SOUTHERN FORCE.

Principal Medical Officer: Brigade-Surgeon G. Farrell.

General Hospital, British Troops: In medical charge, Surgeon-Major A. Sanderson. Doing duty, Surgeon-Major J. R. Rahilly, Surgeons A. F. Russell, W. T. Swan, P. J. B. O'Shaughnessy.

General Hospital, Native Troops: In medical charge, Surgeon-Major C. P. Costello. Doing duty, Surgeons W. G. P. Alpin, R. W. C. Carroll.

No. 2 (British) Field Hospital, Left Division: In medical charge, Surgeon-Major A. H. Rattigan. Doing duty, Surgeon W. A. Morris.

No. 3 (British) Field-Hospital: In medical charge, Surgeon-Major R. N. Mally. Doing duty, Surgeon-Major J. H. Moore, Surgeons S. H. Carter, G. Nelis, W. H. Lendrum.

No. 10 (Native) Field Hospital, Left Division: In medical charge, Surgeon H. Hendley. Doing duty, Surgeon F. J. Drury.

No. 11 (Native) Field Hospital: In medical charge, Surgeon-Major A. S. Reid.

No. 12 (Native) Field Hospital: In medical charge, Surgeon-Major A. McGregor. Doing duty, Surgeon C. H. Beatson.

SIR,—Permit me to inform "Bawbee," through your columns, that he can save "agency fees" by applying to the Paymaster-General, Her Majesty's Forces, Whitehall, for forms to fill up, and by which, when certified by a justice of the peace he can draw his pay, through his banker, without the intervention of an agent. I draw my pension thus monthly.—I am, etc., D. S. G. (Retired).

FOREIGN LUNATICS IN GREAT BRITAIN.—From a Parliamentary return published, showing the total number of persons of unsound mind, not being British subjects, who were on January 1st of this year patients in any county or borough asylum in Great Britain, it appears that in England and Wales the number of such patients was 434, of whom 287 were males and 147 females. In Scotland there were only four.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

	From	To
Dep. Surg.-General W. A. Thomson, M.B.	Belfast	Bombay.
Brigade-Surgeon W. Ashton, M.B.	Bengal	York.
,, F. W. Wade	Bengal	Chatham.
,, A. S. K. Prescott	Bengal	Cork.
,, J. Robinson	Singapore	Curragh.
Surgeon-Major S. K. Ray	Aldershot	Malta.
,, A. Thomson, M.D.	C. of Good Hope	Aldershot.
,, A. W. Roche	Bengal	Shorncliffe.
,, F. Lyons, M.D.	Canterbury	Ipswich.
,, J. Scanlan, M.D.	C. of Good Hope	Devonport.
,, F. G. A. Curran, M.B.	Bahamas	Dublin.
,, J. Coats, M.B.	C. of Good Hope	York.
,, C. E. Dwyer	Dublin	Curragh.
,, W. L. Gubbins, M.B.	Aldershot	Bengal.
Surgeon O. G. Wood, M.D.	Bengal	Edinburgh.
,, J. Prendergast	Templemore	Bombay.
,, J. Martin	Dublin	Madras.
,, J. E. V. Foss, M.D.	C. of Good Hope	Aldershot.
,, R. Smith, M.B.	Warley	Malta.
,, E. O. Reynolds	C. of Good Hope	Devonport.
,, J. J. Morris, M.D.	C. of Good Hope	Devonport.
,, I. B. Emerson	C. of Good Hope	York.
,, J. L. Peyton, M.B.	Leeds	Bengal.
,, G. A. Hughes, M.B.	C. of Good Hope	Woolwich.
,, B. W. Large	Birr	Dublin.
,, W. T. Johnston, M.D.	C. of Good Hope	York.
,, H. C. Kirkpatrick, M.D.	C. of Good Hope	Dover.
,, A. S. W. Young	Edinburgh	Devonport.
,, A. W. P. Inman, M.B.	Bengal	Dublin.
,, T. M. Corker, M.D.	Bengal	Cork.
,, T. B. Moffitt	Bengal	Netley.
,, C. A. Webb	Bengal	Portsmouth.
,, A. E. J. Croly	Madras	Fermoy.
,, R. O. Cusack	Madras	Chatham.
,, E. F. Smith	Madras	Devonport.
,, S. J. Flood	Bombay	Dover.
,, J. Watson, M.D.	Bengal	Dublin.
,, A. O. Geoghegan, M.D.	Bengal	Portsmouth.
,, C. R. Egan, M.B.	Dublin	Curragh.
,, J. D. Day, M.B.	Bengal	Dublin.
,, G. F. Poynder	Bengal	Chatham.
,, J. P. Carmody, M.D.	Madras	Curragh.
,, C. R. Woods, M.D.	C. of Good Hope	York.
,, M. O. Drury	Dublin	Mullingar.
,, S. A. Crick, M.B.	Preston	Fleetwood.
,, J. R. Dodd, M.B.	—	Dover.
,, A. P. Hart, M.B.	Colchester	Shoeburyness.
,, J. H. A. Rhodes	Newcastle	Berwick.
,, T. B. A. Tuckey	Limerick	Cork.
,, A. H. Morgan	Dublin	Cahir.
,, J. Osburne	Buttevant	Bengal.
,, R. P. Hetherington, M.B.	Templemore	Dublin.
,, E. O. Wight	Bengal	Colchester.
,, M. O'D. Braddell, M.B.	Cork	Bengal.
,, S. F. Freyer, M.D.	Curragh	Bengal.
,, C. R. Kilkelly, M.B.	Dublin	Bombay.
,, S. R. Wills	Colchester	Bengal.
,, W. H. Bennett, M.B.	Belfast	Bengal.
,, G. Cree	Aldershot	Bengal.
,, F. W. H. D. Harris	Devonport	Newport.
,, S. G. Allen	Aldershot	Ceylon.
,, J. S. Green, M.B.	Fermoy	Sierra Leone.
,, F. J. Greig	Edinburgh	Bengal.
,, B. A. Maturin	Portsmouth	Madras.
,, A. A. Sutton	Devonport	Egypt.

MEDICO-LEGAL AND MEDICO-ETHICAL.

UNHEALTHY HOUSES.

AN important decision concerning the respective rights of landlords and tenants, was given in the subjoined case. Had the recommendations of the Royal Commission been followed in the recent legislation on dwellings, the tenant of an unfinished house would not be placed at this disadvantage.

The case (Bartram *v.* Aldhous) was tried this week in the Queen's Bench Division of the High Court of Justice, before Mr. Justice Grantham and a Common Jury. The plaintiff, ten or twelve years ago, had three houses built for him in the Romford Road, Stratford, and he resided in one of them himself. The defendant, at Lady Day, 1885, went into possession of one of the houses as tenant for three years, upon an unstamped agreement, at £48 a year; and he left on the following 20th of June. The action was to recover the amount of rent due, and the defendant counter-claimed for damages in respect of illness caused to himself and some members of his family by reason of the unsanitary condition of the premises. The case for the defendant was first laid before the jury. It was that he took the

house upon a representation that the drainage was perfect, and that the house had been put into thorough repair. The drains, however, were in such a condition, and the house was so damp, that the defendant, his wife, son, and two daughters became ill, and in the opinion of the medical man suffered from blood-poisoning. The medical man recommended that they should at once leave the house, and his charges for attendance upon them amounted in all to £36 15s. The case for the plaintiff was, that the defendant was an architect and a sanitary and ventilating engineer; and that, previously to becoming tenant, he went over the house more than once. No representation as to the condition of the house, it was said, was made to him; and he formed his own opinion, and acted upon that when he became tenant. There was also evidence that the plaintiff, when he let the house, had reason to believe that it was in a good sanitary condition, though subsequently it was found necessary to set the drainage right, at considerable cost. Mr. Justice Grantham, in summing up, said that this was one of a most important class of actions. There was, no doubt, naturally a good deal of sympathy and sentiment in favour of a person who made a claim in consequence of ill-health suffered through the imperfect drainage of a house of which he had become tenant. He must ask the jury, however, to dismiss from their minds all feeling of sympathy and sentiment, and to do justice between the parties in accordance with the law. He thought that this litigation had probably arisen in consequence of the knowledge that one of the sanitary engineers thought he had of law. He referred the plaintiff to the case of "Bord *v.* Lord Greville," as, in his opinion, governing this case. That, however, referred to the letting of a furnished house, whilst this one was unfurnished; and there was a great difference in the law which was applicable to one case and to the other. He directed them that, in the case of an unfurnished house, there was no implied contract in letting it that it should be fit for the purposes of the person who took it. It was, therefore, that the counter-claim in this case was based upon the ground that there was an express representation that the drainage was good, and that this representation was not true. In deciding the case, it was for the jury to say whether this had been made out. The jury, having considered the matter for forty minutes, gave a verdict for the plaintiff for £24, the amount of two quarters' rent. His lordship gave judgment for the plaintiff, and said that, looking at the importance of the question, he should certify for costs as if the amount recovered had been £50. He also stayed execution upon the £24 being brought into court.

Zoe.—According to the statement of Zoe, the conduct of his former *locum tenens* was undoubtedly incorrect, and the rule Zoe states himself to have followed is that which should guide all medical practitioners in their conduct under similar circumstances. If our correspondent think it desirable to take further notice of the matter, it would be proper, in the first instance, that he should have a written statement of the facts, and should thereupon address a courteous communication to the medical gentleman in question, bringing the facts to his notice, as stated, and expressing the hope that a satisfactory explanation may be forthcoming, or some expression of regret.

OBITUARY.

KELBURNE KING, M.D., F.R.C.S.Eng., Surgeon to the Royal Infirmary, Hull.

By the death of Dr. Kelburne King, which occurred suddenly on the 2nd inst. from rupture of a thoracic aneurysm, surgery has been deprived of one of its most devoted followers, and the town of Hull has lost one of its worthiest and most honoured citizens.

Born at Kilmalcolm in Renfrewshire, in 1823, Dr. King was educated at the University of Edinburgh, where he greatly distinguished himself as a student, not only in the subjects of the medical curriculum, but in the more general studies of literature and science. His career as a student attracted the attention and gained him the lasting friendship of many distinguished teachers who then adorned the northern University.

In 1844, at the age of 21, he took the degree of M.D.; and, after practising for some time in Greenock, where he was surgeon to the Infirmary, and subsequently in London, he finally settled in Hull, where his high professional abilities and agreeable social qualities soon secured him an extensive practice. In 1858, he was appointed Surgeon to the Hull General Infirmary, a position which he retained till his lamented death, and in which he laboured with signal success. His reputation as a surgeon continued to increase, and soon extended beyond the limits of his adopted town. In 1858, he became a Fellow of the Royal College of Surgeons of Edinburgh; and in 1870, the *ad eundem* Fellowship of the Royal College of Surgeons of England was conferred upon him as a tribute to his reputation, attainments, and public service.

For many years past, Dr. King's name has been almost a household word in Hull and the neighbourhood, and the announcement of his sudden death was received with a feeling of the profoundest sorrow by all classes of society in the district. The deceased was a man of wide and varied culture, and of great intellectual activity. He not only contributed largely to surgical literature, but was the author of numerous able essays on social and scientific questions. In spite of the cares of an extensive private practice, and the duties of hospital appointments, he devoted much time to municipal affairs, as well as to the promotion of education and other measures for the public good. For eleven years he was an active and leading member of the Hull town council, was an alderman and a magistrate of the borough, and three times filled the mayorial chair. He was a clear and logical speaker, and his known sincerity of character and earnestness of purpose made him a power in the council-chamber, and always secured him a respectful hearing on any question to which he gave his attention.

From the commencement of his municipal career, he took an active part in promoting sanitary reform; and, in spite of much opposition and frequent defeats, he had the satisfaction at last of seeing most of his proposals adopted. To his action in the council the recent improvement in the health of Hull is in a great measure due. As President of the Hull Literary and Philosophical Society, he did a great work in the cause of education. Under his presidency, and chiefly through his energy and perseverance, the Society was enabled to pay off a heavy debt, and to erect additional galleries in its museum for the better arrangement and exhibition of the articles contained therein. Science-classes were also established, and the Society now began to emerge from comparative obscurity, and become a great educational agency. Dr. King also took an active interest in the movement for the extension of university teaching, and was President of the Cambridge University Extension Society in Hull.

As a surgeon, he was much beloved by his patients of all classes, by those in the humblest as in the higher walks of life. He was tenderly considerate to high and low alike, and sincere in his sympathy with both. To his junior colleagues, and to the younger members of the profession who had occasion to seek his assistance or advice, he was always courteous and kind, and to those in difficulty or trouble he was ever ready to extend a helping hand.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION, AND THE PAYMENT OF MEDICAL WITNESSES.

At the meeting of the Council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt Court, Fleet Street, on Tuesday, January 5th, that portion of the report of the proceedings at the Winter Assizes at Cork on Friday, December 11th, 1885, was read, from which it appeared that Mr. Justice O'Brien had said "he had received a letter from Dr. Pierce, of Newcastle, County Limerick, who complained of having only received £6 odd for his attendance at the assizes. He stated that he claimed £3 3s. a day, and 15s. each day for expenses; and that he had been allowed but two guineas, without any expenses; so that he had received but half of what he claimed. It was his lordship's intention to reply to him, stating his opinion that two guineas a day to a professional man who came from a distant place was a wholly inadequate remuneration. The Treasury were, no doubt, very great people; and of course it was the duty of any person holding an official position not to sanction undue extravagance and expense; but he would cause the Treasury to understand that he would not require the services of any medical man from the country at two guineas a day. He would not sanction it, and he would treat as contempt of court any attempt to dispute the carrying out of his orders by the Crown solicitors."

The reading of the judge's observations was received with much satisfaction by the members present, some of whom stated that they had been subpœnaed as witnesses in criminal cases, and had only been paid £1 1s. a day; and, if kept from home all night, 3s. 6s. additional, out of which they had to pay the expenses of staying at an hotel, and the payment of a deputy whilst absent; and a feeling was expressed that the time had arrived when determined resistance should be made to such injustice. It was also pro-

posed, "That the best thanks of this Council be given to Mr. Justice O'Brien for his remarks on the case of Dr. Pierce, and for his determination to give effect to his views." This, on being put to the vote, was carried unanimously. It was also decided that steps should be taken to memorialise the Treasury thereon, and to request the co-operation of medical members of Parliament in such memorial.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

At the annual meeting of the Yorkshire Association of the Medical Officers of Health, held in the Council Chamber, Guildhall, York, Mr. S. W. North, of York (President), in the chair, the report read by the Honorary Secretary stated that there were now 62 members enrolled; but in Yorkshire there are 136 urban, and 53 rural sanitary authorities, so that there was still room for considerable additions to membership. A summary was given of papers read during the year, and notice was taken of an unwise omission in the Public Health Local Government Conference Act. The report continued: "Provision has been made for the payment of the expenses of members of sanitary authorities and their clerk, in attending any conference, and for the purchase of reports of such meetings or conferences; but no notice is taken of the medical officer of health, than whom there is no one more competent to take an intelligent and beneficial part in any conference for the discussion of public health questions. We may anticipate that subjects of great importance to sanitary authorities will be discussed in the next Parliament, and in these every medical officer of health must be deeply interested, and your committee will carefully consider any proposals likely to bring about changes in our present methods of sanitary administration."

The report was unanimously adopted.

The following was a list of officers appointed: *President*, Mr. S. W. North, York; *Vice-Presidents*, Mr. T. W. Hime, M.B., Bradford; Dr. W. K. Giddings, Calverley; and Dr. Britton, Halifax. *Committee:* Dr. H. W. Arbuckle, Thorne; Mr. G. Goldie, Leeds; Dr. J. Hardwicke, Rotherham; Mr. A. Roberts, Keighley; Dr. J. W. Mason, Hull; and Mr. W. Burman, Wath. *Secretary*, Dr. J. Mitchell Wilson, Doncaster. *Treasurer*, Dr. R. Bruce Low, Helmsley.

The President delivered an address, in which he stated that, in the course of two or three months, York would have a good fever-hospital for thirty or forty patients. A local Act, containing clauses for the notification of infectious diseases, came into operation last March. The clauses had worked admirably during the time they had been in operation, and the medical men had unanimously agreed to notify cases. An outbreak of scarlatina had been checked as the result of these precautions.

Papers were read by the President on the Etiology of Enteric Fever, and by Dr. Low on Sporadic Cases of Enteric Fever, which he believed to be due to the accidental disturbance of specific poison left behind from previous cases. He thought the poison of enteric fever could retain its power, under suitable conditions, for many years. Some discussion followed, and the meeting terminated.

THE DUTIES OF HOUSE-SURGEONS.

At the board of guardians at Hereford last week, a case of alleged neglect by the house-surgeon of the infirmary was brought forward by the chairman, relative to a man who was taken to the infirmary by two policemen, suffering from a scalp-wound and other injuries. The house-surgeon dressed the scalp-wound, but is said to have overlooked some injury to the ribs, and sent the patient away. The house-surgeon alleged that the man was drunk, and one reason why he did not keep him in the house was that, if he detained all patients who were taken there with wounds, the medical officers would have to put them in separate wards with a nurse to attend them if erysipelas set in. After some discussion, it was agreed that the matter should be brought before the infirmary board.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 6,232 births and 3,927 deaths were registered during the week ending Saturday, January 9th. The annual rate of mortality, which had been 19.3 and 25.5 per 1,000 in the two preceding weeks, declined again during the week to 22.5. The rates in the several towns, ranged in order from the lowest, were as follow: Sheffield, 18.5; Newcastle-upon-Tyne, 18.8; Wolverhampton, 18.9; Leeds, 19.2; Sunderland, 19.2; Hull, 19.6; Salford, 20.0; Bradford, 20.2; Bristol, 20.3; Leicester, 20.6; Cardiff, 20.7; Birmingham, 21.0; Derby, 21.0; Oldham, 21.6; Halifax, 22.0; London, 22.4; Brighton, 22.9; Portsmouth, 24.1; Birkenhead, 24.1; Liverpool, 24.2; Preston, 25.7; Plymouth, 26.6; Blackburn, 26.8; Norwich, 27.2; Nottingham, 27.8; Huddersfield, 28.3; Manchester, 28.5; and the highest rate during the week, 30.8 in Bolton. The death-rate in the twenty-seven provincial towns during the week averaged 22.6 per 1,000, and slightly exceeded the rate recorded in London, which, as before stated, was 22.4 per 1,000. The 3,927 deaths registered in the twenty-eight towns during the week under notice included 174 which were referred to whooping-cough, 113 to measles, 42 to "fever" (principally enteric), 41 to diarrhœal diseases, 38 to scarlet fever, 37 to diphtheria, and 3 to small-pox; in all, 448 deaths resulted from these principal zymotic diseases, against 395 and 497 in the two preceding weeks. The zymotic death-rate was equal to 2.6 per 1,000. In London the zymotic rate was 2.9, whereas it did not exceed 2.3 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 and 0.3 in Halifax and Newcastle-upon-Tyne, to 4.4 in Oldham, 6.0 in Bolton, and 6.8 in Plymouth. The fatal cases of whooping-cough, which had been 126 and 168 in the two previous weeks, further rose during the week to 174, and caused the highest death-rates in Sheffield, Cardiff, and Bolton. The deaths referred to measles, which had been 122 and 163 in the two previous weeks, declined to 113, and showed the largest proportional fatality in Oldham, Nottingham, and Plymouth. The 42 fatal cases of "fever" showed a slight further increase upon recent weekly numbers; this disease was somewhat prevalent in Oldham and Norwich. The deaths referred to scarlet fever, which had been 55 and 34 in the two previous weeks, rose again during the week to 38, and caused the highest death-rates in Leicester, Huddersfield, and Bradford. The 37 fatal cases of diphtheria in the twenty-eight towns showed a slight decline from the number in the preceding week, and included 21 in London, 4 in Liverpool, and 2 in Bristol. Of the 3 deaths from small-pox during the week under notice, 2 occurred in Liverpool, and 1 in Nottingham. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the eight preceding weeks from 90 to 41, had further fallen to 35 on Saturday, January 9th. The admissions, which had been 13, 9, and 2 in the three previous weeks, were only 1 during the week. The death-rate from diseases of the respiratory organs in London during the week was equal to 6.5 per 1,000, and exceeded the average. The causes of 86, or 2.2 per cent., of the 3,927 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, January 9th, 975 births and 565 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977. The annual rate of mortality, which had declined in the three preceding weeks from 24.1 to 21.6 per 1,000, rose again during the week to 22.9, and slightly exceeded the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 15.5 in Leith, 16.1 in Edinburgh, 16.6 in Greenock, 19.8 in Aberdeen, 21.7 in Dundee, 23.4 in Paisley, 27.8 in Perth, and 28.7 in Glasgow. The 565 deaths registered in these towns during the week included 45 which were referred to the principal zymotic diseases, against 42 and 32 in the two previous weeks; of these, 15 resulted from whooping-cough, 10 from diarrhœa, 8 from scarlet fever, 6 from diphtheria, 5 from "fever," 1 from measles, and not one from small-pox. These 45 deaths were equal to an annual rate of 1.8 per 1,000, which was considerably below the average zymotic rate during the same period in the large English towns. The highest zymotic rates during the week were recorded in Paisley, Aberdeen, and Glasgow. The deaths from whooping-cough, which had increased from 7 to 13 in the three preceding weeks, further rose to 15, and included 13 in Glasgow. The 8 fatal cases of scarlet fever exceeded by 5 the number in the previous week; 4 occurred in Aberdeen, and 2 in Glasgow. The deaths from diphtheria, which in the three previous weeks had declined from 8 to 2, rose again during the week to 6, of which 4 were returned in Glasgow. The 5 fatal cases of "fever" showed a decline of 3 from the number in the previous week, and included 4 in Glasgow, where the death from measles also occurred. The mortality from diseases of the respiratory organs in these Scotch towns during the week was equal to 5.5 per 1,000, against 6.5 in London. The causes of 80, or 14.2 per cent., of the 565 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending December 26th, the number of deaths registered in the sixteen principal town-districts of Ireland was 312. The average annual death-rate represented by the deaths registered was 18.8 per 1,000. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 0.0; Belfast, 19.5; Cork, 20.8; Drogheda, 4.2; Dublin, 22.0; Dundalk, 17.5; Galway, 16.8; Kilkenny, 8.5; Limerick, 8.1; Lisburn, 19.3; Londonderry, 19.6; Lurgan, 15.4; Newry, 3.5; Sligo, 9.6; Waterford, 13.9; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in eleven of the districts to 4.4 in Dundalk; the 4 deaths from all causes registered in that district comprising 1 from whooping-cough. Among the 82 deaths from all causes registered in Belfast were 2 from measles, 1 each from scarlatina, typhus, whooping-cough, and diphtheria, 2 from simple continued and ill-defined fever, and 4 from diarrhœa; and the 11 deaths in Londonderry comprised 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 154. Seventeen deaths from zymotic diseases were registered; they consisted of 2 from scarlet fever, 10 from whooping-cough, 1 from cerebro-spinal fever, and 4 from enteric fever. Thirty-five deaths from diseases of the respiratory system were registered; they comprised 27 from bronchitis, and 3 from pneumonia. Thirteen deaths (including 9 of infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 6 by other diseases of the brain and nervous system (exclusive of convulsions), and 7 by diseases of the circulatory system. Phthisis caused 19 deaths, and cancer 3. Five accidental deaths were registered. In 1 instance, the cause of death was "uncertified," and in 24 other cases there was "no medical attendant."

HEALTH OF FOREIGN CITIES.

It appears from statistics published in the Registrar-General's return for the week ending January 9th, that the death-rate was recently equal to 25.6 in Bombay, and 38.6 in Madras. Diarrhœal diseases caused 65 deaths in Madras, and only 18 in Bombay; "fever" mortality showed the largest excess in Bombay. According to the most recently received weekly returns, the annual death-rate in twenty of the largest European cities averaged 25.9 per 1,000, and exceeded by 3.6 the mean rate in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 30.2, and showed a further increase upon the rates in recent weeks; the 538 deaths included 28 from "fever," 25 from scarlet fever, 18 from measles, and 10 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did

not average more than 22.9, and ranged from 20.5 in Stockholm, to 27.2 in Christiania; the 67 deaths in the last-mentioned city included 11 from diphtheria and croup, 4 from scarlet fever, and 4 from whooping-cough. The death-rate in Paris was equal to 23.8, corresponding with the rate in the previous week; 46 deaths were referred to diphtheria and croup, 40 to infantile diarrhœa, 28 to typhoid fever, and 21 to measles. In Brussels the rate was 23.9, and the 200 deaths included 15 from diarrhœal diseases, and 10 from diphtheria and croup. The 21 deaths in Geneva gave a rate of but 15.3. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.7, the rates ranging from 21.6 in the Hague to 32.2 in Rotterdam; the 193 deaths in Rotterdam included 10 from diphtheria and croup, and 7 from measles. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 26.4, and ranged from 21.3 in Berlin and 23.9 in Dresden, to 30.7 in Hamburg, 32.8 in Buda-Pesth and 35.8 in Prague. Small-pox caused 16 deaths in Vienna, 9 in Buda-Pesth, and 5 in Prague; diphtheria caused the greatest mortality in Berlin, Hamburg, and Buda-Pesth. The death-rate was equal to 21.3 in Rome, and 35.7 in Venice; small-pox caused 14 deaths in Venice, and 7 in Rome; typhoid fever 4 in Rome, and diphtheria and croup 5 in Venice. In four of the principal American cities, the recorded death-rate averaged only 20.7, and ranged from 14.4 in Baltimore to 23.5 in New York. Diphtheria and croup caused 44 deaths in New York, 22 in Brooklyn, 45 in Philadelphia, and 7 in Baltimore, and 14 fatal cases of typhoid fever were reported in Philadelphia.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on January 11th, and, when eligible, will be admitted to the pass-examination.

A. A. F. Fletcher, and H. W. Bryant, students of Melbourne University; H. Grier, and T. O. Williams, of Dublin; W. S. Crawford, and E. A. Steele, of Liverpool; W. K. Mackenzie, of King's College; J. E. Wood, and F. W. Mais, of Leeds; J. Farrington, and G. H. Woods, of Manchester; F. Dymoke, of the Bristol School of Medicine; T. S. Coombe, and F. N. Burwell, of Cambridge University.

Passed in Anatomy only.

S. E. C. McDowell, of Toronto; W. F. W. Wilding, of Liverpool; C. A. Morgan, of St. Thomas's Hospital; J. T. Bradley, of Manchester.

Passed in Physiology only.

J. S. Tait, and H. L. Green, of Pennsylvania; F. A. Foy, of Bombay and Aberdeen; J. S. Fox, of Liverpool; J. H. Murray-Aynsley, of St. George's Hospital; H. Walter, of Dublin.

Passed in Anatomy and Physiology on January 12th.

D. R. P. Evans, of Charing Cross Hospital; H. G. Collett, of King's College; D. A. Birrell, of St. Mary's Hospital; P. O. Thompson, J. Nall, and C. H. Cosens, of St. Bartholomew's Hospital; W. Griffiths, of Melbourne, and University College.

Passed in Anatomy only.

W. G. Beyts, and A. B. Hudson, of Guy's Hospital; A. H. Howell, of the London Hospital; H. Lloyd, of University College.

Passed in Physiology only.

W. L. A. La Croix, of Bristol Medical School; R. F. Hiley, of Cambridge, and St. Thomas's Hospital; A. C. J. Macann, J. W. Hudson, and L. P. Gibson, of Middlesex Hospital; J. W. Jessop, E. P. Furber, and S. L. Hinde, of St. Bartholomew's Hospital; T. G. I. Moore, of Charing Cross Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the quarterly examination for the Membership of the College, held on Monday, Tuesday, and Wednesday, January 4th, 5th, and 6th, 1886, the following candidates were successful.

E. M. Cosgrave, M.D.Univ.Dub., Lic. Med. 1882, Dublin; W. Beatty, M.B. Univ.Dub., Lic. Med. 1885.

At the quarterly first professional examination for the Licence in Medicine of the College, held on the above-mentioned days, the undermentioned candidates were successful.

K. D. B. Dobbs; M. Royce.

At the ordinary monthly examinations for the Licences of the College, held on Monday, January 4th, and following days, the undermentioned candidates passed.

For the Licences to practise Medicine and Midwifery.—W. V. Barré, Dublin; G. Fisher, Stradbally, Queen's County; F. Hall, Dublin.

For the Licence to practise Medicine only.—S. J. Armstrong, Wakefield, Yorkshire; W. Evans, Liverpool; F. B. Musgrave, Leeds; E. N. Smartt, Ballymahon, co. Longford; G. Stoker, Dublin.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 7th, 1886.

Káká, Sorabji Manekji, M.R.C.S., L.R.C.P., Bombay.
Weaver, John James, 40, Hoghton Street, Southport.

The following gentlemen also on the same day passed their Primary Professional Examination.

Fletcher, George Rory John, Charing Cross Hospital.
O'Connor, William Patrick, University College.

DR. MUMBY, S. Sc. Cert. Camb., has been elected Medical Officer of Health and Public Analyst for Portsmouth.

MEDICAL VACANCIES.

The following vacancies are announced.

BRISTOL GENERAL HOSPITAL.—Assistant House-Surgeon. Salary, £50. Applications by January 30th.

COUNTY ASYLUM, Lancaster.—Assistant Medical Officer. Salary, £100. Applications by January 25th.

EVELINA HOSPITAL.—House-Surgeon and Surgeon for Out-patients. Salary, £70. Applications by January 28th.

HULL ROYAL INFIRMARY.—Junior Assistant House-Surgeon. Salary, £50. Applications by January 26th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, Margaret Street, Cavendish Square.—Honorary Visiting Physician. Must reside within one mile of the institution.

LINCOLN UNION.—Vaccination Officer. Applications by January 25th.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Anæsthetist. Applications by January 27th.

NATIONAL HOSPITAL, Queen Square, Bloomsbury.—Two Clinical Clerks. Applications by January 28th.

NORWOOD SCHOOLS.—Dentist. Salary, £50. Applications by January 27th, to Guardians' Board-room and Offices, Brook Street, Kennington Road, S.E.

PARISH OF LOCHS, Island of Lewis.—Medical Officer. Salary, £150 per annum. Applications by February 1st.

PLYMOUTH DISTRICT OF THREE TOWNS' FRIENDLY SOCIETY.—A Doubly Qualified Medical Officer. Salary, £230. Applications by January 22nd.

PLYMOUTH DISTRICT OF THREE TOWNS' FRIENDLY SOCIETY.—Two Practitioners. Salary, £150. Applications by January 22nd.

SALOP AND MONTGOMERY COUNTIES LUNATIC ASYLUM, Shrewsbury.—A Junior Assistant Medical Officer. Salary, £100. Applications by January 19th.

SCARBOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, £80. Applications by January 18th.

STAFFORDSHIRE GENERAL INFIRMARY.—House-Surgeon and Secretary. Salary to commence, £100. Applications by January 20th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Physician. Applications by January 21st, to the Secretary, Mr. St. Leger Bunnett, 60, King Street, Regent Street, W.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Salary, £70. Applications by January 30th.

STOCKPORT INFIRMARY.—A Third or Fourth Years' Student as Assistant to House-Surgeon. Applications by January 30th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Honorary Physician. Applications by February 1st.

THE CITY OF EXETER LUNATIC ASYLUM.—Medical Superintendent. Salary, £250. Applications to Town Clerk, 15, Bedford Circus, Exeter, by January 27th.

THE QUEEN'S HOSPITAL, BIRMINGHAM.—Vacancies for offices of Physician for out-patients, and of Casualty Surgeon. Honorarium, £50. Applications before January 23rd.

WONFORD HOUSE HOSPITAL, Exeter.—Assistant Medical Officer. Salary, £150. Applications to Dr. Deas, by March 25th.

MEDICAL APPOINTMENTS.

DAKIN, William Radford, M.D., B.S.(Lond.), M.R.C.P., appointed Physician to the Royal Hospital for Children and Women.

MOLINE, Paul F., M.B.(Lond.), appointed Registrar to the Victoria Hospital for Children, Chelsea.

PATERSON, George H., L.R.C.P., M.R.C.S.Eng., appointed Medical Officer of Health for the Dalton-in-Furness Urban Sanitary District, *vice* S. Johnson, M.B.

SMYTH, WILLIAM J., M.D., reappointed Medical Officer of Health for the Baildon Urban Sanitary District.

TURNER, Philip D., M.B.(Lond.), appointed House-Surgeon to the Victoria Hospital for Children, Chelsea.

WALKER, Francis J., M.B., Certif. San. Science, Durham, M.R.C.S.Eng. L.R.C.P.Lond., L.S.A.Lond., appointed Medical Officer of Health to the Spilsby Rural Sanitary Authority, *vice* J. West-Walker, M.B.Lond., resigned

BIRTHS, MARRIAGES, AND DEATHS.

The charges for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGE.

GOSSE—SMITH.—On January 6th, at St. Thomas's Church, Salisbury, by the Rev. Canon Morrice, assisted by the Rev. Robert Wilkes Gosse, brother of the bridegroom, Hope Wilkes Gosse, M.R.C.S. and L.R.C.P., of Eccleshall, Stafford, to Mary, third daughter of George Smith, Solicitor, Salisbury.

ST. JOHN'S COLLEGE, CAMBRIDGE.—E. H. Hankin and F. S. Locke, both of St. Bartholomew's Hospital Medical School, have been elected to exhibitions of £50 a-year for Natural Sciences.

DR. MARSHALL LAMB has been appointed medical officer of the west coast district of Borneo, in the room of the late Dr. Manson Fraser, who was killed in Borneo in May last.

A THIRD and enlarged edition of Mr. Gant's *Science and Practice of Surgery*, published by Messrs. Baillière, Tindall, and Cox, is in preparation.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St. George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Jonathan Hutchinson: Lettsomian Lectures. On Some Moot Points in the Natural History of Syphilis. Lecture II.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Eve: 1. Examples of Colloid Degeneration of Breast and Omentum; 2. Dislocation of Hip of a Cow (card); 3. (For Mr. A. Lingard.) Specimens of Actinomycosis in Oxen (card). Dr. S. West: Abscess of Gall-Bladder, with Pus in Portal Veins. Mr. Sydney Jones: Spontaneous Fracture of Urinary Calculi. Mr. Clutton: Spontaneous Fracture of Urinary Calculi (card). Dr. Ashby: Diffuse Sclerosis of Brain in a Child aged 18 Months. Dr. A. Davidson: Malignant Growth (Secondary to Cancer of Pylorus) obstructing Thoracic Duct and invading Minute Lymphatics of Lung. Mr. Barwell: Two Cases of Aneurysm. Mr. Churchill: 1. Postnasal Fibroma in a Child; 2. Syphilitic (Congenital) Necrosis of Vomer. Mr. Cripps: Stricture of Rectum. Mr. Bruce Clarke: Rectum after Colotomy. Dr. Goodhart, for Dr. Marshall: Calculus in Bladder of Female Child aged 2 Years (card). Dr. Carrington: Cancer of Body of Stomach. Mr. J. B. Sutton: Congenital Inguinal Hernia in a Monkey (card). Mr. H. Fenwick: Tumour of Bladder (card). Dr. Hadden: 1. Intestine in Lymphadenoma (card); 2. Lipæmic Blood in Diabetes; 3. Mucous Cyst of Tongue (card); 4. Gumma pressing on Ureter (card).

WEDNESDAY.—Sanitary Assurance Association, at the Parkes Museum of Hygiene, 8 P.M. Professor T. Roger Smith, F.R.I.B.A.: On a Damp House.

THURSDAY.—Harveian Society of London, 8 P.M. Annual General Meeting. President's Address; Election of Officers; Conversazione.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Barker: Ununited Fracture of the Clavicle, producing Writer's Cramp: Resection of the False Joint and Wiring of the Fragments; Complete Union; and Relief of the Nerve-Symptoms. Dr. Angel Money: On a New Symptom of Megrim and Epilepsy. Dr. Samuel West: Chronic Simple Ulcers of Stomach and Duodenum, without Symptoms until the Occurrence of Perforation. Mr. Brudenell Carter: A Case of Complete Recovery of Vision in Amaurosis consecutive to Malarial Fever.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and NOT to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

A CENTENARIAN.

SIR,—Under this heading, Dr. Young relates the case of a man whom his family declared to have died at the age of 109 years; and he goes on to say that perhaps the man was not more than 105 years old. If Dr. Young will take the trouble to hunt up the man's baptismal registry, if, indeed, he ever were registered, it is probable that ten years at least will have to be deducted from even the lower estimate above given. Is Dr. Young acquainted with Mr. Thom's admirable volume on *Human Longevity*, 1873? If not, let him get it by all means. He will there see how, one after another, centenarians and ultra-centenarians were reduced to their true ages. The rules for our guidance, laid down by Mr. Thom, are admirable.

In the *Illustrated Magazine* for the present month, there is a paper entitled "A Hundred Years Ago," in which it is stated that Macklin, the famous actor, attained the age of 107; but on his coffin-plate being examined, it was found to be recorded that he was aged 97. In the *Annual Register* for 1797 (Chronicle, p. 42) he is correctly stated to have died "in his 98th year."—Your obedient servant,

J. DIXON.

Dorking.

EVIDENCE AT INQUESTS.

WE have received from Mr. Rae (Stoke) a statement concerning an inquest held by Mr. Vaughan, the Devonport borough coroner, on the body of a child who died from burns received on the previous day. A statement appears to have been made to the coroner that Mr. Rae, who was the club-doctor, was sent for, but did not arrive until the afternoon. Thereupon, the coroner said that, if the medical man had been present, he should have told him smartly that he ought to have come when sent for. These clubs would lead to a great deal of mischief if persons trusted to a medical man coming, and he did not. Mr. Rae, however, informs us that he had no urgent message respecting the case, but a request to send something to apply to a child that had been burnt, the young girl bringing the message not being able to say whether the case was severe or not, whereupon a small quantity of a suitable carbolic oil dressing was supplied. The messenger was sent back later in the day for more of the oil for dressing, and requested the medical man to see the child. He visited the case the seventh on his list of forty-two, and found the child extensively blistered from the neck to the legs, and pointed out that he ought to have been made aware of the nature and extent of the injuries from the first. The child lived thirty-six hours, and was seen by Mr. Rae three times. It is much to be regretted that coroners should so often bring their court into contempt by pronouncing off-hand judgment upon *ex parte* statements. In this case, the jury desired the evidence of the medical attendant, as was just; but the coroner replied that the case was so clear a one, that he should not think of putting the town to the expense of summoning a medical witness, and paying his fee. But in that case, and in the absence of the medical man, it certainly was not his duty to make hostile comments upon a witness whom he deliberately abstained from calling into court, and to whom he afforded no opportunity of answering the allegations made, or of furnishing the necessary information. The censure in this case which the coroner inflicted upon the medical man really recoils upon himself.

MATERIALS FOR AMBULANCE LECTURES.

SIR,—In reply to "Gil Blas'" request for "material for ambulance lectures," allow me to suggest the perusal of any or all of the following handbooks: 1. *First Aids to the Injured*, by Professor Esmarch, of Kiel (2s.), translated by Her Royal Highness Princess Christian. 2. *Ambulance Lectures*, by Dr. Lionel A. Weatherley (1s.). 3. *Accidental Injuries: their Relief and Immediate Treatment*, by Dr. James Cantlie (London). I consulted all three for my class last winter, but am of opinion that Dr. Cantlie's excellent little handbook is "far and away" the best treatise on this now important subject. The cost of the book is only 1s.—I am, sir, faithfully yours,

GEO. BURNETT CURRIE.

Buxburn, Aberdeen, N.B.

SIR,—If "Gil Blas" will forward his name and address to the Chief Secretary, St. John Ambulance Association, St. John's Gate, Clerkenwell, E.C., he will receive full information.—Your obedient servant,

FIRST AID.

The Helen Prideaux Memorial Fund.

Sir,—I beg to enclose a further list of donations to the "Helen Prideaux Memorial Fund."—Yours faithfully,

E. Garrett Anderson.

4, Upper Berkeley Street, W.

	£	s.	d.
Dr. Clifford Allbutt, F.R.S. ..	10	10	0
Dr. Ford Anderson	2	2	0
Dr. Tempest Anderson	1	1	0
Mrs. Atkins, M.D.	1	1	0
Dr. G. W. Balfour.....	2	2	0
Miss Barker, M.D.	1	1	0
Dr. Thomas Barlow	1	1	0
Professor Bentley.....	2	2	0
Dr. Elizabeth Blackwell.....	1	1	0
Miss Boddy, L.K.Q.C.P.I.....	1	1	0
Thos. Bond, Esq.	1	1	0
Stanley Boyd, Esq.	5	5	0
Dr. Cheadle.....	2	2	0
Harrison Cripps, Esq.	1	1	0
Dr. Curnow	1	1	0
Miss Walker Dunbar, M.D. ..	1	1	0
Dr. Matthews Duncan	2	2	0
Sir William Gull, Bart., F.R.S.	10	10	0
C. W. Heaton, Esq.	2	2	0
Dr. A. T. Myers.....	1	1	0
Sir James Paget, Bart., F.R.S.	2	2	0
Mrs. Burdon Sanderson	1	1	0
Professor Schäfer, F.R.S.	5	0	0
Dr. W. Allen Sturge.....	5	5	0
Dr. Octavius Sturges	2	2	0
Dr. and Mrs. Waller.....	5	0	0
Total	£252	9s.	

Dr. George Heald's Defence Fund.

Sir,—As you kindly stated in reply to Mr. Beck's letter, published in the Journal of December 19th, that, if a Committee were formed, you would be willing to open a subscription-list in the British Medical Journal for Dr. George Heald, I now beg to state that a committee of four gentlemen has been formed (with power to add to their number), for the purpose of obtaining subscriptions from sympathisers with Dr. Heald. The Committee consists of Dr. Hollingsworth, Police-Surgeon, Leeds; Dr. J. Sloan, Bramley, Leeds; W. E. Beck, Esq., 33, Bond Street, Leeds (Treasurer); and myself as Honorary Secretary. Subscriptions to the Heald Defence Fund can be paid into the Yorkshire Bank, Leeds, to the Honorary Treasurer, or to myself. As Dr. Heald's legal expenses amount to about £300, we trust the profession and others will generously respond to our appeal to assist him to pay the above amount, so that he shall be nothing out of pocket. The following amounts have already been received: W. E. Beck, Esq., £5 5s.; Dr. Hollingsworth, £3 3s.; Dr. Dobson, £1 1s.; Dr. Sloan, £1; Dr. H. A. Allbutt, 10s. 6d. Other amounts will be published as received.—I am, sir, yours, etc.,

H. Arthur Allbutt, M.R.C.P.E.,
Honorary Secretary to the Heald Defence Fund.

24, Park Square, Leeds.

A Questionable Source of Hospital Receipts.

Sir,—I am directed by the Weekly Board of Governors to inform you that their attention has been drawn to the letter which appeared in your number of December 19th, from a Dr. Gwillim, concerning a publication called *The Family Doctor*, and the source from which donations sent to hospitals by the editor of that paper were obtained. They have decided to receive no more such contributions, as well as to return those which had already been received.—I beg to remain, sir, your very obedient servant,

Arthur Reade, Secretary.

Charing Cross Hospital, London.

X. Y. Z. (Dublin) asks, "Where can I get information on the subject of 'wholemeal bread'? I think a body called the Bread Reform Association issued pamphlets on the subject, but I do not know where to find them."

Home for Incurables.

Sir,—Is there any home for incurables who can afford to pay something for maintenance? The case is a man with spinal sclerosis, who is losing control over the legs, and who will probably soon require regular catheterism; and he wishes, as he is alone in the world, to obtain admission to some home, where he would find every convenience his condition will require, and where he could remain during the rest of his life.—I am, etc.,

Nemo.

Are Ergot and Iron Incompatible?

Sir,—Can anybody inform me if the active principle in preparations of ergot are really destroyed by solutions of salts of iron? It has repeatedly been hinted in obstetric practice that the administration of iron with the liquid extract or tincture of ergot simply means giving iron, the active principle of the ergot being rapidly decomposed by the metal. I should also like to be informed of any writings of distinguished therapeutists and obstetricians on the above question.—I am, etc.,

Odoacer.

Water-Analysis.

Mr. E. G. Clayton, Chemical Laboratory, 54, Holborn Viaduct, recommends as an alternative to Wanklyn's *Treatise on Water-Analysis*, a little treatise *On Water-Analysis*, by E. Frankland, F.R.S., published by Van Voorst.

Pure Terebene: A Disclaimer.

Sir,—My attention has been directed to an advertisement issued by Messrs. Cleaver and Sons, in which my name is used in connection with their terebene in a manner which greatly surprises me. I should esteem it a favour if you would allow me to say that I know nothing of their preparation, or of Bond's terebene. I have never even seen it, much less prescribed or recommended it for use in any way. I distinctly stated in my recent paper on Pure Terebene, that the substance to which I referred was not the patent medicine sold under that name.—I remain, sir, your obedient servant,

William Murrell, M.D.

Weymouth Street, W.

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BOOKS, etc., RECEIVED.

System of Hygienic Medicine. By L. R. Allinson. London: F. Pitman. 1886.

Hernia and its Radical Cure. By J. Wood, F.R.S. London: H. Renshaw. 1886.

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LETTSOMIAN LECTURES

ON

SOME MOOT POINTS IN THE NATURAL HISTORY OF SYPHILIS.

Delivered before the Medical Society of London, 1886.

By JONATHAN HUTCHINSON, F.R.S.,
Emeritus Professor of Surgery to the London Hospital College.

Lecture II.

The Relationship of Tertiaries to Secondaries.—Nerve-Affections, which are Symmetrical, Central, and Aggressive.—The Position of Rupia and of Psoriasis Pulmaris.—Syphilitic Lupus.—Periostitis.—Other Maladies often considered Tertiary really of Early Occurrence.—Influence of Mercury as an Antidote.—Recurrence after Long Treatment.—Conclusions.

Mr. President and Gentlemen,—In our former lecture we glanced at some questions which are still matters of debate in reference to the primary phenomena of syphilis, and I now purpose to take up certain similar topics which concern its later stages. First and most important amongst these, we shall have to consider the relationship between what are known as the secondary phenomena and those which come later and are named tertiary. The older doctrines taught that there exists between these an essential difference of kind and of tendency, and that certain forms of disease can be named as "secondary," and certain others as "tertiary." Thus it has been supposed that the viscera and nervous system suffer in the tertiary period only, and that there is at this latter stage a general tendency to ulceration, and to extension deeply, which is not observed in the secondary one. What has been named a "gumma," has been supposed to be characteristic of the tertiary stage. Opinions have, however, been gradually changing respecting several, if not all, of these points. Cases have been recognised in which the various conditions referred to were met with so early in the disease, and in such close combinations with each other, that the only explanation seemed to be that the disease had run an unusually rapid course, and had reached its last stage before it had well finished its first. By degrees we are, however, arriving at another interpretation of such facts, and are beginning to see that the old classifications of the phenomena cannot hold their ground, and that we must seek for other characters by which to distinguish the secondary and tertiary stages. Not, indeed, that the old observations were wholly wrong; this would be exceedingly improbable, and its mere assertion would very properly lead to much mistrust of any modern conclusion which might seek to supplant them. Speaking loosely and in a general way, it is still true that visceral affections, gummata, deep ulceration, and periostitis, belong to the tertiary stage; it is only when these facts are brought forward as if they were constant, and sufficient in themselves to form the basis of classification, that we are compelled to make protest.

Permit me to illustrate what I mean by the citation of a case. A young man, aged 21, too young, let me note, for it to be likely that he had ever had syphilis before, was admitted into the London Hospital under my colleague, Dr. Langdon Down. He had still the remains of a hard chancre on him, and he was covered by a papular rash, which was ulcerating in places. The date which he assigned to the beginning of the affection was only four months previously. He died suddenly and unexpectedly. The necropsy showed gummata in both testicles, in the spleen, and in the heart, death having been caused by the softening and ulceration of the latter.

Here, then, we have conditions, which are usually counted tertiary, occurring before the primary ones have had time to disappear. If the case were one without companions, we might put it aside; but it is not so, the fact being that it is very exceptional only in the circumstance that the patient died, and thus afforded an opportunity for the demonstration of conditions which are probably present but unsuspected in many others.

I have myself known another case in which a young man, not fairly over the secondary state of syphilis, died of diffuse gumma of the heart. Large gummata in viscera are common enough in syphilitic infants, who, at the same time, still present the ordinary forms of secondary eruption. In the adult, it is an every-day occurrence to observe symptoms implying periostitis, transitory disease of various parts of the nervous system, or even visceral affections, during the secondary period. It is not so much in the special location, or even the character of the morbid changes, as in their tendencies that we observe a difference between them and the lesions of the tertiary stage. The gummata of the early period are small and numerous; those of the later one are large, and often few in number, or even single. Those of the early period easily disappear, either spontaneously or under mild specific treatment, whilst those of the tertiary stage persist, and grow indefinitely unless adequately met. Hence it may easily happen that the indications of internal disease in the secondary stage may often pass unnoticed, whilst those of the later one rarely escape discovery. We may argue this point in more detail in reference to two special symptoms which, as they occur in parts open to inspection, are not liable to the fallacy just mentioned. I refer to rupia and periostitis.

The Position of Rupia and of Psoriasis Palmaris.—It has been customary to claim rupia as definitely a tertiary symptom. This, I contend, is quite a mistake. It almost invariably begins within a year of the chancre, and often much earlier; and, if met with later, it is almost always in cases in which it has resisted treatment and lasted for long. The mistake as to its proper position has arisen from a too easy acceptance of the dogma, that everything that ulcerates is necessarily tertiary. But such is not the fact; ulceration, even to the extent of phagedæna may happen not only in the secondary, but even in the primary stage.

It would be beyond the scope of the present lecture, if I were to attempt to produce proof by the citation of cases that rupia does really occur in the early periods of syphilis. Such proof could easily be brought forward did time permit, but I must leave it for clinical observers to test the assertion for themselves. It is needful, however, to say a few words as to what is meant by rupia, and as to the conditions under which, chiefly, this peculiar and rare form of eruption does occur. We must not confound, under the name of rupia, all conditions attended by ulceration and scab; for this would allow the inclusion of certain lupoid affections which do certainly, as a rule, come much later. By rupia, we mean an eruption consisting of many distinct sores, which begin as bullæ, and tend to the production of conical crusts. There is ulceration of the skin beneath, but it is seldom deep, and there is a certain amount of infiltration, but never much. The face and limbs are its usual sites. Its sores are always round, unless two or more have become confluent, and it leaves round scars. The very fact that it is usually symmetrical, sufficiently denotes its position as one of the secondary phenomena; but, although I claim that such is its place, it is to be clearly admitted that it is never one of the earliest. Usually, I think, the ulcerating forms of eruption, of which rupia is one and ecthyma another, occur after a certain amount of treatment, and after the first eruptions, which were erythematous or papular, have quite disappeared. Often there has been an interval of good health, and all treatment has been laid aside. Sometimes, however, a papular eruption is converted into an ulcerating or rupial one apparently by too vigorous treatment. Sometimes the rupia happens apparently as a consequence of neglect of treatment. Very often, a peculiarity in the diathesis of the patient has been implied, by the fact that his chancre inflamed and ulcerated. Thus a scar-leaving eruption often follows a scar-leaving chancre.

The belief that the occurrence of rupia, or other ulcerating eruption, makes it desirable to avoid mercury and use only iodide of potassium, is, I think, fast losing its hold. Although, unquestionably, mercury does sometimes disagree in such cases, we know that it is chiefly a question of dose and mode of use, and that when these are well arranged it will almost always cure.

Rupia, as a rule, is not serpiginous; it does not creep at its edges; its crusts, when typical, are always circular. The shilling-like scars which it leaves are well known. There is, however, another and an allied condition, possibly sometimes a direct consequence, in which the morbid process is allied to lupus. In this the round form of the sore is lost, for the inflammation spreads at its edges by local infection, and allows healing in the centre. Thus a horseshoe form is assumed; or it may be that large irregular patches, with crescentic edges, become involved. This disease may last indefinitely unless carefully treated, and often does extend over several years. It seldom, I think, originates *de novo*, as a genuine tertiary, years after the secondary symptoms have all disappeared, but is more commonly a sort of continuation of an imperfectly-treated eruption of early date; it ceases to be a generalised eruption, is no longer arranged

with any tendency to symmetry, and it is often more amenable to local than to internal treatment. In all these features, it denotes a sort of transition position.

Syphilitic Lupus.—It may here be convenient to discuss briefly the moot question as to whether there is such a disease as syphilitic lupus. Our answer to such question must depend upon the definition of our terms. That there are syphilitic inflammations of the skin which affect by preference the parts most frequently attacked by lupus, which spread at their edges just as lupus does, which, like it, leave scars, and which, even to those most experienced, present throughout features which render it very difficult to decide whether the condition is common lupus, or due to syphilis, everyone will admit. These diseases, of which we have as great a variety as we have of lupus itself, are to be cured by specific treatment; and in this they differ *toto cælo* from common lupus. I fail to see that any clinical convenience is served by refusing to call these affections syphilitic lupus, using the term in the same sense that we speak of syphilitic psoriasis and syphilitic lichen. They are the syphilitic imitations of the typical malady. The most acute and rapidly destructive of these is what has been termed erosive lupus, an almost phagedænic affection, which usually attacks the nose, and which is more frequently seen in inherited than in acquired syphilis. Good examples of it are, however, occasionally seen in the acquired disease, and always, I think, at a distance of more than a year, and usually of several, after the primary disease. From this acute affection downwards, we have the most varying degrees of severity in syphilitic lupus. As a rule, all lupoid affections rank as tertiary; and it would scarcely be too bold a generalisation to say that all the tertiary affections of the skin are of a lupoid character. I mean by this that all are serpiginous, all unsymmetrically arranged, and that all leave scars. We have done with roseola, psoriasis, lichen, and even with rupia; and if the skin at this stage suffer at all, it will from a tubercular affection which creeps at its edges, persists indefinitely unless cured by treatment, and leaves scars. It is, in fact, a serpiginous gumma of the skin. This generalisation is a most important one, as giving us a clue to the character of the affections of the deeper parts (hidden from view) which occur in this stage. They, like lupus, may be serpiginous, the cell-growth tending to infect the edge of the patch, and thus cause persistent spreading. Such a pathological hypothesis would well explain what we witness in such affections as ophthalmoplegia externa, in which we find indications of slowly spreading central disorganisation, and corresponding external paralysis, the process often going on for years. The same remark applies to locomotor ataxy, if it be admitted that it is sometimes of specific origin.

Periostitis.—Having thus discussed the relationship of the different forms of skin-disease to the different stages of syphilis, we must next try how matters stand as regards the bones. It will be asked, Are not all nodes necessarily tertiary? If by a node we mean a local periosteal swelling, most certainly they are not. Periostitis is a very common phenomenon in the secondary stage, as denoted by what is called syphilitic rheumatism, osteocopic pains, and sometimes by local swellings of considerable size. In some cases, the periosteal pains of secondary syphilis are very severe indeed, and now and then we observe swellings on the skull or tibiæ which might rival those of the later stages. It is quite true that the periostitis of the tertiary period differs much in its tendencies from that of the secondary; it is more lasting, more apt, on the one hand, to end in softening, and, on the other, in permanent sclerosis. It is in these differences of tendency, however, that we distinguish the two in the different stages; not in the tissue which is attacked. Permit me to note that the differing tendency of periostitis is very marked, also, in congenital syphilis. Young infants, whilst suffering from secondary eruptions, often suffer, also, from multiple periostitis on the skull-bones, and also on those of the limbs. It is, however, at this stage, for the most part, a transitory and easily curable process; whereas, eight or ten years later, another form may be expected which will produce much more conspicuous and more lasting lesions.

Other Maladies which are considered Tertiary, often of Early Occurrence.—I might mention many other lesions of different tissues which have usually been counted as tertiary, but which as a matter of fact occur most frequently in the earlier periods. Thus, for instance, the nervous system is very often attacked within the first year, or even within the first six or eight months. Neuro-retinitis, a condition which is easily demonstrable by the ophthalmoscope, almost always occurs early. It is to be distinguished, I need hardly say, from the neuritis which is restricted to the papilla, and attended by what is known as the choked disc, and which is usually symptomatic of an intracranial gumma. Fournier has described lesions of sensation attended with defective perception of pain, which are, he says, very common in the secondary stage. Attacks of paraplegia and th cerebral paralyses, which result from disease of arteries, also occur, I am sure, much earlier in the course of the disease than they are usually supposed to, and often well within the secondary stage. When that terrible form of inflammation of the internal ear, which leads to absolute deafness, occurs, it is always about in the same stage of the malady as the inflammation of the eye; that is, in the second half of the first year. Less severe and more transitory attacks, affecting the ear, and attended by deafness and giddiness, resembling what is known as Menière's disease, are also not very uncommon at this stage. Although the results of choroiditis disseminata are often not recognised until a later period, yet the primary attack almost always occurs within the first eighteen months; and it sometimes happens to the ophthalmic surgeon to be able to demonstrate at this stage, with beautiful distinctness, the existence of multiple gummata in this structure. From such demonstrations, we may infer the kind of changes which may happen at the same stage in other tissues of the same order; such, for instance, as the pia mater.

Before leaving this topic, we may suitably recollect that many of the diseases which I have just mentioned would probably occur much earlier in the evolution of constitutional syphilis, and would be recognised much more definitely as belonging to the secondary stage, were it not for the almost constant employment of antidotal specifics. The effect of mercury, when it does not absolutely cure, is usually to delay and retard. In many cases, the patient remains free from symptoms so long as he continues the drug, but experiences an outbreak within a few weeks or a few months after suspending its use. It seems to be quite easy, if mercury be begun on account of the primary sore, and well antecedent to the appearance of any secondary symptoms, to entirely prevent the development of the latter. I have witnessed this prevention over and over again; and it appears to be the rule, rather than the exception, that no secondaries should appear. The immunity, however, not unfrequently lasts only so long as the drug is continued, and within a few weeks after its omission, even when the course has been one of six or eight months, a rash on the skin will show itself. Thus it may easily be the fact that inflammations of the eye and ear, and of other parts of the nervous system, which occur, in the natural course of things, later than skin-affections, may be yet further retarded by treatment, and may sometimes appear almost to encroach upon the tertiary period, although definitely belonging to the secondary.

If what I have said has carried with it the lesson which has been intended, I think we shall have arrived at a clear perception, that it is quite impossible to classify secondary and tertiary symptoms into two groups, with reference to the tissues which are attacked. These words are to be used rather as applicable to distinct periods of time; and we must thoroughly understand that there is no lesion whatever which may not happen, and no tissue which may not be attacked, during the secondary stage. I really cannot think of any definite exceptions to this sweeping statement. Many things are omitted in the tertiary stage which are common in the secondary; but few, indeed, are the conditions met with in the tertiary which have not found their representatives in its predecessor. This fact supplies, I think, important evidence in favour of the belief that the tertiary symptoms stand in relation to the secondary, often in the place of relapses; that is, of a recrudescence of morbid process in tissues which had been damaged at a former period. Everything that is tertiary is local, in a sense which is not true of any of the secondary phenomena. Thus we find that the tendency to symmetry, so definite and universal in the early stages, diminishes as we advance in the chronology of the attack. With the exception of certain maladies affecting the nervous system, concerning which there is as yet much debate as to whether they are syphilitic or not, we may say that nothing in the tertiary stage is ever bilateral, excepting by accident. For clinical convenience, it may seem well to recognise an intermediate period, during which, in many patients, there is an absolute abeyance of all symptoms, and which may last over several, or even many years. If symptoms should occur after a prolonged period of immunity, they are always definitely of the tertiary class, and almost always non-symmetrical, and if on external parts, they are remarkably amenable to local treatment only. In many persons, however, this intermediate period is not one of absolute immunity, but is occupied by the display of conditions which partake in character of both stages. We may perhaps, for convenience sake, say arbitrarily that the secondary stage ends with the second year, and that about this period the disease ceases to be capable of spreading by contagion, or of being transmitted to offspring. In very many patients the secondary stage, as defined by these criteria, ends with the end of the first year, whilst, in a few exceptional cases, it may be protracted beyond the end of the second.

Perhaps I could not adduce better illustrations of the difference between the secondary and tertiary affections of the same parts, than by reminding you of what happens in the case of the palm of the hand and of the tongue. In the secondary stage, and simultaneously with the general eruption of the skin, the palm of the hand often suffers from psoriasis. It is always both palms which are affected, not one only; and there are usually in each a number of separate patches, which, although of various sizes, are alike in being circular, and covered with broken-up epidermis. Most obviously, such symmetrical and multiple affections are due to blood-infection. This form of secondary palmar psoriasis is generally cured very easily by the use of mercury; it vanishes when the rest of the skin-eruption leaves, and it seldom returns in the same form. If, at a later period, the palm be affected, it will probably be by a single patch of considerable size, which has a spreading edge, and which affects one hand only. The hand most likely to be attacked is that which the patient irritates most, whether by the use of tools in his employment, or by carrying an umbrella or walking-stick. The later the affection occurs, the more definite will be the characters just mentioned. The condition may be cured by the internal use of mercury, but it will often be found to yield more quickly to the local employment either of that drug or of iodoform. Almost precisely similar statements are true as regards the tongue; it is liable, in the secondary stage, to an eruption over its whole surface and sides, of scattered spots, which are part and parcel of the general eruption. These pass away under constitutional treatment, but are very likely to be followed, at a later period, under the influence of local irritation, such as that produced by sharp teeth, hot tobacco-smoke, or by various articles of food, by the development of persisting sores or abrasions, usually not symmetrical, and which are more definitely under the influence of local than of internal treatment.

All these facts, I may repeat, favour that view of tertiary symptoms which regards them as being, for the most part, the sequelæ and consequences of the secondary ones, and which assigns to them, as a rule, certain more or less definite exciting causes, for the help of which there is no necessity in the secondary period. The exciting causes to which reference has just been made are not necessarily local ones, although most frequently such. A patient who has had syphilis is to be regarded as having all his tissues damaged, their power to repair interfered with, and their liability to take on processes of chronic inflammation, ending in atrophy or sclerosis, definitely increased. He is less well fitted for the wear of life in every sense. If his tongue or his palm be subjected to local irritation, they will inflame; and the inflammation be once begun, will very likely persist and become chronic. So also with his nervous system. If he be exposed to great heat, he is more liable to sunstroke than others. If he be subjected to mental strain or excitement, he may get general paralysis of the insane; or if his spinal cord be exposed to unusual fatigue, locomotor ataxy may be the result. It is in this way that I would try to explain the frequently occurring apparent connection between syphilis and some of these obscure and aggressive forms of disease of the nervous system. The nature of that connection, nay, even the fact of its existence, are certainly amongst the moot points in the natural history of syphilis. Everyone admits that locomotor ataxy, for instance, is very frequently met with in those who have been the subjects of syphilis. Those who are specialists in the latter disease see so much of it in this connection, that they almost invariably arrive at the conclusion that it most certainly occupies a very important place amongst its causes. At the head of those holding this belief is M. Alfred Fournier, of Paris; and, unless I am misinformed, Professor Charcot holds a similar opinion with scarcely less confidence. Yet in England we find observers, such as Dr. Buzzard and Dr. Vivian Poore, expressing, after careful consideration of the facts, great doubts as to there being any bond of association whatever. Dr. Buzzard, in particular, doubts the fact, upon which Fournier and Charcot have built with some confidence—the beneficial result of specific treatment.

For myself, I may confess that the number of cases of apparent connection which I have seen has been so great, and the seeming influence of specific treatment so frequently marked, that I cannot resist the conclusion that a previous attack of syphilis plays, at any rate, a very important part as a predisposing cause. There is a cognate malady, ophthalmoplegia externa, in which central changes, at first inflammatory and then atrophic, cause paralysis of the external muscles of both eyeballs. Now, it curiously happens respecting this affection, that in almost all the cases on record there was a clear history of preceding syphilis, and, in some, very definite results were obtained from specifics. The paralysis of single muscles of the eye, or of single nerves, as, for instance, the third or sixth, which are of frequent occurrence, and which not unfrequently precede ataxy, in former days, before this symptomatic significance came to be observed, used invariably to be considered as syphilitic, and were as constantly cured by iodide of potassium. It is difficult to avoid the conclusion that the more widespread changes which produce ataxy, and of which these are only a part, are due to the same cause. I have no wish, however, as already stated, to claim for syphilis in respect to any of these a more important share than that of a predisponent.

Influence of Mercury as an Antidote.—Amongst the questions which may fairly be considered as moot points in the natural history of syphilis, we may count those which concern its relation to the specifics used in its treatment. The claim of mercury to rank as an antidote to the virus of syphilis, has, I think, been much strengthened by the results of recent experience, and it is one of extreme importance in reference to a very important department of general pathology and therapeutics. In connection with it, we may suitably bear in mind the great repute which weak solutions of corrosive sublimate have recently obtained in the prevention of septic processes in wounds. In former times, when mercury was given in large doses and allowed to produce violent effects, and when of necessity its administration was frequently interrupted, the development of constitutional symptoms in some form or other was so constant, that much hesitation was felt by all as to the use of such a word as "antidote." Of late years, we have got into the habit of using only small doses, and giving them over very long periods, carefully taking every precaution against the necessity for interrupting them. I will ask premission to state briefly my own rules of practice, and the impressions which I have formed as to results. As those impressions have been formed for many years chiefly in private practice, and amongst patients concerning whom I have often had opportunities for obtaining information over long periods, I am in a position to speak with much more confidence as to results than would otherwise have been the case. The remedy which I have used almost exclusively has been the grey powder, and the dose usually not more than a single grain. This dose I have given from three to six times in the course of twenty-four hours, according to circumstances, and seldom for a shorter course than six months in the first instance. If this dose be given to a patient with an indurated sore, but in whom, as yet, no secondary symptoms have appeared, the result will usually be that none will occur. If the rash have already made its appearance before the treatment is commenced, as a rule it quickly fades; and so long as the patient continues the remedy he remains free. The exceptions to completeness of freedom concern chiefly the mouth and throat.

It is very seldom indeed that there is any difficulty in keeping the skin perfectly clear. In the tonsils, and sometimes in other parts of the lining membrane of the mouth, sores will occasionally form: and, although these are in a general way amenable to an increase of the dose, and to the local use of the drug (as a black-wash gargle), it is to be admitted that there do occur occasionally cases in which it is difficult to be sure that the supposed remedy does not aggravate the disease. In a large majority of cases, however, in which, beginning at an early period, the patient is put under a six months' course; during the last four of this period, he is absolutely without symptoms and apparently in excellent health. If, however, at the end of this time, the remedy be stopped, in many cases a very remarkable proof of its antidotal efficacy will occur. We shall find that it was it, and it alone, which had held the poison in inactivity. For, in spite of the long period of absolute quiescence, an outbreak of symptoms will occur within a few weeks of its suspension. This outbreak is usually a very mild one, but is, nevertheless, very definite, and it is general. It usually takes the form of an erythematous or lichenoid eruption, occurring chiefly on the trunk, and is not often attended by sore-throat or other symptoms. Although it may now and then be papular, I have never seen it approach in severity the eruptions which we often see in cases which have not been treated. In more than one case, I have known this eruption which comes after the suspension of mercury mistaken for scarlatina. It is always, I believe, very easily amenable to mercury, disappearing in the course of a few days, or at most a week or two, and seldom recurring. There is, however, another very peculiar eruption which sometimes persists for a long time, and recurs over and over again. I have been in the habit of speaking of this as the "after-bath eruption." It is a very trivial affair, and consists chiefly in the appearance of a number of faintly marked erythematous rings, which are seen only on sudden exposure of the body to cold, as on first getting out of bed, and especially after the use of the morning bath. Nine out of ten patients notice them only under the latter condition, and they generally fade away almost completely after a few hours. These rings are seen most frequently on the arms, but sometimes on the trunk and thighs. They are unquestionably

syphilitic, and the liability to them usually ceases on recurrence to mercurial treatment. They are seldom or never attended by other manifestations of the disease.

Respecting the results of treatment in general, I believe I may with truth assert that I have never, in any single case of late years, seen a severe eruption on the skin develop itself after a mercurial course of the kind indicated had been commenced. It is a fact, then, that the remedy manifests antidotal power in that it can not only remove, but anticipate and prevent, by far the most conspicuous manifestations of the disease. I cannot make so strong an assertion respecting some other of the symptoms of the later part of the secondary stage. I have seen iritis, and neuro-retinitis, occur occasionally, with even some severity, in cases which had been well treated; and, in very exceptional instances, I have witnessed disease of the arteries of the brain. In a large majority of cases, however, a six months' course of small doses appears to be adequate to the complete and permanent cure of the disease. No relapses occur, and the patient remains afterwards in excellent health.

We may admit that it is a question which must be left open for future accumulations of evidence, whether the antidotal repression of the secondary stage is influential in preventing the development after a long interval of tertiary symptoms. That it does not do so always, is abundantly proved. I cannot but believe, however, that it does exercise a very powerful influence in that direction, and that the diminishing frequency and severity of tertiary disease in modern times is largely due to better regulated treatment. It is often matter of remark that those who do suffer seriously after long intervals, are those in whom the early symptoms were exceptionally slight, and treatment in consequence not persevered with, or almost wholly omitted.

In urging the antidotal efficacy of mercury as a fact in the natural history of syphilis, I have not in the least wished to claim superiority for the special mode of administration which I have mentioned. I do not doubt in the least that the advocates of other methods, such as those by inunction or by the vapour-bath, can produce just as good results. The essential point seems to be that the treatment should be very long continued, or, if not, that short courses should be repeated without waiting for symptoms. The method which I have advocated is simply one of the most convenient.

It is a question of some interest whether syphilis has any tendency to develop itself by, so to speak, a series of successive waves. It is certain that we do observe periods of very sudden and acute outbreak, and that these sometimes follow after others of complete quiescence. Such facts are especially noted during the development of the secondary phenomena; but it happens, every now and then, at much later periods, that a patient who has been well for years suddenly has new symptoms occur, not only in one, but in several different parts of the body at once. This is, however, infinitely more rare than are the sudden and acute recurrences of symptoms which we often witness during the first year of the disease. The fallacy which besets our observations on this point is the one which meets us at all turns in our attempts to study the natural history of syphilis; it is this, that the phenomena may be connected with the intermittent employment of antidotal treatment. The worst cases of rupia which we see occur usually under these conditions, the patient having been cured of a first and much milder outbreak of eruption, and then, after an interval of some months, becoming the subject of a more severe one.

There is a very severe form of rupia, in which the ulcerations coalesce over large surfaces, and the crusts thus lose the typical limpet-shell form. Of this I have seen but very few examples, and the two which have made the most impression on my memory were almost exactly alike. The violence and the suddenness of the second outbreak were, in each case, most marked. The first occurred to me at the London Hospital, nearly twenty years ago, in the person of a young man named K. I had treated him for a mild attack of secondary symptoms with the usual papular eruptions, and he had got, apparently, quite well. He desisted from treatment, and I lost sight of him for some months. At the end of this time, he came back with a vesicular and bullous eruption just beginning on his face. In conformity with the opinion of those days that mercury ought to be avoided for such eruptions, I gave him the iodide of potassium. The eruption blazed up with extraordinary quickness, and in the course of a week his whole face was covered with crusts; there were many also on his limbs. He became extremely ill, was confined to bed for several months, and was so much emaciated that we thought he would die. At first a mixed treatment of iodide of potassium and mercury was used, and for a while it seemed powerless. Ultimately, under the influence of mercury alone, the man recovered, but with a lamentable amount of scarring. Almost the whole of his face was involved in scars, and his lower eyelids were displaced downwards.

The exact counterpart of this case came under my observation not long ago. A young gentleman of fortune suffered from primary disease at Christmas 1884. He had a sore, which was both exceedingly hard and deeply ulcerated. This sore healed under the influence of full doses of bichloride of mercury, leaving a deep depressed scar in the glans. In April, after about three months' treatment, it was laid aside, as the patient appeared in excellent health, and had had neither rash nor sore-throat. Through the summer he remained well, but towards the end of September what he described as a slight red rash, which lasted only a few days, occurred on the chest. So far as is known, no specific treatment was used for this. No sooner had it faded, however, than some blisters appeared about his lips, and, spreading with great rapidity, in the course of ten days or a fortnight covered his whole face and neck. At the same time, others appeared on the buttocks, and a week or two later all over his limbs. The trunk, with the exception of the buttocks, remained free. The bullæ became confluent, and large heaped-up crusts, covering areas as large as the palm of the hand, were formed. The ulceration was deep, and on the back of one hand the tendons were exposed. For nearly a month, the disease continued to develop, in spite of the use of specifics. The patient was confined to bed, and was in the most loathsome condition. He became exceedingly emaciated. The treatment under which he finally recovered was the use of the bichloride of mercury in doses of one-eighth of a grain with five grains of iodide of potassium, the sores being dressed very liberally with a weak nitrate of mercury ointment. When I saw him in the early part of December, he was still confined to the house, though not to his bed. His face, with the exception of two small patches, one in the middle of each cheek, was wholly involved in scar. The lower lids were everted, and was dragged down to the utmost possible extent. The alæ nasi were destroyed, and the contraction of the scar around his lips had everted the prolabia, and so fixed his mouth that he could with difficulty open it. The cicatrisation of the skin of his cheeks had so much contracted them that it made the mucous membrane bulge between his teeth, so that he bit his cheeks in eating. The scars left on his neck, shoulders, arms, and hands were very peculiar; few of them were quite round, but all were abruptly margined, and in many cases it was clear that they resulted from a confluent group of bullæ. Most of them were slightly raised, and looked as if they were in an early stage of keloid; but I was assured that their thickness was diminishing, and not increasing. Most of them were of a deep purple colour, but a few were quite pale. The scars on the legs were purple, almost to blackness. The buttocks were covered by a great number of little button-like scars, and on these parts there were no large ones. The healing was complete on all parts, with the exception of two or three spots on the legs. The symmetry in the arrangement of the scars was almost absolute.

Several important points are to be noted in this case. First, the disease, which had fallen with such great severity on the skin, had entirely avoided the mucous membrane. There had never been any sore-throat, nor, with the exception of a slight soreness of the gums from the mercury, any sores in the mouth. Secondly, the location of the eruption was on the limbs and face only. If we count the scapular regions as belonging to the upper extremities, and the buttocks to the lower ones, there was not a single spot on the trunk. Thirdly, the arrangement of the eruption was more like that of psoriasis than of a syphilide. Thus there were large livid scars on the tips of the elbows and fronts of the knees, and on the backs of the hands; whilst the fronts of the arms and the palms were exempt. Fourthly, the scalp had been throughout absolutely free. Fifthly, the subsidence of the eruption on all parts under the influence of mercury had been most definite and complete, although in the first instance this drug, which was begun early, had seemed to exert no influence in preventing the outbreak.

Let us for a moment contrast such cases as the two which I have just adduced with some mentioned a little earlier, in which very mild eruptions appeared on the disuse of mercury after the prolonged use of small doses. Under the latter conditions, the eruption, although of common occurrence, is never severe. After short courses, especially if attended by salivation and sudden complete stoppage of treatment, these severe recurrences are not, I think, very rare. They suggest the inference that the poison is in some way retarded in its development by the antidote, but that it is not destroyed, and that it possesses the power, after a rest, of still displaying its utmost rigour.

Conclusion.—And now, Mr. President and Gentlemen, in conclu-

sion, allow me to recapitulate. I have urged that many of the phenomena of syphilis usually counted as tertiary really occur, as a rule, in its early periods, and that there is no structure in the body which may not be attacked in the secondary stage. As instances of this fact, I have mentioned rupia, periostitis, and diseases of the viscera and of the nervous system. If my argument holds good, we must regard the terms secondary and tertiary as applicable to different periods of time, and not to different phenomena. At the same time, it has been fully admitted that syphilitic processes do display different tendencies in relation to the stage in which they occur. The position assigned to the tertiary symptoms has been that of late relapses of morbid processes, in tissues previously damaged. In this way it has been suggested that syphilis may occupy an important part in predisposing to such maladies as locomotor ataxy, without actually causing them. Lastly, the relation of mercury to the natural evolution of syphilis has been discussed, and I have tried to claim for it the position of an antidote to the virus, asserting that not only can it cause symptoms to disappear, but, if used early enough, will entirely prevent them.

"ON A CONDITION OF THE INNER SURFACE OF THE UTERUS, AFTER THE BIRTH OF THE FŒTUS, OF PRACTICAL IMPORTANCE."

By J. BRAXTON HICKS, M.D., F.R.S.,
Consulting Physician-Accoucheur to Guy's Hospital, etc.

The above was the title of a short paper of mine read at the meeting of the British Medical Association at Cardiff last year. It was published on October 10th, 1885. This heading is repeated by Mr. J. Stuart Nairne, of Glasgow, in the Journal of January 16th. And then he says, "I am very glad this condition has attracted the notice of such an eminent physician, but I would have been still better pleased if he had given a little credit to some small observations of my own on the same subject."

In answer to this I would say at once that, to be thought capable of omitting knowingly to give a co-worker due credit, is a source of pain to me. My explanation of my omission is simple but twofold; 1, we are talking of different conditions; 2, I have never seen the remarks made by either Mr. Nairne, or Dr. Napier.

1. I am talking of a condition of the whole internal surface of the uterus, while Drs. Nairne and Napier are speaking of the area of placental insertion (serotina); this they describe after uterine contraction as now "about a couple of inches in length and breadth." In one of my cases, I specially observed that it was outside the area of the placenta before its removal. But, supposing we were describing actually the same condition, then the second part of my answer is, first, that I have to-day consulted the *Glasgow Medical Journal* of 1884, and can find no account of Mr. Nairne's paper, nor any discussion thereon in reference to this question, neither in the report of the Glasgow Southern Medical Society for March, 1884, nor in the April number of the Journal, nor in any other volume thereabouts, neither could I find any report in the Edinburgh journals of these meetings. The only allusion I can find in this remote south is one by Mr. Nairne on Dr. K. N. Macdonald's case in this Journal. This came out in May, and was overlooked by me, doubtless because the heading was "How to Prevent Septicæmia in Cases of Morbidly Adherent Placenta." My paper had been projected long before, and I should have quickly noticed anything bearing on the subject; but, as I say above, the conditions are different, as can be seen by comparing the papers. I therefore must repeat the last paragraph of my short paper. "I am not aware of any one having noticed or pointed out the peculiarity before, though I can hardly think it could have escaped observation; but, in the excitement of the moment, the danger of mistaking the lining of the uterus for adherent placenta is undeniable, and this must be my excuse for occupying your time."

Royal Ear Hospital. — It was stated in the report presented by Drs. Pritchard and Matheson at the annual general meeting of the Royal Ear Hospital, Frith Street, Soho, that during 1885 there were 7,796 out-patient attendances, at which 2,463 separate cases received careful treatment. Forty-four patients were admitted into the in-patient wards, all serious cases, and mostly children. This new department was reported to be a very great success, although it had considerably added to the expenditure. The financial condition of the hospital was shown to be far from satisfactory, as there was a considerable falling off in the donations and subscriptions. Funds are urgently needed to prevent a reduction in the number of beds.

ON THE SURGERY OF THE LATE EXPEDITION TO SUAKIN.

Read before the Surgical Section of the Academy of Medicine in Ireland.

By R. F. TOBIN, F.R.C.S.I.,
Assistant Surgeon, St. Vincent's Hospital, Dublin; late Assistant Professor of Surgery, Army Medical School, and Field-Surgeon to the Suakin Expeditionary Force.

During the late military operations at Suakin, it was my good fortune to occupy the position of Field-Surgeon; and, although I have nothing very new or important to communicate, it may be that it will interest you to hear from an eye-witness the surgical history of that brief campaign. The appointment, styled Field-Surgeon, is one new in our army, it is one that has not yet been recognised by the supreme authorities, and the duties of which are not defined in the army medical regulations. (The subject is treated of in Mr. Longmore's work on *Gun-shot Injuries*, pp. 438, 439.) Let me, therefore, say a few words about it. Perhaps I shall best convey to you the nature of the appointment, by pointing out the conditions that call for its existence. If I do so by uttering a truism in connection with an acknowledged fact, I hope I shall offend no one. That skill in the practice of operative surgery, especially of antiseptic surgery, can only be obtained by practice, is a truism. That in times of peace the ordinary duties of an army medical officer give few opportunities for such practice, is an acknowledged fact. When, therefore, on the breaking out of war, medical officers sent out from various stations are called upon to take charge of wounded, it seems right to put at their disposal, for the purpose of consultation, etc., some one whose hand, to use a familiar phrase, is "in" at surgery. Men skilled in surgery will be glad of such an assistant; men whose training has been limited to operating on the dead body, will be steadied and encouraged by the presence of such a one in their first operations on the living. Men, on the other hand, who from any cause are reluctant to operate, will ask him to undertake for them whatever operations fall to their lot.

The operating tent at Suakin was a large double pole tent, of a pattern in use in India. To the poles were hung irrigators, and to the walls all round were stitched calico bags, filled with ready-made Lister's dressings of various sizes, salicylic, boracic, and iodoform wool, lint, bandages, and other surgical appliances. The floor of the tent was kept sprinkled with carbolic acid solution.

There were carried into the base hospital at Suakin, 129 wounded non-commissioned officers and men. The officers were, as a rule, taken direct to the hospital-ships; and, as I did not see much of them, I do not include them in my statistics or remarks. The official returns classify the 129 wounds as follows.

Regions of the Body Wounded.	Admissions with Wounds.		
	Total Wounded.	Projectile or Weapon by which Wounds were Inflicted.	
		Rifle-Shot.	Sword or Spear.
Wounds of the Head	6	2	4
,, ,, Face	6	4	2
,, ,, Neck	5	3	2
,, ,, Chest	11	8	3
,, ,, Abdomen	3	2	1
,, ,, Back and spine	13	9	4
,, ,, Urinary organs ..	2	2	—
,, ,, Upper extremity ..	32	20	12
,, ,, Lower extremity	51	43	8
Total	129	93	36

N.B.—The Royal Marines are included in this return.

Of the 129 who were wounded, 124 recovered. The five deaths occurred as follows: one from a perforating wound of lung and liver, one from a similar wound of abdomen, with perforation of the intestines; three from wounds of the lower extremities. Two of these latter wounds were fractures of the femur in the neighbourhood of the hip-joint, a class of wound which has never, under the most favourable conditions, furnished a less mortality than 70 per cent., and one of the two was complicated with other injuries that

rendered it necessarily fatal. I shall have occasion to refer to both these cases later on, as they presented points of special interest. The third patient, who died from a wound of the lower extremities, had received a long superficial spear wound on the inner aspect of the thigh. He was brought into hospital about six hours after the receipt of the injury. After the wound had been well irrigated with a 5 per cent. solution of carbolic acid, it was closed, except at its most dependent point. Although the wound seemed to do well, the patient died on the third day, with symptoms of acute septicæmia. No doubt the spear which wounded him had been smeared with some putrid matter, absorption of which had taken place before he reached hospital.

Let me ask you to criticise these statistics narrowly. I ask you to do so in the interest of our profession, and in the interest of the British soldier. To turn out cured in England a soldier wounded on the plains beyond Suakin is, I need scarcely remind you, a very complex undertaking, of which the immediate treatment of the wound is but a part. It is an undertaking requiring much forethought on the part of the administrative authorities, and skilful carrying out of their arrangements by every branch of the executive. It is, moreover, a highly expensive undertaking. The British tax-payer, however, appears not to mind expense, as long as he gets value for his money. It is to satisfy him on this point, and to encourage him to further



liberal outlay on the army medical department and its equipment, that I have brought these statistics before you. Taking into account the nature of the climate, the difficulties of conveyance by land and sea, the septic conditions implied by flies that made black by their presence every spot where they could obtain food, I think you will agree with me that to save 97 per cent. of wounded, was a satisfactory performance. It is right also to point out that, excepting the case of septic spear-wound just referred to, no patient died who had not received a wound of an almost mortal character, while some apparently hopeless cases made excellent recoveries.

Let me first tell you of the two cases of fractured femur that did not recover. One was a private of the 5th Lancers. There was an alarm in their camp on the night of their arrival, and the bullet from the carbine of a comrade struck the man in question as he was in the act of getting up. The bullet entered the right buttock at a point six inches behind the anterior superior spine of the ilium, passed through the rectum one inch and a half above the sphincter, and then, fracturing the left femur, passed out on the outer aspect of the thigh. There was much hæmorrhage into the rectum, and collapse, from which the patient never rallied. On examining the wound after death, the following most strange condition was found. The bone was found to have been fractured two inches below the point where it had been struck. The specimen which I hand round will explain the occurrence better than any words of mine. (*See* Figure.)

I need only add that there was no communication between the wound and the fracture, which was therefore a simple fracture of the femur from a rifle-bullet. The other case of fracture that terminated fatally was in the same neighbourhood. You know that the treatment of such fractures is one of the most vexed and unsatisfactory questions in surgery. Amputation has never yielded better results than is represented by a mortality of 84 per cent.; while a mortality of 71 per cent. has attended non-interference. The shock of the operation appears to have been the fatal factor under the first plan of treatment; while under the second it has been the prolonged suppuration attending the separation of necrosed fragments. In the case in question, there was a comminuted fracture implicating about two inches of the bone below the lesser trochanter. The wound of entrance was on the outer aspect of the thigh, that of exit on the inner. I enlarged the former wound, removed the central fragments, made smooth in a transverse direction, with a saw, the ends of the upper and lower fragments, and secured them together by means of a strong silver wire passed through holes drilled in the usual way. The shock, however, of even this much interference was too much for the patient. He died twelve hours after the operation.

Notwithstanding its failure in the case just mentioned, this plan of treatment is one that commends itself to me in cases where there is a comminuted gunshot fracture of the femur limited to a few inches of the shaft. Much to urge in its favour occurs to me; but there is this against it, that it is sometimes impossible to ascertain that the fracture is one suitable for such an operation without what I shall presently show to be a dangerous amount of examination; and I would therefore limit it to wounds occasioned by bullets known to inflict fractures of the kind indicated. It would also, I think, yield better results as a secondary than as a primary operation.

The other gunshot-wounds of the extremities, of which there were in all sixty-three, were interesting, chiefly in illustrating the difference between wounds inflicted by the Martini-Henry and the Remington rifles. The shape, hardness, and velocity of a bullet materially influence the kind of wound it produces; and the projectiles in question differ in each of these particulars. The effects of velocity were further accentuated by the fact that, whereas the bullets of the Martini-Henry, that inflicted wounds, were nearly all fired close at hand, those of the Remington came from long distances. While at Netley, I was often struck, on the return of soldiers from the many small wars we have been carrying on during the last six years, by the marvellously little amount of damage occasionally inflicted on joints that had evidently been traversed by bullets. The shape and velocity of the bullet, had it been ascertainable, would no doubt have explained the occurrence.

In papers read by Professor Longmore and Surgeon Kirker, R.N., before the International Medical Congress in 1881, detailing experiments made by them, will be found most interesting information on this subject. The Martini-Henry bullet caused much fissuring of the bones it struck, and a large lacerated wound of exit, through which muscle and fragments of bone protruded. The appearance and condition of these wounds at Suakin fully verified the experiments of Professor Longmore just referred to. In treatment, they presented this difficulty, that, if you attempted to interfere with any fragments at all, you loosened the connection of fragments you would have preferred to have left undisturbed. In fact, a surgeon who had not a great respect for fragments would not save a single bone struck by a Martini-Henry bullet at high velocity. He would lay hold of a partially protruding fragment to see if it were detached, and, examining it, he would so loosen it, that he would consider its removal necessary. In removing it, he would disturb some other fragment to which the first had attachments, and which, in its turn, would come in for examination and removal. So proceeding, a hopeless gap is easily established, and amputation rendered necessary. I speak from experience, gained by mistakes which I have made, and which I am not afraid to acknowledge, if so doing will prevent their repetition. Whoever would apply conservation to bones broken by such weapons as the one to which I am referring, must be content to do so without ascertaining

the condition of the bone he would conserve. He must take it for granted that he is dealing with a number of long fissured fragments held together by periosteum; he must gently push back into their places such of them as protrude, and arrange as best he can for the drainage and "asepticity" of the wound, and the securing of the injured parts in a position of immobility. Excuse me if I appear to you to speak dogmatically. It is the first time, as far as I know, that anyone who has verified, by observations made on active service, the important experiments of Professor Longmore already referred to, has spoken on this subject. My observations convince me that experiments on the dead body afford a perfectly reliable means of ascertaining the effect of projectiles on living tissues. And as there is no doubt that each weapon inflicts its own peculiar wound, a wound having often not only special characters, but also requiring a special treatment and a special prognosis, it seems highly desirable that further experiments should be carried out, till the characters of the wounds produced by every weapon of warfare have been accurately and fully ascertained.

The wounds produced by the Remington rifle were altogether different from those of the Martini-Henry. As in no case did death or necessity for removal of a limb follow such wounds, I can only describe their external appearances. Their leading feature was the slight disturbance, both of soft and of hard parts, caused by the bullet. Its track was, as a rule, so closed up by the coming together of parts which it had separated without destroying, that union was easy and rapid. Let me, in illustration, refer to two cases of gunshot-wound of the elbow. Private J., Shropshire regiment, was wounded on March 13th. A Martini-Henri bullet completely shattered the lower two inches and a half of the humerus, and drove many of the fragments through a large lacerated wound of exit situated over the internal condyle. In its course, it divided the ulnar nerve. The joint was resected, and the ends of the divided nerve stitched together. The wound healed; but so extensive had been the injury both to the bone and the soft parts, that an useless limb, which was subsequently amputated, resulted.

Private C. B., of the Berkshire Regiment, was wounded on April 2nd, in the zereba at Tamaai. The bullet, a Remington, entered between the olecranon and internal condyle, and, passing through the olecranon, lodged underneath the skin on the external aspect of the arm. There was almost no loss or displacement of tissue in the wound, which appeared to have closed round the bullet as it passed. The arm was secured in a straight position, to keep the olecranon in its place, and a Lister's dressing applied. The wound healed kindly, with full movement of the joint, and without evil results of any kind.

These two cases give a very good idea of how different are the wounds produced by the two weapons of which I have been speaking.

Wounds of the head furnished some of our most serious cases, and all made good recoveries. I will refer to two of them.

Private F., Berkshire Regiment, was wounded on March 11th, during a night attack on the camp of the Ordnance Department. He received three sabre-wounds of the head, and five spear-wounds on other parts of the body. One of the former was situated on the right side of the head where the hair meets the forehead, and was caused by two sword-cuts, which were so placed as to include between them a piece of the frontal bone, three by two inches, which lay loose on the wound, and a corresponding portion of the underlying brain, which was deeply incised, and bulged upwards in the wound. The detached piece of bone was removed; the prominent brain-tumour was interfered with as little as possible, and all his wounds were dressed antiseptically. He made a good recovery, without impairment of any of his senses.

Corporal J. B., 1st Coldstreams, was struck on March 24th by a bullet, which entered at the internal canthus of the left eye and came out 1½ inches above the right ear, in a line with its anterior boundary. The wound of exit was a lacerated one, through which brain-substance and fragments of bone protruded. The right eyelid was closed and much distended, not, however, with the injured eye-ball, as was first supposed, but with brain-substance; the eye-ball must have dropped out at the time of the injury. To ensure drainage, the orbicularis muscle was cut across at the external canthus, and the wound of exit was enlarged with the same object. This patient also made a good recovery; and when I saw him at Netley on my return, he was up and about, and in full possession of his faculties.

To refer to wounds of other organs would, I fear, carry me beyond the limits of time fixed for the reading of a paper. I will therefore conclude with a few general remarks.

The anæsthetic most commonly used was ether. Although given most freely, it never produced any dangerous symptoms, whereas chloroform, though used in but a few cases, had very nearly to be credited with a fatal result. Ether, although it would take up more room, should, I think, be the recognised anæsthetic of the services.

When amputation was considered necessary, it was usually done by prolonging the incision made for the examination of the wound till uninjured bone was reached, and, using this as a lateral incision, a skin-flap, a long anterior one when possible, was cut by incision; the second flap was also generally cut by incision, and was made to fit to whatever shape circumstances had caused the first one to assume.

To ensure drainage, the drainage-tubes were, as a rule, stitched to the edges of the wound. This is a very necessary precaution where wounded men pass from one medical officer to another, and where, therefore, tubes that have been inserted may escape notice.

Another useful detail to attend to is the giving to the patient a duplicate of whatever dressing may have been originally applied, wrapped, of course, in a close envelope to prevent its being soiled. On active service, it is impossible to say when, where, or under what circumstances the second dressing of a wound may take place, and a precaution such as I have suggested ensures a continuance of one treatment. I cannot refer to-night to the antiseptics used, but it may be well to state that ten yards of gauze and one pound of antiseptic wool was the average expenditure per wounded man.

This concludes, gentlemen, what I have to say to-night of the surgery of the Suakin expedition. The etiquette of the service has prevented me referring, in the course of my remarks, to the work done by particular medical officers. There was, however, associated with us one, of whom as he was not in the service, I may speak, and without the mention of whose name my paper would not be complete. He is one whom the world recognises as one of the pioneers of surgery—one who left a high position, and came out to us to make himself useful, and who succeeded in doing so most perfectly, whether he was advancing with the bearer-companies to pick up wounded, assisting us with his advice in consultation, or giving at an operation the help that means doing the operation without holding the knife. He did so, moreover, with a suppression of self that asserted itself in spite of him, and won the admiration of all. A hundred grateful and pleasant reminiscences crowd on me as I conclude this paper with the name of Professor Ogston of Aberdeen.

NOTES ON SOME SURGICAL CASES IN THE RECENT SUAKIN CAMPAIGN.

By HAROLD HENDLEY, M.R.C.S., Surgeon I.M.S.,
Surgeon in Charge of a large Field-Hospital for Followers of all Nationalities.

Case I. *Bayonet-wound: Death from Compression of Lungs by Air in Pleura.*—The first in interest from its result is a case of bayonet-wound in a Somali camel-driver, aged 23, admitted to hospital April 4th, for a bayonet-wound received during a quarrel. The patient walked from his camp, near which he received the wound, to the hospital, a distance of 200 yards, without any symptoms of discomfort. Examined by the apothecary on duty, he was detained in hospital more from the situation of the wound, than from its apparent danger to life. In the left arm, over the body of the biceps, two small wounds, two inches apart in a horizontal direction, were found connected by a passage between the skin and muscle, through which a gunshot-probe could be passed with little difficulty. Corresponding to the inner of these wounds, when the arm was brought to the side, was a small wound in the mid-axillary line just below the seventh rib, apparently superficial. There were no symptoms of penetration, no cough, hæmoptysis, emphysema, or difficulty of breathing. There was a slight scalp-wound; and this, with the others, was dressed with wet lint and bandage. After remaining in hospital about an hour, the patient absconded, returning to his own tent. On arriving there, he began to experience some difficulty in breathing; and, being again seen about three hours from the time of the accident, he was found dying of asphyxia.

Post Mortem Examination, sixteen hours after death.—The wounds described were little altered, except for slight emphysema around the chest-wound, which, when probed, seemed to be quite superficial. On opening the thorax, a large quantity of inoffensive air escaped from the left pleural cavity. Both lungs had collapsed, and occupied on each side one-fifth of their usual space. Four ounces of venous blood were found in the left of the chest. The lower lobe of the left lung was found to be connected with the chest by old adhesions, which surrounded a small roughly triangular wound having a slightly thickened, rounded, congested edge, through which a large gunshot-probe could be introduced with ease for two inches. The left bronchus was stained with blood; the heart was contracted:

there was no blood in the cavities; the abdomen was normal; the diaphragm uninjured. On tracing the wound to the chest-wall from without, it was followed in an oblique direction over the eighth rib, there passing through its lower border by a triangular opening, with sides and base formed by bone, the latter slightly detached from the main portion. It communicated directly with the pleural cavity, corresponding to the wound in the lung.

REMARKS.—Owing to the position of the adhesions, the wound in the lung was firmly held in a patent condition within about half an inch of the chest-wall. Blood escaped, but not to a large extent, at first probably staying the passage of air by blocking the wound. The air, profiting by the man's exertions, began to find its way into the pleural cavity; the fatal pumping action went on till the lung performing this suicidal process began to affect its companion; pressure within equalled pressure without; and, the chest-walls failing in their duty, the lungs collapsed. The absence of lung-symptoms, the presence of adhesions, and their effect on the results, together with the opening in the rib, giving the exact shape of a triangular bayonet, are noteworthy.

CASE II. *Bullet-Wound (Remington Rifle).*—Rajah Ram, Indian mule-driver, aged 23, wounded by the enemy whilst asleep on the night of April 26th, was admitted from Otao, May 5th. There were two small superficial wounds on the right thigh, joined by a slight thickening of the tissues beneath the skin; one situated slightly external to the middle line of the front of the thigh, and near its centre in a vertical direction; the other five inches from it, and on rather a higher plane on the inner side of the limb; constituting respectively the entrance and exit of a Remington bullet. The bullet had then passed into the left foot, just in front of the astragalo-scaphoid articulation. It had been searched for at Otao several times without success.

Under chloroform, on May 6th, a digital examination showed the scaphoid bone in a state of disintegration, and the middle and internal cuneiform bones much injured. Nélaton's probe was used with but little success; the earthenware was slightly marked, due probably to particles of lead adhering to the bones. Again the finger was introduced, the limbs having been carefully placed in the position in which they were supposed to have been at the time the wound was received. By palpating with the disengaged hand over the sole of the foot, a rounded oblong mass was made out, lying deep between the two inner metatarsal bones, just in front of their bases. There could be no reasonable doubt that this was the missing bullet; it was cut down upon, and removed. There was now no direct communication between the small cavity in which it was found and the original wound. A little bloody serum escaped. A drainage-tube was forced through from above, and the wound dressed with carbolic lint, iodoform, tenax, and splint.

By May 19th, the superficial wounds in the thigh had healed. In the foot, small pieces of bone had separated; the remainder were becoming nicely covered. An extra counter-opening was made in the sole, the other being found to be too far forward. On May 21st, he was invalided to India.

REMARKS.—The position of the patient at the time the wound was received was one often adopted by natives when at rest, reclining towards the right side, the right leg and thigh slightly flexed, and the opposite foot drawn up into the fork, with the toes turned out. The bullet was very little damaged; two or three small pieces of bone adhered to a grazed surface near its apex. It would be difficult to find a case similar in character to this amongst Europeans, the exit being on the inner side and higher up the thigh than the entrance, yet with the bullet (next to no resistance having been met) passing into the opposite foot, with a general direction from above downwards, as shown by skin and bone. There was no trouble with the thigh-wound; it healed very quickly.

CASE III. *Suture of Median Nerve and Tendons.*—Emanka Matoosey, aged 30, a Greek, was transferred on March 26th from one of the field-hospitals, where it had been considered necessary to resect the lower end of the radius, owing to a deep horizontal sword cut across the front of the right wrist, extending from the radial side of the ulna round to the dorsal surface of the radius, and then becoming superficial.

On admission, the major portion of the wound had healed, unfortunately leaving complete loss of sensation in the thumb and next two fingers and a half, and but slight movement in the hand. By April 26th, I had lost all hope of any improvement without an operation. It being decided to reopen the wound, a vertical incision was made through the cicatrix, and prolonged upwards over the ordinary course of the median nerve. After some dissection, the ends of the palmaris longus and flexor carpi radialis tendons and median nerve were discovered much separated; the central end of the latter, superficial and bulbous, and the peripheral, deep and apparently normal, were both imbedded in the cicatrix. After cutting off the bulb, and paring the opposite end, the parts were brought together slightly overlapping, and made fast by three catgut sutures. The tendons were treated in like manner, care being taken to keep the hand flexed. The wound was then closed with silver wire sutures, and dressed with carbolic lint, iodoform, and tenax, whilst the flexed position was secured by a splint and starched bandage.

On the 18th, it was dressed, and found to be doing well.

By the 23rd, a small portion of the cicatricial tissue had commenced to slough; there was a considerable discharge from the wound, and a good result seemed doubtful.

However, on May 1st the wound was looking healthy. Sensation, too, in a modified degree, had returned to the middle and radial side of the second finger; the hand was still kept slightly flexed; the fingers moved fairly well.

The wound was healed by May 26th; the patient was discharged June 5th, with complete sensation in the whole hand, except two small patches over the dorsal surface of the metacarpal bones and the thumb and index-finger, just above the superficial portion of the sword-cut; power of movement in the hand, under the influence of shampooing and passive motion, was increasing daily.

REMARKS.—The importance of joining all structures in recent wounds of this description cannot be too much insisted upon; the results generally more than repay for the trouble taken, even often under most unfavourable conditions.

CASE IV. *Ununited Compound Fracture of Radius and Ulna (middle third) of Right Arm.*—Danāyāh, aged 20, a native of India, was admitted on March 25th with the effects of a camel-bite, an open, profusely granulating, pus-discharging wound, situated over the middle third of the dorsal surface of the ulna, communicating with a fracture of that bone, and indirectly with one of the radius; over this bone also there was a recent cicatrix. With a good permanent splint, there was hope that the parts would unite; it was tried, but, although the discharge became less, and the granulations took on a healthier action, union seemed as far off as ever.

On April 22nd, an examination was made under chloroform; the ends of the bones were found necrosed, and partly separated by soft tissues; no callus had been thrown out, nor any other attempt at union made. After enlarging the wound over the ulna, and reopening that over the radius, the ends of the bones were resected obliquely, so that the corresponding surfaces might be applied to one another; holes were then drilled through, and the extremities of the respective bones drawn well together with silver wire, which was then left depending from the wound. The dressing consisted of drainage-tubes, carbolic lint, tenax, and iodoform.

By the 28th, on which day he was invalided to India, the wounds were fast healing, there was little discharge, and there seemed to be every prospect of union taking place.

REMARKS.—This was one of several cases of camel-bite treated in the hospital, and with all I had a good deal of trouble; in one, it was found necessary to resect the end of the ulna; in another, a large part of the head of the tibia necrosed. Where the bones escaped, the soft tissues suffered in like manner; large sloughs came away, leaving unhealthy looking ulcers.

CASE V. *Removal of Epithelioma.*—Karak Singh, aged 30, a native of India, was admitted on April 11th for a malignant looking ulcer over the pubes, of 180 days' duration, and measuring 3½ inches in a vertical, and 2½ in a horizontal, direction. Its edge, irregular, raised, rounded, and hard, was partly covered with blue cicatricial tissue; its remaining portion was dotted with small pieces of new tissue, between which ran tortuous channels of ulceration, leading to a central deeper ulcer with a firm indurated base. The inguinal glands were very slightly enlarged on each side.

On the 17th, under chloroform, I removed the whole mass, giving it a fairly wide berth; the central ulcer gave some trouble, as it was firmly attached to the linea alba. Proceeding with the operation, a flap of skin was brought down from the right of the middle line, twisted on its base, and attached by its free end to the loose skin of the penis; the sides and under surface were also secured, leaving only a small portion on the left of the wound still uncovered. Dressing—carbolic oiled lint, tenax, and iodoform. The skin of the abdomen was brought towards the middle line by means of strapping, and the legs tied together. On the 18th, when the man was sent on board-ship for passage to India, the skin had already adhered, and the whole promised well. I heard afterwards that the patient did remarkably well, returning to his home after a short stay in hospital in India, quite recovered.

GENERAL REMARKS.—The dressings referred to were those most

commonly used; carbolised oiled lint, iodoform, and tenax, combined or otherwise; the three made an excellent dressing. The iodoform was sprinkled on the wound; then a small strip of lint, covered by the tenax, was bound on by a gauze-bandage, rendering it completely antiseptic. Although flies abounded, they only gave trouble in two or three cases; the following powder, used sparingly outside the bandages, I found very useful in warding them off. ℞ Iodoform ℥j; zinci oxidi ℥ij; pulv. McDougall ad ℥ij. Most wounds in Europeans (from the Mediterranean) and Asiatics did well when not complicated by ague or dysentery. The most obstinate cases were those amongst Africans from the Somali coast. Their wounds healed very slowly, and often resulted in unhealthy looking ulcers, which were aggravated by a native treatment in which they have unbounded faith, and which consists in pressing a copper coin firmly over the wound, a larger one being substituted when the ulcer appears beyond its margins.

GUNSHOT-WOUNDS OF THE HEAD IN CIVIL LIFE.

Read before the Yorkshire Branch.

By EDWARD ATKINSON, M.R.C.S.Eng.,
Surgeon to the Leeds General Infirmary; Lecturer in Surgery to the Yorkshire College.

This class of wounds is not very common nowadays in England, since the days of duelling are past, and, when seen, are generally self-inflicted with a suicidal intention. They have, however, several points of interest when compared with similar injuries received in warfare. It has been my lot to meet with four such cases within the last fifteen years, and hence I am induced to bring them before you (one of the four, of which I have very full notes, being of peculiar interest), and to offer one or two reflections upon them. I will first read the cases.

Case I.—In 1870, I was sent for to a young gentleman, E. T., aged 13, who had been accidentally shot in the back of the head with a small saloon-pistol. His brother and he were amusing themselves by shooting at swallows in the stable-yard. One knelt behind the other, and rested his pistol-hand on his brother's shoulder. Just at the moment of discharge, the boy in front jumped up, and received the bullet in his occiput. On arrival, I found an unmistakable penetrating wound on the right side, midway between the occipital tuberosity and the mastoid process. The hair was matted with blood, and undoubted portions of brain-substance; but there was no wound of exit. Symptoms, beyond those of concussion, there were very few. The pupils were unaffected; there was no stertor, no paralysis, either at the time or afterwards. The wound healed in the ordinary course, and no ill effects followed. The bullet is still in his head; and, though no longer resident in this neighbourhood, I believe he is now, at the age of 28, an useful member of society.

Case II.—W. B., aged 20, in July, 1882, after firing two barrels of a revolver at his master, turned the weapon towards his own head, and discharged it within an inch or two of his forehead. Upon my seeing him, he was already recovered from the slight degree of concussion which followed the shot. The forehead was blackened and scorched with powder, and in exactly the centre was a small aperture in the integuments, through which a probe touched metal. This I enlarged by a small crucial incision, and found the bullet flattened to about the size of a sixpence against the external table overlying the frontal sinus, his ignorance having happily directed him to the thickest point of his skull. He made a good recovery, without any complications.

Case III.—J. F., aged 16, printer, was accidentally shot on May 13th, 1885, under the following circumstances. Three boys playing in the street had an ordinary muzzle-loading pistol, which they all believed to be unloaded. One of them laughingly pointed it at another, who said, "Fire away." He fired, and the victim immediately dropped. When brought to the Infirmary a few minutes later, he was insensible, with symptoms of compression. Breathing was irregular and stertorous, and at times sighing. The left pupil was contracted; the right moderately dilated. There was some vomiting once. Mr. Jessop was sent for, who enlarged the wound, and removed four or five small pieces of bone; the internal table was found (as usual with a spherical bullet) more splintered than the outer. Half an hour afterwards, he was in the same condition. About one hour later, the pulse, which had been slow (52) from admission till then, suddenly rose to 150. The respirations were not more than ten or twelve. In another half hour, the pulse became imperceptible, and breathing took place by gasps. He died two and a half hours after the accident.

Post Mortem Examination.—On removing the skull-cap, the path of the bullet was found to be as follows. After piercing the dura mater, it had entered the first frontal convolution about one and a half inches from the anterior extremity, passed obliquely through this, across the longitudinal fissure, and into the right hemisphere, two and a half inches from the anterior end of the brain, and one inch from the upper surface. Continuing its course in a direction outwards and downwards and backwards, it passed through the frontal and part of the parietal lobes, reaching the surface of the brain just in the Sylvian fissure, about one inch from its termination. On the interior surface of the parietal bone, one and a quarter inches behind the coronal suture, was the mark of the bullet, three-quarters of an inch behind the anterior branch of the middle meningeal artery, and just on the mark of the posterior branch. From this point the path of the bullet was deflected, again traversing the brain-substance at nearly a right angle to its former course, and lodging in the posterior extremity of the gyrus fornicatus, lying half imbedded in that body, and half projecting into the longitudinal fissure, immediately above the posterior part of the corpus callosum. There was much blood under the dura mater; none between that membrane and the bone.

Case IV.—J. P., aged 42, brewer's drayman, a large powerful man, attempted suicide on February 27th, 1885, by discharging a revolver into his mouth.

On admission into hospital soon afterwards, a ragged wound was found just internal to the last right upper molar tooth. The little finger could be easily passed into the wound; the course of the bullet was apparently upwards, and slightly backwards. He bled profusely while being brought to the Infirmary, and vomited a large quantity of blood afterwards; he was quite sensible, though very irritable and excited. There was no counter-opening, though the bullet, judging by one found in an undischarged chamber of the pistol, was conical. There was no paralysis; the pupils were equal and slightly contracted; there was no effusion under the conjunctiva. With some difficulty the right posterior naris was plugged, and the wound was plugged also with dry lint; this controlled the hæmorrhage. As he became collapsed, a little brandy and warm milk was given, hot bottles, etc., applied. He soon rallied, and passed a quiet night.

February 28th. He said the right eye was slightly dim. The ocular movements were not quite so free as those of the left eye. The right pupil was smaller than the left; both reacted to light. There was no paralysis of limbs, nor loss of mental functions.

March 1st. There was now some ptosis of the right eye; the external rectus was partly paralysed; the right pupil was more contracted. He complained of numbness in the left arm, also of some loss of power, but not complete paralysis; there was no facial paralysis or difficulty in swallowing. He had pain in the head, especially in the right temporal and frontal regions. Temperature, 100°; pulse moderately slow and soft. His mind seemed clear, though he said he did not remember shooting himself.

March 2nd. There was complete ptosis, with paralysis of all the ocular movements of the right eye, and the sight of that eye was very dim. There was no facial paralysis; he was completely deaf on the right side. He had pain over the frontal and temporal regions, most severe just below the right temporal ridge; the pain was of a stabbing character. Sensation was impaired all over the body and limbs, almost totally absent from below the middle of the arms and thighs. Voluntary movements were feeble, but there was no complete paralysis; the movements of the left arm were weakest; tendon-reflexes were almost absent; superficial reflexes were much increased, especially in the thighs and legs. Breathing was rather slow and laboured (17); pulse 70, deliberate, soft, and compressible. He swallowed without difficulty, but said it hurt him; his speech was thick; temperature, 100° at night. There was some exophthalmos; no marked change in the optic disc.

March 5th. Sensation was improved, but there was no increase of power. The right eye was just the same; the exophthalmos had increased. Some conjunctival ecchymosis appeared on the lower half of the eyeball. The left hand and arm were weaker.

March 8th. Numbness was still present all over. He could hear a watch tick when in contact with the right ear. The pain in the right temporal region was severe, and slightly paroxysmal. His mental faculties were quite clear.

March 10th. The exophthalmos was not so marked; the ecchymosis was disappearing. The sight of the left eye was now clear, and he could see slightly with the right.

March 12th. Last night he had very severe pain in the head, relieved by one-eighth of a grain of morphine. He had good sleep. He still discharged rather fœtid pus from the wound in the palate.

March 15th. The paralysis of the left arm was much improved; sensation all over was still rather deadened, but mending.

For the next few days his condition was nearly unaltered. All the paralyses remained, but the numbness gave place to a feeling of "pins and needles," especially in the feet and left hand.

April 2nd. The pain in the head was less persistent. He had a feeble grip of the left hand. There was very slight discharge from the wound. He was giddy when sitting up in bed. The wound was nearly healed.

April 5th. The sight of the right eye was now fairly good, when he could get an object in the direct line of vision; he could also hear a watch at a distance of one inch from the right ear.

From this date he began to improve steadily, the various paralyses gradually diminishing, and, for the most part, in the inverse order to that in which they had appeared.

On April 15th, he was up a little, but was rather unsteady on his legs. The grip of the left hand was much stronger. Hyperæsthesia in the frontal and temporal regions was still well marked.

April 27th. The sight was now good; he could see the second-hand of a watch at 12 or 15 inches' distance. The hearing of the right ear was almost perfect. The ocular muscles were still completely paralysed.

May 2nd. He had slight power of movement of the right eyeball, in all directions except outwards. He could raise the upper lid slightly.

May 7th. He walked the length of the ward (100 feet) in a straight line without a stick. He was discharged from hospital.

June 20th. He was seen at Armley Gaol, and was in excellent health. The grip of the left hand was natural. Ptosis was almost gone. He could read minion type at 18 inches. The ocular movements were all right, except the external rectus, which was still completely paralysed. He yet complained of slight pain in the head at a single point near the middle of the right half of the coronal suture, but said it caused him little inconvenience.

Remarks.—1. What was the path of the bullet? and where is it now lodged? I think it must evidently have traversed the whole thickness of the anterior lobe, in a nearly vertical direction, probably invading the fissure of Sylvius also, and be now lying encysted beneath the bone at the point indicated by the pain. 2. What caused the various paralyses—laceration of the brain, or hæmorrhage? It appears to me that, had the former been the cause, the paralyses would have appeared at first and simultaneously; whereas twenty-four hours elapsed before the first symptom appeared, then one nerve after another became involved, and finally all gradually recovered in the inverse order. That these events are not explainable by encephalitis, seems to me plainly indicated by the fact that the temperature remained normal throughout during the daytime, though twice or thrice rising to 100° at night. I therefore conclude that a blood-clot gradually formed at the base of the brain, involved successively and pressed upon the second, third, fourth, sixth, and the portio mollis of the seventh, nerves; and that, as this clot was gradually absorbed, the several nerves regained their functions.

In the next place, I would observe that, in all four cases, though the shots were fired point-blank and at close quarters, the ball penetrated the skull in only three, and perforated in none. This illustrates the fact that a ball does not attain its full velocity until it has travelled some distance from the weapon.

Lastly, I would remark on the extreme rarity (according to Guthrie and Longmore) of a penetrating wound of the head with laceration of brain and lodgment of the ball resulting in recovery; whereas this happy result followed in two out of four (Nos. I and IV) of the above cases.

Knowing how great is the influence of mental condition on the progress of gunshot-wounds, one would suppose that, in warfare, where the lesion is one more or less expected and sustained in the discharge of duty, the patient would stand a better chance, than where it was the effect of a pure accident, or of a vicious or criminal act. The statistics of military practice, however, do not seem to support this theory.

Phthisis among Soldiers.—At a recent meeting of the Paris Academy of Medicine, M. Lagneau, among other interesting facts, stated that phthisis is developed among soldiers housed in barracks, and disappears when the men are encamped. The same facts have been observed with regard to typhoid fever. The long military service which every Frenchman is obliged to undergo has a bad influence on both these diseases. There is a higher rate of mortality among the inferior officers who leave the army at the age of 32 or 35 than among other men of their own age. Mortality is greater among married men under 23 years of age than among single men, but after that age a higher rate of mortality is observed among bachelors.

PERFORATING GUNSHOT-WOUND OF ABDOMEN IMPLICATING KIDNEY: PROFUSE SECONDARY HÆMATURIA: RECOVERY.

By AYLMER HAYES, L.R.C.P.Ed., M.R.C.S.Eng.,
Surgeon Army Medical Staff.

Private H., 2nd Battalion (Queen's) West Surrey Regiment, was shot by a comrade at 10.15 P.M., in the affray of the night of July 8th, 1884, at Sabathu. The ball entered a little to the right of the umbilicus, and, passing backwards and slightly downwards, found its exit at a site corresponding to the position of the right kidney. The hæmorrhage immediately following the injury was not very profuse; but collapse was intense, and pain apparently excruciating. A grain of opium was given every hour until he was relieved of the intense pain. That night, he slept very little; he passed urine unconsciously. As he had been constipated for some days, a small enema of castor-oil was administered. Brandy and beef-tea were ordered to be given every hour to counteract collapse, but to be cautiously employed for fear of circulatory excitement and recurrence of hæmorrhage. Low milk-diet was ordered.

July 10th. He was much better; less collapsed. Severe abdominal pain occurred in paroxysms, but, in the interim, little was felt. There was no hæmorrhage. He passed—without catheterism—smoky dark-coloured urine. There was no emphysema of the wound or its neighbourhood, indicating that the intestinal canal had not been traversed by the ball. There was very little tenderness upon pressure of the abdomen. Pain was referred principally to the wound of exit and its neighbourhood. The tongue was a little coated with white fur. The opium was ordered to be continued as required.

July 11th. He was slightly jaundiced. There was no hæmorrhage nor spasmodic pain. The bowels had not been moved (except after the injection) since his admission. Pulse improved. He was ordered to have a sinapism over the liver. The brandy and beef-tea were continued, according to the state of the pulse.

July 12th. He had very little pain. There was no discharge from the wound. The urine was rather more darkly coloured, but contained neither pus nor mucus. He was more deeply jaundiced. He was ordered to take nitro-muriatic acid and taraxacum. The bowels were still confined.

July 13th. He appeared better. The urine was as before. There was very little pain, and no discharge. He was ordered to have an eight-ounce enema of caster-oil and water.

July 14th. He had less jaundice. The urine was less bloody. The enema did not act. An enema of sulphate of magnesia was ordered.

July 16th. He passed a copious solid stool. The urine was quite clear. He slept well.

July 17th. At about 5.30 P.M., he suddenly expressed a desire to micturate, and passed a large quantity of bright arterial blood *per urethram*. This recurred, and was followed by intense collapse. Brandy and beef-tea were ordered; and twenty minims of fluid extract of ergot, with fifteen grains of tannic acid suspended in mucilage, were ordered to be given every two hours until the hæmaturia should be controlled.

July 18th. This morning he was much better. Hæmaturia was very slight. He slept well. The ergot and tannic acid mixture was continued three times daily.

July 19th. His urine was chocolate-coloured; but there was no fresh hæmorrhage. The sediment in the urine was purulent. The bladder was washed out with tepid water. The aperture of entrance was almost closed. A drainage-tube was inserted from behind, through which about a drachm of healthy pus escaped. The wound was washed out with carbolic lotion (1 in 80). His pulse and general condition were so good that stimulants were withheld, and the ergot and tannic acid mixture was stopped.

July 21st. He had passed a good many clots *per urethram*. The bladder had been washed out daily with tepid water, but, as the clots passed to-day were fœtid, carbolised water was employed. An opium-suppository was ordered to be used each night, to relieve pain and spasm after catheterism. The wound was healthy; temperature sub-normal. He asked for "something to eat."

July 22nd. The temperature rose to 104° Fahr. last evening, preceded by shivering. This was judged to be malarial, and the opinion was borne out by the fact that the temperature was normal again this morning. The urine was perfectly clear and transparent. He passed a copious costive stool. Six drachms of castor-oil were given. The washing out of the bladder, and medicines, were discontinued.

July 23rd. The temperature rose to 100.4° Fahr. last evening. He

was to-day ordered to have ten grains of quinine, and chicken-diet to-morrow. After this, the fever passed off, and he seemed to be doing well for some days.

July 29th. A globular fluctuating swelling was found at the wound of exit (behind). A trocar and cannula was introduced, and an ounce and a half of healthy pus evacuated. The abscess was apparently intermuscular. It was washed out with carbolised lotion, and dressed antiseptically.

July 31st. Drainage was established.

August 5th. For the last three days, his temperature had been irregular. The sinus, from the aperture of exit, extended to a point very close to the aperture of entrance; no communication, however, could be discovered by the probe; and water injected from behind did not escape in front. A drainage-tube was inserted. He was rather constipated. His urine was slightly albuminous.

August 8th. The carbolic lotion, when injected from behind, now escaped anteriorly. Temperature normal.

August 10th. The sinus was shorter, and becoming narrower at both apertures. His general health and spirits were excellent.

August 27th. The sinus having made but little progress, it was syringed out with equal parts of tincture of iodine and water. After this he made satisfactory progress, and on December 2nd was transferred as convalescent to Kasauli Station-Hospital. He completely recovered, and returned to duty, in excellent health.

REMARKS.—In the foregoing case, the following points would appear to be worthy of attention. It is remarkable that a Martini bullet, travelling at a speed practically equal to its initial velocity, should have passed directly from point to point, as described, without destroying the continuity or integrity of the intestinal canal. There were no bloody stools, no emphysema in the neighbourhood of the wound, no tenderness on pressure of the abdomen; and, after an interval of eight days from date of injury, a solid healthy stool was passed. The bullet most certainly passed in a direct line from aperture to aperture; since, apart from the fact that the Martini bullet does not pursue the erratic course frequently followed by the round ball, the probe showed, beyond all doubt, that the track of the bullet lay in a right line from the aperture of entrance to that of exit. That the kidney was perforated is equally evident, both from the position and direction of the wound, and from the occurrence of smoky urine directly after the injury, followed as this was by profuse hæmaturia at the period when secondary hæmorrhage would be expected to occur. When I state that I was, at the time of the affray, serving under Surgeon-Major Cotter, M.D., it will be readily understood that all treatment, etc., were employed in consultation with him, and that all measures adopted were either by his suggestion, or with his sanction and approval.

ON A NEW FORM OF CITRINE OINTMENT.

By BLENNERHASSETT ATTHILL, L.R.C.P.Lond., M.R.C.S.Eng.

ON referring to the new edition of the *British Pharmacopœia*, just published, it will be seen that the unguentum hydrargyri nitratis dilutum is ordered to be prepared with paraffinum molle, soft paraffin, the synonyms being petrolatum (its designation in the *Pharmacopœia* of the United States), petroleine, and unguentum paraffini. It is described as a semi-solid mixture, containing some of the softer or more fluid members of the paraffin series of hydro-carbons, usually obtained by purifying the least volatile portions of petroleum.

These characters do not, however, give us any standard of purity; and, beyond describing the melting point, we are left in ignorance as to what form of petroleum-jelly we should employ. The material purpose suggested by this innovation in the preparation of this particular ointment is clearly to obviate the destructive effects of decomposition, with its resulting rancidity, which obtained to a very objectionable extent in the old form of the dilute citrine ointment.

This hitherto has been prepared with lard, and sometimes even with an animal oil, such as neat's-foot or trotter oil; sometimes with fish oil, such as cod-liver oil—the latter serving to keep the ointment better and longer than the former, and being considered by some as more efficacious as a remedial agent. It has also been prepared with fresh butter; this also keeping fairly well.

As soon, however, as the Americans discovered the petroleum-jelly, and it was introduced into this country, it was hoped that it would supersede all these articles in the preparation and dilution of citrine ointment in particular; but utter disappointment was the inevitable result of the trial and the experiment, as rapid oxidation, decomposition, and rancidity set in, just as in the old form prepared with lard, etc.

On seeking the cause, and, after many inquiries and a few experiments, I discovered what I consider the cause of the decomposition to be. It is, in my opinion, due to the manufacture of the petroleum-jelly by some acid process, in the first place; and by the addition, as is the case of the majority of adulterated specimens coming to us from abroad, in the second place, of heterogeneous and spurious substances, such as resinous matters, perhaps honey, and probably other organic impurities, these additions giving a pretence of emolliency and consistency.

I at last hit upon an English preparation, a product of petroleum alleged to be pure, of the name of "Geoline," which I have found, after a considerable experience in its use, to be the best vehicle in the preparation of citrine ointment and oxide of zinc. I noticed recently a report on this preparation, which was as follows. "It possesses all the advantages claimed for it; under the most favourable circumstances for decomposition, we have found it to retain its purity."

These facts with regard to "geoline" I can quite endorse, after a practical experience of eighteen months in its use. I have found it in every way a perfectly efficacious and satisfactory medium in all ointments, but especially in preserving the citrine form, which is a great desideratum achieved. Not only does it blend admirably with the nitrate of mercury ointment, but it makes a stable zinc oxide ointment, which keeps for an indefinite length of time pure and good. The dilute citrine ointment, made with "geoline," keeps absolutely pure; is of a very firm consistency; pleasant in its use, having a nice jelly-like appearance; and about 75 per cent. is saved in price over lard. The melting point at which geoline liquefies is stated to be 105° Fahr., so that its consistency in ordinary use is one of its great advantages over many of the other more fluid preparations manufactured abroad, and sold in England under various fanciful names.

I am at present attempting some experiments, in mixing geoline with metallic mercury instead of lard, for unguentum hydrargyri fortius; and I further believe that, as this substance is a pure form of hydrocarbon, that, with nitric acid, it will make a more economical compound than with glycerine, either as a remedial or as an explosive agent.

THE REMOVAL OF SUPERFLUOUS HAIRS BY ELECTROLYSIS.

By GILBERT SMITH, F.R.C.S.Ed.,
Surgeon to the Birmingham and Midland Skin and Lock Hospital.

AMONG the various methods adopted for the removal of superfluous hairs, there are none so easy of performance, so painless in their operation, so certain in their destruction of the hair-papilla, and which leaves fewer traces of an operation on the surface of the skin, than electrolysis. Dr. Mechel, the oculist of the Missouri College, I believe, first introduced the operation for the treatment of trichiasis. To Drs. Hardaway of St. Louis, White of Boston, and Piffard of New York, we are indebted for the introduction and popularisation of electrolysis as a method of destroying hair.

The apparatus required for the operation consists of a galvanic battery of from ten to fifteen cells, a sponge electrode, a No. 14 needle, an electrode needle-holder, and two cord conductors, each a yard in length.

The needle, properly fixed in its holder, is connected with the negative, and the sponge with the positive, pole of the battery. The needle is carefully introduced into the follicle alongside the hair, which is used as a guide to the papilla, the moistened sponge-electrode being grasped in the patient's hand (the needle should be applied before the circuit is completed by the sponge-electrode, and the converse after the operation; that is, the sponge-electrode should be released before the needle is withdrawn, otherwise pain will be caused).

The needle is held in position from ten to thirty seconds, according to the size of the hair, until slight frothing is produced, or a wheal appears around the mouth of the follicle; the sponge-electrode is then loosened, and the needle withdrawn.

The hair should now be removed, and the ease with which it is extracted indicates the completeness of the operation. If the hair do not leave the follicle with the feeblest traction, the needle should be reintroduced one or more times. Shortly afterwards, slight redness and swelling are perceptible.

Under a strong lens, it is not difficult to introduce the needle directly into the follicle; but this is not absolutely necessary, as the requisite destruction occurs if the instrument be in its immediate

neighbourhood. Messrs. Field and Co., of Birmingham, have made for me a lens adapted to a most convenient and portable apparatus, which can be fixed with clamp and screw. It has a number of joints of various kinds, so arranged that the lens can be focussed at any angle.

In a few hours the circumscribed congestion disappears, leaving small papules and pustules at the point of operation, which may remain visible for some weeks. For this reason, where the hairs are numerous, as upon the upper lip, not more than twelve should be removed at a sitting, leaving an interval of a week or two between each operation. Where there are but few hairs upon the less prominent regions, all of them may be removed at one sitting; although I may remark that the tediousness of the process soon tells upon the operator.

Minute scars are most apt to occur where it has been found necessary to introduce the needle into the same follicle a number of times, or where hairs situated closely together are removed at one time; but even the most marked cicatrices are scarcely noticeable after the first few weeks.

Like all operations of a delicate nature, this requires a certain amount of skill and manual dexterity only to be acquired by some experience in its performance; this, however, is easily gained.

The amount of pain felt differs in different patients, varying according to the region attacked, or the sensitiveness of the patient; while it is not trivial, it is not unbearable, and a tolerance seems to be established after a few sittings.

In conclusion, I may state that all the cases that have come under my treatment have been most successful. I have recently had an opportunity of examining some patients upon whom I operated six months ago, and find no return of the growth of hair.

A CONTRIBUTION TO THE ETIOLOGY OF DIPHTHERIA.

By G. F. MASTERMAN, Stourport.

In 1883 I attended a severe case of diphtheria. The patient, who was in her twenty-fifth year, was daily expecting her first confinement, but it was evident, from the nature and gravity of the disease, that her chance of surviving that event, or even living until it could take place, was very small indeed. The diphtheritic growth covered both tonsils, and the pharynx, as far as it could be seen. The accompanying fever was high; there was extreme depression, and marked albuminuria.

I ascertained, by palpation and auscultation, that the fœtus was alive and vigorous, and, also, that the maternal pelvis was large enough to permit speedy delivery, and that the vagina was free from any diphtheritic deposit.

As much milk and egg was given as the patient could take, with sufficient brandy to prevent the tongue from becoming dry, a condition which is, I believe, alike the measure of its necessity and of the quantity to be administered. The fauces were pencilled with a solution of hyposulphite of soda in glycerine; diluted sulphurous acid was used as a gargle, and perchloride of iron given in full doses.

On the fifth day the growth had evidently, from the increased dyspnœa, passed the glottis; and although the general, even more than the local, condition of the patient indicated that tracheotomy could be of little service, I felt it to be my duty to propose that operation to her friends as a last resource, but was rather relieved than chagrined when she and they declined it.

Up to this time there had been no labour-pains; the woman was fast sinking, and, although the fœtal heart was still beating strongly, frequent convulsive movements seemed to show that it was feeling the vitiated state of the maternal blood and that its life could only be saved by speedy delivery. I dilated, therefore, the os uteri as rapidly as possible by Barnes's bags, and none too soon, for the woman was already in *articulo mortis* as I removed the last. After hastily performing tracheotomy to prolong the mother's life for a few minutes (and the breathing was temporarily greatly relieved by it), I found that the uterus was so completely relaxed by the approach of death, that my hand passed into its cavity, almost without an effort; and fortunately at once seizing the feet, I was able to turn, and, with but little force, to bring a fine female child crying into the world. Its unfortunate mother had already expired; a slight, shuddering tremor stirred the flaccid limbs as I divided the funis, but the child had been orphaned before its birth. It was at once removed from the room, and, as soon as possible, sent away from the house.

Now, I am narrating this case solely for the sake of its incidence on the pathology of diphtheria, a disease which I had been taught to regard, and had really believed to be, in the words of Tanner, "a specific blood-disease which runs a rapid course," and that the typical growth was a result and an outcome of that morbid condition due to the anteriorly poisoned blood. But here was a child which had existed for above a week on this poisoned blood, filtered, it is true, by the placental dissepiments, but with free endosmotic interchange, yet not only absolutely free from diphtheria, but thoroughly healthy and vigorous, and alive and healthy now.

We know that variola, syphilis, typhus fever, scarlatina, and other diseases affecting the whole organism are transmitted to the fœtus *in utero*; and I believe I am correct in saying that no woman suffering from any disease of this class can contemporaneously give birth to an uninfected living child. Therefore, if diphtheria be a blood-disease, this child should surely have shared the fate of its hapless mother.

In 1878, I witnessed an outbreak of diphtheria in a Suffolk village, where the environs were almost incredibly filthy; and in one room I saw several children lying scantily covered, and amongst them two little girls whose pudenda were partially coated with the characteristic growth; and I was struck at the time—although its significance was not so clear to me then as it is now—by the accuracy with which its inner margin was defined by the line of contact when the labia were separated.

I have never seen it on the surface of an ulcer or a blister-denuded cutis, but it has been observed there by others.

In the fauces, it is almost invariably found on the anterior surface of the tonsils, or on the sides of the chink between them and the uvula; that is, exactly where we should expect to find a growth or exudation due to something from without, and carried thither in the act of inspiration. But, if the disease originate in a morbid blood-change, and the exudation be a result, then the reverse of this would be anticipated; and—granting that only moist and generally mucous surfaces can be invaded by it—the tongue, the whole interior of the mouth, or the conjunctiva, should preferably display it.

And again, if the exudation be the result of centrifugal mischief, why should its appearance on an external surface, on one that has been freely blistered or extensively ulcerated, "add greatly to the amount of the disease against which the patient has to contend" (Reynolds' *System of Medicine*, vol. i, p. 387). The mere exudation of lymph more or less organised can scarcely be of any gravity unless, as in the larynx or bronchi, it is mechanically fatal to life. But if this extension be regarded as the evidence of a fresh or a persistent infection, then its moment is manifestly clear and measurable.

Then as to its source: so many observers have noticed, as I have, an extended area of fungoid growth, sometimes on the wall of the patient's bedroom, or in an adjoining apartment or passage mouldy and damp, or where ammoniacal exhalations from unventilated drains, or heaps of decaying vegetable matter, have supplied the conditions most favourable to fungoid development—that the connection, if not in all primary cases one of cause and effect, is surely more than coincident; not in the sense that the diphtheritic growth is fungoid, for, although fungi are found in it, they seem to be no essential part of it, but that their prolonged inhalation in, perhaps, a depressed state of health, can so specifically influence the surface of the fauces or other sensitive areas that a most unhealthy pseudo-foreign growth can be excited thereon, and that this growth is—whatever the ultimate effects on the blood and nervous system may be—the real origin of the disease. It may seem a strained analogy to compare this growth with that produced on the wild rose by the introduction of the eggs—or some secretion accompanying them—of a *Cynips* (the briar-burrs, or budegars) for the plant does not seem to be injured by them; but the singular depravity in development in both cases, and the conversion in each of a smooth, almost polished surface, into one of rugged outgrowth, has often suggested it to me.

And, if these spores be recognised as the exciting cause of the disease, then the way in which it clings to particular houses or rooms, its apparent capriciousness in attacking only one or two out of several persons living in common, and its prevalence during the close damp days of autumn, are accounted for. And, which is of far greater importance, by pointing this out to our patients, and insisting that every patch of mouldiness within the house shall be washed with a solution of bichloride of mercury and its cause removed, every damp internal wall dried, and cognate sanitary work sedulously attended to, if they would guard themselves and their children from this terrible disease, we shall, as Dr. Wilks said lately, "in so far as we are successful in so doing, be fulfilling one of the highest objects to which anyone can attain."

CLINICAL MEMORANDA.

QUINSY AND RHEUMATISM.

With regard to the question of the connection between rheumatism and suppurative tonsillitis, the following case, at present under my care, seems worth recording.

M. L., aged 32, was delivered naturally on September 5th, 1885, of a living female child. She was living in a damp house with bad drainage-arrangements. Her husband having met with a severe accident, she had a great deal to do in the way of nursing, etc., soon after she got up, so that she did not regain her strength properly. In October they moved into a better house, and, during the moving, she fell ill with sore-throat. Both tonsils were inflamed; but, sodium-salicylate having been administered, no suppuration occurred. On December 23rd, she again had an attack of tonsillitis, when, in spite of aconite and sodium-salicylate, suppuration occurred in one tonsil. On December 29th, she complained of painful and swollen joints (knees and ankles, afterwards arms). The temperature never exceeded 102.2°. Sodium-salicylate was given, and the pain and swelling were quickly diminishing, when, on January 2nd, 1886, erythema nodosum appeared on both shins. This has disappeared, and she is now convalescent. There has been no heart-complication at all.

Henry G. Plimmer, 39, Anerley Road, S.E.

HYPERTROPHY OF THE SPLEEN IN A CHILD, AND ITS TREATMENT.

The following case of enlarged spleen is interesting, as showing the results of two diverse methods of treatment, that by mercurials and that by iron.

A. L., aged 15 months, was brought to me on April 8th, 1882, for an enlargement of the abdomen, which had been noticed for five months, and had been slowly increasing. There was a well marked tumour on the left side extending to midway between the inferior border of the ribs and the pelvis, and possessing the usual characteristics of an enlarged spleen; there was no enlargement of the liver or lymphatic glands. The lower radial epiphyses were enlarged, and there were rickety nodules on the anterior ends of the ribs. The child was somewhat pale and anæmic. There was slight pyrexia at night, and some stomatitis. She had nine teeth, the first having appeared at the age of 11 months. She was unable to walk or stand alone. There was no history of cutaneous eruptions, diarrhœa, or snuffles. The mother had had two miscarriages. Under ordinary treatment, the stomatitis disappeared in a few days. Early in June, the child was again brought to me with the statement that the mother had taken her to a well known children's hospital, where she had become rapidly worse; the treatment consisting mainly, as shown by the patient's letter, of small doses of hydrargyrum cum cretâ twice or three times a day for two weeks. Her aspect was now very sallow and cachectic; her limbs were flabby; she had lost flesh, and was suffering from gastric catarrh, and was in a low and debilitated condition. The cry was hoarse. The spleen had greatly increased in size, extending downwards to the pelvis and to the right, to an inch and a half beyond the umbilicus. There were numerous petechiæ scattered over the surface of the body. The liver was not enlarged. There was neither diarrhœa nor vomiting. The gastric catarrh was easily controlled in a week or ten days, by careful dieting and ordinary therapeutic measures. The child was then (June 16th) put upon small doses (two and a half grains) of ammonio-citrate of iron three times a day. Under this she improved.

On July 12th, the petechiæ not having disappeared, 15 minims of syrup of iodide of iron were ordered to be taken three times a day.

On August 21st, the petechiæ had disappeared. The spleen was nearly two inches to the left of the umbilicus. She was trying to walk by taking hold of chairs, etc. All medicines were discontinued. From this time, she progressed quite satisfactorily, my last note of her being on April 19th, 1883, when she was well and stout.

This was an ordinary case of hypertrophied spleen; and the chief point of interest lay in the cause, which appeared to be limited either to syphilis or to rickets. In favour of the former were the child's hoarse cry, and the fact that the mother had had two miscarriages; in favour of the latter and probably correct view, were the enlarged epiphyses, the nodules on the ribs, and the delayed dentition, together with the absence of any well marked signs of hereditary syphilis. Of course, it is known that enlarged spleens have, now and then, a tendency to recover without treatment; and I do not enter into the question of rickets itself being a late manifestation of syphilis.

Henry A. Wickers, L.R.C.P.Lond., M.R.C.S.

THE BINAURAL STETHOSCOPE IN THE DETECTION OF MURMURS.

While this instrument possesses the great advantage of enabling the physician to examine all parts of the chest without being obliged to adopt constrained positions, and with the least disturbance to the patient; yet I believe it is well known that murmurs are not heard so distinctly with it as with the ordinary wooden instrument.

I was asked recently to see, in consultation, a man suffering from dropsy of the legs and abdomen. The pulse was characteristic of mitral regurgitation, being quick, small, irregular, and soft. I could detect no murmur with the binaural stethoscope, but, on applying my ear to the chest, could plainly distinguish a soft systolic *bruit*. I could also hear it distinctly with a wooden instrument. Of course, in a well marked case like this, the presence or absence of a *bruit* would make little difference; but the detection of a murmur in some cases would be of the highest diagnostic importance, as, for example, detection of a murmur near the spine in aneurysm. In such cases, a wooden stethoscope should be employed. Binaural stethoscopes, I find, vary greatly in conducting power.

C. W. Suckling, M.D.Lond., M.R.C.P., Birmingham.

OPHTHALMOLOGICAL MEMORANDA.

SPASMODIC ECTROPION TREATED BY THE EYE-SPECULUM.

Cases of ectropion vary much in their causation. A case recently under my care followed what had apparently been severe catarrhal or muco-purulent ophthalmia about six months before I had seen it. The lids had been pressed out by the swollen conjunctivæ, and the upper lid had become obstinately everted by the spasmodic contraction of the orbicularis muscle. For weeks an attempt was made to reduce the lid by a compress and bandage in vain. Before resorting to Snellen's stitch or Bowman's symblepharon, I adopted the following simple method. I inserted the eye-speculum between the two lids, allowing the full force of the spring to play on the orbicularis muscle for about twenty minutes, my object being to weary out the muscle by the constant strain of the speculum. On removing the speculum, the lid could be replaced without trouble, and remained in its normal position for several minutes, so that the compress and bandage could be applied easily and at leisure.

This manœuvre was repeated for several days, but had to be discontinued on account of the inflamed state of the eye. Still it had broken the back of the opposition, and the cure was easily effected afterwards by means of the compress and bandage.

Peter Tytler, M.D., Honorary Surgeon to the Ardwick and Ancoats Hospital, Manchester.

OBSTETRIC MEMORANDA.

BRONCHOCELE DURING PREGNANCY.

On August 10th, 1885, I was called to see Mrs. McG., aged 40, who was then in the eighth month of her third pregnancy. She was a tall and thin woman. She complained of difficulty of breathing, huskiness of the voice, occasional vomiting, and complete loss of appetite. About six weeks previously, she had noticed an enlargement on her throat, which gradually increased, until it attained to about the size of an orange, and of which she was very much afraid, not knowing what it was. On palpation, the tumour was firm and tough, and presented no signs of being cystic. It was of uniform size, and appeared to press equally on the adjacent structures. Its pressure on the trachea accounted for the dyspnœa, and probably the loss of voice was caused by pressure on the recurrent laryngeal nerve. The heart-sounds were normal. The urine did not contain albumen. I ordered a tonic, so that the general health might be improved, and also prescribed iodide of potassium.

There was no reduction in the size of the gland up to September 4th, but on the 6th, the tumour had entirely disappeared. The patient was delivered of a healthy male child on the morning of September 7th, by the aid of forceps. I wish to report this case, because of the size of the tumour, its gradual growth, and its sudden disappearance. The tumour existed altogether about ten weeks.

Samuel R. Hunter, M.D., Armagh, Ireland.

Increase of Salary.—The Greenwich Board of Guardians have increased the salary of Dr. H. W. Roberts, medical officer for the Deptford South District, from £120 to £140 *per annum*.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

KIDDERMINSTER INFIRMARY.

SURGICAL CASES.

(Under the care of Mr. SPOFFORTH.)

[For the following notes, we are indebted to Mr. FREDERIC S. BARBER, House-Surgeon.]

CASE I. *Punctured Wound of Thigh: Traumatic Aneurysm: Ligature of Common Femoral Artery: Recovery.*—James P., aged 33, carpet-weaver, was admitted on June 1st, suffering from a severe punctured wound on the inner side of the left thigh, caused by a large and heavy pair of scissors falling point downwards at the time when he was raising his leg.

On admission, he was very pale from loss of blood (which, although temporarily arrested, had been considerable). His leg was elevated on a pillow, and the wound closed by means of a pad and bandage.

On the following morning, there was a swelling in the vicinity of the wound; this swelling pulsated, but ceased to do so when pressure was applied to the femoral artery above; over the swelling, a distinct *bruit* was heard; pulsation could be felt in the anterior and posterior tibials. A shot-bag (7 lbs.) was placed over the common femoral artery, but the pulsation at the seat of the aneurysm was not quite stopped, owing to the difficulty of retaining the bag in position, especially during sleep.

Next day, the swelling had increased in size, and the pulsation and *bruit* were more marked. The weight was increased, and a Martin's bandage carefully applied over the swelling; the leg and foot being covered with a flannel bandage, and elevated.

On the fifth day after admission, owing to the shot-bag becoming painful, a tourniquet was applied, but without good result, and had to give place to another trial of the shot-bag and padding.

The swelling remained in the same condition till June 13th, when Mr. Spofforth decided to tie the common femoral artery in Scarpa's triangle; this completely stopped all pulsation. The ligature used was of catgut soaked in chromic acid, and the wound was dressed with sanitas and oiled lint; and the limb was enveloped in wool. At the time of operation, the aneurysm extended from two inches below Poupart's ligament to a little above the knee, and had become somewhat consolidated. The wound was not interfered with until the fourth day (when it was again dressed with oiled lint and salicylic wool); the temperature had gone up to 100.2°, but afterwards gradually descended to normal. The wound looked healthy, and showed signs of union. It was subsequently dressed on alternate days, the patient doing well and not complaining in any way, and the limb being perfectly sensitive and warm. The ligature separated on the twenty-fourth day.

The mass after the operation became more solid, and gradually decreased in size, causing little inconvenience, and allowing him to get about very well.

Mr. Spofforth attributes the patient's good recovery to the fact that the collateral circulation was partially established by the pressure applied prior to the operation.

CASE II. *Lateral Lithotomy.*—Albert P., aged 8, was admitted September 12th, with some symptoms of vesical calculus, but suffering no pain from jolting, or when jumping from a height. Lateral lithotomy was performed, and a mulberry calculus, weighing 147 grains, was removed; it had been firmly adherent to the fundus of the bladder. The patient made a good recovery.

CASE III. *Extra-uterine Pregnancy. Operation: Recovery.*—H. B., a married woman, with two children, was admitted on September 20th, 1885, with no history of previous illness, except that she had been ailing since her last confinement, fifteen months before. At that time, she felt pain in the left iliac region, which had continued with more or less severity ever since; the pain at first paroxysmal, had for some time been continuous, but aggravated by micturition and defæcation. She had not menstruated since the birth of the child, which was suckled for twelve months. She had suffered from occasional anorexia, nausea, and vomiting. For an uncertain period she had had, in addition, a sensation of weight in the left iliac fossa; but, until three weeks before admission, did not notice any swelling. Swelling was at first confined to the left side, but soon spread across the median line and affected the other iliac fossa. She thought that she had become very much thinner. She was thin and pale. There was a swelling in the lower third of the abdomen; it was most prominent in the left iliac region; this region was also very tender on pressure; the mass was dull to percussion, and there was distinct fluctuation. On vaginal examination, the uterus was found to be drawn upwards, and behind it was a large swelling; the bimanual method proved them to communicate.

On September 24th, Dr. Savage, of Birmingham, performed abdominal section, and a fœtus at the fifth month was removed. The placenta was left behind; there was free hæmorrhage from the placenta, which was inadvertently partially separated. The cyst was stitched to the sides of the wound, and drained. The wall of the cyst was almost pearly white. The wound was dressed with dry wool, and the patient removed to bed. After the operation, the temperature only reached 100° Fahr. on two occasions. The cavity of the cyst was washed out regularly with a 50 per cent. solution of carbolic acid, and the patient did well from the time of the operation till she was discharged cured on November 14th, 1885.

LIVERPOOL NORTHERN HOSPITAL.

TWO CASES OF CHARBON.

[Under the care of Mr. CHAUNCY PUZEY.]

CASE I. *Charbon; Death.*—Eliza S., an unmarried female, aged 44, was admitted May 22nd, 1885. She was a sackmaker, cutting out the new canvas for sacks. She had nothing to do with cattle, sheep, or wool. On May 19th, she noticed a small red pimple on the back of her right forearm towards the outer side; the skin around soon became swollen and painful. The arm was poulticed during the night. On the following day, she was able to work. At night she became feverish, and had several "cold sweats." On the morning of May 21st, she noticed "water blisters" on the forearm. She continued restless and feverish throughout the day, and was admitted to hospital on the following morning. Subsequent inquiry by Dr. Hope, Assistant Medical Officer of Health, showed that there were twelve women at the same work, but none of them had been affected in a similar manner. The woman lived in clean rooms free from smell.

On admission, she was breathing rapidly, much exhausted, and complained of great pain in the forearm. The pulse was very feeble. The temperature was 100.8° Fahr. The right forearm was much swollen, and of a dusky red colour. The swelling extended up the arm, and over the outer part of the right half of the chest. On the back of the forearm was a superficial black slough, about the size of a florin, with several bullæ, varying in size from a pea to a filbert, scattered round about it. There was a considerable thickening along the course of the vessels, but no enlarged glands could be made out either at the elbow or in the axilla.

Mr. Puzey made several incisions; the principal one, passing through the black slough, was about four inches long, and was carried through the muscular fascia, from beneath which a small stream of milky serum flowed. The slough was seen to be quite superficial, and not to extend into the deeper tissues. The "blisters" contained a jelly-like substance, which did not flow out when the blister was cut. The tissues cut through had the appearance of fat bacon, dotted here and there with plugged or bleeding points. A considerable quantity of thin serum, mingled with blood, came from the cut surfaces. The wounds were loosely plugged with lint soaked in carbolic oil, and when the oozing had ceased, oakum poultices were applied. The incisions gave great relief. Some of the jelly-like substance from the blebs was stained with aniline-blue by Dr. Bradshaw, and found to contain great numbers of bacillus anthracis.

May 23rd. She was very restless during the night, and early in the morning became comatose. She threw herself about at times, but was pulseless at the wrist, and breathing rapidly in shallow gasps; she was able to swallow small quantities of fluid with difficulty. The temperature had fallen to 97° Fahr. The œdema had disappeared from the side of the chest, and the arm and forearm were much less tense; a thin bloody fluid exuded from the wound. The patient continued in a comatose state, becoming gradually weaker until her death.

The *post mortem* examination was performed thirty-six hours after death. The veins of the forearm were plugged near the wounds; the glands of the right axilla were softened. The lungs were congested at their bases. The liver and spleen were large, soft, and congested. The brain was normal. No secondary deposits or infarcts were found in the viscera.

CASE II. *Doubtful Charbon; Recovery.*—William C., a labourer, aged 33, was admitted April 24th, 1885, with a "swollen neck." He had been working on steamers which brought cattle from Boston, also

among bales of wool. He did not know of any other workman being poisoned. Three days before, a pimple formed on the right side of his neck; this itched, and he scratched the top of it. On the following day, a little sore formed and his neck began to swell rapidly.

On admission, he had apparently a large double chin, with a short thick neck. The depression below the jaw was almost obliterated, the whole neck being much swollen; the swelling extended over the lower part of the right cheek and the upper part of the right half of the chest. On the right side of the neck, a little below the jaw, was a small leathery slough about the size of a sixpence. The base of the sore was hard, and separable like a button from the tissues beneath. Around the slough was a circle of several minute blebs. The hardness of the deep tissues extended across the middle line and almost down to the clavicle.

A crucial incision was made, the knife being carried through and beyond the margin of the slough. The four segments thus formed were removed. The slough was seen to extend as black lines into the deeper tissues. The wound was well rubbed with potassa fusa, and linseed poultices applied.

The patient slept well during the night. He complained of no pain, but the swelling had not diminished.

April 27th. An extension of the livid slough towards the middle line was noticed. This was excised, and the wound again thoroughly cleared with potassa fusa. He complained of difficulty in breathing. The temperature was 103.8° Fahr.; the pulse was quick, the tongue furred. Five grains of calomel, with fifteen grains of compound jalap powder were ordered.

April 28th. The patient felt much better, and the temperature fell during the day to 100° Fahr. The hardness had extended somewhat, but the borders were not so well defined. There was no suppuration from the wound. Oakum poultices were applied, and the wound was covered with iodoform powder.

From this time the condition of the patient continued to improve, the hardness becoming less marked, and the œdema disappearing. For fourteen days there was no suppuration in the wound, which was covered with a thick fœtid slough. Afterwards, there was some cellulitis of the deep tissues of the neck. The man made a good recovery, although the right side of the neck was somewhat contracted.

The tissue first excised was examined, but no bacillus anthracis was found. Two days afterwards, the fluid from a bleb was stained with aniline-line blue, but with a like negative result.

REMARKS BY MR. CHAUNCEY PUZEY.—The appearance of the first case was that of acute phlegmonous erysipelas of the forearm; but the extreme collapse of the patient and the subsequent course of the case indicated a more virulent poison. The superficial character of the slough, and the brawny indurated swelling, suggested erysipelas rather than charbon; but the discovery of bacillus anthracis in the fluid from the bleb left little doubt as to the real nature of the disease. In the second case, the appearance was that of charbon. The small painless slough, with its circle of vesicles, the separation of the button-like base, the linear extensions of the sloughs into the deep tissues, and, lastly, the considerable period which elapsed before suppuration set in, all alike pointed to malignant pustule. In this case, however, no bacillus was found; and the explanation of this seems now clear. The fluid first stained was taken from the surface of the slough, a part from which the bacillus soon disappears. The second specimen was fluid from a vesicle which had been caused probably by the potassa fusa, and was not a charbon-vesicle. In spite of the absence of absolute proof, I think the symptoms and signs clearly indicated the nature of the disease.

HOSPITAL ACCOMMODATION IN BOURNEMOUTH.—At the recent annual meeting of the Bournemouth hospital and dispensary, a discussion took place respecting the urgent need of increased hospital accommodation for the town and neighbourhood. It was stated that the demand for surgical treatment last year was so much in excess of the supply inside the hospital, that many medical cases had to be refused admission. It was resolved that the wealthy landowners in the neighbourhood should be appealed to in the hope that a suitable freehold site may be obtained for a new hospital.

KENT AND CANTERBURY HOSPITAL.—The income of the Kent and Canterbury hospital during the past year, including legacies and donations, has amounted to £3,588 11s. 2d., and the expenditure to £4,322 8s. 3d., thus showing a deficit of £733 17s. 1d. There was already an overdrawn account at the bank at the beginning of the year, and this, with interest, leaves a present deficit of £1,197 15s. 4d. The matter is looked upon as one of very serious import, the institution above mentioned being one of the most useful medical charities in Kent.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 19TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Colloid Degeneration.—Mr. F. EVE showed specimens, from the Museum of the Royal College of Surgeons, illustrating colloid degeneration of the breast and omentum. The first specimen was a very large tumour of the omentum, removed by Mr. Lawson Tait from a young man aged 27. The surface of the tumour was flocculent, with minute pedunculated saccular bodies depending from it. On section, the tumour was seen to be alveolar, the alveoli being due to colloid degeneration of the sarcomatous tissue of the growth. A second specimen was part of a tumour removed by Sir Spencer Wells. It was a myxosarcoma, but the mucoid degeneration was slight. A specimen of true colloid cancer of the omentum, secondary to cancer of the ovary, was also shown, as well as a tubercular growth of the peritoneum, which was removed during life, on account of acute peritonitis. A specimen of colloid cancer of the breast, removed by Mr. Hulke from a woman more than 80 years of age, was shown, and Mr. Eve pointed out that the colloid substance was produced by a mucoid degeneration of the stroma (carcinoma myxomatodes). Large semi-translucent spheroidal bodies, with concentric laminæ, some smooth, others botryoidal, were also found in the stroma; they were clearly produced by changes in the connective tissue corpuscles. Although the bodies were laminated, they did not appear to contain any crystalline material. A second specimen of colloid cancer of the breast, removed by Mr. Savory, also showed that the colloid degeneration had occurred in the stroma, and not in the epithelium.—In reply to the President, Mr. EVE added that the operation, in the case of the patient from whom the first specimen was removed, had to be abandoned, and the patient did not long survive.

Spontaneous Fracture of Urinary Calculi.—Mr. SYDNEY JONES showed a rare example of spontaneous fracture of urinary calculi. The patient was a man aged 81; during the last seven years of his life, he passed seven or eight fragments of calculi. He was admitted on account of impaction of a fragment, which led to extravasation of urine. The perinæum was incised, and the membranous portion of the urethra opened; some fragments were removed, but eleven other portions remained, and were discovered after death. Mr. Sydney Jones referred to Dr. Ord's view that spontaneous fracture of calculi was due to an explosive effect produced by chemical changes occurring in the nucleus, but suggested that the more probable explanation was that the fracture was due to decomposition of the softer layers of the calculus which contained mucus; the decomposition being brought about by changes in the composition of the urine.—Mr. CLUTTON showed another specimen of spontaneous fracture. In this case, the fractured portions seemed to have been detached from the surface.—Dr. W. M. ORD referred to a specimen of spontaneous fracture which he had shown to the Society some years ago, where the central portion of the calculus was uric acid; the more superficial layers consisted of urate of ammonia, and the separate fragments were coated with urate and phosphate of ammonia. The change leading to the fracture was a purely chemical one in this case. He referred to another calculus which he had also exhibited, where an outer colloid husk had eroded the inner kernel of uric acid and urate of ammonia. He thought that erosion of calculus, by variations in the quantity of colloid contained in the urine, was a process which probably came into action with considerable frequency. Spontaneous fracture, therefore, might be due to two processes; to the effect of a central disruptive force, as was most probably to be seen in Mr. Sydney Jones' case, or to the erosion of the calculus by the variations in the colloids of the urine, as in Mr. Clutton's case.

Diffuse Sclerosis of Brain in an Infant.—Dr. H. ASHBY showed a specimen of diffuse sclerosis of the brain, with descending lesions in the spinal cord in an infant aged 22 months. There was no definite history of syphilis in the mother or father, but during the first few months of the infant's life it suffered from "snuffles," but no rash. The confinement was easy. The infant from its birth was idiotic; as far as could be gathered, it had never been able to see or hear or recognise its friends. A few days after birth, it was convulsed, the convulsions being mostly right-sided. When seen at the age of eight months, there was well-marked nystagmus; it was evident that he was blind and deaf; the limbs became rigid at times, the right arm being more rigid than the left; when a year old, there was more marked rigidity of the limbs; the elbows were flexed and rigid, and the legs drawn up. He gradually became worse, and died at the age of twenty-two months. At the necropsy, there was fluid present in the sub-

dural space, the brain evidently having shrunk away from the skull. The arachnoid was thickened; the pia mater consisted of many fine tortuous vessels, but could be readily dissected off from the surface of the brain. The cerebrum was very firm and tough; the cerebellum was normal. The convex surfaces of both sides of the brain were smooth, with no trace of the convolutions. The Sylvian fissure was well marked, but there was no trace of the fissure of Rolando or of other fissures marking out the convolutions. The frontal lobes were granular, resembling the granulations on the surface of a hobnail liver. On section, there was very little difference in colour between the "grey" and the white matter, and the latter had apparently undergone induration. The lateral ventricles were much dilated, especially in the descending horns. The microscopic examination of the grey matter showed a thickening of the minute vessels, enlarged circumvascular spaces, an almost total disappearance of the caudate cells, and a coarse almost fibrillated condition of the neuroglia. There was a marked descending degeneration along the pyramids of the medulla oblongata, and along the direct and also the lateral tract of the spinal cord. He thought it difficult to say for certain what was the etiology of the case. It appeared probable that there had been a chronic meningo-encephalitis during fœtal life, which lead to the destruction of the grey matter on the surface, probably before the convolutions were formed, and a consequent downward degeneration.—Dr. THOMAS BARLOW thought the case threw much valuable light on certain obscure points in the nervous diseases of children. He had shown to the Society a specimen belonging to the same category; it was the case of a microcephalic child, in whom the lesion was probably intra-uterine. The brain was very small, and the cranial bones had sunk in. The meningitis was confined to the convex surface of the two hemispheres, and to the lateral ventricles. In the median line, and over the temporo-sphenoidal lobes, there were indications of convolutions, but not on the convex surface. The products of inflammation had in part become calcareous. Sclerosis of the brain, as Hayem had pointed out, was sometimes started by meningitis.—Dr. HALE WHITE said that pathologically the case agreed with the condition of the brain seen in general paralysis of the insane. He inquired whether the pupils were equal.—Dr. ASHBY said that the right pupil had been observed to be larger than the left.

Two Cases of Aneurysm.—Mr. BARWELL showed two aneurysms, one connected with the abdominal aorta, the other with the popliteal artery, removed from the same patient. The femoral was tied with an ox-aorta ligature. The patient died of pneumonia. After death, it was found that the sac of the abdominal aneurysm extended through the diaphragm into the thorax, and the vertebræ were eroded. The aneurysm was to a great extent filled with clot, but was traversed by a channel, through which the blood passed to vessels of the lower limbs. Both aneurysms, therefore, had practically become cured.

Postnasal Fibroma.—Mr. FREDERICK CHURCHILL showed a large fibroma removed by him from the mesial line of the roof of the palate in a child aged 8½ years. Each nostril contained prolongations which were distinctly myxomatous, whereas the bulk of the tumour was chiefly fibrous.—Mr. BUTLIN said that he supposed the growth to be a very large mucous polyp. It arose, he presumed, from the turbinate bone. The microscopical appearances were those commonly seen in mucous polyps.—Mr. CHURCHILL said the growth was attached to the upper surface of the soft palate.

Necrosis of Vomer.—Mr. FREDERICK CHURCHILL showed a patient from whom the whole of the vomer had been detached by necrosis, without injury to the soft palate. The patient was a boy, the subject of congenital syphilis, and presented pegged teeth and fissures at the angles of the mouth, and had suffered from interstitial keratitis.

Stricture of Rectum.—Mr. HARRISON CRIPPS showed a specimen from a woman who had first experienced difficulty in defæcation after an attack of pelvic cellulitis. When the patient came under treatment, she was in a desperate condition, and only survived colotomy one week. At the necropsy, a tubular stricture about four inches long, beginning three inches above the anus, was found. The stricture was due chiefly to thickening of the internal muscular coat, which was replaced by dense fibrous tissue. At the bottom of Douglas's pouch was a cicatrix, which pulled upon the rectum, and caused a kink in it. The stricture was probably due to the obstruction thus produced. Syphilis, in his experience, was by no means so common a cause of stricture as was sometimes said; and he believed that in many cases it was due to contraction of pelvic cicatrices, leading to distortion of the rectum. Stricture of the rectum was ten times more common in women, who were liable to pelvic cellulitis, than in men; whereas the reverse proportion held with regard to syphilis.—Mr. BRUCE CLARKE showed a specimen of syphilitic stricture of the rectum in which colotomy was performed. The patient only survived three days. In this case, there was hardening of both the muscular coats extending up to the splenic flexure of the colon, and for the whole of this extent the gut was denuded of epithelium. The submucous tissue and muscular coat were closely infiltrated with small round cells; the muscular coats of the arteries also contained round cells.—Mr. EVE observed that in the Museum of the Royal College of Surgeons there was a specimen closely resembling that shown by Mr. Cripps. John Hunter had attributed the great thickening of the coats in this case to spasm of the muscular fibres.

Card Specimens.—Mr. EVE: 1, Dislocation of Hip (cow); 2, (for Mr. Lingard, from the Museum of the Royal College of Surgeons) Specimens of Actinomycosis, in oxen.—Dr. GOODHART, for Dr. MARSHALL, of Nottingham: Calculus in Bladder of a Female Child, aged 2 years.—Mr. SUTTON: Congenital Inguinal Hernia in a Monkey.—Mr. H. FENWICK: Tumour of Bladder.—Dr. HADDEN: 1, Lipæmic Blood in Diabetes; 2, Mucous Cyst of Tongue; 3, Gumma Pressing on Ureter.

Living Specimens.—Mr. MORGAN: Double Dislocation of the Hip, Congenital.—Mr. BRUCE CLARKE: Case of Early Puberty.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, DECEMBER 18TH, 1885.

W. H. CORFIELD, M.D., President, in the Chair.

The Recommendations of the Royal Commission on the Housing of the Working Classes as affecting the Status of the Medical Officer of Health.—The following is an abstract of this paper, which was read by Dr. E. C. SEATON. The recommendations to which the author of the paper alluded were (1) that medical officers of health should in future appointments be required by sanitary authorities to give their whole time to their official duties; (2) that they should be required to live within a mile of the district which they serve. The object of the paper was to show that, in the present state of public opinion and with areas of local government as at present constituted, such restrictions as those recommended were calculated to retard rather than to advance the progress of that cause which all health-officers had at heart, the extension and application of medical and scientific knowledge for the benefit of the public health. The question of the status of the medical officer of health, that is to say, the character of his duties, his relation to his fellow officers, his emoluments and tenure of office, was now the most important question that had to be considered in relation to the public health. The author had always had doubts of the wisdom of that policy which had led some earnest sanitarians so strenuously to advocate as a general principle that which, for the sake of brevity, might be described as "whole service," except in occasional instances, such as the very large combined areas and, perhaps, towns of the first magnitude. After quoting the opinion of Dr. Gairdner, Mr. Simon, and Dr. Buchanan, in favour of the view that advantage was derived by the medical officer having opportunities for hospital practice, Dr. Seaton gave an imaginary dialogue between two medical officers, the one who argued in favour of the "whole," the other of the "partial service" system. In this dialogue, it was urged that medical officers of health should not assume too much responsibility in connection with legal matters, and that they should avoid appearing in courts of law as advocates or prosecutors, but rather adhere to their proper position as scientific witnesses. It was further pointed out that, on such questions as those connected with unhealthy houses, sewage-disposal, water-supply, etc., there was much risk of their coming into collision with engineers, surveyors, architects and professional chemists (who upon some aspects of these questions were, generally speaking, more entitled to be considered experts), unless they adhered strictly to their own special province as medical officers. Particular attention was also directed to the important duty of a medical officer of health as an adviser of the sanitary authority on all municipal questions affecting the public health, such as hospital accommodation, sanitary administration and police, removal and disposal of excrement, water-supply, etc.; and to the equally important duty which devolved on him of scientifically studying the causes of the origin and spread of outbreaks and epidemics of disease. Dr. Seaton was of opinion that, assuming that the professional arguments on both sides were equally balanced, as a general policy, apart from other considerations, the whole service system was opposed to the highest public interests, because the public would in the future be deprived of the services of medical experts, such as those who in various ways had largely contributed to scientific knowledge in the prevention of disease, but who could not be expected to sacrifice everything for a profession in which the usual incomes were very small and

precarious, and which as a profession might be said to be without prizes; also, because among the towns and districts which had required the whole services of medical experts, there were many which were evidently not sufficiently large to need them; finally, because the insecurity of tenure made it exceedingly difficult for a medical officer of health who was cut off from all other means of earning a livelihood to discharge his duties with sufficient independence, and this want of proper independence would be especially felt in cases where the authority was largely composed of small property-owners, who were opposed to sanitary work. In conclusion, he alluded briefly to the proposed restriction with regard to place of residence, and pointed out that such a restriction would interfere with the combination of sanitary districts for the purpose of appointing a medical officer of health, an arrangement which generally worked well; and, further, that in London the facilities for locomotion were such, that from central positions medical officers could reach any part of their parishes or districts in the shortest time.—In the discussion which followed, the PRESIDENT, Mr. ARMSTRONG, Dr. C. E. SAUNDERS, Dr. SWETE, Mr. BLYTH, Mr. LOVETT, Mr. JACOB, and Dr. BATE, took part.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, NOVEMBER 10TH, 1885.

GEORGE BUCHANAN, M.D., President, in the Chair.

Scirrhus of the Mamma.—Dr. JAMES DUNLOP showed two specimens removed on the morning of the meeting, and read the clinical histories.

Congenital Ascites in a Newly-Born Infant.—Dr. J. LINDSAY STEVEN showed the body of a newly-born child illustrating this condition, which had been sent to him that day by one of the midwifery nurses of the Glasgow Sick Poor and Private Nursing Association. It had caused some delay in the birth, and was born dead. No examination of the body had yet been made.

Pseudo-Hypertrophic Muscular Paralysis.—Dr. DONALD MACPHAIL, of Whifflet, showed a boy suffering from this disease, and gave notes of the history and present condition. Up till two years ago, when he took measles, he had been strong and plump; after the measles, he was ill with feverish symptoms for nearly two months, at the end of which time he had improved so much as to be able to go to school; then for the first time was noticed the weakness of the lower extremities. The typical appearances and symptoms of the disease are now present. Dr. Macphail read very careful notes of the family-history, but, so far as he had been able to make out, it did not throw any special light upon the case.

Cases of Tumour in the Larynx.—Dr. DAVID NEWMAN showed two patients suffering from tumour of the larynx, in both of whom tracheotomy had been performed to relieve difficulty in breathing from obstruction. The first case was one of a large adenoma occupying the upper part of the cavity of the larynx; the second case was one of extensive epithelioma. In this case, the operation had been performed without the use of chloroform, local anæsthesia having been quite satisfactorily produced by the subcutaneous injection over the cricoid cartilage of twenty minims of a five per cent. solution of eucaine. The man suffered slight discomfort, but no actual pain during the performance of the operation.

Round and Spindle-Celled Sarcoma of the Pharynx.—Mr. H. E. CLARK showed the specimen; the history dated back for eight years. Five years ago, he was under the care of the late Dr. Foulis, when the glands were not involved. Dr. Foulis advised removal, but the surgeon under whose care he was admitted to the Infirmary did not think this right; the glands were first involved two and a half years ago. Tracheotomy was performed in April last, and he died in the autumn. There were frequent hæmorrhages into the pharynx preceded by intense pain.

Calculi removed from the Left Kidney by Lumbar Incision.—Dr. HECTOR C. CAMERON showed the specimens, and gave clinical notes of the case.

BORDER COUNTIES BRANCH.

FRIDAY, JANUARY 8TH, 1886.

C. S. HALL, M.R.C.S.Eng., President, in the Chair.

Empyema and Recovery after Removal of Portions of Six Ribs.—Dr. MACLAREN (Carlisle) read notes of this case. A lad, aged 18, was admitted to the Cumberland Infirmary on March 28th, 1883, with left empyema, the result of pleurisy ten months before. His left chest had been drained. The position of the drainage-tube was altered, and the cavity washed out daily. After treatment as an in- and out-patient for four and a half months without material improvement in the quantity of pus, portions of the fifth, sixth, seventh, eighth, ninth, and tenth ribs were removed. It was ascertained that the cavity in the chest was double, and that the outer part only had been effectually drained. The adhesions were broken down, and effective drainage established. Four months after the operation, he was discharged much improved, but with a small cavity still remaining. On March 4th, 1885, he was again admitted with a pleural cavity, which would hold three or four ounces, discharging through a sinus. The cavity was fully opened, so that it could be dressed to the bottom; it steadily contracted, and he was discharged on June 18th quite well. The author drew attention to the fact that the advantage in this case resulted chiefly from breaking down adhesions and effectual drainage, and that the amount of contraction was not a very important element in the result. Very few cases of empyema required section of ribs; and where it was desirable to produce much diminution of the chest-cavity, the cartilages or the ribs should be divided in addition, four or five inches away from the portion removed, so as to let the chest-wall fall in.

Albuminuria and Gout.—Dr. LOCKIE read a paper entitled, Is there any Connection between the (so-called) Albuminuria of Adolescents and a Gouty Inheritance? He narrated four cases of the functional affection in question, in each of which a family history of gout could be traced. This renal disorder had been, for the most part, observed amongst the cultivated classes, which also chiefly furnished the subjects of gout. Like attacks of gout, the albuminuria of adolescence was frequently preceded by mental strain or worry. Authors on gout and hepatic diseases spoke of temporary albuminuria without organic renal disease, as occurring in cases of gouty dyspepsia and hepatic derangement, and it had been alleged by Sir Andrew Clark that gouty men were apt to have temporarily albumen in the urine after delivering political speeches in circumstances of great excitement. These facts, taken together, strongly supported an affirmative answer to the question forming the title of the communication.

Congenital Asymmetry.—Dr. EATON read notes of a case of congenital asymmetry, and referred to similar cases which had been recorded by Dr. I. Owen and Professor Humphry. Immediately after birth, there seemed to be a defective development of the entire right side. The right half was obviously much smaller than the left half of the body, just as if the longitudinal halves of a small and of a larger child had been united in the median line. Both sides had developed in the same ratio since birth. Though the boy was now nearly 10½ years of age, the same proportionate disparity of the two sides, which existed at birth, was still apparent. In November last, measurements were taken, and his condition was as follows. The right side of the face, the right ear, ala nasi, eyeball, half of the tongue, shoulder, arm, forearm, hand, hip, thigh, leg, and foot, were perceptibly less bulky; and the right arm and hand, and leg and foot, were shorter than the left. The girth of the right arm at the middle was one inch, of the right forearm seven-eighths of an inch, of the right thigh one inch, of the right calf half an inch, of the right side of the chest five-eighths of an inch, and of the right instep half an inch less than the left. The distance from the outer edge of the right acromion process to the tip of the right elbow was half an inch, and thence to the end of the right mid-finger was one inch, less than on the left. From the anterior inferior spine of the right ilium to the transverse axis of the knee-joint (inner aspect) was half an inch, and thence to the tip of the right internal malleolus was seven-eighths of an inch, less than on the left. The right foot was one-fourth of an inch shorter than the left. While the shoulders were kept at the same level, the distance from the lower edge of the outer end of the right clavicle to the tip of the right external malleolus was two inches less than on the left side. The clavicles were equal in length. A depression was visible externally over the right hip-joint, evidently caused by the pressure at every step of the tip of the trochanter major upon the muscles attached to or near it. The lower portion of the spinal column from the lumbar region was curved towards the left, and the boy walked with a "lurch" or twist at every step on account of the shortening of the limb. His mother married at 19. She was 33 when he was born, and he was her eighth child. She had had general psoriasis from her twelfth year. Her first baby was still-born, mature, and had spina bifida in the lower dorsal region; and her seventh was born a monorchid; the right testicle was still absent, and his skin was very rough and scaly, especially over the chest and abdomen, where not exposed. She did not know of any history of malformations of any kind amongst her own or her husband's progenitors. Dr. Eaton considered the case interesting on account of the extreme rarity of cases of congenital asymmetry affecting the whole side; on account of the progressive development, in an equal ratio,

of both sides, so that the defective side remained proportionately defective ten years and a half after birth; and on account of the mother having had general psoriasis from childhood, which indicated a constitution below par, having previously borne two congenitally defective children, and having had eight children within fourteen years of her marriage, circumstances which were apt to lead to the birth of children defective in development or stamina.

ACADEMY OF MEDICINE IN IRELAND.

Medical Section.

Friday, December 18th, 1885.

F. R. Cruise, M.D., President, in the Chair.

On the Quantitative Determination of Albumen and Urea in Urine.—The President (Dr. Cruise) made a communication on this subject. The simple clinical methods which he demonstrated, were those of Dr. G. Esbach, chief of the chemical laboratory at the Hôpital Necker, Paris. The instruments used were those constructed by Brewer Brothers, of Paris. For the quantitative determination of albumen, Dr. Esbach used a tube, graduated in accordance with the result of experiment. Into this tube a definite quantity of urine was introduced, and then a definite amount of solution of picric and citric acids. After twenty-four hours, the deposit, which had fallen, was read off by the graduations, which gave the amount of albumen in grammes per litre. These manipulations occupied about one minute. Dr. Esbach's method of determining the amount of urea in urine was founded on that of Dr. Edmund W. Davy, of Dublin, published in 1854. He took a glass tube, fifteen inches long, closed at one end, graduated in cubic centimètres and millimètres. First he introduced about eight cubic centimètres of a rather strong solution of hypobromite of soda, adding distilled water until the mixture reached 140 millimètres. Next he took one cubic centimèter of the urine, and having discharged it rapidly into the tube, closed the latter promptly with his thumb, and by a few movements of inversion thoroughly mixed the contents. Decomposition set in at once, and a considerable froth was developed. As soon as this subsided, he plunged the end of the tube, closed by the thumb, into a water-bath; then he removed the thumb. The fluid was rapidly lowered, being expelled by the nitrogen evolved. When all was steady, he again closed the tube with his thumb, under water, removed it from the bath, and holding it upright, read off the amount of fluid left. This would be less than the 140 millimètres with which he commenced operations, and the difference between the two amounts gave the volume of nitrogen. The next point was to estimate the amount of urea from the volume of nitrogen, making allowance for the state of gaseous tension at the moment. Dr. Esbach provided an easy method of accomplishing this without any calculation, as follows. First, he provided an ingenious instrument, which he termed a baroscope, which indicated gaseous tension, according to the existing temperature; and, secondly, he gave a set of tables constructed on the basis of the volume of nitrogen, and the number indicated by the baroscope. The entire process occupied about five minutes. Dr. Cruise dwelt on the importance of making frequent quantitative analyses of albumen and urea, as well as on the facility with which a fairly accurate result might be obtained by the methods he exhibited.—A discussion followed, in which Dr. Quinlan, Dr. A. W. Foot, Dr. Tichborne, Mr. J. A. Scott, Dr. W. G. Smith, Dr. Falkiner, and Dr. Finny, took part, and the President replied.

Partial Embolism of the Inferior Division of the Central Artery of the Retina associated with repeated attacks of Chorea.—Mr. Arthur Benson read a paper on this subject. The patient, a house painter, aged 21, had had rheumatic fever seven years ago. Three years ago he had an attack of left hemichorea; two years ago another attack of more general chorea; and last year a third attack of chorea. On October 14th, 1885, he suddenly became blind of the right eye; in a few minutes vision began to clear from below upwards, and in fifteen minutes the lower half had quite cleared to the horizontal line, passing through the fixation-point. There the improvement abruptly ceased, and had not since proceeded. The ophthalmoscope showed œdema of the lower half of the retina, and "a cherry-red spot" at the macula. The vessels (veins and arteries) were all filled with blood, and pulsation could be produced with pressure, showing that circulation had been re-established at that time (that is, fifteen hours after the eye became blind). The vessels of the lower half of the fundus were not quite so plumply filled as those of the upper half. In a few days, there were evidences of atrophy of the disc, and shrinking of the retinal vessels in its lower half; and as the œdema of the retina diminished, the atrophic changes increased, and the vessels shrank markedly. The diagnosis was, that an embolus for a time partially blocked the central artery before its bifurcation, and subsequently was shifted into the inferior division and partially blocked it; for the vessels were all carrying blood in the right direction, showing that the obstruction was not complete. He had never had any similar attacks. His heart and kidneys were carefully examined, and nothing abnormal discovered. He was in other respects healthy, and there was no evidence to show whence the embolus came. The case was of interest, as bearing upon the embolic theory of the pathology of chorea. Drawings of the ophthalmoscopic appearances and charts of the field of vision were exhibited.—Dr. Nixon said there had been no suggestion whence the embolism came. Where there was no peripheral disease with which to connect the embolism, it must be assumed that it came from the heart.—Dr. Purser observed that not one out of fifty embolisms came from the valves of the heart. In a great many cases, the deposits on the valves of the heart were too firm to be washed off. It was much more likely to have resulted from thrombi, which became broken up, and were carried away in the current of the circulation.—Dr. Foot said the patient had been under his care, affected with hemichorea on the left side, in his arm, then the leg, and lastly the face. At that time he had no cardiac murmur, but he gave a history of rheumatism, and said that he had had a rheumatic ailment about nine months before the attack of hemichorea. It was then the fashion to treat chorea hypodermically with arsenic, and the patient was injected with arsenic twenty-six times, beginning with five and going up to thirty minims. At fifteen minims the strength was doubled, nor did he stop until he gave a quarter of a grain of arsenic under the skin. He believed that camphorated water would have done as well.—Dr. Benson, in reply, said he had seen but a very small percentage where a distinct heart-lesion was discoverable.

Surgical Section.

Friday, December 11th, 1885.

Sir Charles A. Cameron, M.D., President, in the Chair.

The Surgery of the Suakim Expedition.—Mr. Tobin, late of the Army Medical Department, read a paper on the above subject, which is published at page 145.—Mr. Wheeler, Professor Bennett, Mr. Thomson, Mr. Croly, and Dr. Baxter took part in the discussion.—In reply to the various speakers, Mr. Tobin remarked that, concerning the fissuring of the bones, the experiments of Professor Longmore showed that when bullets were fired into long bones, the fissuring was often carried down to the capsule of the joint, the synovial cavity being opened into. By rough handling the fissuring would extend into it, but with care the wound was rendered non-penetrating. As to Listerism, he could not say whether Lister's theory was correct or not; but he had it always before him, and he thought that cleanliness could not be better arrived at than by carrying out the idea which had the name of "Listerism." If the idea was known before, Lister, at any rate, deserved the credit of having made it current coin. In his operations, a long anterior flap, if easily cut, was the one he found most suitable, as it fell over the wound like the cover of a box, letting it go on healing, whether dressed or not, and therefore obviating the necessity of frequent dressings.

On the Organisation of the Medical Department in an English Army Corps, with Suggestions as to Volunteer Aid.—Surgeon-Major Evatt delivered an address on this subject. He said that civil medical men generally knew nothing of the army system of work, and both sections of the profession suffered in consequence. The army-surgeon had developed ambulance aid to a point far beyond average civil arrangements, and the systematic training of the students in this work would be useful to all civil medical men. The medical service of the army had worked out a very logical system of hospital administration, based on the principle that the trained medical officer was the best fitted individual to be governor and director, as well as scientific head. Civil medical men, as a rule, had little power in their hospitals, and the students received no training in administration; yet it was a highly important matter, as hospitals went to grief constantly, not from defective science in surgery, but from bad nursing, bad construction, bad drainage, want of discipline and supervision; yet in none of these heads were the students trained. He then explained the war system of the army corps, showing on a diagram the battalion-aid, the bearer-companies, the field-hospitals, the hospitals on the communications, the base-hospitals, and the hospital-ships; and traced the course of the wounded soldier from the battle-field back to Dublin. He then said that, with the new duties undertaken by the medical service of the army, no change had been made in the student's training. No training for enforcing discipline had been given to the student, no teaching in ambulance aid, and no

teaching in hospital administration had as yet been made part of the student's course. He suggested that the students should, as a matter of routine, be drilled in ambulance-drill; secondly, that definite teaching in hospital administration should be given them, namely, in cooking, nursing, *personnel*, construction, ventilation, and drainage; and, thirdly, that residences for students were highly desirable in connection with the medical schools, to improve the discipline of the student and his social comfort. If students were so trained in the ideas of the military science, in time of war civil medical men could be utilised as aids, with the certainty that they would be disciplined men. Everything went back to the training and the discipline of the student.—Mr. CANTLIE, of Charing Cross Hospital, London, advocated the importance of bringing civil surgeons into "touch" with the Army Medical Department, by the means which Surgeon-Major Evatt had suggested, and stated that he had himself organised a volunteer corps of medical students.—Dr. BARTON, Dr. DOYLE, Dr. MYLES, and Mr. THOMSON took part in the discussion which followed.

REVIEWS AND NOTICES.

ILLUSTRATIONS OF UNCONSCIOUS MEMORY IN DISEASE, including a THEORY OF ALTERATIVES. By CHARLES CREIGHTON, M.D. London: H. K. Lewis. 1886.

IT is very refreshing to find in medical literature a small book which deals with great subjects, like this of Dr. CREIGHTON'S, and which we can honestly wish were twice as long as it is. It is very carefully written, and there is hardly ever a sentence more—and, indeed, sometimes a sentence less—than is necessary to make quite clear a somewhat difficult meaning. It is not put into a shape fitted for students who are learning to answer examination-questions; in fact, it has some traces of the fascination of heresy about it, but rather is concerned with defending some hypotheses of wide range. The disinclination in practical professions to discuss fundamental questions is almost universal; but nevertheless such discussions must be gone through, if practice is to be made perfect, and their contemporaries owe thanks to those who will do it.

The phrase "unconscious memory" has been found so useful in supplying a gap in psychological nomenclature, which is not so well filled by any other term, that we are not sorry that Dr. Creighton adopts it, and stretches it a little, after the fashion of Hering, by using it, not of the whole man, but of each particular cell or tissue. The unconscious memory of a cell is shown by a tendency which has been induced in it by its previous experiences, and leads it to repeat what it has done before. In the great majority of cases, the experience has been normal, and so the tendency is towards the normal. In disease, the acquired experience is abnormal, and the subsequent tendency is twisted more or less towards the same sort of abnormality. If an epithelial cell, for example, have once by some abnormal irritation been provoked into a catarrh, a tendency may be thereby set up which makes it continue the catarrh after the provocation has ceased, or repeat it unprovoked. It falls into a habit, which constitutes a disease, or a tendency to disease, which is intensified by persistence, and may be transmitted by inheritance. That is the fundamental method of origin, Dr. Creighton urges, of many maladies; of chronic catarrhs, such as gleets; of chronic skin-diseases, such as psoriasis; of chronic spasms, such as whooping-cough; and it has had its effect in those most important groups of ague, syphilis, cancer, and tubercle. And supposing this bad habit, this unconscious but persistent memory of disease, to have been at the root of such formidable maladies, what lesson in treatment is to be learnt from it? Clearly that, if there be any drugs which can break down habits, they will be invaluable. And when we come to reconsider and rationalise the powers of that somewhat mysterious class of remedies which we have been accustomed to call the alteratives, we shall find that they, to various extents and in various provinces, have such powers, for they establish a diversion from the repetition of morbid functions, and during this diversion the normal tendencies of the tissues may be re-established; "their action is simply to break the habit, to banish the usurping memory, to give the indwelling and proper action of the part its long-deferred opportunity of coming in again" (page 54). They clear the way for Nature to recover herself. To realise this suggestion rather more fully, we must turn to the examples. Dr. Andrew Plummer first showed how possible it was to cure "inveterate psoriasis," "indolent buboes," or "a chronic gleet" by the alteratives, sulphurated antimony and calomel, which became so popular as to earn the name of "Plummer's pill." Among habit-coughs, Dr. Creighton puts "stomach-cough," which may best be cured by the alterative arsenic, or a change of habits of living; and also whooping-cough, which he ascribes to the persistent memory of past irritation, such as bronchitis, and which may best be controlled by "habit-breaking" drugs, such as oxide of zinc or quinine. Ague, again, being "a habit" which is periodic and paroxysmal, because it is in origin nervous, yields also to the great habit-breaker quinine; and so also do some periodic and paroxysmal neuralgias. Diabetes sometimes, but not always, begins with occasional and fitful periods of glycosuria, which strengthen into a habit, which may perhaps be broken by an early treatment after the American fashion, by "a combination of arsenic and bromine administered in small doses, and for a considerable period;" (page 110) "albuminuria may also sometimes become a habit," following one or more attack of congestion of the kidneys from chill," and is possibly to be treated in such cases by small doses of Plummer's pill, in favour of which there are some "floating traditions." "Whether cases of scarlatinal congestion come under the same law, I shall not attempt to say. Whenever there is an abiding cause, such as amyloid disease, or any of the extrinsic conditions that make embarrassed venous reflex, it is obvious that the memory-doctrine of cure does not hold even within the modest limits assigned to it in renal pathology."

The continual visceral provocation of bad diet leads to a gradually acquired bad habit of function, a tropho-neurosis, which grows and strengthens into a diathesis, such as seen in pellagra originating from eating bad maize, leprosy from putrid fish, or beri-beri from bad rice. In the first two, at least, the diathesis has acquired dominance enough to be hereditary, and to be difficult to touch even with alteratives. Dr. Creighton's theory is, perhaps, most interesting as applied to syphilis; for, as he says, "the most famous of alterative cures is the cure of syphilis by mercury." What habit is it, then, that is broken here? It is that habit, answers Dr. Creighton, that Hunter summed up, when speaking of syphilitic sores, as "their small disposition to heal." The phagedænic tendency is one kind of indisposition to heal; the healing, "not by granulations, but by a kind of granulomatous tissue," or, as it would usually be called, by a hard sore, is another. Of the method of action of mercury, too, Hunter had some idea when he wrote: "Mercury may act upon the principle of destroying the diseased action of the living parts, and counteracting the venereal irritation by producing another of a different kind." The tradition of bad healing, or of "granulations gone wrong," as Dr. Creighton would phrase it, is for a time suspended by "the usurping action of the metal;" the morbid habit is broken by being suspended, and Nature can resume her ordinary paths of healing, retreating "to the safe termination of scar-tissue in a more or less literal sense."

In cancer and tubercle, we have to go further into the past to find the morbid habit; and it is only natural, consequently, that it is much harder to find a habit-breaking drug to relieve them. Out of habitual visitations, catarrhs, congestions, etc., "the cancerous element grows, in a very peculiar manner. The cancerousness or structural infectiveness of the localised condition is a summation or integration of the morbid habit, a placing of it on an independent or self-existent footing, whereon it may survive and increase as a kind of living thing within the general life of the body." In tubercle, Dr. Creighton avails himself of his careful investigations of bovine tuberculosis to draw the conclusion that, "in stall-fed bovines," subserous lumps of fat are gradually converted by malnutrition into morbid growths, and goes on to say: "I cannot escape from the conviction that the peculiar errors of nutrition in the domesticated bovine species all over the world are the real fountain and source of human tubercle." "The primary idea of tubercle is fat gone wrong, the secondary idea is inadequate blood-supply to a redundant tissue." We have not the opportunity of calling in the reparative forces of Nature in tubercle as we had in syphilis, for the reason that the tradition or fundamental type of tubercle is not that of bad healing or of granulations gone wrong, but of bad nutrition and adipose tissue gone wrong. We must aim at obsolescence as the safest step, by means of better blood and better food.

These last three great maladies—syphilis, cancer, and tubercle—are by no means such good examples as epilepsy, chorea, and hysteria, of unconscious memory giving rise to a disease, though they offer in syphilis the greatest example of cure by an alterative. And what are we to class among these alteratives? and how are we to characterise them? They are mostly metals or metalloids (mercury, arsenic, antimony, zinc, copper, iron, iodine, chlorine, bromine), "foreign to the body, which enter into combination with the body's protoplasm, more or less loosely, as in the case of mercury albuminate;" they "are silent in their action (Brunton);" "may neither stimulate nor depress

(Wood)," or "produce no effect on a healthy person (Duncan)," in single medicinal doses. "They are slow to leave the body, cumulative in their action, and apt to be followed after a time by constitutional symptoms." Quinine agrees in passing through the body without decomposition, and at a slow rate; so, too, does strychnine.

Such, in very crude and insufficient outline, are the chief points on which Dr. Creighton treats; and for any judgment of the reasons by which he supports his conclusions, it is only too plain that recourse must be had to the pages of his present book, and to the very suggestive article on Pathology which he has lately contributed to the many first-rate essays which are being gathered together in the new edition of the *Encyclopædia Britannica*.

His hypotheses involve certainly many debatable points, and we cannot help imagining Dr. Creighton both admitting that, and enjoying the debates. We have no room for full discussion here. It might easily be argued that "the diversion" or substituted irritation afforded to the morbid habit by the alterative is too hypothetical to admit of proof or disproof; and, if whooping-cough were a habit-cough, would it not be likely that it should recur, or tend to recur, at least in the younger years of spasmodic tendency? And why should a first attack be protective against a second, as has been the experience of most careful observers? The action of quinine is not easy to explain, perhaps because it is a complex combination of several actions. We are told that it holds in check the paroxysmal "upset of the heat-regulating nerve-centre" in ague, by breaking the habit; but how is it that it acts as a preventive? It surely cannot break a habit which is not yet begun. And does not the description (p. 97) of the origin of pain in rheumatism from "the upset of the heat-regulating centres by chill, and the extravagant amount of heat-generating nerve-influence sent out" thereby, leave us in some difficulties when we see the hyperpyrexia coming on and the pain going away? But Dr. Creighton's positions are not to be overthrown by small criticisms. They may not be correct in every particular; but they are attempts to take our eyes off the details of the present, and to sum up the results of a wide survey of time and space; and, if there is one thing more than another which is of the highest importance in the study of the most difficult questions of disease, and, we are afraid we must add, more generally neglected, it is the use of the historical method. It is as a noteworthy exponent of that Dr. Creighton earns our best thanks. It requires a wide grasp and student's habits, for it is not likely to lead to immediate profit; but, as in all other branches of knowledge, the understanding of what things really are has been found to involve the unravelling of the processes by which they came to be what they are; so too, in disease, it is beginning to be felt that the true nature of disease must need its true history for its right understanding, and must need its right understanding for its right treatment.

NOTES ON BOOKS.

An Index of Surgery: being a Concise Classification of the Main Facts and Theories of Surgery for the Use of Senior Students and Others. By C. B. KEETLEY, F.R.C.S., Senior Surgeon to the West London Hospital, etc. Third Edition. (London: Smith, Elder, and Co. 1885.)—The rapidity with which this valuable book has passed through three editions testifies abundantly to the skill with which its author has fulfilled the object in view. This *Index* is intended for the use of the senior student, shortly before he goes in for his final examination, and after he has carefully studied the complete text-books of surgery. It is not so much an introduction to surgery, as a summing up of surgical knowledge—both facts and theories—in concise and classified order. It presupposes a study of text-books, and it comes in to supply the need, which both students and surgeons feel, of summarily reviewing the knowledge which they have acquired more or less perfectly from the reading of text-books and monographs. It has achieved a well-deserved reputation for brevity of style and fulness of matter, for accuracy and practical usefulness. The new edition is well revised, to bring it up to date; and the popularity of the book is likely to increase in proportion as it becomes generally known.

A Guide to the New Pharmacopœia, comprising an Epitome of the Changes, etc. By PROSSER JAMES, M.D., Lecturer on Materia Medica and Therapeutics at the London Hospital, etc. (London: J. and A. Churchill. 1885.)—This volume is perhaps the most complete commentary on the additions and alterations contained in the last issue of the *British Pharmacopœia* (1885), which has hitherto appeared; and, inasmuch as these additions will in future be comprised in the subjects for examination, a work dealing with them clearly and briefly, must be welcome to students. The plan of this little work is very straightforward; the author commences by pointing out the alterations in the strength of potent preparations, such as the injectio morphinæ hypodermica, etc., and this is followed by a short chapter on changes in the nomenclature. A table is given of the drugs which have been excluded from the new *Pharmacopœia*, and then we have the 114 additions, which are classified according to their chemical or physical characteristics. The information given in respect of the more important of the additions is very full, and will be of service to the practitioner, as well as to the student. It is essentially of a practical nature, all controversial matter being put aside, in favour of a plain statement of the nature and uses of the various substances.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

POROUS PLASTERS.

MR. A. DE ST. DALMAS, Leicester, forwards us specimens of porous plasters spread on scarlet felt. About a year ago, means were introduced for spreading plasters upon felt by new machinery. This felt holds as much plaster as leather, is warm, and at the same time comfortable to the patient, and clean. All these felt plasters are perforated with fine holes. They are put up in convenient tin cases, and would seem to be very comfortable and convenient in use, especially in winter weather. The specimen forwarded to us, belladonna plaster, appears to be a very good preparation. Two other specialities, of which samples are forwarded, are "The Leicester" improved adhesive plaster, which is spread on fine flesh-coloured cambric. It adheres firmly with the heat of the body, and will adhere also to a bleeding wound. This also is packed in tins, and is made in various widths. The speciality of the "Leicester selvedge bandages" is that, in the process of making, the edges are so arranged that they will expand in exact proportion to the middle of the fabric, so that while the selvedge is perfectly firm, and does not unravel in wear or washing, it does not chafe or indent the most tender limb. These bandages can, with ease, be very evenly applied, and the pressure is more equally distributed; they do not easily slip off; they are strong and elastic, and, being of open texture, are suited for use with starch or plaster of Paris.

SCHERING'S ABSOLUTE IODOFORM.

THE Chemische Fabrik auf Aktien, Berlin (D. Schering) sends us specimens of iodoform by electrolysis, and has given the name of iodoformium absolutum to the product. The iodoform is absolutely pure; it is a mild smelling, silky, delicate, and soft scaly powder of a pure citron yellow colour. By trituration it is easily reduced to a fine powder. It is not higher in price than ordinary iodoform, and is a very great improvement on the other preparations, which it will doubtless supersede. The London agents are Messrs. Zimmermann, of Mincing Lane.

THE PERCUSSO-PUNCTATOR IN LUMBAGO AND RHEUMATISM.

SIR,—I have read with much interest the description by Mr. Brindley James of the instrument called by him the percusso-punctator, and can confirm from personal experience all he says with regard to its beneficial use in lumbago and rheumatic pains, having used an instrument almost identical for the past thirty years. Mr. James is, therefore, mistaken in supposing he is the originator of the instrument. It was invented over thirty-five years ago by a German quack called Baunscheidt, who called his treatment Baunscheidismus, using on the needle-points an irritating oil, which he sold at a high price. The instrument of Baunscheidt will be found figured in the catalogue of Treman, the instrument-maker of New York (published in 1879), part i, page 66, fig. 201, and is called "Baunscheidt's Lebenswecker." It differs from Mr. James's only in the needles being protected and withdrawn by means of a spring, and in not having any attachment for a galvanic battery. In all other respects, and for use, the two instruments are identical.—I am, etc.,

194, Camp Street, New Orleans. J. L. CRAWCOUR, M.D., M.R.C.S.Eng.

URINE TEST PAPERS.

SIR,—We note at the conclusion of your review of Dr. Oliver's bedside urine-testing a remark about "the difficulty of obtaining them except at an almost prohibitive price." Permit us to draw your attention to our price-list, and note we make thereon, showing that thirty-six samples of urine can be tested for one shilling. Some of the papers being prepared for quantitative use, require great time and care to make.—Yours obediently, WILSON AND SON

Harrogate.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 23rd, 1886.

RECENT RESEARCHES ON THE PHYSIOLOGY OF THE BRAIN.

PROFESSOR VULPIAN has recently published an account of a series of experiments on the physiology of the brain, and their results. Pflüger's theory is admitted by nearly all physiologists. MM. Rosenthal and Marey are among the rare exceptions who believe that it is based on results which are not clearly demonstrated. This theory admits that electric stimulus communicated to a nerve becomes more and more intense, in proportion as it travels along the nerve from the stimulated area towards the periphery. Thus, of necessity, an electric stimulus of unvarying intensity produces muscular contraction, more and more exaggerated, according to the increased distance of the stimulated area from the muscles. Another logical deduction from Pflüger's theory is, that a current which is too weak to provoke muscular contraction near the peripheral extremities, would have this effect if the current communicated with the nerve-stimulus at a point farther removed from the ends of the nerves. M. Vulpian made the following experiment, which apparently contradicts Pflüger's theory. A dog was submitted to the effects of chloral, until the reflex phenomena having origin in the medullary substance were suppressed. The external popliteal nerve was then isolated at the upper part of the thigh, and a glass rod was passed under it. The tibialis anticus muscle was isolated in the same manner, and it was stimulated by a current from a Dubois-Reymond's apparatus; when the two conductors were separated by a short distance, the foot contracted. The external popliteal nerve was also stimulated by the same current, but no movement was provoked; but, when the conductors were placed closer together, contraction took place. Other experiments made by M. Vulpian proved equally adverse to the accuracy of Pflüger's theory.

Having obtained these data concerning peripheral nerves, M. Vulpian endeavoured to ascertain if the same phenomena occurred in the brain, and if the grey substance presented certain areas, some more easily stimulated than others, as is supposed by certain physiologists who have studied the effect of electric stimulus on the cerebral surface. When the regions in a dog's brain, which are admitted to be the motor centres for the facial muscles, and for the fore and hind legs, are successively submitted to the influence of an electric stimulus, it is observed that the first region is influenced by a weaker current than the second, and the second by a weaker than the third. As the experiment first described demonstrates that the strength of the current must be proportionally greater the farther the region stimulated is removed from the periphery, it is not logical to suppose that one cerebral region is more easily stimulated than another, but that it is a question of distance, that a proportion of the stimulus is spent on the road. The second experiment, according to M. Vulpian, is not only additional evidence that Pflüger's theory is fallacious, but its results have a direct bearing on cerebral pathology.

A stimulus communicated to regions of the grey cortical substance may be powerful enough to stimulate the nuclei of origin of the facial nerves and provoke facial movements, but not powerful enough to stimulate the nuclei of origin of the nerves of the limbs.

M. Vulpian also believes that he has succeeded in establishing a fact that negatives many others hitherto admitted, with regard to cerebral localisation. Many experimentalists believe that certain motor and sensory centres are localised in certain given cerebral areas. Some clinical phenomena seem to support this doctrine, others to disagree with it; M. Vulpian's experiments indicate that the grey cortical substance is not stimulated by the current in the areas known as centres; but that the underlying white substance is. He isolated electric conductors by means of gutta-percha, and then passed them along the grey substance; he thus was able to observe that an electric current which was not strong enough to stimulate the grey substance provoked movement. He also ascertained that, if the grey substance were coagulated by means of methyl-chloride, an electric stimulus provoked movements in the limbs of which the motor centre had been localised in the grey substance, which he had destroyed by congelation. These two experiments, he considers, indicate that the centres which have been localised in certain regions of the grey substance have no real existence. The real origin of the nerve-fibres is in the underlying white substance; the grey substance does not present isolated groups of cells appropriated to different functions.

M. Vulpian has learned, by means of his experiments, that the brain is capable of receiving a stimulus during only a few seconds after death. Once only he observed, in a dog's brain, that the stimulation-period extended to nearly one minute and a half after the cardiac movements were suddenly arrested by electrisation. M. Vulpian affirms that, in those cases where experimentalists have believed that stimulation of the cerebral motor regions has lasted longer, they have mistaken for the result of cerebral stimulation contractions resulting from direct electrisation (by direct or diffused currents) of the nerves and muscles near the brain. The contractions produced by faradisation of the cerebral lobes a few minutes after death never take place in the limbs; they are always limited to the muscles of the face (especially the temporal muscle), and to the muscles of the neck (including the trapezius muscle). M. Vulpian's assertions have reference to experiments made after part of the cranium has been removed. The results of those made under other conditions cannot be considered valid. If the faradic current be not very intense, these contractions are always limited to the side faradised. If the left cerebral lobe be electrified, the contractions appear on the left half of the face and neck. If the current be sufficiently strong to provoke contractions on both the left and the right sides, they are always more marked on the side which has been submitted to faradisation. The direct stimulation of nerves and muscles by means of direct or diffused currents is followed by phenomena exactly similar to those obtained by the following experiments, in which stimulation does not enter into the question.

A few minutes after crural pulsation was arrested in a dog by faradisation of the cardiac ventricles, the brain was quickly removed by cutting the spinal cord behind the medulla oblongata, and dividing also the cranial nerves. After a few minutes had elapsed, the brain was carefully replaced in exactly its normal position. The electrodes of an induction-apparatus were placed on the cerebral lobes; the points of these electrodes were at a distance of five millimètres (nearly two inches) from each other; a strong current was then passed. The temporal muscle, and the muscles of the side of the neck, were electrified over the same side. The muscles of the neck especially contract when the posterior third of the cerebral lobe is faradised, and still more powerfully when the surface of the cerebellum is stimulated. These phenomena occur about half an hour after cardiac contraction is arrested. When the electrodes penetrate the lobes, the contractions are more violent than when they are applied to the surface. Contractions also take place if, after the brain is removed, a wet pressed sponge be placed on the medulla oblongata. If a faradic current be passed through the sponge, contraction of the temporal muscles, or of the muscles of the neck, takes place on the side electrified, according to the areas which receive stimulation. M. Vulpian has, by electrifying the surface of the wet sponge with a strong current, provoked contractions in the temporal muscle of the corresponding side, forty-five and fifty minutes after circulation had ceased. Generally, those phenomena which are clearly observed twenty-five minutes after circulation is arrested, are not repeated thirty-five minutes afterwards.

These experiments have been made on dogs, but M. Vulpian does not suppose that the period of cerebral stimulation after death, in adult dogs, differs greatly from that of other adult mammals, unless they be hibernating mammals, and in a state of hibernation. The cause of death influences but slightly the length of this period. In cases where death results from sudden arrest of the circulation, the stimulation-period after death is of longest duration.

THE ART OF DELAY AT THE COLLEGE OF SURGEONS.

On Thursday, January 14th, a quarterly meeting of the Council of the College of Surgeons was held, and the proceedings were duly reported in the last number of the Journal. Our readers must have observed a highly instructive passage in the report, which might form an useful stock-quotation whenever any Fellow or Member of the College may in future desire to demonstrate the anatomy and physiology, or, more scientifically speaking, the pathology, of obstruction as practised at the Council. "The President," we are informed, "reported the result of the last meeting of Fellows and Members; and the resolution carried at that meeting was read, on which Mr. Macnamara moved, by permission of the Council, without giving notice, 'That a Committee be appointed to ascertain and report to the Council the views of the Fellows as regards the advisability of Members being allowed to vote for the election of Fellows as members of Council.' This was seconded by Mr. Thomas Smith. An amendment was moved by Sir James Paget, and seconded by Mr. Cooper Forster, 'That the consideration of Mr. Macnamara's motion be deferred until after the report of the Committee on the conditions of admission to the Fellowship shall have been presented to the Council.' The amendment was carried *nem. con.*, and, on being put as a substantive motion, was also agreed to *nem. con.*" An excellent sample this of business as carried on, or rather as kept standing, by the Council, as at present constituted; and we may reasonably conjecture how much worse it would be were the Council left alone by those troublesome people who want their dues to be granted to them.

The action of the Council in this instance will doubtless be plausibly defended on the principle that two things cannot be done at once. The saying is true when one hand or one head is in question; but, when a corporation act on this principle, the case is quite different. On looking at the present dispute with some care, we may note that it is not even a question of "two things." The expression "two things" implies two objects or matters that are quite different, or, in more precise and dignified language, not in any way homologous. Yet Mr. Macnamara's resolution embodies a question not only homologous to that now under the consideration of the Committee on the Conditions of Admission to the Fellowship, but also in most respects a part and parcel of the latter question. The nature of the Fellowship must surely involve its relation to the Membership. The simultaneous consideration of the two questions, which are only parts of one great question, as we have just noted, would be both desirable and advantageous; yet, for routine or prejudice, Mr. Macnamara's proposal was needlessly deferred, last Thursday week, until the presentation of another report on a subject closely allied to the matter embodied in that proposal.

We cannot see in this action of the majority of the Council anything higher than a deliberate and needless act of obstruction, which we understand, on very good authority, has caused annoyance and given offence to several well-known active advocates of reform and progress who are members of the Council. These gentlemen desire such improvements as may be brought about by an amicable arrangement between Council, Fellows, and Members, and earnestly strive to avoid extreme measures. In fact, they do not wish to see the Fellows or Members of the College of Surgeons compelled to gain their desires by direct appeal to Government, so as to settle matters over the head of the Council. That catastrophe must, however, be brought about sooner or later if the Council persist in encouraging the fatal tendency of its official members to obstruct, delay, and mystify, and to direct affairs on timid or pedantic principles rather than on the laws of common sense and reasonable progress.

It is more than ever plain that a small majority of the Council are still disposed to keep the Members at arm's length, and to deny to them their obvious right and inevitable privilege of taking part in the affairs of a College, of which they are the backbone, and chief honour and support. For a limited Council and a few hundred Fellows to ignore the administrative rights of about 16,000 Members, and to deny them the franchise due to their attainments, their diploma, their social position, and their intellectual standing, is an unendurable anachronism. It exists only because it has not been sufficiently discussed or examined. The Members are not the enemies, they are and will be the best friends, of the College; the Council will do well to accept them as such as quickly as possible.

PHOTOGRAPHY IN PATHOLOGY.

At a meeting of the New York County Medical Association, on November 16th, Dr. J. M. Gourley exhibited a series of photographs of pathological specimens, taken while the specimens were immersed in water. A series illustrating diseases of the male genito-urinary organs were chosen for the experiment. For the purpose of being

photographed, each specimen was carefully fastened on a black board by means of pins, and sunk in a tank of clear water. Owing to the density of the water, all irregularities of the surface of the specimens, instead of lying flat, were made to float. We are informed that the result was extremely successful. It cannot be doubted that a cheap method of producing satisfactory photographs of anatomical and pathological specimens would secure the approval of scientists, and of all who prepare contributions for societies and who write medical works. Hitherto such photographs have proved somewhat expensive, and are not highly if at all ornamental; and what is worse, they have generally failed to give a good idea of what they are supposed to represent. When taken from specimens hung up dry before the camera, they often assume the unsightly appearance of irregular masses of clinker or pumice-stone, with something like tendons or bones mixed up with the ugly black objects representing flesh, muscle, or mucous surfaces. In fact, the soft structures do not come out clearly, so that photographs of diseased viscera often fail to instruct the observer, but rather remind him of Ovid's description of chaos. Dr. Gouley's new process promises excellent results, nor need any valuable museum-specimens incur the least risk through being taken out of spirit and placed in water for a few hours. It need hardly be added that recent specimens must be the most suitable for photography, since they have not assumed the uniform pale colour of old spirit preparations, and pale surfaces do not take well. When widely adopted, good photographs of this kind will promote uniformity in medical illustrations, and save authors from the expense of having specimens drawn. Microscopic photography is advancing slowly but surely. Dr. R. L. Maddox, who perhaps has done more to advance photo-micrography than any one else in this country, is the inventor of the dry gelatine plates, now generally used, for which a Gold Medal was given to him at the Inventions Exhibition, and which appear to have taken the place of collodion. There are now many who practise photo-micrography, an art often confounded with micro-photography, which term is generally applied to a process by which large objects are photographed very minutely.

Even now, the whole art of photography appears to be yet in its infancy. Improvements are constantly announced; one of these is the isochromatic plates which are said to represent colours in different gradations of tone, so that certain tints will no longer offer difficulties to the photographer. Opticians are being actively encouraged to bring out improvements in their object-glasses; and Messrs. Power and Leland, Zeiss, and others, have produced improved formulæ in water and oil immersion lenses, as well as dry. The medical writer may add that these important technical refinements are doubtless very good, but that when the specimens are taken, there yet remains the question of engraving. Some process of chemical engraving that will print with type without hand-touch, and will represent the specimen as truthfully as possible, has yet to be discovered. Hitherto, photographic engraving has not proved satisfactory.

Hospital Saturday at Birmingham has been fixed for May 29th.

His Royal Highness the Duke of Cambridge has consented to preside at the Festival Dinner of the City Orthopædic Hospital, on Thursday, May 6th, 1886, at the Holborn Restaurant, in aid of the Extension Fund.

Mr. H. H. Naylor has called attention to the manner in which the quality of an aërated beverage, such as ginger-ale, soda-water, etc., may be affected by impurities due to the carbonic acid used in charging it.

To the list of army medical officers who have been killed while on duty, must be added the name of First-Lieutenant and Assistant-Surgeon Thomas J. C. Maddox, United States Army, who was killed in an affair with the Apache Indians in New Mexico, on December 19th.

Dr. John C. Draper, Professor of Chemistry in the Medical Department of the University of the City of New York, whose work on *Medical Physics* was reviewed in the British Medical Journal of December 12th, died of pneumonia, in the 51st year of his age, on December 20th.

The Municipal Council of Vienna has proposed sending a medical man to Paris, to work in M. Pasteur's laboratory, in order to study his method of treating hydrophobia. The expenses are to be paid by the City of Vienna. The proposal has been forwarded to the sanitary commission.

A death from hydrophobia was reported at Guy's Hospital on Wednesday. The deceased, a young man, a farrier by trade, was bitten, about three months ago, while engaged at his trade. No ill-effects were felt till a few days ago, when the fatal symptoms rapidly developed.

Four popular lectures on Hygiene will be given under the auspices of the National Health Society, by Dr. A. T. Schofield, at the Queen's Road Public Baths, Bayswater. An inaugural meeting, at which Sir Andrew Clark, Bart., will preside, will be held on January 29th. The first lecture of the course will be given on February 2nd, and the subsequent lectures on the 4th, 5th, and 9th of the same month. After each lecture, ambulance-classes will be held, instruction being given to ladies and gentlemen in separate rooms.

The prize of one hundred guineas, offered by the President and Council of the British Medical Temperance Association, for the best essay by a medical student, on the physical and moral advantages of total abstinence from intoxicating liquors, is to be presented to the successful competitor, Mr. H. A. W. Coryn, to-day (Friday, January 22nd), 1886, at the Rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, W., at 5 p.m., by the president, Dr. B. W. Richardson, F.R.S., who will deliver an address on Temperance and the Future of Medicine.

HYDROPHOBIA AFTER TWELVE MONTHS.

A report is published this week, of the death of Major Morley, from hydrophobia, at Malta, whither he had recently removed, having previously occupied the position of Deputy Commissary-General at Dover. A dog, belonging to Major Morley, was seized with rabies at Dover last year, and, it is stated, bit its master and several persons there.

INGLEBY LECTURES.

The second of these lectures "On some Functional Disorders of Females" will be delivered by Dr. Wade, F.R.C.P., Senior Physician to the General Hospital, on Thursday, January 28th, at 4 o'clock, in the theatre of the Queen's College, Birmingham. The subject will be "Some Nervous Disorders."

DEATH OF DR. ROLOFF.

A short but eloquent funeral oration over the late Dr. Roloff, Director of the Royal Veterinary College in Berlin, has been pronounced by Professor Virchow. Roloff had been Extraordinary Professor at the Agricultural Institute of the University of Hallé from

1865 to 1877. Besides numerous articles in Virchow's *Archiv*, his chief works are on the inoculation of pneumonia in cattle, 1868; on cattle-plague, 1871; on phthisis in swine, 1875; and on splenic fever in 1883. In 1876, Roloff was made a member of the Imperial Board of Health, and filled numerous important offices. He was only 55 years old when he died, and his body has been cremated in accordance with his expressed wishes. The veterinary profession throughout the world sustains a great loss by his death.

ICHTHYOL.

DR. LORENZ recommends ichthyol in a variety of cases. In a 30 per cent. solution, it relieves the severe itching of senile prurigo; for pruritus, a weaker solution is used, namely, 10 per cent. As an application to slowly granulating burns and ulcer, he has had excellent results; and internally, in doses of four tablespoonfuls of a 1 per cent. solution in the day, he has relieved the symptoms—vomiting, etc.—of catarrh of the stomach.

THE BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL.

THE Committee of the Skin and Lock Hospital have taken from Sir Alfred Gooch a piece of land, in the centre of the town, on which they intend building a new hospital. This will enable them to provide medicinal baths and beds for in-patients. For a long time past, their present premises have been insufficient for the accommodation of the increasing numbers of patients applying for relief.

PREVENTION OF RABIES.

THE order published by the Commissioner of Police on November 20th last, in reference to dogs at large in public thoroughfares in the metropolis, expired on January 17th, and on January 18th a fresh order in continuation of the same was published, extending its operation for a further period of sixty days. The police order of December 4th as to muzzling dogs is to continue to be stringently enforced until further orders.

DEATH OF A SURGEON FROM DIPHTHERIA.

WE regret to have to report yet another victim to diphtheria contracted in the discharge of his professional duty, in the person of Mr. George Searancke, surgeon, of Ashley Road, Bristol. He was attended by his personal friend Mr. Simpson, and was seen in consultation by Dr. Barrett-Roué, of Clifton, Mr. W. H. Harsant, and Mr. Greig Smith; but, in spite of every effort made on his behalf, symptoms of cardiac failure set in, and he died of asthenia on the sixth day of his illness.

THE GENERAL MEDICAL COUNCIL.

A MEETING of the Executive Council of the General Medical Council was held on Thursday last, at 12 o'clock, for the transaction of ordinary business and finance. Questions connected with the influence of recent legislation, in certain colonies, on the local status of practitioners on the *Register* of the General Medical Council, await discussion, and have been, we understand, the subject of some correspondence, hitherto without result, between the Chairman of the Council and the Colonial Office.

TELEPHONIC HYPNOTISM.

M. LIÈGEOIS, Professor at the Faculty of Law at Nancy, an enthusiastic experimentalist, has just invented what he calls "l'hypnotisme téléphonique." He sends people to sleep several miles distant from him, by transmitting to them by the telephone the order to go to sleep; he then, by telephone, suggests to them the acts he wishes them to commit, and his suggestions are faithfully obeyed. One young man was told to fire a revolver and steal a five-franc piece; on waking up, he committed both offences. A young girl who was sent to sleep by telephonic order, was told to sneeze twice on waking up, and to sing a song from *Les Noces de Jeannette*; she did both.

HYPNOTISM IN THE LAW COURTS.

A FEW days ago, a young girl was taken before a Paris tribunal, charged with stealing a blanket. She pleaded in excuse that she committed the crime whilst under the influence of a dishonest suggestion. Her judges refused to accept the excuse. Since her imprisonment, she has manifested other symptoms of hypnotism. A fellow prisoner suggested to her to write in her own name a most compromising letter, which she did; another suggested to her, whilst she was sleeping one night, to sign an appeal against her imprisonment. She immediately rose from her bed, pushed away the persons whom she met, and went direct to the office in the prison to sign her appeal. MM. Charcot, Brouardel, and Motels will examine the prisoner.

URETHAN AS AN HYPNOTIC.

IN the clinic of Riegel in Vienna, urethan has been given in a variety of cases, with the object of testing its action as a soporific. In chronic weakly conditions, and in heart-cases uncomplicated by excessive cough or dyspnœa, it was found to produce sleep in from one-quarter to half an hour. During sleep, the tendon and other reflexes are unchanged, the pupils reacting to light; on waking, there is no heaviness or drowsiness. The doses given, in twenty-seven cases with sixty-seven administrations, varied from one to four grammes. It is concluded that urethan is useful as a "pure hypnotic," but that it cannot replace morphine in the relief of pain or of cardiac dyspnœa.

TESTIMONIAL BUSTS AND PORTRAITS.

THE artists and sculptors are likely to have a good time just now, in perpetuating the outward presentment of some of the leading members of the medical profession. Beside the bust of Sir James Paget, by Boehm, which is commissioned for the Royal College of Surgeons, we hear of projects on foot for testimonial busts or portraits of Sir Henry Pitman, Sir Henry Acland, Professor Humphry, and Professor Redwood.

CEREBRAL TUMOURS.

THE next meeting of the Pathological Society of London (on February 2nd) will be entirely given up to the exhibition and discussion of specimens of cerebral tumour. It is expected that specimens will be shown by Dr. Byrom Bramwell of Edinburgh, Dr. Thomas Barlow, Dr. Coats of Glasgow, Dr. Saundby, Dr. Frederick Taylor, Dr. Charlewood Turner, Dr. Goodhart, and Dr. Hadden. It is hoped that other pathologists will send or exhibit specimens, so that a thoroughly representative collection may be got together. The Medical Secretary, Dr. Coupland, will be glad to receive as early as possible the names of intending exhibitors and speakers.

ROYAL COLLEGE OF PHYSICIANS.

THE lectures of the present year will be delivered at the College, Pall Mall East, on each of the following Tuesdays and Thursdays, at five o'clock: Gulstonian Lectures, by Dr. S. J. Sharkey, on March 18th, 23rd, and 25th, "On Spasm in Chronic Nerve-Disease"; Croonian Lectures, by Dr. P. W. Latham, on March 30th, April 1st and 6th, "On some points in the Pathology of Rheumatism, Gout, and Diabetes;" Lumleian Lectures, by Dr. W. H. Stone, on April 8th, 13th, and 15th, on "Man as an Electric Conductor, Condenser, and Electrolyte."

LIVERPOOL MEDICAL INSTITUTION.

AT the annual meeting held on Thursday, January 14th, the following list of officers, council, and Microscopical Committee was adopted. Those marked (*) did not hold the same office last year:—*President:* *Dr. J. Birkbeck Nevins. *Vice-Presidents:* Mr. Frank T. Paul, *Dr. Alexander, and *Dr. James Barr. *Treasurer:* *Dr. F. J. Bailey. *General Secretary:* *Dr. Bernard. *Secretary of Ordinary Meetings:* Dr. W. Williams. *Librarian:* *Mr. R. Williams. *Council:* Dr. J. Cameron, *Mr. R. Hamilton, Dr. Harvey, *Dr. Prytherch, *Mr.

Sheldon, Mr. H. O. Thomas, *Dr. A. Davidson, *Dr. Davies, *Dr. Robert Gee, *Mr. N. K. Marsh, *Mr. D. Harrisson, and *Dr. Wollaston. *Microscopical Committee:* Dr. Alexander, *Dr. Barron, Dr. Braidwood, Dr. Briggs, Dr. Hyla Greves, Mr. G. Hamilton, Dr. Hicks, Dr. Logan, Mr. Rushton Parker, Mr. Frank T. Paul, *Dr. J. Wiglesworth, and Dr. W. Williams. *Auditors:* *Mr. C. G. Lee and *Dr. H. Harvey.

INFECTIOUS HOSPITAL-ACCOMMODATION FOR LIVERPOOL.

THE corporation of Liverpool purpose to borrow £100,000 in order to provide hospital-accommodation for the city, and a public inquiry on the subject was held on January 15th by Dr. R. Thorne Thorne and Major-General Carey, inspectors of the Local Government Board. The Liverpool district is at present very inadequately provided with hospital-accommodation for infectious diseases, and some time ago the Central Board pointed out to the corporation that at least 750 beds should be available for infectious patients in the city. This view is, in the main, supported by the local health-officer; and it is in order to meet the acknowledged want that the present apparently large scheme has been promoted.

THE PATHOLOGY AND SURGERY OF CANCER.

A COURSE of lectures, illustrated by pathological and microscopical specimens, drawings, etc., is being delivered by members of the staff of the Cancer Hospital, Fulham Road, Brompton, at 4 P.M. on Fridays. Medical practitioners and students will be admitted on presenting their cards. The following are the lecturers and subjects. Dr. F. A. Purcell, January 22nd and 29th, Cancer of the Tongue. Mr. F. Bowreman Jessett, February 5th and 12th, Cancer of the Alimentary Canal. Mr. C. Stonham, February 19th, Pathology of Cancer; February 26th, Pathology of Tumours of the Testicle. Mr. C. E. Jennings, March 5th and 12th, Excision of the Uterus for Cancer. Dr. Herbert Snow, March 19th, The Treatment of Cancer, Surgical and Medical.

ST. JOHN AMBULANCE ASSOCIATION.

A MOST promising centre has been founded in the Isle of Man. The inaugural meeting was held at Douglas on Monday, January 18th. Surgeon-Major Hutton delivered a very instructive and practical address on the Association's aims and objects. His Excellency Spencer Walpole, Lieutenant-Governor, President of the Centre, occupied the chair, and was supported by a considerable number of the local practitioners and committeemen. Mr. Ernest Black has been appointed lecturer to the centre and an Association examiner. Dr. Richardson, Mr. Dearden, and Mr. Roxburgh will take charge of practical classes. Mr. J. A. Brown, of the *Isle of Man Times*, is Treasurer; and Mr. H. Stanley Nelson Secretary.

PASTEUR ON THE SYMPTOMS OF RABIES.

A CORRESPONDENT in Paris states that a person, bitten by a favourite dog recently, brought the animal to the Veterinary School at Alfort, to be examined, and carefully watched for some days; but, after the examination took place, the owner was informed that he could not receive an immediate answer to some questions he put, in conformity with the rules. He would have to come next day, and if the dog then presented no symptom of rabies, he would have to take it away. This not suiting him, he wrote to M. Pasteur, stating his case, and asking to be treated by him. M. Pasteur wrote back to him. As the hydrophobia scare appears to be spreading over the world, M. Pasteur's letter cannot fail to be read with universal interest: "Sir,—Do not trouble yourself to call on me, because it would be useless. Every dog, whether it eats or not, that is attacked with rabies, dies in a few days. When it eats, death is delayed a short time, but that is all. It cannot live for more than ten days, and will probably die on the eighth. During the interval, rabid symptoms will be shown. Lock up your dog, therefore, and chain it. Be careful, in feeding it and in cleaning away its litter, not to go within biting distance. If it survive the tenth day, you may have an easy mind. Meanwhile, attend to your wound; it should on no account be neglected. The saliva of a perfectly healthy dog may contain microbes which would cause an abscess. In very rare cases, the bites of such dogs hav caused septic blood-poisoning. If you find rabid symptoms in the dog, come at once to my laboratory, and I will be happy to treat you for rabies.—I am, etc., PASTEUR."

ADULTERATION MADE EASY.

THE legislative aspect of adulteration shows, according to the report of the county analyst of Buckinghamshire, analysed in the *Sanitary Record*, a new phase. The analyst refers to a recent case where a small shopkeeper was fined for selling coffee adulterated with chicory. The person, who was convicted, was charged subsequently with a similar offence, and it then appeared the adulteration had increased. It was brought out in evidence that the wholesale house paid the first fine, so that there was nothing in the Adulteration Act to touch the wholesale houses, and there was no hardship on the village shopkeeper. If this sort of thing were carried further, it would be advisable to represent such cases to the Local Government Board, showing the need for further legislation. The chief constable remarked that as much as 7d. per lb. profit was made by putting in chicory to the extent it had been. Sir Harry Verney thought it would be advisable to ask the Government to find a remedy.

ORAL TEACHING OF THE DEAF AND DUMB.

REFERENCE was made, in the last number of the JOURNAL, to the success of the oral method of teaching the deaf and dumb as practised at the asylum for sufferers from that infirmity in the Old Kent Road, and in the oral branch of the same institution at Ramsgate. Since then, we learn from official sources that Her Majesty has, on the recommendation of the Home Secretary, approved of the inquiry now being held by Royal Commissioners into the education of the blind being so extended as to include the education of the deaf and dumb and such other cases as would seem to require exceptional methods of educational treatment. The Queen has also approved of the appointment of Lord Egerton, of Tatton, to be chairman of the Commission, in the place of His Grace the Duke of Westminster, K.G., who, from reasons of health, is unable to continue in that office. It being necessary to strengthen the Commission, in consequence of the extended inquiry, Her Majesty has approved of Sir T. Selwin-Ibbetson, Bart., M.P.; Sir Lyon Playfair, K.C.B., M.P.; and Mr. B. St. John Ackers being appointed to serve as Royal Commissioners.

TYROTOXICON: A CHEESE-POISON.

DR. VAUGHAN, of the University of Michigan, recently read before the Michigan State Board of Health a paper on a poisonous fermentation product sometimes found in cheese, which is capable of producing serious or even fatal results. He isolated a substance, which he has named "tyrotoxicon." It is apparently more likely to occur in the soft cheeses prepared in small families, but is by no means confined to these. It not unfrequently occurs in the products of large manufactories, both in the States and in Europe. The symptoms produced by "sick" cheeses, as the poisonous ones are called, are dryness of the mouth and fauces, a sense of constriction in the throat, nausea, vomiting, diarrhœa, and great nervous prostration. These symptoms usually wear away after a few hours, but, in rare instances, death results from collapse. Unfortunately, "sick" cheese cannot be detected by any peculiarities of taste, smell, or appearance, and the only certain means of ascertaining its character is by chemical examination. Dr. Vaughan regards the litmus paper test as the readiest and most practical means. This depends upon the fact that cheese containing the poison is always strongly acid, while good cheese, although always somewhat acid to test-paper, is less decidedly so, and does not so quickly and deeply redden litmus paper. It is

not alleged that the test is entirely free from error, but only that it affords the most reliable ready means of guarding against accident from this source; and grocers should apply the test to all cheese which they purchase. The poisonous principle was found to exist in quite different proportions in different samples of infected cheese. From some, three times the amount was obtained as from an equal weight of other samples. Tyrotoxicon, when isolated, is in the form of long needle-shaped crystals, which are freely soluble in water, chloroform, alcohol, and ether. A minute crystal placed on the end of the tongue causes a sharp stinging sensation at the point of application, and this is presently succeeded by dryness and a sense of constriction in the throat. A slightly larger amount produces the other symptoms characteristic of poisoning by poisonous cheese.

HULL ROYAL INFIRMARY.

By the death of Dr. Kelburne King, a vacancy has occurred in the surgical staff of this hospital. Until now, the election has been in the hands of about 1,200 governors; but for some time past new rules have been drawn up, with the view of placing the election in the hands of the committee of the hospital. The present is considered a very opportune time for passing these rules, chiefly because it is expected that, if the election be vested in a committee, it may be freed from the effects of personal influence, and thus the best candidate be secured. No vacancy has yet been declared; but ever since the death of Dr. King several of the candidates have been carrying on a very active canvass among the governors, both personally and by means of committees and advertisements in the public papers. The exceedingly vigorous manner in which this is being done in some instances, has more especially led to complaints in the papers from bewildered governors, and there appears to be a wish to pass the new rules before any vacancy is declared. The most satisfactory rule would be to appoint a committee of election, including the medical staff or their delegates; and to prohibit miscellaneous canvassing. The general body of governors is the most unsatisfactory electorate, and they should commit their powers to a qualified and responsible tribunal.

GASTRO-ENTEROSTOMY.

A woman was recently admitted into University College Hospital, suffering from symptoms of pyloric obstruction. As a very mobile tumour could be felt in the situation of the pylorus, an exploratory laparotomy was performed by Mr. Arthur E. Barker. The new growth was found to extend too far along the lesser curvature to permit excision of the whole tumour and pylorus, and a palliative operation was therefore performed. A loop of the jejunum was picked up, and an opening one and a half inches long made in it; an opening of similar dimensions was then made in the stomach, and the two stitched together. In this way, a short cut was provided by which the chyme could pass from the stomach into the jejunum without traversing the diseased structures. The patient bore the operation well, and was able to take food by the mouth five days after the operation. Fourteen days after the operation she was completely convalescent, and expressed herself as greatly relieved.

MR. HUTCHINSON ON SYPHILIS.

Mr. Hutchinson's second Lettsomian lecture, delivered before the Medical Society of London on Monday last, is a sequel to his lecture of January 4th. The results of a further series of observations were discussed, and suggestions made as to the inferences which may be drawn from them. Mr. Hutchinson protests against the doctrine that the formation of gummata, deep ulcerations, and various skin-affections, such as rupia and syphilitic psoriasis, belong exclusively to the tertiary stage of syphilis. While acknowledging the difficulty that exists in distinguishing between the two categories of symptoms, he endeavoured to show that every symptom which is habitually described as tertiary may and often does occur quite early in the history of the disease. Mr. Hutchinson's explanation of the cause of this almost universal error respecting the relationship between secondary and tertiary symptoms is that, under a mercurial course, the secondary symptoms are delayed when they are not prevented, and so may only supervene when the period usually assigned for the appearance of the secondary symptoms is passed. From a clinical point of view, he said, the difference between secondary and tertiary symptoms consists rather in their tendencies than in their nature. The former are for the most part symmetrical, and disappear either spontaneously or under mild treatment, while the latter are characterised by asymmetry and by a tendency to break down and suppurate. The tissues of a person who has had syphilis are to be regarded as damaged, and so permanently placed at a disadvantage for the wear and tear of existence. They are liable under slight irritation to take on an inflammatory condition, which is apt to become chronic. Hence the presence of palmar psoriasis from the friction of an umbrella or walking-stick, and psoriasis of the tongue from the irritation of tobacco-smoke, or carious teeth. Further, this peculiarity of the tissues damaged by syphilis must obviously predispose to chronic inflammatory affections of the circulatory and nervous systems, and so pave the way under suitable conditions for ataxy or impairment of the cerebral circulation.

COMBATANTS AND NON-COMBATANTS..

Seldom has it been given to any officer by his death to bequeath a larger legacy of honour to the corps to which he belonged, than in the case of the lamented Surgeon Heath, who fell by the Burmese dacoits in carrying his wounded comrade from the field. He has shown that to every military surgeon is open the triple path of duty, attendance on the sick, succour of the wounded, and rescue of the wounded; and he has added another name to the long roll which has already proved that in the day of battle the military surgeon has not been found wanting. A more honourable or more interesting career can scarcely be offered by any other branch of the national service, than can be embodied in the duties of the military surgeon. That the rewards for these duties are becoming every day more adequate and more liberal is a matter for sincere congratulation; since, although there are many ready to perform these services, there are few out of whom humanity has been so far spiritualised as to render them indifferent to the public and substantial recognition of them. Under these circumstances, the moment may not be inappropriate to again bring forward the question, whether it is just that military surgeons should continue to be regarded and rewarded as "non-combatants." The serious hardship that results from the existing distinction between combatant and non-combatant cannot be better illustrated than by supposing that Surgeon Heath and Lieut. Armstrong had both survived their wounds, and that a year hence, both, being unfit for service, were placed on temporary half-pay. In accordance with the Army Circular, March 1st, 1880, the "officer placed on half-pay on account of ill-health, incurred in and by the service, may reckon time on half-pay, not exceeding one year, towards full-pay retirement;" whereas the medical officer, who received his wound on the same battlefield who risked his life to save a comrade, and who qualified for the highest reward of valour which his Sovereign can bestow, could reckon nothing towards retirement, because in official designation he is only a "non-combatant." The absurdity still remains, that the man whose duty calls upon him to lay down his life under the fire of the enemy is not a combatant.

THE NEW BUILDINGS FOR THE CAMBRIDGE MEDICAL SCHOOL.

In his valedictory address as retiring Vice-Chancellor, Dr. Ferrers, Master of Caius College, referred to the successful efforts of the Financial Board to negotiate a loan for the erection of these much-needed new buildings. For the first of these, the chemical laboratories and lecture-rooms, the contract has been signed; and it is expected that the builders, Messrs. Bull, of Southampton, will commence work as soon as the weather permits. The new Anatomical

buildings are to be erected on the site of the present Chemical and Anatomical departments, and are to consist of a large dissecting-room, a large "bone-room," an anatomical lecture-room, and a new anatomical museum, as well as some smaller rooms for anatomical research work. Pending the clearance of the site for these, the Museums and Lecture-Room Syndicate have wisely erected a temporary building for the purposes of anatomy, similar to the temporary building in use for this purpose in Glasgow, but larger. This structure will be completed in three weeks, and it is expected that it will be ready for use as a dissecting-room in the term now commencing; the old dissecting-room will then be set free to be fitted as a "bone-room," and the officers of the Anatomy Department have been busy in preparing dissections, frozen sections, and other teaching specimens for it. It is also contemplated to extend the Physiological School, and to erect a new lecture-room and a large addition to the Physiological laboratories, which are much too small for the classes which work in them; and to erect a laboratory and the other necessary rooms for the rapidly developing Pathological department. These works are expected to begin soon, and the plans for the buildings have been submitted to the Senate. It is a matter of congratulation that now all the obstacles in the way of the erection of buildings worthy of the University have been cleared away, and that the teachers in the medical departments of Cambridge will soon have ample room to carry out in full the system of practical laboratory work in all departments, which has been from the first the distinguishing feature of the school.

THE LUMLEIAN LECTURES: ELECTRO-PHYSIOLOGY.

As we have already announced, the Lumleian lectures to be given by Dr. W. H. Stone this year will be on the Electrical Conditions of the Human Body. From a syllabus drawn up by Dr. Stone, we learn that he intends first to point out the importance of placing the physiological and medical application of electricity on a physical basis of absolute measurement; the observations and investigations made in this direction by Du Bois-Reymond, Count du Moncel, and others, being somewhat scanty. The human body exhibits electric resistance, electro-chemical capacity, and electrolysis. He will point out that the resistance has been enormously overestimated, owing to the high insulating power of the skin, and will explain how this variable factor can be reduced to zero by obtaining perfect contact. The measurement of resistance by the methods of momentary contacts and alternating currents, involves errors due, in the first method, to electrolysis, and, in the second, to electro-chemical or voltametric capacity. It will be shown that a third method, originally designed by Manec, to test a faulty submarine cable, entirely removes these difficulties, and enables the three processes to be independently determined. With regard to the second division of the subject, alternating induction-currents, as used in physiology, have not been hitherto measured, and Dr. Stone, will show that the two momentary currents of Ruhmkorf's coil are of very unequal intensity, and that a tuning-fork commutator and battery present great advantages in this respect. The methods of measuring alternating currents by the dynamometer and the quadrant electrometer will be explained, and the estimation of the electrostatic capacity of the body by methods used in calibrating condensers will be illustrated. Under the third heading, it will be shown that the amount of electrolysis produced by a constant current is far larger than has been hitherto supposed; and the question whether the body behaves as a solid or as a liquid conductor will be discussed. Evidence that its resistance diminishes instead of increasing with heat will be adduced, and the great diminution of resistance on the occurrence of dropsical effusion will be pointed out. Certain physiological deductions from the above observations will be made, and the traces of a mechanical law, governing the length of the bones as levers, and the bulk of the muscles as powers, will be indicated. The great lessening of resistance in atrophied muscle, and in certain metallic impregnations, and the predominant nervous action of rapid alterations of potential, will be discussed. In conclusion, a speculation will be put forward as to the possibility of the human nervous system distantly resembling a duplex telegraph cable, in which a transmitted impulse is balanced and inhibited at the sending-station, but unbalanced and exhibited at the receiving-station.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to the British Medical Benevolent Fund, was held on Thursday, January 14th, at 31, Lower Seymour Street, the house of the Honorary Financial Secretary, Mr. Field, at 4 P.M., when Mr. J. F. France, J.P., Vice-President of the Fund, took the chair, in the unavoidable absence of the President, Sir George Burrows. The financial statement was submitted, and the annual report of the committee for the past year read by the treasurer, from which it appeared that the donations during 1885 had amounted to £808; subscriptions to £1,229; a total of £2,037. There was an increase in the amount of donations, while subscriptions had not fallen off much, inasmuch as the total received showed a slight increase upon that of last year. The disbursements during the year had been, in grants, £1,894; in annuities, £1,086; in all, £2,980; and the entire cost of collecting and distributing this large sum—over £5,000—had been £141, under 3 per cent., including stationery, collector's commission, the printing and postage of the report, a copy being sent to each subscriber, the postage and other expenses of the honorary secretaries for finance and cases, and the postage and expenses connected with the distribution of nearly £3,000 in weekly or monthly instalments, a peculiar characteristic of this fund, carried out in an admirable manner by the Cheque Bank. The number of cases relieved was 161; but many of those which came before the Committee were exceptionally hard, and the Committee felt that, had the means at their disposal been larger, they would have been better able to cope with the painful amount of misery and want, nay, even actual starvation, revealed when the touchstone of personal inquiry came to be applied. This year, 1886, is the Jubilee year of the Fund, and it is intended to make a special effort to render the year memorable in the annals of the fund, by holding, early in the year, a dinner, at which Sir James Paget has kindly consented to preside; by means of a special appeal to every registered medical man; and by an effort, at the meeting of the British Medical Association, at Brighton, in August, to collect the honorary local secretaries together, in a meeting, and try to induce prominent medical men, in districts and towns not now represented upon the list, to take an interest in the work, accept the post of local secretary, and so aid the Committee in the work of helping those who are known to be trying to help themselves, and rescuing those who, but for the help of the fund, would have sunk in the struggle. In the annuity department there were 3 deaths, and 7 fresh annuitants were elected, making a total of 57. There are, however, still 44 candidates eligible, waiting for a chance of election, all over 60 years of age, not one enjoying an income of £10, and most of them past work and practically penniless; and the Committee would most strongly urge their claims upon the profession. Mr. S. H. Byam joined the Committee in the place of Mr. Thomas Smith, resigned, and Dr. Habershon was elected a Vice-President, in the room of Mr. W. B. Page, whose death the fund has good reason to deplore.

SMALL-POX AMONG GIPSIES.

AN outbreak of small-pox has occurred among a gipsy community in the neighbourhood of Winchester. One death out of several cases is known to have already occurred, but the extent of the mischief is not at present absolutely known. Vaccination and revaccination among these people is probably almost, if not entirely, neglected, whilst the sanitary surroundings and crowded condition of the average gipsy-van are not calculated to avert the spread of infection when once intro

duced. To deal satisfactorily with an outbreak of this kind is a matter of some difficulty for the local authorities in the districts concerned; and the utmost vigilance on their part will be needed to prevent the disease from spreading to the settled population of the towns and villages in the neighbourhood of the New Forest. It is to be feared that some of the sanitary authorities in this district have no proper standing provision for the isolation of infectious disease, so that their difficulties in dealing with the present cases will be greatly increased. If the ordinary gipsy family were not so opposed to interference from the outside world, it might be feasible to convert a travelling van into a sort of temporary hospital, and to fairly isolate it on an open, breezy common. But, as things are, even this would obviously not be by any means sufficient. It is to be hoped that the local authorities have succeeded in promoting vaccination and revaccination among the gipsies ; in isolating, as far as possible, the infected persons ; in carrying out or securing efficient measures of disinfection ; and in enforcing the provisions of Section 126 of the Public Health Act, 1875, whenever necessary to prevent the exposure of infected persons, articles, or things. A great deal, however, depends in such a case on the tact, good judgment, and watchfulness of the local sanitary officials, and on their influence on the wanderers. In connection with this subject, it should not be forgotten that, by Section 9 of the Housing of the Working Classes Act, 1885, a tent or van used for human habitation which is in such a state as to be a nuisance or injurious to health, or which is so overcrowded as to be injurious to the health of the inmates, whether or not members of the same family, shall be deemed to be a nuisance within the meaning of Section 91 of the Public Health Act, 1875 ; and, further, that where any person duly authorised by a sanitary authority or by a justice of the peace has reasonable cause to suppose that there is in any such tent or van any person suffering from a dangerous infectious disorder, he may examine the same in order to ascertain the facts.

LOCAL GOVERNMENT REFORM AND THE QUEEN'S SPEECH.

In these degenerate days, it has come to be almost a foregone conclusion that the social reforms which are shadowed forth in the Speech from the Throne will be thrust back into oblivion at the end of the session, for mere lack of time to discuss or even to begin the discussion of them. From the Queen's Speeches of the last ten years, for example, a quite melancholy catalogue might be compiled of intentions unfulfilled and hopes blighted. There have of late been startling rumours as to the domestic legislation which the Government were incubating, and the most precise and definite statements have appeared in self-constituted "authoritative quarters" as to the particular measures which were in process of development. It is, therefore, with some little disappointment that there is seen to be in Her Majesty's Speech only one reference, and that not a very serious one, to the great subject of local government reform that has been in everyone's mouth, and has figured in every election speech for the last six months. The Cabinet, it appears, have resolved to submit Bills for "transferring to representative councils in the counties of Great Britain local business which is now transacted by the Court of Quarter Sessions and other authorities. These Bills will, with another for the reform of county government in Ireland, involve the consideration of the present incidence of local burdens"—as, indeed, was in any case inevitable. Nothing is said as to the reform of local government generally, or as to the unification of authorities and local imposts, of which everyone admits the necessity. As we have said the promises of speeches from the Throne seldom arrive at legislative fruition. Apart altogether from the present unstable position of the Government from other causes, their County Government Bill has probably no greater chance of passing than the measure for the reform of local government generally, which we may assume to be behind it, but which would overweight the ship of State in the present turbulent state of the policical ocean.

SCOTLAND.

THOMSON LECTURES IN ABERDEEN.

Dr. H. Macmillan, in his third, fourth, and fifth lectures, discoursed on mosses and lichens. After discussing their botanical relation, he dwelt on their uses to man, some lichens being used as food, while others were formerly greatly prized for the dyes which were obtainable from them.

STUDENTS' REPRESENTATIVE COUNCIL.

The annual general meeting of the Edinburgh University Students' Representative Council was held last week, when the retiring President, Mr. Leith, M.B., C.M., made an interesting statement as to the work done by the Council and its Committees during the past year ; and anyone reading a report of it cannot but be convinced of the usefulness of this comparatively recent institution in Edinburgh, and of its value in the future as a means of securing that the legitimate aspirations of the students (who form so important a factor in Edinburgh University) will be properly expressed and attended to. This week the elections of new members of the Council are going on, and we earnestly hope the results will be such as to still further secure the respect of the University authorities, and the confidence of the constituency.

IRELAND.

BELFAST HOSPITAL FOR SICK CHILDREN.

It was intended to have held a bazaar in aid of this hospital, but, after considering the matter, other counsels prevailed, and one hundred ladies arranged to collect each a sum, not less than £5, by a certain date. It is satisfactory to learn that this proposal has turned out most satisfactorily, and a sum of £715 14s. 6d. has in this way been obtained for a most deserving charity.

HEALTH OF CORK.

During December, the births registered numbered 116, or 18.82 per 1,000, and the deaths 151, or 24.49. It is gratifying to find that there has been so little infectious disease in Cork during December, and that typhus fever has been gradually declining—a very good indi cation of an improving sanitary condition.

DUBLIN BRANCH.

The annual meeting of this Branch will be held in the King and Queen's College of Physicians, on Thursday next, January 28th. Dr. Lombe Atthill will be succeeded as President by Dr. Edward H. Bennett, Professor of Surgery in the University of Dublin, and ex-President of the Royal College of Surgeons in Ireland. His Serene Highness Prince Edward of Saxe-Weimar will honour the Branch by being present at the annual dinner ; and a large number of distinguished guests and of members will be present on the occasion to meet him.

SAMARITAN HOSPITAL, BELFAST.

The thirteenth annual meeting was held on January 14th. The chairman said that the institution had not only relieved suffering, but most of the sufferers, to their credit be it told, had contributed, as far as their means would allow, to the support of the hospital. Relief was given in some cases gratuitously, and where possible it was paid for. The patients' fees during the past year amounted to £452. They receive medical attention free of charge, but, by the payment they make, they free themselves from the imputation of pauperism, and the subscriptions received from the public are devoted solely to the relief of those unable to pay anything. The Committee believe that the very remarkable and extensive support so received from the patients, is not only unique in the history of hospitals in the three kingdoms, but is the best possible guarantee to subscribers, that any contributions received will be productive of much good in the alleviation of suffering.

DR. B. FOSTER, M.P.

AT a numerously attended meeting of the Council of the British Medical Association, held at Exeter Hall, London, on Wednesday, January 20th, Dr. FOSTER, M.P., in the chair,

Mr. MACNAMARA (Treasurer) said: Before you proceed with the business of this meeting, it may be a little out of order perhaps, but I beg to draw attention to a circumstance which has occurred since we last met. Since we met in this room, our President has been elected Member of Parliament for Chester. I think it is our duty as well as privilege to congratulate him upon this honour; and, in doing so, I will simply draw attention to the fact that I suppose this is the first instance in which a man in the prime of life, who has raised himself to the position in the profession to which Dr. Foster has attained, and who is engaged in a very large practice, has given up a considerable amount of his time and energies, and devoted himself to the work of Parliament. That is a remarkable fact, that the profession probably hardly realises at the present time. But, at the same time, there is still more to be said, and it is this: that Dr. Foster has been led to take this step under the impression that, by so doing, he is enhancing the position of the medical profession. That has been largely the motive which has guided him in this particular step; and I am sure, whatever our ideas may be with regard to medical men entering Parliament, we can all of us thoroughly appreciate the spirit which has guided him in this action, that is to say, the spirit of self-sacrifice, giving up self and income for the advancement of the professional status and position. Well, gentlemen, we can none of us have the slightest doubt of this, that Dr. Foster, having gained his position in Parliament, will forward the interests of the medical profession, and I think we can hardly doubt that he will add much to the efficiency of the deliberations in Parliament, not only upon medical reform, but also upon all sanitary matters, as well as others connected with the profession. I therefore ask you to pass the following resolution, which I will read.

"The Council of the British Medical Association beg to offer their hearty congratulations to their President, Dr. B. Foster, on his being elected a Member of Parliament for Chester. The Council are convinced that in this they express the sentiments of the entire Association, and they sincerely trust that Dr. Foster may enjoy many years of health and energy for the work that lies before him. Among his other Parliamentary duties, the Council of the Association hope that, in the interest of the public and of the profession, Dr. Foster will impress on the Government the necessity that exists for enforcing those measures of medical reform which have been so constantly urged on Parliament by this Association, and which have already received the approval of the House of Lords, and of a Royal Commission appointed to inquire into the subject."

That resolution I beg to place before you, and I call upon Mr. Wheelhouse to second it.

Mr. WHEELHOUSE: I hope you will allow me to second the motion. So far as our political views are concerned, I dare say you know that Dr. Foster and I are about as widely separated as the poles; nevertheless, we must have representatives of all sides, and we, in our President, shall have a member who will at all times be able, as well as ready and willing, to take up any professional matter that may be brought before the House, and who will from his position be able to give either the Government or the House information that they could not get in any other way. I think, therefore, we may safely congratulate ourselves, as well as Dr. Foster, on his election. I am quite sure that this Council would desire to offer Dr. Foster their very hearty congratulations, and therefore I have very great pleasure in seconding the resolution that has been put before you by Mr. Macnamara.

The resolution was carried by acclamation.

The PRESIDENT: Gentlemen, the kindly remarks and the exceedingly kindly expressed resolution with which Mr. Macnamara has surprised me, make me feel that I owe you a very deep and earnest expression of my gratitude for so kindly offering me this mark of your confidence and your sympathy. In the new position and the new duties which I have undertaken, I feel very glad of any expression on the part of the medical profession which binds me more closely to them as a body. I owe every little success I have had in the world to the medical profession; I have, therefore, a debt to pay, in any position in life in which it may please Providence to place me; and I hope that in discharging those new duties which I have undertaken, not for selfish reasons, but for reasons which have been very happily expressed by Mr. Macnamara, I may show that I am not unmindful of what I owe to the medical profession in all I may do in connection with anything affecting medical interests, or with reference to medical or sanitary matters. I hope, in this new position, to be of some little use, and I think the time is coming when medical knowledge may be increasingly useful in guiding the legislation of this country into useful channels. If I did not think I could be of use, I should be very unwilling to sacrifice a part of that usefulness which I have now enjoyed for some years in the district in which I live. You know that a medical man's life is one of unceasing usefulness to his fellow-creatures; and if I did not think I could be of use in this new position, I should not give up the useful work which has formed the routine of my daily life. I believe that the new legislation which is coming before this country, is legislation in which the medical aspect is most important; and I hope that medical opinions and medical counsel, in the formation of that legislation, may conduce, not only to the benefit of the medical profession, but to the happiness and prosperity of the great mass of our fellow creatures. If it does that, I am sure the medical profession, above all classes of the community, will be gratified by the progress of legislation in the future. Gentlemen, I thank you most heartily and sincerely.

VOLUNTEER MEDICAL STAFF CORPS.

IMPORTANT MEETING AT WOOLWICH.

A PUBLIC meeting called to promote the formation of a company of the Volunteer Medical Staff Corps was held on January 11th, at the Woolwich Town Hall, when there was a crowded and influential attendance. The Chairman pointed out the great importance of providing bearer-companies in the field for the volunteer service. The great difficulty was money, and it was understood that it was the intention of the Government, if these bearer-companies were started, to concede grants of money. He congratulated the meeting on the large and influential attendance of medical officers of the regular army.

Colonel STUART, R.E., moved a resolution: "That a medical staff corps is an essential part of the auxiliary forces." The medical department divided itself naturally into two great branches: the medical staff, consisting of the medical officers and surgeons, and a properly organised hospital staff corps. The medical organisation of the volunteers was regimental, but, for field-purposes, it must be extended to divisions, and form a general staff corps. The formation of a great medical organisation for the volunteers would be of great importance from the regular service point of view. He asked for active aid by subscriptions.

Sir JAMES HANBURY said that no army was in a fit position to take the field unless it had the machinery at hand for succouring its sick and wounded. Such a medical staff corps existed in the regular army as a distinct and independent military unit, and a like organisation was necessary for the volunteer army. The organisation of such a Volunteer Medical Staff Corps, of course, did not imply any interference with, or abolition of, the regimental medical officers, nor would it in the least interfere with the ambulance classes. He hoped that the county of Kent would make a starting-point by enrolling a company of medical volunteers, and that this movement would extend to other counties, where similar companies would be enrolled. These companies would become integral portions of the Volunteer Corps in each district. The pupils of the St. John Ambulance Association should be invited as a matter of preference to join the Medical Staff Corps.

The resolution was carried unanimously.

Director-General Sir T. CRAWFORD, M.D., K.C.B., moved a resolution that the movement of providing a Volunteer Staff Corps deserved the cordial support of the public. He paid a warm compliment to the St. John Ambulance Association, which had rendered great services, and whose teaching had been with great advantage extended, through Lieut. Maclure, to some 5,000 Volunteers in ambulance work. For our fighting arm—our first line of defence—we had at the present moment hardly enough to meet the requirements of our own army corps in the field, that is, a medical staff corps, the reserve of the medical staff corps, and some 1,200 men in the Militia. For an army of 250,000 Volunteers, something like eighty bearer-companies would be required, and until these bearer-companies were provided with proper arrangements for transport, the volunteers were not an army, and would not be able to take the field properly organised. What was required was money to melt into organisation the material already existing in the shape of the St. John Ambulance Association and the medical trained volunteers themselves. The first thing to do was to teach the public the value of this work and

the next thing to persuade able-bodied men to join the bearer-companies.

Colonel DUNCAN, R.A., C.B., M.P., seconded the resolution. The first important point was that his scheme seemed to promise an addition of completeness, and especially of efficiency, to the volunteer service; the second, that it seemed to offer the prospect of valuable and much-needed reserves to the Army Medical Staff Corps; and the third, that it contained a prospect of increasing the number of persons having that simple knowledge as to the first treatment of injured persons, which was of great public importance. The presence of the Director-General gave the imprimatur of authority to the movement. The system proposed to-night gave the great quality of mobility to the organisation.

Surgeon-Major EVATT moved a resolution thanking the gentlemen who had travelled a considerable distance to attend the meeting, and he paid a high compliment to Lieutenant Maclure, who was the first to initiate the Volunteer Ambulance Association.

Surgeon-Major CANTLIE V.M.S.C., moved a vote of thanks to the Chairman, and the proceedings terminated.

UNIVERSITY OF LONDON.

AN ordinary meeting of the House of Convocation was held on Tuesday last, in the theatre of the University building, Mr. F. J. Wood, LL.D., presiding. There was a large attendance. The Chairman read a communication from Mrs. Carpenter (the widow of the late Dr. Carpenter) acknowledging the resolution of condolence passed by the House at the last meeting.

Mr. W. L. CARPENTER, B.A., B.Sc., presented the report of the annual committee, and in moving its reception referred to the appended report of the subcommittee appointed to consider the regulations of the matriculation examination. He stated that, in order to gather opinions from the whole of the educational authorities of England and Scotland on the subject of the matriculation examination, a letter of inquiry had been addressed to a large number of educational authorities, containing a great many practical questions. Some of those questions were suggested by the committee, and others were suggested to them by those members of the University and others whom they took into their counsel. The answers which were received were very carefully collated by Mr. Belcher, and they found on certain points there was a remarkable consensus of opinion, considering the wide range of subjects. With regard to the retention of Latin as a compulsory subject in the matriculation examination, although some objected, most of the authorities to whom they referred were in favour of its retention. But in the science programme the greatest changes had been recommended. Under the old system, both chemistry and natural philosophy were obligatory subjects in the examination, but they now proposed that natural philosophy should be retained as an obligatory subject under the head of mechanics, which included elementary notions as to velocity, acceleration, force, mass, momentum, work, and energy; composition and resolution of velocities, accelerations, and forces—in one plane; moments and couples—in one plane; centre of gravity, or mass-centre; pressure of liquids and gases, its equal diffusion, and variation with the depth; specific gravity, and modes of determining it; the barometer, the siphon, the common pump and forcing pump, and the air-pump (exhausting and condensing). With regard to the first four of those paragraphs, they were advised very strongly by eminent physicists that the subjects there set forth were so essentially at the bottom of physics and chemistry, and of practical and experimental science of every kind, that it was necessary that that should be retained as a compulsory subject. In order to retain the particular advantage of the teaching of experimental science, the Committee felt it was most desirable that one branch of experimental science should be compulsory also.

Mr. A. M'DOWALL, B.A., B.Sc., seconded the motion, which was adopted.

Mr. W. L. CARPENTER moved the adoption of the following resolution, recommended in the annual report:—"That in place of the Syllabus now in force for the Matriculation Examination, this House recommends that the revised Syllabus (set forth in the Appendix to the report presented to Convocation on January 19th, 1886, pp. 17-22), prepared by the annual committee, be adopted."

The resolution was seconded by Mr. W. PAICE, M.A.

The Rev. M. F. O'REILLY, D.Sc., suggested that the subject of theory of music should be introduced in the syllabus.

Mr. NESBITT, M.A., moved that the following addition be made in the resolution:—"and that the subject of physiography be added to the optional subjects."

Mr. R. H. HUTTON, LL.D., M.A., seconded the amendment.

A long discussion followed.

Upon a vote being taken, the amendment was rejected.

Mrs. BRYANT then moved as a further amendment, that the following words be added to the resolution:—"That one language only besides Latin be made obligatory, and that the second language referred to in the syllabus, page 17, be made optional, with the following subjects: (1.) Drawing, with special reference to the requirements of engineering candidates; (2.) Sound and theory of music, and any other group of subjects which it may be deemed proper to add to the above."

Mr. O'REILLY seconded the amendment, which, upon a division being taken, was rejected.

The original resolution was then put and carried.

On the motion of Mr. R. F. WEYMOUTH, seconded by Mr. W. J. SPRATLING, B.Sc., the following resolution was also carried: "That this House desires to direct attention to a report in regard to the matriculation adopted by the Senate on November 1st, 1870, as follows: 'Instead of confining the list of questions to that exact number which a student is expected to answer, they will propose to insert in the paper a larger list of questions, requiring from the student answers only to a certain proportion of the total, and leaving to him the choice as to those which he is best qualified to answer. In suggesting this alteration of practice, the committee do not at all desire to lower the standard of knowledge requisite for passing, but to secure to each student a fuller and fairer opportunity of manifesting such knowledge as he really possesses;' and, while respectfully requesting the Senate to reaffirm the principle of this recommendation, to express the hope that it may be carried into effect."

Mr. A. HAWKINS JONES, LL.B., moved: "That, in the opinion of this House, 'an original printed thesis,' with examination thereupon, should—in harmony with the principle newly adopted for the degrees of D.Lit. and D.Sc.—be required of every candidate for the Doctorate in Laws and that in Medicine, instead of the existing examination in each case."

Mr. BENTWICK seconded the resolution, which, after a prolonged discussion, was lost.

The House was afterwards counted out.

BOURNEMOUTH SANITARY HOSPITAL.

THE Bournemouth sanitary authorities have done themselves credit, and rendered a service to the town, by erecting a new isolation hospital. The new hospital has been built on five acres of land; it is situated in an isolated position commanding a view of the New Forest. The cost of the building has been £4,000. It is of great importance for all towns, but vitally necessary for health-resorts such as Bournemouth, to be adequately provided with isolation-houses or a sanitary hospital, into which persons suffering from infectious diseases may be removed. The present hospital has been constructed with much care and intelligence. At the opening ceremony, Mr. Nunn, medical officer of health, read an excellent paper, in which he gave a history of the various efforts which had preceded the erection of the present building, and describing the building, which includes an administrative block, an isolated ward pavilion, a mortuary, a laundry, an ambulance-house, stable with coach-house, and a complete disinfecting station. Some of the details may be of interest.

With regard to the administrative block, there were rooms for nurse, matron, a caretaker and his wife, medical attendants, etc., with electric bells communicating with the ward-pavilion. The isolated pavilion consisted of four wards: two large ones, 30 feet by 18 feet, and two small ones, 8 feet 6 inches by 17 feet, and 13 feet in height, with two wards for nurses, commanding views of each ward by window. The wards were absolutely distinct from each other, and atmospherically disconnected. The larger wards contained three beds and one child's crib; the smaller wards were planned for two beds. The cubic capacity allowed for each bed was 2,340 cubic feet, with 180 square yards of floor-space, which, in each instance, was considerably more than was considered sufficient. A special feature of the wards was that all internal angles, both vertical and horizontal, had been rounded, in order to prevent the accumulation of dust and the stagnation of air. Under each floor there was a depth of six inches of concrete; the floor-boards were of best white deal, each board being grooved and tongued with iron, the boards being stained, sized, varnished, and beeswaxed, all nail-heads being filed and rendered smooth. The walls had been faced with cement, rendered smooth and painted in two colours, and could be readily cleaned with mop and sponge. The windows were placed at the two ends of the ward, and were double glazed and provided with patent ventilators. Boyle's patent air-pump ventilators were fixed in the centre of the

ceiling of each ward, terminating about two feet above the roof. The bedsteads were made of iron, and fitted with patent springs, and an adjustable raising back. The mattresses were made by Messrs. Sturt and Son, of the best picked white horsehair. The whole of the furnishing had been carried out by this firm, under contract, and was thoroughly adapted to the requirements of the place. The movable washstand, which visitors would notice, was a plan of Mr. Nunn's own ; it was fitted with India-rubber wheels, and could be moved noiselessly about the wards, and pushed over the beds for washing, or to be used as a table. The ambulance had not yet arrived, but was one of the most complete that could be designed. Mr. Nunn next described the process of disinfection by steam, which would be carried on in the apparatus provided at the back of the hospital, in Washington Lyon's patent steam disinfector. He congratulated the Commissioners and the ratepayers on having secured so admirable an apparatus, and it was to be hoped that, in cases of necessity, articles of clothing would be forwarded to be disinfected, or notice given for them to be called for. He believed the Commissioners intended to have some sort of telephonic communication between the hospital and the central office, so that friends would be able to make inquiries as to the condition of patients, which would obviate the necessity of visiting. He mentioned, in conclusion, that patients would be able to have their own medical officer.

Various speeches were made. Dr. Douglas, speaking for the medical profession, said that the medical men had always felt very strongly the necessity for such a hospital as this. They had been put to terrible shifts, when attending infectious cases at private houses, where it was very difficult to make arrangements for the isolation of the patients. Some people took a house in Bournemouth, to recruit after scarlet fever ; a case occurred in the family, and they had to pay £200 to the owner of the house to which they brought the case. That was very hard, and would not have occurred had there been a proper hospital. Mr. Nunn had alluded to the value of that institution in nipping epidemics in the bud, and he thought they had much to congratulate themselves upon in having it opened.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the above district will be held, by invitation of Dr. Amsden, at the Essex County Asylum, Brentwood, on Wednesday, January 27th, 1886, at 2.30 P.M. Previously to the business of the meeting, Dr. Amsden has kindly offered to escort the members round some of the wards of the asylum. Dr. Elliston, President of the Branch, will preside. Programme and Business Agenda :—1. To arrange the place and date of the next meeting, and to nominate a member of the district, resident in or near such place of meeting, to take the chair thereat, provided the President of the Branch does not attend. 2. To elect an honorary secretary for the year 1886. The following papers have been promised :—1. On the Administration of Medicines by Injection into the Rectum, by the President. 2. On Fits, by W. B. Hadden, M.D., of St. Thomas's Hospital, London. 3. The Treatment of Acute Mania by Hyoscyamine, by G. Amsden, M.B., Medical Superintendent, Essex County Asylum. 4. The Necessity of a Medical Defence Fund in connection with the British Medical Association, by J. Sinclair Holden, M.D., Sudbury. 5. Dr. Hadden will exhibit some sections showing Naked-eye Changes in the Spinal Cord, and some drawings of Brain and Cord Diseases. Gentlemen intending to be present, or wishing to read a paper, or show a case, are requested to communicate with the Honorary Secretary not later than January 25th.—WM. THOS. JACKMAN, Honorary Secretary, Coggeshall, Essex.

DUBLIN BRANCH.—The ninth annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Thursday, January 28th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. Dr. E. H. Bennett, President-elect, will deliver the annual address. The annual dinner of the Branch will be held in the College Hall, at 7 P.M., on the day of the meeting. Dinner-tickets for members who purchase their tickets on or before Wednesday, the 27th instant, 17s. 6d. ; for members purchasing their tickets after that date, and for guests, £1. —RICHARD A. HAYES, M.D., Honorary Secretary and Treasurer, 56, Merrion Square South, Dublin.—January 6th, 1886.

OXFORD AND DISTRICT BRANCH.—The next meeting will be held on Wednesday, January 27th, at 3.30 P.M., at the Radcliffe Infirmary, Oxford. Members who have papers to read or cases or specimens to show are requested to communicate with one of the secretaries on or before January 23rd. Dinner will be provided (at a charge of 5s.) at 6 o'clock, after the meeting, for those members only who intimate their intention of dining to one of the honorary secretaries, on or before January 25th.—Dr. DARBISHIRE, 60, High Street; and Mr. MORGAN, 42, Broad Street, Oxford.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—Ordinary meeting, Marine Hotel, Ventnor, Thursday, January 28th, 1886, Daniel Beaton, M.D., President, in the chair. *Agenda:* 1. A discussion will be opened on The Etiology of Phthisis, by Isambard Owen, M.D. 2. Family-History in Phthisis, R. Robertson, M.D. 3. On a Fatal Case of Acute Delirious Mania with an Unusual Complication, J. M. Williamson, M.D. 4. India-Rubber Stamps for Clinical Notes, R. Robertson, M.D. Gentlemen who are desirous of introducing Patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. Dinner at 6 P.M. ; charge, 6s., exclusive of wine. Members to send in names before Tuesday, January 26th. Trains leave Ventnor for Sandown, Newport, and Ryde at 7.47 P.M. (By-law.—When a member cannot attend whose paper is upon the agenda, it should be sent before the meeting to the Secretary for the purpose of being read and discussed.) —W. E. GREEN, Honorary Secretary.

BATH AND BRISTOL BRANCH.—The third ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, January 28th, at half-past seven o'clock, E. C. Board, M.R.C.S.Eng., President. The following communications are expected. 1. A Few Words on Cholera, Dr. W. B. Beatson. 2. A Note on Hypermetropia and its Reflex Phenomena, Mr. T. Pagan Lowe. 3. Parker's Method of Radical Cure of Hernia (two cases will be shown), Mr. H. W. Freeman.—R. J. H. SCOTT, E. MARKHAM SKERRITT, M.D., Honorary Secretaries.

THAMES VALLEY BRANCH.—The next meeting will be held on Wednesday, January 27th, at 6 o'clock, at the Griffin Hotel, Kingston. Papers will be read by F. P. Atkinson, M.D., on Quinsy, and A. Roberts Law, M.D., on Hospital Reform. Dinner at half-past seven. C. C. SCOTT, M.D., Honorary Secretary.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE first general meeting of this session was held at the Station Hotel, Stoke-upon-Trent, on Thursday, November 28th, 1885; present, Mr. J. H. HARTILL, President, in the chair, and twenty-five members.

Specimens.—The following were shown.

1. Mr. West showed a case of Xanthoma occuring in a woman aged 49, the subject of chronic jaundice, due, probably, to carcinoma of the liver. It was a well marked example of xanthoma tuberosum and xanthoma planum ; the latter form showing itself on the palms of the hands, and the former on the eyelids and elbows.

2. Dr. Hind showed Yellow Sulphur Crusts from a patch of Favus on the thigh of a girl. There was no other patch on the same patient, and no other person in the house had the same complaint. The patient was recovering from acute capillary bronchitis.

3. Dr. Hind showed a Salivary Calculus removed from the ranine duct, one inch long and one-quarter of an inch in diameter. It was very brittle, and consisted chiefly of carbonate of lime.

4. Dr. Hind exhibited a cast from a case of Membranous Dysmenorrhœa, where one was passed every twenty-six days, after pain and bearing-down. The patient was barren, and had slight anteflexion.

5. Dr. Hind showed some Renal Calculi passed after an attack of renal colic lasting one week. The largest was of the size of a small bean.

6. Dr. Hind showed a woman aged 54, the mother of a large family, with an Abdominal Tumour. Twelve months ago, an abscess pointed at the umbilicus, and subsequently discharged by expectoration. The assigned cause was a slight strain whilst doing house-work.

7. Dr. McAldowie showed a specimen of extreme Calcareous Degeneration of the Aortic Valves.

8. Mr. Spanton showed a Tumour of the Spermatic Cord from a boy aged 15, which, in its clinical aspect, resembled an omental inguinal hernia. By its increase and pressure upon the spermatic cord, sloughing of the scrotum had been caused. The spermatic cord, with the tumour attached, and the testis, were removed ; and the patient made a rapid recovery. The tumour consisted of connective tissue, and was about the size of a large date.

9. Mr. Spanton showed a child in whom there was Congenital Ab-

sence of both Tibiæ and Fibulæ, except the articular extremities; with six toes on each foot, talipes varus, absence of both thumbs, and webbed fingers, six on one hand, and seven on the other. The other parts of the body were normally developed.

10. Mr. Spanton shewed an improved India-rubber Pad for use after colotomy, consisting of a flat pad surrounded by a rounded air-tight border; and in the centre of the pad a cup of solid India-rubber, which exactly fitted over the opening in the bowel. In two instances in which Mr. Spanton had recently used it, the pad was found to answer admirably, after the ordinary appliances had failed. It is made by Maw, Son, and Thompson.

11. Mr. Spanton showed Specula Vaginæ, made of fine porcelain, lined with platinum, which, while giving as much light as the silvered glass ones, were more durable, and resisted the action of all ordinary caustics. They were clean, strong, and very durable, and could be made in any shape desired, and were less expensive than any others.

12. Mr. Vincent Jackson exhibited eleven Calculi, removed from ten women and girls. The operations which were employed exemplified all those usually practised for the removal of stone from the female bladder. Short particulars of the series are as follows. C. H. (2); lithectasy; weight of calculus, 30 grains; cured. M. G. (4); lithectasy; weight of calculus, 240 grains; cured. B. S. (4); lithectasy; weight of calculus, 27 grains; cured. R. S. (4); lithectasy; weight of calculus, 117 grains; cured. P. G. (6); lithectasy; weight of calculus, 240 grains; cured. M. L. (6); lithotrity; weight of calculus, 118 grains; cured. L. T. (7); lithectasy; weight of calculus, 168 grains; cured. A. S. (7); suprapubic lithotomy; weight of calculus, 1,320 grains; died. M. O. (30); lithectasy; two calculi removed, one weighing 72, and the second 69 grains; cured. H. P. (66); vaginal lithotomy; weight of calculus, 2,015 grains; cured. In the lithectasy and lithotrity cases, incontinence of urine was only of short duration, perfect control of the bladder being regained. In the suprapubic lithotomy case, the child was almost worn out by pain and distress, and death was caused by peritonitis.

Donation to the Royal Medical Benevolent College.—Dr. TOTHERICK proposed, and it was carried, "That, from the surplus funds of the Branch, a donation of five guineas be given to the Royal Medical Benevolent College; and that the privilege of voting vested in the President be exercised for the benefit of members of the Branch who may at any time require assistance from the College."

Papers.—The following were read.

1. Dr. Arlidge: On Purgation.
2. Dr. Hind: On a Case of Septic Inflammation of the Knee in a Lad, aged 13, due to Typhoid Fever, treated by Aspiration, followed by Recovery.

BORDER COUNTIES BRANCH: SPECIAL MEETING.

A SPECIAL winter meeting of this Branch was held at the County Hotel, Carlisle, on Friday, January 8th, 1886. The president, Mr. C. S. Hall, of Carlisle, took the chair, at 6 P.M. Eighteen members and four visitors were present.

The Late Dr. Gilchrist.—Prior to the transaction of the ordinary business, the following resolution was proposed by Dr. BARNES, seconded by Dr. HADDON, and carried unanimously: "That this meeting of the Border Counties Branch of the British Medical Association desires to express its regret at the death of Dr. Gilchrist, of Dumfries, who held the office of president of the Branch in 1878-79, and took a warm interest in its progress and prosperity, and further requests the president to convey the sympathy of the members to his widow."

The Late Mr. W. B. Page.—In a feeling way, the PRESIDENT proposed, Dr. TIFFEN seconded, and the meeting unanimously agreed to the following resolution: "That this meeting receives, with feelings of sincere regret, the intelligence of Mr. William Bousfield Page's death, whereby a long and active career, which has been no less remarkable than successful, has been brought to a close. While testifying to the valuable and important services rendered by him to the profession and the community at large, this meeting desires also to express its unfeigned sympathy with Mrs. Page and family in the great loss and bereavement which they have sustained."

New Members.—The following new members were elected to the Branch: Robert L. Clark, M.B., C.M.Ed., Maryport; Herbert J. B. Lorraine, L.R.C.S., and L.R.C.P., Stapleton; James R. Irwin, L.R.C.S., and L.R.C.P.Ed., Whitehaven; William Murphy, M.B., C.M.Ed., Carrutherstown, Dumfriesshire; J. F. Muir, M.B., C.M., Whitehaven; George C. Henderson, M.R.C.S., The Infirmary, Carlisle; Robert D. Helm, M.B., C.M., Carlisle; James Altham, M.B., Penrith. At the Council meeting, which preceded business, the following were elected members of the Association:—R. D. Helm, M.B., Carlisle; G. C. Henderson, M.R.C.S., Infirmary, Carlisle.

Proposed Discussion.—The PRESIDENT announced that at the next meeting of the Branch, to be held in March, at Dumfries, there would be a discussion upon "Brain Surgery," which would be opened by Dr. Thomson, of Dumfries, who had undertaken to do so at the request of the Council.

Communications.—The following communications were made.

1. Dr. Douie (Carlisle) showed ten photographs of three cases of Pseudo-hypertrophic Paralysis.
2. Dr. Maclean (Carlisle) read a paper on a Case of Empyema which recovered after the Removal of Portions of Six Ribs.—The President, Drs. Haddon, Barnes, and Lockie, took part in the discussion.
3. Dr. Maclaren showed fifteen Ovarian, Renal, and allied Cysts.
4. Dr. Lockie (Carlisle) read a paper entitled "Is there any Connection between the so-called Albuminuria of Adolescence and a Gouty Inheritance?"—In the discussion which followed, Drs. Macdougall, Barnes, Haddon, Maclean, and Lediard, joined.
5. Dr. Eaton (Cleator Moor) read Note of a Case of Congenital Asymmetry, with Remarks.
6. Dr. Lediard showed some samples of Moss for Surgical Dressings.

Compulsory Notification of Infectious Diseases.—Dr. DOUIE read an interesting paper on this subject. After speaking of the advantages to be gained by notification, and of the various methods employed in the towns possessing the system, the writer described what he would consider a satisfactory system. This was a general measure applicable to the whole country, including other sanitary reforms, such as the mapping out of the country into sanitary districts, under the care of medical officers of health, debarred from private practice. He considered that the householder should be the notifying party, and that such notifications should be confidential reports to the health-officer, who could give the tabulated results to his board and to the public.—In the discussion which followed, the President, Drs. Haddon, Brown, Maclaren, Barnes, Lediard, Speirs, and Hamilton, took part; and the following resolution, proposed by Dr. DOUIE and seconded by Dr. BARNES, was unanimously agreed to: "That, in the opinion of this meeting, a uniform general Act should be passed for the notification and registration of infectious diseases. In carrying out this object, the meeting think it desirable that the duty of notification should lie with the householder." It was further unanimously agreed that a copy of the resolution should be sent to the Mayor and Corporation of Carlisle.

Supper.—The members and visitors afterwards had supper at 9 o'clock.

The Next Meeting of the Branch will be held at Dumfries, towards the end of March.

Association and Branch subscriptions for 1886 are now due, and may be paid to the Secretary, 41, Lowther Street, Carlisle.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Use of Ophthalmic Instruments.—Experiments with Urine of Cholera Patients.—An Unusual Cardiac Lesion.—M. Pasteur.—Cruelty of a Nurse.—Hydrophobia.

M. LANDOLT has commenced his course of lectures on ophthalmic surgery, at the École Pratique. The subject of the opening lecture was, "How to Handle Instruments in Ophthalmic Surgery." The lecturer indicated the difference that exists between ordinary surgery and ophthalmic surgery. The field of operation is limited in ophthalmic surgery, and the organ operated on is essentially mobile. The surface traversed by the instrument is excessively small; it is the fingering, says M. Landolt, which makes a good ophthalmic surgeon. Ophthalmic surgery requires quick and definite manipulation; movements directed by the wrist may destroy an eye. In a large number of universities, exercises are practised which render the fingers independent of each other, and cultivate that delicacy of touch and prompt manipulation which ophthalmic surgery demands. The lecturer then described the positions which the body and arm of the operator ought to assume, and the art of holding and guiding the instrument, and commented on the importance of technical principles, and the necessity of observing them. "The arm," he said, "ought to form the lever to which the hand is suspended." M. Landolt

divides ophthalmic instruments into three categories ; instruments in handles, scissors, and forceps. Manipulation with those in the first category depends entirely on the position of the fingers on the instrument ; with those in the second, the contact of the finger ought to be light and unremitting, "like the foot in a stirrup," says M. Landolt. Manipulation with forceps demands excessive freedom of the fingers, and thorough manual command. M. Landolt does not believe that gymnastics, fencing, riding, rowing, etc., militate against accurate manipulation ; on the contrary, he says, all that improves bodily health, renders the arm stronger, and is of benefit to surgeons.

M. Livon has injected urine of cholera-patients into the veins of dogs. There was some slight disturbance, but the animals recovered. M. Lépine observed that the quantity injected was insufficient, unless the fluid were extremely toxic ; twenty cubic centimètres injected into the veins of a dog weighing ten kilogrammes constituted neither proof nor denial.

M. Déjérine made a long communication, on December 26th, at the Biological Society, concerning an unusual cardiac lesion causing sudden death in two patients, convalescent from typhoid fever. There were no cardiac symptoms during life. At the necropsy, there was an absence of lesion, but examination with the microscope showed that the the myocardium was broken up. Each fragment was constituted of an isolated muscular cell. There was neither fatty, nor putrid, nor pigmentary degeneration. In both cases, the lesion of the myocardium consisted in a separation of the intercellular cement of Eberth, which in a normal condition unites the cells of the cardiac fibres. The phenomenon is observed in patients in an asystolic condition. It is due to the fact that the intercellular cement is dissolved by sarcolastic acid, which is formed in great abundance. There were no bacilli in the myocardium. Landouzy and Renaut have described this lesion in the myocardium some time after pericarditis.

M. Pasteur has been so violently attacked in the *Wiener Medicinsche Wochenschrift* by Dr. Lorinser, sanitary councillor and director of the Wieden Hospital, that he has answered the attack. The letter has appeared in the *Gazette de Hongrie*. The French papers are demanding that the prefectoral rules concerning wandering dogs should be put in practice. A few nights ago, a large dog attacked with rabies entered the lodge of a keeper of a railway-gate, and bit him. Two policemen were fortunately near the spot, and killed the animal. Last week, a dog in the commune of Malakoff bit a child, aged 8, and two men ; they were all cauterised, and conveyed to M. Pasteur to be treated. A nobleman has placed £1,500 at M. Pasteur's disposal, to be devoted to the use of his patients.

A terrible act of cruelty has been perpetrated at the Beaujon Hospital by one of the male nurses. A few nights ago, when the sister went her rounds, she noticed that a bed in one of the wards was empty. She called the male nurse, and inquired where the patient was. After hesitating, he said, "I will show him to you," and conducted the sister to a coal-cupboard, a yard and a half deep. The patient was insensible, and died a short time afterwards, notwithstanding every means taken to restore him. The nurse will shortly be tried, and the system of recruiting male hospital-nurses will be inquired into.

A recent trial has shown what is the French law concerning mad dogs. Last July, a little girl was bitten by a mad dog at a wine-merchant's, where her mother had sent her to buy a bottle of wine. It was the day of the national *fête*, and it was supposed that the dog was excited by the noise of the rockets, etc., let off by the children in the neighbourhood. A neighbour took the child home to her mother, and told her she had fallen and cut her lip with a bottle. Later in the evening, she was told the truth. The mistress of the shop shut up the dog, but the next morning it was allowed to escape, and bit two other people. The dog was again shut up by his mistress, and a veterinary surgeon was sent for, and pronounced the dog mad, and said it ought to be killed, which was done. Twenty-six days later, the little girl died from hydrophobia ; one of the men also died. The owner of the dog was prosecuted for manslaughter from imprudence, and was condemned to pay a fine of 300 francs ; and the veterinary surgeon, who was also proceeded against for infraction of the police-regulations, was fined sixteen francs. He ought to have informed the authorities that it was urgent to kill the animal, and have received their instructions for disposing of its dead body.

THE public baths erected last year, at a cost of £2,000, by the Corporation of Yeovil, have been visited by the Corporation of Taunton and the Bridgwater councilmen, who propose to recommend the establishment of similar baths in these towns.

MEDICAL MAGISTRATE.—Dr. Hatton Smyth has been placed on the Commission of the Peace for the borough of Poole.

CORRESPONDENCE.

THE ST. JOHN AMBULANCE ASSOCIATION.

SIR,—Permit me to remark, in reference to the letter of "Unappreciated," in the JOURNAL of January 16th, that it is an entirely voluntary act on the part of medical gentlemen if they deliver ambulance lectures on "First Aid to the Sick and Wounded" gratuitously. I have been connected with the movement from the outset, and have not encouraged this procedure, because I quite think with "Unappreciated" that the medical profession already has more than a just share in the gratuitous labour bestowed upon the community. In the directions for the formation of an Ambulance Centre, you will find the sum of £5 5s. appointed as the fee to be paid to a lecturer per class, and his first-class railway fare is put down as an extra.

The Association has no power to prevent gratuitous lecturing, which, for reasons best known to themselves, many lecturers prefer. The Association consider that by offering to gratuitous lecturers the position of honorary life members, they do all that they can do to acknowledge such services; and I think they would justly shrink from offering to gentlemen badges which would scarcely carry much distinction in the eyes of the public, and, in the present state of the society's exchequer, would certainly present no interest from an æsthetic or a pecuniary point of view.

I may take this opportunity of stating that, admirable as has been the willingness of the profession throughout the country to support the ambulance movement, which may be regarded as a most valuable aid to education and self-help, the pecuniary assistance afforded by the general public has been of the most niggardly character. If "Unappreciated," and those who think with him, would each, in his circle, secure pecuniary support from the wealthier classes, much more might be done in the way of remuneration, for which, if it is to have any pecuniary value, the Association at present has but very limited funds.

I may add that anyone looking at a syllabus of lectures, required to be delivered at intervals of generally one week, will admit that very little mental strain is put upon a well-trained medical man to deliver a course which necessarily is useful to him, by bringing him into pleasant contact with the people in his vicinity.—I am, sir, your obedient servant,

EDWARD H. SIEVEKING.

17, Manchester Square, W.

MR. JONATHAN HUTCHINSON'S LETTSOMIAN LECTURES.

SIR,—In the BRITISH MEDICAL JOURNAL of January 16th, Mr. Berkeley Hill has written some very valuable comments upon Mr. Hutchinson's lectures. As the title of Mr. Hutchinson's lectures is "On some Moot Points in the Natural History of Syphilis," it is not surprising that some differences of opinion should exist.

I entirely agree with Mr. Hill in everything he says about the value and excellence of Mr. Hutchinson's lectures, and I also agree with him that the experiments made by the late Mr. Morgan, of Dublin, cannot be relied upon as proving that the secretion from the vagina of a syphilitic woman will, when inoculated, produce the "typical chancroid." When such an inoculation does succeed, it produces an elevated tubercle not unlike a blind boil, which soon softens and suppurates in its centre. This is an entirely different natural process from that which forms "the rounded punched-out ulcer, with ragged edges and grey base" (see Holmes's *Surgery*, vol. iii, p. 372). Now this grey base, if I read Mr. Hutchinson rightly, is "a sort of minimised phagedæna," and consequently accompanied by some permanent loss of substance. As a remarkable instance of this, I may mention a case of a patient who had undergone what is termed syphilisation. The whole of his body was covered by small depressed scars, resembling, although much smaller, than those which are often left after an attack of small-pox. At the time when these inoculations were performed, the pus from soft suppurating sores was exclusively used. Inoculations from irritated indurated sores, on the other hand, always produce at first an increase of substance, and leave subsequently no necessary depressions.

The case of syphilitic inoculation, mentioned by Mr. Hutchinson, from a vaccine-vesicle is so important that it demands our most serious consideration. Again, I agree with Mr. Hill that it would have been satisfactory if the lymph used had been submitted to microscopic examination.

Mr. Hutchinson believes that the true chancroid is not now often met with in practice, but the same may be said with regard to the typical Hunterian chancre. In both cases, modifications, derivations, or degenerations, are much more common than the well-developed

typical affection. The application of iodoform, so common in the present day, will often produce a thickening which at first it may be difficult to distinguish from specific induration. Other caustics will do the same. After eliminating these and other possible sources of error, it is difficult to believe that fifty out of fifty-four cases of venereal sores were syphilitic. If these figures of Mr. Morgan's at all represent the general proportion, it must be evident that secondary syphilis would be much more common than it is proved to be; all the army and other available statistics afford abundant evidence to the contrary. It must, however, be allowed that, from cleanliness and other causes, the soft sore, especially in its typical form, is much less common than formerly. It was formerly generally acknowledged that soft sores occurred in the proportion of three to one. I have long been of opinion that that proportion is now reversed, and that, out of forty venereal sores, there would be about ten local soft sores, and that the remainder would be hard sores, abortive inoculations or re-infections from true syphilis (see Report, Contagious Diseases Acts, p. 57, 1881).—I am, your obedient servant, HENRY LEE.

SIR,—There are some points in this very able lecture about which I should like to make a few observations.

1. As regards the natural relations of the different forms of primary venereal sores, I must avow myself a dualist, and, as defined by Mr. Hutchinson, I believe that there exist two quite distinct and independent contagia, one of which produces a non-infecting sore, and the other syphilis. I cannot believe that a chancroid is produced by the attenuation of the syphilitic poison, or by a specialised syphilitic contagium. We have no reliable evidence to prove this, but facts without number show that the secretion of a chancroid is very contagious, and always produces a sore like itself, a soft, rounded, punched-out ulcer, with ragged edges and grey base. Such sores I have often seen in persons who have never had constitutional syphilis, and in whom no constitutional effects followed.

2. I cannot entirely agree with Mr. Hutchinson in regard to the origin of suppurating buboes. In my own practice, I very seldom meet with a syphilitic bubo, unless the sore have become in some way or other inflamed; but a suppurating bubo following a chancroid used to be a very common occurrence. Of late years this has been much less frequent, which, I believe, must be attributed to the almost universal use of disinfectants at the very commencement of the ulcerative process. I am, therefore, in the absence of other symptoms, in the habit of considering that the presence of cicatrices of old buboes, especially if on both sides, is corroborative evidence that the original sore was most probably a chancroid.

My experience with regard to chancres of the fingers, is in accord with Mr. Hutchinson's, for, although I have treated many soft sores in that situation, I have never met with a suppurating bubo in the armpit.—I am, etc., BUXTON SHILLITOE.

2, Frederick Place, Old Jewry.

Sir,—I read with great interest Mr. Hutchinson's lecture in the JOURNAL of January 9th, and also the letter of Mr. Berkeley Hill, in the JOURNAL of January 16th. Both these gentlemen have had considerable experience in the practical study of syphilis, and may be said to represent the two views, Mr. Hutchinson representing the unicists, Mr. Hill the dualists. Having had, during nearly eleven years, unusually favourable opportunities of observing almost all the moot points noticed by Mr. Hutchinson, I should like to have an opportunity of stating how far my experience agrees with or differs from each of them.

I have seen numerous instances of chancroids in patients who have never had syphilis previously, and where it never followed. It appears to me that later on in his lecture Mr. Hutchinson confirms the dual theory in his remarks on the lengthened period of incubation of chancre, which my experience would fully confirm. I have furnished him with a perfectly well authenticated case of fifty-one days, while periods of four, five, or even six weeks, have frequently come to my notice. Undoubtedly, there is much difficulty in obtaining accurate information, but cases occur now and then when the dates are beyond dispute. The chancroid, on the other hand, has little or no period of incubation, and may appear in the course of twenty-four hours. Surely there are strong grounds for assuming that when at the very commencement of the two forms of disease there is such a wide difference between them, the contagion must be distinct and independent. The case is well put by Dr. Frederick Zinsser, quoted in the last edition of Bumstead's work, page 33. "So simply and naturally the double contagion explains the different forms (of venereal disease), that even after the fall of dualism, should that event occur, clinically the differentiation would be perpetuated." In the Liverp Lock Hospital we see now and then what we may call an accide inoculation on the thigh or abdomen, caused by contact betwee chancre on the penis and a pimple or abrasion, the result bein chancroid. As these are auto-inoculations, they only confirm wha already known; and interesting as it would be to know the effec inoculation from these chancroids on healthy individuals, it must, obvious reasons, remain a mystery.

Referring to gonorrhœa-syphilis, I have frequently seen cases urethral chancre, which have so closely resembled gonorrhœa as deceive practitioners and myself at first; the subsequent indurat in the urethra and in the inguinal glands clearing up the case. B cannot call to mind a case where the existence of an ulcer was evident sooner or later.

As regards phagedæna, my experience does not confirm Mr. Hutch son's statement—"All will admit that syphilitic inflammations h a remarkable tendency to become phagedænic." My experience of Lock Hospital extends, off and on, over a period of twenty-five ye When I was a student there, in 1861, cases of phagedæna were not frequent, but they were not always originally cases of syphilis; m more frequently they were cases of chancroid occurring in patie with broken-down constitutions, aggravated by drinking-habits, exposure to wet and cold. Since my appointment to the hospital surgeon, in 1875, cases of phagedæna have been so rare that I can remember one under my care, though I believe that there was a c under my former colleague, Mr. McCheane, now consulting-surge some years ago. We have occasionally cases of sloughing ulc and within the last two months I have seen three cases, two in h pital, one in private practice. One of these was a case of chan the other two chancroids; all did remarkably well, and there was difference between the hospital-cases and that treated at home. male wards are frequently full, and the majority of cases are syphili at the present date there are twenty-two cases, and of these twe are cases of syphilis, some very severe cases. Out of seventeen patie in the female wards, seven are syphilitic cases.

Within the last six years, I have seen frequent cases of what Hutchinson terms "recurrent chancres of false indurations," but which Bumstead gives the term "relapsing induration." They h always occurred on the site of the former chancre, which has genera been the retrocoronal fold of the prepuce. These cases are very puzzl to the patients, who are apt to blame the mode of treatment, whi in all the cases I have seen, has been mercury, given in reasona doses, and for a sufficient period.

With reference to induration, I find it well marked in the majo of the cases of syphilis which I see, both in hospital and private pr tice. It is, of course, much modified by its situation, being m more evident on a mucous than on a cuticular surface. It is v well marked in those cases in which there has been no mercu treatment at first, and where the chancre has been allowed to spr from inner prepuce to furrow, and then on to the corona glan forming an indurated mass, which requires prolonged mercurial tr ment before it will yield. I have sometimes seen it very well mar in women, though these instances are the exception. But that ca of undoubted syphilis may occur, in which induration has b absent, is a fact constantly demonstrated in hospital and priv practice.

I observe with surprise that Mr. Hutchinson touches ligh upon the uninflamed indurated glands as an important diagno symptom. I have seldom seen them absent, though frequentl have seen one or more glands subsequently become inflamed and s purate, thus closely resembling a suppurating bubo. In this other instances, I have frequently remarked to the students attend the hospital that the experience of a lock hospital teaches us no accept too implicitly the somewhat dogmatic teachings laid dow former text-books, but to remember that there is always an except to a rule. I have heard practitioners lay it down as a canon th suppurating bubo is proof positive that the original sore was a n infecting one. As Mr. Hutchinson has well shown, this is not tru

I should like to have added more, especially on the subject of infection, did not consideration for your space induce me to st Mr. Hutchinson's lectures and writings on syphilis are always s instructive, and to me fascinating, reading, that I trust you will s be publishing more, when I shall hope to send the results of further experience.—I am, sir, etc.,

FREDERICK W. LOWNDES

MR. JAMES REID, late Medical Officer of the St. Augustine Pris Canterbury, has obtained a superannuation allowance of £66 5s. 1 *per annum*.

DR. IMLACH'S CASE OF PREGNANCY IN DOUBLE UTERUS.

SIR,—Having heard from good authority that Dr. Imlach had sent a reply to my letter, I was somewhat surprised to see a communication on the subject signed "John Butler Edis."

I must decline to discuss the case with Dr. Edis, or anybody else but Dr. Imlach; and if the latter gentleman will convince me that I have misrepresented him, I will admit my error, though I must remind him that I founded my former remarks on his own statement. If he be silent, subscribers to the JOURNAL will be able to judge for themselves, by what has already been written between us.

In justice to myself, however, I must inform you that my object in writing was not to attack Dr. Imlach; but, having heard the operation fully discussed and adversely criticised by medical men in the town, to separate myself from those members of the staff who, by their silence, acquiesced in its performance. I have only to add my humble apologies to Dr. Edis for presuming to absent myself from the operation without his permission, and no further explanation will be necessary.

Dr. Edis says that all who were at the operation will bear out his statement that Dr. Imlach's account was fair and accurate. Possibly they will. But your readers will be not a little astonished to learn that one of these gentlemen, in a written description of the operation, expressed his regret that he had continued to take any part in it; "that he would never forget the scene," etc., and that all of them, except that gentleman, met in conference and discussed the operation, condemning it in uncomprising terms. They will be still more astonished to learn that Dr. Edis, on two occasions—once at the same conference—added his strictures to those of the rest. It did not occur to him then that my absence from the operation debarred me from criticising it, but he was good enough to give me a detailed account of it, which differed strangely from that which appeared in the JOURNAL of December 12th.

I make no further comment, except to express my astonishment that Dr. Edis should, by imposing upon me the necessity of exposing the weakness of his position, so far damage the cause of his patron.—Yours, etc.,

CHARLES G. STEELE,
Honorary Assistant-Surgeon, Hospital for Women, Liverpool.
Liverpool.

*** The publication of this letter has been accidentally delayed.

MR. CLUTTON'S PAPER ON SPINA BIFIDA AT THE CLINICAL SOCIETY.

SIR,—In speaking of a case of cervical spina bifida at the meeting of the Clinical Society, reported in the JOURNAL of January 16th, I am reported to have said, "It was thought to be a simple running cœtre from the fact that there was a perfect cutaneous covering without any ulceration, median furrow, or central depression," etc. What I did say was "It was thought to be a simple meningocele from the fact that," etc., etc.

I should be glad if you would allow this correction to appear in this week's issue of the JOURNAL.—I am, sir, yours faithfully,

2, Portland Place, W. H. H. CLUTTON.

MEATH HOSPITAL, DUBLIN.

SIR,—With your usual kindness, would you allow me to mention, through your columns, to the many readers of the JOURNAL who were students at the "Old Meath Hospital, Dublin," that I am at present engaged in tabulating, in book-form, the names, addresses, period of study, qualifications, and present appointments, of all old students of the hospital, no matter in what part of the world they are at present located. In order that my compendium should be complete, if those who see this letter would kindly forward me the desired information as soon as possible, it would be esteemed as a very great favour. To save trouble, a post-card will in most cases be sufficient, so long as the information giving name and address is clearly and plainly written.—I am, sir, yours truly,

L. HEPENSTAL ORMSBY, M.D., F.R.C.S.,
Surgeon to the Meath Hospital and County Dublin Infirmary.
4, Merrion Square West, Dublin.

THE LIGATURE IN OVARIOTOMY.

SIR,—In the JOURNAL of November 14th, Mr. Tait challenged my statement that "the cautery is the only perfect method of dealing with the pedicle," and advocated the use of the Staffordshire knot.

Mr. Taylor, in the *Lancet* of December 26th, tells us that he had in the evening to gather up with catch-forceps, and apply a fresh ligature to the stump of a broad ligament, which had been tied by Mr. Tait in the usual way, in the morning.

This clearly shows that the Staffordshire knot is not reliable, and brings out the special advantage claimed for the cautery, that, if there is to be bleeding, it will occur at once, and not after the abdomen has been closed.—I am, sir, yours, etc., SKENE KEITH.
Edinburgh.

STRYCHNINE AS A PREVENTIVE OF POST PARTUM HÆMORRHAGE.

SIR,—I read lately in the BRITISH MEDICAL JOURNAL an article from a gentleman who is in the habit of giving strychnine before labour, to guard against the occurrence of *post partum* hæmorrhage. May I ask if this treatment involves any risk to the fœtus, such as convulsions, etc.?

I can answer from experience as to the efficacy of strychnine combined with ergot in *post partum* hæmorrhage. I have seen cases of severe bleeding, in which the uterus was large and relaxed, completely controlled within five or six minutes after this drug being administered.

Dr. Atthill, in his *Diseases of Women*, recommends a trial of this drug, but does not say that he himself has ever used it. It was from reading his admirable lectures that I was first induced to try it.—Sincerely yours, HOLCLOUGH HOEY, L.K.Q.C.P.I., etc.
Assistant-Master, Coombe Lying-in Hospital.
47, Westland Row, Dublin.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CONVICTION FOR MANSLAUGHTER BY PROCURING ABORTION.

IN the Central Criminal Court, on Saturday last, before Mr. Justice Denman, William Turnbull, a surgeon, and Mary Nottage, a midwife, who were on Friday, January 15th, found guilty of the manslaughter of a young woman named Charlotte Louisa Clifford, were brought up for judgment. There was another case, which was not gone into. In this case, it was proved that the young woman had been received into Turnbull's house in a state of pregnancy, and had died there. He gave a certificate that death had been caused by typhoid fever and congestion of the lungs. Mr. Pepper said he made the *post mortem* examination of the deceased. The deceased had been pregnant, and had miscarried within a fortnight. Some violence had been used to the deceased. The immediate cause of death was blood-poisoning, caused by inflammation. There were no appearances of the deceased having suffered from typhoid fever or ulceration of the throat. Mr. George Jones corroborated the evidence given by Mr. Pepper. Mr. Justice Denman, in passing sentence, commented at some length upon the nature of the case, observing that there was a great distinction to be drawn between the cases of the two prisoners. With regard to Turnbull, who was a surgeon of long standing, it would be mere hypocrisy to pretend that he did not know every particular of the young girl's residence in his house, and Nottage also must have known it. Referring to the suggestion made on the part of the prosecution, his lordship pointed out that nothing could be more mischievous, or calculated to destroy the desire on the part of the young women to preserve their virtue, than that it should be known that there were persons in existence who were ready to relieve them of their shame. Taking all the circumstances into consideration, his lordship sentenced Turnbull to ten years' penal servitude and Nottage to eighteen months' imprisonment with hard labour.

MEDICAL FEES.

SIR,—Do you not think it a perfect insult to receive a circular like the enclosed with the names of Professor Grainger Stewart and Professor Chiene attached thereto? Of course I have taken no notice of it, but I should like to know your opinion, and that of the profession at large, on 7s. 6d. as a fee for examining a person carefully for life-insurance.—Yours very truly,

Canterbury. T. WHITEHEAD REID.

"The Sickness and Accident Assurance Association, Limited, 1, St. Andrew Square, Edinburgh, January 4th, 1886.—Dr. T. W. Reid, Canterbury, Kent.—Sir,—The directors of the above Association, on the recommendation of its chief medical officers, are willing to appoint you medical officer to the Association for your district, if the terms are considered suitable by you. In view of the working expenses at the commencement being necessarily high, while at the same time the income will be more limited than in future years, it is believed that the medical officers of the Association, in common with its other officials, might be willing to assist the Association in its earlier stages by undertaking the medical work for remuneration which otherwise might be considered inadequate. After careful consideration of the question, in consultation with medical men of eminence, the directors, while expecting that they will be able, after the first year of the operations of the Association, to make the amount for the

examination of proposers not less than half a guinea, propose to offer the following fees in the first instance—for the examination of proposers, 7s. 6d.; for the inspection of claims, each visit, 5s. I should be glad to know your views on the matter, and also as to whether you feel disposed to entertain the proposal favourably as a tentative arrangement. Of course special terms would be arranged for the inspection of claims at long distances.—I am, yours truly, J. BUYERS BLACK, Manager.—P.S.—In the event of your reply being favourable, would you please say between what hours proposers could see you at your own house without arrangement, and at what hours you could see them by arrangement."

VIGILANS.—The conduct indicated is evidently objectionable, and our correspondent would be justified in calling the attention of the Secretary of the College to the facts which he states *ex parte*.

NAVAL AND MILITARY MEDICAL SERVICES.

HONOURS FOR SERVICE IN THE SOUDAN.

SIR,—In a letter signed "Eye-Witness," which appeared in the JOURNAL of September 6th, 1884, the following paragraph appeared:—"A supplementary *Gazette* having now been published, in which further promotion for services in the Soudan is announced, it may, I presume, be taken for granted that the list of honours and rewards for that campaign is now complete."

This inference turns out to have been incorrect, for in an official *Gazette* I find a long list of names of officers decorated by H.H. the Khedive for their services during the Soudan campaign of 1884. Of the 80 officers specially commended by General Graham on that occasion, the unrewarded are now as follows—subalterns, 10; veterinary surgeon, 1; surgeons, 4; surgeons-major, 2. With the above exceptions, every officer, combatant or departmental, above the rank of lieutenant has received an acknowledgment. The two surgeons-major left out ranked as lieutenant-colonels, and the four surgeons as captains.

The recipients of the Khedive's decoration are very numerous, but only eleven were mentioned in despatches; the remainder, doubtless, did good service, but it was not specially recorded at the time. This makes the neglect of those who were mentioned all the harder to understand, and points conclusively to the necessity for the "thorough change" indicated in your leading article of October 31st.—I am, sir, yours obediently, JUSTITIA.

THE NAVY.

MR. JOHN ARKLE WARING has been appointed Surgeon to the London Brigade of the Royal Naval Artillery Volunteers.

Fleet-Surgeon NICHOLAS LITTLETON, M.R.C.S., died on January 16th at Well Park, Saltash, in his sixty-seventh year. He entered the Royal Navy as Surgeon May 10th, 1841; became Staff-Surgeon November 11th, 1851, and Fleet-Surgeon June 27th, 1871, retiring from the service April 7th, 1874.

ARMY MEDICAL SERVICE.

MR. J. M. CHAPMAN, M.B., has been appointed Acting-Surgeon to the 1st Inverness Artillery Volunteers.

Surgeon ARTHUR CÆSAR has resigned his commission in the 16th Middlesex (London Irish) Volunteers, which he joined on June 18th, 1881.

Deputy Surgeon-General T. J. TUFNELL, M.D., died on November 27th last at Dublin. He entered the Army Medical Service June 11th, 1841, became Surgeon July 24th, 1860, and Surgeon-Major June 11th, 1861; he retired with a step of honorary rank December 9th, 1874.

Surgeon-Major C. W. WOODROFFE, M.D., died at Booterstown, co. Dublin, on November 19th last. His commission as Assistant-Surgeon dated from March 21st, 1851, Surgeon January 26th, 1858, and Surgeon-Major March 21st, 1871. He retired on half-pay May 17th, 1871. He served the campaign of 1860 in China with the 1st Royals, and was at the taking of Sinho and Tangker, the occupation of Tientsin, and the surrender of Pekin; he received the medal with two clasps.

Surgeon-Major J. P. ROONEY, serving in Bengal, has been directed to take charge of the Ferozepore Lock Hospital on a temporary arrangement, *vice* Surgeon H. S. Parker, who has proceeded on duty.

Brigade-Surgeon B. C. KERR, M.D., in medical charge of the station-hospital at Nynee Tal, is ordered to take civil medical charge of Nynee Tal, *vice* Surgeon-Major A. J. Willcocks, of the Bengal Establishment.

Surgeon A. HEWETT, serving in the Bombay command, is transferred from general duty Presidency Circle to general duty Poona Circle.

Brigade-Surgeon A. ALLAN, M.D., has been brought on the strength of H.M.'s British force in the Bombay command from December 10th, the date of his landing at Bombay.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR G. A. DUNDAS, Bengal Establishment, is appointed to the officiating medical charge of the 18th Native Infantry, *vice* Surgeon-Major H. Potter, who has been granted furlough.

Surgeon-Major GEORGE MASSY is appointed Civil Surgeon of Rawul Pindee in the place of Surgeon G. F. Nicholson, M.D.

Consequent on the return of Brigade-Surgeon J. Fairweather, M.D., to Kapoorthala, Surgeon-Major W. A. C. ROE, of the Bengal Establishment, has reverted to his appointment as First Class Officiating Civil Surgeon.

Surgeon-Major A. J. WILLCOCKS, M.D., Bengal Establishment, Second Class Civil Surgeon at Nynee Tal, is ordered to join the camp of the Lieutenant-Governor of the North-West Provinces and Oude.

The services of Surgeon F. C. REEVES, of the Madras Establishment, are placed at the disposal of the Government of India Finance and Commerce Department.

Surgeon W. H. BURKE, Bombay Establishment, is transferred from general duty Quetta to general duty Sind Circle.

The undermentioned gentlemen have obtained leave of absence for the periods specified:—Surgeon-Major H. POTTER, M.D., Bengal Establishment, Medical Officer of the 18th Native Infantry, for one year and 120 days on private affairs; Surgeon-Major J. KELLY, Bengal Establishment, for two months in extension on medical certificate; Surgeon-Major J. SCULLY, M.D., Bengal Establishment, for six months in extension on medical certificate; Surgeon F. A. ROGERS, Bengal Establishment, to Madras on medical certificate from November 20th to February 18th.

OBITUARY.

DANIEL ALLEN CHARLES, M.D., M.CH.

ON January 2nd, Daniel Allan Charles, M.D., Q.U.I., M.Ch., and L.M., Queen's College, Belfast, and St. Thomas's, London, aged 35, died at his residence, Cookstown, co. Tyrone, Ireland. The talented young physician whose career has been thus prematurely terminated by death, belonged to a family well known throughout the north of Ireland for the number of distinguished medical men it has produced. His father and uncle were both physicians of good standing; one of his brothers is at present Professor of Anatomy in Queen's College, Cork; another is the Demonstrator of Physiology at St. Thomas's Hospital, and author of several well known scientific books; a third is the distinguished young medical officer who was attached to Sir Peter Lumsden's expedition to Afghanistan. With such antecedents and surroundings, Dr. Charles threw himself from the very first, with all the strength of a powerful intellect, and the enthusiasm of an ardent temperament, into the study of medicine. At Queen's College, Belfast, where his studies were pursued, his career was exceptionally brilliant. Matriculating in 1870, he showed himself throughout his course the foremost man of his year, winning the first medical scholarship for three years in succession, together with thirteen class prizes. He graduated, with high honours, in 1875.

After spending some time in London, and acquiring much valuable experience in his profession, he was, in 1876, appointed Medical Officer of the Dispensary at Bellaghy, co. Londonderry, where he quickly made a high reputation for himself both as a physician and as a surgeon.

His popularity among all classes of society, from the highest to the lowest, was quite unprecedented; and when, in 1882, he was obliged, for the benefit of his wife's health, to leave Bellaghy, and settle in Cookstown, his numerous friends and patients parted from him with the deepest regret. His professional success and personal popularity followed him to his new sphere of labour. His reputation was rapidly rising far above that of an ordinary practitioner, and patients, sometimes from long distances, were beginning to seek his advice.

In 1883 he contributed to the BRITISH MEDICAL JOURNAL an account of a remarkable case of "Gunshot Wound of Neck, with Perforation of Œsophagus," treated by him successfully. This paper, and several others contributed to the medical journals, were making his name known in wider circles, and his friends anticipated for him a rapid rise to the highest position in his profession, when his career came suddenly to an end. Towards the end of December he was seized with a severe attack of enteritis, and, after little more than a fortnight's illness, unfortunately attended with much suffering, he succumbed to the disease. Nothing could exceed the concern shown regarding him by all classes of the community. Nine of his professional brethren gave their services, not merely as physicians, but as constant attendants by his sick bed, often sitting up with him during the night. All that medical skill could do was done for him; but from the first his symptoms were alarming, and it was only his splendid physical organisation that prolonged his struggle with disease.

The news of his death caused widespread sorrow, and his funeral was one of the largest ever seen in Cookstown. Above eighty members of the masonic body, to which Dr. Charles belonged, accompanied the procession to the parish church, where, after reading the service, the rector, Dr. Carter, delivered an address, in which he characterised the deceased as "a dutiful and obedient son, a tender and devoted husband, a loving father, and a kind and generous friend." The whole proceedings wore an appearance of genuine sorrow, very different from the merely conventional mourning which is usual on such occasions. After the funeral, a meeting was held by some of the principal inhabitants of Cookstown and the neighbourhood, and a subscription-list was opened with a view to erect a suitable monument to Dr. Charles, and to present his bereaved family with a substantial token of the respect and affection with which he was regarded. Several contributions of £20, £10, and £5 were at once offered; and it is hoped that a sum will be raised large enough to be of material assistance to the widow and children who now mourn his loss.

IT is announced in the *London Gazette* that the Queen has been pleased to grant the dignity of a knight to William Bartlett Dalby, M.B.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

DISTRICT MEDICAL OFFICERS AND THE POLICE.

SIR,—I am district medical officer of an union; I am not police-surgeon. The police find a person, apparently well-to-do or not, in the street *hors de combat*, from cause unknown (drink, disease, accident, or otherwise), and take him or her to the police-station, and send for me, assuming that the party is a pauper. Are the police justified in so assuming from appearances only, or even against them (as where the party has a watch or money)? If so, I cannot charge. If not, am I justified in refusing to attend without fee?—I am, yours, etc., M.R.C.S.E.

*** The police authorities, whether acting for a city borough or division of a county, have no power vested in them to require the attendance of a district poor-law medical officer in any case of real or supposed sickness when the party has been taken to a station-house. If the police had such authority, and exercised it in the metropolis, many poor-law medical officers would be deprived of fees which they now get, and which is 3s. 6d. for a visit by day, and 7s. 6d. if made between 11 P.M. and 6 A.M. Our correspondent should apply for his fee, and, if it be refused by the police authorities, decline in future to attend to any call they may make upon him. The only order he is bound to obey is one given by the relieving officer, and, in cases of emergency, by an overseer or his assistant.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on January 13th, and, when eligible, will be admitted to the pass-examination.

S. A. Bontor, and F. W. Tunnicliffe, students of St. Bartholomew's Hospital; H. V. Hickman, and E. H. Baldock, of Guy's Hospital; G. A. Ballingall, of Edinburgh University.

Passed in Anatomy only.

E. R. Kavanagh, of Guy's and Westminster Hospitals; A. B. Harman, H. B. Falconer, and W. J. Rugg, of King's College; D. T. Jones, of Guy's Hospital; C. J. Paterson, and L. M. Stocken, of University College; D. J. P. McNabb, of Newcastle and London Hospital; E. J. Cross, of St. Thomas's Hospital; C. M. Leakey, of the London Hospital; G. E. G. Metcalfe, of St. Bartholomew's Hospital; A. G. N. Goldney, of Charing Cross Hospital; R. F. H. Newton, and S. D. Graham, of St. George's Hospital; J. D. H. Smyth, and R. B. Ferguson, of St. Mary's Hospital.

Passed in Physiology only.

P. Johnson, and G. D. Parker, of St. Bartholomew's Hospital; H. B. Slatter, R. W. Rouw, and A. R. F. Evershed, of Guy's Hospital; H. E. Blake, of University College; R. Hedley, of Bristol Medical School; C. J. P. Hogarth, of Melbourne and St. Bartholomew's Hospital; E. Carter, and J. L. S. Sherlock, of the London Hospital; A. C. A. Lovegrove, of Westminster Hospital; R. R. Hatherell, of St. Thomas's Hospital; R. Thorpe, of St. George's Hospital; A. R. Sieveking, of St. Mary's Hospital; M. Chisholm, of McGill College, Montreal.

The following gentlemen passed their primary examinations in Anatomy only at a meeting of the Board of Examiners on January 14th, and, when eligible, will be admitted to the pass-examination.

F. R. Hird, and A. J. Lambert, of the Leeds School of Medicine; J. F. Wright, of Owens College, Manchester; W. C. Costine, of University College, Liverpool; H. F. Devis, of Bristol Medical School; C. Graves, of St. Mary's Hospital; F. Osborne, and C. H. Andrews, of St. Thomas's Hospital; H. A. Bray, of King's College; R. A. Smith, and W. W. Craig, of University College; J. V. Albert, and G. T. Mould, of St. George's Hospital; T. H. Valentine, of St. Bartholomew's Hospital; A. E. Tebb, and R. G. Pollock, of Guy's Hospital; J. P. De Buriatta, and J. R. Gallard, of the London Hospital; R. Roberts, of Middlesex Hospital.

Passed in Physiology only.

G. Thorpe, of the Sheffield Medical School; N. Nelson, of Dublin; E. Foxton, of Kingston, Canada; A. J. Mener, of New York; H. W. C. B. Cave, of Queen's College, Birmingham; W. V. Tanner, H. C. Addison, and W. D. Wells, of King's College; G. H. Thompson, R. H. Wellington, and C. S. Fisher, of St. Bartholomew's Hospital; N. Robinson, and W. H. Robinson, of St. George's Hospital; D. F. Roberts, of Manchester and Guy's Hospital; J. S. Bradish, F. M. House, and C. R. Adams, of St. Thomas's Hospital; P. K. O'Brien, and A. L. Fuller, of University College; E. O. Kingdon, of St. Mary's Hospital.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on January 18th.

T. S. Edye, L.S.A., Elgin Road, W., of St. Thomas's Hospital; A. J. Pickthorn, L.S.A., Wetherly Terrace, W., of St. George's Hospital; W. R. N. Maloney, L.S.A., Melbourne, of St. Mary's Hospital; G. Niven, M.B.Cantab., Greenwich, of Cambridge and Guy's Hospital; R. Burnett, L.R.C.P.Lond., Onecote, Staffordshire, and M. Benson, L.R.C.P.Lond., Wigan, of the Royal Infirmary, Manchester; D. J. P. McNabb, L.R.C.P.Ed., Newcastle-on-Tyne, of Newcastle and London Hospital; J. R. Logan, M.D.Toronto, E. Farrer, M.B.Toronto, St. Louis, Canada, and H. H. H. Trenton, Canada, of Toronto; P. J. Rendall, L.S.A., Ladbroke Square, of St. Bartholomew's Hospital; E. W. Clarke, M.B.Edin., of Edinburgh University; J. E. Trask, Bath, of Bristol Royal Infirmary; J. S. Revely, M.B.Durham, South Shields, of Newcastle-on-Tyne.

Four candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members; seven were referred for three months, five for six months, and one for nine months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on January 19th.

S. B. Jolly, L.S.A., Lansdown, Bath, and A. J. H. Montague, L.S.A., Notting Hill, of St. Thomas's Hospital; W. Evans, L.K.Q.C.P.I., Liverpool, and A. W. Dawson, M.B.Durham, Liverpool, of the Royal Infirmary, Liverpool; W. E. Facey, M.B.Cantab., Abergavenny, of St. Mary's Hospital; R. F. Jowers, L.S.A., Brighton, of St. Bartholomew's Hospital; J. J. Weaver, L.S.A., Southport, of University College; F. E. Daniel, Birmingham, and A. W. Hill, L.S.A., Adelaide, of Birmingham; H. C. Male, M.B.Edin., Stone, Staffordshire, of Edinburgh University; M. Sharman, M.B.Glasgow, Wellingborough, of Glasgow University; J. T. Harvey, M.B.Edin, Victoria, of Melbourne and Edinburgh University; R. W. Wright, Holland Road, of St. George's Hospital; E. Felix, L.R.C.P.Lond., Sharland Road, W., of Charing Cross Hospital; G. E. Roach, L.S.A., Plymouth, of Guy's and Birmingham; E. B. Sugden, L.S.A., Hampstead, of King's College.

Seven candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members. Two candidates were referred for three months, and five for six months.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentleman passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on Thursday, January 14th, 1886.

Oakman, Joseph John, The Priory, Battersea, S.W.

The following gentlemen passed the Examination in the Science and Practice of Medicine, and received certificates to practise.

Pisani, Lionel John, Rockmound Road, Upper Norwood.
Teasdall, Walter John, M.D., University of Victoria, Aurora, Ontario, Canada.
Thorpe, George, 65, Stoke Newington Road, N.
Wilkin, Griffith Charles, 15, Hyde Park Street, W.

EXAMINATION IN ARTS.—The following candidates passed this examination on January 8th and 9th, 1886.

First Division (*Winter*), George Mitchell. *Second Division*, J. C. Atkinson, E. A. Bonner, A. H. Buck, A. R. Chater, A. N. Davies, F. V. Denne, J. W. Eastment, F. A. M. Flegg, G. S. Fuller, G. Garrard, G. Hern, D. C. Johnston, J. C. Kellman, S. G. Knox, P. G. Laver, A. A. Liversidge, H. St. B. Moore, J. F. Nall, T. G. Ouston, E. Ringrose, W. H. Savery, R. H. Shepard, H. Soltan, E. T. Whitehead, G. E. M. Wood.

The following passed in Elementary Mechanics alone.

A. Addie, H. C. Barnes, B. A. Castellotte, A. D. P. Dudley, R. A. Dunn, L. Dryland, E. W. Everett, G. B. Holden, J. H. Jones, E. J. Lang, G. E. Lockyer, H. B. Long, A. H. Meadows, D. C. Rayner, F. C. Sutherland, A. E. E. Twynam, E. T. White, J. H. Garrett, F. F. S. Sheen.

MEDICAL VACANCIES.

The following vacancies are announced.

BRISTOL GENERAL HOSPITAL.—Assistant House-Surgeon. Salary, £50. Applications by January 30th.

CHELTENHAM GENERAL HOSPITAL.—Honorary Surgeon. Applications by February 1st.

COTTAGE HOSPITAL AND DISPENSARY, Hounslow.—Dispenser. Applications to the Secretary.

COUNTY ASYLUM, Lancaster.—Assistant Medical Officer. Salary, £100. Applications by January 25th.

EVELINA HOSPITAL.—House-Surgeon and Surgeon for Out-patients. Salary, £70. Applications by January 28th.

HULL ROYAL INFIRMARY.—Junior Assistant House-Surgeon. Salary, £50. Applications by January 26th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, Margaret Street, Cavendish Square.—Honorary Visiting Physician. Must reside within one mile of the institution.

JAMES MURRAY'S ROYAL ASYLUM, Perth.—Assistant Medical Officer. Applications by February 1st.

LINCOLN UNION.—Vaccination Officer. Applications by January 25th.

LIVERPOOL NORTHERN HOSPITAL.—House-Physician. Salary, £80. Applications by February 5th.

LIVERPOOL INFIRMARY, Myrtle Street, Liverpool.—Assistant House-Surgeon.

LONDON FEVER HOSPITAL, Liverpool Road, Islington.—Assistant Resident Medical Officer. Salary, £120. Applications to the Secretary by February 3rd.

MEDICAL INSTITUTE, 4, Bath Street, Bath.—Medical Officer. Salary, £200. Applications to the Secretary by January 28th.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Anæsthetist. Applications by January 27th.

NATIONAL HOSPITAL, Queen Square, Bloomsbury.—Two Clinical Clerks. Applications by January 28th.

NATIONAL HOSPITAL, Queen Square, Bloomsbury.—Surgeon, Ophthalmic Surgeon, and Aural Surgeon. Applications by January 28th.

NEWCASTLE-UPON-TYNE INFIRMARY.—House-Surgeon. Salary, £50. Applications by February 3rd.

NORWOOD SCHOOLS.—Dentist. Salary, £50. Applications by January 27th, to Guardians' Board-room and Offices, Brook Street, Kennington Road, S.E.

OLDHAM INFIRMARY.—House-Surgeon. Salary, £80. Applications by January 23rd.

PARISH OF LOCHS, Island of Lewis.—Medical Officer. Salary, £150 per annum. Applications by February 1st.

ROYAL SOUTH LONDON DISPENSARY, St. George's Road, Lambeth. Surgeon, Honorarium, £20. Applications by January 30th.

STANLEY HOSPITAL, Liverpool.—Junior House-Surgeon. Salary, £70. Applications by January 28th.

ST. IVES UNION, Hants.—Medical Officer of Health. Salary, £60. Applications by January 26th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Honorary Physician. Applications by February 1st.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Salary, £70. Applications by January 30th.

STOCKPORT INFIRMARY.—A Third or Fourth Years' Student as Assistant to House-Surgeon. Applications by January 30th.

THE CITY OF EXETER LUNATIC ASYLUM.—Medical Superintendent. Salary, £250. Applications to Town Clerk, 15, Bedford Circus, Exeter, by January 27th.

THE QUEEN'S HOSPITAL, BIRMINGHAM.—Vacancies for offices of Physician for out-patients, and of Casualty Surgeon. Honorarium, £50. Applications before January 23rd.

UNIVERSITY OF SYDNEY.—Professor of Physics. For particulars apply to S. Samuel, 5, Westminster Chambers, Victoria Street, S.W.

WONFORD HOUSE HOSPITAL, Exeter.—Assistant Medical Officer. Salary, £150. Applications to Dr. Deas, by February 3rd.

MEDICAL APPOINTMENTS.

DONALDSON, Robert Lockhart S., A.B., M.B., B.Ch., University of Dublin, appointed Assistant Resident Medical Superintendent to the Monaghan and Cavan District Lunatic Asylum, Monaghan.

FENTON, George, M.R.C.S.Eng., A.S.A.Lond., etc., appointed Medical Officer to the Western Dispensary, Rochester Row, S.W., *vice* Francis Pearse, M.R.C.S.Eng., A.S.A.Lond., resigned.

GOOD, Frederick Thomas, M.R.C.S.Eng., L.S.A.Lond., appointed Medical Officer of Health (*pro tempore*) for St. Neots Rural and Urban Sanitary Districts, *vice* E. Segson, L.R.C.P. and S.Ed., deceased.

JOHNSTON, George Minto, M.D.Ed., appointed Medical Officer to the parish of South Leith, *vice* Thomas Williamson, M.D., deceased.

PHILPOTS, E. P., M.D., appointed Resident Physician and General Manager to the Mont Dore, Bournemouth.

WALDO, Frederick J., M.A., M.D., appointed Honorary Medical Officer to the Kensington Dispensary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

BRUCE-RONALDSON.—At Ennerdale, Haddington, N.B., on January 15th, the wife of J. Bruce-Ronaldson, F.R.C.S.E., etc., of a son.

GREEN.—On Thursday, January 14th, at 116, Stricklandgate, Kendal, the wife of T. Beaufoy Green, of a son.

ROSSITER.—On January 16th, at Cairo Lodge, Weston-super-Mare, the wife of George F. Rossiter, M.B.Lond., of a son.

MARRIAGES.

CHAPMAN—MACKENZIE.—At 34, Regent Terrace, Edinburgh, on January 14th, by the Rev. P. Hay Hunter, minister of the Parish of Elie, James Milne Chapman, M.B.Edin., M.R.C.S.Eng., Inverness, to Eliza Georgina, daughter of the late A. F. Mackenzie, Kessock, Inverness-shire.

FERGUSON—BOOTE.—On January 13th, at the parish church, Ashton-on-Mersey, by the Reverend F. R. Wansbrough, James Mitchell Ferguson, M.B., Hounslow, to Jane Beatrice Margaret, elder daughter of Daniel Boote, Ashton-on-Mersey and Manchester.

MCGEAGH—MORICE.—January 14th, at St. Stephen's, Paddington, London, by the Rev. W. S. Carter, R. T. McGeagh, M.D., Surgeon, A. M. S., to Ida C. Napier, eldest daughter of Morice Pacha, R.N., of Alexandria, Egypt.

DEATHS.

MADELEY.—On January 14th, at Ventnor, Isle of Wight, George Sherwin Madeley, M.R.C.S., aged 41.

WOOD.—On February 10th, at 118, Mount Pleasant, Liverpool, Robert Arthur Henry Wood, M.R.C.S. and L.S.A., Fellow of Obstetrical Society, Honorary Surgeon to Liverpool Lying-in Hospital, and District Medical Officer to Liverpool Select Vestry.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Thudichum: On the Theory of the Febrile Process, its accompanying Chemical Changes, and the Modes in which it produces Death and Immunity. Mr. Walter Pye: Pyæmia after Removal of a Sarcomatous Tumour from the Base of the Skull.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. William Ogle: Mortality in the Medical Profession. Mr. Henry Lee: On the Tapetum Lucidum.

WEDNESDAY.—British Gynæcological Society, 8.30 P.M. Specimens will be shown. Address by Mr. Lawson Tait.—Hunterian Society. Dr. Braxton Hicks: Note on a Condition of Uterine Displacement, in which Pessaries are Contraindicated; Case of Cephalic Version in Arm-Presentation. Dr. Galabin: On the Relative Advantages of Axis-Traction and Ordinary Forceps, and on the Mode of making Correct Axis-Traction with Ordinary Long-curved Forceps.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Living and Card Specimens at 8 P.M. Dr. Thomas Reid: 1. Polarisation-Spectroscope for Achromatopsia; 2. The same for determining the Neutral Point in Dichroic Vision; 3. A Perimeter for Colour-Vision; 4. Ophthalmoscope adapted for the Electric Light. Mr. E. Nettleship: Fatal Meningitis after Enucleation. Mr. Priestly Smith: Primary Glaucoma in Relation to Age. Mr. W. H. Jessop: On Herpes Ophthalmicus affecting the Eye. Mr. G. L. Johnson: 1. Atrophy of Iris, etc., following a Blow on the Head; 2. Conical Cornea improved by Stenopaic Glasses. Mr. W. Lang (for Dr. J. W. Barrett): New Microtome. Mr. H. Juler: Refraction-Ophthalmoscope arranged for the Electric Light. Dr. C. E. Fitzgerald: A New Instrument for facilitating Refraction-Tests. Mr. W. J. Jessop: A New Pupillometer. Mr. W. Adams Frost: A New Model showing the Movements of the Eyes. Mr. G. Hartridge; 1. Glaucoma in a Girl aged 14; 2. Small Lenses. Mr. R. M. Gunn: 1. Optic Atrophy after Wound of Orbit; 2. Amblyopia from Bisulphide of Carbon; 3. Result of Operation on Eye damaged by Severe Sympathetic Disease.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M. Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M. Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M. Royal London Ophthalmic.—1.15 P.M.: St. George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M. West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Sk. M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; E. Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. T. 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu.,

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12. Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. T. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Thro Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

We regret to find that the accounts of the Kent and Canterbu Hospital for the past year show a deficit of £733, which, with overdrawn account at the bank, with interest, leaves a balance agai the institution of nearly £2,000.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

MUNICATIONS respecting editorial matters should be addressed to the Editor, 1A, Strand, W.C., London; those concerning business matters, non-delivery the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, rand, W.C., London.

rder to avoid delay, it is particularly requested that all letters on the editorial siness of the JOURNAL be addressed to the Editor at the office of the JOURNAL, d not to his private house.

IORS desiring reprints of their articles published in the BRITISH MEDICAL URNAL, are requested to communicate beforehand with the Manager, 161A, rand, W.C.

ESPONDENTS who wish notice to be taken of their communications, should thenticate them with their names—of course not necessarily for publication.

ESPONDENTS not answered, are requested to look to the Notices to Corre- ondents of the following week.

IC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of alth if they will, on forwarding their Annual and other Reports, favour us h *Duplicate Copies*.

ANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

A SENSATIONAL REPORT.

RY absurd and highly exaggerated account has been going the round of the ers of a patient who partially recovered his sight when under treatment at Royal Eye Hospital, St. John Street, Manchester. This ridiculous and sational story was the concoction of the patient himself and of a newspaper orter. This gentleman had called upon Dr. Emrys-Jones, who refused to e any information, and expressed his disapproval of the publication of medi- details of the treatment of cases in the daily papers; the incorrect publica- in question was, therefore, made against his wish, and without his hority. He has published a warm disclaimer, and his conduct throughout been in the highest degree correct. The case was one of optic neuritis bene- d by mercurial treatment.

DURHAM DEGREE.

—In answer to your correspondent, "W. A. R.," I would advise Bryant's gery, Roberts's *Practice of Medicine*, Husband's *Forensic Medicine*, Ringer's Farquharson's *Therapeutics*, Lombe Atthill's *Diseases of Women*. If . A. R." would write to Dr. L. Armstrong, Dean of the Medical Faculty, he ld be able to obtain a prospectus of the Newcastle Medical College, in which would find certainly ten sets of questions given at the most recent minations. If "W. A. R." would like to communicate with me, I shall be py to furnish him with any further particulars.—Your obedient servant,

M.D.

DUALITY OF THE BRAIN.

—I have just read the article on the dual action of the brain in the JOURNAL of uary 2nd, and beg to call your attention to a case I published in the *Pro- cial Medical Journal* for 1848, which will be found at page 510 of the volume that year, and may be of interest in this connection.—Yours faithfully,

3, Brock Street, Bath. J. PRANKERD, F.R.C.S.Eng.

THE PRESENTATION OF MAMMARY ABSCESS.

—I think that very few cases of inflammation of the breasts should go on to ess, if properly managed. The effervescing citrate of potash, with about en minims of sweet spirits of nitre, and the same quantity of sal volatile, y four hours, will cause most cases to end in resolution. If any local appli- ons are required to ease pain and help the resolution, hot fomentations con- ing belladonna, I think are the best —I am sir, your obedient servant,

arbiton F. P. ATKINSON.

TOXIC EFFECTS OF CUCAINE.

—In case any of your readers should be prejudiced against cucaine by Dr. mpson's note on the dangers of its use, will you allow me space to say that tely applied it, of the strength of 4 per cent., continuously for days to re- e the excessive pain of a corneal ulcer in a young lady, and that altogether ty grains at least were so used. The only drawback noticeable was per- ent dilatation of the pupil.

econdly, I recollect a strong healthy-looking gamekeeper fainting from a at (self-inflicted) puncture-wound, and a still more interesting case of a rous navvy, on whom (alas! more than twenty years ago) I was about to orm phlebotomy, as soon as the lancet touched his skin, not only fainting, actually becoming convulsed by the fright.—Yours, EXPERIENCE.

CUCAINE IN PROSTATIC DISEASE.

In reply to inquiry in your JOURNAL of January 2nd respecting the above, I recommend theobroma-oil suppositories, each containing one-tenth of a n of cucaine-hydrochlorate, one to be used every night. Great care must be n in their manufacture, as the cucaine is only held in suspension and not olved.

these suppositories, after a time, should slightly fail in their action, I ld alternate them with the suppositories made of one-fourth of a grain each ctract of belladonna and camphor in oil of theobroma.

e foregoing treatment has been highly successful in a very severe case, and orthy of trial by your correspondent "Leeds."—Yours faithfully,

, Pembridge Place, W. M. J. MAC CORMACK, M.D.,

Surgeon-Major (Retired).

I would recommend "Leeds" to pass a fine or medium-sized bulbous eter, and keep it tied in for a day or two, in order to give the bladder com- rest. I have found this treatment answer well. A morphine suppository, of the strength of a quarter of a grain, at bedtime, gives great relief.—I am, yours truly,

G. R. ILLINGWORTH, M.D.(Ed.).

PURE TEREBENE IN THE CURE OF WINTER COUGH.

SIR,—Referring to Dr. Bond's letter of comment and inquiry as to the "terebene" recommended and employed by Dr. Murrell as stated in his paper "On Winter Cough" in the BRITISH MEDICAL JOURNAL of December 12th, I am in a position to state that the "terebene" so recommended and employed by Dr. Murrell is not that in which Dr. Bond is in any way interested. I—possibly among many others—interviewed Dr. Murrell to ascertain where *the* "terebene" which appeared to be so efficacious in his hands was to be obtained. He informed me that it was procured from Messrs. Burroughs and Wellcome, of Snow Hill; at the same time showing me a sample of a pale, straw-coloured, apparently oleaginous fluid. To Snow Hill, I forthwith went, and learnt from Messrs. Burroughs and Wellcome that the supply of "pure terebene" was exhausted; they recommended one as a substitute, and as they assured me, equally efficacious, "Eucalyptia," of which they kindly gave me a two-drachm bottle. As, however, I was desirous of obtaining that for which I purposely came, they told me I might possibly obtain it from Messrs. Cleaver, of 32, Red Lion Street. Thither I went, only to meet with another disappointment. When I explained to the shopman what I required, and Dr. Murrell's directions as to its administration, he seemed posed, and was not cognisant of its being administered internally. He showed me a shilling bottle wrapped up, and labelled as to its sanitary application, etc., observing, at the same time, that he did not think a few drops taken would do anybody harm. The result is that I left it, and procured some "pure terebene" the following day at Squire's, of Oxford Street. It is a pure limpid fluid which I am now taking. As the eventuality from administration of these "terebenes" or terebenthinates in my own case are matters concerning chiefly doctor and patient, I need only, in due course, "report progress" to Dr. Murrell, and am, yours very faithfully, RICHARD LAWTON, L.S.A., 1827.

156, York Road, Lambeth.

SIR,—You have been good enough to publish a letter from Dr. Bond on this subject, the object of his communication being to persuade the readers of your JOURNAL that the "pure terebene" recently advocated by Dr. Murrell in the treatment of winter cough is identical with a substance which Dr. Bond is not ashamed to own he has patented. He claims for his preparation that it is prepared "by the method suggested by Dr. Murrell;" but Dr. Murrell gives no method for its manufacture, and furnishes no details which could warrant Dr. Bond's assertion that the processes are the same. This gentleman says that his preparation "is not what is ordinarily known as a patent medicine;" but if a medicine which has been patented be not a patent medicine, then, perhaps, he will kindly inform us what he understands by that expression.

It would be interesting to know the views of the Royal Society of Edinburgh, of which Dr. Bond appears to be a Fellow, as to the propriety of a medical man, whether in practice or not, patenting a preparation which, according to his own account, is possessed of such useful properties in the treatment of a troublesome and obstinate affection.—Yours faithfully, A. S. G.

UNDUE PUBLICITY.

A CORRESPONDENT forwards the following cutting from the *Cavan Weekly News*, and asks, "Is this medical advertising?"

"MEDICAL.—Doctor Alfred J. Smith has arrived at his residence, 26, Upper Mount Street, Dublin, after his sojourn among the leading hospitals of the continent. During his stay in Leipsic University, with its staff of professors hardly equalled in any other city, he studied the diseases of women and children under Credé and Sänger, internal medicine under the celebrated Professor Wagner. In Berlin, his time was chiefly devoted to gynæcology and diseases of the heart. But the Vienna Hospital, with its three thousand beds, and its world-famed teachers, afforded him the best advantages for studying the treatment of the various diseases. Under Carl Braun von Fernwald, Professors Spatch and Bandl, he studied gynæcology; operative obstetrics under Priskatech; children's diseases under Monti; surgery under Bilroth; genito-urinary troubles under Ultznan; diseases of the digestive organs and general system under Professor Nothnagel, one of the most eminent men of the present day in that branch of the medical science. In Vienna, Dr. Smith had all the advantages of a house-physician, and holds the highest testimonials from his professors in each of the above subjects. Dr. Smith is son of Philip Smith, Esq., J.P., Kevitt Castle, Crossdoney."

*** We presume that there can be no doubt about the answer, and it is professionally much to be regretted that such methods of furthering the public cognisance of the qualifications of an educated medical man should be pursued.

GARROD'S MATERIA MEDICA: ALTERATIONS.

SIR,—In consequence of the recent publication of numerous corrections in the *British Pharmacopœia*, certain alterations have been found necessary in the new edition of Garrod's *Materia Medica*. Will you kindly announce that a printed list of these can be obtained from the publishers, Messrs. Longmans and Co., or from myself?—Yours faithfully, NESTOR TIRARD, M.D.,

Editor of Garrod's *Materia Medica*.

28, Weymouth Street, Portland Place, W.

P. W. S.—We publish such lists as we receive.

ANÆSTHETICS V. ANODYNES.

SIR,—I should feel much obliged for replies to the following queries.

1. What anæsthetic is now considered best for using in cases of labour?
2. Can any anæsthetic be said to be absolutely safe, when properly administered, in such cases, and where there is no evidence of any organic disease?
3. Has cucaine been used as an external application in cases of prurigo ferox? if so, with what result? and what is the strength of the solution? If not, would it be a safe application, and to how large an extent of surface might it be applied at one time?—I am, sir, yours faithfully, F. CARRE, F.R.C.S.I.

Letterkenny.

THE letter of "Veuda" has been placed in the hands of the General Secretary and Manager.

"M.D." (Naples) desires to know if there are any publications on the colonial or low fever of Australia.

ARE ERGOT AND IRON INCOMPATIBLE?

SIR,—In reply to "Odoacer," Dr. Atthill, of Dublin, in his book on *Diseases of Women*, in the section devoted to ergot, says, "In anæmic patients, the addition of ten drops of tincture of perchloride of iron to each dose greatly enhances the efficacy of the medicine."—I am, etc., I. M. C.

LING'S SWEDISH GYMNASTICS.

DR. L. M. asks where he can get information which will enable a ladies' school to put into daily use a system of gymnastics, such as Ling's Swedish gymnastics, if books are printed with instructions, etc.

MAHOMED MEMORIAL FUND.

THE following additional subscription has been received: Percy Moore Wood, Esq., Australia, £5.

ARTHUR E. DENHAM, Treasurer,
W. H. A. JACOBSON, JAMES F. GOODHART, Honorary Secretaries.

CONGENITAL HERNIA.

SIR,—What is the most satisfactory way of treating the above in very young subjects?—I am, etc.,

SURGEON.

ANGLO-AMERICAN CARRIAGES.

SIR,—Kindly allow me, through the medium of your JOURNAL, to ask if any of my brother "medicos" can give me information as to wear, comfort, etc., of the Anglo-American carriages, with four wheels, and under 4 cwt.—Faithfully yours,

A MEMBER.

HOME FOR INCURABLES.

SIR,—With reference to the letter from "Nemo" in the JOURNAL of January 16th, the Longmore Hospital for Incurables in this city has accommodation for patients who can pay for maintenance. Board for a whole room costs £52 per annum, for a half room £35. I shall be glad to send full particulars on application.—I am, etc.,

J. T. MACLAGAN, Secretary and Treasurer.
6, North Saint David Street, Edinburgh.

FAILURE OF BELLADONNA TO ARREST THE SECRETION OF MILK.

SIR,—To those who are in the habit of regarding belladonna as specific for the suppression of the secretion of milk, the following may prove interesting. Mrs. R. F., aged 23 (with marked symptoms of phthisis), was delivered of her first child on November 23rd. The breasts were small, and apparently contained no milk; but, as it was considered unwise to allow her to suckle the infant, tincture of belladonna was given in order to arrest the secretion. On November 24th, the breasts were enlarged. Two days later, galactorrhœa was excessive. Pressure (as recommended by Dr. Edis), a mixture of iodide of potassium and tincture of belladonna, and the external application of extract of belladonna, were tried, but proved useless. Quinine also failed. The bowels have been freely acted on by sulphate of magnesia, but all treatment has been to no purpose; and to-day, four weeks after confinement, milk still runs from the breasts in such quantities as to necessitate a frequent change of clothing. Hitherto, I have always found the above measures so speedily successful, that I look on the present failure as being so exceptional as to make it worth noting.—I am, etc.,

E. A. P.

THE MEDICAL DIRECTORY.

SIR,—May I be allowed to suggest that it would be a great boon if the proprietors of that excellent compendium, the *Medical Directory*, would, in addition to the usual items of intelligence, add the registered telegraphic addresses of those who have taken the trouble to provide themselves with one. It would take up but little additional space, and be of great service.—I am, sir, your obedient servant,

A. S. G.

AN APPEAL.

WE are asked again to call the attention of our readers to an appeal made in our issue of January 2nd, by Mrs. E. D. Bauer, for assistance for her father, Mr. S. F. Scarnell, L.A.C. (now in his ninety-first year), who has been bedridden for eleven years, and long since unable to practise. His sole income is £20 *per annum* from the Medical Benevolent Fund.

REDUCTION OF DISLOCATIONS BY PRESSURE.

SIR,—The reduction of dislocations by pressure appears worth attention. I have twice reduced dislocations of the thumb by grasping the hand with my two hands, and pressing with my thumbs on the dislocated articular surfaces; and two or three times I have reduced partial dislocations of the shoulder forwards by raising the arm with one hand, and pressing back the head of the bone with the other, standing behind the patient. I may note, likewise, that I always reduce common dislocations of the shoulder downwards, in the way which was practised in University College Hospital, namely: the patient is seated in a chair, another chair is placed by his side; the surgeon stands behind the patient, places his foot on the chair, his knee in the axilla, and usually easily brings the head of the bone into place with gentle traction to dislodge the head of the humerus; the arm always afterwards placed in sling for a week or two.—I am, sir, your obedient servant,

CHARLES YOUNG.
Chilton Polden.

DIAGRAMS FOR A POPULAR LECTURE.

SIR,—Would you kindly inform me through the JOURNAL, or otherwise, where I might obtain diagrams on the heart, suitable for a lecture to be delivered at a Young Men's Mutual Improvement Society, and oblige, yours faithfully,

Cleveland House, New Normanton, Derby. WM. HY. WRIGHT.

*** Probably from the National Health Society, 44, Berners Street, London, W.

PHTHISIS is invited to communicate with Dr. Jelly, Calle Colon-B., Valencia, Spain.

ERRATUM.

IN the JOURNAL of January 16th, page 117, column 2, line 7, for "Mr. F. Treves" read "Mr. W. Knight Treves."

COMMUNICATIONS, LETTERS, etc., have been received from:
Mr. Alfred Craske, London; Mr. C. E. Bennett, Liverpool: Mr. F. T. Good, St. Neots; Our Cairo Correspondent; Mr. J. Ferguson, Perth; Mr. J. Altham, Penrith; Mr. Buxton Shillitoe, London; Dr. Idelson, St. Petersburg; Dr. Carey, Killarney; Dr. E. H. Jacob, Leeds; Dr. G. M. Johnston, Leith; Dr. T. J. Waldo, London; Brigade-Surgeon Wm. Curran, London; Medical Officer of Health, Salford; Mr. H. Stubbs, Madeley; The Honorary Secretary of the Chester Medical Society; Mr. William Duncan, Ridgeway, Frome; Dr. S. Holdsworth, Wakefield; Mr. J. T. Maclagan, Edinburgh; Mr. C. J. Symonds, London; Dr. Thomas, Glasgow; Mr. E. Gilbert Smith, Birmingham; Mr. T. Tinsworth, Liverpool; Mr. Charles E. Steele, Liverpool; Mr. C. C. Scott, Twickenham; Captain W. Joynson, Northwich; Dr. J. P. McGeagh, Liverpool; Mr. W. Gurner, London; Mr. W. Knight Treves, Margate; Mr. W. H. Wright, New Normanton; Mr. B. C. A. Windle, Birmingham; Mr. J. Maclea Carrell, London; Mr. John Brown, Glasgow; Mr. Cecil R. C. Lyster, London Mr. G. T. Rossiter, Weston-super-Mare; Mr. Dunstan, London; I.V.R.C.; M Simeon Snell, Sheffield; Dr. Ormsby, Dublin; Mr. H. Lee, London; Dr. E. B Sieveking, London; Mr. W. Smith, London; Dr. J. E. Usher, London; Mr. C Gaskoin, Caerleon; Dr. J. Ferguson Perth, N.B.; Mr. C. R. Lyall, Skipton Mr. Clutton, London; Dr. Barnardo, London; Mr. A. Bernard, Liverpoo Dr. W. R. Thomas, Sheffield; Mr. J. A. Francis, London; Messrs. Cleaver an Sons, London; Mr. H. W. White, London; Mr. M. D. Makuna, Ystrad Valley Mr. G. H. Brown, Brynmawr; Mr. T. Whitehead Reid, Canterbury; Mr. W Hunter, Edinburgh; Mr. O. M. White, London; Our Aberdeen Correspondent Mr. N. Alcock, Dublin; Mr. W. W. Wagstaffe, Sevenoaks; Mr. E. Eas London; Mr. W. Bruce, Dingwall; Dr. D. Newman, Glasgow; Mr. A. Godfrey, Jersey; Surgeon-Major Wallich, London; Mr. Vincent Jackson Wolverhampton; Mr. T. L. Macartney, Worthen; Dr. J. Braxton Hicks London; Mr. G. C. Pauli, Bristol; Mrs. Leak, Brighton; The Secretary of th Parkes Museum, London; Mr. F. A. Southam, Manchester; Messrs. Georg Baker and Co., London; Dr. A. Wynn Williams, West Drayton; Messrs. Tower Williamson, and Ellis, London; Dr. G. A. Miskin, London; Dr. J. Mag Finny, Dublin; Dr. Crawcour, New Orleans; Dr. Peddie, Edinburgh; Mr. W. Corss, South Norwood; Mr. C. Roberts, London; Dr. Buchan, Plymouth Dr. A. L. Myrtle, Harrogate; Dr. G. Rummo, Naples; Dr. J. A. Lindsay, Be fast; Dr. W. J. Mackie, Turvey; Mr. J. B. Martin, Ventnor; Mr. Gubb, Londo Dr. Sidney Martin, London; Mr. H. Jones, Cork; Dr. W. B. Roué, Clifto Mr. Humphreys, Swansea; Mr. P. H. Emerson, Southwold; Dr. Stewart Lock Carlisle; Our Birmingham Correspondent; Our Dublin Correspondent Dr. Shuttleworth, Lancaster; The Secretary of the Royal Medical and Chirurg cal Society, London; Mr. F. W. Lowndes, Liverpool; Mr. R. L. Donaldso Monaghan; Dr. Edwardes, London; Dr. E. Holland, London; Mr. H. S. N son, London; Our Glasgow Correspondent; Our Edinburgh Correspondent Our Paris Correspondent; A Member; The Secretary of the British Medi Temperance Association; Mr. E. George, London; Dr. Macdonald, Liverpoo Disgusted; Dr. Heath, Penzance; Dr. Mackey, Brighton; Dr. Webb, Wirk worth; Dr. A. Emrys-Jones, Manchester; Our Liverpool Correspondent Our Manchester Correspondent, etc.

BOOKS, ETC., RECEIVED.

Hunterian Lectures. On some of the Injuries and Diseases of the Neck and H the Genito-urinary Organs, and the Rectum. Delivered before the Royal C lege of Surgeons of England, June, 1885. By E. Lund, F.R.C.S. Lond J. and A. Churchill. 1886.

Lieutenant Mary: a Novel. By J. T. Collier, M.D. In two volumes. Vols. I II. London: Remington and Co. 1886.

Practical Surgery. By J. Ewing Mears, M.D. Philadelphia: Blakiston, and Co. 1885.

International Journal of Medical Sciences. Published quarterly. Edited J. Minis Hays, M.D., of Philadelphia, and Malcolm Morris, of Lon London: Cassell and Co. 1886.

In the Watches of the Night. Poems (in eighteen volumes). By Mrs. Ho Dobell. Vol. X. Price 6d. London: Remington and Co. 1885.

A Code of Medical Ethics. By Jukes de Styrap, M.K.Q.C.P.I. Second Edit London: J. and A. Churchill. 1886.

Year-Book of Pharmacy and Transactions of the British Pharmacological ference. London: J. and A. Churchill. 1886.

An Introduction to the Use of the Laryngoscope. By A. E. Garrod, M.A., London: Longmans, Green, and Co. 1886.

Catalogue of the Pathological Museum of the Western Infirmary, Glasgow. piled by Joseph Coats, M.D. Glasgow: Printed by Alexander MacDou 1885.

Firework Accidents; their Cause and Prevention; with Experiments. By W Browne, M.A. Hull: W. Adams. London: Kent and Co.

SCALE OF CHARGES FOR ADVERTISEMENTS IN TH "BRITISH MEDICAL JOURNAL."

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Post-Office Orders should be made payable to the British Medical Associ at the West Central Post-Office, High Holborn. Small amounts may be p postage-stamps.

AN ADDRESS

ON THE PROGRESS AND WORK OF THE BRITISH GYNÆCOLOGICAL SOCIETY.

Delivered at the Annual Meeting of the Society.

BY ALFRED MEADOWS, M.D., F.R.C.P.,

Physician Accoucheur, and Lecturer on Midwifery and Diseases of Women and Children at St. Mary's Hospital; President of the Society.

ONLY ten short months have elapsed since I delivered from this place the inaugural address at the first meeting of this Society. My first words on that occasion were those of grateful acknowledgment to you, gentlemen, for the high honour you had conferred upon me in electing me as the first President of a Society which, I felt confident, would ere long be able to boast of a success second to none in the history of medical societies in this country. To-day, ere I vacate this chair, I desire to express my heart-felt thanks for the unvarying courtesy, kindness, and consideration which has been shown to me by my colleagues in the council-chamber, and by the Fellows of the Society at the meetings over which I have had the honour to preside. The confident expectation which I expressed as to the success of this Society has, I am pleased and proud to say, been more than verified; and I believe I am fairly entitled to say that, as a society, we occupy a position to-day which, whether it be regarded from the standpoint of our numerical strength, or from the character and quality of the work which we have done, as recorded in the Journal of our Transactions, is one that we may all be justly proud of. If there be sceptics who doubted the wisdom or questioned the propriety of founding a new society with the objects we had in view, their criticism, I venture to say, will hardly do credit to their foresight when confronted with the historical facts which form the record of our first year's existence. As a matter of fact, I believe that the objections which were taken and the opposition that was raised to the formation of this Society were not of a high scientific order, or the result of any conscientious desire to advance or encourage the study of gynæcology in this country; but these objects were certainly uppermost in the minds of those who originated this Society; and we may well feel, as we look back upon the record of our first year's history, that we have wrought a good work, and that we have not only added to our stock of knowledge by mutual intercourse with each other, but that we have left our mark upon the scientific record of the year, and have added to the total sum of human knowledge for the benefit of mankind.

If this be so—and I challenge anyone competent to express an opinion on the subject to deny it—then I say that we have not only established our claim to existence, but we have made that existence an absolute necessity for the work which we are called upon to do—work, too, which would certainly not be done except by such a society as this. Measured merely by the numerical standard, I believe that no other medical society can show such a marvellous record of success, nor do I know of any other test by which to gauge the popularity of a movement such as that which led to the foundation of this Society. The fact that 260 Fellows had joined our ranks when I delivered the inaugural address at our first meeting is sufficient evidence, I think, of the appreciation in which it was held, and is conclusive testimony that it supplied a want which was very generally felt; while the fact that over 120 Fellows have subsequently been elected is conclusive proof of the continued interest which is felt in the prosperity of the Society, and the strongest testimony to its utility and attractiveness. Moreover, the attendance at our meetings, which has been in point of numbers fully equal to that of any other medical society, notwithstanding that we meet fortnightly instead of monthly, as is the rule with most other societies, is additional proof of our success, and evidence of the interest taken in our proceedings. Nor is it merely or chiefly from London that our Fellows are derived, nor even from the British Isles alone, but we have on our muster-roll as ordinary Fellows of the Society the names of gentlemen from all parts of the world, more especially from America and France. Among our Vice-Presidents, and therefore as ordinary Fellows of the Society, we have the names of Pinard of Paris and Mundé of New York—men whose names are familiar as household words wherever the science of gynæcology is recognised; so that not only is this Society rightly designated British, but it might also be called universal.

Speaking from a pretty large experience of other medical societies in this metropolis, I can truly say that I know of no other society the ordinary meetings of which attract Fellows from such distances as does this. I believe we have never held a meeting at which there were not present representatives of some of the largest provincial towns, as well as from the capitals of Ireland and Scotland. Birmingham, Manchester, Liverpool, Wolverhampton, Dublin, and Edinburgh, have all furnished materials and men to illustrate our work, and enhance the interest and attractiveness of our meetings, by bringing together, into one focus as it were, a mass of experience of the most varied order, and scientific attainments of the highest mark. Hence, the discussions which have taken place here have possessed, as I ventured to hope and predict they would, an educational value which cannot be over-estimated. In my inaugural address, I made the remark that "if this Society fulfilled its proper mission, it may, and, in my opinion, it ought to, become a great educational institution;" and I have always regarded this as one of its most valuable features. Even we so-called specialists have, I venture to say, learnt much during this our first session; and the large number of our brethren in general practice who have attended our meetings must, I think, have thereby gained much valuable information which cannot but be useful to them in their daily work.

Referring to the numerical strength of the Society, I may say that, including the names of those nominated to-night, our muster-roll has now run up to 400, a number which, I believe, is wholly without parallel in the history of any similar society, seeing that it is only ten months since we started on our career, of which two months were vacation-time, so that we have only had one short session of eight months.

And here I would make one remark in reference to the Journal of the Society, which is at present our only literary property. No one, I think, who has seen that journal, will contradict me when I say that, for artistic effect, for typographical excellence, and for general external appearance, it reflects the greatest credit upon the editor, Dr. Fancourt Barnes, who is alone responsible for these qualities, and deserves the thanks of the Fellows; while, as to its scientific contents, I think, as representing the first year of our work, it is a journal and a record of which we may feel honestly proud. That it is appreciated, too, by the profession, is evidenced by the fact that one of our numbers had to be reprinted as a second edition. I think it is a very great advantage that our transactions are thus published quarterly, instead of waiting till the end of the year; especially as the Journal contains not only particulars of our own work, but is also a record of the whole subject of gynæcology at home and abroad, and, as such, possesses a very special value. Only those who are acquainted with journalistic work can appreciate the labour which such a journal entails; but the Society is to be congratulated on having secured the ready, willing, able, and most valuable services of Dr. Fancourt Barnes.

Another matter which the Council has taken in hand during the past year, and upon which a committee is now actively engaged, is the subject of the Relation of Menstruation to Ovulation. I ventured, in my inaugural address, to suggest that a small working committee should be formed to collect and sift the mass of evidence which exists on this subject, and to give us a report which might be discussed and criticised with great advantage. I cannot imagine a more useful work for such a society as this, than the collective investigation of evidence on doubtful scientific questions connected with our special department of practice. All such work may go on simultaneously with the clinical and practical work of our lives; and thus much of abstract scientific knowledge, as well as of practical therapeutics, may be the outcome of such a society as this, and the best possible evidence of its utility and value.

Turning now to a brief mention of some of the subjects which have been discussed during the past year, I would put in the forefront, as being the most interesting and the most important, the discussion on uterine fibromata, which extended over three nights, and was originated by an admirable paper; though I dissent from many of the opinions advocated by the author, Dr. More Madden. It is not too much to say that that discussion, and the specimens of this disease which have been exhibited here by Dr. Bantock, Mr. Lawson Tait, and others, have advanced considerably our views of the proper treatment to be adopted in these cases; and, as I took no part in that discussion, I may perhaps be allowed now to make one or two observations on the subject. It will be recollected that the author objected rather strongly to the practice of treating these cases by hysterectomy, or indeed by any surgical proceeding, on the ground that the disease very seldom ends fatally, and that therefore a formidable operation is not called for, and can only be regarded as justifiable in very exceptional circumstances. Wide differences of opinion were proved to exist among the Fellows of the Society as to the danger of leaving these cases

alone; some, though a very small minority, regarding them as comparatively harmless cases; while the experience of others, and that a large majority, showed that fatal results are by no means unfrequent. It is obvious that the question of the propriety of resorting to surgical interference depends in great measure upon whether the disease is or is not to be regarded as one involving any danger to life if left alone. Speaking from my own experience, I have no hesitation in saying that a fatal issue, in the ordinary history of these cases, is by no means so rare as is sometimes asserted. Nor is it merely by gradual exhaustion and continued loss of blood that death not unfrequently occurs; for there are other more sudden and more certain causes of death which were not mentioned during the discussion. I have seen again and again inflammatory attacks occurring in the tumours themselves, and leading in some cases to suppuration within the substance of the tumours, and to subsequent death by pyæmia; while in other cases phlebitis has occurred, and death has resulted from pulmonary embolism. Two such cases occurred in my practice within the last two years. Sir Wm. Jenner saw one of them with me. Both of these might, I believe, have been saved had the patients consented to surgical interference; but they had been told that the disease was perfectly harmless, and therefore refused to have anything done to rid them of it. I have seen many cases of inflammation of uterine fibroids, and I always regarded the condition as one of extreme gravity, for the course of the inflammation is very uncertain and erratic, and liable to accidents, so-called, of the kind above mentioned. I have also seen several cases end fatally by gradually exhausting discharges, while others have terminated more suddenly by violent losses of blood. I well remember, years ago, being called suddenly to a case of violent flooding, which had come on while the patient was walking in the street. She was carried home, and died in a few hours; but, before she died, I found that she was the subject of an intra-uterine fibroma, for which she had long been under medical treatment, which I do not hesitate to say was worse than useless; but was told that the disease was perfectly harmless, and that at the change of life it would disappear. She, however, died before that happy change occurred. My experience, therefore, is dead against the opinion as to the harmlessness of these growths; and I entirely dissent from the statement of Dr. More Madden, that "the mortality of an ordinary uterine fibroid, if left alone, is nothing approaching a death-rate of 8 per cent." Hence, I am an advocate for more frequent resort to surgical interference, and I should regard a death occurring in the history of an uterine fibroid as casting a great slur upon the professional reputation of the attending practitioner.

On the question of enucleation *versus* hysterectomy, I also entertain a very decided opinion adverse to the former, except in certain clearly defined cases; and I would lay down this rule with regard to the question of enucleation; namely, that in all cases where the uterine cervix is perfectly healthy, and altogether free from the disease, which is, therefore, limited absolutely to the fundus and body of the uterus, enucleation is wholly inadmissible, and hysterectomy ought to be performed. The cervix in such cases forms an admirable pedicle or stump, and the whole disease, being above the cervix, is well within the compass of removal by abdominal section. Where, on the other hand, the disease is in one or other uterine wall, and invades the whole cervix, so that the anterior or the posterior lip is occupied by the growth which thus projects into the vagina, there the disease can and ought to be attacked, for it is easily accessible *per vaginam*, and can, as a rule, be easily shelled out from the loose cellular bed in which it is developed.

As to the medicinal treatment of all these growths, I expressed a very decided opinion years ago, which subsequent experience has amply confirmed—that it is worse than useless, and I would say scarcely honest, to attempt any such with a view to cure; it is mere waste of valuable time, and, so far as the patient is concerned, an equal waste of valuable money.

Upon the question of the removal of the ovaries in these cases for the arrest of menstruation, and consequent arrest or the cure of the disease, my experience has thus far been decidedly favourable; though, as I have already mentioned, I have one case now under observation where the removal of the ovaries twelve months ago has not been followed by the cessation of menstruation, and the growth is still increasing in size. Nor do I think that this proceeding can have more than a limited application; namely, to those cases in which the growth is certainly not larger than a fœtal head at term, where the tumour is also interstitial, and therefore liable to flooding, and where the patient is under forty years of age. It should be remembered, too, as in favour of this operation, that while it is not one which is attended with much risk, its failure for the purpose in question does not preclude us from subsequently resorting to the more radical method of complete extirpation of the disease by hysterectomy.

Another very interesting and suggestive paper was that of Dr. Bell on dysmenorrhœa. The condition of which it treated is so common, and the views entertained by gynæcologists regarding its pathology and treatment are so diverse, that much good must follow the publication of a paper so thoughtful and philosophical. Moreover, as a protest against what the author regarded as a too mechanical tendency in the treatment of this affection, it would undoubtedly exercise a thoughtful influence over the minds of gynæcologists. At the same time, I feel bound to say that my own experience accords very closely with that of most of the speakers in the belief that, in a very large proportion of the cases of dysmenorrhœa, the pain is entirely due to mechanical defects of a more or less obstructive character, and is only to be successfully combated by mechanical interference. It is well, however, that we should now and then have our attention called to the work which others are doing in what I may term the antimechanical field of uterine therapeutics. There is no doubt, I think, that the natural tendency of the busy life we lead is rather towards a narrowing of the field of our mental vision in proportion to the activity of our occupation. We seem sometimes to live almost too fast even to think; and such a habit of over-activity and preoccupation tends rather to limit and contract our mental vision, and thus to cause us, as it were, to run too much in a groove, and to be satisfied with insufficient inquiry. Hence, a paper like that of Dr. Bell calls upon us to halt and reflect; and though we may go on again, working on the same lines as before, yet the halt will have done good, even if it only confirm us, after mature reflection, in the opinion we previously held.

A brief but very interesting discussion arose upon a specimen, brought forward by Dr. Fancourt Barnes, of the kidneys of a woman who had died of albuminuria in pregnancy. The opinion seemed to be very general, but certainly not universal, that in all cases of albuminuria in pregnancy abortion ought always to be induced. I cannot altogether accept this doctrine, and the rule which I would recommend is this: that we should first of all differentiate cases of albuminuria in pregnancy into two classes, first, those in which the disease is recent and acute; and, secondly, those in which it is of long standing and chronic. The symptoms in these two cases are generally very plainly marked, and the microscope will usually distinguish between the two with unerring precision; for while casts will be found in both cases, they differ materially in their character and significance. In the chronic variety they are of large size, granular, and sometimes contain secreting epithelium upon their surface; while in the more recent and acute form, the casts are small, waxy, transparent, hyaline, and not at all granular. Hence the distinction is very marked, and so are the symptoms; and the treatment in the two cases ought, I think, to be widely different, and to be based upon these facts; for, as the chronic variety is not likely to be made much worse by the pregnancy, the acute form is pretty sure to become chronic if the pregnancy be allowed to go on. Moreover, interference of a surgical kind is far more likely to be attended with mischievous results in the former case than in the latter; for we have abundant evidence to prove that surgical operations cannot be performed with impunity on persons who are the subjects of chronic renal disease. This was indeed illustrated painfully in the case brought forward by Dr. Fancourt Barnes. But this fatality is by no means the rule in cases where the albuminuria is recent and acute; operative interference is here tolerated not only with impunity, but with manifest relief to that condition which calls for the operation. Again, in the case of the chronic variety, the life of the mother is, if I may say so, to some extent relatively of less value than in the other class of case, because she already has a mortal disease, and therefore the life of the child has a stronger claim upon us, and we should do what is best for it by allowing the pregnancy to go on. For all these reasons, then, I would lay down this rule: that in chronic cases, such as that brought forward by Dr. Fancourt Barnes, no interference with the course of pregnancy should be attempted; it is dangerous to do so, fatal to the child, and we cannot thereby prevent the development of the disease which has already become permanently established. In recent and acute cases, on the other hand, operative interference is well tolerated, to the evident relief of the symptoms; the disease is thereby prevented from becoming chronic, and so ultimately endangering the mother's life; and lastly, the child's life is of less value when put in comparison with that of the mother, which is certainly threatened if the pregnancy goes on. Such is the rule which I would venture to lay down for future guidance in these cases.

May I be pardoned now if I venture to make one or two observations which have about them a tinge of adverse criticism on the work

which we have done? Where all has been so good, it may perhaps not be very gracious to find fault; nor do I wish to do so, but only to point out other fields of labour in which I think abundant harvests may be reaped. It is, I confess, with a slight feeling of disappointment that I survey the work of the past year, in order to find what has been done in regard to uterine therapeutics. There has been a singular absence of any well-recorded observations of the value of drugs in the treatment of uterine diseases. I am myself a firm believer in the use of drugs. To me, practice would be shorn of its greatest attraction if I did not feel confidence in the things I prescribe. And what we sorely need here is a number of accurately recorded observations of medicinal treatment, that we may know what is useful and what not, and, if possible, the reasons why. We shall look in vain, in the past numbers of our Journal, for much information, much evidence of work done, in this department. With the single exception of the medicated tampons exhibited by Dr. Fancourt Barnes, as illustrating a new mode of applying remedies, we have had no novelty in medicinal practice brought forward. Dr. Chalmers, in his well-recorded case of sloughing of the vagina, certainly detailed some very careful observations in practical therapeutics. We want many more such, and I think we must probably look for them rather from the less operative Fellows of the Society. True, there was, one night, reference made to the value of iodine in the treatment of certain uterine diseases, but this reference served rather to illustrate the proverbial saying that doctors differ; because, while one eminent authority declared that iodine is most valuable when used in conjunction with glycerine, another no less emphatically stated an exactly opposite opinion. It is obvious that there must be some mistake here, and what we want is such accuracy of observation that errors of this sort are impossible. In my inaugural address, I gave special expression to the hope that during our first year of work we would record many accurate histories of exact therapeutic observations which would add to our treasury of useful knowledge, from which our professional brethren, and especially those engaged in general practice, might largely draw for the benefit of those whom they might be called upon to treat. At present, my hope in this respect has not been realised; and, ere I vacate this chair, I would again earnestly invite those Fellows of the Society who have special opportunities for observing the effect of drugs in gynæcological work to give us the benefit of their experience, in order that the teaching value of this Society may receive its fullest and most useful development.

There is another little criticism which I would venture to make, in the form of a mild protest against what I fear may become the too surgical tendency of this Society. We must remember that it is not given to all of us to perform the splendid operations which we have had detailed to us over and over again during the past year, by those whom we may well regard as the leaders in gynæcological surgery. Moreover the mind is apt to become satiated with these sensational novelties, and to be unfitted thereby for the more quiet but none the less useful routine of daily practice; and I venture to think that he who will perfect our daily work, by adding to our therapeutic store of knowledge of an *exact* kind, will do quite as much, though in a more quiet and unostentatious way, to earn the gratitude of suffering women, as he who performs the most brilliant operation before a wondering and admiring audience. Pray do not let it be supposed that I undervalue the splendid surgical achievements of Lawson Tait, of Bantock, and others; or the less showy but useful work described by Dr. R. T. Smith, in his highly suggestive and philosophical paper on the operation for the cure of lacerated cervix uteri; or again, the operation, originated by Dr. Alexander, of shortening the round ligament for obstinate and severe cases of retroflection. I admire these achievements as much as any one, and I think they do infinite credit to the skill, the ingenuity, the courage, and the patience of their performers; and the record of their work must ever be honourable to this Society. But for all that, we must take care not to be too one-sided, and especially we should be careful not to be too surgically minded in our practice, or to think that the record of surgical work only is the one thing needful in such a society as this; for in proportion as we do so, we limit the sphere of usefulness of this Society, and to that extent we sow the seeds of ultimate decay and dissolution.

And now, gentlemen, I have finished. I fear I have wearied you with these tedious and rather commonplace observations, for which I ask your indulgence. The time has arrived when I must vacate this chair, which by your kindness I have occupied during the past year. No one knows better than I do my many shortcomings during my year of office, and no one can have felt more keenly than I the responsibility which rested upon me as your first President. It is no light matter, in these days of marvellous scientific development, to undertake to found a new scientific society; and certainly those who do so should understand what they are about, and give proof of the reality and seriousness of their work. I do not think we shall have much to fear on this account when the day of reckoning comes. I rejoice to know that the wonderful success which this Society has achieved up to the present time—a success which I believe is without a parallel in the history of medical societies—has been due far more to its own inherent vitality than to the character and work of its first President. Certainly, I have taken, and shall continue to take as long as I live, the deepest interest in its welfare and success; and, to the utmost of my power and ability, it will be a genuine pleasure to me to promote its prosperity and extend its usefulness. Nor can I doubt that what you have done to-night, in the choice of my successor, has been done wisely and well, in the best interests of the Society. Considering the title and composition of the Society, I think it was both a graceful and a right thing to do to choose a President from among the provincial Fellows. Mr. Lawson Tait has by his work demonstrated that he is a consummate master of his art, and he is known, to be a man of the true scientific type. Moreover, he is a man of great force of character—fearless, honest, thorough, and straightforward; in fact, just the sort of man that I would wish to see ever at the head of affairs of the British Gynæcological Society. I congratulate you on the choice which you have made, and him on the honour he has received.

CLINICAL LECTURE
ON IDIOCY AND IMBECILITY.

Delivered to Students of Owens College, Manchester (Dr. Ashby's Class for Diseases of Children).

By G. E. SHUTTLEWORTH, B.A., M.D.,
Medical Superintendent of the Royal Albert Asylum, Lancaster.

Gentlemen,—In welcoming you as observant visitors to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, I presume it will be scarcely necessary for me to point out wherein the inmates of this institution differ from those of a lunatic asylum. As, however, I am sometimes surprised to find that, even amongst members of our profession, there is a want of clear appreciation of the distinction between the lunatic and the idiot, a contrasting definition of each class may not be out of place. Briefly, then, the lunatic is one who has lost his intellect, the idiot has always lacked it; in the one case, there is mental disease; in the other, mental defect. Lunacy, or insanity, is characterised by disordered mental action; idiocy, or imbecility, by defective mental action. Esquirol aptly compares the madman to "a rich man become poor, whereas the idiot has always been in misfortune and misery." The term imbecility is now usually employed to denote merely a milder degree of idiocy, though formerly, and by French writers, it was used specially to designate mental weakness supervening in infancy. The Latin *Amentia* includes idiocy and imbecility; and the latter term (that is, imbecility) is, in my opinion, inappropriately applied when used (as we find even in official returns) to denote mental failure in old age, properly described as Dementia.

A few words as to the prevalence and distribution of idiocy. The census of 1881 gives 32,717 persons—16,105 males and 16,612 females—returned in the schedules for England and Wales as "idiots and imbeciles," being in the ratio of 1 to 794 of the population. Of these, no fewer than 9,183 were aged 45 years and upwards, of whom many so-called "imbeciles" were probably the subjects of dementia. On the other hand, parental reluctance to recognise mental defect in the case of young children is evidenced by the fact that the whole number of "imbeciles and idiots" under 5 years of age is returned as 451 only; and it is probable that a considerable increment, estimated by the Commissioners as at least one-fourth, should be added to the census returns, which would bring up the ratio at all ages to 1 in about 620 of the population.[1]

It is curious that, whilst the census returns give in the aggregate a slight excess of female idiots and imbeciles, the experience of all British institutions shows that there is about twice the demand for accommodation for male as for female imbecile children. This is to some extent explained by the fact that the excess of females exists

[1] *Census 1881 Report*, vol. iv, p. 68, etc.

only in groups of ages above 25, below which age 7,287 males and 5,572 females are returned. The greater liability of the male head to injuries in birth is probably one cause of the preponderance denoted by these figures. A like preponderance obtains in the case of deaf-mutes.

With regard to distribution, it is interesting to note that, in the seven northern counties from which the patients of this asylum are mainly drawn, the proportion of idiots is somewhat less than in England and Wales at large; the proportion in the former to the general population being 1 in 984, as compared with 1 in 794 in the latter. The proportions in the various counties range from 1 in 1,425 in the mining county of Durham, to 1 in 757 in pastoral and mountainous Westmorland.

You will probably have been struck with the defective physique which is manifested by many, if not the majority, of the inmates of the asylum. Their stature and weight, if compared with those of normal children of similar age, are decidedly below the average; the former being deficient at 5 years by 1 inch, at 10 years by 2 inches, at 15 years by 3 inches, and the latter at 8 years by 4½ lbs., at 10 years by 6 lbs., and at 15 years by 8 lbs.[2] The relative rate of growth of male and female idiots respectively varies, much as it does with normal children at corresponding ages, though all along inferior. The development of puberty is for the most part deferred in the imbecile class.

It is a mistake to suppose (as we find laid down even in students' text-books) that of necessity the brain of an idiot is undersized. You will probably have noticed that, amongst the children you have seen, small heads do not obviously preponderate; and, on comparison of a series of cranial measurements of our population and a series (corresponding for groups of ages) taken at a neighbouring orphanage, we shall find that the respective averages do not materially differ.[3] The explanation is, that the abnormally large heads at one end of the series compensate for the abnormally small heads at the other; and thus, to quote a somewhat trite but quaint saying of Fuller, "heads are sometimes so little that there is no room for wit, and sometimes so long that there is no wit for so much room."

Various bases of classification have been proposed by writers on the subject of idiocy. Long ago, Esquirol proposed a psychical classification, dividing idiots into three classes, according to their degree of capacity for speech. About twenty years ago, Dr. Langdon Down pointed out the curious ethnological resemblances of certain groups of idiots, and suggested that a division might be made into Caucasian, Ethiopian, Malay, and Mongolian types. More recently, he has proposed (in Quain's *Dictionary of Medicine*) an etiological classification; but, from this standpoint, perhaps the most comprehensive classification is that put forward by Dr. W. W. Ireland in 1872, and further elaborated in his excellent work on *Idiocy and Imbecility*. Whilst expressing my obligations to both these sources, I shall venture to submit to you a scheme of classification combining some of the features of each, which I have myself found practically convenient. In the first place, a broad division of all cases of imbecility may be made into *congenital* and *non-congenital* cases. Subordinate to these primary divisions, and in a sense intermediate, we have a group of cases in which the signs of imbecility are not manifest from birth, but appear at some crisis of childhood; and these Dr. Down has named *developmental* cases. It seems questionable whether these cases should form a subclass under the congenital or the non-congenital heading; for, though the imbecility may not be developed till the first or even second dentition, the "tendency to mental catastrophe" is, no doubt, innate. At all events, such cases are to be carefully distinguished from the purely *accidental* or *acquired* cases. In tabular form, the classification is as follows.

CLASS A.—CONGENITAL.

Type.	Type.
1. Microcephalic.	5. Primarily neurotic.
2. Hydrocephalic (also non-congenital).	6. Paralytic (also non-congenital).
3. Scrofulous—"Mongol type."	7. Choreic (also non-congenital).
4. Sensorial (also non-congenital).	8. Cretinoid: (*a*) sporadic; (*b*) endemic.

CLASS B.—NON-CONGENITAL.

a. Developmental.

9. Eclampsic.	11. Syphilitic.
10. Epileptic.	12. Post-febrile (also *accidental*).

b. Accidental or Acquired.

13. Toxic.	15. Emotional.
14. Traumatic.	

c. Mixed Causes.

Such a classification as the above will help us to consider in definite order the various groups of patients I have arranged for your inspection; it does not, however, profess to be scientifically exact or complete. Some of the rarer forms of idiocy (such as those named from characteristic cranial distortions, "plagio-cephalic," "scapho-cephalic," etc.) I purposely omit; also those called "hypertrophic."

The first inquiry that occurs to us is, which are the more frequent, the congenital or the non-congenital cases? If guided simply by the statement of parents, we shall conclude that the non-congenital are; and this is probably true, if we include under that term all the developmental cases. My own impression, however, is that parents will always give themselves the "benefit of the doubt;" and they are very slow to see and to acknowledge congenital infirmity in their offspring. There is no doubt, to use the words of Dr. West (*Diseases of Infancy*, 6th edition, p. 275), that, popularly, "a sense of hopelessness attaches to congenital disease;" but, so far as prognosis is concerned, my own experience is in accord with that of Dr. Down and others, that congenital cases, as a rule, offer more hope of improvement than the non-congenital.

Some help may be obtained in distinguishing between these two classes by the physiognomy. This boy with the shelving forehead, diminutive cranium, and bird-like aspect; and this one with the high, narrow-vaulted palate, and unshapely ear, planted low down and far back, are doubtless cases of congenital imbecility; as is also that girl with the branny skin, tender eyelids, wiry hair, squarely built head, and obliquely slanting eyebrows. On the other hand, this poor lad, with regular features and pleasing physiognomy; and this bright-looking, but restless girl, with good teeth, well-formed mouth and healthy skin, are examples of the non-congenital variety: in the one case, epilepsy has destroyed the intellect; in the other, some catastrophe, during teething, arrested its development. In spite of their comparatively bright appearance, they are amongst the least hopeful children here, and illustrate the remark of Dr. Down, "that the prognosis is, contrary to what is so often thought, inversely as the child is comely, fair to look upon, and winsome."[4]

Now, let us glance at some of the typical groups before us. First, we are struck with the extreme smallness of some of the heads; these are of course the microcephalic cases of our classification. Look at this lad "Freddy," now nearly 20 years of age, but only 55 inches high; his head measures, in its greatest circumference, no more than 15 inches. We have had him here nearly fourteen years, and during that time his stature has increased from 40 to 55 inches, but his head-circumference only from 14⅛ to 15 inches. His forehead rapidly recedes, and his occiput is small; his features are, however, shapely, his eyes large and lustrous, and his nose of Roman type. Like the so-called Aztecs, he has an aspect which reminds one of a bird. He is active in movement; and, though he can say but little, he is fairly observant of all around him, and makes his wants known by persistent gesture. He is somewhat pugnacious (a tendency, by the way, I have observed in some other microcephalics). He has improved to some extent in habits, but very little in intelligence and industry; and I need hardly say that, in extreme cases of microcephalic imbecility, the mental is limited by the cranial capacity. I have known, however, some amount of education and industrial training to be imparted to girls with head-measurements between 17 and 18 inches. The brain is, as a rule, small in these cases, from formative arrest of intra-uterine origin; and I have made *post mortem* examinations of cases in which it has weighed 21½ ounces, 13½ ounces, and 27½ ounces respectively. I show you a drawing of the first-named brain, from which you will see that the occipital and temporo-sphenoidal lobes were very imperfectly developed, and the cerebellum was quite uncovered (*Journal of Mental Science*, October, 1878). There is but little evidence in support of the theory which attributes microcephaly to premature cranial synostosis.

By way of contrast, let us now turn our attention to the group of cases illustrating hydrocephalic imbecility. This may be either of congenital or of non-congenital origin; but for our purpose the distinction is not of practical importance, for it is only when active disease has subsided that training is practicable. In such cases, however, considerable improvement may be looked for; and in this youth, whose globular head measures 23 inches in circumference, there remain, after seven years' training, but few indications of mental defect, save in the direction of moral imbecility. This girl, with a head measuring over 21 inches, is an useful worker in the dormitories.

We shall have no difficulty in finding cases wherein local and general indications of scrofula form the predominant characteristic. Here is a lad who has lost the sight of one eye from scrofulous ophthalmia, and we have numerous cases of scrofulous neck, with glands enlarged or discharging; indeed, strumous ulcers, and affections of the joints and bones, form a considerable portion of our work

[2] See paper by author in Health Exhibition Literature, vol. xi, p. 532, and tables by C. Roberts, F.R.C.S.

[3] *Trans. International Medical Congress*, 1881, vol. iii, p. 610.

[4] *Obstetrical Transactions*, vol. xxii.

at the Infirmary. "Perhaps two-thirds, or even more, of all idiots are of the scrofulous constitution," says Dr. Ireland; but many of these may, of course, be ranged under other types. There remain, however, a considerable number whose history, personal and hereditary, points to scrofula as the main efficient cause of the mental condition. Coming to us, as they usually do, from the slums of large cities, it is surprising to see how soon many of these cases improve from the fresh air, cheerful surroundings, and good feeding, which they enjoy in this institution. About 20 per cent. of our admissions have a phthisical family history, and some form of scrofulous or phthisical disease accounts for two-thirds of our deaths.

There is a remarkable variety of imbecility, probably scrofulous in its essence, which has obtained from its physiognomical characters the name of the "Mongol" or "Kalmuc" type. We have numerous specimens of that type in this institution (perhaps 3 per cent. of its population); and you will notice in all a certain family resemblance, though they come from widely distant parts of our district. They all have a skin coarse in epidermis, if not furfuraceous; many have sore eye-lids, some fissured lips; but one of their most striking peculiarities is the state of the tongue, which is transversely fissured and has hypertrophied papillæ. Many of them have almond-shaped eyes obliquely set; and this feature, with the squat nose and wiry hair, give the "Mongol" aspect whence they derive their name. My view is that they are, in fact, unfinished children, and that their peculiar appearance is really that of a phase of fœtal life. I do not mean that they are necessarily prematurely born, but some cause has depressed the maternal powers, and there has been a defect of formative force. It is remarkable that, in our experience, nearly half these children are the last born of a long family; and in more than one-third a phthisical history has been traced. They are generally delicate in body, and very susceptible to cold; mentally, they have good imitative powers, are often very fond of music, and dance and drill well. Comparatively few grow up to be men and women; and, as a rule, they die of phthisis before 20.

Under the heading of sensorial imbecility, we include those cases in which defects of sight or hearing (or both combined) occlude the avenues of instruction, and, when special modes of education are not adopted, mental obtuseness results. Such cases, if refused by blind or deaf-mute schools, often find their way into idiot asylums.

"Primarily neurotic" cases depend upon inherited instability of the nervous system, and are characterised by abnormal excitability. The senses and perceptions may be sharp enough, but there is a painful restlessness, an incapacity for sustained mental application, and often strange propensities for mischief and cruelty. Here is a boy, innocent-looking enough, who takes a sly pleasure in plucking the doves we keep in cages; and here a girl who tears her clothing without compunction, though punished for it; she says she will be good, and at the very same moment pinches her unoffending companions. Such cases of moral imbecility tend too often to insanity at puberty.

Paralytic and choreic cases may or may not be congenital. In the former class, the paralysis may be due to an actual gap in the brain (porencephalous defect), or it may be produced by some infantile accident or illness. My experience of such cases is, that much may be done by special modes of education in improving the intelligence, which is often masked by the imperfections of speech and facial distortions. Choreic movements are sometimes seen associated with these paralytic cases, and I show you two or three patients who exhibit that curious form of inco-ordination called "athetosis."

The form of cretinoid imbecility, a specimen of which I show you to-day, is that described by Hilton Fagge (and, I think, by Sir William Gull) under the name of sporadic cretinism. This girl, aged 16, is no more than three feet high; she has a grave old-fashioned look, a broad face, pug nose, pouting lips, and protruding tongue. Her skin is loose and baggy, as if too large for her bones; the belly is tumid, and her hands and feet are squat. She has no goître, but on each side one may feel some fulness above the clavicle, which Dr. Fletcher Beach's researches show to be fatty tumours. She can speak a word or two, but very slowly; and all her movements are characterised by the utmost deliberation. I may say that I have seen about half a dozen similar cases here and in other institutions; they have all been dwarfs, and look like children of one family. Those of you who have seen cases of myxœdema will note certain striking resemblances.

Cretinoid imbeciles with goître are not common in the district of this asylum (including, though it does, the dales of Yorkshire and valleys of Westmorland), and I cannot show you to-day a single characteristic example. Those of you who have visited Savoy, or the valley of the Rhone, will probably be familiar with the repulsive aspect of the victims of endemic cretinism.

Eclampsic cases are those resulting from severe teething-fits and infantile convulsions, as distinguished from true epilepsy. In 28 per cent. of our cases there is a history of convulsions, and in 20 per cent. they are assigned as the cause of the imbecility. The prognosis, in these cases, is, as a rule, not very favourable; of course, varying with the degree of brain-lesion left by the fits.

Epilepsy is very frequently associated with idiocy; and even here, though our rules exclude confirmed epileptics, 10 per cent. of our patients suffer from more or less frequent fits. You will recognise, in some cases, the peculiar suffused look about the eyes characteristic of epilepsy; and with regard to these I may say that the result of training is not encouraging, for with the recurrence of fits they are apt to lose the knowledge they had acquired. I show you one case in which Dr. Alexander, of Liverpool, has tied the vertebral artery with at least temporary benefit; and others who, by the long continued administration of bromides, appear really to have lost the tendency to epilepsy; but my experience is that these improving cases form but a small minority.

Syphilitic cases are not so common, or, at any rate, not so commonly recognised, in idiot asylums, as might be expected. I can show you but one case in which the history points to syphilis; in this there are fissures about the mouth, but the teeth are not characteristic, though suggestive. Juvenile dementia, supervening at puberty, is probably more frequently the mental manifestation of syphilis than is original defect of intelligence; but possibly, as has been suggested—(see paper in *Brain*, April, 1883, by Dr. Judson Bury)—some of the cases of hydrocephalic imbecility may really be due to inherited syphilis. "Hutchinson's teeth" are, however, very rare in idiot asylums.

Postfebrile, or inflammatory cases, are those in which the mental defect has followed brain-affection, complicating the exanthemata, or resulting from the extension inwards of otitis. Speaking generally, the prognosis is not favourable in this class of cases, though, of course, depending upon the amount of damage which the brain has sustained. In some cases, irremediable lesion may have been left; in others, there has been merely an arrest of development from failing nutrition. With a neurotic family history, such cases may be classed as developmental; some, however, may properly be considered accidental.

Toxic idiocy is, in this country, chiefly associated with the administration to infants of opiates, which, under the name of "soothing syrups," are, unhappily, much in request with ignorant mothers. I show you the photograph of a lad, said to have been brought up from babyhood on porter instead of milk. Though physically well favoured, he had evident atrophy of his nervous centres.

Traumatic cases are those due to accident in early life affecting the head; and the earliest form of such injury is pressure in parturition. This, when unduly prolonged, may give rise to the asphyxia neonatorum, which is, no doubt, perilous to the integrity of the nervous system, giving rise to spastic rigidity and choreiform symptoms, even if it do not destroy the intelligence. Dr. Down states that, of 2,000 cases of idiocy examined by him, 20 were born with well marked symptoms of suspended animation. In 2.9 per cent. of our cases, prolonged labour, without instrumental interference, is the assigned cause; and in 2.6 per cent. forceps-delivery is also recorded. The judicious use of instruments will, in many cases, avert the terrible consequences of too prolonged pressure. We have three or four cases in which falls on the head at the moment of birth, the labour being unexpectedly rapid, have been assigned as the cause; and many in which falls from the arms of careless nurses are blamed. Falls down steps, kicks from horses, etc., are other common causes of traumatic imbecility, the character and prognosis of which vary very considerably according to the severity of the accident.

By emotional cases, I mean those resulting from nervous shock or fright at an early age. This lad, who, though aged 22, has still a nervous shrinking expression, was bitten by a dog in early life; and this boy is said to have been all right till locked up in a dark closet at an infant school. Such cases improve under kind treatment, and the older of the two boys I have shown you is now an useful assistant in the stores.

As I have already said, while a certain percentage of cases may be definitely placed under one or other of the classes I have named, there are others (and perhaps the majority) in which the types, though traceable, are mingled together; and these I include under the heading of mixed causes.

Time will not permit us to do more than glance at the pathology of the subject. As might be expected, feeble minds are usually associated with feeble bodies; and the rate of mortality[5] in English idiot

[5] See paper by author on "Health and Development of Idiots," *Health Exhibition Literature*, vol. xi, p. 531.

institutions is comparatively large. At the Royal Albert Asylum it has averaged 35 per 1,000 of its population during the fourteen years of its operations. Necropsies are always made when the consent of parents can be obtained; and we have occasionally found, when least expected, extraordinary defects in brain-conformation. I show you a photograph (by Dr. Ferrier) of the encephalon of a girl who died last summer of phthisis, from which you will see that she had scarcely any cerebellum, though she did not display during life marked symptoms of ataxy. Here is a brain from a paralytic imbecile, in which you will notice the defect called porencephaly—that is, a gap extending in the place of the right frontal convolutions, and leaving the deeper structures of the brain quite uncovered. Of course, these "coarse lesions" are exceptional; but microscopic examination will discover in many instances some abnormality of structure, such as the preponderance of simply formed brain-cells devoid of processes, denoting persistence of fœtal structures; or, on the other hand, degenerative changes resulting from inflammatory atrophy.

I have already adverted to the numerous physical defects associated with imbecility. It may indeed be said that no idiot is physically sound; of course, amongst imbeciles of a higher grade there may be less bodily infirmity. The ameliorative treatment of this class entirely depends upon the principle, strongly insisted on by Seguin, that physical must precede psychical improvement; hence the importance of the skilled physician preceding, and indeed supervising, the operations of the schoolmaster. We have heard much lately of overpressure in elementary schools; I need hardly say that schools for imbeciles must be so organised as to render any sort of overpressure impossible. The training of the senses, and the regulation of the muscular powers, accomplished in as attractive a manner as possible, form the stepping-stones to the more familiar forms of tuition, which, however, must be aided by objective demonstration as much as practicable. I am not without hope that some of the plans adopted in the instruction of the feeble-minded may furnish useful hints to those interested in the education of normal children in accordance with physiological principles. You will see, in your inspection of the building, lessons in actual progress, both in school and in workshops; but I may direct your attention to the collection of school-appliances and educational and industrial work, for which a diploma of honour was awarded to this institution at the International Health Exhibition.

In conclusion, a few practical hints as to the mode of admission of children to this and other kindred institutions may be useful to you as medical practitioners. This is fundamentally a charity, and the majority of the inmates are elected by the subscribers; but we have also superior accommodation, and a separate boarding house, for payment cases. At present, every patient received here has to be certified precisely in the same form as is required for the admission of a lunatic to a lunatic asylum; that is, he must be described either as "an idiot" or as "a person of unsound mind." (The term "imbecile" is not statutory.) We think that the inclusion of such institutions as this—really training-schools for imbecile children—under the stringent provisions of the lunacy-laws is unfair, and often prejudicial to the educational interests of the feeble-minded; and it is probable that at no distant period an effort will be made to amend the law in this respect.

Donations and Bequests.—The North Staffordshire Infirmary has received £1,000 anonymously, per Mr. C. Cooper, postmaster, Stoke-upon-Trent.—"J. B." has given £500 to the Charing Cross Hospital, and £500 to King's College Hospital.—The Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster, has received £500 under the will of Miss Hannah Goad.—Lady Rolle has bequeathed £100 to the Exeter Lying-in Charity, £100 to the West of England Eye Infirmary, and £100 to the Exeter Dispensary.—The North-West London Hospital has received £251, collected by Mr. J. M. Pritchard on the Stock Exchange.—The General Hospital, Birmingham, has received £100 under the will of Mr. Mayer Blanckensee, and £40 for the Samaritan Fund from the trustees of Mrs. Hollier's Charity.—The Children's Hospital, Birmingham, has received £100 under the will of Dr. Heslop, and £50 under that of Mr. Mayer Blanckensee.—Mr. George Sturge has given £100, the fourth instalment on account of £1,000, to the North-Eastern Hospital for Children, Hackney Road.—Sir William Rose, K.C.B., of Leiston, Suffolk, Clerk of Parliament, has bequeathed £50 to the Westminster Hospital, and £50 to the East Suffolk and Ipswich Hospital, out of the "residue" of his real and personal estate, after the death of his wife.—Messrs. Joshua Tetley and Son have given £100 to the Leeds Infirmary.—The Great Northern Central Hospital has received £100 (less duty) under the will of Mr. F. H. Windsor.—Mr. Joseph King (per Sir Joseph Lister, Bart.) has given 70 guineas to King's College Hospital.

A CLINICAL LECTURE
ON THE SURGERY OF THE MALE PERINÆUM AND EXTERNAL ORGANS OF GENERATION.

Delivered before the Pupils of the Medical Department of the Yorkshire College, December 9th, 1885.

By C. G. WHEELHOUSE, F.R.C.S.,
Consulting Surgeon to the General Infirmary at Leeds.

Gentlemen,—There are certain regions of the body which, so far as their surgical aspects are concerned, are of more than ordinary importance. The surgical emergencies to which they are liable are apt to come suddenly on the practitioner, and are liable also to involve consequences of vital moment. Thus, if called upon to rescue the life of a child from impending suffocation, and tracheotomy is our only resource, it would ill become us to have to sit down, and on the moment to study and think out the anatomy of the parts concerned and the steps of the operation; for, whilst we did this, the patient would die, and our resuscitated skill would be of little avail for the restoration of the child.

In managing a case of hernia, the same observation holds good; for, to save life, our knowledge and our skill must be kept ever bright and ready, producible at a moment's notice, and that without either hurry or excitement, and yet with a precision that will not be daunted by trifling difficulties or unusual peculiarities, but will be ready and apt to meet and overcome either. And, on the other hand, there are cases which can only be dealt with in a perfectly satisfactory manner after their nature, causes, and probable results, have been thought out very seriously and from many different points of view, after the probable or possible effects of various methods of surgical treatment have been carefully considered and reasoned out, and the whole subject has been weighed and exhausted in the mind of the thinker.

How, for example, was John Hunter's method of treating an aneurysm arrived at? If, called to the help of a patient suffering from a popliteal aneurysm, he had acted on the former lines, he would promptly have amputated the limb; whereas, by proceeding on the latter, he was enabled to arrive at an operation philosophically perfect, and which, while it saved the limb, yet substantially cured the disease, and restored the patient to the full activity of life as perfectly as he had ever enjoyed it. To us, who see this apparently simple operation performed so often, its real physiological aspect and importance seem almost to have dropped out of sight; but with how different a significance does it bear upon our minds from that with which it must have pressed upon the imagination of its great originator! Where are the hours of philosophical deduction and thought which led him to a result so brilliant? Where the many experiments, whether of his own or of the immortal Harvey, which proved the possibility of its success? Where? They are stored in the archives of science, there to be used as the common property of every operator of to-day; and in the heart of every true surgeon they rise as a grateful incense of past sacrifice, and as a thankful remembrance of a splended inheritance bequeathed to us by a noble ancestor.

For exactly a hundred years this operation has been before the surgical world. It was first publicly performed by Hunter in December 1785; and who can count the number of those who have benefited by it?

It was, I think, whilst revolving some such problems as these in my mind, that the subject of the clinical study of the surgical needs of the male perinæum came into it, and led me to the determination to address you in one of these clinical lectures upon that subject. In thinking the matter over, I remembered the many times I have been summoned suddenly, in the dead of the night, to this institution for the relief of cases of extreme retention of urine, in which I have been called upon, almost at a moment's notice, to decide as to what was best, in a given case, to be done; whether simply to relieve the distended bladder of its load, and await further consequences; to combine with this some much more serious procedure, which, whilst doing this, should also do more, and would enable me to strike for the producing cause at the same time; or it might even be to do all this and yet more still, by seeking to limit the evil consequences of mischief already done, of extravasation, of sloughing, and of sinking

vitality. And, whilst thinking of these cases, I have remembered others of scarcely less importance, in which the results of my personal experience may, as it has seemed to me, be utilised for your future advantage.

It so happens, that my thoughts have been led to dwell a good deal on the surgery of this region; and I think it may be possible, out of my past experience, to evolve something that may prove of service to you in your coming years. Let me take, for example, first of all the simple operation of amputation of an epitheliomatous penis.

If the disease be confined to the glans, and be not far advanced, the old operation, completed by one stroke of the knife, and followed by the old and tedious method of healing and dressing, might even now be sufficient. This simple operation, so long as we were unprovided with anæsthetics, was undoubtedly the most merciful procedure; but when, with anæsthetic aid, time and suffering were subjugated, it behoved us to leave no stone unturned in the improvement of our method; and then came the plan of cutting through the corpus spongiosum and urethra at one, and through the corpora cavernosa at another level, and of providing the raw end of the stump with a covering of skin, as carefully as we should have done had the member amputated been a finger or a thigh.

This operation you will, doubtless, very often see performed; but, from time to time, cases of return growth will present themselves, or cases in which, from various motives, the disease has been permitted to run on unchecked until it seems, at first sight, almost hopeless to interfere, or to attempt its removal. But, gentlemen, in this institution you will as rarely see, I fancy, as I in former times saw frequently, such cases dismissed as hopelessly too late, and beyond the pale of surgical help.

I had often been struck in my younger days with the sadness of the sight, when I had seen return growths, sometimes in the body of the penis, sometimes in the inguinal glands or in the testes, or even in all these situations together, condemned as hopeless, and have wondered if they ought really to be so; and, little by little, I have watched the broad mantle of surgery spread over them, until at last I have seen them all included in the ever widening and lengthening list of remediable cases.

First, I noted the increasing frequency with which return growths alone were removed, and the closeness to the pubes from which they were removed with success; next, I saw masses of secondary growth in the inguinal glands taken beneficially away; then I saw the testes, after invasion by similar return growth, also swept away, with the result of prolonging life, and adding vastly to the sufferer's comfort; and, lastly, I have lived to complete, with my own hands, a proceeding more perfect in its result than all these when individually and separately done.

Let me relate to you the case. On March 20th, 1879, a labourer, aged 50, presented himself, during my hospital-visit, with disease of the penis. He was perfectly free from any syphilitic taint, but showed a large, malodorous, fungating swelling in the region of the penis. About six years previously, he had received a somewhat severe kick over the genital region. He thought little of the injury at the time, and, when its immediate effects had passed away, he dismissed all thought of it from his mind. Gradually, however, the penis became indurated and painful, and an intractable sore, apparently of an epitheliomatous character, developed around the glans. This was removed by amputation in the ordinary way, a short stump only being left; and, for a while, he was rendered comfortable again.

At the time he was admitted into the infirmary under my care, his condition was as follows. The stump of the penis was again indurated and painful; the urethra was so far closed that micturition could only be performed by drops; the glands in the groins were swollen and tender, but were not ulcerated; and both testicles were indurated, swollen, and had open fungating sores upon them.

Here, then, was an extreme case, one in which, a few years earlier, I should have felt that there was nothing to be done, that the disease had passed beyond the domain of surgical help. I brought the case before my colleagues for consideration, and even then they were all agreed that it was so, and that he and I had better accept and bow to the inevitable. But, fortunately for this man, I had noticed in my reading (in the BRITISH MEDICAL JOURNAL, I think it was), a few weeks previously, a short paragraph under the head of "Surgical Memoranda," describing an altogether novel method of dealing with such cases; and, rather than leave him to so miserable a fate as was before him, I determined that I would try whether it was capable of affording him relief. The operation aims at the total removal of the entire body of the penis, and is performed as follows. A vertical incision is made through the skin of the mons Veneris, and, sweeping around each side of the root of the penis, is carried onward into the raphé of the scrotum. The skin being then held well away on each side, the body of the penis is drawn fully out of the wound, so as to expose the organ to its very root. A twitch is then placed upon it as far back as possible. This is so tightened as to act as a tourniquet, and then the organ is severed from its connections immediately in front of the triangular ligament. The dorsal artery of the penis and any other bleeding vessels are then secured; the tourniquet-twitch is removed, so as to expose the part freely, and any portion concerning which any doubt can be entertained is carefully clipped away. The body of the penis is thus entirely removed, and the first stage of the operation is completed.

Next comes the question, what is to be done with the urethra? This, as you know, is one of the great difficulties of the old operation—perhaps the greatest; the passage in that operation is simply slit along its under surface, and the edges of the mucous membrane are stitched back to the edges of the skin, and the after-diminution of the canal by the double cicatricial action of its own tissues and of the skin remains, *par excellence*, the evil to be contended with.

In the new operation, we deal with it thus. As a second stage is proceeding, the patient is placed in lithotomy position, the perinæum is laid open in the centre, and the urethra, into which a sound has been passed from above, is carefully dissected from its connections for about an inch, or an inch and a half, and is then brought down into the perinæum, is brought out through the wound there, is laid open on its under surface for half an inch or so, and its margins are carefully stitched to the edges of the perineal wound at a little distance in front of the anus. There it is permanently fixed; a soft rubber catheter is introduced into the bladder, and is kept there for a few days. Both wounds are then carefully stitched up, and, when they are healed, no trace of the penis can be found. Henceforward, the patient is obliged to micturate in the sitting position; but, as he retains perfect control over the bladder, this is a matter of but little inconvenience.

The glands in the groin should now claim attention. It may be that they are swollen, enlarged, and in a state of sympathetic irritation, and yet are not infiltrated with the germs of the specific disease. They were in this condition in the case of which I have been speaking. If we can be tolerably confident that such is their condition, they should be, by all means, left alone. The source of irritation having been removed, they will, probably, quietly return to their normal state, and the less injury inflicted on the patient the better. But if, on the other hand, they be already implicated in the disease, I would strongly advocate their removal as part of the operation; for, though their ablation may seem to add materially to the primary risk to the patient, it will, in reality, very greatly help to insure the permanence of its protective influence, and may retard the return of the disease by many months.

Since the above operation, which I consider a memorable one in the annals of my surgical life, I have seen my colleague, Mr. Jessop, in a case which seemed really desperate in its extent, sweep them all away with the happiest and most perfect result.

Then, with respect to the testes, you may perhaps conceive that a little more deliberation should be exercised before they are removed. In a case in which, only a very short time previously, I had performed a somewhat similar operation, these organs were in no way implicated; there appeared to be no reason for interference with them, and they were allowed to remain. In the one I have just detailed to you, they were distinctly involved in the disease, and without hesitation I removed them. The result, in the two cases, was as marked as it was different. The two patients lay in contiguous beds, were constantly comparing notes, and never failed to give me the benefit of their discussions. The removal, though it added greatly to the severity and danger of the operation, did not prevent the patient from making an excellent recovery, and he has many times since spoken to me with the greatest gratitude and thankfulness for the complete relief I had afforded him in every way. In the case, on the other hand, in which I did not remove them, they became from first to last a cause of trouble and distress. Soon after the operation, they became swollen, and remained tender for a long time; they were there as a possible seat for the return of the disease, and, by their physiological action, they were a constant source of annoyance. To a patient otherwise completely mutilated, you will easily understand how and why this should be so; and many a time that patient volunteered the assertion that he wished that, while I had been about the business, I had made a complete sweep of everything for him as well as for his neighbour. The one patient was, so far as is possible in such a case, completely relieved, the other was only partially so; the one was freed from physiological as well as from pathological discomfort; while the other remained a prey to desires which could never be gratified; and the eventual condition of the former was certainly more satisfactory and perfect than that of the latter.

When, therefore, you feel compelled to resort to the more sweeping measure of total ablation of the penis, I think the consideration of the patient's condition in the future, should he recover from the operation, should be laid fully before him, should be carefully explained to him beforehand, and, should he determine to submit to the removal of the testes, as well as of the penis, I should not often hesitate to make the operation complete. So long as any portion of the penis is left, this question will never, of course, arise; but, when that organ is completely and entirely removed, it becomes a very essential part of the consideration to be placed before the patient.

Pray, gentlemen, remembering what I said to you in my last lecture on the unwisdom of claiming priority in any surgical proceeding, bear in mind that I claim no precedence as to this; I derived it from a German source, and, whilst I find that my own countrymen are nearly as tenacious of their claims to priority and inventiveness as is possible, I fear our foreign colleagues are just a little more so.

As concerns the next operation to which I desire to draw your attention, I might, I think with safety, be a little more venturesome in this respect, without running any very serious risk; for, without any attempt on my part to claim originality or priority in the method of performing perineal section or external urethrotomy, as you will see it performed in Leeds, my colleagues first, and the profession generally afterwards, have done me the honour to call the operation mine, and to assign it a high rank among surgical proceedings. Certainly in our hands it has proved a very successful one, and, I think I may say without fear of contradiction, has enabled us to find the correct and safe way into the bladder in many cases in which, by any other, it would have been impossible to do so. I do not claim for it anything in the way of originality; it has been entirely a matter of observation, and is, after all, only an improvement on former methods of operating in certain points, at which, when I have either been myself, or have seen others, met by unusual difficulty, I have set myself to think how those difficulties might best be overcome. It happened to me, in my early days, to see so many mishaps in attempting to reach the bladder from the perinæum without any actual guide, that I resolved, if possible, to find or to invent some better method than the old operation. But perhaps I had better describe that to you first, then the earliest modifications of it that I saw, and, lastly, my own operation, as the result of my observations.

Given a case of stricture which, by reason of long continued neglect has at last become practically impervious, or, so nearly so that, though a fine catgut or whalebone bougie may sometimes, and at others may not, be capable of being passed through it, the patient's life is endangered by the mischief arising from backward pressure upon the bladder, the ureters, and the kidneys. It has manifestly become necessary that the stricture must, in some way, be overcome if your patient is to be saved. Already his life is rendered burdensome, for day and night alike he is answering repeated calls to micturate; and, on very trifling provocation, a little indulgence at table, a little imprudence in exercise, a trifling exposure to cold and damp, complete retention comes on. This, so long as a catheter cannot be passed, involves hours of agonising suffering, and can only be temporarily relieved by long continued medical and topical treatment, hot baths, antimony, opium, and so on, and, even with the aid of these means, is only too likely to be followed by such irritation around the stricture as will end in the formation of local abscesses, and, in process of time, by fistulæ with which the perinæum eventually comes to be riddled.

Such, then, is the case to which you may at any time be called, and for the relief of which you ought to be prepared to act; and I will endeavour to show you how I am able, notwithstanding all difficulties, as a rule, to reach the bladder along the true track of the urethra, and with safety. In the old operation, the knife, guided by the forefinger in the rectum, was passed steadily onward from the surface until it entered the urethra somewhere in the neighbourhood of the prostate; and, once relief was afforded to the distended bladder, and the risk of extravasation was avoided, the surgeon was content, and the stricture was henceforward disregarded. Upon this procedure, Mr. Cock, of Guy's Hospital, was the first, I believe, to introduce a great element of precision. Having ascertained two pathological facts—(1) that the portion of the urethra which lies immediately in front of the apex of the prostate is never strictured, and (2) that it is usually dilated—he made it a *sine quâ non*, in operating, that this point should first of all be clearly defined by the forefinger of the left hand in the rectum; next, that the knife, entered half an inch in front of the anus, should be plunged deeply into the perinæum, and be then carried steadily and unflinchingly onward until it was felt by the left forefinger to have penetrated the urethra at that point. Then, the knife being withdrawn, it was followed by a catheter to the same spot, which catheter was then passed through the prostate into the bladder, and there retained. Retention having been thus relieved, and the danger of extravasation prevented, he would, as circumstances seemed to dictate, either rest content with having effected so much, or would make a further attempt to divide the stricture also, attacking that from behind, and making the healthy but dilated portion of the tube, which he had already found and opened, his new starting-point. You will see at once how much more likely it is that a fine probe will follow even a tortuous urethra in the natural line of outflow than in opposition to it; and by this manœuvre Mr. Cock was, I believe, almost invariably able to succeed in accurately incising the stricture, as well as in relieving the distended bladder. But it is not given to all men to possess the hands of Mr. Cock, and skill such as he possessed is only attainable by few; and hence, notwithstanding his almost invariable success, some simpler and more attainable method for the many remained a desideratum.

(To be continued.)

THE PREMONITORY SYMPTOMS OF INSANITY.

Read before the South-Eastern Branch.

By HENRY SUTHERLAND, M.D., M.R.C.P.,
Lecturer on Insanity at the Westminster Hospital; Physician to Blacklands House and Otto House Asylums.

It will be my object, in the time I have at my disposal, to describe as briefly as possible the most important premonitory symptoms of insanity, and to conclude by making a few remarks upon their treatment.

Esquirol recognised three distinct stages of insanity. In the first, there is a change of habits; in the second, perversion of the affections; and the third constitutes true insanity. The first set are usually seen only by the relatives of the patient; the second, by the family-physician; and the third, by the asylum-superintendent, when they are now so far advanced that any attempt at prophylactic treatment is out of the question.

It is almost impossible to say from the premonitory symptoms what form the insanity will assume, unless, indeed, the patient have suffered from a previous attack. Almost all authors agree, however, that insanity rarely commences with excitement. As an exception, may be mentioned the mania which is produced suddenly, after a moderate amount of alcohol, in a person who has previously sustained an injury to the head, or has had a sunstroke. But the majority of cases are preceded by a stage of depression, which has been called by Guislain the "stadium melancholicum."

To estimate the duration of these premonitory symptoms is, as a rule, impossible, as the relations of the patient, either from deficiency of experience or from a wilful perversion of the truth, only throw obstacles in the way of the practitioner, who is trying his best to get at the real etiology of the case.

From a long experience of such matters, I have no hesitation in saying that, in my opinion, some eccentric act on the part of the patient, done many years before the actual outbreak of the mental disease, can be detected in the majority of cases, if the early history of the patient be only carefully investigated. For instance, in 1856, a schoolfellow of mine stole some money from another boy, although he was at the time, comparatively speaking, well off. In 1870, fourteen years afterwards, this same schoolfellow, who was then a clergyman, was admitted to Bethlem Hospital, suffering from a first attack of insanity.

Again, in 1868, I was acquainted at college with a student who had the insane temperament strongly marked, as indicated by unnecessary outbursts of temper and abnormal conduct. In 1880, twelve years later, he committed suicide on board a steamer, his conduct for some days previous having been noticed to be very peculiar.

Again, in 1874, a friend of mine sent to me to rescue him, as he said, from an action-at-law. He had taken lodgings near a line of railway, and the trains, in passing, kept him awake at night. He had not the moral courage to leave without my assistance. I paid the landlady a week's rent, and took my friend back to his house. In 1881, seven years later, he had an attack of mania.

Now, in all these cases there were, to my certain knowledge, other acts of eccentricity committed between the first of them and the actual outbreak of insanity; and I have every reason to believe that, if these patients had chosen some quiet pursuit in life, and if their conduct had been closely watched by their relations, much trouble and expense connected with their mental diseases would have been prevented.

Sometimes a large pecuniary interest depends upon the evidence

we can obtain concerning the date of the first appearance of the premonitory symptoms of insanity; as, for instance, in will-cases, in deeds of settlement, and in attempts to prove nullity of marriage on the ground that one of the contracting parties was insane at the time of the ceremony.

The premonitory symptoms of insanity are most commonly represented by a contrary abnormality in different cases; for instance, in one case an unusual volubility may be found; and in another, unusual silence. Some alteration of character of this description is most often displayed, but in certain rare cases an exaggeration of the natural disposition is noticed. The forms of insanity in which this last is most usual, are hypochondriacal melancholia and hysterical mania.

In one case recently under my care, the patient suffered from what he called an "*idée fixe*," a remembrance of some trifling event, the importance of which he exaggerated to such an extent, that it almost amounted to a delusion. In this patient, hepatic congestion and insomnia were the accompanying bodily conditions. Under appropriate treatment, the threatened attack of insanity was averted.

In most cases in which mental disease is coming on, there is, as Dr. Maudsley says, a "something different, which the nearest friends do not fail to feel, although they cannot always describe it."

Sometimes the patient perceives that he is not quite right, and consults a physician. A lady who has been four times under my care now lives in a lodging near my asylum, and, when she feels the attack approaching, sends for qualified practitioners to certify that she is insane, returns to her usual room in the asylum, and places herself thus not only voluntarily but legally under restraint.

A gentleman, who has been under my care on not fewer than six separate occasions, comes to me of his own accord when he feels the attack approaching. He appears distressed, and says, "I don't think this is one of my regular illnesses coming on; I only feel bilious." His skin, which is usually clear, becomes yellow, there is a pinched anxious look on his face, he gradually becomes silent and morose, and in a few days he develops suicidal tendencies, after which an onset of acute mania supervenes. But it is not always that patients are aware of the insidious approach of mental disease. In some cases, and notably those of general paralysis, the patient feels in an unusually good state of health, and altogether repudiates the notion that there is anything the matter with him. Cases of senile dementia, for the same reason, that they feel so well, are very troublesome to deal with, and also on account of the unwillingness of the patient to acknowledge the necessity for anyone but himself taking the lead in a house where he has always been accustomed to command. This class of cases taxes our ingenuity and firmness to a most trying degree; but, although they are incurable, yet we can prolong life, and this is sometimes of the greatest importance, as for instance where the family of a clergyman will be turned out of house and home, should the incumbent die.

We must now briefly enumerate the mental and bodily symptoms which are most common in incipient insanity.

Irritability and a tendency to take offence are very common at this stage, sometimes accompanied by moroseness and silence, or again by noisy scolding and fault-finding with servants. There may be an indifference to usual employments, or, on the other hand, a restless pursuit of novel occupations. Delusions of suspicion and jealousy are now developed against those with whom the patient has always lived on good terms. And it must be remembered, in sifting evidence, that there are occasionally good grounds for these delusions.

Sometimes the patient thinks he is ruined, and again he may launch out into endless extravagance, giving orders for carriages and horses which he will never be able to pay for.

Loss of memory is also a very marked symptom. A patient will remain seated in your consulting room much longer than is necessary, and long after you believe the interview is concluded. He will get up in the night, and think it is the morning. He will take three or four hours to dress, owing to his performing parts of the toilet more than once, and forgetting that he has done so. He will eat voraciously, or he will neglect to take his food, simply from loss of memory.

The mental and the bodily symptoms now begin to act and to re-act upon one another. Through forgetfulness, the patient neglects to take exercise, and to attend to his bowels, and through the stagnation and constipation thus produced an increased feeling of malaise and depression comes over him. A general neglect of personal appearance will not escape the eye of the expert practitioner. The expression of the face is also strangely altered, the lines of the features becoming more marked in melancholia, but obliterated and dim in epileptic cases. In acute hysterical mania, and in puerperal insanity, the cornea becomes bright, prominent, and staring. But, on the contrary, in masturbating insanity, the patient seldom looks you in the face, and, when he does so, there is an absence of that expression of the sympathetic eye, the "*σύντροφον δμμα*" of De Quincey, which is so eloquently characteristic of a healthy mind. A row of paupers at work on a road can thus be distinguished from a gang of lunatics. In the one case they will all "catch your eye," as you drive past; in the other case they will not.

A word as to bodily symptoms. The posture, and even the gait, of an insane patient is abnormal. The skin, as a rule, is harsh and dry, although sometimes perspiring. It emits, in some cases, a peculiar odour, although this has been denied by the highest authorities. Occasionally rigors, feverish heat of skin, and elevation of temperature, are noticed, which, however, are usually due to some accompanying somatic condition, the cuticle being, as a rule, dry or clammy. The tongue is usually white and coated, and the breath offensive, from refusal of food and neglect of the bowels, which are, at this stage, almost invariably confined. The appetite is generally deficient from want of fresh air and exercise, and from constipation. The circulation is commonly feeble at first. The pulse is either slow (50 to 60) or too rapid (120), in delirious cases.

Generally speaking, the face is pale, but in very rare cases there is great congestion of the head, heat of the scalp, and throbbing of the carotid and temporal arteries. Headache is a very common symptom. This is produced partly by the changes, functional or organic, which are going on in the brain and its membranes, partly by the presence of an excess of bile in the system, due to the neglect of his health on the part of the patient, and also from a condition either of plethora or of anæmia, local or general, in the head and whole system.

Sexual appetite is in abeyance in some cases, as in those of bilious melancholia. It is in excess in others, as in those of general paralysis, and, oddly enough, is conspicuously so in senile dementia. The maid-servant is frequently found to be pregnant by the master, before any mental aberration is discovered by the relations, in this form of mental disorder.

The catamenia are frequently suppressed, although many attacks occur and run their course without any abnormality being observed in this function.

Impairment of some of the special senses, real or imaginary, is sometimes noticed. Deafness is occasionally simulated. Real abnormal sensations of heat and cold, of pricking and electrical shocks, of attempts to shake the bed of the patient, and of irritation, referred to the ends of the fingers and toes, are also frequently noticed.

The voice of the patient is almost always altered, becoming low and almost inaudible in the stadium melancholicum, but high in pitch, should mania be developed. Sometimes the patient talks more rapidly, sometimes more slowly and deliberately, than usual. Sometimes he will raise his voice and shout; in other cases, he will speak only in a whisper, or not at all.

Articulation is rarely affected, excepting in general paralysis. The style of conversation, is, however, often changed, oaths and obscene language being uttered by those who were never previously known to be guilty of such conduct. Muttering and talking aloud to the patient's self is frequently noticed.

Not unfrequently the patient will roam about the house, or wander away from home on an objectless journey. One patient, now in my asylum, walked barefooted from London to Portsmouth, before admission, under some religious delusion.

Delusions, illusions, and hallucinations are, however, comparatively rare during the premonitory stage. When they are developed the disease may, as a rule, be pronounced as being insanity, and all prophylactic treatment is now useless. The ship must go before the wind, and you must steer it, as best you can, through the tempestuous course which will lead to recovery, to death, or to hopeless dementia.

A word, if I am not trespassing too long on your valuable time, as to treatment prophylactic, medical, moral, and hygienic.

1. *Prophylactic.* If a patient have been known to have an attack regularly every year, which is not uncommon, send him for a trip with an expert and agreeable medical man, a month before the time of the onset of the mental disorder is expected. This frequently not only staves off one attack, but sometimes even prevents an accession of future attacks. But, if the slightest premonitory symptom should exist, keep him at home, as he must undoubtedly undergo the course of the disorder, and it is extremely dangerous that he should do so, if far away from good medical advice.

2. *Medical.* Bromide of potassium, or chloral, or belladonna, may be used where there is heat of head or sexual excitement. Opium and morphia in anæmic cases. Judge by the condition of the pupil whether opium or belladonna be indicated. Antimony is

the sheet-anchor in violent cases. Do not add digitalis. Calabar bean is indicated in the early stages of general paralysis. Iodide of potassium and mercury often allay excitement, when the mental symptoms are due to some syphilitic taint.

Hydrocyanic acid, with or without the bromides, is useful in robust cases of mania.

Henbane, in my hands, has proved a disappointing remedy. It is feeble as a sedative, and only valuable as such in large doses, such as half an ounce of the tincture; and even in small doses it often produces headache.

Combinations of drugs are invaluable, such as chloral with bromide of potassium, chloral with the liquor morphiæ bimeconatis, bromide with cannabis Indica, in acute mania; bromide with ergot, in recurrent insanity; morphia with assafœtida, in hysteria.

Conium is useful where there is much motility; quinine in intermittent insanity; and sumbul or chloral in the status epilepticus.

Aperients are almost always required in the early stages. The milder purges are, as a rule, indicated. These are: Æsculap and Hunyadi János waters; granular effervescing citrate of magnesia; stewed prunes, oranges, and similar domestic remedies. In extreme cases, enemata are necessary, which must sometimes be administered daily, and, if there be no obstruction, croton-oil. Avoid pills, as the patient, if suicidal, will hoard them up, and then take a poisonous quantity.

Should medicine be refused, a subcutaneous injection is occasionally useful, but I prefer disguising my remedies. Chloral in beer or port-wine, tincture of opium in coffee, antimony in any liquid (as it is tasteless); and, as regards aperients, calomel between thin slices of bread and butter; syrup of senna in a cup of tea, in lieu of sugar; and other similar harmless modes of deception are now allowable.

3. The *moral treatment* must consist of a mixture of kindness and firmness; and, above all things, we must remember that each case requires different treatment.

4. The *hygienic treatment* is obvious. Let the patient walk out daily till he nearly drops from fatigue, and soon all complaints of loss of sleep and want of appetite will cease; and, although the disease may yet have to run its course, the symptoms will be milder, and the outlook more hopeful, than would have been the case if the patient had been allowed to have his own way.

I must apologise for the concentrated form in which I have been obliged to put these remarks. Let us not think that, by treating the premonitory symptoms of insanity, medical men will want for work. As long as human nature, sexual intercourse, and alcohol exist, so long will there be excess; and, in consequence, plenty of work for our profession—whether we endeavour to sound a note of warning to the foolish, or to alleviate the distress of those who now undeservedly suffer for the sins of their forefathers.

STRICTURE OF THE SIGMOID FLEXURE OF THE COLON: DEATH.

Read at a Meeting of the Sheffield Medico-Chirurgical Society.

By M. MARTIN DE BARTOLOMÉ, M.D.,

Physician to the Sheffield General Infirmary, and Lecturer upon Clinical Medicine and the Practice of Physic at the Sheffield School of Medicine.

I was first called to Miss A. S., aged 51, on Tuesday, September 29th, 1885. I found her in bed suffering from slight abdominal pains, and looking as well as usual. She informed me that her bowels had not acted since the preceding Wednesday, September 23rd, but that she felt no particular inconvenience, neither was she alarmed, because she had been in the same predicament several times before, particularly upon two or three occasions when the bowels had not acted for above a fortnight; and checking herself, she added, with great emphasis, "certainly beyond a week," and then "had always become all right by themselves." She assured me that, with these exceptions, she had always been healthy; indeed, although I have frequently attended in the family for several years past, I have never heard her complain.

When I first saw her—and, indeed, throughout her illness, with the exception of a few hours which I shall presently mention—her temperature was 98° as a maximum, her pulse 90, also as a maximum, regular, and of good strength, and the respirations 18, and quite tranquil; the abdomen was distended and tympanitic; the only alteration from her usual appearance which struck me at the time, and which continued to the end, was her complexion, which had a decided mahogany tint, very different from her natural healthy bloom.

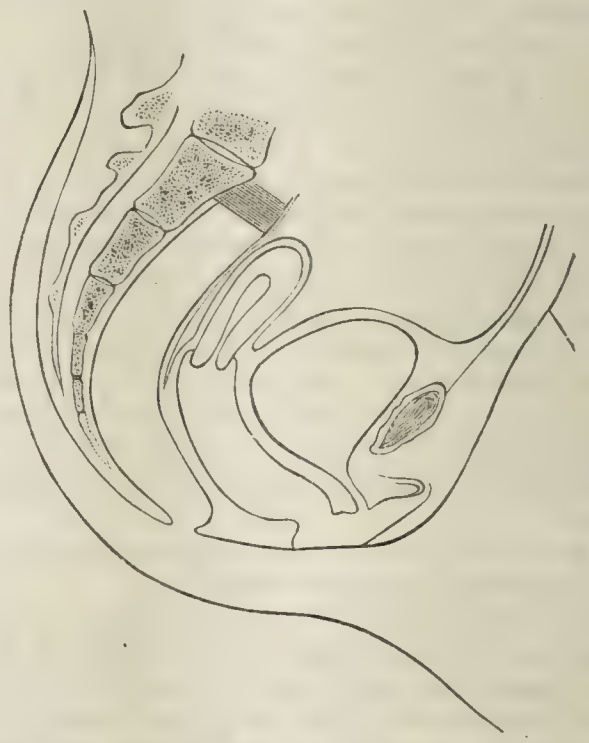
From the temperature being so normal, and the pulse only 90 as the maximum, from the absence of any constitutional disturbance, or anything like acute suffering, and from the positive account she gave of her previous attacks, I concluded that the obstruction was caused either by some congenital malformation, or by some chronic disease of the intestines, probably of a malignant character, but of its situation I could form no idea in the absence of any local pain or other symptom, and the abdomen being firmly unyielding and equally resonant all over, rendered percussion useless as a diagnostic.

I requested the patient to take nothing into the stomach which she could avoid taking, and, above all, to turn a deaf ear to the importunities of officious friends, whose proffered nostrums I have found in more than one such case most efficient in making bad worse, and in thus destroying what little chance the patient originally had.

I ordered her a copious injection of gruel with yolk of egg, castor-oil, and turpentine every twelve hours, and a pill containing one grain of calomel, and half a grain of opium, three or four times daily, or oftener if the pain increased. I also directed belladonna ointment to be applied over the abdomen, and a warm linseed poultice to be constantly kept upon the ointment.

She continued in this condition, with occasional bilious vomiting, up till October 8th, when she had a copious and very offensive stercoraceous vomiting, which I may here observe never returned, though the patient continued occasionally to vomit the contents of the stomach and unmistakable bile.

My attention was now called to a prolapsus ani, which, the patient informed me, had existed for many years, and had caused her great inconvenience, because she could but seldom entirely reduce it, and she had been compelled, in consequence, to wear a bandage in order to support and protect it.



I found, upon examination, a protrusion of the rectum about the size of the fist, and covered with skin; the anus was patulous and lax, and would, I think, if the patient had been put under the influence of chloroform, have readily allowed the whole hand to pass. On introducing the finger into the rectum, I fancied I could feel, with the extreme point, a small and rigid stricture; and, while pressing against it, I felt, heard, and smelt, two distinct and separate most offensive "retrograde sighs," which induced me to think that there might be an opening in the obstruction, and that, although I had been forbidden to speak again of any surgical interference, it was my duty to ascertain, if possible, whether surgical dexterity could not do something to save the patient's life. It was then late in the evening, and, as I did not wish to waste time in useless discussion, I hastened home and returned immediately with an O'Beirne's tube, which I tried to introduce into the bowel; but, although I passed it eighteen inches through the anus, I found that the tube had only coiled itself in the rectum; the point of the tube, however, must have pressed against the stricture, because it was slightly besmeared with blood just as my finger had been.

I then desisted from further interference, and again most earnestly pressed upon the patient the possibility of relieving her by an operation, but all to no purpose, for it only distressed and irritated her;

and she most peremptorily desired that the subject should not be mentioned again.

The temperature that night rose to 100° Fahr., and the pulse to 98, which I attributed to excitement, for both subsided to their former rates before the next morning.

From this moment the injections, which had done nothing but wash the rectum, were discontinued, and the patient very gradually and almost imperceptibly sank, until her death, which took place on Sunday, October 11th, 1885, at 11 o'clock P.M., nineteen and a half days after the last natural action of the bowels.

Post mortem examination thirty-four hours after death.—The body was well nourished, not to say fat. The intestines were distended pretty equally throughout their whole length by above a gallon of well-digested fæces, of about the consistency of thick hasty pudding, and very offensive. The right ovary was of a dark purple colour, and about the size of a large orange; it was multilocular, and contained thick dark grumous fluid. The intestines presented here and there insignificant streaks of florid congestion. The rectum, at about six or seven inches from the anus, was almost entirely closed by a firm and most remarkable puckering, caused by a firm membranous band nearly surrounding the bowel, which I can compare only to a wire passed round the intestine with its ends firmly twisted, as you will perceive by the specimen before you much better than I can describe it; this band, which in its centre is round like a whipcord, was firmly attached at both ends to the promontory of the sacrum, thus firmly enclosing the bowel against the spinal column. It is represented by the black band in the diagram.

The membranous band and the puckering of the bowel appear so devoid of any morbid deposit, except organised lymph, that the only explanation which offers itself to me is the following. I think the patient must at some former period have suffered from limited peritonitis, just about where the peritoneum is reflected from the spinal column over the bowel; this inflammation must have led to the effusion of lymph, which, becoming attached by its ends to the sacrum, formed a bridge over the rectum; and this, again contracting in all directions towards its centre, while becoming organised, gradually shortened its length between its extremities, and drew inwards its thin edges, thus slowly and imperceptibly forming the hard and firm stricture, and giving it its remarkable shape.

The opening through the stricture was very small, but it has unfortunately been dilated by handling. The remarkable features of the case throughout were the normal state of the temperature, of the pulse, and respiration, and the absence of anything like constitutional disturbance and of acute suffering, except for the last twenty-four or thirty hours of the patient's life.

PREVENTION OF LACERATION OF THE PERINÆUM IN PRIMIPARÆ.

By J. ALGERNON TEMPLE, M.D., M.R.C.S.Eng.,
Professor of Obstetrics and Gynæcology, Trinity Medical School, Toronto, Canada.

The issue of the British Medical Journal for November 21st, 1885, contains an article on the above subject by Dr. David Gaussen, which deserves more than a mere passing notice. Practically, it is of great value.

For many years, I have been greatly disappointed with the means recommended for prevention of laceration of the perinæum; and, after most careful study of the subject, I came to the conclusion that the only method of any value was to prevent extension of the head from occurring, and to compel it to be born in a state of forced flexion.

In primiparæ, the vulval orifice is small and resisting, and the occiput in its descent does not reach the pubic arch (as it does in multiparæ) before extension commences; as a result of this extension, the long occipito-frontal diameter, which measures about four inches and a half, is obliged to traverse the perinæum, to be followed by the fronto-mental, which measures about three inches and a half, making in all part of a circle about eight or nine inches in length. This naturally stretches the perinæum and vulval orifice to its utmost capacity, and it is during this time that rupture is apt to occur.

To guard against this overdistension in cases where I fear laceration, after the head has reached the floor of the pelvis, and just previously to extension, I have been in the habit of applying the short forceps, and then, by carrying the handles backwards, I flex the chin on the chest, while, at the same time, gentle traction is made downwards and backwards. In this way, I deliver the occiput first, keeping the chin close to the chest; this brings the cervico-bregmatic diameter, which is but three inches and a half, through the vaginal orifice. This plan saves the perinæum one inch or more of distension. I have had the best results from this practice, and have taught it to my class of students for the past three years.

The practice as taught by Dr. Gaussen I think somewhat difficult to carry out with the fingers, though he desires to obtain the same end as I here advocate. With the forceps, it is easy and safe.

I think this subject one of great importance, and worthy of a trial by any who may have any doubt as to its efficiency. In fact, I may say I am doubtful of the propriety of carrying the handles of the forceps forwards, as taught in the text-books, in any case.

THE DIAGNOSIS OF DISTENDED GALL-BLADDER.

By JOHN W. TAYLOR, F.R.C.S.,
Out-Patient Surgeon to the Birmingham and Midland Hospital for Women.

In the British Medical Journal of December 19th, 1885, I have read with much interest the lecture of Mr. Wheelhouse on Abdominal Surgery, in which he does me the honour of quoting considerably from a paper of mine on Cholecystotomy.

In this paper, which was published in the British Medical Journal of January 31st, 1885, I described a diagnostic "line," which I believed would be of considerable service in the detection or elimination of a distended gall-bladder in doubtful cases. "This is to be traced from the normal position of the larger end of the gall-bladder (near the tip of the cartilage of the tenth rib on the right side) to the opposite side of the abdomen, crossing the middle line slightly below the umbilicus. In the direction of this line, a distended gall-bladder will, I believe, naturally lie."

During the past year, I have had the opportunity of testing the value of this aid to diagnosis in nine cases operated on by Mr. Tait, a tabular list of which is here given.

No.	Date.	External Signs.	Condition found on opening the Abdomen.	Operation.
1	March 26	Tumour in line	Distended gall-bladder	Cholecystotomy
2	May 7	Tumour to left of line (tending to cross middle line above umbilicus)	Hydatid tumour of liver	Hepatotomy
3	April 1	Tumour to right of line (jaundice)	Solid tumour of liver (probably cancer)	Exploratory incision
4	Aug. 17	Tumour to left of line (jaundice)	Solid tumour (probably cancer of pancreas, gall-bladder felt to right of tumour, slightly distended)	Exploratory incision
5	Oct. 14	Tumour in line	Distended gall-bladder (suppurating)	Cholecystotomy
6	Nov. 11	Tumour in line	Distended gall-bladder (adherent to abdominal wall)	,,
7	Dec. 10	Tumour in line (jaundice)	Distended gall-bladder	,,
8	Dec. 13	Tumour to left of line (tending to cross middle line above umbilicus)	Solid tumour (probably cancer)	Exploratory incision
9	Dec. 14	Tumour to right of line in position of right kidney	Suppurating right kidney, from which four gall-stones were removed; gall-bladder not felt; probable adhesion of gall-bladder to right kidney, and ulceration of gall-stones into pelvis of kidney	Nephrotomy

In eight of these cases (from 1 to 8) a tumour existed in the neighbourhood of where a distended gall-bladder might reasonably be expected, that is, not far from the junction of the right hypochondriac, right lumbar, epigastric, and umbilical regions; and in all, this sign was associated with symptoms of supposed biliary colic.

Of these eight cases of abdominal tumour, the four tumours which fell in the diagonal line described proved to be distended gall-bladders, while the four which varied from this line proved to be tumours of some other class.

In Nos. 2, 4, and 8 of these cases, a distended gall-bladder was confidently expected by several physicians in attendance on each case, and the general symptoms were decidedly confirmatory of this opinion; but in each of these cases, the divergence of the tumour from the diagonal line, and the result of the operation, proved the diagnosis to be mistaken. It has, therefore, appeared to me that this aid to diagnosis is almost of more value from its negative than from its positive aspect, especially in the case of all tumours lying to the left of the line, and tending to cross the middle line above the umbilicus.

I notice that Mr. Wheelhouse refers to another line which has been

recommended "from the acromion to the pubes." As, in Mr. Tait's first case of cholecystotomy, the tumour had crossed the middle line, and in my own case it was on the verge of crossing, I do not think this can be so reliable as the one I have given. Both, however, would eliminate the class of tumours just referred to.

Case No. 9 is, of course, a very exceptional one. In this case, if the gall-bladder could have been felt, it must necessarily have been altogether to the right of the line which I have described; and I should wish to be distinctly understood as claiming for my "line" nothing beyond a good indication of the direction in which a distended gall-bladder will "naturally" lie. Neither this nor any other extra-abdominal sign can be more than an aid to diagnosis. In any very doubtful case, the diagnosis should be intra-abdominal.

The liver and kidney may be so displaced, and adhesions may so alter the relations of important viscera, that the expectation of the most careful and experienced may often (and occasionally most fortunately) be found wide of the mark.

ON RE-INFUSION OF BLOOD IN PRIMARY AND OTHER AMPUTATIONS.

By JOHN DUNCAN, M.A., LL.D., ETC.,
Surgeon to the Royal Infirmary, Edinburgh.

On October 21st, 1885, Dr. Lindsay Porteous, of Kirkcaldy, sent to me a case of railway injury. The left leg had been crushed, and amputation was required in the lower third of the thigh. There had been no hæmorrhage at the time of injury; but Dr. Porteous, as a measure of precaution, had placed a tourniquet loosely round the limb, with instructions to tighten it if necessary. Bleeding commenced during the journey; the tourniquet was insufficiently screwed up; and a large quantity of blood was lost before the patient reached the infirmary. When I saw him eight hours after the accident, he was pallid and collapsed, with a pulse, when perceptible, quick, irregular, and fluttering. Alcohol, ether-injection, and elevation of the limbs, had a scarcely appreciable and quite evanescent effect; and I came to the conclusion that it was impossible he should lose his leg and live through the operation. Intravenous injection seemed the only hope, and it occurred to me that I might to a certain extent utilise the patient's own blood for the purpose. In a large school like this, there is no difficulty in finding blood-givers during the day, but at night a saline fluid is the imperfect alternative.

The patient was anæsthetised with chloroform, followed by ether. While I rapidly removed the limb, the blood which fell from it (in all about three ounces) was caught by an assistant in a dish containing solution of phosphate of soda. After the arteries had been tied, it was difficult for a time to say whether the patient was dead or alive; but I proceeded to inject the blood and phosphate of soda, mingled with distilled water in the last syringeful to increase the quantity. In all, about eight ounces were thrown into the femoral vein on the face of the stump. The quantities are not exact, because the graduated dish was necessarily flat to catch the blood, but are correct within a drachm, or at most two.

The patient was then quickly put to bed, placed in front of the fire, and teaspoonfuls of weak brandy and water were given to him frequently. The pulse had become quite perceptible by the time he had been got into bed; it steadily improved during the night, and the man is now perfectly well.

The dominant idea in the procedure is to utilise the blood flowing from the amputated limb, which otherwise must necessarily be lost. Especially in shattered limbs, it is difficult to empty thoroughly before amputating; and both at the moment of incision, and also while ligaturing the arteries, a certain quantity of blood may always be caught. The importance of even a few ounces in cases of collapse can hardly be overestimated. No doubt, a simple saline fluid may for a time supply the means of working to the empty heart and vessels; but, in my experience, the benefit is only temporary—for one reason, because it is essential that the blood-forming organs should act; and they require suitable nourishment, like every other part of the frame.

I am convinced that this little operation, so easily performed, will save many lives in the collapse of primary amputations, and will prove beneficial to wasted and anæmic patients in the major amputations for disease. I have now performed it in a sufficient number of cases, one of them an amputation at the hip performed by my colleague, Dr. Miller, to enable me to speak with confidence as to its safety and value.

The idea would probably not have occurred to me had I not, during the previous six months, had considerable experience in transfusion of blood from one human being to another. My colleague, Dr. Brakenridge, having under his care a case of pernicious anæmia, in which the decadence was so rapid that the end could not be postponed many weeks, came to the conclusion that it would be right to try transfusion of blood, and consulted me on the subject. I had tried myself, or seen tried by others, most of the instruments hitherto in use for direct transfusion, and had arrived at the opinion that all were unsatisfactory, either from the risk attending them, or from liability to failure in attaining the desired end. It appeared to me, therefore, that it was necessary to adopt the method of defibrination, or to delay the coagulation of the blood by some of the saline additions which have already been used for the purpose, in order that a sufficient quantity might be injected with sufficient slowness.

In making inquiry as to the experience of others, I was informed by my colleague, Dr. Cotterill, that he had on one occasion performed transfusion of blood mingled with phosphate of soda, as recommended by Dr. Pavy, and that the immediate result of the operation had been all that could be desired. As the power of phosphate of soda to delay coagulation is undoubted, I determined to adopt a plan whose feasibility was thus assured.

It is unnecessary now to go into the history of the pernicious anæmia. Dr. Brakenridge will doubtless give the results of his very careful observation, when the case may be regarded as complete. Suffice it to say that, by four transfusions, the quantity of the red corpuscles and hæmoglobin was trebled, and that the improvement has been maintained for two months without further operation.

Before describing the mode of operating, I will merely mention another of our transfusion cases, highly creditable to my last house-surgeon, Dr. Carmichael, which he intends to publish more fully, along with some important experimental investigations on which he is engaged. I had operated in a case of empyema by resection of portions of seven ribs. A certain amount of blood was unavoidably lost during the operation, and through the night slow oozing took place into the thoracic cavity, making little show outside the dressings. Next day the patient seemed moribund; and, as he found that I was from home, Dr. Carmichael, who had admirably assisted me in the other operations, had himself bled to six ounces, and injected that quantity with phosphate solution into the patient's veins. The man immediately rallied, and is now quite well.

An operation of this kind plainly requires attention to detail, but its extreme simplicity renders easy the avoidance of mistakes, some of which I committed in the earlier instances. I attach much importance to the perfect fluidity of the blood, and the aseptic condition of all the instruments. In no case had our patients the slightest fever, rigor, or disturbance of any sort subsequent to the operation. Glass was purified by prolonged immersion in a solution of bichloride of mercury, metal in carbolic acid.

For introduction into the vein of the receiver, I use a short glass-tube, of the size of a No. 6 catheter, having a pen-shaped point. To its other end, made slightly bulbous, about two inches of India-rubber tubing is attached. A simple glass syringe, holding four ounces, whose nozzle fits the tubing, is perfectly effective. I keep up the temperature by surrounding it with boric lint, wrung out of hot water. A syringe which I had made with an outer glass envelope to hold warm water, I find rather cumbrous. A graduated glass vessel, kept floating in warm water, contains the solution of phosphate of soda, and receives the blood.

All are washed with aseptic water after removal from the antiseptic solution, and before being used.

In amputations, the most convenient vein is selected on the face of the stump, the glass point is inserted, and a catgut ligature put round it. While the process of ligaturing the arteries is going on, the blood is caught by one assistant, who adds the soda-solution as required, and is slowly injected by another. There is no time wasted, and the amount put into the circulation is precisely proportioned to what the patient would otherwise have lost, *plus* what amount of saline solution the surgeon may think right and appropriate to the case.

In the case of pernicious anæmia to which I have referred, a vein in the arm of the blood-receiver was exposed, and under it a double thread of catgut was passed. I then drew the blood from the donor into the dish containing the phosphate of soda, with which it was gently mixed by means of a glass rod. While an assistant filled the syringe, I opened the exposed vein of the receiver, the lower thread of catgut being gently pulled upon to prevent bleeding. The tube was now inserted, the upper thread tied round it with one knot, and the lower definitely secured and cut short. The blood was next slowly injected, the India-rubber tubing being pinched when the syringe re-

quired to be refilled. The upper catgut was finally tied and cut short when the operation was completed, and the little wound was stitched up.

There is a limit to the rate of injection on each side. One may possibly take longer to inject than the blood will remain fluid, or one may inject too rapidly for the comfort of the patient. In amputation, neither of these can easily happen; but in this case, I committed both errors. This point of course involves the question as to how much phosphate of soda ought to be added, and as to the coagulating quality of the blood. The solution of phosphate of soda was of 5 per cent., and one part of the solution was added to three parts of blood. A slightly larger proportion is probably advisable, and was frequently used in the amputation cases.

The donors for the pernicious anæmia were healthy and powerful young students. One of them, Mr. Hardyman, found before he was bled that his red corpuscles were largely above the average, and on that occasion six ounces and a half of blood were added to two ounces of soda-solution. I was obliged to stop before the last ounce was injected, because it showed signs of thickening in the dish, and it actually coagulated six or eight minutes afterwards.

On the next occasion, with the same donor, I hastened the operation considerably, in order to avoid this coagulation. The patient, however, had only received four ounces when she experienced so much distress from pain in the back and forcible cardiac action, that I ceased injecting. It was annoying to find that, by an error in compounding, the soda-solution had been made of double strength, and that the remaining blood had not coagulated half an hour afterwards.

Experience, in short, shows that, in such a case, and with sufficient phosphate of soda, one may occupy at least twenty or thirty minutes in injecting; and that at a slow rate the patient will experience not the least discomfort. At the same time, the effect will vary with the condition of the patient. In one amputation, I injected eight ounces in five minutes; in the hip, sixteen ounces in about fifteen minutes, without any disturbance. But in the case of pernicious anæmia, we had already by previous operations added considerably to the vascular contents, and the quantity of blood in the body was daily increasing, so that it is not astonishing that four ounces added to the blood in five minutes should produce unpleasant though evanescent symptoms. The more complete and rapid depletion has been, the more quickly and largely may repletion be effected.

One other observation has to be made. The process of re-injecting the patient's own blood is incompatible with the use of spray or irrigation during the operation. For myself, I am satisfied by experiment and from clinical experience that the spray does not kill micro-organisms in the air; and that in most cases the application of the germicide may safely be delayed till near the end of the operation. With pure hands and instruments, the risk from the air is trifling, and it is not worth considering when a patient is in imminent danger from hæmorrhage and collapse.

ABDOMINAL SECTION FOR THE REMOVAL OF SMALL INTRAPELVIC TUMOURS OF THE OVARIES AND ADJACENT PARTS: WITH NOTES OF TWO CASES.

Read before the Lancashire and Cheshire Branch.

By CHARLES J. CULLINGWORTH, M.D., M.R.C.P.,
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The operation for the removal of the ordinary ovarian tumour has now become so general, that it is no longer necessary to plead that it should be recommended early. Medical men are, for the most part, sufficiently alive to the desirability of such a course, knowing how much their patient has to gain by submitting to treatment before the constitution has begun seriously to suffer. But the feasibility of operative interference in the class of cases, of which the two to which I am about to call attention are typical specimens, is not yet established on anything like so firm a basis. We are, indeed, only just beginning to realise the vast fields of usefulness that have been opened up to us by recent advances in abdominal surgery—advances due, in the first instance, to the experience gained by our great ovariotomists; in the second place, to the introduction of the various antiseptic methods, whether Listerian or otherwise; and lastly, if not chiefly, to the conspicuous ability and enterprise of a distinguished provincial surgeon; I mean, of course, Mr. Lawson Tait. I confess that, in common with many others, I was somewhat slow to undertake ovarian operations where there was no perceptible tumour in the abdomen. But I have now for some time been convinced that surgical interference affords us the best, if not the only, means at our disposal of relieving and curing a large number of women, who have hitherto drifted on from year to year, without sensible amelioration of their suffering, and who have long been the opprobria of our gynæcological out-patient and consulting rooms.

The operation of abdominal section for the removal of intrapelvic tumours is in several respects a more difficult one than ordinary ovariotomy. The incision in the abdominal walls is more likely to be attended with troublesome hæmorrhage when the tissues are in their normal condition, than when they have been distended and atrophied by the pressure of an underlying tumour. Again, instead of a tumour presenting itself to one's eye the moment the incision is made, one is apt to come upon coils of small intestine, amongst which one has, as it were, to grope for the diseased structures which lie deeply down, out of sight. One has, in short, to rely much more on the sense of touch, and much less on the sense of sight. Further, when the diseased structure is seized, its removal is very often attended with considerable difficulty, owing to its deep situation, and the firm adhesions frequent under these circumstances. But notwithstanding these difficulties, the operation is not only a feasible and justifiable one, but, thanks to the improved methods of operating now practised, is as safe as ordinary ovariotomy.

Without further preface, I proceed to describe, as briefly as possible, two cases upon which I have operated successfully during the present year.[1]

The first case was that of a young woman, aged 25, named Annie McC., who presented herself in the out-patient department of St. Mary's Hospital, Manchester, on account of a constant pain and a sensation of weight in the lower part of the abdomen, which rendered her quite unable to continue her calling as a dressmaker. She had married at the age of 17, had never been pregnant, and had now been a widow for three years. The pain commenced six years ago, and had continued ever since with one or two short intervals; it was most severe on the left side. She had consulted several eminent gynæcologists in London, and had at one time been a patient at the Chelsea Hospital, where she obtained considerable temporary relief. But the symptoms returned when she resumed her ordinary life, and increased in severity from year to year, until, twelve months ago, she found she was unable to maintain the sitting posture sufficiently long to continue her occupation. During the last six months, she had earned what she could as an artist's model. She had an anæmic and careworn appearance, and her general health was evidently becoming impaired.

On bimanual examination of the pelvis, a firm, rounded, tender swelling was felt to the right of, and slightly behind, the uterus; the uterus itself was normal in size and position. The patient attended in the out-door department for about seven weeks, and, as she did not in any way improve, I suggested an exploratory incision, with a view to removing the disease, if it were found practicable. As her life was a burden to her, and she was unfit for any kind of work, she readily consented to run the risk of the operation; and, accordingly, I admitted her as an in-patient on May 11th, 1885, and explored the abdomen, with antiseptic precautions, on the 13th.

I expected to find a chronically inflamed and enlarged ovary on the right side, and an inflamed and adherent ovary, without marked enlargement, on the left. What I did find was as follows: on the right side, a chronically inflamed and indurated ovary, of the size of a walnut, and, in addition to this, a firm tumour of the broad ligament, of the size of a closed fist, consisting of a compact mass of exceedingly small cysts; on the left side, another broad ligament tumour of similar character to that on the right side, but smaller. The left ovary was apparently healthy. I enucleated both the broad-ligament tumours, and removed the right ovary with part of the Fallopian tube, leaving the left ovary and tube undisturbed. The operation was rendered somewhat difficult, owing to numerous very firm adhesions. The pedicle of the right ovary and tube was secured by a carbolised silk ligature, and left within the abdomen. A glass drainage-tube was inserted, and left in for forty-eight hours. The temperature rose to 102° Fahr. in the evening of the day of operation, but soon fell to 100° Fahr.; and, although it rose on the morning of the fifth day, and again on the morning of the sixth day, to 101° Fahr., it did not again occasion the least anxiety, and the patient made an excellent recovery.

I saw her so recently as yesterday (December 15th, 1885). She has lost her anæmic appearance, and become stout and well. A lady, from whom I removed an ovarian tumour some time ago as a private

[1] The descriptions which follow are condensed from notes kindly taken for me by Dr. Archibald Donald, house-surgeon to the hospital.

patient, happened to visit the hospital while McC. was under treatment, and, taking an interest in her fellow-sufferer, has very kindly established her in business as a dressmaker, where she now follows her occupation in comfort, being entirely relieved of her pain. Her only trouble now arises from some menstrual irregularity, which, I quite hope, will prove to be merely temporary.

Why the pain in this case was on the left side, when the principal mischief was on the right, I cannot explain. The satisfactory point is, that removal of the disease has put an end to the pain.

The second case is that of a married woman, aged 26, named Mary M., a winder in a cotton-mill, who was admitted into St. Mary's Hospital, Manchester, on September 25th, 1885, complaining of continuous pain in the lower part of the abdomen, especially on the right side, and down the right thigh. The pain had existed for seven years, commencing soon after the birth of her only child. At first, it only came on immediately before each menstrual period, but it was even then so severe while it lasted, that she was rendered unfit for work. During the last two months, the pain had been severe and continuous, and there had been persistent hæmorrhage from the uterus.

The patient, on admission, was thin and anæmic, with a haggard and pinched countenance, betokening much suffering. On bimanual examination of the pelvis, the right side was found to be occupied by an oblong firm swelling, very tender to the touch, pushing over the uterus to the left of the middle line. The diagnosis was uncertain; but I thought it most probable that there was distension of the right Fallopian tube. The hot douche and absolute rest were found, at the end of a fortnight, not to have resulted in the least relief; and, accordingly, the risk having been explained to the patient, an exploratory incision was made in the middle line of the abdomen on October 7th. The right ovary was found to be enlarged to the size of a hen's egg, and to be cystic; the contents of the cyst, which escaped during removal, consisted of dark fluid blood, altered by long retention. Closely connected with the diseased ovary was a thick fusiform swelling, consisting of the Fallopian tube distended with blood, partly fluid and partly clotted, the walls of the tube being much thickened by chronic inflammation and firmly adherent externally to a coil of small intestine. After carefully separating the adhesions, the tube and ovary were both removed, the ligature being placed close to the uterus. The left ovary was also found to be enlarged from incipient cystic disease, and was accordingly removed. The tube on the left side was healthy. A glass drainage-tube was inserted at the lower angle of the wound, and allowed to remain until the fourth day. The patient made an excellent recovery, the temperature only once rising to 100° Fahr. She had some pain about a fortnight after the operation, but it soon passed off, and she is now entirely free from pelvic discomfort, and able to go about as usual.

These cases require little comment. I have not brought the patients, for there is nothing now to show but a healthy cicatrix.

One word, however, may be added as to the conditions which, in my opinion, justify operative interference. In considering the treatment of disease of the so-called uterine appendages, it is always necessary to bear in mind that even severe and continuous pain may be after all purely neuralgic, or, at any rate, merely functional. In such cases, probably no one would consider an operation justifiable. Having found it necessary, as everyone engaged in the practice of gynæcological surgery must have done, to formulate for my own guidance the conditions which justify exploration, and bearing in mind the special liability of the female pelvic organs to the functional disorders to which I have alluded, I have come to the conclusion that the essential conditions are two in number; namely, (1) the presence of physical signs of actual disease, in the form of one or more circumscribed intra-pelvic swellings not springing directly from the uterus; and (2) the existence of continuous pain, which rest and other simple methods of treatment fail to relieve, and which is sufficiently severe in character to disable the patient from following the ordinary occupation of her life, whether that occupation be the means of earning a livelihood, or merely the work of her own household. Where these two conditions are present, and the patient and her friends are made acquainted with and are willing to accept the risk, I believe we not only may operate, but that it is our duty to do so.

EPIDEMIC OF GOÎTRE.—Dr. Hand, in the *North-Western Lancet*, reports an epidemic of goître among the inmates of the Minnesota State Reform School. Forty-four out of 140 were suffering at the time of Dr. Hand's observation. It was thought that the origin of the trouble lay in the flour from which the bread was made. The usual treatment, with a change in the flour, was speedily followed by a cure of most of the cases.

A NEW, EASY, RAPID, AND PAINLESS METHOD OF REDUCTION OF DISLOCATIONS OF THE SHOULDER, WITHOUT AN ANÆSTHETIC: WITH CASES.

BY NEIL MACLEOD, M.D.Edin., Shanghai.

AN experience in my own person, three years ago, of a dislocated shoulder, and its reduction without an anæsthetic, by the ordinary method, with the heel in the axilla, suggested the method found successful in the two cases here recorded. It has been my misfortune, in three years, to have only these two opportunities of testing the efficiency of the method proposed; but the result so far exceeded my expectations, that I am tempted, without waiting for other cases, to ask surgeons who have more frequent opportunities than I have to make a trial of it, especially as it is a painless one, and, if unsuccessful, does not in any way interfere with the adoption of other methods.

In my own case the dislocation was subglenoid, with very marked abduction of the elbow. When the arm was allowed to hang unsupported, there was pain at the insertion of the deltoid muscle, at once relieved by abduction of the elbow. A surgeon, who was at hand when the accident happened, placed the arm over his shoulder, and tried to press the head of the bone into its proper place with his two thumbs, causing great pain at the point of pressure, and failing to make reduction. I then lay down on the ground, and the reduction was accomplished in the ordinary way, with the heel in the axilla, requiring great force, accompanied by a jerk; the pain at the lower part of the deltoid being very great. For several days after reduction, this pain continued, preventing sleep; and at the end of the week there were tenderness, discoloration, and two lumps with a hollow between at the insertion of the deltoid. There was no discoloration visible at any time in the region of the shoulder itself. I inferred, and I believe rightly, that the deltoid had been partly torn at its insertion. From the behaviour of the pain before reduction, when strain was put on and taken off the muscle, and also its intensity during, and persistence after, reduction, it seems unlikely that the tear was caused by the accident, and that it was more probably due to the procedure in reduction. It is not easy to rupture tendon or muscle by steady traction; but let either be put at the disadvantage present in subglenoid dislocation (as the deltoid muscle is), and the long arm of the lever from the insertion of the deltoid to the hand would easily account for such an accident, when the force was applied by a powerful man. At all events, the pain accompanying reduction in my case, made relaxation of the muscles concerned in the movement of the joint absolutely impossible. Now, after a lapse of three years, I have pain at this point with certain movements, there being none whatever in the region of the joint.

In accordance with the axiom, that the direction of the reducing should be as nearly as possible opposite to that of the producing force, I determined, in the first case that came into my hands, to pull the arm in a direction at right angles to the line of the trunk. This is nothing new, for it is recommended by Hulke and Lowe, and perhaps by others; but Hulke further recommends the sitting posture on a chair, a doorpost, two or three assistants, and a close hitch, and Lowe, the sitting posture on the floor and a sofa. In a sitting posture, while a man may relax his shoulder-muscles (and he will not do so if there be pain there), the other muscles of the body are more or less tense, and so enable him, by association, to resist with the shoulder-muscles, involuntarily as well as voluntarily. The only position in which any and every one is accustomed to relax completely all voluntary muscles, is when lying down. This fact is taken advantage of, certainly, in the ordinary heel-in-the-axilla method; but the direction of traction in this method causes pain, and, so long as pain exists, it is impossible to have relaxation of muscles in any position. It is noteworthy that, to relieve the pain of a dislocated shoulder, the patient supports, that is, abducts the elbow, and the surgeon can raise the elbow to the height of the shoulder, giving comparative ease, while every attempt at adduction produces pain and spasm. Traction in a line at right angles to the trunk in the two cases here described, I found, to my astonishment, did not cause pain when the patient was lying down; and this traction fulfils the axiom as to the direction of the best reducing force.

The deltoid, latissimus dorsi, teres, and pectoral muscles are, as I have pointed out, relaxed when the subject is lying on the ground, and so even with the arm outstretched and also lying on the ground. In the same posture, when the head of the bone has been pushed nearer the middle line of the trunk, as in most dislocations of the shoulder, the insertions and origins of all these muscles have been

approximated, and the muscles are probably still more relaxed than they were without dislocation. On the other hand, when the arm lies by the side in the supine position before dislocation, the origin and insertion of the deltoid are further apart, whilst those of the other muscles are nearer, than when the arm was outstretched; after dislocation in this position, with the arm by the side, whilst the origins and insertions of the other muscles are at least not further apart, those of the deltoid are probably so, and the limb cannot be adducted completely without tension of the deltoid, and great pain. Even if there be no elongation of the distance through which the deltoid has to act, and therefore absence of the element of stretching, contraction will be set up in the deltoid by pain, wherever it may be, provided the pain is the result of adduction, since the deltoid is the great abductor of the arm. During reduction then, by traction favouring adduction, there is spasm of the deltoid; and if the other muscles act at all, the line of traction will not in any way overcome their action, which is at right angles, and tends to keep the head of the bone from slipping outwards. Traction outwards from the trunk at right angles does certainly not stretch the deltoid; and the other muscles are not strained to the extent of their relaxed length in health, until the head of the bone is in position, whilst, if they do resist, they are better overcome than when the limb is adducted.

I have left out of consideration the coraco-brachialis, biceps, long head of the triceps, supraspinatus and infraspinatus, and subscapularis muscles, as they do not probably influence reduction to any great extent, and, at all events, cannot be said to favour it by traction with adduction rather than with abduction.

These theoretical considerations were verified practically during reduction in the two following cases by the absence of pain, as stated by the patients themselves, and by the absence of resistance, observed in the second case; absent, also, probably in the first, but not watched for, my attention being solely occupied in this instance in looking out for the jerk.

Case I. A heavy, powerful, athletic man, aged 42, fell while hunting; three-quarters of an hour after the fall, I found a subcoracoid dislocation of the left humerus. He complained of great pain when the arm was not supported. I laid him down on the floor, with his arms extended. With my left heel in the axilla, I pulled the arm steadily straight out from the trunk, warning him that this would be painful; and there being no jerk, or other intimation of reduction, I pulled and pulled more strongly, and, thinking I had failed, determined to try the ordinary plan of extension more in the line of the trunk. Before resorting to this, I placed my hand on the shoulder, and, adducting the limb, I was surprised to find the head of the bone replaced.

On inquiry of the patient if the pain was great whilst I was pulling, he surprised me by saying "there was none." At the time, I could not tell at what moment reduction took place, neither could the patient, nor a surgeon who was looking on, and was interested in the experiment, which I had explained to him before setting to work. The pain after reduction was "not worth taking notice of," and was only occasional.

Case II was that of a small muscular man, aged 28. A fall from a pony resulted in a dislocation of the humerus. Before I saw him, three men had each "had a pull" at the arm, a fourth fixing the trunk by encircling it with his arms; this gave great pain. A fifth bystander volunteered to try the heel-in-the-axilla method, but also failed. They decided that it must be something other than a dislocation. Three-quarters of an hour after the accident, I saw him in my consulting-room. There was a good deal of abduction of the elbow; the shoulder was slightly swollen; pain was complained of in the region of the lower third of the deltoid, and the dislocation was more subglenoid than subcoracoid, not typically either. Raising the elbow to the level of the shoulder afforded great relief; depressing it made him complain lustily. I laid him on the floor, with his arms extended at right angles to the trunk, and, having told him to lie still, asked him how the shoulder felt. "Very easy," was the answer. With my heel in the axilla, I made gentle traction on the arm straight out from the trunk, watching for a jerk, and using a force of from five pounds to ten pounds, so far as I could estimate; there was no jerk. Not expecting reduction, I placed my hand on the shoulder, and was so surprised to find it had taken place, that I had to adduct the arm completely before I was quite convinced. The patient refused to believe that it was done. Here, again, there was no pain during reduction, nor the slightest attempt at, or appearance of, resistance.

In this case, immediately after the accident, while presumably the constitutional effects were still present, great force had been applied unsuccessfully in the same direction in which I applied a small amount successfully three-quarters of an hour later; the former failed with the man standing, the latter succeeded with him lying on his back. Likewise, lying down immediately after the accident, great force was applied, with the heel in the axilla, in vain, and a small amount of force in the same position, with the heel in the axilla, succeeded later; the former failed with traction in the line of the trunk, whilst the latter succeeded with the traction at right angles to that line. Whilst the first case may possibly have been one of those easily reduced by any method, the previous attempts at reduction make this unlikely in the second case.

Mr. Bryant, in his excellent surgical text-book (third edition, vol. ii, p. 340), writing of the treatment of dislocated humerus, says "the use of anæsthetics has completely revolutionised the treatment of dislocations, and, at the present day, nothing can usually be simpler than the reduction of a dislocation of the shoulder, and what was formerly called reduction by stratagem is now the rule. 'If you can get a person off his guard,' wrote Abernethy, 'you have first to..... and it will sometimes succeed in putting it in;' and the modern surgeon, in describing the reduction of dislocations by manipulation, might use the same language. To reduce a dislocated humerus by manipulation, chloroform is essential."

Now chloroform gets rid of one difficulty in the way of reduction, namely, muscular spasm, and this not sufficiently until pain also is absent. In the two cases described, muscular spasm and pain were both got rid of without an anæsthetic, simply by the use of two precautions, which have certainly been used by other surgeons before, but not, strangely enough, so far as I am aware, both at the same time; and I would fain hope that other cases similarly treated will be as successful.

The whole procedure is of the simplest. Let the patient lie down on his back on the floor or ground, with the dislocated arm outstretched at right angles to the trunk, and also on the floor. Having told the patient to lie quite still and make no effort, let the surgeon, placing the approximate heel in the axilla, make traction gently and steadily at right angles to the line of the trunk; and, as there may be no jerk or evident intimation of the return of the head of the bone to its place, let him ascertain its position, if necessary, adducting the limb to make sure; if reduction have not taken place, let him renew and increase the force of traction, and repeat the examination until he has succeeded or failed, in which latter case nothing has been done to interfere with the application of other methods.

It is possible that, in many cases, the heel in the axilla may be unnecessary; but it will serve to steady the scapula, and affords a better counter-extending force than the weight of the patient's body, and thus leaves him free to lie still and make no effort as if to aid.

I hope that surgeons who may try the method above described will be kind enough to intimate their results, successful or unsuccessful.[1]

[1] In the *Edinburgh Medical Journal* for either February or March, 1883, I described my own case, and there proposed the method of reduction tested in the two cases recorded.

The Redwood Testimonial Fund.—An influential committee has been formed for the purpose of raising a permanent record of Dr. Redwood's services to chemistry in its relation to medicine and pharmacy. It is proposed to found a "Redwood Scholarship" in connection with the Pharmaceutical Society, which has for more than half a century been the principal scene of Dr. Redwood's labours. The occasion of the movement is the retirement of Dr. Redwood from the Professorship of Chemistry to the Pharmaceutical Society, which he has held since 1842. Dr. Redwood is well known as the author of many works on materia medica, as editor of three editions of the *British Pharmacopœia*, as Secretary and Treasurer to the Chemical Society (from 1852-70), and as Secretary to the Cavendish Society. The Executive Committee, of which the President of the Pharmaceutical Society is chairman, includes the names of the President of the Royal College of Physicians (Sir W. Jenner, Bart.), the President of the General Medical Council (Sir Henry Acland, K.C.B.), the President of the Chemical Society (Dr. Hugo Müller, F.R.S.), the President of the Institute of Chemistry (Professor Odling); Sir William Gull, Bart., Sir George Burrows, Bart., Sir Spencer Wells, Bart., Sir Henry Pitman, Sir Henry Roscoe, M.P., Sir Frederick Abel, C.B., Sir J. B. Lawes, Dr. Quain, Dr. De la Rue, Dr. Garrod, Dr. Owen Rees, Professors Frankland, Hofmann, Gilbert, Latham, besides the President of the British Pharmaceutical Conference (Mr. Greenish), and many prominent pharmaceutists. The preliminary list of subscriptions shows that the movement has already received considerable support. Subscriptions should be sent to the Honorary Secretary, Professor Dunstan, 17, Bloomsbury Square, London, W.C.

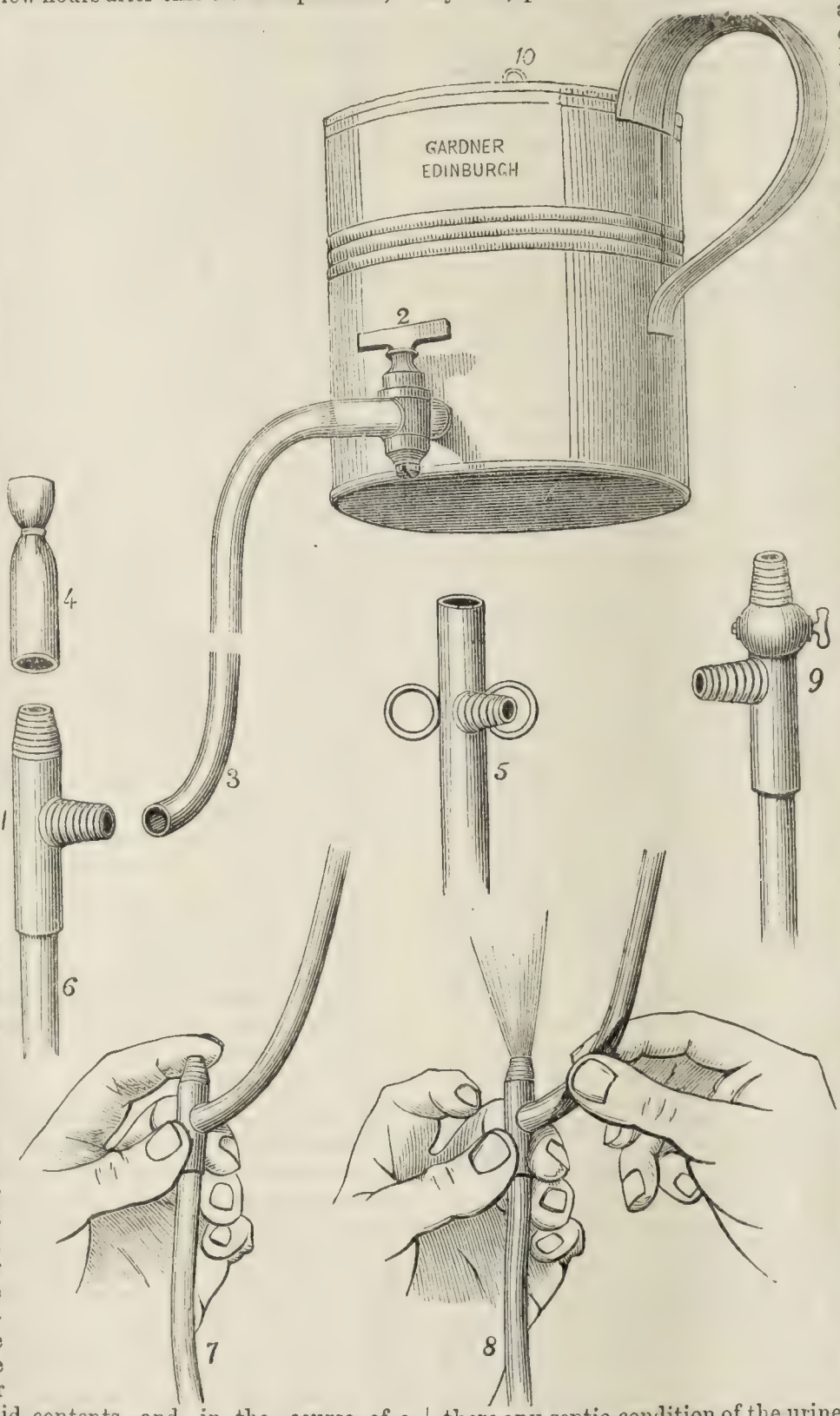
AN ASEPTIC CATHETER FOR WASHING OUT THE BLADDER.

By JAMES FOULIS, M.D., Edinburgh.

A CATHETER is not clean or aseptic so long as air occupies the tube of the instrument. The surgeon cleans the outside of his catheter with the greatest care; the instrument is beautifully polished; and, before it is passed into the bladder, it is dipped into carbolised oil, or some other antiseptic unguent. Yet, in spite of all these precautions, it too often happens that the patient, a few hours after this trivial operation, has a severe rigor, followed by high fever and profuse perspiration; then comes on an attack of inflammation of the bladder, with putridity of the urine. Some have sought to explain these phenomena by supposing that the catheter, during its passage, has torn or injured some of the delicate nerves which are found just within the orifice of the bladder; and that all the unpleasant after-consequences are neurotic in origin, and not septic. It this be true, how is it that a man may have an acute-angled oxalate of lime calculus, rattling about in his bladder for years, and yet not suffer from any such severe symptoms as above mentioned; while, if a dirty sound or catheter be passed into his bladder, to test for the presence of a stone, such symptoms may come on at once?

I am with those who believe that the rigor, fever, and profuse perspiration, followed by inflammation of the bladder and putridity of the urine, are certain signs that septic matter has been introduced into the bladder by the catheter.

There is no better "cultivating medium" than urine in the warm bladder. The mere point of a needle, with septic matter on it, is sufficient to impart to it sepsis. Any one who has seen a beam of light pouring into a dark room, will allow that the air in the tube of the catheter is full of so-called "motes." When a catheter is passed into a warm bladder, the air within the tube begins to expand, because the instrument is warmed by the warm urethra. The cold air of the outside surrounding atmosphere acts as a buffer at the open end of the catheter; and as soon as the catheter comes into contact with the warm urine, a bubble of air escapes through the urine before the fluid itself rushes into the catheter. The bladder can never be perfectly emptied of its fluid contents, and, in the course of a few hours, the seeds of sepsis which have been left behind multiply a million-fold.



It is seldom that a metallic catheter is passed into the bladder without some injury being done to the delicate protecting epithelium of the mucous membrane. How often do we see blood withdrawn with the catheter after the bladder is emptied! Does not this show that in some places the mucous membrane has been torn or scraped, and the delicate blood-vessels exposed? It is in these situations that the absorption of septic fluid takes place. A mere speck of vaccine lymph, placed in the furrow of a scratch on the arm, is sufficient to affect the whole organism. The rigor, fever, and profuse perspiration, following some hours after the passage of an aseptic catheter into the bladder, undoubtedly point to the absorption of some of the septic urine.

Some urines are better "cultivating media" than others, but urine which contains pus is peculiarly apt to putrefy after a dirty catheter has come into contact with it. It is in these cases that the surgeon ought to be more than careful when using his catheter. A septic catheter should never be passed into a bladder when the urine contains pus, especially if the surgeon be not sure whether the pus comes from the bladder or from the kidney. A patient, lately under my care, passed at least two ounces of pus in his urine daily. This affection was first noticed in early childhood; it never ceased. It was not possible to form an exact diagnosis as to the source of the pus. This daily discharge of pus went on for more than thirty years. During the last two years he was under my observation, I examined his urine very frequently and carefully, under the microscope, using a $\frac{1}{10}$ immersion-lens. I did not find, at any time, organisms in the pus, and when the urine was just passed it had no bad odour. There were never any symptoms of inflammation of the bladder. After his marriage, this gentleman was most anxious to be cured of his trouble, and went to London to consult a leading surgeon. A catheter was passed, and at least two ounces of pus were withdrawn from the bladder. Blood came away with the catheter as the instrument was withdrawn. That night my patient had a very severe rigor, great fever, and profuse perspiration. When he returned to Edinburgh, I again examined his urine under the microscope. It was now offensive in odour, and was loaded with organisms. Health now began to fail, and, from the symptoms which gradually came on, an exact diagnosis of the case was made. He was found to be suffering from a large cystic scrofulous kidney on the left side. It was now quite clear that the putridity of the pus in his urine had extended upwards to the pus escaping from his scrofulous kidney. After many months of suffering, an attempt was made to remove the diseased kidney, but the patient did not recover from the operation.

This was a very striking case, and made a great impression on me. Although this gentleman passed pus in his urine for more than thirty years, at no time during that long period was there any septic condition of the urine. His health was generally fairly good. He was anæmic at times, but a course of iron kept him in good condition; and his muscular system was excellent. From the time a catheter was passed, all this was changed. His health began at once to fail. Sepsis of his urine was established, the scrofulous kidney was quickly affected, and general blood-poisoning followed. Naturally, one asks, could that sepsis, which led to this gentleman's death, have been prevented by the use of a perfectly aseptic catheter, when the bladder was first examined?

Another gentleman, under my care at present, had a catheter passed into his bladder when he was suffering from a gonorrhœal discharge.

It is now two years since that small operation was performed, and since then his bladder has been in a state of chronic inflammation, and his urine, as it passes from the bladder, is found, under the microscope, to be loaded with organisms, and these can be seen in the pus and epithelial scales which come from the bladder. He has suffered frequently from swollen testicles, without fresh gonorrhœal infection, and has constant rheumatic pains in his lumbar region. Although the bladder is frequently washed out with antiseptic lotions, it seems to be almost impossible to get rid of the organisms from his urine. They disappear for a few hours after a thorough washing out, but reappear in the course of twenty-four hours.

After sepsis has been once fairly set up in the bladder, in my experience it is extremely difficult to cure it. We cannot pour into the bladder such a strong germicide solution as will at once permanently destroy the organisms, without at the same time injuring the bladder; besides, the organisms travel along the various ducts which communicate with the bladder, and are out of the reach of antiseptic solutions, and they keep up the sepsis in the urine by freshly infecting it after the bladder has been over and over again washed out.

The use of a very strong antiseptic solution, as that of bichloride of mercury, is apt to be followed by intense pain in the bladder and urethra; and I have observed that the organisms rapidly increase in the urine, after there have been symptoms of inflammatory action following the use of a too strong antiseptic solution in washing out the bladder.

It is best to use a weak solution frequently, rather than a strong one occasionally, in washing out the bladder. Inflammation of the mucous membrane of the bladder undoubtedly lowers the vitality of the protecting epithelial cells; and their wonderful resisting power is so reduced, that the parasitic organisms of sepsis have it all their own way in the struggle for existence.

With the object of preventing septic infection of the bladder, rather than curing it, about fifteen months ago I constructed an instrument which I call an aseptic catheter. This has answered extremely well, both in drawing off urine from the bladder, and in washing out the organ when sepsis has been established. An ordinary silver catheter, or any soft elastic instrument, can be made aseptic before it is used by the method I shall now describe.

The whole apparatus consists of two parts. The first is a tin can, holding about a quart, with a stop-cock (Fig. 2), to which is attached an India-rubber tube (Fig. 3), about three feet in length. This tin can is filled with an antiseptic solution, and is placed on a mantel-piece, or is hung up by means of the loop (Fig. 10) on a wall, or at the bedside, three feet or so above the patient lying on his bed. When the tap is turned on, a perfectly steady and constant stream of antiseptic lotion is given through the tube.

The second part of the apparatus consists of a modified catheter. If a soft gum elastic catheter, such as a No. 9 instrument, be used, there is screwed on to the end of the instrument a piece of light metallic tube, about an inch and a half in length. Projecting at right angles from this tube, and equidistant from its ends, there is another metallic tube, about half an inch in length, to which the India-rubber tube from the tin can is to be attached (Fig. 1). The India-rubber tube should be tightly screwed on to this projecting metallic tube in a perfectly air-tight manner. A piece of India-rubber tube, about an inch and a half in length, and tied very tightly in the middle, is used as a cap to fit on to the end of the instrument (Fig. 4). The catheter is now ready for use. Supposing it is perfectly clean outside, the catheter is seized near its eye-end, and held upside down over the basin which is to catch the urine. The tap (Fig. 2) is now turned on. A stream of antiseptic lotion at once pours through the eye of the catheter, having first driven out all the air in the instrument. No air can again enter the tube of the catheter as long as the liquid flows through it. The tap of the can is now turned off until the liquid escapes drop by drop through the eye of the catheter, which is then dipped into carbolic oil or other antiseptic unguent, and is at once passed into the bladder. The India-rubber cap is then twisted off the end of the instrument, and the urine will at once begin to flow. Immediately the urine ceases to flow, the tap (Fig. 2) is turned full on; and, the forefinger of either hand being pressed against the orifice of the catheter, the antiseptic lotion will then pour into the bladder (Fig. 7). As soon as the bladder is full of the antiseptic lotion, the forefinger is withdrawn, and the India-rubber tube is squeezed, or bent on itself, and then the bladder will pour out the antiseptic lotion (Fig. 8). Thus the bladder may be first emptied of its urine, and then washed out, over and over again, in the simple manner now described. On withdrawing the instrument from the bladder, the forefinger should be pressed against the orifice of the catheter so as to prevent the escape of fluid in the catheter. The patient can wash his own bladder out just as easily as the surgeon can do it for him; and after the catheter is withdrawn from the bladder, it should be thoroughly cleansed by allowing the antiseptic lotion to run through it for a time. It is just as easy to use this catheter in the recumbent as in the vertical position of the patient.

This is the cheapest and simplest form of the apparatus, and only costs a few shillings. Should the catheter wear out, the metallic portion can be easily screwed on to a new soft elastic catheter.

A more perfect instrument is that represented in Fig. 9. It has an air-tight stop-cock just external to the projecting tube. In using this instrument, it is not necessary to have the small India-rubber cap to fit over the orifice of the catheter, and it is not necessary to press the forefinger against the orifice of the catheter, when the bladder is filling with the antiseptic lotion, as in the case of the other instrument. The stop-cock is tight when the instrument is first passed into the bladder, and it is simply turned one way when the urine is escaping from the bladder, and the other way when the antiseptic lotion is pouring into the bladder.

In the case of the ordinary metallic catheter, all that is necessary to do is to fasten on to the instrument a small metallic tube about half an inch in length, and of the same diameter as the catheter itself. This small tube, of course, communicates with the tube of the catheter, and is soldered on about one inch from the end of the catheter, on the upper or curved side of the instrument (Fig. 5). This modified instrument is used in exactly the same way as the one already described.

Mr. Gardner, surgical instrument-maker, South Bridge, Edinburgh, now makes up a box of several catheters with an adapter arrangement, by means of which a single washing-out instrument, as seen in Fig. 9, can be made to fit each and all of the catheters, though of different sizes.

With regard to the antiseptic lotion to be used, it is best to pour into the tin can a certain quantity of a cold and strong solution of a germicide. By the addition of boiling water to this solution, it can be diluted and warmed up to the proper degree for use, and it should be used at once.

The stomach, in disease, and in cases of poisoning, may be washed out in the most effectual manner, by attaching the tube of an ordinary aspirator to the free, or open end, of a large catheter, as in Fig. 9. The stomach being filled from the tin-can with an antiseptic lotion, or solution of an antidote for a poison, may be immediately washed out by the aspirator. In the same way, the pleural, or other cavity, may be rapidly and effectually washed out.

SOME REMARKS UPON ERGOT.

By CHARLES B. PLOWRIGHT, F.L.S., M.R.C.S.,
Surgeon to the West Norfolk and Lynn Hospital.

THE recent investigations of Dr. R. Kobert upon the active principles of this drug, referred to last spring in the BRITISH MEDICAL JOURNAL, March 21st, 1885, p. 608, are in themselves of great importance to the medical profession. They show, for one thing, how incomplete our knowledge of the subject even now really is, and, for another, how absolutely essential it is to study the action of such bodies, separately, upon living animals.

Some time ago, there was a tendency, amongst certain members of the profession, rather to doubt whether the continued administration of ergot was capable of inducing those terrible epidemics of gangrene which history has handed down to us. While it is quite true that patients may take for some considerable time small doses of the various preparations of ergot without manifesting any dangerous or even unpleasant symptoms, yet most practitioners feel a certain amount of anxiety about these cases, unless they can be seen at pretty short intervals. There is really, however, no doubt that eating bread contaminated by ergot does produce gangrene (Taylor *On Poisons*, 1848, p. 538), as has been known since the sixteenth century (Pereira, *Elements of Materia Medica*, 1840, vol. ii, p. 604); and, quite recently, Dr. Meadows (*Medical Times and Gazette*, October 2nd, 1879, p. 397) met with a case in which unpleasant symptoms, such as flushing of the face, swelling of the eyelids, hand, and arm, were produced by so small a dose as half a drachm of the powder upon two separate occasions. Kobert (*Ueber die Bestandtheile und Wirkungen des Mutterkorns*, Strasburg, 1884, p. 14) has likewise obtained direct evidence that sphacelinic acid, when administered to fowls, caused dry gangrene of the comb and wattles, as well as of other parts of the body.

The toxic effect of ergot upon the animal system is not, however, confined to the production of gangrene. Pereira (*loc. cit.*

p. 600) quotes Diez as having found, among other symptoms, that ergot given to dogs caused "semiparalysis of the extremities, especially of the hinder ones;" and Gaspard as having found that an intravenous injection of aqueous extract produces in the same animal "paralysis of the posterior extremities." In a recent communication, Dr. Althaus (BRITISH MEDICAL JOURNAL, May 10th, 1884, p. 893) says, "Bread contaminated with ergot of rye will, when habitually taken for some time, cause well marked decrease of the posterior columns." Kobert (*loc. cit.*, p. 21) found that eighty grammes of ergot, given to a pig with oil and milk, caused it to become, in three days, markedly ataxic, with loss of the patellar reflex.

With these facts before us, pointing as they do to the possibility of ergot inducing such a formidable disease as locomotor ataxy, or, at any rate, ataxic symptoms, the importance of being cautious in prescribing this drug for any length of time is obvious. Without venturing any pronounced opinion, either upon the pathology or upon the etiology of this disease, there are many cases of it which occur to us in actual practice in which none of the usually accredited causes, such as syphilis, sexual excess, alcoholic abuse, exposure to cold, etc., can be blamed. Although rye-bread is not consumed in this country as an article of diet to any extent, yet one class of the community, at any rate, is liable to ergotisation from a source which is not generally recognised.

In many parts of England, especially in the eastern counties, wheat is often ergoted to an extent, in some seasons, that would hardly be credited by anyone who has not specially looked into the matter. This being the case, a few remarks upon the subject may not be out of place.

Of all our cereal crops, rye is most subject to ergot, next to it wheat, very rarely barley, and never, as far as my knowledge goes, oats. Many species of grasses are, however, ergoted to an extent that is of very serious import to the graziers. In all these cases, the same fungus is the cause (Claviceps purpurea).

An ergot is an ovule of one of these grasses into which, either at the time of its fecundation by the pollen, or immediately afterwards, a spore of the Claviceps has gained admission. The spore once inside, gives rise to mass of mycelium, which so alters the grain that, instead of developing into starch, it becomes a sclerotium, or, in other words, a consolidated mass of mycelium, which remains in a state of quiescence for a long time (one or two years if necessary), but retaining its vitality until favourable conditions enable it to produce the perfect fungus, Claviceps. This, under ordinary circumstances, takes place in May and June, just about the time that the grasses and cereals are in flower. The spores of the Claviceps come into contact with the stigma of the grass by being carried in the air to it, and then give rise in the ovule, not directly to an ergot, but to an enormous number of very minute spores (conidia), which are held together, by a viscid material, into a mass to which the name sphacelia has been applied. It is obvious that these conidia (which used to be called Ergotetia abortifaciens), held together as they are by the sticky material, cannot be blown from one plant to another by any wind-currents.

Flückiger (*Lehrbuch der Pharkognosie des Pflanzenreiches:* Berlin, 1867) has shown that the viscid substance in the sphacelia is saccharine, and produces a copious precipitate of the suboxide of copper with Fehling's solution; and Ráthay (*Untersuchungen über die Spermogonien der Rostpilze*, Wien, 1882, p. 35) says that eighteen species of Diptera, as well as other insects, visit the sphacelia in search of their sugary pabulum, and thus convey the conidia to healthy stigmata, in the same way as other insects in their search for the honey of flowering plants carry the pollen from flower to flower. Subsequently, the production of conidia ceases, and the true ergot is developed by the infected ovule, and so the life-cycle of the fungus is maintained throughout the year.

Mr. A. Stephen Wilson informs me, however, that, while he has confirmed Ráthay's observation as to the avidity with which insects, especially flies, feed upon the sphacelia, yet they die in great numbers, apparently poisoned by it.

The reproduction of the fungus by means of the conidia continues on some species of grass throughout the summer and autumn. Notably is this the case with the common rye-grass (*Lolium perenne*), which, late in the year, is almost invariably ergoted, although many of the ergots are so small as to remain concealed within the florets. The reason that wheat is less frequently affected than rye is because, in the former plant, as soon as its stigma is fertilised by the pollen, it is retracted within the pales, while, in the latter, it remains hanging outside them. Hence we see a sunless year is more apt to be one in which wheat is ergoted than any other, even a rainy one. It s a curious fact that some grasses which do not in this country usually perfect their fruit, are, nevertheless, very prone to be ergoted. The common reed (*Phragmites communis*) is a case in point, and is the probable source from which the wheats in the fens become infected. Twitch-grass (*Triticum repens*) is another instance.

In the fen-district, every year a certain amount of ergot occurs in the wheat; but sometimes, as in 1879, it is very abundant. In the latter year, most of the samples from this district which were offered in the King's Lynn market contained ergots. These, of course, were but a small proportion of the numbers which originally occurred in it; the improved processes of threshing and dressing having eliminated all those ergots which were either larger or smaller than the wheat-kernels. For this reason, there is not much fear of the general public suffering any ill-effects from this cause. Still such a thing is within the bounds of possibility. There is, however, a pretty numerous class to which this does not apply, namely, to the agricultural labourer, who often subsists for many weeks during the winter upon corn which his family have gleaned after the harvest. The total amount of this gleaned corn in the possession of each family, never being very large, it is threshed and dressed by the labourers themselves in the most primitive manner. It is then sent to the miller to be ground by him, and returned to the family for their winter's consumption. In appearance, a wheat-ergot is very similar to a rye-ergot, but shorter and stouter. They are often mistaken by farmers and millers for the excreta of mice or rats.

With regard to the action of ergot in producing abortion, there is one point which has long struck me; namely, that a pregnant person or animal, by taking a number of small doses extended over a considerable time, is quite as likely to abort as, and perhaps even more so than, after a single pretty large dose. If the uterus be thrown into a chronic state of contraction, however slight this may be in degree, it is obvious that the blood-supply to the placenta will be more or less interfered with. This may be, at the same time, accompanied by trivial localised separations, so small in themselves, that, when the immediate effect of each dose passes off, the placenta itself is not detached, but sufficiently numerous, by their continued repetition, to inflict serious if not fatal injury upon the fœtus. Short of this, however, it is obvious that the contraction of arterioles, characteristic of the action of ergot upon the animal economy, must necessarily imperil the vitality of the embryo in any stage of its existence. This is borne out by what occurs to the flock of pregnant ewes. Here the animals become ergotised, not by a single large dose, but by continually ingesting small ones, principally from rye-grass, which is constantly ergotised in pastures, but especially upon road-sides. The same is even more strikingly shown in the case of cattle, where the animals are much larger. Often, in these cases, the fœtus is not expelled at once, but is so injured that it subsequently dies, and is expelled at a later period.

NOTES ON STROPHANTHUS (HISPIDUS).

BY J. LINDSAY PORTEOUS, M.D., F.R.C.S.Ed., Pathhead, Fife.

AT the annual meeting of the British Medical Association in Cardiff, Professor Thomas Fraser, of Edinburgh, read a most instructive and interesting paper on "The Actions and Uses of Digitalis and its substitutes, with special reference to Strophanthus (Hispidus)." Dr. Fraser says that the pharmacological action of strophanthine is as a muscle-poison; that it increases the contractile power of all striped muscles, and renders their contractions more complete and prolonged. As to the heart, he says, "the systole is increased, and its contractions are slowed by small doses. It is paralysed in a condition of rigid systolic contraction by large doses." It also increases secretion of urine, and reduces temperature.

Having in my practice a considerable number of cases of cardiac disease, and finding that digitalis did not agree with all my patients, I was anxious to try the effects of this medicine, which had proved so beneficial in the cases of Dr. Fraser. Through his kindness I obtained a small quantity, and I give notes of three cases where I used it; and I am only sorry that the notes are not fuller; but we all know the difficulty there is in taking careful and correct records in private practice.

CASE I.—Mrs. W., aged 38, of florid complexion, rather thin, wife of a factory-worker, stated that she had a severe attack of rheumatic fever three years ago, and had been troubled with shortness of breath and palpitation ever since. During the night, she had frequently to start up with "a feeling of choking for want of breath." She had been treated by several medical men, and received digitalis from all, which gave temporary relief. On November 12th, 1885, she was confined, and although the labour was rapid and easy, it gave me a

good deal of anxiety, knowing the state of her heart, as indicated by a very marked mitral *bruit* and a very feeble pulse. Her feet and ankles were much swollen. Her pulse, half-an-hour after the confinement, was, as near as I could count, 160 per minute. I ordered her fifteen-minim doses of tincture of digitalis every four hours. This gave her a certain amount of relief, as, eight hours after labour, the pulse was 130 per minute. Her breathing, however, was still very high, 48 per minute. I continued this treatment till the 22nd, only changing the time of giving the digitalis from every four hours to every six hours. At bedtime of this day, I gave her a dose of four minims of tincture of strophanthus. On the 23rd, she told me she had a better night, lying down for one hour and three-quarters. Her pulse was 100, and very weak; respiration, 30. The feet and ankles were still swollen; her urine was scanty and thick. I ordered a dose of four minims of tincture of strophanthus immediately, to be repeated in the evening. On the 24th she had slept nearly three hours. Pulse, 108; respirations, 26. The urine was more copious and paler. The same dose of strophanthus was ordered thrice daily. On the 25th she had been restless up to 2 A.M., but after that slept soundly till 7 A.M. Pulse, 102; respiration, 22. On the 26th, she had slept from 11 P.M. till 6 o'clock this morning, lying down all the time. Pulse, 98; respiration, 19; urine was more abundant and clearer. On the 27th, she had slept the same time as on the previous night; she might have slept longer, but was disturbed by her husband going to work. She had been sitting by the fire for four hours the previous evening, and felt none the worse for it. Pulse, 94; respiration, 19. She passed a good quantity of urine of an amber colour. She was still taking the same dose. On the 28th, when I visited her at 10 A.M., I found her washing her baby. She said she had been up most of the previous afternoon. She told me she had not felt so well for over two years. Pulse, 90, firm and steady; respiration, 19. On the 30th, she said she was quite well and able for her household duties. Pulse, 80, strong and firm. She was very anxious to continue the medicine, as she said it had "made life more happy."

I have seen her frequently since the last date, and on December 23rd found her hale and hearty.

CASE II.—Mrs. F., aged 48, thin, pale, and nervous, stated that she had been treated for angina pectoris for years, and, during the last five or six years, had had almost daily attacks of violent palpitation. During nearly the whole of this period, she had taken digitalis. On November 27th, at 4 P.M., I was asked to visit her, as she was thought to be dying. I found her, propped up by pillows, pale and pulseless. The heart's contractions were so rapid, that I could not count them. Respirations were 40 per minute. She complained of great pain over her heart, and pressed her hands over it "to prevent it from being torn asunder." She had, before my arrival, taken two doses of tincture of digitalis within four hours, but no relief followed. I ordered her a four-minim dose of tincture of strophanthus, to be taken immediately, and repeated at 10 o'clock, and again at 8 A.M. At 12 noon of the 28th I found her much calmer; the fear of impending dissolution had left her. Her pulse was 110; respiration 24. She had slept well from 2 A.M. to 6 A.M. Her urine was scanty, and rather dark. I ordered her 6 minims of tincture of strophanthus thrice daily. On the 29th, she felt faint during the early morning, and took some sal-volatile. When I saw her at 11 A.M., her pulse was 92, respiration 20. Her face was rather flushed. She had passed more urine, and the bowels had acted. The doses of tincture of strophanthus were continued. On the 30th, at 11 A.M., pulse 120, respiration 20. The pulse was firmer than I had ever felt it. She, however, felt weaker, probably due to an attack of diarrhœa during the night. On December 1st, at 10 A.M., diarrhœa was still present; also nausea and vomiting. She said that, shortly after each dose of the strophanthus, she vomited, and her heart beat rapidly for about an hour; pulse 105, respiration 20. On December 2nd, her pulse was 105, respiration 20. She still had diarrhœa, and vomiting and felt very weak. On December 3rd, at 10 A.M., she had sickness and vomiting, with diarrhœa. I ordered bismuth, dilute hydrocyanic acid, and lime-water; pulse 120. On December 4th, she was still sick, but not vomiting; pulse 120. She had only taken one dose of strophanthus since yesterday morning. I stopped the strophanthus, and ordered fifteen-minim doses of tincture of digitalis every six hours. On December 5th, at 12 at noon, she felt much better; the nausea, vomiting, and diarrhœa had ceased. She slept well during the greater part of the night; pulse 88. She felt pretty well during the 6th. At 8 A.M. on the 7th, the patient said her pulse suddenly rose to 130. She took 15 minims of tincture of digitalis, and at 11 A.M. felt much better; pulse 110. I ordered (as suggested by Dr. Fraser) 5 minims of tincture of capsicum, with 6 minims of tincture of strophanthus, at bedtime. This was taken, and on the 8th the patient said that shortly after taking the dose, which did not cause sickness, the pulse rose to 140, but fell to 98, at which I found it, very firm; there was no sickness, and no diarrhœa. I reduced the dose to 2½ minims. On December 9th, there had been no rise of pulse, and no sickness; pulse 98. On December 10th, she took two four-minim doses; after each dose the pulse had gone up to 140. On the 11th she refused to take more, as she felt weak after the rise of pulse.

CASE III.—R. W., aged 7 years and 9 months, was said by her mother to have suffered from breathlessness and palpitation very much for three months, but for some years she had been very easily excited and startled. On November 15th, I was called to see her. Her feet and face were swollen. There was a soft mitral murmur. She was propped up in bed, and had been unable to lie down for several days; pulse 142, very weak. The urine was scanty, of porter colour. I ordered tincture of digitalis, in ten-minim doses, thrice daily. Under this treatment, the swelling of the face and feet was much reduced; the quantity of urine was slightly increased, but not until the 22nd was she able to lie down. After this date, until the 27th, she was able to get a sound sleep in the recumbent position, and the urine was more copious, and clearer. On the 28th, at 10 A.M., when I visited her, I found that she had been very restless and breathless during the previous night, and had again to take to her chair, the dyspnœa being so great. Her look was anxious, and she complained of pain in the region of the heart. Her mother stated that she was very hungry in the evening, and probably had eaten too much; pulse 140, respiration 30. No urine had been voided for twenty-four hours. I ordered 5 minims of tincture of strophanthus three times daily. She had only one dose of the medicine on that day, and shortly afterwards had a copious flow of urine, lighter in colour. At 9 o'clock on the 29th, she had another dose of the strophanthus. At 11 A.M., when I saw her, the pulse was very feeble, and too fast to be counted. The heart's contractions were very irregular and rapid; respirations, 48 per minute. She had a very anxious, terrified expression. On the 30th, she was easier; pulse 108 (firmer), respiration 48. There was a larger quantity of urine; the bowels were rather loose. December 1st, pulse 112, respiration 40. She had passed only half a pint of urine in eleven hours. On December 2nd, pulse 120, respiration 50; the pulse was firmer; the urine was still scanty and dark. On the 3rd, she was still taking the strophanthus three times daily; pulse 116, respiration 58. She had a short, dry cough. No urine had been passed for sixteen hours. On the 4th, pulse 10, respiration 40. She had only passed urine once in twenty-four hours. I reduced the quantity of strophanthus to 2½ minims, but ordered it every six hours. On the 5th she was easier; pulse 98, respiration 30. A much larger quantity of urine was passed at 8 P.M. of the 4th than she had ever passed at one time since she became so ill. The same dose of strophanthus was continued. She slept well on the night of the 5th. She breathed more easily on the 6th, and voided urine three times in the night; pulse 98, respiration 28. On the 8th, pulse 98, respiration 26. The bowels were acting twice daily. The skin was moist, and a good quantity of urine was passed. On the 9th, pulse 100, respiration 26. The medicine having been finished, the bowels did not act up to last night; but on providing some more, and giving a dose, the bowels acted three hours afterwards. The swelling was entirely gone. On the 11th, she passed plenty of urine. The dyspnœa was quite gone. She was very cheerful and happy; pulse 90, respiration 22. Up to December 23rd, I saw her several times. Her pulse had always kept below 92. She was able to play with the other children, had a good appetite, and seemed much stronger. For two or three days she was without the strophanthus, and the only difference was that her bowels became costive; but the pulse remained firmer, and there was no return of the swelling or dyspnœa.

REMARKS.—In all of those cases I have recorded, tincture of strophanthus decidedly increased the flow of urine. It likewise caused a certain amount of moisture over the surface of the body. Both of these actions Professor Fraser has noted, but he makes no mention of its power of relaxing the bowels. But this it undoubtedly did in all of the cases in which I have used it. It also markedly made the pulse firmer, although, as has been shown, it raises it for a short time after it has been taken. In Case 2, that of Mrs. F., it certainly showed its toxic effects, when it made her purge and vomit, although the dose was as small as 4 minims. She must have been exceedingly susceptible to its poisonous powers.

I am inclined to think that the dose of the tincture prepared by Professor Fraser should, to begin with, not exceed 3 minims. Where I gave more, the pulse invariably rose at first, but it was no doubt firmer.

Strophanthus, if carefully used, is destined to hold a foremost place amongst our remedies for controlling the heart's action, but, like other remedies, will not suit every patient.

TOBACCO AMBLYOPIA.

By GUSTAVUS HARTRIDGE. F.R.C.S.,
Ophthalmic Surgeon to St. Bartholomew's Hospital, Chatham; and Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

TWENTY cases of tobacco amblyopia having come under my care during the past twelve months at the Royal Westminster Ophthalmic Hospital, I think they may prove a useful addition to Mr. Shears' list of cases, published in the number of the BRITISH MEDICAL JOURNAL for June 21st, 1884. I have arranged the cases in the convenient tabular form suggested by Mr. Jonathan Hutchinson. The chief points relied on in the diagnosis, were *(a)*, Rapid failure of sight with no ophthalmoscopic or other change to account for the great loss of vision; *(b)*, Central colour scotoma; *(c)*, Excessive smoking. Of the twenty cases, all improved considerably, and in thirteen complete recovery may be said to have resulted. In one instance the patient was a woman (the only one that has ever come under my notice suffering from tobacco amblyopia), another was a teetotaller, and four chewed as well as smoked; but in no instance have I met with a case of amblyopia in a person who used tobacco for chewing only.

As regards treatment, the essential point was the total discontinuance of smoking, instead of diminishing the quantity and quality of the tobacco, as suggested by some writers. In half the cases strychnine was administered, in the other half a placebo, with apparently equally good results. Galvanism was tried in three cases, but with no appreciable effect. After recovery, three or four pipes of mild tobacco daily, were allowed, but a caution was given that excessive smoking would be likely to produce a return of the amblyopia. In my experience optic atrophy has never resulted.

Name and Age.	Duration of Amblyopia.	Vision at First Visit	Subsequent Vision.	Amount of Tobacco used.	Ophthalmoscopic Changes.	Central Colour Scotoma.	Treatment.
J. J., 40	8 months	R. $\frac{6}{60}$ J. 10 L. $\frac{6}{60}$ J. 10	In 6 months R. $\frac{6}{12}$ J. 2 L. $\frac{6}{12}$ J. 2	1 oz. of shag daily for many years, did not chew, and drank very moderately	No change to be seen	For red and green	Placebo. To leave off Tobacco entirely.
A. M., 45	9 ,,	R. $\frac{6}{36}$ J. 8 L. $\frac{3}{36}$ J. 8	In 10 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{9}$ J. 1	$\frac{1}{2}$ oz. of shag daily for 20 years, did not chew, and drank but little	,, ,,	,, ,,	,, ,, ,,
G H., 50	6 ,,	R. $\frac{6}{60}$ J. 10 L. $\frac{6}{60}$ J. 12	In 6 months R. $\frac{6}{18}$ J. 2 L. $\frac{6}{36}$ J. 12	Smoked almost constantly, chews occasionally, and drinks a good deal of spirit	Discs pale	For red, green doubtful	,, , ,,
G. N., 43	12 ,,	R. $\frac{6}{24}$ J. 6 L. $\frac{6}{24}$ J. 6	In 8 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{9}$ J. 1	1 oz. of shag daily for many years, did not chew, and drank only at meals	Discs hyperæmic	For red and green	,, , ,,
F. D., 33	9 ,,	R. $\frac{4}{60}$ J. 12 L. $\frac{4}{60}$ J. 16	In 9 months R. $\frac{6}{24}$ J. 6 L. $\frac{6}{24}$ J. 8	Always smoking, cavendish chiefly, chews a good deal, drinks moderately	Discs slightly pale on temporal sides	,, ,,	,, ,, ,,
S. W., 35	12 ,,	R. $\frac{2}{60}$ J. 16 L. $\frac{2}{60}$ J. 16	In 9 months R. $\frac{6}{12}$ J. 2 L. $\frac{6}{18}$ J. 4	3 oz. of shag weekly, does not chew, and is a teetotaller	Discs pale	For red	,, ,, ,,
G. J., 39	5 ,,	R. $\frac{6}{36}$ J. 6 L. $\frac{16}{36}$ J. 6	In 6 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{12}$ J. 1	Nearly always smoking, does not chew, drinks only at meals	No change to be seen	,,	,, ,, ,,
B. B., 40	11 ,,	R. $\frac{6}{18}$ J. 6 L. $\frac{6}{18}$ J. 6	In 5 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{9}$ J. 1	About $\frac{1}{2}$ oz. of shag daily, does not chew, drinks irregularly	Discs hyperæmic	For red and green	,, ,, ,,
W. A., 50	10 ,,	R. $\frac{6}{60}$ J. 8 L. $\frac{6}{60}$ J. 8	In 9 months R. $\frac{6}{12}$ J. 2 L. $\frac{6}{18}$ J. 2	1 oz. of shag daily, for last 20 years, does not chew, but drinks a good deal, chiefly beer	Discs slightly pale on temporal sides	,, ,,	,, ,
J. G., 52	6 ,,	R. $\frac{2}{60}$ J. 12 L. $\frac{2}{60}$ J. 12	In 12 months R. $\frac{6}{24}$ J 6 L. $\frac{6}{18}$ J. 4	Smokes a good deal, chiefly shag	Discs pale	,, ,,	,, ,, (This patient is a woman still under treatment).
S. T., 50	9 to 12 ,,	R. $\frac{6}{24}$ L. $\frac{6}{24}$	After 6 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{6}$ J. 1	About $\frac{3}{4}$ oz. of shag daily, did not chew, and drank moderately	No change to be seen	Red (?)	Strychnine. To leave off Tobacco entirely.
W. T., 48	6 ,,	R. $\frac{6}{60}$ J. 10 L. $\frac{6}{60}$ J. 10	After 8 months R. $\frac{6}{12}$ J. 2 L. $\frac{6}{18}$ J. 4	Always smoked a great deal, cavendish chiefly, did not chew, but drank several pints of beer daily	Discs hyperæmic	Red and green	,, Still under treatment.
J. J., 43	7 or 8 ,,	R. $\frac{6}{36}$ J. 8 L. $\frac{6}{36}$ J. 8	In 6 months R. $\frac{6}{6}$ J. 1 L. $\frac{6}{9}$ J. 1	1 oz. of shag daily	No change to be seen	,, ,,	,,
J. K., 47	5 ,,	R. $\frac{6}{60}$ J. 8 L. $\frac{6}{60}$ J. 18	In 9 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{60}$ J. 18	$\frac{3}{4}$ oz. of shag daily, chewed a great deal, and drinks much	Discs pale on the temporal sides	,, ,,	,,
G. S., 32	14 ,,	R. $\frac{4}{60}$ J. 10 L. $\frac{4}{60}$ J. 12	In 12 months R. $\frac{6}{12}$ J. 2 L. $\frac{6}{12}$ J. 2	1 oz. of shag daily, did not chew, and drank only moderately	,, ,,	Red	,,
F. W., 36	6 ,,	R. $\frac{2}{60}$ J. 18 L. leucoma	In 8 months R. $\frac{6}{18}$ J. 4	Nearly always smoking	No change to be seen	Red and green	,,
W. J., 49	9 ,,	R. $\frac{6}{36}$ J. 8 L. $\frac{6}{36}$ J. 8	In 6 months R. $\frac{6}{9}$ J. 1 L. $\frac{6}{9}$ J. 1	About 3 oz. of shag weekly, did not chew, but drank a good deal	,, ,,	,, ,,	,,
T. W., 51	2 ,,	R. $\frac{6}{60}$ J. 8 L. $\frac{6}{60}$ J. 10	In 2 months R. $\frac{6}{24}$ J. 6 L. $\frac{6}{36}$ J. 8	Nearly always smoking or chewing, drinks but little	Discs pale on the temporal sides	Red (?)	,, And galvanism, still under treatment.
E. S., 48	8 ,,	R. $\frac{4}{60}$ J. 18 L. $\frac{4}{60}$ J. 18	In 9 months R. $\frac{6}{18}$ J. 10 L. $\frac{6}{9}$ J. 1	About 1 oz. of shag daily, and frequently gets drunk, does not chew	,, ,,	Red and green	,, ,, ,,
S. G., 44	12 ,,	R. $\frac{2}{60}$ J. 16 L. $\frac{4}{60}$ J. 16	In 3 months R. $\frac{6}{24}$ J. 10 L. $\frac{6}{24}$ J. 10	Smokes constantly	No change to be seen	,, ,,	,, ,, ,,

CLINICAL MEMORANDA.

CHILDBIRTH DURING AN ATTACK OF SMALL-POX: INFANT NOT INFECTED.

In his paper on the Etiology of Diphtheria, in the JOURNAL of January 23rd, Mr. G. F. Masterman says: "We know that variola, syphilis, typhus fever, scarlatina, and other diseases affecting the whole organism, are transmitted to the fœtus *in utero;* and I believe I am correct in saying that no woman suffering from any disease of this class can contemporaneously give birth to an uninfected living child." However true this may be regarding some of the diseases named above, it would appear from the following case that, with respect to variola at least, the rule does not always hold good.

Some years ago, when small-pox was epidemic in this neighbourhood, I attended a woman in her confinement, who was at the same time sickening with this disease. The child was born at midnight; and on the following morning, within eight hours of delivery, the mother was covered with the eruption of small-pox. The child, however, showed no signs of the disease, and was, to all appearance, perfectly healthy and well. I vaccinated it at once; and, although it remained with the mother during the whole of her illness, it continued well, merely showing a slight feverishness on the ninth day, due to the vaccination, which was very successful, being on that day at its height. The mother recovered, but was deeply marked with small-pox. Had the birth of the child occurred later, when the disease was developed upon the mother, the child would, no doubt, have been infected.

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OPHTHALMOLOGICAL MEMORANDA.

TROPHIC ULCERATION OF THE CORNEA, FOLLOWING ERYSIPELAS OF THE FACE.

MRS. F., aged about 40, suffered from chronic and extensive ulceration of the right leg, After prolonged rest and treatment, a cure was obtained, but only at the expense of the straightness of the limb.

When the leg healed, an attack of erysipelas in the face and head supervened, with intense neuralgic pain. After a few days this subsided, but almost immediately recurred. This happened at least thrice; as a result, great induration of the cellular tissue of the face (especially on the right side) occurred. An ulcer now commenced at the inner canthus of the right eye. This rapidly spread and became deeper, internal strabismus occurring upon that side. An excoriation now appeared over the lowest third of the cornea. This also spread rapidly in extent and depth; the anterior chamber of the eye became filled with *débris*, and iritis was set up. It was now found that the cheek and conjunctiva of the affected side were devoid of sensation. After treatment for about two months, during which prolapse of the iris and escape of the contents of the globe seemed imminent, the patient recovered. The cornea healed, remaining opaque only in its lower two-thirds. Curiously enough, coincidently with the repair of the eye, the ulcer of the leg returned. When last seen, the patient's lower extremity was again straight, the ulcer as bad as ever; the vision in the effected eye was not worse than could be accounted for by the opacity of the cornea. The conjunctiva was devoid of sensation. The patient did not wish to have the ulcer upon the leg healed again.

This case appears to be a good clinical illustration of the fact, that ulceration of the cornea following withdrawal of a part of its nervous supply is more probably due to a defect in trophic nervous influence than to the accidental presence of undetected foreign bodies causing irritation; for Mrs. F.'s cornea healed perfectly, notwithstanding the persistence of anæsthesia of the surface of the eye.

ERNEST F. NEVE, M.D., Edinburgh.

OBSTETRIC MEMORANDA.

RETENTION OF CATAMENIA: PAINS SIMULATING LABOUR.

ON the morning of December 11th, 1860, about 10 A.M., I was called to see a girl, aged 14 years and four months. I was told that she went to bed overnight in her usual health. About 2 A.M., her parents were aroused by her cries, caused by pains in the abdomen. She had a very great desire to micturate, but could not. The pains came and went just like labour-pains. I was not apprised of any of her symptoms (except the pain) before I went to see her. On arrival, I felt her pulse, and found it about 90, regular. The skin was moist and natural. Her mother told me that the girl said the pain was situated in the belly. I placed my hand on the abdomen, and, to my surprise, found a round tumour, quite firm and solid, filling the abdomen as high as the umbilicus. In reply to inquiries, her mother told me that her daughter had never had her catamenia, and that she had been a steady girl. During the conversation and examination, she had not had any pains. Her mother told me that the pains came on about every quarter of an hour. In a short time, another pain seized her, having all the expulsive characteristics of a pain in the second stage of labour. Whilst this pain continued, I placed my hand upon her person, and there found a tumour protruding outside the vagina, about the size of an orange, with a feeling as if it were the amnion with its water, and that it was just about to burst. I tried to rupture it with my finger, but could not. I then tried to introduce my finger past it into the vagina, but found the same membrane to obstruct the entrance of my finger at all points. I was then obliged to make an ocular examination, in order to find out the cause of this obstruction, as well as the nature of the tumour. I then found that the membrane was the hymen, attached all round, and completely blocking up the vagina; at the upper part, there was only just sufficient space to admit the urethra. I now concluded that the protrusion and enlargement of the uterus, together with the expulsive pains, must be dependent upon an accumulation of the catamenial fluid. I introduced a catheter into the bladder, and drew off about one quart of pale urine. After withdrawing the urine, I made a crucial incision into the membrane, when there flowed from it three gills to a quart of a dark thick fluid, resembling black treacle. The discharge continued about a week. The girl did well, and was never troubled afterwards with her catamenia. Her mother said that she only now and then complained of a "bellyache," and she thought this attack was only a bit of a cold. Had this girl been having one of the expulsive pains when I went into the room, I should certainly have told her mother that she was in labour. Here is a case which should teach medical men the necessity of being exceedingly cautious and guarded before giving a decided opinion, especially in the case of young girls.

E. H. MONKS, sen., L.R.C.P., M.R.C.S., etc., Wigan.

SURGICAL MEMORANDA.

SYPHILITIC URETHRITIS.

THE following case may be worth recording, as bearing on Mr. Cadell's notes in the JOURNAL of December 5th on urethral discharge in secondary syphilis.

A man, aged 36, was admitted into the Royal Isle of Wight Infirmary, under Dr. Davey, with whose kind permission I write this, showing the following signs of syphilis; mucous tubercles inside the upper lip, ulceration of the tonsils, pharynx, and larynx, an indurated sore on the penis, the inguinal glands enlarged, and hard, but not tender; there was a considerable thick, yellow, creamy discharge from the urethra, in itself indistinguishable from acute inflammatory gonorrhœa, but unaccompanied by any signs of inflammation about the meatus, pain or scalding. There was no eruption to be seen on the skin. Very little in the way of reliable history could be got out of the man; he had suffered from a bad sore-throat for three weeks past; had first noticed the sore on his penis (which, being a married man, he attributed to the rubbing of his trousers) at about the same time; was absolutely certain that the discharge from his urethra did not exist the day before his admission into the Infirmary.

Although in a somewhat early stage of the disease for such treatment, he was put on iodide of potassium, and, at the time of writing, all laryngeal symptoms have disappeared; the pharynx and fauces are only congested; the discharge has all but ceased; the patient, however, suffers from rather obstinate diarrhœa, the result, probably, of implication of the intestines.

There is, of course, no reason why a patient already in the grasp of secondary syphilis should not contract gonorrhœa; but in this case the fact that the man had been laid up in bed for nearly three weeks prior to his admission, owing to the laryngeal affection, which, at the time he came into the Infirmary, had brought him to a state of dangerous dyspnœa, together with the entire absence of signs of inflammation about the glans, prepuce, or inguinal glands, would seem to exclude this possibility. A point which might have assisted the diagnosis, but which was at the time unfortunately overlooked,

was the examination of the discharge for the micrococci of simple gonorrhœa.

Putting gonorrhœa, then, on one side, it appears to me to be doubtful whether a mere erythema could, as Mr. Cadell suggests, be the source of a discharge which, in both his case and in mine, was profuse and purulent. Would not a more probable cause be an ulceration of the urethra similar to that occurring during the earlier months of syphilis in the mucous lining of the pharynx, rectum, and vagina, originating in a condition of the mucous membrane analogous to the squamous syphilide? The man in question was just such a patient, ill nourished, weakly, and dirty, in whom one would expect syphilis to attack more especially the mucous membranes. Allowing that such ulceration occurs in the urethra, and bearing in mind the dense fibrous nature of the cicatricial tissue which repairs the lesions of syphilis, it would be worth while to consider whether some, at any rate, of the more intractable cases of resilient stricture could not be traced back to syphilitic urethritis rather than to simple gonorrhœa.

ALEX. G. R. FOULERTON, M.R.C.S., L.R.C.P.,
House-Surgeon to the Royal Isle of Wight Infirmary.

REMOVAL OF CANCEROUS CERVICAL GLANDS BY AXILLARY INCISION.

ON May 5th, 1885, I removed a large scirrhous tumour involving the whole right breast from a married woman, aged 59. At the same time, I cleared out from the axilla three enlarged lymphatic glands of the size of a pigeon's egg.

On January 3rd, 1886, the patient came to me complaining of stiffness on moving the right arm. On examination, I found a hard mass under the pectoral fold, and also high up in the axilla. No enlargement of cervical glands could be detected on careful manipulation. On January 5th, I cleared out the scirrhous masses from the axilla; then, passing my right index-finger to the top of the axilla, by means of conjoined examination, I discovered an enlarged cervical gland. By the aid of the finger-nail and a little assistance from polypus-forceps, I removed four cervical glands, all indurated, and varying in size from a split pea to a French bean.

I put this case on record, as I am not aware that cervical glands have been previously removed in this manner. We all but too frequently are disappointed on finding, after removal of a breast and clearing out of the axilla, that a recurrence takes place sooner or later in the cervical glands; and, when we see the patients, operation is out of the question. I would earnestly suggest that every operator should carefully examine these glands through the axilla, and, if they be enlarged, remove them in the way described. It takes some time and patience, but the ultimate gain in prolongation of life will probably be found very great. I would recommend the introduction of a drainage-tube and strict antiseptic precautions.

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THERAPEUTIC MEMORANDA.

RECTAL ALIMENTATION.

IN the JOURNAL of December 19th, I observed that prominent notice was given of a case attended by Dr. Barlow and Mr. Godlee, and nourished by suppositories "for many days." From the report of the proceedings of the Clinical Society, at page 1161, I infer the number of days to have been something under twenty, and the alimentation not to have been solely, but only chiefly, by the bowel. However that may be, it seems to me that the complicated method of preparing these suppositories will prove a practical hindrance to their general adoption in practice. This leads me to remark that I have just finished attendance on a patient who suffered from vomiting in pregnancy, nothing whatever taken, or attempted to be taken, by the mouth being tolerated for fifteen days, dating from November 26th. During this period her only nourishment was two teaspoonfuls of Messrs. Barff and Wire's kreochyle, given by the rectum in a small tablespoonful of nearly cold water every two hours. There was no intolerance, and the patient expressed herself as feeling satisfied. The sensation of thirst was more formidable than that of hunger, but was combated tolerably successfully by separate water enemata, as in Dr. Barlow's case, and by rinsing the mouth with a mixture of glycerine and water (1 to 5) flavoured with tincture of lemon. As the power of gastric digestion returned, the use of the water enemata was entirely suspended, and the nutrient enemata were proportionately diminished in frequency. The patient is now as well as a pregnancy at the fourth month permits her to be.

Each method will doubtless find its appropriate application, but diluted kreochyle has simplicity and inexpensiveness in its favour.

ARCHIBALD D. MACDONALD, M.D.Edin.,
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TOXICOLOGICAL MEMORANDA.

TOXIC DOSE OF BELLADONNA.

IT is well known that children tolerate belladonna in large doses, but the following may be interesting by showing what a large dose may be taken without much inconvenience. A woman brought a child to me suffering from pertussis. I prescribed a two-ounce mixture containing 48 minims of tincture of belladonna (*British Pharmacopœia*). On reaching home, the mother placed the bottle on the table whilst giving the child a teaspoonful of the mixture, when a boy aged 3 years seized the bottle, and drank off the contents, that is, about 45 minims of belladonna. According to her account, the only effects it produced were sleep for two hours, and thirst lasting the remainder of the day. She thought it of no consequence, therefore I did not hear of it till the following evening, when all symptoms had passed away.

H. C. ALDERTON, L.R.C.P.Lond.,
Barnoldewick, Yorks.

GYNÆCOLOGICAL MEMORANDA.

PROLAPSUS UTERI OF LONG STANDING: CUP PORTION OF PESSARY INCARCERATED IN UTERINE CAVITY.

AN elderly lady, who had suffered from extreme prolapsus for many years, the os uteri hanging down between the thighs, and being more or less abraded, and had found much inconvenience in walking, asked me to do something to relieve her. I introduced one of Maw's cup-shaped pessaries, the stem being supported by bands suspended from an abdominal belt, as figured in Maw's illustrated catalogue. She wore this for about a week or two, and then came to say that she was unable to resume it, and that there was a very offensive discharge. On examination, the cup-shaped portion of the instrument could not be felt; and, on traction being made, the whole uterus prolapsed as before, when the os was seen firmly grasping the stem, whilst the upper portion was firmly enclosed in the uterine cavity. At first, I had some difficulty in removing it, but, by pulling on one side steadily, this part escaped from the uterus, and it was then easy to remove the rest. An intra-uterine carbolic injection was given, and no bad results whatever followed.

M. G. BIGGS, London.

THE HAMPSTEAD HOSPITAL.—The representative vestry of the borough of Hampstead has resolved to memorialise the Local Government Board not to allow the Metropolitan Asylums Boards Hospital at Hampstead to be again used for the reception of smallpox cases, except any which may arise in the immediate neighbourhood of the hospital. It will be remembered that repeated and persistent efforts have been made by the inhabitants of Hampstead by litigation, and otherwise, to get rid of this hospital from their midst, on the ground that it was a source of danger to the health of the neighbourhood, which contention was supported by very weighty evidence. Hitherto, however, only partial success has attended the efforts of the Hampstead people. At the present time the hospital is only used for a certain number of fever cases; but, under existing circumstances, should an epidemic of small-pox again make its appearance in the metropolis, there is nothing to prevent the Asylums Board using this hospital for a number of small-pox patients. The memorial of the Hampstead Vestry contends that the result of inquiries as to the influence of the Fulham Small-pox Hospital upon that neighbourhood, as reported in a supplement to the last annual report of the Local Government Board, fully substantiate the arguments of the Hampstead Vestry in a previous memorial to that Board, and the statements in a report from Dr. Gwynne, the medical officer of health for Hampstead. In the case of Hampstead, moreover, the danger is not confined to the residents alone, but is "shared by the thousands of persons from all parts of London, who resort to Hampstead Heath for recreation." The Hampstead Vestry, therefore, most earnestly entreats the Local Government Board to "take such measures as will prevent the future reception and treatment in the North-Western (Hampstead) Hospital of cases of small-pox not arising in its immediate vicinity." The Hampstead Hospital is situated in close proximity to a densely populated neighbourhood, and between two main thoroughfares to Hampstead Heath.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GENERAL INFIRMARY, WORCESTER.

CASE OF RAYNAUD'S DISEASE FOLLOWING DIPHTHERIA.

(Under the care of Mr. HYDE.)

[Reported by ALLMAN POWELL, M.B., House-Surgeon.]

C. P., aged 48, was admitted on July 14th, 1884. He gave the following history of his case. He served in the Royal Horse Artillery as rough rider for twenty-two years, and subsequently as drill-instructor to police for six years. During all this time, his health had been excellent. He had never had any illness of more than a day's duration until about eight months before admission, when he had two or three severe "colds," contracted from wet feet when on night-duty. He had not been abroad, had always lived well, his habits had been regular, and he had not suffered from syphilis, gout, or rheumatism. His family history was very satisfactory, the majority of his relatives being remarkable from their longevity. On May 12th, he reported himself ill with sore throat. This was followed, in a week's time, by sudden loss of voice, for which he was treated by a practitioner, who said he suffered from diphtheria. During his convalescence, three weeks later, when dressing in the morning, he discovered his nose had become blue and swollen during the night, "in fact, resembling an overgrown mulberry." This was followed, in a day or two afterwards, by a similar appearance in the pulps of the fingers of his right hand and in his ears. In the following week, the ring and



little fingers of the left hand were attacked in the same manner, and gave him considerable pain. The discoloration of the fingers steadily increased until, at the end of three weeks, they were quite black along their entire length. The blackness then receded to the middle joints, where blebs formed between the sound flesh and mortified parts. Subsequently, black patches formed on the second and third toes of the right foot, and along its outer margin. His mouth and tongue became swollen and painful, the latter being livid, and an ulcer forming near the tip. His nose was stopped so that he could not breathe through it, and was only cleared by sneezing out some tough brown stuff, which came away with much difficulty.

Careful examination on the day after admission showed that in general he was a well built man, above the average size, and fairly healthy looking, although he stated that he had lost much flesh and become much weaker during his present illness. His hair was grey, but otherwise he looked fresh for his age. He had no arcus senilis, nor had he any signs of general anæmia. His nose was cold and livid. The edges of the helices of both ears were blue, a small dry slough separating from the left. The ungual, and part of the middle phalanges of the ring and little fingers of the left hand, and of all the fingers of the right, were black, dried up, and completely mummified. The remaining fingers of the left hand and both thumbs were cold, glossy, devoid of hairs, and of a dusky red colour at the tips. The ungual phalanges of the second and third toes of the right foot were also sphacelated. The sphacelated portions of the fingers were separated from the sound flesh by bullæ containing turbid serum, but there was no distinct line of demarcation. Careful physical examination of the chest did not reveal anything abnormal, nor could any disease be detected in the radial ulnar, or posterior tibial arteries of either side. There was no paralysis, sensory or motor. His voice had been regained. The temperature was normal. The urine contained a little albumen, but no casts nor sugar. The blood, examined under the microscope, showed an increase of the white corpuscles. The digestive functions were well performed. He complained of nothing but slight pain and tingling in the fingers occasionally.

Under liberal dietetic and tonic treatment he increased rapidly in weight, and his general condition sufficiently improved for him to go to the country for change of air on September 3rd, and on his return, a month later, Mr. Hyde, finding a well defined line of demarcation, amputated the gangrenous fingers. The sloughs separated from the ear and toes without interference, leaving granulating surfaces underneath, which rapidly healed. The stumps of the gangrenous fingers were slow in healing, and his thumbs and ears were still cold and slightly discoloured, but he was sufficiently well to resume his duty as instructor of police.

REMARKS BY DR. ALLMAN POWELL.—The above case of symmetrical gangrene is interesting as having occurred after diphtheria, when the vaso-motor, or trophic, lesions which occasioned the gangrene would appear to have taken the place of post-diphtheritic paralysis. That the case was one of diphtheria, I ascertained from the practitioner who attended him before admission. The fact that he had eaten the same baker's bread for six years, and that no one else in the house suffered, excluded gangrene from ergotism. The absence of any general anæmia, or of any disease or feebleness of the circulation, the presence of swelling prior to the shrivelling of the gangrenous parts, and the occurrence of the disease in summer, make the case more remarkable.

August 19th. I met this patient on duty at the assizes a short time ago; he looked and expressed himself as in excellent health.

WESTMINSTER OPHTHALMIC HOSPITAL.

CASES ILLUSTRATIVE OF THE USE OF THE OPHTHALMOSCOPE IN THE DIAGNOSIS OF DISEASES WHICH ARE NOT CONFINED TO THE EYE.

(Under the care of Mr. HENRY E. JULER, F.R.C.S.)

CASE I. *Anæmia: Amenorrhœa: Optic Neuritis.*—Jane C., aged 19, applied, in June, 1884, complaining of headache and dimness of vision (vision, $\frac{6}{9}$). There was no hysteria, but there was evident anæmia. She had occasional vomiting. By the shadow-test, the refraction was found to be normal. By the direct method of ophthalmoscopic examination, the optic discs of both eyes were seen to be hazy and swollen (optic neuritis). No hæmorrhage could be detected, but this condition of the discs was sufficient to excite considerable concern as to the cause of the affection and as to the prognosis and treatment. On carefully going into the case, we could find no definite sign of intracranial disease, no localising symptom, but it was ascertained that the catamenia had disappeared for nearly a year, and that the symptoms complained of dated nearly as far back as this. Treatment was therefore directed to the disordered menstruation, the catamenial flow was re-established, the headache disappeared, the vision improved, and the optic discs became nearly normal again.

REMARKS BY MR. JULER.—Here there was a case, by no means uncommon, of optic neuritis in the early stage associated with amenorrhœa; and I venture to think that the early use of the ophthalmoscope enabled us to realise the importance of the case, and at once to grapple with the cause of the affection. Had the amenorrhœa continued, the neuritis would probably have increased, and have terminated in partial or complete blindness.

CASE II. *Optic Neuritis: Astigmatism.*—Annie B., aged 12, a delicate child, was brought on account of defective vision ($\frac{6}{24}$) and severe headache on attempting to read. She had suffered from measles six months before, and had been at school since that time. On ophthalmoscopic examination by the direct method, we found double optic neuritis as in the last case; and by the shadow-test, it was found that she had considerable hypermetropic astigmatism. By the same shadow-test, the error was corrected, and suitable glasses prescribed. A tonic plan of treatment was also adopted. The result was most satisfactory; the headache disappeared, the vision improved so that it became nearly normal ($\frac{6}{9}$), and the optic discs only presented a slight woolly appearance.

REMARKS BY MR. JULER.—I believe this to be an example of a large class of cases in which astigmatism, combined with debilitating causes, is the means of setting up optic neuritis, and that it would be well if physicians would make more extensive use of the simple and easy shadow-test in order to ascertain the refractive condition of the

eye. This observation finds confirmation in the case of a medical man, aged 38, of powerful physique, active habits, and literary tastes, who consulted me upon a subject which had for some time been to him a source of great trouble and anxiety. He stated that his left eye had long become useless, and that he had been told by competent authority that it would never improve, and that his right eye was now becoming so dim that he could not read at night, nor, indeed, had he the courage to do more than a minimum amount of reading by day. He wore smoked glasses by way of precaution, hoping that this might help to preserve the vision. Besides this, he suffered from frontal pains on attempting to read. He had been told that tobacco-smoking was the cause of the failure of vision, and had consequently relinquished this, his only indulgence. On ophthalmoscopic examination, the shadow-test enabled us at once to perceive that both the eyes were hypermetropic, the left being more so than the right. The optic discs were not pallid, but were hyperæmic. There was no central scotoma for red and green in his visual fields, such as is often found in tobacco-amblyopia. Further than this, the proper glasses gave him perfect vision in both his eyes, the headache disappeared, and he can now read as much as he pleases without discomfort, and can smoke his pipe in peace without the ever present dread of future blindness. This is typical of numberless cases where, owing to the neglect of the ophthalmoscope on the part of the general practitioner, patients are badly advised, and are allowed to suffer unnecessarily for months or even years.

CASE III. *Neuro-retinitis: Retinal Hæmorrhages: Chronic Interstitial Nephritis.*—A man, aged 36, came complaining of loss of sight, general *malaise*, and occasional bilious attacks. He stated that he would be strong enough to do his work, but that his bad vision prevented this. Ophthalmoscopic examination showed that, while the refraction was normal, the optic disc and retina were quite hazy, that there were numerous old and recent hæmorrhages scattered over the fundus, and that in the yellow-spot region, and in other parts of the fundus, were numerous white spots without pigment. This suggested kidney-affection, and on examining the urine, we found it to be loaded with albumen, and to contain numerous granular casts. The vision was very bad ($\frac{6}{24}$), and had been so for some months, but, although the man had been under medical treatment, the kidney-affection had not been discovered.

REMARKS BY MR. JULER.—This is another instance of a large number of cases, where the routine and early use of the ophthalmoscope would have led to the discovery of a grave disease of the kidneys, the early treatment of which might have checked, or even cured, the retinal trouble.

BRITISH SEAMEN'S HOSPITAL, CONSTANTINOPLE.

PURPURA HÆMORRHAGICA.

(Under the care of Dr. JOHN PATTERSON, Surgeon Superintendent.)

THE patient, aged 28, well built, of florid complexion, with light yellow hair, and nervous temperament, was admitted on February 15th, with mild gonorrhœa and epididymitis. He had been in hospital at Alexandria for twenty days, with swollen testicle and gonorrhœa; he was discharged before recovery, and came on in his vessel to Constantinople. During the voyage, he had taken copaiba balsam very freely. The right testicle was somewhat swollen, and very slightly tender, the gonorrhœal discharge not great, and there was no urethral irritation. The temperature at night was 99° Fahr. He was ordered a milk and soup diet, a lotion of acetate of lead for the testicle, and tepid water injections to the urethra.

February 19th. The testicle was not tender, and the swelling was diminished. His face was covered with a miliary red eruption, resembling the eruption produced by copaiba. In the night he had a feeling of chilliness, and complained of pain in the loins. The pulse was 100, jerky; the temperature was 101° Fahr. At night, the eruption had extended to the chest and shoulders, and very slightly over the abdomen. There was no sore-throat. The temperature was 101° Fahr. The urine contained no albumen, but was loaded with urates.

February 25th. The whole body was covered with the erythematous eruption and large purpuric spots; there was ecchymoses of both eyes, and chemosis of the conjunctivæ. The pulse was 94, and very jerky; the temperature was 96° Fahr. Brandy was ordered with arrowroot in repeated doses, and a mixture containing quinine and nitro-muriatic acid. At 4 P.M., whilst taking the arrowroot and brandy, he expressed himself as feeling much better, and that he enjoyed it very much. He turned on his side in bed, and suddenly expired.

The necropsy was made twenty-four hours after death. The body was well nourished. Rigor mortis was complete. The surface was lividly congested, and covered with purpuric blotches. The purpuric spots were produced by separate clots of dark blood; each spot was distinct and could be easily turned out of its cavity in the subjacent cellular tissue; and from the skin, when incised, dark-coloured serum flowed. The cuticle was not detached. The liver was large, with fatty degeneration, and bloodless. The spleen was of natural size, and perfectly hepatised. The kidneys were large and nodular. Both pelves were filled with firm coagula, extending an inch and a half into the ureters. The mesentery was blanched, but studded with purpuric spots; the mesenteric glands were normal in size, with purpuric spots at their bases. The peritoneal coverings were all marked by purpuric spots. The intestines were also blanched, with here and there purpuric spots under the peritoneal coverings. On detaching the peritoneum, the firmly formed clots were easily removed, but over the kidneys the clots were in the peritoneum itself, and not lying under it. The gall-bladder was distended with bile. There was no effusion of serum into the abdominal cavity. The bladder was healthy, and empty. The last urine, passed two hours before death, was tinged with blood. There were no purpuric spots in the mucous membrane of the bladder. The stomach contained the last food taken; it was much congested, and covered in its whole surface with spots, which were separate blood-clots lying under the mucous membrane. This condition existed in the whole course of the intestines, the mucous membrane of which was completely blanched. There was no ulceration of the intestinal glands. The lungs were healthy, but perfectly anæmic. The heart was very firmly contracted; there was about half an ounce of clear serum in the pericardial sac. The valves of the heart were patent, and its muscular substance healthy. There was no fibrin nor a drop of blood in either auricles or ventricles, and no impacted clot in any of the vessels leading to or from the heart. There was no serous effusion into the cavity of the thorax, nor any purpuric spots on the pleuræ. There was no blood effused into the muscles of the body. The brain was not examined. Cross sections of the skin under the microscope showed general blocking of the capillaries.

REMARKS BY DR. PATTERSON.—What was the true character of this disease? There was no evidence to show that the patient had been exposed to any causes of blood-poisoning except from gonorrhœa, or copaiba balsam. It corresponds with the descriptions given of purpura thrombotica.

The case may help to illustrate some of the points dwelt upon by Dr. S. Mackenzie, in his introduction to the discussion on the nature of purpura before the Section of Medicine in the meeting of the British Medical Association.

THE CASUALTIES IN THE NILE EXPEDITION.—Official returns have been made by the War Office as to the casualties in the Nile Expedition from March last to the present time. The cases of sickness among non-commissioned officers and men of the Royal Marines were 4,748; deaths from all causes, 298; admissions to hospital, 117; deaths in action, 10; deaths from wounds in action, 19; and from drowning, 11. In the Naval Brigade the sick cases were 197, and the deaths 22; deaths from wounds in action 9, and from drowning 5. British regular troops—Sick cases, 3,120; deaths, 117; admissions to hospitals, 105; deaths from wounds in action, 5. Naval contingent—Sick cases, 523; deaths, 17; hospital admissions, 26; deaths from wounds in action, 9. Indian contingent—Sick cases, 894; deaths, 93; hospital admissions, 130; deaths from wounds in action, 2. New South Wales contingent—Sick cases, 112; deaths, 2. Grand total—Sick cases, 4,649; deaths, 229; hospital admissions, 261; deaths from wounds in action, 16.

LONGEVITY IN THE SOCIETY OF FRIENDS.—The "quiet mind" undoubtedly co-operates actively in producing length of days. The obituary of the Society of Friends for the past year for Great Britain and Ireland shows some striking instances of longevity. In all, the deaths of 317 persons are recorded—160 males and 157 females. The infantile mortality is very slight, the total number of deaths of children under 1 year being 13, and of those between 1 and 5 years, 11. Of persons from 5 to 10 years, there were seven deaths, and 10 to 15 years, 4 deaths only in the year. The deaths slowly increase with the decades following, but not until that from 50 to 60 is reached is the number over 20, for the decade named the actual number being 29. But from 60 to 70 years, there were not fewer than 51 deaths; from 70 to 80 years, the number was 72, there being 31 males, and 41 females. The deaths at the age of from 80 to 90 years were as many as 61, the number of males being 24, and females 37. And of deaths of persons between 90 and 100 years of age, there were 8, of whom 3 were males, and 5 females. One of the latter 8 was 92, 2 were each 93, another 91, while most of the remainder had turned the 90th year.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 26TH, 1886.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

Mortality in the Medical Profession. By WILLIAM OGLE, M.D. F.R.C.P., Superintendent of Statistics in the Registrar-General's office.—All statisticians who from time to time have investigated the mortality of the medical profession have come to the conclusion that it is excessive. In this paper, it was shown that the mortality of the profession in England and Wales had been extremely high in recent years; and this, whether it were compared with the mortality (1) at earlier dates, or (2) in other professions and occupations. 1. Thus, in 1860-1, the mean annual mortality of medical men in this country was 23.63 per 1,000; in 1871 it reached 24.99; and in 1880-1-2 it had still further risen to 25.53 (see Table I and II). 2. In 1880-1-2, the rate for the legal profession was 20.23, and for the clerical profession only 15.93. The medical mortality was also high when compared with that of almost all considerable trades or industries, with the exception of some few of notoriously dangerous or unhealthy character (see Table III). The author then proceeded to inquire under what diseases or headings this excess of mortality occurred. The data for this inquiry were the registered causes of death of 3,865 medical men who died in this country in the decennium 1873-1882. A table (IV) was given of these deaths, with ages and registered causes. The mean annual mortality of medical men from all causes in 1880-1-2 was 25,535 per million living. These 25,535 deaths of all kinds were divided out to the individual causes in proportions obtained from the 3,865 deaths of which the causes are known; and the following table gave the annual mortality from each separate cause thus arrived at in comparison with that of the general male population. The medical mortality was thus found to be higher than that of the general male population under almost all the headings, there being only three of any numerical importance in which the balance was the other way, these three being phthisis, diseases of the respiratory organs, and accident. Moreover, though the medical accident-rate was considerably below the average, this was merely because the average included the mortality in a small number of highly dangerous industries, such as mining, quarrying, and sea-fishing; and it was shown by a table that, excluding these, the accident rate was high in the medical profession. (See Table V.) The differences under the other headings were considered. It was pointed out that, as might be expected, the medical mortality was above the average from scarlet fever, diphtheria, and other infectious diseases; a notable exception being, however, presented by small-pox, doubtlessly because medical men were, as a body, better vaccinated than the average public. Particular attention was called to the excessive mortality of medical men from cirrhosis and other diseases of the liver, from diseases of the digestive and of the urinary systems, and also from gout, alcoholism, and suicide. In conclusion, the general results, so far as they related to the average duration of life of medical men, were compared with the results of other investigators, and it was shown that the figures in the present paper give a more favourable result than either those of Pro-

TABLE I.—*Death-rates of Medical Men, 1880-82.*

Medical men.	Age-periods.				
	20—	25—	45—	65—	All ages
Enumerated in 1881	810	8300	4435	1546	15091
Died in 1880—1—2	18	288	373	477	1156
Mean annual mortality per 1000	7.40	11.57	28.03	102.85	25.53

TABLE II.—*Death-rates of Medical Men in 1860-1, 1871, and 1880-2.*

Date.	Age-periods.				Per 1000 with age-distribution as in 1881.
	20—	25—	45—	65—	
1860—1	5.86	12.78	23.47	91.69	23.63
1871	11.17	13.85	24.56	93.30	24.99
1880—1—2	7.40	11.57	28.03	102.85	25.53

TABLE III.—*Death-rates of Various Professions and Callings.*

Profession, Trade, or Industry.	Annual death-rate per 1,000.		Profession, Trade, or Industry.	Annual death-rate per 1,000.	
	Males 20 yrs. of age and upwards	Males 25 to 65 yrs. of age.		Males 20 yrs of age and upwards	Males 25 to 65 yrs. of age.
All occupations	22.83	15.42	Watch, clock, philosophical instrument maker, jeweller	21.20	14.36
Medical profession	25.53	17.30	Printer	23.75	16.51
Clerical ,,	15.93	8.57	Bookbinder	25.36	18.00
Legal ,,	20.23	12.97	Earthenware manufacturer	35.98	26.83
Schoolmaster	19.90	11.09	Cotton manufacturer	27.19	16.76
Clerk (commercial and law)	21.10	15.61	Woollen, worsted manufacturer	26.47	15.91
Commercial traveller	20.06	14.61	Mason, bricklayer, builder	22.29	14.94
Farmer	17.49	9.73	Carpenter, joiner	19.30	12.64
Agricultural labourer	18.28	10.80	Painter, plumber, glazier	25.95	18.53
Gardener	15.08	9.24	Cutler	28.52	20.18
Innkeeper, publican	29.02	23.47	Blacksmith	23.14	14.99
Brewer	29.23	20.99	Quarryman	26.42	17.29
Chemist	22.52	15.66	Coalminer	23.97	13.72
Shopkeeper	19.43	13.52			
Butcher	25.89	18.05			
Baker	21.87	14.77			
Tailor	22.45	16 21			
Shoemaker	20.66	14.20			

TABLE IV.—*Causes of Death of Medical Men as compared with the General Population.*

Causes of death.	Annual deaths per million living males over 20 years of age.		Causes of death.	Annual deaths per million living males over 20 years of age.	
	Medical men.	General population		Medical men.	General population
Small-pox	13	73	Diseases of circulatory system	4142	2934
Scarlet fever	59	16	Diseases of respiratory system	3237	4408
Typhus	79	38	Liver-diseases	1744	744
Diphtheria	59	14	Other diseases of digestive system	973	632
Simple or ill-defined continued fever	33	40	Calculus	86	30
Enteric fever	311	238	Diseases of bladder and prostate	634	287
Diarrhœa-cholera	205	274	Other diseases of urinary system	1520	665
Malarial fever	46	11	Hernia	13	88
Erysipelas	172	136	Accident	793	1105
Alcoholism	178	130	Suicide	363	238
Gout	291	78	All other causes	2869	2124
Rheumatic affections	251	215			
Malignant diseases	879	790			
Phthisis	1738	3145			
Diabetes	284	108			
Diseases of nervous system	4565	4268	Total from all causes	25,535	22,829

TABLE V.—*Death-rate per million from Accidents.*

Occupation.	Rate per million.	Occupation.	Rate per million.
Miners	2785	Butchers	541
Fishermen	2351	Agricultural Labourers	511
Quarrymen	2290	Farmers	464
Cabmen	1229	Cotton Workers	464
Painters, Plumbers, and Glaziers	1129	Wool, Worsted Workers	418
Blacksmiths	758	Gardeners	371
Builders, Masons, and Bricklayers	696	Pottery Workers	371
Innkeepers, Publicans	696	Bakers	325
Medical Men	644	Tailors	278
Carpenters, Joiners	588	Shoemakers	263
Commercial Travellers	557		

fessor Casper or of Dr. Escherich.—The PRESIDENT, after thanking Dr. Ogle for the very great care and trouble he had spent upon his paper, expressed his regret that he did not hold out a more attractive prospect. That the medical men who died of small-pox were very few in comparison with the general public, was an important fact, as showing how vaccination might protect even those who were exceptionally exposed to contagion. The comparatively high death-rate from scarlet fever, typhus, erysipelas, and diphtheria, was only what must be expected where there was no known prophylactic. The high death-rate from enteric fever surprised him, for medical men undoubtedly had better houses than the average of all classes; he supposed their chief dangers lay in visiting the foul habitations of their poorer patients, of which he had himself had some experience when he was in dispensary practice. He was sorry to see the high rate of alcoholism, but he hoped that alcoholism was not responsible for the excess of deaths from disease of the urinary organs, which he was inclined to attribute to the cold and exposure of the medical man in his country practice.—Mr. NOEL HUMPHREYS felt very much indebted to Dr. Ogle for his paper, and wished to suggest a few statistical points. The comparison between medical men and the rest of the population was unfortunate, for it was practically a comparison of a part of the upper classes with the lower; it would have been much more instructive to have compared two parts of the upper classes with each other—the medical men with the barristers, for instance. The most notable point in Dr. Ogle's table of diseases was that medical men had less disease of the respiratory system than the average, and more of the digestive. These, he thought, might very probably be class differences, the hot rooms and bad air of the lower classes bringing with them more respiratory disease, and the class of food and defect of exercise in the upper class bringing more digestive disease.—Mr. NEWBATT said that, as a critic of figures, he could not refrain from suggesting a doubt as to the value of Dr. Ogle's conclusions. In Table I., the total number in which death-rates were investigated was only 15,000, which was too small to give trustworthy results. The numbers between the ages 20 and 25, and also those after to 37, were so very small as to show large variations in their death-rate, due to what might might fairly be called chance. The numbers between 25 and 65, he admitted, were less untrustworthy. But to those who dealt largely with statistics it would be apparent that a slight difference in grouping might give very different results; and also much difference in the results might be caused by wrong returns of ages at the census. He had been surprised that Dr. Ogle had said that all statisticians regarded medical mortality as excessive. For his own part, he was almost inclined to say that the exact reverse was the case. Dr. Guy, in his series of papers on longevity in the learned professions, represented the medical men as the longest lived, the lawyers next, the clergy third. It was true that Guy's calculations were unscientific, for he would not compare his numbers of deaths with the numbers of those living; but that affected his estimates of all three professions equally.—Dr. ROUTH expressed some objection to Dr. Ogle's conclusions, and inquired if he had made out the mortality in the other learned professions with which to compare the medical.—Dr. GLOVER did not agree that the death-rate from small-pox was a credit to the medical men, for he thought the complete immunity of the nurses in positions of great danger of contagion showed that there ought to be even fewer deaths among medical men. He thought it likely that many deaths included in Dr. Ogle's lists were of medical men, falsely so-called. The large mortality from diseases of the urinary system required careful consideration.—Dr. C. THEODORE WILLIAMS found it hard to criticise so elaborate a paper. He was very anxious that some comparison should be made between medical men in the towns and country, and believed that the results would be very encouraging to the towns; but that the general results should come to be known to the insurance-offices he thought would be almost disastrous, as it would lead to an extra premium being put on all medical lives. Even at present it was bad enough, for one insurance-office would not accept any Irish medical man, except one from a large town.—Dr. DOUGLAS POWELL completed Dr. Ogle's paper by reading a note to it which he had previously omitted, showing how Dr. Guy's conclusions were only based on deaths of medical men of some eminence.—Dr. W. OGLE, in reply, thanked his audience for their attention and criticism. He quite agreed with Mr. Noel Humphreys that comparison of one profession with another in the same rank of life would be by far the most desirable; but it was not possible, for there were no means of getting at a death-rate of barristers or clergymen. He was afraid to cross swords with an actuary like Mr. Newbatt, though the actuary professed himself afraid of the statistician; but he must remind him that he must not regard his conclusions based on the small number of 15,000 but on three times 15,000, for he had taken the death-rate for three years, namely, 1880-81-82. The number of medical men he thoroughly admitted between the ages of 20 and 25, and again over 65, was small, too small, as Mr. Newbatt had said, to afford good results; but Mr. Newbatt did not seem to realise that he had for this very reason left out these figures in drawing his general conclusions. He was naturally most anxious to get larger numbers as a basis for his estimates, but he regarded the fact that the estimates of 1860-61 and of 1871 approximately coincided with those of 1880-81-82, as giving the latter very considerable support. It had been suggested that some returns might have been made, under the head of medical men, of those who had no right so to call themselves. He thought it was possible there might be a very few such; but one thing tended to hinder it, namely, that the provincial registrars, when sending in copies of the returns of death of medical men, got half a crown for those who were on the *Medical Register*, and nothing for those who were not. He had not pretended to explain the causes of the mortality-rates under different diseases, and had no means of affording Dr. Williams a comparison between the medical men of town and country, but he would hardly admit that the medical man was more exposed to cold and wet than the average of the people, which amounted practically to the average of the lower classes, and that could hardly be the reason for his escaping on the whole from diseases of the respiratory system.

On the Tapetum Lucidum.—Mr. HENRY LEE, read a paper on this subject. The object of this paper was to show that the rays of light from different points which passed through the pupil and impinged upon the tapetum lucidum were reflected again in a concentrated form, as from a concave mirror. In the ox and in the sheep, the greater part of the rays so reflected were brought to an ill-defined focus near the mouth. In the dog and the cat the reflected rays were more nearly parallel, and were projected forward and downward in a direction nearly parallel with the median plane. In relation to the orbit in the ox and the sheep, the tapetum was principally on the outer side; in the dog and the cat it was principally on the innerside. In relation to the optic nerve the tapetum in the ox occupied almost exclusively the upper and outer part of the back of the eyeball. In the cat and dog, it was situated above the entrance of the optic nerve, equally to its inner and outer sides. In the horse, the tapetum was very well developed. It extended fully two inches in its transverse diameter when spread out. The vertical diameter was larger on the outer than upon the inner side. The reflected rays from the former were directed downward and inward, as in the ox. The rays from the latter were directed more downward and forward, as in the dog and cat. Fish had no tapetum. Birds, supposed to have the longest and keenest vision, had no tapetum. The conclusions arrived at were that, by reflected and concentrated light, the tapetum had an illuminating power which enabled animals who possessed it to see better in the dim twilight than those who had it not; that this power could be utilised only at comparatively short distances; and that the rays of light reflected from the surface of the tapetum were concentrated and directed in accordance with the habits and instincts respectively of different classes of animals.—Mr. W. H. H. JESSOP considered that a real tapetum did occur in the fishes; it was found in the teleosteans and some ganoids, and he took it as represented by what was often called the argentea in the deep-sea fishes. He should be glad to know if Mr. Lee had any explanation why the bats and owls had not any; if it were really useful for illumination, he should have thought they would have been specially in need of it. The layer of rods and cones lay in front of it, and he was inclined to think it might be of service by reflecting the light back again through that layer, so as to stimulate it twice over.—Mr. LEE said that its real absence in deep-sea fish was not unnatural, when they had no light to reflect by it; it was distinct from the choroid, and lay in front of it, and was not to be mistaken for a coloured choroid. It was of use for vision within very short distances only. It lay always above the optic nerve, and got its light, not directly from the sky, but by reflection from the ground. In the case of the horse, giraffe, lion, and leopard, in the Hunterian Museum, the eye had been turned upside down—not, he was sure, by Hunter's hands—so that it seemed to lie below the optic nerve.—Mr. BRUDENELL CARTER suggested that such a position might be the true one in the giraffe, who usually ate food that was above him, and not below, as in most other animals.—Mr. LEE found it difficult to accept this as a satisfactory explanation.

HYDROPHOBIA.—The official report to the Hygienic Council for the Department of the Seine on the cases of hydrophobia during 1885 states the number of deaths to have been nineteen, which is in excess of the previous year. It was this last year that the law excluding dogs from the streets had been enforced rigorously.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 22ND, 1886.

W. CAYLEY, M.D., Vice-President, in the Chair.

A Case of Ununited Fracture of the Clavicle causing Pressure on the Brachial Plexus and Writer's Cramp, for which Excision of the False Joint, with Wiring of the Fragments, was Done; Perfect Union of the Bone, and Complete Relief of the Nerve-Symptoms Supervening.—Mr. BARKER read a paper on this case. The patient was a boy, aged 12, perfectly healthy, and with an excellent family history. His right clavicle was found soon after birth to be broken. The labour was natural, and no accident happened to the child. The mother had had a fall on the ice when pregnant three or four months. Up to three years ago, the condition gave rise to no inconvenience, though there was free mobility in the false joint which had formed. He then began to complain of pain down the right arm, and a sense of weight in it. Two months before admission into University College Hospital he noticed, besides the pain, that his fingers became stiff and fixed over his pencil when writing. The fingers then tended to close, and he could not get them straight without a good deal of rubbing. On admission, the right clavicle was found to be an inch and a half shorter than the left, and the shoulder to be lower on that side. The inner end of the outer fragment dipped under and behind the outer end of the inner. The broken ends were rounded off and freely movable. He was set to copy out a sheet of foolscap, and, in the course of a few minutes, spasmodic movements were noticed in the hand, and, at the end of half an hour, his writing was totally illegible, and he could not unclose the hand, while the pain in the arm was severe. Rest in hospital did not give any relief, the result being always the same. A special examination by Dr. G. V. Poore showed "some wasting of the thenar eminence, and some mottling of the skin of the right arm, which was also smaller than the left. No abnormalities of sensation were noticed, but the cords of the brachial plexus in the axilla and the large nerve-trunks in the arm were found more tender than on the left side. The faradic current showed reaction in all the muscles except the first right dorsal interosseous, which made no response to a weak current, but gave a good response on the other side." On August 26th, 1885, Mr. Barker raised a semilunar flap of skin and muscle from the clavicle, resected the false joint, and wired the cut surfaces together. All was done antiseptically, and the arm and shoulder were put up in a plaster-of-Paris corset. The wound was not touched for fourteen days, when it was found quite healed without a drop of suppuration; a moist spot remained where a catgut drain had been inserted. The dressings and corset were left on for a fortnight longer, and were then finally removed, the scar being round, and the bone firmly united with callus. Shortly afterwards he was set to do some writing as before, and all the former symptoms were found to have disappeared. The electric examination showed a corresponding improvement, and the finger-nails now began to grow normally, a furrow marking the difference before and after operation. Since then the arm had rapidly regained strength, and all the symptoms noted had disappeared; it was now like its fellow in power. The rarity of ununited fracture of the clavicle was illustrated by an examination into the literature of the subject, all the recorded cases being collected. The present case was shown to stand alone, both in the phenomena exhibited and in the treatment and favourable result. The rapid and perfect union of the bones was attributed by the author, in a great measure, to the complete immobilisation of the fragments by the use of the plaster corset.—Dr. POORE considered that exception might be taken to the term "writers' cramp" as applied to this case. The weakness of the muscles complained of was often more apparent during the performance of fine movements than when those of coarser character were essayed. Two important points called for observation in this case and in the subjects of writers' cramp; one was tenderness along the nerve-trunks of the arm, and the median nerve especially, and the cause of which was very obscure; the second was diminished irritability of the dorsal interosseous nerve; which symptoms immediately disappeared on the performance of the operation in Mr. Barker's patient. The tenderness was probably due to efforts made in writing, and was a secondary phenomenon. Mottling of the skin and diminution in the rate of growth of the nails on the affected side, indubitable proof of which was afforded by the boy himself, indicated the occurrence of trophic changes in the arm of the same side.—Dr. HUGHES BENNETT also thought confusion might be created by applying the term "writers' cramp" to such cases, the phenomenon when strictly used being due to excessive writing, while the symptoms observed in Mr. Barker's patient were clearly incident on injury. Weakness, inco-ordination, trophic changes, etc., all pointed to some nerve-lesion, and to the cutting off of central influences. Writers' cramp, on the contrary, arose from a general neurosis, and was unattended with wasting; and the existing confusion both as to terminology and treatment was attributable to this want of distinction between effects due to injury and those arising from neurotic changes.—Mr. GODLEE mentioned that Sir James Paget had told him that he, Sir James, had only met with two or three instances of ununited congenital fractures of clavicle in children. In one, all attempts at union failed; he saw it in consultation with Sir W. Fergusson, who regarded it as hopeless of cure, and amputation of the limb finally took place. Mr. Godlee had met with one instance, a child, aged 3, of healthy parents, in which both leg-bones were fractured, and in this case he prophesied that no union would result. He considered Mr. Barker was greatly to be congratulated on the favourable conclusion to his case.—Mr. BARKER explained that he had no desire to retain the use of the term writers' cramp; he employed it merely as one of convenience.

A New Symptom of Megrim and Epilepsy.—Dr. ANGEL MONEY read a paper on the case. The patient in whom the new symptom was noted was a man aged 29. He had suffered from many of the symptoms that were usually put down under the heading of megrim, such as transient hemiopia, spots and flashes of light, headache with and without nausea, abnormal tactile sensations. When about 11 years old, he used to faint, with a queer sensation at his epigastrium. The new symptom consisted in an apparent momentary lengthening of a written or printed word, seemingly caused by a reduplication of one or more of the letters in the word. The patient observed that this annoying symptom was most frequent when the flashes of light were most troublesome. Another noteworthy fact in connection with his visual organs was the long persistence of negative images, a condition which was not always present, but only at the times when he felt bilious. There had never been convulsions of motor spasm of any kind; nor, with the exception above mentioned, had he ever lost consciousness. At times, the patient was troubled with a ringing noise, apparently in his right ear; he was, however, distinctly though not very deaf on the right side. Reflecting on this symptom of apparent lengthening of a word, it occurred to Dr. Money to ask his patient whether he ever experienced a similar alteration in the length of spoken words. There was no weakness of any ocular muscle, and only a trifling degree of myopia. The author remarked that there were many ways of interpreting this symptom. He did not think there was any fraud, or reasonable doubt that the symptom was a real one. Was it due to some transient disturbance in the muscular mechanism of the eyes? The author thought this supposition not at all improbable. But he considered that theoretically it must not be overlooked that one might have to do with a symptom belonging to what might turn out to be an altogether new field of sensory nervous symptoms. By this he meant a group of symptoms which might best be designated as "reduplicated nervous actions." If the patient were right in his opinion that one of the letters of a word was doubled in the apparent lengthening, then it would not be at all absurd to regard the phenomenon as due to the reduplication of a nervous discharge in the usual word-centre.—Dr. S. MACKENZIE said he failed to gather from Dr. Money's description whether the symptom of reduplication complained of occurred only with vision, or whether it appeared in writing also. The distinction was an important one, inasmuch as the latter failing was evidenced by the subjects of so-called "barrel-organ" aphasia; and if a similar explanation could be applied in both instances, it might help materially to assist in the localisation of the cerebral lesion involved.—Dr. B. O'CONNOR had observed something of the same kind as the symptom described by Dr. Money, in the case of a printer who failed to correct such repetition of letters in "proof copy." The man did not suffer from megrim. He thought such affections might be commonly observed in sufferers from brain-diseases.—Dr. MONEY explained that the symptom was purely subjective with his patient, who did not repeat the letters in writing.

Chronic Simple Ulcers of Stomach and Duodenum without Symptoms until the Occurrence of Perforation.—Dr. SAMUEL WEST related particulars of this case. Hannah A., aged 48, while eating, was seized with sudden severe pain in the epigastrium, which continued until her admission, a month later. She had vomited, but food produced neither pain nor sickness. She had rapidly lost flesh and strength, and had recently perspired at night, and for a few days had had a cough, which caused her pain in the right side and back. She had been all the time confined to bed, and a bed-sore had formed upon the right buttock a fortnight before admission. Though she had been losing strength lately, there was no history of any ailment before the present illness. There had never been any pain or discomfort after food. The patient looked very ill; her respirations were 46, shallow, with general rhonchus. Pulse 120, very fresh;

temperature 99°. The urine contained a trace of albumen. The liver was uniformly enlarged. Some tenderness existed above the umbilicus and towards the right hypochondrium. There was no ascites, but œdema of the legs. Two days after admission she passed, with a stool, about six ounces of dark blood, and also on the two following days. She rapidly became weaker, and died on the fifth day after admission. The *post mortem* examination showed some old chronic pleurisy and pericarditis. The liver was enlarged, with superficial abscess between it and the abdominal walls. This abscess had two openings leading from the duodenum, and due to perforation of an old ulcer; the second into the colon, probably accounting for the hæmorrhage. Another large chronic ulcer was found upon the lesser curvature of the stomach, which had also perforated, and led into a cavity with thick fibroid walls, the base of which was formed by the liver. The two ulcers were of very old date, the symptoms being produced by the perforation of the duodenal ulcer, and the formation of the abscess. Two points were noteworthy: 1. the extent and duration of the ulcers without symptoms; 2. the lowness of the temperature in spite of active suppuration.—Dr. CAYLEY narrated the history of a case, that of a man, seen by him some years since in the Middlesex Hospital, and of which sudden acute pain was the first prominent symptom complained of, followed speedily by death from peritonitis. On *post mortem* examination, a duodenal ulcer of considerable size, and of evident long standing, was found, which communicated with the cavity of the abdomen.—Dr. TAYLOR said he was, some years ago, called to see an anæmic servant, who had been suddenly attacked with acute pain early in the morning, and who died almost immediately. On *post mortem* examination, an ulcer of the stomach was discovered. He had then under his care a patient who was probably suffering from simple ulcer, and who had been but a fortnight ill, but who had, nevertheless, suffered from severe hæmorrhage. She was, however, slowly recovering.—Dr. S. WEST mentioned that, notwithstanding the amount of suppuration in his case, a low temperature was maintained.—Dr. S. MACKENZIE said that, having recently analysed the fatal cases of ulcer, in the London Hospital, for ten years past, he found no record of any of the kind in question in that period. In 1874, however, a girl was admitted who had been seized with a sudden pain; hæmorrhage occurred, and she died in two days. She had been dismissed from service, and inquiry failed to obtain any history of previous symptoms. Perforation without premonitory symptoms was rare, and Dr. Mackenzie suggested that, though really existing, they might not be mentioned by the patient, under the impression that they were too trivial to demand notice.—Dr. GOODHART pointed out the necessity of distinguishing between gastric and duodenal ulcers. The former were most commonly attended by marked symptoms, but in the latter none might be present until the occurrence of hæmorrhage directed attention to them.—Mr. GODLEE instanced the case of a man admitted into hospital for supposed lead-colic, and who was found to have a small femoral hernia, which was cut down upon on the supposition that the symptoms pointed to strangulation. Some purulent fluid was evacuated from the sac, but the man died two days later, and on *post mortem* examination he was found to be the subject of a duodenal ulcer.—Dr. WEST insisted that in his patient there were no premonitory symptoms. He had seen two or three cases of duodenal ulcer; in one, considerable symptoms were present, as was also the case with those due to external burns.

Case of Recovery of Vision after Amaurosis consecutive to Malarial Fever.—Mr. BRUDENELL CARTER read a paper on this case. The patient was a gentleman about 35 years of age, who was the chief of the police in a West Indian colony. He came to the author on July 15th, 1884, his vision being then reduced to little more than qualitative perception of light. His history was that, in November, 1883, after very fatiguing duty in unhealthy parts of the colony, he was seized with a fever of malarial origin and malignant type, which nearly proved fatal. When he had otherwise fairly entered upon convalescence, his pupils remained widely dilated and insensitive to light, and it was observed that he had to feel for a feeding-cup or other object which was offered to him—a condition from which he made no advance. Mr. Carter found the optic nerves very white, as if from atrophy; and the larger vessels lifted up in bold curves as they crossed the disc-margin, showing that the atrophy was consecutive to pre-existing swelling. The ophthalmoscope also showed hypermetropia 4.0 D, with 1.0 D of astigmatism. There could be no doubt that the fever had been attended by optic neuritis, probably connected with meningeal trouble; and that vision was being destroyed by the contraction of effused material. Notwithstanding the unfavourable prospects of the case, the author determined to carry out the plan of treatment which he had several years ago laid down as appropriate for similar conditions; namely, to endeavour to promote the absorption of effused material by mercury and iodide of potassium, and to stimulate the nutrition of the optic nerves by strychnine. The patient wished to take up his temporary residence at Birmingham, and Mr. Carter had the good fortune to obtain the co-operation of Mr. Bartleet in carrying out the necessary measures. Perchloride of mercury and iodide of potassium were administered by the mouth, in moderate doses; and sulphate of strychnine hypodermically, in doses which commenced with a sixtieth of a grain, and were gradually increased to as much as a seventh, when the injections were followed by stiffness and rigidity of the muscles of the legs, and the dose was necessarily reduced. On August 4th, or rather more than a fortnight after the commencement of the treatment, the patient reported that, although he could not see to read or write, he thought he had improved in sight as far as concerned general objects; and he was thereupon encouraged to persevere. In another month, the improvement was no longer doubtful; and, after five months of treatment, in December, 1884, the error of refraction being corrected by suitable glasses, he was found to have one-third of normal vision, and to be able to read No. 6 of Jäger in the hand. On January 10th, 1885, Mr. Carter received a letter from him in perfectly good and legible handwriting, except that the lines were uneven and irregular. In this letter he said, "Will reading the newspaper by gaslight hurt my eyes? After reading a little time, the words appear as if coming out of a fog, if I may so describe it, and occasionally a sort of flash of colours (similar to colours which appear on cut glass when the sun shines upon it) comes before my eyes. It is, however, a great comfort to be able to read at all." By March 20th, 1885, his vision had increased to one-half, and he read No. 2 of Jäger. By July 21st vision had reached two-thirds, and in another month it was normal, and No. 1 of Jäger was read easily. The patient was not conscious of any remaining impairment, except that he saw badly on coming from a stronger light into a weaker one, as if the retina required a decided stimulus. At this time the optic nerves were still pale, but many small vessels, previously invisible, were to be seen upon their surfaces. The patient wrote in even lines, and in the following month he returned to his official duties. At a somewhat later stage in the course of the treatment, it became necessary to relinquish the hypodermic injections, in consequence of every puncture having for some time past become the seat of painful inflammatory swelling; and, thenceforward, the strychnine was given by the mouth, alternately with mercury and iodide of potassium. The author remarked upon the great perseverance of the patient, and bore grateful testimony to the way in which he had been assisted and supported by Mr. Bartleet.—Dr. S. MACKENZIE quoted Hammond to the effect that optic neuritis was commonly encountered in those countries in which malarial fever was prevalent, although in this country it was rare in the same connection. It was an important observation that, under the influence of iodide of potassium, patients affected with cerebral tumours and accompanying optic neuritis practically recovered from the latter affection even while, at a later date, they succumbed to the brain tumour. Dr. Mackenzie asked why Mr. Carter persisted in administering the strychnine hypodermically, notwithstanding its manifest effects on the skin of his patient. He had never seen recovery follow the treatment of any case of optic neuritis so far advanced as Mr. Carter's.—Dr. COUPLAND mentioned that within the last few days he had seen a man, formerly almost hopelessly blind, who, under mercurial treatment at the hands of Dr. Emrys Jones, of Manchester, had quite recovered his sight.—Mr. BRUDENELL CARTER replied to Dr. S. Mackenzie that he preferred the hypodermic administration of strychnine as being, in his judgment, more certain in its operation, and less liable to produce the effects of cumulative poisoning than if the drug was given by the mouth. In reply to other speakers, he said that there was no history or ground for suspicion of syphilis. The patient was a moderate smoker, but had discontinued tobacco entirely as part of the treatment. Mr. Carter did not think it possible in any way to connect the blindness with the use of tobacco; because it was quite clear that the symptoms dated from the fever. Before the illness, there had been some difficulties connected with the use of the eyes, but they were manifestly produced by the error of refraction, and might at any time have been relieved by spectacles.

A CONCERT for the entertainment of the patients and friends of the North-West London Hospital took place on the 14th instant, in the male ward of the institution. The proceedings were enlivened by songs from Mrs. Durham and Miss Hickson, Messrs. Spreat, Skelding, Pridmore, and Wells; while Mr. Furber on the banjo, and Mr. De Cordova's recitations, contributed materially to the humour of the evening.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 23RD, 1885.

ALFRED MEADOWS, M.D., F.R.C.P., President, in the Chair.

Specimens.—Dr. BANTOCK showed a thick-walled Suppurating Cyst removed from the left broad ligament. The cyst-wall proper was removed by enucleation from its investing envelope. While examining the relations of the cyst, an opening was accidentally made through the envelope and cyst-wall at the bottom of Douglas's pouch, and some of the purulent offensive contents escaped into the peritoneal cavity. The pelvic cavity was twice filled with plain warm water, and well sponged out. The patient made a most excellent recovery. No antiseptic of any kind was used. Also two Fibroid Tumours, removed from single women, aged 37 and 34, on November 24th and December 9th. Both cases made good recoveries. Also a Multilocular Tumour of the right Ovary, removed on December 16th. It presented characteristic papillomatous patches, and the left ovary was also in an early stage of cystic disease. Also the Ovaries and Tubes from a married woman aged 46. Menstruation had ceased rather suddenly nine years before, and ever since she had suffered from severe pain, which no treatment had in the slightest degree relieved. The ovaries were found in a cirrhotic condition. Also the Right Ovary from a young lady aged 20, from whom he removed at the same time a parovarian cyst weighing 24 lbs. The ovary was in an early stage of multilocular disease. Hæmorrhage had taken place into one of its cysts.

Dr. R. T. SMITH showed the specimens from a case of Double Hydrosalpinx. The patient had recovered well.—Dr. MEADOWS, Dr. FANCOURT BARNES, Dr. AVELING, Dr. BANTOCK, Dr. ROUTH, Dr. GRIGG, and Dr. BARNES, made remarks.

Adjourned Discussion on Dr. R. T. Smith's Paper on Emmet's Operation for Laceration of the Cervix Uteri.—Dr. BANTOCK, in resuming the discussion, thought the subject had been treated in a very able and temperate manner, without excessive-laudation on the one hand, or depreciation on the other. He objected to the word trachelorraphy or trachelorrhaphy, as it was variously spelt, and wished it to be abandoned. He was convinced that, while there was undoubtedly a wide field for the operation, it was performed much too frequently. This was admitted by Dr. Goodell, and even Emmet himself said that he now operated on a much smaller number than formerly. Possibly it was more frequently required in America than in this country, midwifery in the mass being less skilfully practised there. He was opposed to the pronounced views which Dr. Emmet held on the subject. He did not agree that the mere repair of an ulcerated cervix would suffice for the restoration of a retroverted uterus when the two were combined. He could understand that a subinvoluted, partially retroverted uterus might be benefited by the operation, and involution so hastened that, in a shorter space of time than otherwise would have been the case, the uterus might right itself on attaining its normal size. But his experience was opposed to this contention in the case of a well-marked retroversion. As to the performance of the operation in cases where hereditary tendency to malignant disease existed, he had never been able to trace any connection between the two conditions. He agreed with Emmet on this point. He thought in this country the operation had not yet gained the recognition which it deserved. He was of opinion that deep laceration of the cervix should be treated by this operation, but that cases of fissure, especially those of radiating or stellate fissure, usually of no great depth, might be let alone; and that when the state of congestion and hyperplasia, often present in these cases, and which exaggerated appearances, was appropriately treated, the necessity for the operation would disappear with the congestion and hyperplasia. Preparatory treatment was therefore necessary to determine this point.—Dr. AVELING treated all cases of ectropic erosion by aderstion, a term which included searing and ignipuncture. The searing cured the erosion: the ignipuncture, the hypertrophy arising from the erosion. The operation was short and easily performed, and the cases very successful.—Dr. FANCOURT BARNES said that lacerations of the cervix frequently occurred spontaneously, during the passage of the child through the os uteri. They often healed spontaneously, and could not be attributed in any way to the manner in which the labour was managed. He thought that the greater frequency of lacerations of the cervix in America than in England, was due to climatic influence. He could not agree that the actual cautery was sufficient to restore the cervix to a natural condition after deep laceration: nothing but Emmet's operation could do this.—Dr. MANSELL MOULLIN had seen many of the operations upon which Dr. R. T. Smith based his interesting paper, and had performed the operation many times himself, with very good results. He had only operated in cases in which the laceration was deep and well marked, presenting a large raw and granular surface; but he was so satisfied with the operation, he would extend its sphere. He agreed that, whenever the gaping labia could be approximated and rolled inward, the operation was likely to be beneficial. He had remarked a great tendency to miscarriage in these cases.—Dr. ROUTH did not believe that the actual cautery, any more than trachelorraphy, would cure retroversion of the uterus, but it would cure a subinvoluted inflammed and ragged state of that organ. The very sloughing off of the eschar produced a drain upon the uterus, and this reduced it in size. The cure was generally complete in a month or six weeks; cleanliness and avoidance of fatigue was all the after-treatment needed.—Dr. BEDFORD FENWICK thought that these cases could be successfully dealt with by Emmet's operation, or by the cautery, but the operative treatment was more speedy.—Dr. FENTON JONES divided cases of lacerated cervix into three classes, according to degree. He considered that the symptoms were due rather to the ectropion than the laceration. Either Emmet's operation or the plan suggested by Dr. Aveling was successful in minor cases. Those in which the laceration was deep should be reserved for Emmet's operation.—Dr. R. T. SMITH, in reply, was aware that Dr. Barnes had given, in his second edition of the *Diseases of Women*, a careful and appreciative account of the value of Emmet's teaching, and was glad of his approval. He agreed with Dr. Bantock's condemnation of the word trachelorraphy, as also with his statement that retroflexion was not always cured by the operation; but the uterus was so diminished in size, and its resilience was so increased, that the ordinary means of treating retroflexion were now successful. While admitting that the cautery and caustics would lessen indurations, and cause diminution of size, he could only maintain that the healing of a neglected wound by vivifying the surfaces, and their healing by first intention, was preferable to that of applying any form of caustic with the subsequent sloughing and healing by granulation. Of the great saving of time, and of the less amount of painful treatment, there could be no doubt whatever.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 25TH, 1886.

W. M. ORD, M.D., F.R.C.P., President, in the Chair.

The Theory of the Febrile Process, its accompanying Chemical Changes, and the Modes in which it produces Death and Immunity.—Dr. THUDICHUM read a paper on this subject. According to the author's views and observations, the amount of heat present in fever was not all accounted for by the evidence of combustion in the excretions; and, since all physical processes for the production of heat must leave physical marks of their accomplishment, one was obliged to seek the source of that portion of the heat which could not be accounted for, elsewhere. This source might be, Dr. Thudichum suggested, in the setting free of latent heat by tissues, which, under the influence of the febrile processes, underwent a change of volume. The atomic volume of the tissues thus became less; and, their heat-containing capacity diminishing *pari passu*, heat was set free, and became manifest. Tissues which had passed through this change, and had contracted, were not for the time being, at any rate, in a condition to undergo further changes of a similar nature. This was Dr. Thudichum's explanation of the immunity which might result from one attack of a specific fever. In his analyses of brain-substance, Dr. Thudichum had been enabled to detect the presence of bodies which he had called *phosphatides*, they being analogous to, but not identical with, ordinary phosphates. These bodies, as a group, were very sensitive to any rise of temperature, and under its influence readily became insoluble. The function of the brain being thus interfered with or prevented, death resulted.

Pyæmia following an Operation on the Base of the Skull.—Mr. WALTER PYE read notes on a case of pyæmia, following an operation for the removal of a sarcomatous growth at the base of the skull. The operation itself was a difficult one, necessitating a preliminary tracheotomy; the écraseur wire was then introduced into the mouth, and drawn out through the nostril by means of a Bellocq's sound. It was a very vascular growth, of a typical myxo-sarcomatous nature; nevertheless no recurrence had taken place so far. Soon after this patient's discharge, he was readmitted with symptoms of acute rheumatism, but the joints suppurated, abscesses formed in his thigh and buttock, and he had signs of catarrhal pneumonia. Notwithstanding the extent of the suppuration, the patient ultimately recovered, without any affection of spleen, so far as could be ascertained.—Dr. THUDICHUM said he had had cases which offered greater difficulties than the one described, and he had removed the growth by means of the galvano-cautery, without tracheotomy, and without pyæmia as a sequel.—Mr. PYE doubted

whether, from the vascular nature of the growth, it was possible to dispense with the tracheotomy.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 15TH, 1886.

T. R. JESSOP, F.R.C.S., President, in the Chair.

Endocarditis at Apex of Left Ventricle, with Large Vegetations.—Dr. CHURTON showed a heart with a softening thrombus at the apex of the left ventricle, laid flat on the surface. He considered this to be due to a localised endocarditis, a specimen of which he showed in another heart, extending from the anterior flap of the mitral to the upper limit of the auricle. The patient from whom the first specimen was taken was a carter, aged 49, who was subject to attacks of syncope, which led to his admission to the infirmary, for fracture of the thigh. The left ventricle was slightly dilated, and its walls thin. There was no atheroma of the coronary arteries. The spleen, much enlarged, contained a whitening infarct of the size of the closed hand. The interior of the chief cardiac cavities contained puriform fluid.

On the Value of Antiseptic Precautions, including the Eucalyptus Air Spray in Operations on the Eye.—Mr. HEWETSON described the precautions he adopted in ophthalmic operations. The eye was washed with carbolic lotion (1 in 80); the instruments in lotion 1 in 60. Cucaine, if used, was in aseptic solutions. The operation was performed under the eucalyptus air-spray, and the eye was subsequently covered with a pad of salicylic silk, enclosed in a double layer of absorbent wool, which had been freely exposed to the air-spray.

Excision of Tarsal Bones.—Dr. ALFRED SWANN showed a patient aged 8, from whom he had, three years previously, removed the os calcis, astragalus and the malleoli on account of strumous disease, of eighteen weeks' duration, which had apparently originated spontaneously. The child was able to run and walk perfectly, the movements at the ankle-joint appearing normal. The bones were also shown, and presented the appearance of strumous ostitis.—The PRESIDENT said that the incision was similar to the one introduced by the late Mr. Nunneley. He also remarked on the excellency of the rule not to do partial operations in disease of the small bones of the carpus or tarsus.—Mr. MAYO ROBSON congratulated Dr. Swann on his case; and after some remarks on a case in which he had excised a great part of the tarsus, leaving a useful foot, he said that he fully endorsed Mr. Jessop's remarks with regard to complete excision.

Labio-glosso-laryngeal Paralysis.—Dr. BARRS showed a patient suffering from labio-glosso-laryngeal paralysis, with atrophic paralysis of the hands. The patient, a man aged 29, had been under observation since August 18th, 1885, when he applied as an out-patient, complaining of nasal voice and slight dysphagia. There were noticed besides impaired movement of the soft palate and lips, but no appreciable loss of power in the tongue, and no affection of deglutition, except the occasional passage of food through the nose. There was no history of syphilis, diphtheria, or lead-poisoning. In September, the tongue was tremulous, but could be protruded, and the other symptoms were markedly increased. In October, some loss of power in the left thumb was noted, and in a month's time there was wasting of muscles of both hands, but more marked on the left side. The electrical reaction remained normal. At the time of relating the case, there was entire loss of all articulation, his attempts at speech being quite unintelligible; phonation was unaltered, and the laryngeal movements normal. The *visage pleurard* was well marked, and the mouth was large from falling of the lips. The tip of the tongue could just be protruded beyond the line of the teeth, and was the seat of distinct fibrillar contractions and some wasting. The atrophic palsy of the hands was well marked, and the left was somewhat clawed. The wrist and elbow reflexes were much increased. The knee-jerks were also increased; and the legs were said to be occasionally stiff, but there was no suggestion of any spastic condition to be noticed. The case was progressing very rapidly towards its complete development, though of only eight months' duration. Dr. Barrs suggested that the case might ultimately develop into one of amyotrophic lateral sclerosis, as described by Charcot.

Bulbar Paralysis.—Dr. JACOB showed with the lantern some photographs of patients suffering from bulbar palsy, and views of the histological lesions to be found in such cases. He also related a case under his care at the time, when, with slight symptoms of bulbar palsy, there was marked increase of the leg-reflexes, with ankle clonus and a staggering gait.—Dr. CLIFFORD ALLBUTT referred to the views of Duchenne, the first describer of the disease, and remarked on its identity with progressive muscular atrophy, which Duchenne strenuously denied.

CHESTER MEDICAL SOCIETY.

FRIDAY, JANUARY 8TH.

JAMES TAYLOR, F.R.C.S., President, in the Chair.

President's Address.—Mr. TAYLOR, in taking his seat as President, shortly reviewed the work of the Society during the past year, and alluded to the first death amongst its members, that of Mr. Allan C. McEwen; after which he passed on to examine the condition, successes, and deficiencies of the medical profession, as painted by Bacon at the beginning of the seventeenth century; and to consider how a study of these might still guide us in our means of learning and applying our knowledge.

Tumour of the Brain.—The Secretary read notes of a case of Mr. TAYLOR'S, and the report of the Pathological Committee upon the brain of the patient. John D., aged 42, admitted into the Chester Infirmary on November 10th, 1885, complained of pain on the crown of his head. He walked in an uncertain manner, spoke in a hesitating way, and could not without help raise himself to a sitting posture in bed. He had often fallen; and on November 16th he walked across the ward, and fell suddenly. After that, he could not stand without help. After the 20th, he had incontinence of fæces, and he spoke little. From the 24th, he had attacks of violent spasmodic twitching, which were set up by any stimulus, such as changing the bedclothes or the cry of a patient in the ward. He died on November 27th. On examination of the brain, a glioma was found in the right frontal lobe, an inch and a half in diameter, and extending about an inch inwards from the surface. The brain-tissue surrounding it was firm and dense, and at its posterior extremity was a cyst containing two or three drachms of clear fluid. Microscopic sections of the tumour, made by Mr. H. Dobie, were shown.—Mr. R. S. ARCHER related a somewhat similar case.

Ovum: Treatment of Abortion.—Dr. DOBIE showed an ovum aborted about the eighth week. The amniotic sac was filled with coagulated blood, by which the embryo was surrounded, and which presumably was the cause of the abortion. He proceeded to relate the results of his personal experience in the treatment of abortion. In cases of threatened abortion, with hæmorrhage and occasional pains, he found that full doses of opium, thirty to forty minims of liquor sedativus repeated every hour till pain subsided, with rest in the supine position and light diet, were often sufficient to avert it, and to allow the patient to go on to full term. When, however, abortion was inevitable, as indicated by severe and prolonged pain, with great hæmorrhage, and perhaps the escape of amniotic fluid, his object was to obtain the discharge of the entire ovum. If this could be easily detached with the finger, he generally removed it at once; but, where there was any difficulty, he gave a full dose of ergot with a little opium, and inserted an India-rubber air-bag into the vagina, which he then inflated by means of a force-pump syringe. He had used this for more than twenty-five years, and found it the most comfortable and easily employed plug. It could be easily taken out and replaced after syringing the vagina with an astringent or antiseptic solution. It restrained hæmorrhage, and excited uterine contraction. With its use, he had never had any symptoms of septicæmia; such, in the early days of his practice, he had frequently seen, caused, he believed, by imprudent interference with the ovum while still adherent to the uterus. He thought that by antiseptic injections the ovum and discharges could be kept sweet until the former was naturally detached.—Mr. HAMILTON spoke of the necessity for prolonged rest in cases of threatened abortion, and thought that when inevitable the earlier the ovum could be removed the better.—Dr. HAINING said he had found belladonna and small doses of acetate of lead useful in threatened abortion.

Dr. Squibb's Process for the Approximate Estimation of the Quantity of Urea in Urine.—Dr. KING gave a demonstration of this process, described by Mr. Green in the BRITISH MEDICAL JOURNAL, December 5th, 1885, p. 1056.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, DECEMBER 3RD, 1885.

T. S. BYASS, M.D., President, in the Chair.

Sarcoma of Kidney.—Dr. HOLLIS showed a specimen of a kidney weighing sixty-five ounces, and almost entirely filled with sarcomatous growth, soft, yellowish-white in colour, broken down in places into cysts containing a bloody grumous fluid, with fibrous intersecting bands. Microscopically, the stroma showed small round, with some spindle-shaped, cells. The patient was a man, aged 55, who had had hæmaturia for a few days, eight years, and again one year, ago, with interval of fair health. For two years, he had noticed a tumour in the

left side, which latterly had much increased. In January, 1885, when he was admitted into the County Hospital, this tumour was generally considered splenic. There was then no blood or albumen in his urine, nor dropsy; but he had several attacks of hæmaturia between that date and October, when general dropsy set in, and he lost colour, flesh, and strength. There was no history of syphilis or intemperance, but he had had ague (at Newhaven). When readmitted, the abdomen was much distended, especially on the left side, and a tumour of the size of a large cocoa-nut occupied the left hypochondriac and lumbar regions. It was apparently the spleen, but its exact relations could not be made out on account of the fluid in the abdomen. The superficial veins were much enlarged. The urine was of dark smoky colour, of specific gravity 1020, with excess of urates, and sometimes containing bright red blood and small clots; it became nearly solid with albumen on boiling; the sediment showed red and white blood-cells and epithelial casts; the blood showed excess of white cells. He had much pain in the abdomen and loins. Dyspnœa was a marked symptom; and, on November 9th, this suddenly became much aggravated; bright frothy blood was coughed up, collapse set in, and he died two hours later.

Accidental Re-vaccination of a Mother by Infant.—Dr. WINTER FISHER showed a photograph in illustration of this on the face of the mother.

Lacerations of the Cervix Uteri and their Treatment.—Mr. H. A. HODSON read a paper on this subject, strongly advocating Emmet's operation of trachelorraphy, from experience of its results at the Women's Hospital. Laceration in the lateral direction was more likely to cause serious result than the more common laceration in the median line. The tissues of the uterine canal tending to "roll outwards," the flaps of the laceration diverged; and, if examination were made with a cylindrical speculum, the appearance was rather of ulceration, hence a probable reason of the condition not being always recognised. There was more or less prolapsus and retroversion; with a Sims' speculum, and tenacula, the edges could be approximated, and laceration made evident. The general symptoms were inability to stand or walk with comfort, pain in the back and abdomen, irritability of the bladder, profuse and irregular menstruation and leucorrhœa, with headache and depression. If treatment by rest, tampons, scarification, and hot water injection were either inadmissible, or failed to cure, the operation offered a good prospect, and should be performed by denuding the torn surfaces of the cervix (leaving an undenuded tract in the centre for continuation of the uterine canal), and bringing the flaps together with silver wire in the usual way. Any hæmorrhage was controlled by injections of hot water. The after-treatment was mainly rest and cleanliness; the sutures should be removed about the eighth day. Three cases were related of women, about 40 years of age, married about twenty years, and dating the trouble above described from confinements. In two of them high temperatures occurred for two or three nights after operation, but no serious complications occurred, and all three obtained complete relief from their symptoms. Mr. Hodson considered the operation remarkably free from danger, and one of the most successful in uterine surgery.—In reply to Mr. BABER, who inquired how deep a laceration would warrant the operation, he thought that any amount of eversion would be sufficient warrant.

The Treatment of Some Forms of Enlarged Uterus.—Mr. R. SANDERSON read a paper on this subject. He referred mainly to the results of subinvolution, and expressed his disappointment with the effects of the large number of recommended remedies, including pessaries. The plan which gave him more satisfaction than any other was, after a brisk purge, to measure, and, if necessary, replace the affected organ, and to insert two plugs soaked in glycerine of alum (gr. 15 to ℥); one in the posterior *cul-de-sac*, the other against the anterior lip of the cervix; these should be left in for eighteen to twenty-four hours, and changed twice or thrice weekly. Absolute rest was essential; drugs were not of service, and Hodge's pessary he found either unnecessary or useless. The same treatment was applicable to any "chronically engorged" uterus, when a stem also might be needed. If any fibrosis had occurred, pregnancy was the only cure. Possibly a small soft ring-pessary might relieve dragging pain, but all active treatment on the part of the gynæcologist was superfluous and useless.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

THURSDAY, JANUARY 7TH, 1886.

S. A. SMITH, M.D., President, in the Chair.

Medical Consultations.—The discussion on this subject adjourned from the previous meeting, was concluded after several members had spoken.

Simple Fracture of the Patella.—Mr. VINCENT JACKSON exhibited two patients who had suffered simple fracture of the left patella, and in each case the fracture had occurred twice. One, a gentleman, aged 48, was seen by Mr. Jackson seven years ago, on account of a simple transverse fracture of the left patella. The treatment consisted in apposing the fragments, and extending the limb on a back splint with a foot-piece. This was continued until the union fibrous permitted progression, and the gentleman resumed his avocation. Six months afterwards, he tripped and fell from the top to the bottom of some stairs, refracturing the patella. The treatment was repeated, and the same favourable result followed. The second patient was a man, aged 21, who was admitted into the hospital with a simple fracture of the left patella. Two days later, when seen by Mr. Jackson, it was determined to wire the fragments together; and, for this purpose, ether was administered, and, when the patient was almost anæsthetised, respiration stopped, and a very alarming condition ensued. Fortunately, the means used to restore animation were successful, and Mr. Jackson decided not to perform the operation, and directed that the fracture should be treated in the ordinary way, the result being perfectly successful. Two months after his discharge, he fell again, and refractured the patella; treatment was for the second time employed, and, in the course of time, he went home and resumed his work. Mr. Jackson, in a few observations, stated that he exhibited the patients as evidence, if any were wanted, that wiring of the fragments together in fractured patella was not necessary, and that such a procedure should not be regarded as "the routine treatment." No better result for all practical purposes than that achieved in the cases shown was to be desired, for both patients could take any amount and variety of exercise, and do any quantity of work. One, in the presence of the meeting, quickly ascended and descended the library steps, and, as each walked, no indication was afforded of any previous injury to the bone. Mr. Vincent Jackson showed a patella removed from a male patient who, many years before his death, transversely fractured it; and it was exhibited as an example of bony union, which occasionally follows when similar treatment to that already mentioned is employed for these injuries.

Radical Cure of Hernia.—Mr. VINCENT JACKSON exhibited a man, aged 24, sent to him by Mr. Clendinner, of Caseley, to be radically cured of a large hernial tumour of the left side, the circumference of which was twelve inches, and its extent downwards seven inches. The hernia was readily reducible, and could be retained within the abdomen by a truss; but, as the man wished to be released of the disagreeableness of wearing such an instrument, he readily submitted, seven weeks since, to the necessary operative treatment. No truss was now worn; the external ring and the inguinal canal being completely obliterated.

REVIEWS AND NOTICES.

THE LIFE OF SIR ROBERT CHRISTISON, BART. Edited by his Sons. In two volumes. Vol. I: Autobiography. Edinburgh and London: William Blackwood and Sons. 1885.

A PHILOSOPHER has said that if any man, no matter how modest his attainments or insignificant his position, would intelligently record the events and experiences of his life, the recital would prove of interest and instruction to the reflective reader. How much more does this truism apply, when the autobiographer has been endowed by nature with more than remarkable physical and intellectual qualities, when he has to the full utilised and profited by the advantages he possessed, and when, moreover, he has lived far beyond the ordinary span allotted by the prophet to the average members of the human race. For this reason, the publication of the life of Sir Robert Christison will appeal to the sympathies of a large circle; not only to those who, during the last half century, have come into personal contact with him as a teacher, physician, and friend, but to many others throughout the world who have more indirectly profited by his influence as a philanthropist, scientist, and author. As the editors of the work under notice point out, although the biography of a physician and man of science must necessarily appeal mainly to medical readers and to those acquainted with the sciences allied to medicine, even the professional and scientific parts of the present book may prove interesting to those cultivated members of the general public who are not unwilling to take an occasional side glance at professions and pursuits differing widely from their own. The present memoir, however, will be specially wel-

come to those who, during his long life, came into immediate relations with Sir Robert Christison; for, in a public capacity, he won the respect of his professional brethren and fellow-citizens by the culture, integrity, and devotion to duty which characterised his career, while by his modest, dignified, and genial bearing, he gained for himself the affection of a large number of personal admirers and friends. Cynics affirm that we have a tendency to glorify the dead at the expense of the living, and that we are prone to over-magnify the exploits of the heroes of the past, comparing them too favourably with those of the men of the present. Whether this is mere fancy, the result of visionary youthful impressions, or actual fact, the consequence of a retrograde process of evolution due to changed circumstances, is a problem which must be left to the speculative to decide. There can, however, be little doubt that, in the last generation, there existed a class of men whom we of the present day delight to honour and revere. In our own profession, more especially half a century ago, there were many such, enrolled under the title of physician, scattered throughout the world, and conspicuously numerous in the capital of the north, who for general culture, scientific acumen, personal dignity, and refinement, could intellectually compare favourably with the members of any other calling, and who socially could hold their own on equal terms with the highest ranks of society. As a result, these men commanded the respect, confidence, and admiration of all classes of their fellow-men. To such a type of physician, Sir Robert Christison eminently belonged, a representative example, of which his profession and country may justly feel proud. Now that he has passed away in the fulness of years and good work, it is not only an act of justice, but one of expediency, that his sayings and doings should be recorded and preserved, both as a memento for those who knew him, and as a source of counsel and example for others.

The work just published consists of two volumes. The first is an account of the first thirty-three years of his life, written by Sir Robert Christison himself. The second is a record of the remainder of his career, compiled after his death by his sons, who edit the entire book. The former volume only is before us. It would be as unsatisfactory as impossible to attempt to abstract or criticise the contents of this volume. It must be read to be thoroughly appreciated, and we may add enjoyed, as not only is it replete with useful and solid information, but it teems with anecdotes and humorous sketches, which render its perusal not only profitable, but amusing. Throughout its pages, we find depicted in his own modest way the real character of the man, his thoroughness of purpose, his breadth of thought, his versatility of genius. Here we find that, although from the beginning he was favoured by worldly prosperity, and thus deprived of the impetus so useful as a stimulus to the advancement of most men, he, unlike many, did not succumb to the enervating influences which surrounded him, but rather employed his favourable circumstances in the pursuit of higher intellectual and scientific attainments. Made a professor at the unusually early age of twenty-three, from then till death he never relaxed in his efforts to advance the science and art of his profession, and in a variety of different directions distinguished himself as an original thinker and worker. He is known far and wide as a botanist, chemist, toxicologist, and therapeutist; and his treatise on *Poisons* still remains the standard work on the subject.

If from his intellectual energy Christison was good at work, owing to his physical vigour, he was none the less good at play, and one of the most popular traits in his character was the delight he experienced in, and the zest he threw into, the pursuit of all forms of healthy recreation. He was devoted to walking, rowing, hill-climbing, and volunteering, all of which amusements he practised whenever opportunity offered. Perhaps his greatest passion was that of ascending the mountains of his native land, the charms of which pastime he himself depicts in his autobiography. This pursuit he enjoyed successfully till a very late period of his life. The present writer (himself a no mean athlete) on one occasion ascended Ben Lomond in company with the professor. On reaching the summit, a bad second, panting from the steepness of the final ascent, he there found Sir Robert already seated on the cairn at the top, who, in his dry humorous way, simply remarked, "There are not many men who at the age of seventy could beat a young fellow like you in a race up one of the highest mountains of Scotland."

It is always sad to find those whom we have known passing from us in the fulness of mental and bodily activity. All who knew Sir Robert Christison preserve his memory with affectionate regard, and they must be consoled by the appearance of the present volumes, which constitute a worthy memento of their late friend. The perusal will convince them that, if his life was long, it must, from the nature of the man, his pursuits, his successes, and his rectitude of purpose, have been a happy one.

Diseases of Sedentary and Advanced Life. By J. Milner Fothergill, M.D., Physician to the City of London Hospital for Diseases of the Chest, Victoria Park. London: Baillière and Co.

In this work, which the author says is intended "to fill a gap in medical literature," the most noticeable feature is a mixture of the *utile* and the *dulce*. The results of insufficient exercise in childhood, adolescence, and adult life, are treated consecutively; and special chapters are devoted to professions which entail to a greater or lesser extent a privation of active physical existence. The author sheds the classic tear over the hard-worked sempstress and her compeers, but consoles himself with the reflection that his part of the duty is to advise, and not to contrive the carrying out, the means of avoiding the dire results of habitual constipation, the result of prolonged sitting, overwork, and privation. The subject of the young ladies' seminary is treated in detail, and the "crocodile" (which would appear to be the *soubriquet* of the young lady when out walking) is held up to pity and commiseration. Dr. Fothergill would like to see a little less "deportment," and a good deal more exhibition of animal energy; and he ascribes much of the decadence which, he states, exists in latter day Americans to the enervating habits of idleness, in which American girls and young women of the middle and upper classes are brought up.

Under the head of "biliousness" is included a short description of the functions of the liver, which consists of a mixture of technicalities and humorous remarks, enlivened by quotations from Georges Sand, Dryden, etc., who were both apparently familiar with the "sharp pains in the liver, which produce symptoms, in all those that are subject to them, of profound sadness and a wish to die." To all such, Dr. Fothergill speaks words of comfort, and bids them "be of good cheer;" let them abstain from too frequent "nips" or too luxurious a table, and take a little exercise in the open air, and they shall go their way rejoicing.

Heart-disease and consumption are duly explained and commented upon, although they are rather the causes than the results of a sedentary life. With the title of "An Inward Complaint," a chapter is devoted to rectal disorders, the details and treatment of which should go far to damp the curiosity of the lay reader to go deeper into the subject. Dr. Fothergill weighs the advantages of sea-voyages for ill-health and overwork in a careful and judicious manner, and deprecates the indiscriminate expatriation of chest-patients, when so much can be done for them at home.

One of the most useful features of this book consists in hints as to the details of diet in different complaints, some of which are sufficiently ample to constitute a really admirable *ménu*. There is a dogmatic manner about Dr. Fothergill's writing which is refreshing in these days of doubt and uncertainty.

Diabetes and glycosuria, Bright's disease, and albuminuria, are made the subjects of several pleasant chapters, where the differences that are distinctions, and the distinctions that are not differences, are critically passed in review, the whole something after the jaunty style of Oliver Wendell Holmes' *Autocrat of the Breakfast Table*. The subject of albuminuria is treated in a judicious, albeit superficial manner; the fact that albumen in the urine is not of necessity a symptom of Bright's disease is insisted on, and, as the author says, "there are times when its presence causes us no disquiet; and there are times when its absence brings with it no comfort." There is a useful section on Gerocomy, which, we are informed in a footnote, is the science of treatment of the aged. The book is clearly printed on good paper, and will doubtless meet with a hearty reception, more especially from the layman with medical proclivities. The substitution of "tonic" for "toxic" in one or two places may, however, be the means of creating an erroneous impression on the minds of those to whom the context does not bring its own corrective.

Milk-Analysis and Infant-Feeding. A Practical Treatise on the Examination of Human and Cow's Milk, Cream, Condensed Milk, etc.; and Directions as to the Diet of Young Infants. By Arthur V. Meigs, M.D., Physician to the Pennsylvania Hospital, and to the Children's Hospital. Philadelphia: P. Blakiston, Son, and Co. 1885.

This small octavo of a hundred pages contains more solid original matter than many a bulky treatise of a thousand. The name of Dr. J. F. Meigs was well known in this country as that of a physician of great experience, who had made important clinical contributions to the study of the diseases of children; and his son has done well to

dedicate this little treatise, the outcome of much elaborate laboratory work, to his father's memory.

Dr. A. V. MEIGS has made a considerable number of analysis of human milk; and the point to which he attaches importance is, that the quantity of casein is always a great deal less than is usually stated. Unless we have grievously misunderstood him, Dr. Meigs persists in calling all the albumen of the milk casein—an eccentricity of terminology for which he offers no excuse. It will, we fear, somewhat interfere with the general acceptance of his results by chemists. A careful study of his method of analysis leaves no doubt that he has accounted for all the albuminoid bodies in milk, and has called all albumen casein. The method is tedious in the extreme, but certainly appears to account for everything. A weighed quantity of milk is diluted with double its bulk of distilled water, and then double its bulk of ether is added, and the mixture agitated in a large bottle; a bulk of alcohol equal to the bulk of ether (that is, twice the bulk of the milk) is added, and the mixture again agitated. The supernatant layer of ether holding fat in solution is then drawn off; a small quantity of ether is then again poured on, and again drawn off; this is repeated five times; the ethereal washings are mixed and evaporated, the residue being taken to be fat. The fluid remaining, consisting of sugar, "casein," salts, water, and alcohol, is very thoroughly dried over a water-bath; the dry residue is treated with boiling water, and the clear solution poured off; this solution is again dried, and again treated with boiling water; this is repeated four times, any residue being on each occasion added to the first residue. The final solution contains all the sugar; and the combined residues all the "casein," together with salts. The true quantities of casein and sugar are ascertained by incineration. Dr. Meigs therefore obtains three residues—fat, "casein," and sugar. He shows that the sugar contains no body convertible into ammonia; the "casein," no body capable of reducing Fehling's solution. He assumes, but does not mention any direct experiment in proof, that the fat contains no albuminoid body. The chances are, of course, that it does not.

Using this method, the author has made a series of analyses of human milk. The analyses of milk of eight different women are given; but, in order to obtain an average milk, two samples, obtained by mixing together the milk of a number of women, were analysed. In one case the mixed milk of twenty-seven white women, in another the mixed milk of eight negro women, was thus analysed. The following table shows the percentage or fats, casein, and sugar, in the ten specimens examined.

	Fat.	"Casein."	Sugar.
Average of 27 white women.....	4.389	1.058	7.417
,, of 8 negro women	3.942	1.071	7.490
,, of the 43 women whose milk was examined.....	4.283	1.046	7.407

The maximum quantity of "casein" found was 1.268, in the milk of an Irish woman aged 30, whose child was fifteen months old; the amount of fat and sugar in this milk was about average. The minimum quantity of "casein," .729, was found in the milk of a Scotch woman aged 36, whose child was ten months old; her milk contained an unusual quantity of fat (nearly twice the average), and about the average quantity of sugar. We may here call attention to a possible source of fallacy. It is said that, when milk is allowed to stand for some time, part of the casein gives origin to a fat. Only two analyses of cow's milk by this method are given; and they show a rather lower percentage of casein than is generally stated, the average being as nearly as possible 3 per cent.

The two most important results of the analyses are, firstly, that the composition of human milk is far more constant than an inspection of the discordant published analyses would lead one to believe; and, secondly, as above said, that the amount of casein is very small, only about one-third as much as in cow's milk. Further, the author says that, if cream, milk, water, lime-water, and milk-sugar be mixed together in proportions dictated by the results of the above analysis, the resulting mixture, in appearance, reaction, and (*mirabile dictu*) taste, is "strikingly like human milk." The composition of the infant's milk, or artificial human milk recommended by the author, is: cow's milk, 5 c.c.; cream, 10 c.c.; milk-sugar, 2.2 grammes; lime-water, 10 c.c.; and water, 15 c.c. In practice, a milk of this composition may be thus obtained. Milk-sugar, 17¾ drachms, is dissolved in one pint of water. This solution can be kept for a day or two in a cool place. The nurse mixes together solution of milk-sugar ʒiss. milk ʒss, cream ʒi, lime-water ʒi. This quantity is sufficient for each meal during the first few weeks; subsequently, the quantity should be increased. Here Dr. Meigs makes a good point by showing that the milk of a nursing mother does not increase in concentration during lactation; and that, therefore, artificial feeding will be made more like natural feeding at the breast by increasing the quantity of the artificial milk given, and not by rendering it more concentrated. From the observations of Bouchaud, which were confirmed by Parrot, it appears that a healthy child takes about one pint of milk from the breast each day during the first three months of life, but about one pint and a half from the sixth to the ninth month.

NOTES ON BOOKS.

A Code of Medical Ethics, with General and Special Rules for the Guidance of the Faculty and the Public in the complex relations of professional life. By JUKES DE STYRAP, M.K.Q.C.P., etc. Second Edition, revised and enlarged. London: J. and A. Churchill, New Burlington Street.—This is a second edition, revised and enlarged, of a very valuable code of medical ethics, prepared first by Dr. de Styrap for the Shropshire Ethical Branch of the British Medical Association. There are many who maintain the opinion that, in view of the clear general principles on which the conduct of medical men towards each other and towards their patients should be regulated, no specified code is necessary. Such an objection, however, applies rather to all codes of conduct than to this one in particular. No doubt the general rules of medical ethics are sufficiently well understood, and they may be summed up as being particular cases of general morals, and specific applications of rules of good conduct and courtesy common to every profession and incumbent upon all men. The complex relations of medical men, however, introduce many special conditions which afford frequent opportunities for doubt, of which interested persons are only too ready to give themselves the benefit; and it is only necessary to read the headings of Dr. Styrap's chapters to see how convenient and how advantageous it would be if practitioners in general would provide themselves with this excellent little work, and habitually refer to it as their authority for conduct in all cases of doubt. A man who penetrated himself thoroughly with the spirit of this book, and fortified himself by its examples, would render himself proof against many annoyances which occasionally occur in ordinary practice, and would have a standard of inestimable benefit to himself, and of much use for reference if cause for discussion with those who surround him should arise. It not only gives a code of general rules for the guidance of medical men, and of their patients, in the complex relations of professional life, but it treats specifically of the duties of practitioners to their patients; of the duties of patients to their medical advisers; the duties of practitioners in support of professional character and status; the duties of practitioners in regard to their professional services to each other, their families, widows, and children; the duties of practitioners in respect to vicarious offices; the duties of practitioners in consultations; the duties of practitioners in reference to substitutes or *locum tenentes*, and incidental interference with other than their own patients; the duties of practitioners when differences occur between them; the duties of practitioners in reference to professional charges; the duties of the profession to the public; the obligations of the public to the profession; the use of, and property in, prescriptions; "medical" etiquette or the rule of the profession on commencing practice, etc. A great deal of important new matter has been added to this second edition, and the whole of it has been revised with the assistance of eminent persons in the three countries of the United Kingdom. There is something stately and old-fashioned in the diction which well suits the subject, and adds to rather than detracts from the impressiveness and authority of the text. Apart from all specific instructions, there are noticeable in the book a high sense of justice, an element of dignity and self-respect, and a general sentiment of affection for all that is best in medical life and character, which combine to make it excellent reading. It is a book to be treasured for its own sake, and there is no one who will not feel strengthened by reading it, or, who having read it, will not put it in a handy place on his bookshelf for frequent reference, and who will not always turn to it with a sense of refreshment and help. It well deserves the authority which it has earned for itself by its purely intrinsic merits.

Health-Lectures for the People. Delivered in Manchester, 1884 and 1885. Vol. VIII. Manchester and London: John Heywood.—The value of these lectures continues to increase, and the present set of lectures includes: Soils and Sites, by Arthur Ransome, M.A., M.D., F.R.S.; Draining and Sewering, by Joseph Corbett, Esq., C.E.; Plans and Sections, by Francis Vacher, F.R.C.S.; Foundations and Materials used in Buildings, by John Holden, F.R.I.B.A., F.S.I.; Plumbing, by W. R. Maguire, Esq., F.R.M.S.; Decoration and Furnishing, with illustrations in colours, by G. F. Armitage, Esq.; Heating, Lighting, and Ventilation, by John Newton, Esq., M.Inst.C.E.; The Legal Position of Landlords, Tenants, and Sani-

tary Authorities, by J. E. Crawford Munro, LL.M. They are admirable. They are delivered at the Manchester Technical School to large audiences, composed chiefly of architects, plumbers, and men engaged practically in the various branches of the building trade. If our City companies would devote themselves to creating centres of this sort in London, and to giving intelligible lectures of the kind, they would confer a great boon. It is a pity that vast sums of money have been spent thus far in the erection of magnificent buildings on costly sites, while little has been done in a plain and unpretentious manner to create local workshop-centres at which plain lectures of the Manchester type could be given. It is seldom that we have found a volume of health-lectures so full of sound information, and so free from padding as this one.

Our Dwellings, Healthy and Unhealthy. By CATHERINE M. BUCKTON. With numerous illustrations. London: Longmans, Green, and Co. 1885.—Mrs. Buckton has added to the many obligations she has conferred upon the rising generation by this excellent little set of lectures, intended to describe and illustrate healthy dwellings for working people. She treats consecutively the description of the model of a healthy working man's dwelling; plan of a healthy dwelling; wall-decorations and colouring; ventilation; drain-pipes and traps; construction and testing of house-drains; drainage-systems of London; diseases caused by impure water; warmth and ventilation; furnishing a cottage; curtains, carpets, and decorations; the unhealthy dwelling; with an appendix of useful rules. The book is profusely illustrated, clearly written, carefully revised, thoroughly intelligible, and cannot fail to be of great use. Lectures of this kind are fortunately just now becoming very common in villages, towns, mechanics' institutes, and working men's clubs. Such a book as this will supply a clear and suggestive text for many such lectures.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE PERCUSSO-PUNCTATOR AS A THERAPEUTIC AGENT.

SIR,—I am much interested in the letters that have recently appeared on the use of the percusso-punctator. I have one, consisting of thirty needles, and in which the necessary force is produced by releasing a long spiral spring. It was obtained, some years since, of Bruno Zechel, Verlagsbuchhandlung, in Leipzig. I would refer anyone interested in the subject to a German work, entitled *Die Exanthematische Heilmethode*, by Dr. Med. C. Hermann Schauenburg. I have used the so-called "Lebenswecker" in a considerable variety of cases, and often with much apparent benefit. I have also taken notes of the information supplied by persons who had submitted to the treatment at the hands of irregular practitioners. In these cases, the somewhat heroic use of the method seems to have been productive of alleviation in the symptoms of hypochondriasis, and various functional nervous disorders. Baunscheidt himself was in the habit of using his instrument, followed by the application of an irritating oil, in an immense variety of cases. By this means he frequently produced pustular eruptions on the back and legs and other parts, of great extent and severity. Pyrexia, of many days' duration, was a frequent accompaniment of the condition thus induced. At one period, he had a very large and lucrative practice. This method of treatment is, on account of its irregular origin and intimate association with quackery, held in disrepute by the profession. It is, however, possible that the more heroic use of the percusso-punctator, with or without the application of some pustule-producing agent, would prove an useful addition to our list of remedial agents.—Yours faithfully, JOHN BENSON COOKE.
H. M. Convict Service, Portland.

SIR,—Having seen in your columns the letter of Dr. J. L. Crawcour (of New Orleans) respecting my invention, the percusso-punctator, I beg, in reply, to refer that gentleman to the letter I wrote, under the date of January 16th, in the BRITISH MEDICAL JOURNAL, itself a reply on the very same subject, to Dr. W. Johnstone Fyffe. I feel confident Dr. Crawcour will deem it a sufficient and satisfactory answer.—I remain, sir, yours truly, J. BRINDLEY JAMES.
Brindley House, Jamaica Road, S.E.

ANTISEPTICS IN EYE-SURGERY.—M. Panas, in a paper read before the Paris Académie de Médicine, on January 5th, 1886, dwelt on the improved results obtained by rigorously following the antiseptic method, both within and without the eyeball, in cataract-extraction. He uses the biniodide of mercury in the proportion of one in twenty thousand. The formula for the antiseptic fluid he recommended is biniodide of mercury 5 centigrammes, alcohol (90°) 20 grammes, distilled water 1 litre. This proportion may be approximately represented by the following prescription: ℞. Hydrargyri iodidi rubri, gr. 1; alcohol ethylici (90°) ℥i; aquæ distillatæ, Oii ℥v.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 30th, 1886.

HEALTH IN WINTER.

THE English climate, although extraordinarily variable within narrow limits, is in the main mild and equable, free from great extremes of temperature, and not characterised by any striking contrasts of season. We cannot count confidently upon heat in July, nor upon frost in December. The cutting blasts of May have ere now made it the most trying month in the year, despite the rhapsodies of the poets, and not rarely January possesses a mildness more appropriate to September. From such peculiarities of climate has sprung the fact that, in the regulation of food, clothing, and habit of life, we take comparatively slight notice of change of season, and frequently neglect climatic indications which are not sufficiently patent to thrust themselves importunately upon our notice. Hence the Englishman is conservative in matters of food and dress. Even when he turns colonist, and becomes a permanent resident in tropical or subtropical lands, he adheres to his ancestral customs, and eats plum-pudding upon Christmas Day in Australia, and drinks bottled Bass's ale in Calcutta, regardless of consequences.

Yet it cannot be doubted that a due regard to season and a prudent adaptation of individual habit to climatic conditions would materially lower our death-rate, and augment the happiness and usefulness of human life among us. The mortality-returns of our winter months are swollen mainly by diseases due to exposure, such as bronchitis and rheumatism; and their prevalence in each class of society is, to a very large extent, proportionate to its ability or inability to protect itself against the vicissitudes of weather. The adoption by all classes during the winter months of underclothing composed of a material like flannel, which maintains a fairly equal temperature of the body, absorbs perspiration, and hinders chill, would do much to promote health and avert disease. This is in every way preferable to the use of heavy overcoats or other outer garments, which are liable to be hastily cast aside, or not to be at hand when required. Specially to be deprecated is the use by delicate women of sealskin-jackets, which enjoy much popularity from their handsome appearance, and the luxurious sensations which they confer upon the wearer. They are objectionable, because our average winter weather is far too mild and open to demand the constant use of furs of any kind, which are appropriate enough to the winter rigours of Minnesota or Winnepeg; they envelope the wearer in a close overheated atmosphere, hindering the exhalations of the body, and strongly predisposing to chill; they are too heavy to be easily borne, and, consequently, they tend to

limit healthful exercise. On all these grounds, we think the profession would act wisely in discouraging their general adoption by the wealthy classes as their appropriate winter attire.

The condition of the feet calls for attention in winter, as the constant wet of our streets penetrates through ordinary boots, and produces a damp and chilly sensation. This may be guarded against by the use of waterproof overshoes, of inside linings, or equally well by always keeping two or three pairs of boots in constant use, and changing them frequently, according to the state of the weather and the condition of the streets.

The hands should be covered in winter while the individual is out of doors, and, if subject to chilblains, he should recollect that this troublesome affection owes its origin to deficient circulation of the blood, and must be combated by maintaining the warmth of the affected parts.

The condition of the sleeping-room at night calls for attention during winter, the two chief points being the regulation of heat and of ventilation. Much depends upon the size and position of the room, the number, ages, and constitutional condition of the occupants, and the actual state of the weather. The indications are, of course, to maintain a reasonably warm, uniform, and pure atmosphere. Probably not many people can sleep with comfort if the temperature of the room sink to 40° Fahr., and possibly this is rather low a limit for the majority. If the morning temperature fall to this point, some means of artificial warmth had better be adopted; and nothing is more convenient or more suitable than a small fire in an open grate, so arranged that the heat shall at no time be excessive, and that it shall die out gradually and not suddenly. Here again the state of health and sensations of the individual must be our guides. To a person in robust health, who has plentiful sources of heat within himself, and who does not know what it is to awake feeling chilly, artificial warmth of any kind at night is unnecessary, and should, therefore, be avoided. On the other hand, a thin-blooded, anæmic person, especially if prone to bronchial catarrh, should sleep in a moderately warm and equable temperature, however this may be best secured.

As regards ventilation, it is hardly any longer necessary to insist upon the necessity for pure air, both by night and by day. In summer it is a good practice, for those in health, to sleep with open windows (draughts being guarded against); but this wholesome practice should not be persisted in during the winter season, if experience show that it is not readily tolerated. A fall of temperature of 10° during the night is not uncommon in our climate, and would be dangerous to many persons if sleeping with open windows. The bronchitic especially must be watchful in this regard ; while on the other hand nervous persons and exhausted brain-workers, if free from all tendency to pulmonary weakness, may justifiably risk a little cold for the sake of pure air.

An impression prevails in many quarters that there is something actually noxious about night-air, *per se*, an idea for which there is no adequate foundation. It is no doubt true that, in low-lying marshy districts, exhalations frequently arise after sun-down, and are likely to be unwholesome; but this objection does not apply to houses in good situations, and further, the really dangerous time is rather the hours immediately after sunset than those usually devoted to sleep.

These remarks on dress, sleep, exposure, etc., while universally applicable more or less, apply with peculiar force in the case of children. They lose heat more readily than adults, and are more seriously affected by chill. They, therefere, need thorough protection against changes of temperature, and the common practice of exposing their legs and arms cannot be too strongly condemned. There can be no doubt that the careless and needless exposure of children is one of the most fruitful causes of infant mortality, causing not merely pulmonary diseases and rheumatism, with its long train of sad sequelæ, but intestinal and renal affections, and, in fact, a preponderating proportion of the maladies to which infant flesh is heir.

The question of the advisability of the cold morning bath in winter must depend upon the habits and constitution of the individual. The person who can take and enjoy his cold plunge when the frost is at the window and the snow lies thick, is a fortunate individual, and possesses one of the most solid guarantees of health ; but many who benefit by the cold bath in summer are unable to take it with advantage in winter. The rule on this subject is precise and plain. If reaction be speedy and sufficient, the cold bath does good ; if it be slow and deficient, if the individual feel chilled and depressed for some time subsequently, the cold bath is doing harm, and should be abandoned.

The question of the diet most suitable for winter hardly receives the attention from us which it clearly deserves. In the first place, more food is as a rule required in the cold than in the warm season. Not merely is digestion then more active, but more food is required to protect against cold. Sir John Franklin, in his Arctic expedition, found that, if his men went to bed fasting, nothing could keep them warm, but if they had supped heartily, they easily resisted the cold. The heat-producing elements of food are manifestly indicated for a winter dietary. Fat, in the form of butter, bacon, suet-puddings, etc., should enter largely into our food during the cold season ; and here the palate is a safe guide, as we easily tolerate during winter a quantity of oleaginous food-material which would be highly distasteful in summer. Other heat-producing articles of food are cheese, cocoa-nibs, and oatmeal. Pea-soup is very suitable for winter, and coffee is preferable to tea, its effect being as decidedly warming as that of tea is cooling.

By such simple rules as these, we may greatly augment our comfort and promote health. To adjust ourselves to our physical surroundings is the first intuition of man, and the last dictum of science. In proportion as we succeed in doing so, are we learning to live wisely, healthily, and happily.

CAUTERISATION IN HYDROPHOBIA.

Deaths from hydrophobia continue to occur ; we may hope that, under the operation of the recent police regulation with regard to stray dogs, the disease may soon be rooted out, at all events in the districts which are thus protected. So far, that desirable end has not been attained ; it is therefore all the more necessary, while the cause of the mischief is still existent, to redouble our exertions to treat the malady itself, should it present itself in the only stage in which it can be arrested, with the greatest possible effect.

Everyone must have noticed that, in a number of the fatal cases lately reported, the wound has been cauterised when freshly inflicted. The bitten person died, nevertheless, in due course, at the end of the incubation period. This fact does not, of course, show that the caustic agent was insufficient to destroy the germ of disease if that were reached. A lapse of an hour or two may, perhaps, have been

allowed to baffle all attempts to destroy the poison, which, once absorbed into the system, is gone beyond recall or cure. Or, perhaps, some infected corner of a wound has, in some way, escaped the burning agent.

There are persons, we know, who make very light of dog-bites; a poultice is enough in their opinion to prevent all evil effects. It soothes the torn surface, it settles the startled imagination, and the rest may be left to Nature. Such persons are apt to doubt the reality of hydrophobia, and their comfortable faith in the power of littles is thus easily accounted for.

To us, the preventive benefit of early and thorough cauterisation is as much a fact as hydrophobia itself. We are, therefore, the more anxious that in all cases of dog-bite, particularly if a possibility of rabies exist, no care should be omitted which may assure the effect of the best and readiest remedy. The prophylaxis of hydrophobia is, to some extent, that of all poisonous wounds. Free bleeding from the bite, if it can be obtained, is consequently an advantage. The bitten person should, therefore, lose no time in pressing the parts round about the wound with his hands, taking care that these have no cuts on them, or, better still, if, as usually happens, a finger or part of a limb be bitten, should tie a string or handkerchief above the seat of injury, to stop the venous blood-flow, and should bathe or souse the part in hot water. All this need not occupy more than a few minutes.

The next step (or the first one if the bite be not newly inflicted) is cauterisation. It has been customary to recommend excision of the edges of the wound before burning it; and such is undoubtedly a good practice. It is possible, however, that a wound may be found to be too much lacerated to allow this to be readily done. If this be the case, rapid cleansing with water must suffice instead of it. Thorough and searching cauterisation of every corner of a wound, or trace of abraded skin, must then be resorted to. For this purpose, lunar caustic is by no means the best agent, though the best known. The burning process must be accomplished by stronger measures, which will not only sear the mere injured surface, but will penetrate for some distance into the layer of tissue beneath it. Strong acids, as pure nitric acid, sulphuric acid, or caustic potash, are caustics of the kind in question. Nothing, however, is equal to the heated iron or wire; and the momentary pain inflicted by this means may well be preferred by persons whose other choice may be the fatal agonies of hydrophobia. If the burning be efficiently accomplished, and the surrounding parts well washed with some alkaline solution—soap and water will do—to remove all possible traces of mucus, etc., from the neighbourhood, we may hope, with fair reason, that hydrophobia, after cauterisation, will be somewhat rarer than it now seems to be. Before all things, let it be noted that nothing is so perilous after the reception of a rabid bite as delay in treatment.

COLD AND PHTHISIS.

Professor Jaccoud, in his work upon *The Curability and Treatment of Pulmonary Phthisis*, of which a translation not long ago appeared from the pen of Dr. Montagu Lubbock, remarks upon the erroneous notion which has long prevailed of an etiological connection between cold and phthisis. "Cold is believed to favour the formation and development of tubercle, it being forgotten that tuberculosis is not bronchitis. On the other hand, it is stated that heat deters the formation and evolution of this product, a fact which is shown to be untrue by the frequent occurrence of phthisis amongst the inhabitants of warm countries." This erroneous hypothesis long dominated medical practice in two important directions: first, in the routine recommendation of warm climates as the natural health-resorts for consumptive patients; and secondly, in the prescription to consumptives while, at home, of a mode of life based on a maximum of warmth and a minimum of exposure. The invalid line of treatment pursued at home, alternating with a winter residence in southern Europe or northern Africa, has long been the accepted practice of the profession, but its results have been unsatisfactory, not to say disastrous. It has culminated in general acquiescence in the conclusion that phthisis is essentially an incurable disease; that the duty of the physician is simply to combat complications, and render life as tolerable as possible; and that for the patient remains nothing but a few months or years of increasing weakness, to be followed in due course by inevitable death. A theory and a practice attended by such results should command our adhesion only so long as the evidence in their favour is utterly overwhelming.

Let us inquire on what evidence is based the venerable prejudice, that warmth and invalidism are the foundations of treatment in pulmonary phthisis. We have seen how unfavourable have been the results attending it. It is clear that *à priori* considerations lend no support to this idea, for nothing is more certain than that tuberculosis is common in warm countries (especially, we believe, the so-called "acute" form), while we now know that it is relatively very rare in high mountain regions, and that above a certain altitude the immunity from it is absolute. Yet it is not difficult to conjecture to what the orthodox treatment of phthisis owed its origin and long popularity. The influence of the recognised methods of treatment in bronchitis has probably been powerfully operative. Here are two diseases both characterised by chronic cough, and frequently simulating each other by a long train of more or less analogous symptoms. A warm uniform moist atmosphere, and the adoption of an invalid life being of recognised therapeutic value in bronchitis, it was not unnatural that an assumed parity of reasoning should dictate a similar line of treatment in phthisis. Further, the consumptive patient sooner or later suffers from the complication of bronchial catarrh, which, of course, is relieved by a course of treatment similar to that adopted in ordinary bronchitis. The consumptive, too, readily lends himself to this erroneous line of treatment. He is more or less emaciated and anæmic, he lives in a constant dread of "chill," and his prevailing asthenia induces him to welcome readily the invalid life, with its ease, comfort, and luxury. He feels unequal to much physical or intellectual effort, and gladly acquiesces in the idea that such effort is not to be expected from him. We have little doubt that to such considerations may be traced the genesis of the long-prevalent treatment of pulmonary phthisis.

The arguments in favour of the adoption of a radically opposed line of practice have great weight, and are daily winning a wider adhesion. The pathology of tubercle is still involved in much mystery; but we know that its favourite site is in the least functionally active portion of the lung; whence the conclusion is not difficult that it should be combated by modes of life which favour exercise, and not by those which involve rest, of the lung. In the warmth of his invalid chamber, and in the luxurious ease of subtropical climates the consumptive reduces respiratory exercise to a minimum. He succeeds, perhaps, in relieving his bronchial catarrh, but at the tremendous expense of favouring the further development of tubercle, or the

softening of the deposit already existing in his lungs. Such a mode of life has the further grave disadvantage of inducing dyspepsia and retarding nutrition; while nothing is more evident in the treatment of phthisis, than the fatuity of expecting any real progress while digestion and absorption are feeble and defective.

When we come to consider the conditions presented by a vigorous open-air life, especially in a cold climate and at a high elevation, we see how much more favourable they are for the consumptive patient. These conditions are well pointed out by Professor Jaccoud. The cold stimulates the cutaneous circulation, thus relieving the internal organs, and among them the lungs, by which means their tendency to passive congestion is combated. It tempts to outdoor exercise and amusement, and in this way increases the efficiency of the pulmonary circulation, promotes appetite and nutrition, and tends to improve the general health and vigour. The high Alpine resorts, with their combined cold and rarefaction of the atmosphere, have the peculiar advantage of promoting at once lung-exercise and pulmonary anæmia, the latter safeguarding the former.

If the above considerations were universally applicable without exception or qualification, our advice to consumptives would be clear. We should recommend them when at home to lead an open-air life of wholesome activity; to ride, and hunt, and shoot; to shun cough-mixtures and the routine customs of the invalid, and to be of good courage. We should send them to Davos, St. Moritz, or Manitou Springs in Colorado, and put our veto upon the Riviera and Egypt. But such advice—although we believe in the main much more wholesome than the routine treatment of the past—would often fail to do good, and would occasionally work mischief. We have to deal with delicate subjects, easily fatigued, readily chilled, fearful, perhaps, of hæmorrhage, prone sometimes to troublesome complications. Rough measures, therefore, would be often both cruel and injurious. We must lure the consumptive back by insensible degrees from his invalidism to wholesome activity. We must be on our watch for complications which may at any moment necessitate a modification or reversal of such treatment. If the patient, unhappily, present no response to treatment, and steadily lose ground, we must be content with the old-fashioned routine of mitigating symptoms, and soothing the last hours of life.

In the selection of a foreign health-resort, we must distinguish between cases that afford hope of cure, and those that admit only of alleviation. We believe further experience will show that an increasing preponderance of the former class benefit by the cold mountain-resorts, while, no doubt, Algiers, Madeira, and Egypt, will retain their popularity for those patients who are content to be relieved of their most distressing symptoms, and who have abandoned hope of ultimate recovery.

THE address on Lanolin by Professor Oscar Liebreich, which we recently published, was reported by Dr. Ernest Wende, of Berlin.

THE distinguished French physician, Professor Vulpian, has sent in his resignation as a member of the staff of the Hôtel-Dieu, Paris.

A MEDICAL man who has lived a long time among the Chinese writes that they treat cholera by acupuncture and cauterisation. Their explanation for this treatment will not convince Europeans; they believe thas the poison accumulates in certain parts of the body, and can be discovered by an adroit physician and extracted; nevertheless, it is of practical value, as the pains accompanying the cramps are immediately relieved by acupuncture.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

THE third conference in connection with this Association will be held at 3, Lamb's Conduit Street, W.C., on Saturday, February 6th, 1886, Mr. W. Bousfield, in the chair; on which occasion a paper will be read by Dr. Robert Rentoul, of Liverpool, on Thrift and the Working Classes. At a conference to be held on Saturday, March 6th, a paper will be read by Dr. Francis Hawkins on Medical Relief and the Management of Hospitals and Dispensaries.

A STRIKE AMONG MEDICAL STUDENTS.

THE medical students of the Brussels University have for some time refused to attend the lectures, and continue their studies; their return, it appears, does not at present seem probable. The reason they advance to explain their conduct, is the dismissal of the clinical professors by the hospital administration, in order to replace them by professors of their own choosing. The University is quite independent of State protection.

NAPHTHALIN FOR DRESSING ULCERS.

ACCORDING to Dovodtchikoff, naphthalin is an invaluable dressing for ulcers. He writes in the *Vrach*, that it is inexpensive and easily used, therefore of great service to poor people. After its application, granulations quickly appear, and cicatrisation is rapid; its antiseptic properties serve to remove false membranes and bad odours. Naphthalin dressings do not irritate ulcers, nor produce any pain, and patients can continue their avocations without any difficulty.

CREMATION IN PARLIAMENT.

IT is announced that it is not proposed to raise the question of cremation in the House of Commons during the present session, the members interested in the subject expressing themselves satisfied with the progress which the practice is making out of doors, and the evidence which has been obtained that legal obstacles cannot be placed in its way.

DEATH OF JULES GUÉRIN.

M. JULES GUÉRIN, the "Father" of the Academy of Medicine, died on Tuesday at Hyères, whither he had gone for his health a fortnight ago. He was born in 1801, and pursued his medical studies at Louvain and Paris. He was to the last a vigorous disputant, but of the most eccentric and anomalous character. He stoutly combated modern theories on cholera, as also M. Pasteur's inoculation for hydrophobia.

REGULATION OF SHOP HOURS.

SIR JOHN LUBBOCK has re-introduced his Bill for limiting the hours o labour of the young in shops. He proposes to prohibit any young person from being employed in a shop for more than twelve hours in one day. For this purpose "young persons" are defined as being those between the ages of 13 and 18, and a "shop" includes retail and wholesale shops and warehouses in which assistants are employed for hire, but not licensed public-houses or refreshment houses of any kind. For an infringement of the measure the penalty is to be a fine of £1, and offences are to be prosecuted in the same way as under the Factory and Workshop Act of 1878.

DEATH-CERTIFICATES.

AT the Nottingham Police-Court recently, Mr. William John Irvine, surgeon, was fined £3, with the alternative of a month's imprisonment, for issuing a false certificate of death in the case of Ada Mabe Brown, aged nine months. The prosecution was ordered by the Registrar-General. The child was attended to at the defendant's surgery by a medical assistant named M'Clure. The child afterwards died, and Irvine signed a certificate that death resulted from measles, without ever having seen the child. Defendant pleaded ignorance of the law, as his conduct would have been legal in Scotland and Ireland.

HYDROPHOBIA AFTER NINE MONTHS.

In the JOURNAL of January 23rd, we mentioned a case of hydrophobia, which declared itself after twelve months' incubation. Our Paris correspondent writes as follows, concerning a similar case: M. Féré read notes at a meeting of the Paris Biological Society, furnished by Dr. Jagot, of Angers, concerning a case of hydrophobia, which ended in death nine months after the bite. Fard, a prosperous artisan, was bitten on February 4th, 1883, by his dog, who had a few days previously been irritable, and refused to eat. The dog was shut up, but escaped; it bit a girl on the foot, but her boot only was injured, and she escaped. On November 7th, Fard showed symptoms of hydrophobia, and died within forty-eight hours.

HOW TO CURE FRECKLES.

M. HALKIN, in the *Annales de la Société Médico-Chirurgicale de Liège*, recommends the following process for curing freckles. After the skin has been well washed and dried, the folds of the skin are drawn out with the left hand, and, with the right, carbolic acid is painted on the freckle, and allowed to dry. During some days the spots appear more evident than before the application of the acid, and a kind of epidermic scale is formed. In seven or eight days the scale falls off; the skin thus exposed is of a rose colour, but afterwards becomes white.

DIPHTHERIA AT AYLESBURY.

DIPHTHERIA has recently been prevalent in Aylesbury, and all the public elementary schools in the town have, in consequence, been closed for a fortnight, by order of the local sanitary authority. The disease seems to have first made its appearance in October last, and, during the past three months, about fourteen or fifteen deaths have been registered. The earliest cases were among children attending a particular school, which was consequently closed for a time in November, but, as the disease still lingers in the town, the local authority have recently adopted the expedient of temporarily closing all the public schools.

RENAL SURGERY.

THE patient on whom Mr. Clement Lucas operated for total suppression of urine lasting four days, whose case has been previously noticed in the BRITISH MEDICAL JOURNAL, has now completely recovered. She sat up just before Christmas, the wound having soundly healed; and her urinary functions and general health are quite restored to their former state. Mr. Lucas explored a kidney for calculus on January 19th, in a young gentleman who had been under the care of Dr. Tirard, and for some time under the observation of Professor Humphry at Cambridge, for frequent paroxysmal attacks of acute pain in the region of the left kidney, which had been ruptured two years before. No stone was discovered, but a cicatricial adhesion between the colon and kidney. On January 22nd, Mr. Lucas operated in Guy's Hospital on a patient of Dr. Boyce's, of Maidstone, for a dilated strumous kidney, which he drained through the loin. These patients are progressing favourably.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

THE following lecture arrangements for the year 1886 have been issued by the Secretary. The lecture-hour will be 4 P.M. precisely, each day. Mr. John Bland Sutton (Erasmus Wilson Lecturer), three lectures on Evolution in Pathology, on Monday, Wednesday, and Friday, February 8th, 10th, and 12th: Professor Charles Stewart, six lectures on the Organs of Hearing, on Mondays, Wednesdays, and Fridays, February 15th, 17th, 19th, 22nd, 24th, and 26th: Professor Alex Hill, three lectures on the Brain Mechanism of Smell and Sight, on Monday, Wednesday, and Friday, March 1st, 3rd, and 5th: Professor Frederick Treves, six lectures on the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia, on Mondays, Wednesdays, and Fridays, March 8th, 10th, 12th, 15th, 17th, and 19th: Professor William Arthur Brailey, three lectures on the Muscles and Fasciæ of the Orbit, on Monday, Wednesday, and Friday, March 22nd, 24th, and 26th: Mr. Leonard Charles Wooldridge, three lectures on the Physiology of the Blood, in June: Professor Henry Power, three lectures on the Diseases of the Lachrymal Organs, in June: Professor William Cadge, three lectures on Stone in the Bladder, in June. The dates of the last three courses will be announced.

LEAD-POISONING AT UTRECHT.

THE Utrecht white lead factory appears to need special supervision, since, out of the fifteen operatives employed there, forty-nine cases of lead-poisoning have occurred, as is seen by the hospital-register for 1885. This is at the rate of more than 300 per cent.; and that these statistics are in reality below the actual number of cases, is evident from the fact that only those cases are included which are directly and indisputably connected with lead-poisoning, and also that no cognisance is taken of cases attended in the homes of the operatives.

POSTGRADUATE LECTURES ON THE DISEASES OF WOMEN.

A COURSE of six lectures on the Medical and Surgical Diseases of Women will be given at the Chelsea Hospital for Women, by the Physicians, Dr. Aveling, Dr. Edis, and Dr. Fancourt Barnes, and the Senior Assistant-Physician, Dr. Phillips, as follows. Monday, February 8th, Lecture I, by Dr. J. H. Aveling, on Inversion of the Uterus; February 15th, Lecture II, by Dr. A. W. Edis, on Dyspareunia; February 22nd, Lecture III, by Dr. Fancourt Barnes, on Perinæorraphy; March 1st, Lecture IV, by Dr. A. W. Edis, on Removal of the Uterine Appendages; March 8th, Lecture V, by Dr. Fancourt Barnes, on Sterility; March 15th, Lecture VI, by Dr. John Phillips, on the Various Modes of Treatment of Epithelioma of the Cervix Uteri. The lectures will begin at 5 o'clock each day, and will be open free to all duly qualified medical men, on presentation of address-card.

THE SENATE OF THE UNIVERSITY OF LONDON.

WE regret to have to announce that a lawyer has been appointed by the Crown to fill the vacancy on the Senate of the University of London occasioned by the death of Dr. W. B. Carpenter. Mr. Henry Mathews, Q.C., has not rendered, so far as we are aware, any very conspicuous services to the cause of education; but even were this so, it is a bad precedent to establish. The legal profession is already largely represented on the Senate, and Dr. Carpenter was one of the few representatives of the teachers of Biology. A very large proportion of the graduates of the University have graduated in one or other of the scientific faculties, and it would seem to be only just that the number of scientific members of the Senate should not be reduced. The University ought now to be old enough to manage its own affairs, and elect its own Senate; but autonomy will never be obtained so long as a contribution is accepted from the Treasury.

INSPECTION OF FACTORIES IN HOLLAND.

AT the winter session of the Medical Council for North Holland, Heer J. A. Van Hamel urged the necessity for a systematically organised nspection of factories and other places of work throughout the land, with a view to the improvement in the sanitary conditions of the factories and the health of the operatives. Three points must be taken into consideration: the position or locality of the factory, the measures of security against unhealthy occupations, and the general improvement of all the conditions of labour. For this purpose, Heer Van Hamel moved, first, that the Home Minister should be requested to call an extraordinary meeting of inspectors; and second, that, in case of refusal, the inspectors should be communicated with directly, with a view to entering upon deliberations. The first point was carried by a majority; the second by general consent.

EDUCATION OF THE BLIND AND OF THE DEAF AND DUMB.

THE *Gazette* contains the appointment of a Royal Commission to investigate and report upon the condition of the Blind in the United Kingdom, the various systems of education of the blind, elementary, technical, and professional, at home and abroad, and the existing institutions for that purpose, the employment open to and suitable for the blind, and the means by which education may be extended so as to increase the number of blind persons qualified for such employment, and also to investigate and report similarly upon the condition and education of the deaf and dumb, as well as such other cases as from special circumstances would seem to require exceptional methods of education. The Commissioners named are Lord Egerton, the Bishop of London, Sir L. Playfair, M.P., the Right Hon. A. J. Mundella, M.P., Sir H. J. Selwin-Ibbetson, Bart., M.P., Admiral Sir E. S. Sotheby. Mr. B. St. John Ackers, Dr. T. R. Armitage, Mr. W. A. Arrol, Dr. Z. J. Campbell, Mr. E. C. Johnson, Dr. R. M'Donnell, and Dr. W. T. Robertson.

PROFESSIONAL COURTESY.

A CORRESPONDENT writes: "The want of consideration and courtesy on the part of some members of the staff of the London hospitals—and especially of the junior staff—towards general practitioners, is unfortunately but too often a matter of complaint from those of the latter who come into contact with them. The older masters in our profession always inculcated the propriety of forbearance between fellow-practitioners and the duty incumbent upon all to conceal, as far as possible, the shortcomings of a colleague. It may be admitted that the diagnoses of the despised general practitioner are not always impeccable; but when we consider the disadvantages under which he labours, and the scant time at his disposal for an inquiry into the case which he is called upon to treat, we can only wonder that he so generally contrives to arrive at a correct opinion on the subject. On the other hand, these very members of the junior staff, who are so ready to wound the feelings and damn the reputation of a colleague by their unconcealed contempt for his opinions, themselves partly owe their relative immunity from criticism to the peculiarity of their position. Their errors of diagnosis and inadequacy of treatment only transpire in the *post mortem* room, 'far from the madding crowd,' and are charitably condoned by the privileged few who are present. In short, since we are all liable to errors of judgment, let us at least be indulgent towards those of the overburdened general practitioner, who has neither the time nor the facilities that fall to the lot of the more favoured hospital resident or consulting man. The period of residency is at best but short, and the majority of the gentlemen holding these appointments sooner or later suffer themselves from the effect of a *regime* which they did their share to perpetuate."

SICK AND WOUNDED IN WAR.

THE Executive Committee of the British National Society for Aid to the Sick and Wounded in War have published a report of their operations during the Egyptian campaign of 1884-85, together with a statement of receipts and expenditure. Before referring to the work done in this campaign, however, the Committee give a brief sketch of the society's operations, at home and abroad, since the termination of the Russo-Turkish war, in the course of which over £30,000 was expended in relieving the belligerents on both sides. They point out that in the Zulu war, in 1879, the sum of £1,727 was spent by the society, with the most satisfactory results, in the purchase of medical comforts for our sick and wounded soldiers; and again, during the Boer rebellion, in 1881, about £1,100 was expended in providing extra comforts to invalids in hospital, and in other ways alleviating the sufferings of the soldiers. In 1880 the Committee, desirous of carrying on some form of the work of the Society in time of peace, and having in view the valuable services rendered during the South African wars by the female nurses trained at Netley, resolved to train a regular staff of nurses, at the expense of the Society. The Government approved the scheme, and, with their permission, a number of ladies were sent to Netley Hospital for training. Since that time. the Society has had twelve sisters under training; and on March 31st last, the whole staff of eight nurses was draften into the regular service, in compliance with the new regulations for army-nurses. In the Egyptian campaign, Major J. S. Young, Assistant Commissary-General, was selected as commissioner of the Society; and Sir Allen Young, C.B., who afforded valuable help to the Society on the Nile, was subsequently appointed commissioner afloat, attached to the Suakin Ambulance. The report gives an interesting account of the difficulties the Society encountered in getting their supplies up the Nile in their steam-launch, the *Queen Victoria*, and of the perseverance with which these difficulties were surmounted. A staff of medical men and four nursing sisters were sent out to Egypt, and the way in which they did their work evoked alike the gratitude of the army and the commendation of the Society. The Committee acknowledged the assistance readily given to the officers of the Society in Egypt in carrying out their work, for which all ranks, from the highest in command to the humblest in service, were grateful. The Princess of Wales's branch of the Society did excellent work, and the Committee especially thank Lady Baring, president, and Mrs. Davis, vice-president of the branch, for their labours. The statement of accounts showed that £19,352 9s. 3d. was expended by the society during the campaign.

THE NEUROLOGICAL SOCIETY OF LONDON.

THANKS, in a great measure, to the energetic initiative and perseverance of Dr. de Watteville, the editor of *Brain*, an association called the "Neurological Society of London," has just come into existence. At an informal meeting, a couple of months ago, at 30, Welbeck Street, it was decided that such a society should be formed, and an influential committee was appointed to frame a constitution. This was presented and adopted at a second meeting, and the Society formally constituted itself by the election of a Council. Dr. Hughlings Jackson has been elected president for the ensuing year, with Dr. Wilks and Sir James Crichton Browne as vice-presidents. Dr. Bristowe has accepted the treasurership; whilst, on the Council, are Drs. Bastian, Broadbent, Bucknill, Buzzard, Ferrier, Mr. Galton, Mr. Hutchinson, Mr. Romanes, Dr. Savage, and Professor Schäfer. Drs. Hughes Bennett and de Watteville will act as secretaries. It is intended to include in the programme of the Society not only neurophysiology and pathology, but also that aspect of neurology which bears upon psychology, both normal and morbid.

THE HARVEIAN SOCIETY.

THE annual conversazione of the Harveian Society was held on January 21st, when Dr. Thomas Morton, the retiring president, delivered the annual address, on the Influence of Public Morals on the Public Health. The officers for the ensuing year, proposed by the Council, were re-elected; the names were given in the JOURNAL for January 16th. Dr. Hughlings Jackson took his seat as President. Subsequently the members inspected the numerous works of art, and other objects of interest which had been lent for exhibition. Messrs. Boning and Small had sent a large painting of the Council of the Royal College of Surgeons, during the presidency of Mr. Cooper Forster, a picture which deserves some commendation on account of the general faithfulness of the portraits. Mr. H. E. Juler exhibited and demonstrated his electric ophthalmoscope; it is designed only for the direct method of examination, and has many great advantages; the light is excellent, not too strong, and always directed automatically in the right direction. Surgical and scientific instruments, engravings, tapestries, and embroideries, were lent by several well-known firms. Dr. Percy Boulton and Dr. Griffiths lent collections of Japanese curiosities, and numerous paintings and engravings were lent by various members and friends.

BRITISH GYNÆCOLOGICAL SOCIETY.

AT the annual meeting of the Society, January 13th, the following were elected officers and council for the ensuing year:—*President:* Lawson Tait, F.R.C.S. *Vice-Presidents:* J. H. Aveling, M.D.; G. Granville Bantock, M.D.; T. More Madden, M.D. (Dublin); Alfred Meadows, M.D.; Paul F. Mundé, M.D. (New York); T. Nunn, F.R.C.S.; A. Pinard, M.D. (Paris); D. Lloyd Roberts, M.D. (Manchester); C. H. F. Routh, M.D.; J. Griffiths Swayne, M.D. (Bristol). *Treasurer:* Arthur W. Edis, M.D. *Council:* Alfred Cooper, F.R.C.S.; Robert Bell, M.D. (Glasgow); J. E. Burton M.R.C.S. (Liverpool); J. G. Sinclair Coghill, M.D. (Ventnor); J. Halliday Croom, M.D. (Edinburgh); T. M. Dolan, M.D. (Halifax); J. J. Macwhirter Dunbar, M.D.; A. R. Graham, M.B. (Weybridge); W. Hope, M.D.; Francis Imlach, M.D. (Liverpool); T. Vincent Jackson, F.R.C.S. (Wolverhampton); W. Culver James, M.D.; A. V. Macan, M.D. (Dublin); J. J. Merriman, M.R.C.S; Henry Monckton, M.D. (Maidstone); J. Mansell Moullin, M.D.; R. D. Purefoy, M.D. (Dublin); A. Milne Murray, M.D. (Edinburgh); H. A. Reeves, F.R.C.S.; T. Savage, M.D. (Birmingham); R. T. Smith, M.D.; W. Travers, M.D.; John Wallace, M.D. (Liverpool); W. Walter, M.D. (Manchester). *Secretaries:* Fancourt Barnes, M.D.; W. C. Grigg, M.D. The retiring President, Dr. Meadows, then delivered an address, which is published at page 181.

METROPOLITAN HOSPITAL SUNDAY FUND.

A MEETING of the Council of this fund was held at the Mansion House this week, to elect committees and officers for the year 1886, and for general business. In the absence of the Lord Mayor—who, it was stated, was engaged on magisterial business—the chair was taken by Sir Sydney Waterlow. Amongst those present were the Rev. Canon Nisbet, the Rev. Canon Ingram, M.A., the Rev. J. G. Finch, LL.D., the Rev. Septimus Hansard, M.A., the Rev. R. J. Simpson, M.A., the Rev. Main S. A. Walrond, M.A., the Hon. Reginald Capel, Mr. J. Boodle, Mr. J. Lawrence Hamilton, Mr. R. Moreland, Mr. J. G. Pitcairn, and Mr. H. C. Burdett. The Committee of Distribution and the General Purposes Committee were reappointed without change, as were also the officers. The Chairman stated that it was gratifying to find that there was this year an increase in the number of places of worship in which collections would be made in aid of the fund. In 1884, the number of Church of England congregations who contributed was 585, and Nonconformist 258; in 1885, the numbers were, Church of England 584, and Nonconformist 254; but the number this year would be, Church of England 604, and Nonconformist 286, showing an increase in the Church of England congregations of 20, and of Nonconformists of 32. This was only as far as was at present ascertained, and the numbers might be increased. This, he thought, was very satisfactory, after the controversy which had taken place. There were a few who had declined, but some of the members of the Council might be able to clear up any misunderstanding which prevented them from continuing their contributions.

THE REGISTRATION OF PLUMBERS.

THE proposition to educate, examine, and register plumbers was brought before the British Medical Association at the meeting of its Public Health Section in Sheffield by Mr. Ernest Hart in a detailed paper, of which the substance has been several times repeated. This proposition has been practically taken up by the Plumbers' Guild, at the instance of Mr. Shaw (the Master), Mr. Ernest Hart (who laid his proposals before the Plumbers' Congress, 1885), and Mr. W. R. E. Coles. A meeting of master and journeymen plumbers was held at the Guildhall lately to consider, with the Court of the Plumbers' Company, resolutions of the General Council appointed by the Plumbers' Company to give practical effect to the decision of the conference of metropolitan and provincial plumbers in October, 1884, in order to secure the greater efficiency of plumbing and draining work in connection with dwelling-houses. There was a numerous attendance. Mr. George Shaw, Master of the Plumbers' Company, occupied the chair. The resolutions referred to were to the effect that the Plumbers' Company be requested to establish a system of registration of plumbers within the city of London and within a circuit of seven miles thereof, the register to include masters and journeymen; that plumbers admitted to the register be entitled to use the letters "R.P." (Registered Plumber) after their names; and that the Court reserve the right to remove names from the register in cases of proved misrepresentation or other gross misconduct injurious to the trade and the public. After a lengthened discussion, in which there was a general agreement of opinion that the proposed registration would be not only an advantage to the masters and the men, but a protection to the public against bad workmanship, it was unanimously agreed that the Plumbers' Company should be requested to open such a register, that the names and addresses of the plumbers registered be published weekly during the months of March, April, and May, in the chief technical and daily newspapers, and periodically afterwards as the Plumbers' Company may decide; and the fees payable on registration were fixed at two guineas for masters and 10s. 6d. for the men, with an annual payment, the amount of which is to be determined by the General Council. Twelve names, four of them being masters and eight journeymen, were then added to the General Council, and the meeting closed with a cordial vote of thanks to the chairman.

THE JUMPERS.

DR. J. D. THORNTON, of the United States Marine Hospital Service, gives some further interesting details in the *New York Medical Record*, of the class of French-Canadians among whom the peculiarly hysterical affection, which we last week referred to under the title of "miryachit," or "lata," is prevalent. They are known as "jumpers,' and suffer from the same over-sensitive condition of the nervous system, with uncontrollable tendency to imitation, as we have described. They are found especially among the lumbermen—French-Canadians, who go over into Maine and the other lumbering districts. Dr. Thornton says:—

"I had from time to time heard lumbermen and others whose avocations lead them to spend much time among the French camps, speak of these 'jumpers,' but had given no credence to the, as I thought, absurd stories they related in regard to them, until one day, while attending to my duties in the waiting-room of my fumigating station, I incidentally let fall the window near my desk, by turning the button suddenly, thus letting the frame fall a short distance, making a quick, sharp noise, when three out of seven French-Canadians who were sitting near, awaiting their certificates of inspection, leaped into the air as if they had been shot, at the same time uttering a yell which would have done credit to a North-American Indian. From that time I was on the watch for these strange characters, and, when possible, made inquiries of them through my interpreter, in regard to the cause of their condition. Before speaking of this, perhaps it will be well to enumerate some of the manifestations which give them the characteristic name of "jumpers." One or two instances will be sufficient. Recently one of them, a French-Canadian of small stature, came out from an adjacent camp to the post-office. Just as he was about to ask the postmaster for his mail, he being a total stranger to the official, a man of 65 years of age, someone knowing the fellow to be a "jumper," mischievously cried out, "Grab him by the throat!" The fellow sprung like a cat, and grasped the old man by the throat, and held on until removed, the irate postmaster pouring forth torrents of invectives on the poor fellow, who really was perfectly guiltless. Another unfortunate wood-chopper had just come into camp from two days' work, and was standing near the large camp-heater, in which was a very hot fire, when someone cried, "Grab the furnace!" No sooner were the words said, than the poor fellow obeyed the order, and, as a result, left a scorched pattern of each hand on the nearly red-hot pipe, thus rendering him unfit for his work in the woods for some weeks. I could, were it not for taking up valuable space, enumerate instance after instance fully as peculiar as the above. In brief, it may be stated that at any time and under any circumstances, with the slightest provocation, and almost instantaneously on being spoken to, one of these fellows will obey any command, imitate any action, without regard to its nature, trivial or serious. He will leap on to a table,

or over a stove, or into a river or pond; throw any article or weapon he may have in hand in any direction indicated; will repeat any sentence or exclamation. So serious a matter is this, that many of the lumber-men absolutely refuse to admit a man known as a "jumper" into their camps. I find they are not wholly confined to French-Canadians, as occasionally a Canadian of Irish parentage will exhibit the same symptoms. As stated above, I have endeavoured, when possible, to investigate as to the cause of this peculiar and distressing condition; and while I find, without doubt, that primarily it is due to an inherited nervousness, the immediate cause is in taking such children, when small, and, while firmly held, tickling them until convulsive symptoms appear. This seems to be the story of such ones as I have made inquiries of. Whatever the cause, the condition is one much more easily acquired than lost, as it firmly clings to its victim far into adult life."

THE HISTORY OF AN EPIDEMIC OF TYPHOID FEVER.

DR. BENJAMIN LEE, of Philadelphia, Secretary of the State Board of Health, in a paper entitled The Debit and Credit Account of the Plymouth Epidemic, has given an extremely interesting and valuable account of this epidemic, tracing its origin very clearly to an outbreak in a certain house in Philadelphia, whose sanitary arrangements were defective. A man was visiting at this house late in 1884, and contracted typhoid fever there, other persons in the house having had the disease. He returned to his home in Plymouth, Pennsylvania, in January, 1885, and was ill several weeks. The town of Plymouth receives its water-supply from a mountain-stream, across which several dams have been made for the purpose of collecting the water into reservoirs. The house in which this patient lived was situated between two of these reservoirs, and within forty feet of the bank. His excreta during his illness were thrown either upon the snow toward the water-supply, or into an outhouse, the contents of which fell upon the surface of the ground. After March 25th, during a thaw, the snow melted, and the water from it ran into the reservoir. Ten days afterward, or in the usual time allowed for the incubation of typhoid fever, the epidemic made its appearance among the population supplied with the public water. The conclusion that here was a definite cause, was made still more evident by the fact that people obtaining their water from wells were not attacked. The number of deaths resulting was 114, and the total number of cases over 1,000. The actual pecuniary loss to the population in lost time, expenses of attendance on the sick, and other expenses, were estimated at over 100,000 dollars; and no better argument could have existed for the formation of a State Board of Health of Pennsylvania, which was organised during the following season. This case is one of peculiar interest to all communities having public water-supplies, as well as to the owners of private wells, and may be compared with the well-known and instructive history of the Caterham epidemic. A series of epidemics of this kind are reported and tabulated in a paper read by Mr. Ernest Hart at the Society of Arts on May 16th, 1879.

ACTION OF KAVA.

DR. LEWIN read a paper on kava, or rather kava-kava, before the Berlin Medical Society, on December 16th. The plant, the botanical name of which is *Piper methysticum*, comes from the Pacific Islands, and is there used by the natives on all festive occasions. European residents have also become kawa-drinkers more or less, especially in the Fiji islands. The effects vary extremely according to the dose. The first effect is a feeling of comfort and freshness, associated with tranquillity. Fatigues are better endured, and the mind is clearer. After larger doses, a state of happy indifference ensues, passing into a dreamy partial unconsciousness, without excitement at any stage. Excessive doses cause paresis of the limbs, nervous tremors, and somnolence. Dr. Lewin has been experimenting on animals for the last two years with kava. He finds two chief resins, one being soluble in alcohol, and only barely soluble in water. This "α-resin" has the chief properties of kava, and its chief effect on frogs is the abolition of the perception of peripheral irritation, a general anæsthesia. This arises from lowered excitability of the ganglia of the spinal cord.

TURPINE AS A THERAPEUTIC AGENT.

A CORRESPONDENT writes:—Turpine is a hydrate of turpentine (C_{10} H_{16} 2 H_2 0), and is more commonly known as turpentine camphor. It is obtained by treating the oil of turpentine with nitric acid and alcohol. It is crystallisable, and has the colour and taste of ordinary camphor, but is less pungent, and somewhat less terebinthinate. Dr. R. Lépine, of Lyons, has lately been making a series of experiments with this substance among his hospital patients, with what appeared to him very satisfactory results. Speaking roughly, its action resembles that of turpentine, but it is more active, consequently it must be employed in smaller doses. Dissolved in water or alcohol, its taste is by no means disagreeable, and it agrees very well with the majority of patients. In doses of from four to twelve grains, turpine increases the bronchial secretion, and, by rendering it more fluid, facilitates its expectoration. In cases of subacute and chronic bronchitis, turpine generally benefits the patient; in fifty cases so treated, all the patients without exception wished the treatment to be continued. If the dose be increased, the bronchial secretion is, on the contrary, diminished, and this action may be of service in bronchorrhœa, although further observation as to this is wanting. In moderate doses turpine acts as a diuretic, and is very valuable in certain class of cases where the quantity of urine is below normal; but, of course, it must be administered cautiously, if at all, in Bright's disease. In albuminuria, moderate doses of turpine diminish the quantity of albumen, and the symptoms often improve. In people with healthy kidneys, twenty-grain doses do not cause any untoward circumstances, though the excretion of urine may be curtailed. Its action on the nervous system is the same as that of large doses of the essence of turpentine. Given in large doses (one to three drachms) to dogs, hæmaturia and albuminuria result, the action of the drug appearing to be mainly on the kidneys. The best way to administer the drug is to prescribe the alcohol solution in a syrup or other convenient vehicle. When in larger dose, it is well to combine it with an astringent, to prevent any diarrhœa. The tincture of catechu is very suitable with this end in view. It is, moreover, apt to cause nausea in some patients. To sum up, turpine is preferable in the majority of cases to the essence of turpentine; "it is," says Dr. Lépine, "an excellent diuretic, acting on the renal epithelium, and has an useful effect on the bronchial mucous membrane, augmenting or decreasing the secretion according to the dose."

SCOTLAND.

EDINBURGH HEALTH SOCIETY LECTURE.

THE Edinburgh health-lecture last week was delivered by Dr. James, who took for his subject, "How to Live Long," and divided it into the following parts: 1, what was the natural limit of human life; 2, why there should be a limit, and on what this limit seemed to depend; 3, why the natural limit was so seldom reached; and 4, how we can best act so as to attain it. The subject, which was treated in a most interesting and instructive way, was attentively listened to and frequently applauded, and a cordial vote of thanks was given to Dr. James, and also to Bailie Anderson, who presided.

GLASGOW ROYAL ASYLUM.

THE annual meeting of the contributors to the Royal Asylum, Glasgow, was held last week. The report was read by the Secretary, and it stated that there were 483 patients in the asylum at the commencement of the year. There were 188 admissions and 161 discharges, 67 of which were recoveries, and 39 deaths, leaving the number resident at the end of the year 471. Of this total, 291 are private patients, and 180 are chargeable to parishes. There was an increase of ten private patients, and the decrease in the number of parish patients is due entirely to the removal, towards the close of the year, of a number of chronic and incurable cases to the lunatic-wards of poor-houses or other institutions, in order to make room for fresh cases. The

asylum has a reserve-fund which now amounts to £22,639 15s. 4d. The Chairman, in moving the adoption of the report, said the whole institution reflected the greatest possible credit on the directors and medical superintendents of the institution, and gave the utmost satisfaction to the public and friends of those in the asylum. The report was unanimously adopted, and the thanks of the meeting were given to Dr. Yellowlees and his medical attendants for the conscientious and efficient manner in which their duties had been discharged.

THE GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

IN connection with the forthcoming discussion on cancers at the above Society, a preliminary meeting was devoted to demonstrations on the subject, when museum specimens and microscopic sections of the disease were shown by several members. There was a very large attendance, and the arrangements made for enabling those present to view the numerous and excellent preparations submitted for inspection facilitated matters very much. The demonstrations were given simultaneously in different rooms, and at intervals. The chief series presented were those furnished by Drs. Macewen, Newman, Coats, and Maylard; and they were illustrative, in a most complete form, of the appearance of cancer in the different tissues of the body, and the mode of carcinomatous extension by the lymphatics and lymphatic glands. The first night of the discussion is fixed for January 27th, when the speakers are to be Dr. Joseph Coats, Dr. William Macewen, and Mr. Maylard.

THE GLASGOW UNIVERSITY AMBULANCE COMPANY.

CONSIDERABLE progress has been made in the formation of the proposed company of the Volunteer Medical Staff Corps in connection with the University of Glasgow. Nearly one hundred names have been received of medical students desirous of joining, and it has been decided to commence instruction at once. Through the kindness of Professor Young, the Lower Museum Hall of the University has been obtained for drill-purposes, and application has been made to the Senate to formally sanction the permission already granted by Professor Young. This has removed one difficulty in connection with the movement; and, if funds can be raised for providing sufficient ambulance-material for instruction in stretcher-work and first aid to the injured, nothing stands in the way of the success of the undertaking, as it has been very warmly taken up by the students of the different years.

PROFESSOR STIRLING.

DR. STIRLING, Professor of Institutes of Medicine in the University of Aberdeen, has accepted the Chair of Physiology in the Victoria University, Manchester, rendered vacant by the resignation of Dr. Gamgee. Soon after the vacancy occurred, candidates were requested to apply in the usual way; but, although the appointment is a valuable one, no well-known physiologist offered his services. The Council, recognising perhaps, that the future success of the Medical School depended to a large extent on their securing a strong man to fill the Chair of Physiology, refrained from appointing a successor to Dr. Gamgee. At length, however, they have succeeded in inducing Dr. Stirling to accept the appointment. The *Scotsman* announces: "We understand that Dr. Stirling has been led to prefer Manchester to Aberdeen, chiefly because the well-equipped laboratories of the physiological department of the Victoria University will enable him to engage in original research, and to have a number of investigators carrying on work under his direction. Dr. Stirling is one of the few men who have been invited to transfer their services from one university to another. Some years ago, Professor (now Sir Joseph) Lister was invited to join the staff at King's College, London, and more recently Professor Burdon Sanderson was asked to accept the Chair of Physiology at Oxford. It may be hoped that this system, which works well on the Continent, may ultimately prevail in this country."

THOMSON LECTURES IN ABERDEEN.

THIS course of lectures was finished by Dr. Macmillan last week, the concluding lecture being devoted to a consideration of diatoms, blood-prodigies, and fungi. Many of the diseases of animals and plants due to the presence of fungi were referred to, including such vegetable epidemics as cereal blights, vine, potato, and coffee diseases.

IRELAND.

KILDARE COUNTY INFIRMARY.

AT the Presentment Sessions recently held at Naas, the Treasurer of the County Kildare Infirmary applied for a sum of £600 for the support and maintenance of that institution. The application was opposed by some ratepayers, and, after considerable discussion, the presentment was thrown out by a majority of three votes.

CORK UNION.

AT a meeting of the guardians last week, a communication was received from the Local Government Board with reference to the admission of medical students to the hospitals, to which they stated they had no objection, provided the conditions laid down by the guardians were carried out. The question of accommodation for pauper-lunatics next came under discussion, and it was shown from a report of Dr. Cummins, the medical officer in charge of the female lunatics, made on December 31st last, that there were at that date in the female lunatic ward 121 patients and assistants, while there was only accommodation for 100. The guardians applied to the governors of the Cork Lunatic Asylum to take charge of these 21 surplus pauper-lunatics, but it was found that there was not any room for them in the asylum. In August, 1885, Dr. Nugent inspected the lunatic asylum, and then reported that it contained 945 patients, being 15 over the legitimate amount. This over-repletion he believed to be owing to the transfer of inmates from the poor-house, many of whom did not need asylum-treatment. He doubted the wisdom of this procedure, which, without corresponding benefit, would not fail to increase local taxation, through structural additions to the asylum. Dr. Nugent urged on the board of guardians the advisability of enlarging the lunatic-wards by the erection of a plain structure adjoining the existing building for the demented, quiet, and hopeless cases not unfrequently transferred to the asylum. The following resolution was adopted by the guardians after a considerable amount of discussion: "That the attention of the Local Government Board be called to the important report of Dr. Nugent, dated August 5th, 1885, showing the rapidly increasing number of admissions to the Cork District Lunatic Asylum, and to the letter of Dr. Eames, medical superintendent of the institution, stating that the governors of the asylum cannot take any more workhouse patients. The Local Government Board are requested to represent to the Lord Lieutenant the insufficiency of the accommodation of the Cork District Lunatic Asylum, and that further accommodation is necessary for the admission of pauper-lunatics, as provided by the fourteenth section 8 and 9 Vict., cap. 107."

THE LATE DR. S. S. DYER.—There is to be a memorial to the late Dr. Dyer, and at a meeting at the Town Hall, Ringwood, on Tuesday, January 16th, it was decided to set aside a certain portion of a sum of money, not exceeding £50, to be spent in putting up a stained glass window and a brass tablet in the church. The rest of the amount collected will be invested to form a fund called "The Dyer Memorial Fund," from which assistance and maintenance could be afforded to any poor persons of the Union of Ringwood while under medical treatment at special or other hospitals. It was decided to form a committee, with the view of collecting subscriptions. A resolution was passed instructing the committee to consider whether a larger and more varied scheme should be adopted, and if they were of that opinion to report to a future meeting.

SCARLET FEVER FROM THE COW.

A REPORT has been recently presented to the Marylebone Vestry by Mr. A. Wynter Blyth, which suggests some important questions upon the origin of scarlet fever; and the facts, when fully elucidated, will be of interest, not only to dairymen and drinkers of milk, but also to pathologists and physicians. The report is as follows.

"The following is a brief epitome of an epidemic of scarlet fever and sore-throat, apparently produced by infected milk. On December 14th, I received a communication from Dr. Hickman, to the effect that there were several cases of scarlet fever in Dorset Square. I at once personally made investigations, and found that the only connecting link between the various households was a common milk-supply. Previously to this sudden outbreak, there had been remarkably little scarlet fever in the parish. I had, however, on December 9th, caused to be removed to hospital a lad suffering from scarlet fever, one of the milk-carriers at the dairy whence the sick families obtained their milk. The first impression was that this lad had in some way contaminated the milk; but this supposition was speedily excluded, for a number of the cases had occurred several days before the lad was taken ill, and the whole evidence clearly showed that the lad was infected by the milk, and not the milk by the lad. The dairy, which may be conveniently called 'Dairy A,' derived its supply from two sources—namely, sixty-three barn-gallons from a large farm in the parish of Hendon, and a few gallons from Swindon. I telegraphed to the Medical Officer of Health at Swindon for information, and as quickly as possible visited the farm at Hendon. I will at once put the Swindon supply on one side, for it was ascertained that some of the sufferers never had the Swindon milk at all, and the whole evidence subsequently obtained was of a negative character, so far as regards this small part of the milk supplied by 'Dairy A.' The Hendon farm is one of the model type, with excellent drainage and water-supply. The milk-produce of the farm was distributed to three retailers, A, B, and C. 'Dairy A' took 63 barn-gallons daily, B (St. John's Wood), 20 barn-gallons, and C (Hampstead), 67 barn-gallons daily. All three had the milk from different sheds. At the date of my visit (December 15th), I ascertained, from a personal examination of the milkmen, that there was not, nor had there been, any scarlet fever, sore-throat, or other infectious malady on the farm. In this inquiry, Dr. Cameron, the medical officer of health, gave active and valuable assistance, and visited each of the labourer's families, so as to be certain that true statements had been given. Nevertheless, I was far from satisfied, and still less satisfied when, by a mere chance, I heard a rumour of a family, deriving milk direct from the farm, suffering from scarlet fever. I obtained, with a little trouble, the particulars, which were briefly as follows. Five cases of scarlet fever had occurred almost simultaneously, on or about December 3rd, in a household at Hampstead, no scarlet fever being at that time in the immediate neighbourhood. The cause of the attack was to the sufferers a mystery. They had their milk-supply direct from the Hendon farm. Dr. Power afterwards elicited the important fact that this milk was derived from the same shed which supplied 'Dairy A.' The evidence on December 17th relative to the infection, in some way or other, of the Hendon milk, was strengthened by other facts, and I felt it my duty to make a strong representation to the proprietor of 'Dairy A,' requesting him, in the public interest and his own, to at once cease retailing the Hendon milk. He did so, and a very instructive event followed. The very milk that would have been delivered in Marylebone was in part thrown away, and in part given to poor people in the neighbourhood of the Hendon farm. Within a few days, eight of the families partaking of this milk were struck down with scarlet fever. On the same day on which the milk was stopped, I had all the cans disinfected. They were taken to the stone yard in carts, packed in the hot-air chamber, submitted for many hours to a temperature of 250°, and finally washed with hot water and soda, under the careful superintendence of Mr. Phillips. Too much stress can scarcely be laid on the fact that, after stopping the supply from Hendon and disinfecting the cans, there was no fresh infection of the customers of this dairy. With regard to 'Dairy B,' deriving milk from the same farm, but from a different shed, I could discover no illness among the customers until December 27th, when in one household a suspicious case occurred, and I then stopped the Hendon supply in this direction also, and had the cans disinfected. Considering that the sudden withdrawal of two outlets for the milk produced at this farm would be likely so far to disturb the existing arrangements that the sound and unsound milk would be mixed together, and, moreover, that it was certainly being distributed in other parishes, I felt it my duty to communicate with the medical officers of health of Hampstead, St. Pancras, and Paddington, and also with the Medical Department of the Local Government Board. Dr. Buchanan, seeing the importance of the epidemic, the more especially as the facts already detailed seemed likely to throw light on the genesis of scarlet fever, at once deputed Dr. Power to investigate the matter. Dr. Power entered on the task with great energy and specially directed his attention to the state of the cows in the different sheds. The result of this examination will be published in due course. I will only say now that certain of the cows are 'suspect;' and that one, the appearance of which was least satisfactory, has been bought, and conveyed to the Brown Institution, and Dr. Klein is making experiments with the milk and other secretions. There have been in the parish, between the dates of December 1st and December 29th, sixty cases of illness having this one thing in common, that the patients had drank milk from one or other of three dairies getting their supply from Hendon. During the whole month, there have only been three cases of scarlet fever in which the connection with one or other of the dairies is not fairly clear. Some of the sufferers have had simple sore-throat, others a slight attack of scarlet fever; a few have had a severe attack; in one case (Dairy C), death resulted. Some interesting facts have been ascertained as to the period of incubation, which seems in a few cases to have been very short. For example, a child living in the parish of Paddington came to see an uncle near Dorset Square, had some of the milk from Dairy A, and in two days the symptoms appeared. In another case, a young gentleman came from a military college, where there was no scarlet fever, drank some of the milk unboiled, and on the third day sickened with a mild attack of scarlet fever. Those who drank no milk save that which had been boiled were not attacked, and most of those who merely took a little milk in tea or coffee escaped. Children taking considerable quantities of lukewarm or unboiled milk, and adults drinking raw milk, form the bulk of the cases. Several instances of infection from the cream occurred, and I have reason to believe that the disease-influence was in a more concentrated form in the cream than in the milk. This report is necessarily incomplete; for the full history will not be known until Dr. Power publishes his report, and gives the details relative to the cases in the parishes of Hendon and Hampstead, infected either directly from the farm or indirectly through 'Dairy C;' together with the results of the examination of the cows and Dr. Klein's experiment. I believe that we are on the eve of some very important discovery as to the origin of scarlet fever In conclusion, I must specially point out the great obligation the public are under to Dr. Hickman for his prompt information to the sanitary officers, thus enabling what may have been a serious epidemic to be arrested at its commencement."

THE HOSPITALS ASSOCIATION.

THE third general meeting of the session, 1885-6, was held at the rooms of the Social Science Association, on Wednesday evening, January 27th; Sir Andrew Clark, Bart, in the chair. The object of the meeting was to receive a deputation from the Council of the Metropolitan Counties Branch of the British Medical Association, on the "hospital out-patient" question. The President opened the discussion, by calling on Dr. Dickson to give the result of the information he had been enabled to collect.

Dr. WALTER DICKSON, President of the Metropolitan Counties Branch, defined the subject to be an inquiry into the extent to which persons undeserving of charity were relieved in the out-patient department of the London hospitals, to the great detriment of neighbouring practitioners. A committee of medical men, formed to elucidate this question, had, he said, come to the conclusion that the best method of preventing any such abuse, was the system now carried out at the London Hospital, of inquiring into the circumstances of the applicants for medical attendance. He alluded to the difficulty of instituting such inquiries, in a large city like London, and, further, to the undesirable feeling such a course was apt to produce with the public and with the subscribers. Much good would be done by a more careful inquiry on the part of governors, as to the circumstances of persons to whom they gave letters of recommendation. Personally, he thought that married people whose income did not exceed £2 a week, and had a family, were proper objects of charity. Dr. Dickson spoke in terms of approbation of the system of allowing the use of the wards to single men, etc., on the payment of a certain sum; the system, indeed, in use at Guy's Hospital. In reply to the chairman, Dr. Dickson said he was unable to give any figures of the relative proportion of undeserving applicants: he certainly thought that the out-patient system was useful and necessary, as well for the public as for the profession.

Dr. HENTY (one of the District Secretaries of the Metropolitan

Counties Branch) said he had, after long and careful consideration, come to the conclusion that something ought to be done in the matter. Formerly he had inclined to the system of payment, but now he had changed his views in favour of the system of inquiry adopted at the London Hospital. This distaste of the payment system he had found to be prevalent among the practitioners in the neighbourhood of hospitals. In answer to the president's question as to the proportion of undeserving applicants, he had made no particular inquiries, but he had been told that it was in reality very small. He mentioned that one drawback of the inquiry system was to involve an expense of from £250 per annum upwards.

The PRESIDENT called attention to the expression of opinion on the part of medical men that the out-patient system was both useful and necessary, if only conducted on proper lines.

Dr. GILBART SMITH insisted on the importance of the fact that men like Dr. Henty, who had approached the question prejudiced in favour of the payment system, had ultimately come over to the system of inquiry. He believed that the provident dispensary system could not answer; partly owing to intrinsic difficulties, and partly to want of sufficient funds. He had considerable experience of the payment system, and could affirm that it led to open and palpable abuse. In fact, they had come to the same conclusion as to the preference to be accorded to the method in vogue at the London Hospital. This system, however, should be universal if it were to do any real good.

Mr. NIXON (House-Governor of the London Hospital) said that the result of this system had been eminently successful in warding off a great number of patients—about 50 per cent.—especially in the special departments. It was conducted with great tact and management, but he thought many would-be applicants abstained from coming in consequence of the inquiries likely to be made as to their circumstances, and this all the more so as the inquiries were fully carried out. He did not think that the £2 limit of income could always be accepted as a criterion. While he approved of the system of allowing patients to be admitted on the payment of a certain sum where their circumstances were such as to require it, it was not practicable at the London Hospital, where all the beds were full. In answer to a question, he said that the system had been in practice for two years, prior to which no attempt was made to discriminate.

Mr. TIMOTHY HOLMES thought that something ought to be done to prevent the waste of time that resulted from the number of trivial cases which occupied the time and attention of the medical officers. He was of opinion that the great question was rather in the nature of the case than in the circumstances of the individual, and that only medical authorities were competent to decide that point. He expressed his disapprobation of the payment system, which he considered derogatory to the profession, and to the institution which allowed it; and he questioned the legality of such a proceeding.

Mr. BUNN (Secretary of the Metropolitan Provident Dispensary Association) said that, from his experience of the labouring classes, he thought nothing was more likely to deter them from applying for medical relief than the inquisitorial system so much spoken of. He wished to ask whether, as a matter of fact, a great many of the patients were not seen by assistants.

The CHAIRMAN warmly condemned the insinuation that the medical staff of hospitals were in the habit of leaving their work to subordinates.

Mr. CARR GOMM (of the London Hospital House-Committee) said that patients were never sent away until they had been seen by the medical officer.

Major Ross (of the Middlesex Hospital) said that the payment system was inadmissible at his hospital under its constitution. What they did was to issue general letters to the subscribers, not specifying whether the patient was to be treated in or out of the hospital.

Mr. BURDETT, alluding to Dr. Heslop, of Birmingham, as the originator of the payment system, said that he had had reason to see that it was a failure, inasmuch as, far from decreasing the number of patients, it only increased it.

After a vote of thanks to the Chairman, etc., the meeting ended.

THE DEATH-RATE IN THE CITY.—At a meeting of the Commissioners of Sewers recently, the medical officer reported that the births in the City during the past week had been 14, and the deaths 5. The births were at the rate of 14.15 per 1,000, and the death-rate 5.05 per 1,000. He called attention to the remarkably low death-rate, which he believed to be the lowest on record. As showing, however, ths fickleness of the same in the City, he mentioned that, in the corresponding week of last year, the deaths were at the rate of 27.29 per 1,000.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.
ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT. —The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 18th, at 8.30 P.M., when Dr. Stephen Mackenzie will demonstrate a number of patients suffering from various forms of skin-diseases.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston.

SPECIAL CORRESPONDENCE.

PARIS.

Antiscepticism in Operations for Cataract.—Aniline Colours.—Absorption of Bile by the Subhepatic Veins.—Suspected Malingering.—Injury to Axillary Vessels.—Hysteria in Males and Females.—Attenuated Charbon-Virus.—Tuberculous Ulcer of the Lower Lip.—Elimination of Arsenic by the Milk.—Sclavonic Science in a French Medium.—Dr. Ferran's Inoculations.—General News.

M. PANAS, in a communication to the Academy of Medicine, stated that, in operating for cataract, thorough antiseptic precautions are necessary. The operation known as Daviel's is excellent, with antiseptic treatment. Von Gräfe thought that the flap was too large, and believed that this defect in the method was the cause of 10 per cent. of the suppurations. M. Panas has reduced cases of suppuration to 5 per cent. He uses as an antiseptic agent biniodide of mercury. He recommends the following formula: Biniodide of mercury, 5 centigrammes; alcohol at 90°, 20 grammes; distilled water, 1 litre. The neighbouring conjunctiva should not be injured. M. Panas does not perform iridectomy, except in cases where the iris cannot be reduced. After the operation, M. Panas dresses the eye with a pomade of eserine and vaseline, in order to promote, during a certain time, myotic action. When iridectomy is not performed, this treatment need not be continued so long. In diabetic and gouty patients, cicatrisation is equally quick. Later on, after the operation, M. Panas uses a pomade of a gramme and a half of mercurial salt and 100 of cerate. At a subsequent meeting, M. Perrin, surgeon at the Val-de-Grace, stated that he was glad M. Panas abandoned von Gräfe's method to return to the French method. M. Perrin had anticipated him, some years ago, before the discussion on the subject in the Paris Surgical Society took place. M. Perrin has operated according to Daviel's method, preserving the flap; but he continues to perform iridectomy, and does not believe it is possible to always avoid performing it. It is well not to regard it as inseparable from the operation for cataract, only in case of contusion of the iris, when it has been too much drawn during the operation, or threatens to result in hernia. M. Perrin believes that M. Panas' success with his operations is owing to his ability and dexterity, and not to the intra-ocular injection, a practice which M. Perrin condemns. He believes that suppuration rarely occurs. Air-bubbles rarely enter the anterior chamber; and a microbe which only asserts its presence eight days after the operation need not be feared.

At the same meeting, M. Livon asserted that the substance known as *rouge de Bourdeaux* is not toxic. M. Lépine answered that it is so, but slightly; experiments made by him and M. Cazeneuve have proved it. M. Bert asked what hygienic conclusion could be drawn from these experiments. How can the use of aniline colours, which are only slightly dangerous, be prohibited, when alcohol, which is extremely toxic, is not forbidden? It is true it depends upon the dose; but then salicylic acid, a dangerous substance, is given in large doses to patients. M. Lépine answered that aniline colours in general are only slightly toxic, but there is one special one, a compound of naphthol, which is very dangerous, and easily absorbed. This substance is used for colouring macaroni yellow. M. Grimaux observed that this dangerous practice still continues, although forbidden. As to salicylic acid, he had calculated that anyone who breakfasted on preserved butter, jam, and tinned peas, would absorb two or three grammes of salicylic acid. M. Bert thinks it very fortunate that salicylic acid is adulterated.

M. Lépine has tried to ascertain by experiment whether the subhepatic veins can absorb the bile contained in the gall-bladder. If, when the ductus choledochus is ligatured, blood be removed from the subhepatic veins, and analysed, it is found to contain traces of biliary acids. In order to obtain blood from the subhepatic veins it is necessary to use a special aspirating apparatus, and to proceed from the external jugular vein to the inferior part of the vena cava. If, under these circumstances, the pressure in the gall-bladder be increased, a quantity of bile passes into the subhepatic veins. In ordinary pathological conditions, this increased pressure in the gall-bladder does not exist.

At a recent meeting of the Paris Surgical Society, M. Baudry, of Lille, read notes of the following case. A woman, aged 30, entered a hospital, and she stated that, seven or eight years ago, she was struck in the eye with a piece of glass, which broke. At different subsequent periods, from fourteen to fifteen fragments of glass had been extracted from the orbit. M. Baudry arrived at the conclusion that this woman was shamming; that she introduced small pieces of glass into her own eye by means of a small wound existing on the conjunctiva. This unaccountable practice did not result in inflammation or any ocular disturbance. M. Baudry referred to the case of M. Collette (Liège) who removed two hundred fragments of a glass window from the eye of a woman.

At the same meeting, M. Heuzel, of Boulogne, described the following case. A boy, aged 11, who was suffering from infantile paralysis, was carried from his bed to an arm-chair, and held under the armpit. A tumour appeared, presenting all the characteristics of an abscess; there was neither pulsation, expansion, nor *bruit*. The supposed abscess was opened; some clots of blood were removed, and violent hæmorrhage immediately followed. Compression was practised, and cloths steeped in perchloride of iron were placed in the abscess. M. Heuzel was then sent for, and he found the arm purple and cold. Probably there was rupture of the axillary artery. The radial pulsation, observed before incising the tumour, was no longer felt. On the third day the perchloride of iron dressing was removed, and the patient recovered.

M. Charcot, in a clinical lecture at the Salpêtrière, described three unusually interesting hysterical patients; two of them were males, and the other a female. The first patient was a man who had remained dumb for four months. He was a soldier, aged 37, and had lost an arm in 1871. He was addicted to absinthe-drinking, and had not led a steady life. His father was cataleptic, his mother subject to nervous attacks, and one of his uncles was an irresponsible drunkard. For ten years, he had been subject to occasional attacks, which had been diagnosed as meningitis. Since the last five or six years, these attacks changed in character, and the patient became lethargic; he slept from thirty-six to forty-eight hours, and on awaking, he had hemiplegia of the left side, which lasted during two or three months. During his fits of dumbness, which lasted three or four months, he could not utter the slightest sound, but described his sensations in writing; he felt as though there were an obstacle, on a level with the larynx, preventing him from speaking. His tongue had its normal facility of motion, but his labial movements were more difficult. There was no serious disturbance; the patient was neither deaf nor blind, and could express his ideas rapidly in an elegant handwriting. There was considerable difference between his condition and that of an aphasic patient, who can emit a laryngeal sound, though he cannot articulate, and sometimes can imperfectly utter two or three words. The patient in question had the stigmata of hysterical patients, and anæsthetic areas on the left side, which, on pressure, provoked a commencement of an aura. The second patient was a girl aged 20, who was attacked by chorea. She became dumb from agitation on witnessing her father's furniture seized for debt. She remained in that condition during fifteen days, and had stammered since the first attack of dumbness. She was subject to recurrence of the fits, which always terminated in stammering, and a respiratory spasm, evident to others by its sound. She had constant hiccough, and the left side was anæsthetised. The third patient was a man who, whilst working in a workshop of one of the railways, was projected into the air, and fell on his back. He immediately complained of his left hip, and limped. He presented the appearance of a patient with coxalgia in its third stage; but it was purely hysterical. His general health was perfect, which was not compatible with organic coxalgia. The limb was contracted, and felt much colder than its fellow—a symptom absent in real coxalgia. He presented the stigmata peculiar to hysterical patients, with areæ of anæsthesia, imperfect vision, and absence of taste on the left side of the tongue. The patient was placed under chloroform, and it was ascertained that the hip-joint was perfectly normal.

At a recent meeting of the Academy of Sciences, M. Vulpian read a note by M. Feltz, of Nancy, stating that, under certain conditions, the charbon virus buried under the earth undergoes progressive attenuation, and becomes less toxic. M. Feltz has carried on a series of experiments, which have extended over three years, and show that animals inoculated with virus removed from soil previously infected exhibit symptoms of more or less gravity, according to the period that has elapsed between the inoculation and the date of burying the charbon virus.

At a meeting of the Medico-Chirurgical Society of the Lyons hospitals, M. Poncet showed a man 52 years old, who presented a tuberculous ulcer on the outer surface of the lower lip: also, on the same side, in the submaxiliary region, a large fluctuating gland; the integument covering it was thin and red. The patient had been phthisical for four years; he became so three years after the death of his wife, who died from pulmonary tuberculosis. The ulceration and the larger

gland appeared simultaneously about eight months ago: they developed together, and the pulmonary symptoms gradually became more evident. The ulcer was evidently tuberculous. Examination proved that it was neither syphilitic nor of the character of an epithelioma.

The *Union Médicale* of January 3rd published an interesting case of elimination of arsenic by the milk. A wet nurse narrowly escaped being poisoned by arsenic; the child she suckled died, exhibiting choleraic symptoms. M. Brouardel, professor of medical jurisprudence, removed from the viscera of the child five milligrammes of arsenious acid. M. Pouchet submitted the wet nurses of the Saint-Louis Hospital to arsenical treatment; one of them took during a week eight milligrammes a day of Fowler's solution. Chemical analysis proved that one hundred grammes of her milk contained one milligramme of arsenic. The results of the experiments on animals were contradictory; they were not all equally susceptible to the influence of arsenic.

M. Charles Richet, professor *agregé* at the Paris Medical Faculty, and M. Maurice Mendelssohn, have published the first number of *Archives Slaves de Biologie*, and had presented it to all the learned societies. This journal will contain summaries and abstracts of the different interesting scientific labours of Sclavonic scientists, which hitherto have been much overlooked by the Latin and Teutonic races, from the fact that their work is always expressed in a language which no one understands but natives. M. Mendelssohn is an accomplished Russian scientist, working in a well known Paris laboratory, and his *Archives Slaves de Biologie* are warmly welcomed by the Paris scientific world.

Dr. Ferran has sent a letter to the Academy of Sciences, justifying his anticholeraic vaccinations. He explains its supposed efficacy by the hypothesis that inoculating dead comma-bacilli into an organism renders it hostile to the development of the living bacillus; or, in other words, to the development of the disease of which this bacillus is considered to be the specific element. Dr. Ferran invokes a chemical process; he believes that the toxic action of a substance proceeding from the bacillus used for inoculation prevents the development in the blood of those bacilli which provoke the appearance of the malady.

An important work has just been published by Delahaye and Lecrosnier, Paris. It is entitled *Traité de Médecine Légale de Jurisprudence Médicale et Toxicologie*, by Legrand du Saulle, physician at the Salpêtrière, G. Berryer, of the Cour d'Appel, and G. Pouchet, Professeur Agrégé at the Paris Medical Faculty.

The medical and pharmaceutical students of Marseilles have presented to the hospitals of that city 19,455 fr. 55 c. (£778 4s. 7½d.), and have expressed their desire that the administration will use it for building an isolated hospital, where children with infectious and contagious diseases may be treated.

At a recent meeting of the Paris Biological Society, M. Regnard showed two cylindrical blocks of quartz, which are to be adjusted to an apparatus for submitting animals to a pressure of 1,000 atmospheres. These blocks, owing to their excessive transparency, will allow the observer, if they do not burst, to study all the phenomena which occur.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The Chair of Physiology at Owens College—The Lectureship on Jurisprudence—The Royal Albert Asylum—Monsall Hospital.

THE Council of the Owens College are to be congratulated on having secured the services of Professor Stirling, of Aberdeen, as Brackenbury Professor of Physiology, thus filling up the chair which was rendered vacant by the resignation of Dr. Gamgee last summer. The delay in making the appointment was unavoidable, as it was extremely desirable in the interests of the college that the best man possible should be obtained; and this result was secured only after much "searching of heart." Professor Stirling comes to us with the reputation of a brilliant investigator and experienced teacher, not only of experimental science, but of that form of physiology so dear to the medical student, namely, physiology applied to practical medicine. He will add an element of strength to the professorial staff, and is certain to receive a warm welcome from his colleagues, the students, and the profession in Manchester.

The vacant lectureship on Medical Jurisprudence at the college has been filled up by the appointment of Dr. Dixon Mann, who, as physician to the Salford Royal Hospital, and well known for his chemical and varied scientific researches, had claims which could not be overlooked. From the first he had the warm support and good wishes of the profession in his candidature.

The Mayor of Manchester convened a meeting of ladies last week, for the purpose of forming a District Ladies' Association, to be presided over by Lady Egerton of Tatton, for the support of the Royal Albert Asylum for Idiots and Imbeciles, at Lancaster. Similar ladies' associations are worked with great efficiency in some other towns, being the means of raising funds and securing the election of idiot children in their districts. There are at present sixty-four children in the asylum, from Manchester, but a proportionate share of subscriptions has not as yet been forthcoming from this district. According to the 21st Report of this charity, just issued, at the close of last year there were 540 inmates, 71 had been admitted, 50 discharged, and 10 had died. The deaths had been mostly due to tubercular disease. The report refers to the great importance of a modification of the Lunacy Acts, so that a simplification may be effected in the certificates and formalities respecting the admission and retention of the pupils in institutions which are in reality training schools for backward children and imbeciles, rather than asylums. In connection with this charity a new departure has been made, which deserves to be widely known, namely, the establishment of a boarding-house, known as Brunton House, which consists of two private villas, surrounded by their own grounds, which are set apart for the reception of imbecile and backward children belonging to the wealthier classes. This establishment is proving a great success, and it affords the seclusion and comforts of a private asylum with the various sources of instruction and responsible management of a public institution. The Royal Albert Asylum is one of which the North of England may justly be proud.

At Monsall Fever Hospital, four new wards for the reception of scarlet fever have just been opened; each ward contains twelve beds, with a space of about 2,000 cubic feet per bed. A new home has also been opened for nurses. For the first time for nearly a year, there is this week no case of small-pox in the hospital.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The Proposed Provident Medical Association.—Allegations against a Southport Medical Man.—Hospital Sunday.—Entertainments in Aid of the Medical Charities.—Local Government Board Inquiry.—Small-pox in Liverpool: Concealment of Cases.—Birkenhead Hospital.—The Northern Hospital Horse-Ambulance.

THE meeting on January 11th, to consider the question of forming a Provident Medical Association for the benefit of the working classes here, may be regarded as having achieved its object. The gathering was not so large as it ought to have been, considering the publicity that had been given to the movement in the local press; but a number of influential and prominent citizens were present. There was, as was expected, some little show of opposition to the scheme; but the resolution in favour of it, proposed and supported by two leading clergymen and two leading members of the profession, was carried by a large majority. Those who spoke against the advisability of establishing such a society were, as usually seems to be the case, connected with the management of hospitals; but surely it is obvious that, as pointed out in your leading article last Saturday, provident medical associations are not to be regarded as being in any sense antagonistic to the ordinary medical charities. There appears to be no reason to doubt that the project will be successfully carried out, supported as it is by so large a number of medical men and others. Dr. Rentoul has been working hard at the matter for a long time past; and, should the Association be successfully started, it will be mainly due to his strenuous and earnest efforts.

At an inquest recently held in Southport, serious allegations of neglect were made against a parish medical officer. At the adjourned inquiry, this gentleman, Mr. Moore, explained matters to the satisfaction of the court. The deceased, an old woman, had been run over, and her friends alleged that she had not been visited as often as the serious nature of the case demanded; but it was clearly shown that the cause of death was general decay, accelerated by bed-sores and the shock of the accident; and that, the case being of a kind requiring nursing, etc., more than medical aid, the patient had been seen quite as often as was really needed.

On January 11th, the Hospital Sunday collections were made in all the places of worship here. Unfortunately, the weather was most tempestuous; and, consequently, the congregations were generally small. The receipts, so far as the returns are known, accordingly appear to

be less than usual. It has been very sensibly suggested by Mr. W. P. Lockhart, of the Toxteth Tabernacle, that a Sunday later in the year, when more favourable weather may be expected, should be chosen in preference to the second Sunday in January. I understand that this suggestion will probably be considered by the Hospital Sunday Committee; and it is to be hoped that the proposed alteration will be made.

The bazaar in aid of the Ladies' Charity and Lying-in Hospital was most successful. The gross proceeds were £1,795 8s. 4d.; expenditure, £201 4s. 7d.; leaving the very handsome sum of £1,594 3s. 9d., which has been paid over to the treasurer, to be devoted to the building fund of the hospital. The medical charities on the Cheshire side of the Mersey have been soliciting help; and entertainments have been given on their behalf. There has been of late years a very marked increase of population in the Wallasey district; and it has been found necessary, on this account, to enlarge the Seacombe Cottage Hospital, to rebuild the Wallasey Cottage Hospital, and to remove the Wallasey Dispensary to larger and more central premises.

General Phipps Carey and Dr. R. T. Thorne have been holding an inquiry here, on behalf of the Local Government Board, into an application of the City Council; or sanction to borrow £100,000 to provide hospital-accommodation for the city. Several medical men gave evidence, including the medical officers of health for West Derby and Liverpool, Mr. Hamilton, and Dr. Gee; and, with one exception, they supported the Council scheme.

In connection with the increase of small-pox in the town, it has been discovered that no fresh centre of infection has occurred, but that centres have been concealed from the authorities. A few days ago, a woman was fined forty shillings and costs; and, being unable to pay the fine, was sent to gaol for fourteen days, under the 126th section of the Public Health Act, for exposing a child which had been suffering from an infectious disease. Dr. Hope, the assistant medical officer of health, visited this woman's house; and, finding the dead body of a child who had died from small-pox, and a child suffering from the same disease, recommended the removal of the latter to a hospital. But, before this could be done, the child was taken away from the house. It was stated in court that, since the child's removal, ten of the immediate relatives of the defendant had suffered from small-pox.

At the annual meeting, held this week, of the governors and subscribers of the Birkenhead Borough Hospital, it was stated that the ordinary receipts had fallen short of the expenses by nearly £400; and that at the present time a balance of £657 11s. 11d. is due to the treasurer. Nearly 10,000 patients have been treated at this institution during the past year; and the total expenses amounted only to £2,645 4s. 7d. The workmen's contributions, the donations, and the Hospital Sunday Fund, all showed a falling off; but, owing to special efforts having recently been made to increase the number of subscribers, there was an increase in the subscription list.

The Northern Hospital Horse Ambulance has done admirable service to all classes of the community since its introduction; and, when fears have for some time past been entertained that for lack of funds this most valuable institution would have to be given up, it is pleasing to be able to report a most generous action on the part of the Liverpool Junior Reform Club. At Christmas, the members of this club, with their friends, raised a sum of money for the benefit of the deserving poor. A balance of £60 being left, this sum has been offered for the benefit of the Ambulance Fund, on condition that the horse ambulance be maintained at work throughout the present year. The offer, with the conditions named, has been cordially accepted by the Ambulance Committee.

DONATIONS AND BEQUESTS.—Mrs. Mary Blackden, of Norfolk Crescent, Hyde Park, has bequeathed £300 to the Convalescent Institution, Walton-on-Thames, and £200 to St. Mary's Hospital.—"A Friend" (per Mr. R. Walters, Newcastle-on-Tyne) has given £300, and Mrs. Turner, at Dingle Head, £200 additional, to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties.—The Church Burgesses of Sheffield have given £160 to the General Infirmary, and £115 to the General Hospital, of that town.—A concert in aid of the funds of the Jenny Lind Infirmary, Norwich, at which Madame Albani, Mr. Charles Santley, Mr. Edward Lloyd, Lady Benedict, and others, gave their services, realised £529 14s. 8d.—The General Hospital, Birmingham, has received £100, less duty, under the will of Mr. Thomas Aston.—Mrs. Louisa Brooke Blake has bequeathed £100 to the Torbay Infirmary and Dispensary.—"J. W." has given £100 to the Westminster Hospital.—The Grocers' Company have given £50 to the North-Eastern Hospital for Children.

CORRESPONDENCE.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

SIR,—With reference to the article in your JOURNAL of January 23rd, regarding the constitution of the Council of the Royal College of Surgeons, I would beg to remark that the College was founded in order to promote the art and science of surgery; this fact is reiterated in all the charters granted to the College. It was "in order more effectually to promote and encourage the study and practice of surgery," that the class of Fellows by examination was instituted. I believe that, in the interests of surgery, it is desirable that the College should continue to have the power to confer honours in surgery, and that these honours should carry with them any privileges which it is in the power of the College to bestow; and, consequently, that those only who gain the Fellowship shall be entitled to a seat on the Council. It is open to any Member of the College to pass the examination for the Fellowship; and I should very much like to see the second examination, or that in the practice of surgery alone, insisted on for Members of twelve years' standing and upwards.

It is urged that the reason why Members of the College should have seats on the Council is because it is desirable that the views of general practitioners should be heard at the Council; but a very large proportion of the Fellows are in general practice. If, therefore, general practitioners have interests which it is the province of the College to advance, as distinct from those of consulting surgeons, there can be no reason why these views should not be advocated at the Council by Fellows who are engaged in the work of general practice. What I mean is, that the fact of a man being a Fellow of the College in no way lessens his power to appreciate the feelings of general practitioners, especially if he be engaged in that line of the profession; the idea above referred to consequently appears to me to be groundless, so far as it applies to Members being elected to the Council.

On the other hand, by only permitting Fellows to be elected to the Council, it is possible that we enhance the privileges of the Fellowship, and so may lead men to seek this honour, and thus forward the objects for which the College was founded. Beyond this, it seems to me most objectionable to have anything like class distinctions or interests in the Council; at the same time, to my mind, there are many sound and valid reasons why Members of the College should have a voice in the election of the Council. It is feared that, if all Members of ten years' standing be allowed to vote for candidates for the Council, that the voice of the Fellows will be swamped; but there are means by which this difficulty may be overcome. It is, however, useless to enter into details until we know what the opinion of the Fellows is upon the subject. There can be no question that the Fellows of the College are in possession of all the rights and privileges of electing members of Council, but it is impossible for anyone at present to know what their feelings, if they have any, on this matter may be. It was to ascertain this point that I brought forward my resolution at the Council of the College of Surgeons on January 14th.—I remain, yours,

C. MACNAMARA.

13, Grosvenor Street.

SYPHILIS AND TABES DORSALIS.

SIR,—In the second of his most suggestive Lettsomian Lectures, Mr. Hutchinson, in doing me the honour to refer to my observation on the above question, somewhat misapprehended, apparently, the remarks published in my "Clinical Lectures on Diseases of the Nervous System."

I do not doubt that there is a bond of association between syphilis and tabes, but, on the contrary, have suggested in one of the lectures (X) a mode by which syphilis probably sometimes leads to posterior sclerosis. At the same time, as this mode is not in all cases an adequate explanation, and, in consequence of other difficulties, which are fully set forth in the lecture, I certainly cautioned against accepting the *post hoc* as necessarily *propter hoc*. My concluding words were these (p. 214): "Whilst it appears to me incontestable that there is a remarkable frequency of association between syphilis and tabes dorsalis, I do not think, all things being considered, that the time has yet arrived for us to draw safe inferences as to the precise nature of the relation."—Yours obediently,

THOMAS BUZZARD.

Grosvenor Street.

MR. JONATHAN HUTCHINSON'S LETTSOMIAN LECTURES.

SIR,—Mr. Hutchinson, in his second Lettsomian lecture, commences with the relationship of tertiaries to secondaries. I perfectly agree with him, that we do occasionally see the early development of some of the so-called tertiary symptoms, *e.g.*, gummata rupia, periostitis, etc. At the same time, the present classification is sufficiently correct to be retained. So far as I have observed, the exceptions have been in those cases in which the disease developed early, with unusual intensity. I have seen many cases of early rupia, but the earliest is at the present time under my care. My patient is a pale cachectic man. The eruption appeared first on the face on the thirty-seventh day after infection, but I did not recognise it as rupia until four days later; there was also considerable fever, and a peculiar diphtheritic-looking ulceration of the tonsils; the penis was large and œdematous, with fœtid sanious pus exuding from beneath a phimosed prepuce, and there was a small, slightly undurated sore at the end. Up to this time he had had no specific treatment, and I ordered one drachm of strong mercurial ointment, to be rubbed in night and morning. After nine rubbings, salivation commenced, and then half a drachm was rubbed in every night. The improvement was extremely rapid; within a month all the rupeal patches on the face had healed, leaving the characteristic scars, but some large cones on the limbs still remain. The ulceration in the throat has healed, and the penis has assumed its normal appearance, no induration remaining. Of course he is continuing with mild mercurials. I frequently meet with periostitis in the secondary stage, but I have very seldom seen gummata except in the tongue developing before the end of the second stage. I agree with Mr. Hutchinson's remarks on the antidotal influence of mercury in syphilis; that, in its earlier stages, the symptoms are delayed, retarded, and made irregular by its use, and if discontinued, there is frequently a sudden outburst of secondaries which had been kept under. I agree also with the administration of small doses of mercury, frequently repeated, for the treatment of the primary indurations; but I consider it necessary to continue them for a longer period than six months. I have known several instances where the outbreak of secondaries has been delayed for more than twelve months, so that, in a well-marked case, I always insist upon the continuance of the treatment (even if there are no symptoms) for more than a twelvemonth.

Recurrent chancres are very much more frequent now than formerly, when much larger doses of mercury were commonly used, but they are not of much importance.

With regard to the treatment of many of the obstinate forms of the tertiary stage, I am in the habit of advising my patients to go through a fortnight's course of Zittmann. I have used this treatment now for more than twenty years, and I am more and more satisfied of its power in coping with the large intractable ulcerations, gummata, and various periosteal conditions so common in the later stages. Many of my cases have been perfectly healed in the fortnight, and have remained well after many years. I know of no other treatment that would give such good results.—I am, etc., BUXTON SHILLITOE.

SIR,—The perusal of Mr. J. Hutchinson's lectures on "Moot points in the Natural History of Syphilis" has afforded me great pleasure. I cannot say that my experience coincides with his in several instances. If his statement that the presence of scars in the groins is presumptive evidence of syphilis be correct, then I must say that reinfection is anything but a rare occurrence. Time after time I have noticed scars in the groins in patients, the subjects of recent syphilis, whose previous venereal affections dated far back. At the present moment, I have under my care at the Liverpool Lock Hospital two patients suffering from a recent attack of syphilis, presenting old scars in the groins. One of these patients is covered with a papular eruption, and the other suffers from a macular syphilide. I have closely questioned them, and they are both positive that their previous venereal affections were unaccompanied by any rash or sore-throat. As far as my experience goes, the indolent bubo attending an indurated ulcer or other form of initial lesion remains indolent in the great majority of cases, and, unless irritated, resolves without suppuration or any appearance to indicate its existence.

I need not here proclaim my adherence to either the unal or the dual theory, but I feel bound to say that the period of incubation enters largely in distinguishing the two kinds of sores, and a lesion which appears after a marked period of quiescence must contain some ingredient altogether absent in the chancroid. I cannot recall a single instance of a syphilitic infection resulting from the presence of a soft sore, unaccompanied by glandular enlargement in the vicinity. A syphilitic initial lesion in certain situations, as on the skin of the penis, or on the labium in the female, is found in many instances to be unindurated; but in such a case the neighbouring glands will be involved almost to a certainty.

The experiments of Kaposi, who inoculated the pus obtained from acne and scabies upon syphilitic and non-syphilitic persons, show that sores inoculable in generation can be obtained from the secretions of other lesions than irritated syphilitic ones; and when we take into account the dirty condition in which the majority of low prostitutes allow themselves to remain, is it not natural to assume that their filthy acrid secretions, acting on a delicate mucous membrane, may produce sores on their own persons, from which the pus can be inoculated on those who resort to them?

It affords me much pleasure to agree with Mr. Hutchinson in several of the remarks contained in his second lecture. I have notes of two cases of very early appearance of syphilitic psoriasis. The first was that of a ship's captain, aged 41, married. He consulted me on March 11th, 1882, suffering from a plantar and palmar syphiloderm, with papular syphilide on the legs and head. The initial lesion, which was situated in the furrow behind the glans, made its appearance on December 1st, 1881, after a period of incubation of forty-four days. On January 17th, 1882, the patient "noticed the skin of the middle finger raised, the hands and feet became affected four or five days afterwards; the eruption on the belly was noticed on February 13th, followed by the eruption on the legs on February 20th." He remained under my care until April 8th, 1882, when he proceeded to sea very much improved. The treatment consisted in the administration of a grain and a half of hydrargyrum cum cretâ, three times a day, with the local application of an ointment composed of white precipitate, zinc-ointment, and glycerine.

The second case occurred in a ship's steward, aged 25, who consulted me on November 4th, 1882, suffering from a scattered eruption on the abdomen, arms, thighs, and head (large papules, very slightly elevated), palmar and plantar syphilodermata, and condylomata. The patient's statement, which I extract from my register, is as follows. "About three months since, I observed a sore in the hollow behind the nut (furrow). The sore appeared six weeks after connection, and healed in a fortnight. Immediately afterwards, I noticed a rash on the soles of the feet and palms of the hands, followed by a slight eruption over the body. For the last month, I have suffered from an ulcerated tongue. Have never had syphilis before."

In these two cases, the earliest evidences of constitutional infection appeared in the form of psoriasis. In the one, seven weeks after the appearance of the initial lesion, and, in the other, three months and a half after its onset. It is worthy of notice that the periods of incubation in both cases were long (forty-four days and six weeks respectively).

As regards Mr. Hutchinson's remark on the occasional early appearance of rupia, that I can also endorse.

I fear I have already taken up too much of your valuable space, and will close these remarks with an expression of admiration for Mr. Jonathan Hutchinson's instructive and most interesting lectures.

—I am, sir, etc.,
ARMAND BERNARD,
Liverpool. Surgeon to the Liverpool Lock Hospital.

SIR,—Some of Mr. Hutchinson's "moot points" are of special interest to me. In his second lecture, under the heading of "Periostitis," he discussed the question of *nodes*; and, as to whether they should be called secondary or tertiary lesions. Defining a node as a "local periosteal swelling," Mr. Hutchinson goes on to show that such nodes are not necessarily tertiary manifestations. In this I quite agree. On the other hand, it appears to me that *true nodes* are something more than merely local *periosteal* swellings, and do belong to the tertiary stage.

Mr. Hutchinson points out that the periostitis of the tertiary period differs much in its tendencies from that of the secondary; "it is more lasting, more apt, on the one hand, to end in softening, and, on the other, in permanent sclerosis. It is in these differences of tendency, however, that we distinguish the two in the different stages; *not in the tissue which is attacked*" (the italics are mine). On this last point I would especially join issue, for I believe there is a marked difference in the tissue chiefly affected. The one is really a periostitis, the other is an ostitis. In the latter, the periosteum takes but little part; it can be easily separated, and beneath there will be found an ostitis affecting the substance of the bone at that part, sometimes softening and suppurating out, or disappearing in response to antidotal treatment, sometimes running a chronic course, and leading to sclerosis, which may endure even for several years, but which, I think, finally disappears.

The "periostitis" of infants, in my opinion, is almost always an *ostitis*. I have examined many such bones after death, and have

rarely, if ever, seen the periosteum altered. The bone itself, however, is altered; according to age and stage it may be enlarged, thickened, softened or sclerosed, and, if a long bone, the medullary cavity will be found obliterated.

It would be more than strange if a fundamental tissue, like bone, escaped the incidence of such a disease as syphilis, while a secondary tissue, like periosteum, should suffer so severely.

I have many times cut down on these osteal nodes, separated the periosteum, and have then scraped out the softened node-tissue with a "sharp spoon;" and I believe this to be the most effectual, and quickest way of treating them. The hole in the bone should be packed with corrosive lint or wool, to ensure healing from below.—Yours, etc.,

Old Cavendish Street, W. ROBERT WILLIAM PARKER.

THE LIGATURE IN OVARIOTOMY.

SIR,—My friend Dr. Skene Keith will not travel far in the steps of his distinguished father, unless he be a little more careful in considering arguments adduced by others, and their relations to what he has to say on what he believes himself.

The discussion between Dr. Skene Keith and myself concerning the ligature is for its use in "ovariotomy," not in removal of the appendages. In the latter operation, the cautery, save in a few exceptional instances, is absolutely inadmissible; there can be no choice between the cautery and the ligature in that case. The case which my assistant, Mr. Taylor, narrated, was one of removal of the appendages, and therefore outside the discussion altogether. Dr. Skene Keith has not taken the trouble to note what Mr. Taylor makes perfectly clear, that the bleeding came from the adhesions, and not from the stump. The pedicles in this case were extremely short. I had tied them really within the abdomen, far out of reach of eyesight; and in pulling the right pedicle up to see if it were satisfactory, there can be no doubt that Mr. Taylor pulled a little of the broad ligament out of the loop of the ligature; but the hæmorrhage did not come from there at all, for it had to be secured by pressing a sponge down into Douglas' pouch, saturated with a solution of perchloride of iron.

The Staffordshire knot is of course not infallible; but it is as reliable as any other hæmostatic that we know, and has been, in my hands, completely satisfactory; in not a single instance has hæmorrhage ever come after its use from the pedicle to which it was applied, and this is not the case with the cautery.—I am, sir, yours, etc.,

Birmingham. LAWSON TAIT.

DR. IMLACH'S CASE OF PREGNANCY IN DOUBLE UTERUS.

SIR,—Mr. Steele declines to discuss this case with Mr. Edis or anybody else but myself. If I convince him that he has misrepresented me, he will admit his error, though he reminds me that he founded his former remarks upon my own statement. Mr. Steele's former remarks are these: "Not having been present at the operation described in the JOURNAL of October 10th, I can only judge of its merits by the accounts of those who were." But since Mr. Edis wrote to you that all who were at the operation would bear out his statement that my account was fair and accurate, Mr. Steele has changed front, and his object now is, having heard the operation fully discussed by some who were not present, to separate himself from those who were.

Mr. Steele says "he heard, from good authority, that Dr. Imlach had sent a reply to his letter." He has been erroneously informed, and I fear some one has been hoaxing him. It may happen some day that Mr. Steele will have to perform an operation; and then, perhaps, although (like me) he may feel the torment of little bites, he will not care to retort.

There were three members of the medical staff present at the operation; one of them, according to Mr. Steele, wrote a letter, saying he should never forget the scene, etc.; and the other two met in conference, discussed the operation, and condemned it in uncompromising terms. Of the letter, I know nothing; and as to the hypothetical inference, of which I had never heard, the members of the staff who were present at the operation assure me that no such conference ever took place. I feel certain that someone is hoaxing Mr. Steele.

He will only discuss the operation with me. But I have told my story already in your columns, and have nothing to add to it. How can I to convince him? He rejects my story, and will not listen to Mr. Edis's mature judgment. Surely Mr. Steele does not mean to separate himself from everybody; let me offer him the opinion of one outside the hospital. Dr. Matthews Duncan, no mean authority in gynæcology, and not an undue enthusiast for surgical measures, wrote to me immediately after the publication of my paper: "I congratulate you on a great and successful operation."

But I cannot hope to "convince" Mr. Steele either by authority or by argument. I am even content to have performed an operation which has failed to meet with his approval. It has saved the woman's life, and that is of more importance.—Yours, etc.,

FRANCIS IMLACH,
Honorary Surgeon to the Liverpool Hospital for Women.
16, Canning Street, Liverpool.

INCOME-TAX.

SIR,—I had no idea, until "M.D.'s" mention in your JOURNAL of my pamphlet and of my agency for recovery of income-tax brought me shoals of letters from every part of the kingdom, how shamelessly professional men are overassessed, then overtaxed, and often made to pay twice, first under Schedule D, then under Schedule E, if they hold an appointment. However unjustly a professional man may have been assessed, there is no redress left for the past; but there is a remedy for the present, and I wish to advise your readers thereof. An assessed person has a right, under 5 and 6 Vict., cap. 35, sec. 133, as amended by 28 Vict., cap. 30, sec. 6, to show, at the expiration of the year of assessment, that his profits have not come up to the amount on which he paid tax, and he has a right to demand that repayment should be made to him on the difference between the sum at which he was assessed, and the third part of his profits for the past three years, including the year of assessment. But I cannot too strongly impress upon all persons interested that the time is strictly limited. I am having forms prepared specially for professional men, to enable them without difficulty to make the three balance-sheets necessary, and the three years' returns. They will be ready in a few days.—I am, sir, your obedient servant, ALFRED CHAPMAN.

16, Artesian Road, W.

NAVAL AND MILITARY MEDICAL SERVICES.

WHERE ARE THE MILITIA SURGEONS DISAPPEARING?

SIR,—We had formerly, in the three kingdoms, two medical officers with each militia corps, or a force of about four hundred militia surgeons at least. Why are they allowed to die out? They would be a great help to us in any national emergency, and it is a pity not to continue appointing such men.

They would now, of course, be appointed to the militia medical staff, and would officer the militia medical reserve now being organised in our districts.

When the sanction was given, in 1884, for 1,200 militia reserve men for the Medical Staff Corps, we all thought these men would be made supernumerary in their regiments, and enrolled in militia medical companies for each district, and called out every summer for training at the district centres. Unfortunately, this has not been done, and the men are allowed to remain in their militia-battalions; and as these battalions are called out irregularly and at uncertain times, we never get the men in a mass for training. Thus the germ of a very good idea is spoiled by want of thoroughness in carrying it out.

Surely these men should receive the militia medical uniform, be formed into district militia companies of the local division Medical Staff Corps, and be called out with the militia staff doctors for training every summer for twenty-eight days or so. I believe the military authorities would offer no objection to such a scheme.—Yours, MILITIA RESERVE.

HONOURS FOR SERVICE IN THE SOUDAN.

SIR,—I am glad to see that "Justitia" has raised again the question of honours to the medical officers who served in the Soudan. It is to be hoped that the subject will be fully discussed and brought prominently under the notice of the Government. There are some most deserving men who have been repeatedly mentioned in despatches, and who have not received any honour, even from the Khedive.

The chief advantage (?) they have obtained as a reward for much hard and good work, to which they unselfishly volunteered, is to be sent on unpleasant duty to a foreign station, when they had hoped for a little well-earned repose.

It would be impolitic to mention names, but I can furnish you with them if required.—I am, sir, yours truly, A CIVILIAN.

BRITISH SUBJECTS AND THE INDIAN MEDICAL SERVICE.

SIR,—Would you, or any of your numerous correspondents, kindly inform me, through the JOURNAL, whether a person born in other than any part of Her Majesty's dominions, may be a candidate for the Indian Medical Service? In the regulations of this service, it is laid down thus:—All natural-born subjects of Her Majesty . . . . . may be candidates. I have always understood by this, that only such persons may be candidates who are born of natural parents, within Her Majesty's dominions. As, however, I am not certain on this point, I should like to be informed, in order that I may be able to guide an intending candidate, who has applied to me on the subject. I enclose my card, and remain, yours faithfully, BRAHMS.

*** The regulations for the Indian Medical Service do not admit of foreigners becoming candidates for commissions in it, though they may become so if they have become naturalised subjects of Great Britain prior to their candidature. Natural-born subjects of Her Majesty, in whatever part of the British dominions they may be born, alone have a legal right to be candidates for Indian Medical Service.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FOURTH QUARTER OF 1885.

In the accompanying table will be found summarised the vital and mortal statistics of the thirty-nine sanitary districts of London relating to the fourth quarter of 1885, based upon the Registrar-General's returns. The whole of the deaths occurring in the various institutions of London have been distributed among the sanitary districts in which the patients previously resided. By this method the precise number of deaths of persons really belonging to the respective sanitary districts is known; without such correction, the number of deaths in a district does not afford reliable data upon which to calculate rates of mortality.

The births registered in London during the last quarter of 1885 were 33,351, equal to an annual rate of 32.8 per 1,000 of the population of the metropolis, estimated at 4,083,928 persons. The London birth-rate in the corresponding quarter of the two preceding years was 32.4 and 33.3 per 1,000 respectively. The birth-rates in the various sanitary districts showed the usual wide variations, the age and sex distribution of the population differing greatly. In Kensington, St. George Hanover Square, St. James Westminster, and Hampstead, where a large proportion of the population consists of unmarried females, the birth-rates are exceptionally low; while in Fulham, St. Luke's, Southwark, Bermondsey, and in most of the East districts, where the population contains a comparatively large proportion of young married persons, the birth-rates show a marked excess.

The 19,643 deaths registered in London during the quarter under notice were equal to an annual rate of 19.3 per 1,000 of the estimated population, which was lower than that recorded in the corresponding quarter of any year on record. During the ten years 1875-84 the rate of mortality in London in the December quarter averaged 22.0 per 1,000; the rate during the quarter under notice was therefore as much as 2.7 per 1,000 below this average. The lowest death-rates among the thirty-nine sanitary districts last quarter were 13.1 in Plumstead, 13.2 in Hampstead, 14.2 in Kensington, 14.6 in St. James Westminster, 14.9 in Hackney, and 15.8 in Paddington. The rates ranged upwards in the other districts to 26.1 in St. Luke's and in Stepney, 26.5 in St. George Southwark, 27.5 in St. Giles, 28.1 in St. George in the East, and 29.0 in St. Saviour Southwark. During the quarter under notice 2,175 deaths were referred to the principal zymotic diseases in London; of these, 669 resulted from whooping-cough, 640 from measles, 240 from diphtheria, 210 from diarrhœa, 192 from "fever" (including 2 from typhoid, 169 from enteric or typhoid fever, and 21 from ill-defined forms of fever), 190 from scarlet fever, and 32 from small-pox. These 2,175 zymotic deaths were equal to an annual rate of 2.1 per 1,000, which corresponded with the rate recorded in the fourth quarter of 1884. The lowest zymotic death-rates in the thirty-nine sanitary districts were returned in Plumstead, St. James Westminster, Kensington, Hackney, and Hampstead; the highest in Westminster, Stepney, St. George Southwark, St. Pancras, and St. Saviour Southwark. Compared with the preceding or third quarter of 1885, the fatality of each of the principal zymotic diseases, except small-pox and diarrhœa, showed an increase. The deaths from small-pox in the metropolis, which in the two preceding quarters had been 602 and 136,

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after complete distribution of Deaths occurring in Public Institutions, during the Fourth Quarter of 1885.

Sanitary Areas.	Estimated Population middle of 1885.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births
				Births.	Deaths.	Principal Zymotic Diseases.											
LONDON	4,083,928	33,351	19,643	32.8	19.3	2.1	2,175	32	640	190	242	669	2	169	21	210	135
West Districts																	
Paddington	110,291	736	434	26.8	15.8	1.3	35	2	11	—	5	7	—	7	1	2	128
Kensington	182,924	987	649	21.7	14.2	1.0	46	2	6	2	6	17	—	4	—	9	156
Fulham	140,136	1,312	620	37.6	17.8	1.9	67	—	26	1	12	13	—	3	1	11	117
Chelsea	95,592	820	541	34.5	22.7	2.8	66	—	15	4	6	26	—	3	—	12	160
St. George, Hanover Square	88,248	462	353	21.0	16.1	1.7	38	—	17	2	6	5	—	2	—	6	93
Westminster	57,031	387	339	27.2	23.9	3.2	45	2	25	2	3	6	—	4	—	3	165
St. James, Westminster	28,502	161	104	22.7	14.6	0.9	6	—	2	—	—	2	—	—	—	2	68
North Districts																	
Marylebone	151,302	1,121	743	29.7	19.7	1.5	56	1	17	4	12	12	—	4	—	6	121
Hampstead	51,950	317	171	24.5	13.2	1.3	17	—	10	1	2	2	—	2	—	—	120
St. Pancras	239,999	1,883	1,335	31.5	22.3	3.7	223	1	143	6	10	40	—	6	2	15	154
Islington	314,881	2,493	1,352	31.8	17.2	2.1	166	2	21	14	42	56	—	15	5	11	123
Hackney	218,535	1,662	810	30.5	14.9	1.1	60	—	2	10	10	22	—	10	1	5	118
Central Districts																	
St. Giles	42,038	331	288	31.6	27.5	2.9	30	—	7	2	2	10	—	5	—	4	136
St. Martin-in-the-Fields	16,928	89	84	22.3	21.0	2.5	10	—	6	—	—	4	—	—	—	—	157
Strand	30,527	203	145	26.7	19.1	2.2	17	—	6	—	1	3	—	5	—	2	103
Holborn	32,465	255	230	31.5	28.4	2.2	18	—	7	—	2	4	—	2	—	3	204
Clerkenwell	69,091	616	397	35.8	23.1	3.0	52	—	24	1	5	13	—	2	2	5	149
St. Luke's	44,043	524	286	47.7	26.1	2.6	29	—	5	8	3	7	1	1	1	3	120
London City	43,312	198	251	16.3	23.3	1.4	15	—	2	1	2	7	—	2	—	1	182
East Districts																	
Shoreditch	125,565	1,172	654	37.5	20.9	2.4	74	—	4	22	3	30	—	3	—	12	154
Bethnal Green	129,175	1,358	685	42.2	21.3	2.7	87	—	3	18	5	45	—	10	—	6	132
Whitechapel	68,828	630	341	36.7	19.9	1.4	24	—	—	6	5	8	—	1	—	4	125
St. George-in-the-East	46,490	440	325	38.0	28.1	2.5	29	—	—	7	3	14	—	—	—	5	155
Stepney	58,544	539	381	37.0	26.1	3.2	47	2	2	9	3	21	—	7	1	2	173
Mile End Old Town	110,709	964	508	35.0	18.4	2.2	62	2	5	18	2	20	—	11	1	3	151
Poplar	174,596	1,505	799	34.6	18.4	1.7	72	2	5	19	7	22	1	8	2	6	141
South Districts																	
St. Saviour, Southwark	27,674	255	200	37.0	29.0	6.1	42	—	30	—	4	3	—	1	—	4	153
St. George, Southwark	59,063	551	390	37.4	26.5	3.3	49	—	27	—	2	13	—	4	—	3	151
Newington	115,772	1,016	617	35.2	21.4	2.7	77	1	18	4	11	33	—	4	—	6	143
St. Olave, Southwark	10,735	104	50	38.9	18.7	1.9	5	—	1	—	—	3	—	—	—	1	144
Bermondsey	88,111	835	499	38.0	22.7	2.0	45	—	7	5	4	19	—	4	—	6	131
Rotherhithe	40,055	372	195	37.3	19.5	1.7	17	—	3	3	3	5	—	3	—	—	118
Lambeth	273,295	2,317	1,264	34.0	18.4	2.1	142	1	61	2	18	37	—	7	1	15	125
Wandsworth	257,092	2,202	1,185	34.4	18.5	2.4	156	—	81	2	7	39	—	13	1	13	149
Camberwell	227,917	1,898	997	33.4	17.5	1.8	104	9	15	10	15	39	—	3	—	13	125
Greenwich	145,569	1,295	740	35.7	20.4	2.8	102	2	26	6	18	38	—	7	1	4	112
Lewisham	36,758	397	217	29.6	16.2	1.4	19	2	—	—	—	10	—	4	—	3	128
Woolwich	77,242	350	211	38.2	23.0	1.5	14	—	—	—	—	8	—	1	1	4	123
Plumstead	53,843	594	253	30.9	13.1	0.6	12	1	—	1	3	6	—	1	—	—	109

further declined during the three months under notice to 32. These 32 fatal cases included 19 of London residents which were recorded in the Metropolitan Asylum Hospital ship *Atlas*, situated outside registration London, all of which have been credited to the districts in which the patients resided prior to their removal to the hospital. Of these 32 deaths from small-pox, 16 belonged to South London (including 9 to Camberwell), 6 to West London, 6 to East London, and 4 to North London. Whooping-cough showed the largest proportional fatality in Newington, Stepney, and Bethnal Green; measles in Clerkenwell, Westminster, Southwark, and St. Pancras; diphtheria in Fulham, Islington, and Greenwich; "fever" in Hackney, Bethnal Green, Mile End Old Town, and Stepney; and scarlet fever in St. Luke's and Shoreditch.

Infant mortality in London last quarter, measured by the proportion of deaths under one year of age to births registered, averaged 135 per 1,000, against 144 and 136 in the corresponding periods of 1883 and 1884. In the East districts the rate of infant mortality averaged 145 per 1,000 during the quarter under notice, while in the rest of London it did not exceed 125 per 1,000, but showed an excess in London City, Holborn, and Westminster.

THE GUARDIANS OF THE OUNDLE UNION AND MR. A. S. STOKES.

In our issue of December 5th, we drew attention to the action of the Oundle Board of Guardians in appointing Mr. Thomas Pink, of Kingscliffe, Northampton, to the Weldon district of that union, in which district he was non-resident, and from which he was distant eight miles, and to the confirmation of such appointment by the Local Government Board, although there was resident at Weldon a medical gentleman, namely, Mr. A. S. Stokes, who had resigned the office on finding that he was paid £10 a year less than an unregistered medical man whose appointment had been similarly sanctioned by the department; but who (Mr. Stokes), was willing to again accept the office even at the stipend fixed by the guardians, in consequence of the annoyance to which he was subjected, consequent on the repeated requests that were made to him to attend poor people, from whom it was impossible to obtain any remuneration, and which was consequent on the distance at which the district medical officer resided. We now learn from a Northampton journal that, at a meeting of the Board held on January 21st, a communication from the Local Government Board, respecting a letter from Mr. A. S. Stokes was read by the clerk, from which it appears that the Local Government Board presumed that the guardians would take immediate steps for securing that the medical officer for the Weldon district would, in compliance with the consolidated orders, nominate some qualified medical practitioner who would attend on his behalf, under the circumstances contemplated in Article 20. The letter to the Local Government Board from Mr. A. S. Stokes was as follows.

"I beg to inform you that the statement made by the Oundle Board of Guardians to your Board that the distance at which Mr. Pink resides from Weldon does not cause any inconvenience to the poor is an untenable statement. Recent facts have proved the distance to be fraught with extreme difficulties and expense to sick paupers in case of urgency.

"The present system is one which is not only an injustice to myself, but the indifference to the comfort and welfare of the sick poor of Weldon demands a full inquiry. To urge such inquiry, I hereby give notice to the Local Government Board that, on and after January 1st, 1886, and until such time as an inquiry be instituted, I absolutely refuse to act as substitute for Mr. Pink in any parish case of illness. Sooner or later, a coroner's inquest will result, and a jury's verdict may possibly awaken the guardians to a sense of their duty, which they owe to the paupers under their charge.

"(Signed) A. S. STOKES."

At the request of the Board, the clerk read minutes of previous meetings, from which it appeared that Mr. Stokes resigned, as the Board would not pay a higher salary. The clerk was instructed to take steps in accordance with the letter from the Local Government Board, that is, to call on Mr. Pink to appoint a substitute, which it may be a somewhat difficult thing for him to do, having regard to the professional circumstances.

Among the instances of hardship which have been reported, one will suffice. A widow who is bedridden, and receives but 2s. 6d. a week for her maintenance, has had to pay 10d. a week for the carriage of medicines from Mr. Pink's surgery to her cottage.

In commenting on this case, we can but remark that it is more than surprising that, because Mr. Stokes considered that his salary was insufficient, and resigned when he found that the guardians would not increase it, his Board should have been supported in their false economy and injustice by the Local Government Board sanctioning the appointment of a gentleman who is not only non-resident, but who lives eight miles away.

That Mr. Stokes should be dismissed from his office as public vaccinator, is only consistent with the other proceedings of the Oundle Board of Guardians.

In conclusion, we trust that Mr. A. S. Stokes will succeed in obtaining that public inquiry which he seeks. In the meanwhile, we would advise him to get a question put to the President of the Local Government Board in the House of Commons; and in the interests of our sick poor we commend the action which Mr. Stokes has taken.

TENTS, VANS, AND SANITARY AUTHORITIES.

SIR,—At page 168 of the JOURNAL of Saturday, January 23rd, it is stated that, by Section 9 of the Housing of the Working Classes Act, 1885, a tent or van comes under clause 91 of Public Health Act if overcrowded, or a nuisance injurious to health. I find, on referring to the *Medical Directory* for 1886, the Act is mentioned at page 31, that power is given to sanitary authorities to make by-laws with respect to tents, vans, sheds, etc.; *ergo*, is the Act inoperative in districts where there are no by-laws, as I believe many districts act only on the powers conferred upon them by the Public Health Act, as in many large districts there is a difficulty in making laws that are applicable to small towns, villages, etc., differently situated as to the need and mode of sanitation.—Yours faithfully,

THOMAS PARTRIDGE, Medical Officer of Health.
Stroud Sanitary Authority.

*** Section 9 of the Housing of the Working Classes Act, 1885, enacts that "a tent, van, shed, or similar structure used for human habitation, which (1) is in such a state as to be a nuisance or injurious to health, or (2) which is so overcrowded as to be injurious to the health of the inmates, whether or not members of the same family, shall be deemed to be a nuisance within the meaning of Section 91 of the Public Health Act." Nuisances within the meaning of that Section are liable to be dealt with summarily, and justices have power to order their abatement on proceedings being taken. Section 92 of the Public Health Act obliges local authorities to take these proceedings.

The power to make by-laws given by the Housing of the Working Classes Act is in addition to the general powers and duties given by the portion of Section 9 quoted above. Where tents, etc., are a nuisance, they must be proceeded against by the local authority under the general Act. If the circumstances of the district are such as to make further restriction desirable, by-laws may be made for that purpose.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, January 16th, 6,133 births and 4,149 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 25.5 and 22.5 per 1,000 in the two preceding weeks, rose again last week to 23.8. The rates in the several towns, ranged in order from the lowest, were as follow: Hull, 17.2; Sunderland, 17.2; Sheffield, 18.6; Birkenhead, 19.1; Oldham, 20.0; Leicester, 20.9; Bristol, 21.0; Bradford, 21.2; Blackburn, 21.8; Derby, 22.2; Huddersfield, 23.0; Salford, 23.2; Birmingham, 23.4; Liverpool, 23.8; London, 23.9; Leeds, 24.2; Newcastle-upon-Tyne, 24.2; Brighton, 24.2; Preston, 25.2; Bolton, 25.3; Nottingham, 26.1; Norwich, 26.1; Cardiff, 26.4; Wolverhampton, 27.4; Manchester, 30.6; Plymouth, 31.3; Portsmouth, 31.8; and the highest rate during the week, 32.7 in Halifax. The death-rate in the twenty-seven provincial towns averaged 23.7 per 1,000, and was 0.2 below the rate recorded in London, which, as before stated, was 23.9 per 1,000. The 4,149 deaths registered in the twenty-eight towns included 435 which were referred to the principal zymotic diseases, against 497 and 448 in the two preceding weeks; of these, 156 resulted from whooping-cough, 111 from measles, 46 from scarlet fever, 41 from "fever" (principally enteric), 37 from diarrhœa, 39 from diphtheria, and 5 from small-pox. These 435 deaths were equal to an annual rate of 2.5 per 1,000. The zymotic death-rate in London was equal to 2.7, while in the twenty-seven provincial towns it did not exceed 2.3 per 1,000, and ranged from 0.0 and 1.0 in Derby and in Cardiff, to 4.0 in Oldham, 4.8 in Nottingham, and 6.1 in Plymouth. The deaths referred to whooping-cough, which had risen in the five preceding weeks from 111 to 274, declined to 156, and showed the largest proportional fatality in Portsmouth and Brighton. The fatal cases of measles, which had been 163 and 113 in the two previous weeks, were 111, and caused the highest death-rates in Blackburn, Nottingham, and Plymouth. The 46 deaths from scarlet fever showed an increase of 8 upon the numbers returned in the preceding week; this disease was proportionally most fatal in Norwich, Leicester, and Birkenhead. The fatal cases of "fever," which had been 38 and 42 in the two previous weeks, were 41, and caused the highest death-rate in Norwich. The 39 deaths from diphtheria exceeded by 2 the number in the preceding week, and included 22 in London, 5 in Liverpool, 3 in Bristol, 2 in Portsmouth, and 2 in Leeds. The 37 fatal cases of diarrhœa differed but slightly from recent weekly numbers. Of the 5 deaths from small-pox recorded in the twenty-eight towns, 2 occurred in Liverpool, 1 in London (exclusive, however, of 2 deaths of London residents, from this disease, recorded in the Metropolitan Asylum Hospital ship *Atlas*, situated outside registration London), 1 in Manchester and 1 in Cardiff. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the nine preceding weeks from 90 to 35, were again 35 on Saturday, January 16th; 11 patients were admitted to these hospitals, against but 2 and 1 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 6.7 per 1,000, and exceeded the average. The causes of 90 or 2.2 per cent. of the 4,149 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

OBITUARY.

WILLIAM BOUSFIELD PAGE, F.R.C.S.,

Consulting Surgeon to the Cumberland Infirmary, Carlisle.

THIS distinguished surgeon, whose place in the North of England will not be easily filled, was born at Ashford, in Kent, in 1817, and was, therefore, in his sixty-ninth year when he died on January 5th, 1886, at his residence, St. Anne's, near Carlisle. Several years ago, he had completed arrangements which admitted of his retiring, in a measure, from the more laborious part of his extensive practice; and in 1877 he resigned his position as acting surgeon to the Cumberland Infirmary, which he had filled ever since the opening of the infirmary in 1841. It does not appear, however, that in these changes he was conscious of any failure in health, or even in his always energetic devotion to everything which he undertook. He was, and continued till within a year of his death, in very active practice, as well as occupied in various ways with business which seemed to afford him the only kind of rest he needed, or that his nature admitted; for, it is said, he rarely or never took a complete, or at least a long, holiday. It is even said that he hardly ever knew what it was to be ill, although several years ago the writer of these lines remembers vaguely certain symptoms being talked over, in the view of their possibly indicating gout. About nine months before his death, he had occasion to use some extra exertion in ascending a hill to meet a professional engagement, and was then conscious for the first time of something like cardiac failure, and also of an unwonted weakness in the lower extremities, suggestive of paralysis. At the same time, his general health, previously robust, underwent a notable change, and he became relatively, though not perhaps at first absolutely, emaciated and anæmic. He also became depressed in spirits, and anxious about himself to a degree very unusual, and indeed ominous in one whose whole life up to this time had been one continuous illustration of a cheerful and sanguine temperament. This was, as it now appears, the sure instinct of a mind rarely at fault in diagnosis or prognosis, brought suddenly face to face with bodily disease of a serious character, which, if it existed at all, had been previously overlooked. From the time of the almost accidental discovery above alluded to, Mr. Page slowly declined into a condition closely resembling progressive pernicious anæmia. No change of place, and no remedy or combination of remedies, appeared to do him any good. Neither the cardiac nor the paralytic symptoms which he at first apprehended appeared to make progress, but his bodily condition surely and gradually declined from week to week; and the fatal result came about at last without any striking or sudden transition. So ended a life of far more than common activity, usefulness, and beneficence, surrounded by all the attentions of devoted and loving friends, and with the wide-spread and universal sympathy of a large district, where his daily labours for nearly half a century had made him not only a well-known character, but had also earned for him everywhere "the blessing of him that is ready to perish."

Mr. Page began his medical career in London as the pupil, and afterwards the confidential assistant, of Mr. John Scott, Surgeon to the London Hospital. He always referred to this early association as one from which he derived incalculable benefit, and which, in its influence upon his character as well as his career, had more than anything else made him the man he was. The immense experience of a very large City consulting practice, and of one of the largest hospitals in London, was open to him from the first. The *Medical Register* bears that he became a Member of the Royal College of Surgeons of England in 1841, and a Fellow in 1856. Certain it is, that he early acquired the habits and the skill necessary for dealing with emergencies, and along with these essential qualifications came the confidence and the power to read the lessons of his own experience, which never afterwards failed him. At the age of 24, he was recommended to the governors of the newly completed Cumberland Infirmary by Mr. Scott, who had previously been invited by Bishop Percy to nominate an acting surgeon, and who, we learn, "offered the post to three men, all of whom have attained eminence in the profession—namely, Mr. Curling, Mr. Critchett, and lastly, to Mr. Page, who accepted it."

Few of those who knew Mr. Page intimately can doubt that, had he remained in London, as he was under some inducements to do, the way of success would have been opened to him there also, and that he might have taken his place among the leading hospital-surgeons of the metropolis, with a prospect of rising to much greater distinction than was possible to him in the Border city; but it may well remain doubtful if his life would have been, or could have been, more usefully spent in the service of humanity. He entered Carlisle, as he himself tells us, "on a midwinter afternoon (New Year's Day, 1842), almo frozen, having travelled in a biting frost outside the coach fro Preston. All sensation in my lower limbs was gone by the time I h got over Shap fells; and when I had taken off my boots, I had look to see if my toes were still in them." He did not know a sing person in Carlisle, and, not being aware of certain controversies whi had attended his appointment by nomination, his position was, first, not a very comfortable one. But he possessed energy, tact, a surgical skill; and with these he rapidly made friends. The histo of his early struggles will probably never be written; but it is kno that within a very short time he not only took the leading place Surgeon to the Cumberland Infirmary, but had been consulted most of the county families, and by the dignitaries of the Cathedr whose confidence in his professional skill and personal character mained firm to the last. He became surgeon to the county gaol, a consulting surgeon to the asylum. He also became surgeon to three of t great railway companies whose lines pass through Carlisle; and fro the immense range of experience thus afforded, he came to be large consulted by other companies in difficult cases. Mr. Page's i fluence was always, if possible, exerted so as to avoid litigatio and his great tact and knowledge of human nature, as well the confidence reposed in him alike by the companies and t public, gave him a power always to resist extravagant clai while conceding what was just and even generous; in consequen of which, he was but rarely unsuccessful in attaining the end in vie

It is unfortunate that this, and other duties in which t record of his personal experience and conduct would have been pec liarly valuable, came upon him after his time was so fully occupie that he had almost abandoned the habit of his earlier years, of co tributing occasionally to the medical journals. Those who had acc to the stores of his information through conversation know how mu has been lost to the world owing to this cause; for it might almo be said that in no department of pathology or of medical or surgic experience, was it possible to apply to Mr. Page, without some luc and instructive remark, always founded on facts observed rather tha on much reading, though not without evidence of a carefully dis plined mind applied to all that he read. The peculiar character this self-discipline was, that in rapidly taking in all the points o case, whether with a view to surgical treatment, or to any disputed disputable question, he rarely allowed himself to hesitate; and ye with this abrupt and apparently instinctive way of arriving at decision, he was rarely far wrong. He had a quick eye for facts, a was not easily misled by prejudices, or by sentiment; yet he was much in sympathy with weak and frail human nature, that he cou not condemn too harshly even those whom he knew to be tryin more or less consciously, to mislead him. In actual grave disea and domestic calamity, his faithfulness and sympathy were alwa felt and freely acknowledged. Those who have read one of the mo touching books of modern times, the memoirs of Mrs. Tait by h husband, the late Archbishop, will not fail to remember the numero and grateful allusions in it to the trusted family friend and medic attendant. Another of his well-known and life-long patients was t late Sir James Graham, of Netherby. It may be as well to put record here, that the writer of these lines has heard Mr. Page e patiate on the deathbed and dying words of that statesman as one the grandest scenes of simple fortitude and almost sublime faith in t unseen, which he had ever witnessed.

Always attached to the Church of England, Mr. Page was entire free from bigotry and narrowness in religious matters, and cou estimate men individually as he found them, by the simp canon: "By their fruits ye shall know them." An instructiv and yet amusing, instance of his promptitude in adapting hi self to all occasions of usefulness, was personally communicated h him to the writer, and may therefore be accepted as authentic. lady of title was in the neighbourhood of Carlisle, and was far a vanced in pregnancy, but expecting by-and-bye to be delivered of h first-born child in London. Owing to some miscalculation, howeve Mr. Page had to be sent for, and found her ladyship, very much to h own surprise, already suffering labour-pains, of which, of course, s had no previous experience. When confronted with the facts, she w actually distressed, as she said it was of the utmost importance th the child, and possible heir to the title, should be born in Londo "In that case," said Mr. Page, at once, "you have no time to lose you must go to London by the very next train, and I must go wit you; the train starts at ——," naming a very brief interval, and once going off to make the necessary arrangements. The lady at on consented to place herself in his hands, and to run the risk of bein delivered in the course of the journey. She was, however, safe carried to London as she desired, and the child was born there.

Mr. Page married, in 1844, the daughter of Mr. William Nanson, town clerk of Carlisle, by whom he had four sons and four daughters, all of whom, as well as Mrs. Page, survive him. Three of his sons are settled in London, and one of them, Mr. Herbert W. Page, is Assistant-Surgeon to St. Mary's Hospital. In early life, Mr. Page communicated to the *Medico-Chirurgical Transactions*, 1848, a paper on the Treatment of Ununited Fracture; and, two years afterwards, one on Excision of the Os Calcis; he also made several communications to the medical journals.

DAVID GORDON, M.D., L.R.C.S.

ANOTHER of the old Edinburgh practitioners, Dr. David Gordon, has died this week, aged seventy. He was born in Nova Scotia, and passed his boyhood there. He came to Edinburgh fully half a century ago, and studied medicine in Edinburgh, graduating M.D. there in 1841, and in the same year also taking the L.R.C.S.E. During the last forty-five years he engaged in general practice in Edinburgh, and was very successful, the conscientious discharge of his duties and the marked benevolence of his nature rendering him a favourite with all who came under his care, while in the Wesleyan church to which he belonged he was highly respected for the unostentatious zeal with which he worked in church matters.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, January 22nd, 1886.

THE following Bills were brought in and read a first time.—Mr. CONWAY—Bill to regulate the importation, manusacture, and sale of butter substitutes.—Baron DIMSDALE: Bill for the better securing of purity in beer.—Mr. J. STUART: Bill to repeal the Contagious Diseases Acts, 1866 and 1869.—Mr. DODDS: Bill to amend the Public Health Acts in relation to private improvement expenses.—Sir J. LUBBOCK: Bill to limit the hours of labour of children and young persons in shops.—Mr. QUILTER: Bill for better securing the purity of beer.—Mr. DIXON HARTLAND: Bill for better sanitation of houses in the metropolis.

Monday, January 25th.

Overhead-Wires.—Lord J. MANNERS, replying to Sir H. TYLER, was understood to say that his attention had been called to the failure of overhead telegraph and telephone wires during the recent snowstorm. He was happy to say that no case of fatal accident to human beings had been caused by wires belonging to the Post-Office. The overhead telephone-wires did not belong to the Post-Office, and the department had no means of furnishing a return of the failures and accidents which the hon. member asked for. The policy of the Post-Office for many years had been in the direction of substituting underground for overhead wires, wherever the expense could be justified.

Mr. W. CORBET'S Bill to alter and amend the law relating to private lunatic asylums in Ireland, and to make other and more suitable provision for paying patients, was read a first time.

Notices of Motion.—The following notices have been given: Mr. CHARLES RUSSELL: To call attention to the operation of the Rivers Pollution Prevention Act, 1876, and the defects therein, with reference especially to the dangerous condition of the River Lea; and to move for the appointment of a Select Committee of this House to inquire into and report thereon, with the view of amending the law and devising a remedy.—Mr. HENRY J. WILSON: To call attention to the Contagious Diseases Acts, 1866 and 1869; and to move that, in the opinion of this House, the Contagious Diseases Acts of 1866 and 1869 ought to be repealed.

UNIVERSITY INTELLIGENCE.

OWENS COLLEGE, VICTORIA UNIVERSITY, MANCHESTER.

APPOINTMENTS.—The following appointments have recently been made: to the Brackenbury Professorship of Physiology, William Stirling, M.D., D.Sc. Regius Professor of the Institutes of Medicine in the University of Aberdeen; to the Lectureship in Medical Jurisprudence, John Dixon Mann, M.D., M.R.C.P.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE ordinary meeting of the College was held on Thursday, January 28th; Sir W. Jenner, K.C.B., in the chair.

The following gentlemen were admitted to the Membership: Oswald A. Browne, M.B.Cantab.; James Limont, M.B.Edin.; Joseph M. Prendergast, M.D.Dublin.

The Licence of the College was granted to eighty-six gentlemen, who had passed the required examinations.

The Registrar announced that the late Dr. Milroy had bequeathed to the College the sum of £2,000, to found a lectureship in Public Medicine; also books and documents of value.

Dr. P. W. Latham, Dr. Playfair, Dr. Ringer, and Sir J. Fayrer were elected Councillors. Dr. Stone and Dr. Duckworth were appointed Examiners for the Murchison Scholarship.

The President announced that Dr. Pavy has consented to deliver the Harveian Oration; and that the Bradshaw Lecturer will be Dr. Dreschfeld, of Manchester.

The Examiners' annual report and the quarterly report of the Finance Committee were received and adopted. A report was also received from the Building Committee, which stated that no time had been lost in commencing the works at the site of the new Conjoint Examination Hall on the Thames Embankment. Six tenders for the contract had been received, and the lowest tender—that of Messrs. Higgs and Hill—had been chosen. The foundations had been entirely excavated, and much of the basement brickwork executed. The subsoil having been found to be river-mud, it had proved necessary to carry the foundations down to the gravel, twenty feet below the surface. During the excavations, part of the old river-wall of the Savoy Palace had been found, also some ornamental tiles and pottery, which had been claimed by the Duchy of Lancaster. The Committee proposed that there should be some public ceremonial at the formal laying of the first stone of the new Hall. This proposal met with the approval of the College.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on January 20th.

J. S Hill, L.R.C.P.Lond, Mecklenburgh Square, and G. T. Bates, L.S.A., Bredwardine, students of University College; R. J. C. Cottell, L.R.C.P.L., Cheyne Row, of St. George's Hospital; P. C. C. Billups, L.R.C.P.L., East Dulwich, of Guy's Hospital; J. A. Rigge, L.S.A., Greys, Essex, A. Lyndon, L.S.A., South Hampstead, H. C. Otway, L.R.C.P.L., Kennington Park Road, and J. Girvin, Mecklenburgh Square, of St. Bartholomew's Hospital; E. C. Freeman, L.R.C.P.L., St. George's Square, of St. Thomas's Hospital; B. Volckman, L.S.A., Stapleford, Notts, and J. Thomas, L.R.C.P.L., St. Peter's Street, of the London Hospital; V. G. Thorpe, L.S.A., Camberwell, and H. B. Cavell, L.S.A., Brook Street, of King's College; M. Hughes, Croydon, of Westminster Hospital; A. T. G. Watts, L.S.A., Buckingham Palace Road, of Cambridge and St. George's Hospital; L. Roberts, L.S.A., Bishopsbyford, of St. Mary's Hospital.

Seven candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members; one candidate was referred for three months, and five for six months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on January 21st.

A. G. M. Creagh, L.S.A., Ballinrollin, and P. W. Fraser, Wolverhampton, of University College; L. J. Pisani, L.S.A., Upper Norwood, of Charing Cross Hospital; O. C. P. Evans, L.R.C.P.L., Hadlow, Kent, E. M. Hassard, Hoddesdon, F. N. Brown, Chobham, C. Christopherson, L.S.A., Blackheath, and C. W. F. Young, L.S.A., Clapham Common, of St. Bartholomew's Hospital; H. L. Williams, Carnarvon, and F. W. Clark, East Croydon, of Middlesex Hospital; A. W. Robinson, Longleat, of St. George's Hospital; C. J. Ireland, Amwell Road, of Leeds Infirmary; A. Berrill, Oltom, of Birmingham; J. F. Bridgwood, Stafford, of Guy's Hospital; F. S. Hawkins, Bristol, of Bristol Royal Infirmary.

Three candidates were approved in Surgery, and, when qualified in Medicine and Midwifery will be admitted Members. Three candidates were referred for three months, six for six months, and one for twelve months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on January 22nd.

F. C. Evill, L.R.C.P., Worcester Park, W. H. C. Caudler, L.R.C.P.L, Lee, S.E., G. H. Russell, L.R.C.P.L., Barking Road, F. T. Bennett, L.S.A., Denmark Hill, L. M. Snow, L.R.C.P.L, King Henry's Road, N.W., C. J. Horner Walthamstow, A. Wright, Cape Town, E. V. Brown, Tufnell Park, J. P. Roughton, Kettering, W. J. Wordsworth, Harley Street, of St. Bartholomew's Hospital; F. J. Morgan, L.R.C.P.L., Junction Road, of Westminster Hospital; J. B. Okell, L.R.C.P.L., Chester, of St. Thomas's Hospital; S. R. Hodge, L.R.C.P.L., Hornsey Lane, and H. Fouks, Knowle, Warwick

shire, of the London Hospital; T. H. Williams, L.R.C.P.L., Seymour Street, of Middlesex Hospital; F. S. Le Quesne, L.S.A., Brighton, and A. H. Sturdee, Southsea, of King's College; A. N. Darlington, L.S.A., Birmingham, of the General Hospital, Birmingham; L. Déqué, L.R.C.P.L., Derby, of St. Mary's Hospital; G. D. Symes, Dorchester, of St. George's Hospital; L. H. Williams, Clifton, of Bristol Royal Infirmary; C. Pollard, Wadebridge, Cornwall, of Guy's Hospital; J. C. Holderness, Bishops Wilton, Yorks, G. S. Greenwood, Ossett, Yorks, of Leeds General Infirmary.

Six candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members. Seven were referred for six months, and two for twelve months.

The following gentlemen were admitted Members on January 25th.

J. Crisp, L.R.C.P.Lond., Kennington Park Gardens, and F. F. Burghard, Brixton, of Guy's Hospital; R. H. Combes, L.R.C.P.Lond., New South Wales; W. T. Gardner, L.R.C.P.Lond., Hampstead, A. W. B. Warde, Yalding, J. A. Smith, Hull, C. A. Griffiths, Finsbury Park, and R. Gillies Smith, Durham, of St. Bartholomew's Hospital; P. E. Barber, L.R.C.P.Lond., Sheffield, and R. F. Castle, Delamere Crescent, of Cambridge and St. Bartholomew's Hospital; J. Holt, Leeds, of Leeds General Infirmary; S. H. Harrison, Tamworth, of Birmingham General Hospital; J. Birt, Brighton, of St. George's Hospital; J. P. Hubbard, Dudley, of Birmingham General Hospital; J. O. Ward, L.S.A., Crossgate, near Leeds, of Liverpool Royal Infirmary.

Two candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members. Four were referred for three months, seven for six months, and one for twelve months.

The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on January 26th, and, when eligible, will be admitted to the pass-examination.

F. B. Hulke, L.R.C.P.Lond., Deal, student of University College; Kankai Totsuka, L.R.C.P.Lond., Tokio, Japan, and G. Hope, L.R.C.P.Lond., Ventnor, of St. Thomas's Hospital; G. F. W. Ewens, West Hammersmith, of King's College; C. Dickinson, Sloane Street, S.W., and A. T. Wood, Melton Hall, Suffolk, of St. George's Hospital; J. R. Williams-Freeman, M.B.Durham, Southampton, of Newcastle and University College; B. M. Bond, L.R.C.P.Lond., Hastings, of St. Bartholomew's Hospital; G. F. Pollard, L.S.A., Falmouth Road, of Guy's Hospital.

Seven candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members; two were referred for three months, nine for six months, and one for twelve months.

The following gentlemen were admitted Members on January 27th.

H. A. Francis, L.R.C.P.Lond., Lincoln's Inn Fields, student of St. Bartholomew's Hospital; W. H. C. Staveley, L.R.C.P.Lond., St. Stephen's Square, W. J. Staddon, L.R.C.P.Lond., Ipswich, and F. G. Parsons, L.R.C.P.Lond., Lee, S.E., of St. Thomas's Hospital; S. Wacher, L.R.C.P.Lond., and William H. Crosse, L.S.A., Terrington, Norfolk, of Guy's Hospital; E. Evans, M.B.Cantab., Dorchester Place, of St. Mary's Hospital; G. T. Gifford, L.S.A., Winchester, P. R. T. Harris, L.S.A., Amhurst Park, N., and E. P. A. Marriette, L.S.A., St. Stephen's Square, of King's College; F. W. Collingwood, L.R.C.P.Lond., Manor Road, S.E., and C. D. Morris, L.S.A., Philpot Street, of the London Hospital.

Seven candidates were approved in Surgery; one was referred for three months, and eight for six months.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The examinations for the triple qualification of these bodies in Edinburgh were held in January, with the following results. Passed First Examination.

A. C. Evered, Plymouth; R. Aldous, Norfolk; H. Gurney, Hounslow, Middlesex; J. H. Carson, County Down; G. Cormick, Persia; J. A. Oorloff, Badulla, Ceylon; W. E. Thomas, Glamorgan; E. F. Hogan, County Clare; H. G. Tandy, London; C. F. Lovibond, Somersetshire; J. A. Nowell, Lancashire; D. M. Campbell, Ontario; J. Brown, County Donegal; F. T. Anderson, Darjeeling, India; M. C. Billings, Meerut, India; J. F. Challinor, Bolton; J. Cannings, Demerara; C. D. F. de Mello, Goa; F. W. Cuttle, Newent, Gloucestershire; D. K. Draffin, County Monaghan; D. E. Edwards, South Wales; W. A. K. Hanna, Bombay; M. C. Hopkins, Meath; P. Gleeson, Tipperary; A. H. Goodwyn, The Curragh; J. Hurley, County Cork; A. Macdonald, Edinburgh; F. Primrose, Nova Scotia; J. Metcalfe, Tongue, N.B.: J. W. Kelly, Queenstown; R. L. Hughes, North Wales; R. Nugent, Calcutta; H. C. Swailes, Yorkshire; L. V. Parry, Merionethshire; J. Slatter, Natal; C. H. Sykes, Yorkshire; H. R. H. Peare, Melbourne; H. Smith, Yorkshire: T. Warren, Armagh.

Passed Second Examination.

J. H. Briggs, Yorkshire; J. W. Brooks, Bombay; T. J. Barr, Dublin; J. T. Chapman, Victoria; H. Chadwick, Burnley; T. Cussen, County Limerick; M. T. Casey, County Limerick; G. W. Dick, Edinburgh; C. A. Fergus, East Kilbride; G. Gibson, Cheshire; J. Fayrer, Edinburgh; A. C. Evered, Plymouth; W. M. Gabriel, Kendal; C. F. Lovibond, Somersetshire; H. Gurney, Middlesex; E. F. Hogan, County Clare; J. A. Nowell, Lancashire; D. S. Moncrieff, jun., Dalkeith; A. L. Mather, Aberdeenshire; E. Ryan, County Limerick: J. W. Parry, Pwllheli, North Wales; P. O'Sullivan, County Clare; E. R. Sims, Derby; T. W. Quinn, Bimlipatam; H. G. Tandy, London; P. Sturrock, Pitlochry; W. E. Thomas, Glamorganshire; P. J. Wilkinson, Manchester.

Passed Third Examination, and admitted L.R.C.P.Edinburgh, L.R.C.S.Edinburgh, and L.F.P. & S.Glasgow.

W. E. Thompson, Newfoundland; T. J. Barr, Dublin; J. Lazar, Madras; J. Fayrer, Edinburgh; J. D. Leigh, Bishop Auckland; C. J. Morton, Edinburgh; D. McArthur, Clifton; M. O'Sullivan, Castle Mahon; R. J. Paton, India; E. T. Turnbull, Alnwick; J. S. Sidey, Edinburgh; T. W. Stewart, Madras; J. W. Rowlands, Anglesey; E. Wakelam, Willenhall, Staffordshire.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, January 21st, 1886.

Beer, Louis Edward Simon, 23, Hampstead Road, N.W.
Parker, Charles Arthur, Claxby, Alford, Lincolnshire.
Pound, Clement, Odiham, Hants.
Toogood, Frederick Sherman, 48, Manor Park Road, Willesden.

The following gentlemen passed in the Science and Practice of Medicine, and received certificates to practise.

Creagh, Arthur George Mellefont, Ballenvollin, Co. Cork.
Owen, Samuel Walshe, M.R.C.S., 14, Landcroft Road, East Dulwich.

MEDICAL VACANCIES.

The following vacancies are announced.

BAILDON, Yorks.—Medical Officer. Salary, £30. Applications to W. H. Hines, Baildon, Shipley.

BRISTOL GENERAL HOSPITAL.—Assistant House-Surgeon. Salary, £50. Applications by January 30th.

CHELTENHAM GENERAL HOSPITAL.—Honorary Surgeon. Applications by February 1st.

COTTAGE HOSPITAL AND DISPENSARY, Hounslow.—Dispenser. Applications to the Secretary.

FEMALE LOCK HOSPITAL, Harrow Road, W.—House-Surgeon. Salary, £100. Applications by February 13th.

FRIENDLY SOCIETY MEDICAL INSTITUTE, Northampton. Assistant Medical Officer. Salary, £150. Applications by February 9th.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road.—Two Clinical Assistants.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by February 13th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, Margaret Street, Cavendish Square.—Honorary Visiting Physician. Must reside within one mile of the institution.

JAMES MURRAY'S ROYAL ASYLUM, Perth.—Assistant Medical Officer. Applications by February 1st.

LEICESTER PROVIDENT DISPENSARY.—Medical Officer. Applications by February 9th.

LEITH HOSPITAL.—House-Surgeon. Salary, £70. Applications to the Secretary.

LIVERPOOL INFIRMARY, Myrtle Street, Liverpool.—Assistant House-Surgeon.

LIVERPOOL NORTHERN HOSPITAL.—House-Physician. Salary, £80. Applications by February 5th.

LONDON FEVER HOSPITAL, Liverpool Road, Islington.—Assistant Resident Medical Officer. Salary, £120. Applications to the Secretary by February 3rd.

LUNATIC HOSPITAL, The Coppice, Nottingham.—Assistant Medical Officer. Salary, £100. Applications to Dr. Tate on February 18th.

NEWCASTLE-UPON-TYNE INFIRMARY.—House-Surgeon. Salary, £50. Applications by February 3rd.

OWENS COLLEGE, Manchester.—Lecturer in Dental Anatomy and Physiology. Applications to the Registrar by February 8th.

PARISH OF LOCHS, Island of Lewis.—Medical Officer. Salary, £150 per annum. Applications by February 1st.

QUEEN'S HOSPITAL, BIRMINGHAM.—Two Casualty Surgeons. Honorarium, £50 each. Applications by February 13th.

RINGWOOD UNION.—Medical Officer of Health. Salary, £40. Applications by February 6th.

RISCA COLLERIES, Newport, Mon.—Surgeon. Applications to the Committee, Risca Office, Newport, before February 5th.

ROYAL SOUTH LONDON DISPENSARY, St. George's Road, Lambeth. Surgeon, Honorarium, £20. Applications by January 30th.

SKIPTON UNION.—Medical Officer. Salary, £18. Applications by February 5th.

ST. HELEN'S FRIENDLY SOCIETY MEDICAL AID ASSOCIATION.—Medical Practitioner. Applications by March 1st.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Honorary Physician. Applications by February 1st.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Salary, £70. Applications by January 30th.

STOCKPORT INFIRMARY.—A Third or Fourth Years' Student as Assistant to House-Surgeon. Applications by January 30th.

UNIVERSITY OF SYDNEY.—Professor of Physics. For particulars apply to S. Samuel, 5, Westminster Chambers, Victoria Street, S.W.

WONFORD HOUSE HOSPITAL, Exeter.—Assistant Medical Officer. Salary, £150. Applications to Dr. Deas, by February 3rd.

MEDICAL APPOINTMENTS.

CHILDE, Letterstedt F., M.B.Lond., M.R.C.S., appointed House-Surgeon to Guy's Hospital.

COLLENETTE, Frank de B., L.R.C.P., re-appointed Medical Officer to the Wolstanton and Burslem Union.

COUNSELL, Herbert E., M.R.C.S., L.R.C.P.Lond., appointed Resident Obstetric Assistant to Guy's Hospital.

OWLER, C. Owen, M.D., appointed House-Physician to the General Lying-in Hospital, Lambeth, *vice* W. Radford Dakin, M.D., resigned.

ARSANT, Joseph G., M.B., B.S.Lond., appointed Resident Obstetric Assistant to Guy's Hospital.

QUEEN, Edgar, M.B., appointed Physician to Out-Patients to the Queen's Hospital, Birmingham.

ANN, J. Dixon, M.D., M.R.C.P., appointed Lecturer on Medical Jurisprudence in the Owens College.

VEN, James, M.B., M.A.Camb., appointed Medical Officer of Health to the Borough of Oldham, *vice* R. Bryden Hill, M.D., B.Sc., deceased.

UTHERN, J. Acton, M.R.C.S., L.R.C.P.Lond., appointed Resident Assistant House-Surgeon to the Derbyshire General Infirmary, *vice* Edmund Vaudrey, M.B., resigned.

ONG, Charles S., M.R.C.S., appointed House-Surgeon to Guy's Hospital.

YLOR, Alfred E., M.R.C.S., appointed House-Surgeon to Guy's Hospital.

ALTERS, F. R., F.R.C.S., M.D.Lond., B.S., appointed Honorary Surgeon to the Westminster General Dispensary, *vice* J. Waters, M.D., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

e charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

OWN—LEWIS.—On January 20th, at Llanishen Parish Church, by the Rev. Jas. Oakley, assisted by the Rev. R. H. Baynes, M.A., Tintern (Hon. Canon, Worcester Cathedral), John Taylor Brown, M.B., C.M., Tintern, to Lucy Edith Louisa, second daughter of the late William Lewis, Llanwinney, Monmouth.

OMAS—LITTLE.—On the 4th November, 1885, at St. Andrew's, Lutwyche, Brisbane, by the Rev. J. Southey, Walter Duncan Thomas, M.B.(Lond.), Bundaberg (second son of the late Benjamin Thomas, F.R.C.S., Llanelly), to Leila Boyle, third daughter of Robert Little, Whytecliffe, Brisbane.

DEATHS.

TH.—On January 22nd, at 2, Stanhope Terrace, Gloucester Gate, N.W., Herbert Ross (Bertie), youngest son of Walter Smith, M.D., M.R.C.P.Ed., aged 11 years.

OD.—On January 10th, at 118, Mount Pleasant, Liverpool, Robert Arthur Henry Wood, M.R.C.S. and L.S.A., Fellow of Obstetrical Society, Honorary Surgeon to Liverpool Lying-in Hospital, and District Medical Officer to Liverpool Select Vestry, in his 39th year.

RKMAN.—On the 11th instant, at Teignmouth, Dr. Charles John Workman, aged 46.

PRESENTATION.—Mr. Roger Prosser, surgeon, of Bromsgrove, having ched the age of 50 on Saturday last, January 23rd, was presented, at a olic dinner, with a dessert-service of solid silver, the centrepiece of ich bore the following inscription: "Presented to Roger Prosser, ., on his fiftieth birthday, by his friends and fellow-townsmen, in preciation of his private worth, and in recognition of his public vices. 23 January, 1886."

FISH-DINNERS IN WORKHOUSES.—The Canterbury guardians have ided to inform the Local Board, in reply to a communication from uitehall, that the fish-dinners in the workhouse during the last ee months were very beneficial to the health of the inmates, and, h one or two exceptions, were well liked.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

NDAY.—Medical Society of London, 8.30 P.M. Mr. Jonathan Hutchinson: Lettsomian Lectures. On Some Moot Points in the Natural History of Syphilis. Lecture III.—Odontological Society of Great Britain, 8 P.M. Casual Communication by Mr. Storer Bennett. Mr. J. Bland Sutton: Dental and Oral Cases in Animals. President's Inaugural Address.

SDAY.—Pathological Society of London, 8.30 P.M. Specimens of Tumours of the Brain and its Membranes will be exhibited by Dr. Ashby, Dr. Barlow, Dr. Beevor, Mr. Butlin, Dr. Chaffey, Dr. Goodhart, Dr. Hadden, Dr. P. W. Macdonald, Dr. G. Ogilvie, Dr. Ord, Mr. D'Arcy Power, Mr. Peeke Richards, Dr. Saundby, Dr. F. Taylor, Dr. Charlewood Turner, and Dr. Samuel West. Dr. Hale White will show specimens of Thinning of the Skull from Cerebral Tumours. Microscopical Specimens will be on view at 8 P.M.

ONESDAY.—Obstetrical Society of London, 8 P.M. Annual Meeting. The President (Dr. Potter) will deliver the Annual Address. Specimens will be shown. Mr. Knowsley Thornton: A Case of Removal of Both Ovaries during Pregnancy. Dr. Lewers: A Case of Circumscribed Sarcoma of Uterus and Vagina. Dr. Matthews Duncan: On Contraction, Inhibition, and Expansion of the Uterus.

RSDAY.—Harveian Society of London, 8.30 P.M. Dr. D. B. Lees: The Neurotic Treatment of Catarrh. Mr. Shirley Murphy: Animal Vaccination.—Parkes Museum of Hygiene, 8 P.M. Dr. G. A. Heron: How it is Shown that Living Things cause some of the Diseases of Man.

DAY.—West London Medico-Chirurgical Society, 8 P.M. Mr. Percy Dunn: A Morbid Growth involving the Right Broad Ligament and Ovary, causing Complete Obstruction of the Intestinal Canal; Chronic Suppuration of the Lung following Pneumonia. Dr. Campbell Pope: Large Urinary Calculus passed *per Urethram*. Mr. Hurry Fenwick: Photographs of Twelve Cases of Extroversio Vesicæ.—Papers by Mr. Bruce Clarke, On Abdominal Exploration; and by Dr. Herringham, On a Case of Paralytic Deformity of the Foot.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30 Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

Sexual Ignorance.

Sir,—Accepting the invitation in the Journal of September 19th last to assist in trying to solve this difficult and all important problem, with the utmost deference I would suggest that your grand object, the preservation of sexual purity in the young, has been provided for already. No silence is observed in scripture on this vital subject. "Verily, he or she that runneth may read." "Thou shalt not" was thundered from Sinai to primitive mankind, and still rings in the ears of the youth of the nineteenth century. Dull indeed must be the moral perceptions of boys or girls, at the age of puberty, who does not comprehend the meaning of their Maker sufficiently at least to make them pause and think. The very plain speaking of Scripture is itself proof, were that required, of the moral depravity of human nature, in which, more than in any sort of ignorance, must be sought the *fons et origo mali*.

Some good, however, might be done by placing in the hands of boys and girls, at the proper age, a brief treatise on the general laws of generation, a subject brought necessarily under their notice at an early age by the lower animals, from which source, beyond doubt, they derive their first non-intuitive ideas on the subject of reproduction.

The matter should be treated in a very elementary but explicit manner, with special reference, of course, to the human species, and with appropriate scriptural references, and explanations of what constitutes wrong. Surely the most delicate-minded parent could hardly object to a child reading, as soon as he or she is capable of comprehending it, a simple exposition of what the Creator has caused to be written for the guidance of each succeeding generation to the end of time.

One standard work compiled, or at least approved, by a joint committee of clerical and medical authorities, would be very desirable. Finally, this authorised instruction might be placed in the hands of the boy or girl on the twelfth or thirteenth birthday by the father or mother, as the case may be, to be read at leisure and in private. This plan, if carried out, would at least dispose of the element of ignorance, however much or little that may be.—I am, sir, yours faithfully,

A Doctor and a Father.

Health-Resort for a Phthisical Patient.

Sir,—Would anyone be kind enough to inform a phthisical member, with limited means, where he could go for the next two or three months with probable benefit to his health? There is a direct phthisical family history, a hawking-up of purulent mucus for the past five months, and there was an attack of hæmoptysis in November last. After the bleeding, which was slight, weight went down four or five pounds, but is now normal again. Warm summer weather makes me feel languid. Would a voyage to the Cape and back be recommended? or would some one be kind enough to suggest something better? Any information will be very thankfully received by, yours truly,

An Associate.

Electric Belts.

Sir,—I am frequently asked by patients what is my opinion of electric belts, so freely advertised. I have usually been in the habit of telling them that, if the belt be placed round the bedpost, it will do them about the same amount of good as if placed on their body. I should be glad, however, to have your opinion as to whether they have any effect, useful or otherwise, if you will reply in the Journal.—Yours faithfully,

M.D.St. Andrew's.

*** We must first understand what is meant by an "electric belt." Some call by this name a collection of bits of magnetised iron sewn in between two layers of flannel. We know absolutely nothing of the physiological action or therapeutic value of magnetism, except in certain rare forms of functional nervous disorder (for example, hystero-epilepsy). With reference to true galvanic belts, composed of two metals moistened with vinegar, or other exciting liquid, it is often difficult to understand how they can send a current through the body at all, much less through the part of it which is diseased. A good electric belt is a more expensive and less practical apparatus for the production of galvanic currents than a battery of ten or fifteen reliable cells in a box with suitable electrodes. Schott, of 230, Euston Road, supplies such instruments for thirty to forty shillings.

"Electric belts" may fairly be described as offering in some cases a method of faith-cure (not to speak of the value of the flannel bandage); in others, an antiqnated, uncertain, and disagreeable method of electrisation. Dr. de Watteville, in his *Medical Electricity* (page 153), says that it is now the unanimous opinion of authorities that, in the immense majority of cases, everything electricity is likely to do is to be obtained by the application of moderate currents, for a moderate time, and repeated at intervals. Where "continuous electrisation" is thought to be advisable, two or three cells of modern construction will answer the therapeutical indications.

Dr. T. S. Dowse.—See British Medical Journal, February 15th, 1879, page 249; and March 15th, 1879, pages 417-18.

Hysterical Paralysis in a Boy, aged 7 Years.

Sir,—I should feel much obliged if you would insert, in the Journal, this account of a case of hysterical paralysis in a boy, aged 7 years. I have never seen anything of the kind in one so young and of the same sex. Perhaps some of your readers will kindly give their experience of any similar cases which may have occurred to them.

The patient, a boy, aged 7 years, is one of a family of eight children, four being older, and three younger, than himself. In none of these is there any history of convulsions or other nervous complaint. The father, a clergyman, is, however, of a highly nervous temperament. Under strong emotion he loses the power of co-ordinating the movements of his legs. The mother is quite healthy, and not by any means an excitable woman. Two years ago the patient had an attack of typhoid fever, following almost immediately after scarlatina. From these, however, he recovered, only that he has had, since then, a slightly enlarged condition of the tonsils, and also a tendency to diarrhœa, having usually two or three motions in the course of the twenty-four hours. He has never looked strong, and, during these two years, has been more inclined to occupy himself with books, pictures, and practising drawing, than with ordinary childish and boyish sports. Four weeks ago, I was sent for to see him; his father said he had had some kind of fit. I could not, from his description, form an idea of its nature. When I saw the child, he had paralysis of the muscles of the mouth and eyebrows, also of arm, with squinting. When asked to walk round the room, he limped, as if the knee or ankle pained him. No history of a blow, or fright, could be got. Worms in the intestine were suspected, but have never been seen. In case these should be present, a purge was given, also santonin, but with negative results.

I prescribed for him a mixture containing bromide of potassium, the dose being ten grains every four hours, and ordered that the child be kept perfectly quiet, and that all lessons be stopped; letting him, however, have his pictures to amuse himself with. During all this time the child was perfectly sensible and could always give an intelligent answer to any question asked of him. This condition lasted for two or three days, when it was noticed that the left arm and left leg were becoming gradually weaker, and by the fifth day the boy was unable to walk. When he attempted to do so, the leg was dragged on the floor and he soon fell. There was flaccidity in both arm and leg. In the arm the power of grasping was retained, but it was much weaker on the left side than on the right. I was told by his parents that he occasionally had "fits," like that which he had had at first, but I did not happen to see him in any of them. About a week from the commencement of his illness, I was hastily summoned to go and see him, as he was said to be very much worse. On entering the room, I saw the child in what was apparently a well-marked hysterical fit. I took him out of bed, and finding he knew me, I talked firmly but gently to him, and before I left the house, all evidence of the fit had passed away. I told the parents what I suspected, and also informed them that the cure lay very much in their own hands. Galvanism was employed to keep up the tone of the muscles in the arm and leg; and here I may state, that in the affected arm and leg, a current could be borne so strong, that I myself could scarcely bear it, while the other side was as susceptible to electricity as one would expect in a child. Occasionally, signs of hysterical fits appeared, but these were promptly checked.

Seeing him one day limping and dragging his leg, I told him I could not allow him to walk in that way, and had the pleasure of seeing him walk properly; and he has gradually improved, until now he walks nearly as well as ever he did.

Apologising for trespassing on your space at such length, I remain, etc.,

M.B., C.M. (Edin).

Trained Nurses.

Sir,—I do not know if you will deem a letter from a trained nurse of sufficient interest for insertion in your valuable Journal, but, in justice to the nursing sisterhood generally, I hope you will allow me to say a few words.

An article on "Trained Nurses" was published in a medical paper some weeks ago, which has already been copied in one periodical, and, unless contradicted, will most probably appear in others, and do an incalculable amount of harm. That nursing in private families and in hospital wards are two very distinct things is, I believe, a recognised fact; but any woman who has undergone a thorough course of training in the wards of a large hospital will have acquired adaptability, and will know how to accommodate herself to circumstances when in charge of a private case; and the greater her experience, the more valuable will be her services, both to the patient and medical attendant. To nurse the sick efficiently and well, some form of training is necessary. Three most essential qualities in a nurse—forethought, patience, and perseverance—are not usually inborn, but have to be acquired; so also have self-possession and endurance. No woman can be a perfect nurse without training, any more than a man can be a skilful musician without practice. In each case, talent must be cultivated. In the making of beds alone, an intelligent woman would learn more in one month, in the wards of a large hospital, than she would understand in one year from verbal directions alone. The same may be said as regards the lifting or turning of helpless cases, the changing of poultices and dressings with least exposure or discomfort to the patient, and the handling of painful limbs.

It must often happen, in private families where trained help is not available, that, whilst the attendants are learning the elementary rules of nursing, the patients' sufferings are greatly increased. How far a nurse's education should be carried on, depends entirely on the special branch of nursing she proposes to adopt, and its requirements.

I could write much more on this subject, but I fear I have already trespassed too long on your forbearance.—Believe me, sir, faithfully yours,

E. E. Julian, Matron and Superintendent of Nursing,
Newark Hospital.

A Degree in Medicine for London Students.

Sir,—Unfortunately I cannot spare time to come to the meetings of Convocation of the University of London, or I would vote against making a teaching university of it, as it would considerably narrow its sphere of usefulness. It does good work at the present time, being the only University in the United Kingdom that is open to all, without residence at any particular college.

The fact is, that a medical degree is in great measure a matter of money. A man with a private income of £100 a year is not very likely to go in for the drudgery of "general practice;" and we want a medical degree for general practitioners equivalent to the Scotch and Irish degrees. The University of London M.B. takes at least five years to get; and if a man is rejected at the Preliminary Scientific Examination (as most men are), it means the loss of a year, and is equivalent to a fine of £100.

But, rather than alter the regulations of the University of London at present the better plan would be for the Royal College of Physicians and the Royal College of Surgeons to get power to grant the degree of M.D., after a good examination in biology, to men who have taken their double qualification.

It is unusual to put biology at the end of a course of study, but the knowledge of human anatomy and physiology greatly helps one in the study of biology, and most men are only too glad to have some subject to work at in the comparatively leisure time that they get soon after they are "qualified." It is the science-subjects that a great number of medical schools are unable to teach; and if a man be not tied down to attending stated courses of lectures, he will get his science-teaching from the best source available.

While writing on this subject, may I ask what is the use of examining a student twice in anatomy and physiology? The first examination of the conjoint board must be by far the most difficult of the three, including, as it does, anatomy, physiology, chemistry, materia medica, and botany; and it has to be passed after only a year of study. Why not leave out the anatomy and physiology, examining only in chemistry and materia medica, the botany being included in a biology examination for a degree. The degree might be made retrospective, by allowing men with the double qualification who have been ten years in practice to send in a thesis in place of passing an examination in biology.—Yours, etc.,

G. Birt M.B.Lond.

Stourbridge.

Mr. R. F. Owen's letter has been handed to the General Secretary.

The Beefsteak and Hot Water Cure.

Sir,—A letter lately appeared in the *Pall Mall Gazette* telling us "How to become Thin," which is sure to attract attention, partly from the striking way in which the writer has put his case, and also from the interest which the treatment of fatness always excites among the fat. The course consisted in drinking nothing but hot water, and eating practically nothing but animal food, for seventeen weeks. The water was taken in four doses daily, at a temperature of from 130° to 150° Fahr., on an empty stomach, and at least one hour before a meal. The daily average of solid food was 5 lbs., chiefly lean beef; a little plain boiled codfish occasionally. That the course was successful, is clear from his account. "Two years ago, I weighed (dressed) 16 st. 4 lbs., and my figure was of tubby, aldermanic contour. I am now 13 st. 2 lbs. My waist-girth was 44½ inches; now it is 35 inches. I suffered from chronic heartburn; I have had none of it for fifteen months. I went in daily fear of a painful kidney attack; I have not had a symptom of it since I began the hot water. I sleep better, and do both my mental and physical work more easily; and, in fact, feel a much younger man than formerly."

Many people are sure to be anxious to try this "cure;" and, as the wiser among them will probably begin by asking our advice on the matter, it is as well that we should be prepared to say in what kind of cases this sort of treatment is likely to do good, and in what it will be injurious; for that it will be injurious in some is perfectly certain. The treatment of obesity by a lean-meat diet is old enough; in fact, it is the central point of Bantingism; nor is there any novelty in the prescription of meat for dyspeptics, in whom vegetables turn to flatulent sourness; nor is the use of warm water in any way an untried thing, being in fact the key to the success of many of the Spas. But the special combination of the meat and the hot water, and its use for the treatment of lithæmia, is, I think, a new departure, and is worthy of careful thought.

The first thing to bear in mind is that the water is essential; without it, the meat would kill; the next is, that the success of the treatment depends on the possession by the patient of fairly capable kidneys; and the next, that the quantity of meat prescribed was for the cure of the obesity, and not necessarily for that of the lithæmia, the hot water being often useful in cases of lithæmia in conjunction with a mixed diet, the great condition being that no fluid should be drunk at meals.

In the treatment of the lithæmic condition, one finds one's self constantly on the horns of a dilemma; if meat is ordered, the malady is aggravated; if vegetables, the patient suffers from flatulent indigestion; hence the compromise usually recommended, namely, as little meat as the patient can get on with, and such vegetables as he can digest, the whole tempered by occasional blue pills and salines.

But if washing out the system between meals with plentiful supplies of hot water will enable us to feed even our lithæmics on strong meat, which frequently is to them by far the most pleasant and digestible food, a step is gained in dietetics which will often be of great service in the treatment of many other problems besides that of "how to become thin." It must, however, be distinctly borne in mind that this course of diet must not be recommended until we have assured ourselves of the capacity of the patient's kidneys as excretory organs. Some people with active intestines can save their kidneys by a farinaceous diet; others with freely acting kidneys can humour their digestion by eating meat; but there will always be some who, with feeble digestions and inefficient kidneys, will be unable, even with the aid of the hot water, to escape that "life on a lower level" which is the only safe resource for those affected with chronic organic disease.—I am, etc.,

Halifax. Solomon C. Smith, M.D.

Maternal Impressions.

Sir,—The question of the influence of maternal impressions upon the fœtus *in utero*, cropping up occasionally, in the pages of the Journal, can only be answered by the Nestors of our profession.

We begin life, probably, as sceptics or unbelievers, and it is not until, perhaps, two or three thousand labours have passed under our care, that we are enabled to speak with anything like assurance upon the subject.

At the same time, from the days of the patriarch Jacob, who peeled wands of poplar, hazel, and chestnut, and set them before the flocks that they might conceive ringstraked, speckled, and spotted, it has been admitted that the lower animals are affected, if not mentally, at least by impressions acting on the senses, in a manner which may influence their future progeny; though, from their less impressionable natures, probably unfrequently as compared with the highly impressionable human female.

For my part, I consider a woman's surroundings during the period of gestation by no means a matter of indifference; and no careful or loving husband would so regard it. Is it of no import to a refined, sensitive, and emotional creature whether she be encompassed by all that is pure, and chaste, and lovely at this important crisis, or whether she be surrounded by objects gross, vulgar, and repulsive? Doubtless, to a dull, unappreciative, and uncultivated mind, it matters little whether she gaze upon an Apollo or a pump, but not so with the more refined and gentle of her sex. The two following are amongst the most remarkable instances which have fallen under my own personal cognisance.

A woman in the third month of pregnancy was crossing a dimly lighted cellar, when a toad hopped before her. She instantly closed her eyes, and grasped (clutched, as she termed it) her left forearm with her right hand. It was an affair of a moment, and her self-possession was restored. On delivering the child at full term, I found the left forearm undeveloped, presenting an appearance as if amputated below the elbow. Shortly afterwards, the unfortunate infant was discovered to be amaurotic.

A lady of refined tastes was in the habit of sitting before a group of statuary, with one little figure of which she was greatly enamoured. This was a "Cupid reposing;" his cheek resting on the back of his hand. When her baby was born, his resemblance in form and feature to the little Cupid was at once striking. On seeing him the next day in his berceaunette, I perceived he had assumed the precise attitude of the statuette—the cheek upon the back of the hand; and this position he invariably, and, of course, involuntarily, adopted during sleep, not only throughout infancy, but up to advanced boyhood, when I lost sight of him.

Some years since, the proprietors of the *Illustrated London News* published a chromograph, which they have never surpassed, of Little Red Riding Hood. It commanded an extensive sale, and to this day it may be found in almost every house, from the mansion to the cottage. I believe I can trace the influence of this charming picture, and that it has had a sensible effect in ameliorating the deformities and exalting the beauties of our race. As the advertisements say, "No nursery should be without it."

It is noteworthy, as showing how deep and durable must have been the maternal impression in the first-mentioned case, that the next baby after was born blind, then came a perfect child, and again a third one amaurotic.

One more observation, if space will permit, *a propos* of absence of sight. The happiness of blind people is proverbial. The late Postmaster-General, though deprived of the blessing which he once enjoyed, has left us a noble example of more than resignation—of usefulness, activity, and contentment. The poor boy to whom I first alluded, the son of a labourer, is now a young man. A short time since, I put to him the question, "If it were possible to bestow upon you sight, you would esteem it a great boon?" His prompt reply was, "Thank you, I'd much rather not." Pressing him to explain, he said: "I cannot conceive a happier condition than that which I enjoy, and I would rather not run the risk of acquiring something that I know nothing at all about." The truth of what my blind boy instinctively felt is admirably worked out in Wilkie Collins's psychological study of *Poor Miss Finch*.—I am, yours, etc.,

Faversham. Edward Garraway.

Colonial Practice.

Sir,—The excellent leading article on "Colonial Practice," which appeared in the Journal of Sept. 5th, ought to command the serious attention of everybody who is thinking of emigrating; but the statement that towns increase more rapidly here than at home is certainly incorrect as far as Victoria is concerned, as the following extract from the *Argus*, of October 31st, will show. "We see no large towns springing up behind Sydney or Adelaide. The inland centres in Victoria, were the creation of the gold-fields, and the census shows that they are doing little more than hold their own. Scores of Victorian hamlets could be mentioned which have disappeared from the scene, having slipped down the railways to Melbourne; and the alarm can be understood which has induced the larger towns to band themselves into a decentralisation league to resist such a fate." The railways have been the making of Melbourne, but the ruin of the up-country towns, which for the most part are decreasing. The mining industry has for years past been steadily declining.

Referring to the letter from the Edinburgh Missionary Society, as to openings in New Zealand, I do not believe there is a spot in those islands, or any part of Australia, where a medical man or a clergyman can obtain a living, but where there is a man ready and willing to go forward and fill up the gap. What would be the cost of working such a practice as that described? And it must be remembered that £300 out here is of very different value from that amount at home. It is very nice to hear that there is some place calling out for a Christian medical man, for no one can help noticing how often it is the drunken practitioner who is the favourite because, for some reason I cannot explain, he is sure to be considered the cleverest. Any increase of population goes to swell the clubs, so the medical men holding those appointments are alone the gainers. If your readers will consider what is the population of these colonies, it is very easy to understand how soon their wants are supplied. Victoria has a million, one third of which is centred in Melbourne; New South Wales, about the same; Queensland and South Australia, about 300,000 each; and New Zealand about 600,000. There has been no emigration into Victoria for years past; and during the years 1871 to 1881, the natural growth, from all sources, was only 17.9 per cent. Matrimony is at a serious discount, so much so, that it has been proposed to levy a bachelors' tax of £10.

Many may know friends out here who give a different account from what I do; so did I, and took the information they supplied as trustworthy, but I find their opinions have undergone considerable change, and that they themselves are wanderers. In speaking of Victoria in my last letter as being the "wealthiest and most populous," I ought not to have qualified it by adding, "considering its size." The decrease in the population of Ballarat ought to have been put at 9,000, and not 1,500. The openings to which I therein referred have all been filled up, and I would wish to say that I have come across four or five practices of £1,000 and upwards. For the Blackall Hospital, Queensland, salary £200, with right to practice, there were no fewer than sixteen applicants—population of town, 700; that is conclusive proof as to the excess of supply over demand. I was surprised the writer of your editorial article did not allude to the depression in South Australia and New Zealand, from both of which colonies emigration has been going on. Gordon and Gotch's *Australian Handbook* is an invaluable book of reference, and the descriptions of the various townships read very nicely when you are in England; but the reality of having to live in them is sufficient to make the stoutest heart give way, and I am not surprised at so many medical men taking to drink. Many people who have spent years in Australia, know nothing of the country, simply because they have always lived in a large town.—Yours truly,

Melbourne. A Member.

Southern Health-Resorts.

The following notice occupies a very prominent position just now in Italian hotels. "Winter Season, 1885. In Italy. Declaration of Healthiness. We, the undersigned, in their quality of chief magistrates of their respective towns, declare hereby that the state of healthiness is most perfect, and that not a single case of infectious diseases has never been proved on their whole communes. This declaration has been made in order to contradict whatever a countrary assertion which could be made by a few persons interested to spread about that the state of healthiness of these towns is not still most satisfaction. The usually so great a number of winter host may consequently come as before and quite safely pass the winter in our so nice a climate without any fear of contagions disease. —(Signed by magistrates of towns of North Italy and Riviera.)"

Cucaine in Cancer of Uterus.

Madame J. G. Sarraute, M.D., writes to the *Semaine Médicale* in reference to a case of cancer affecting the neck and body of the uterus, which had reached its last stages, and was the cause of unceasing agonising pain. The patient used subcutaneous injections of morphine seven times daily, and began to present symptoms of morphine-intoxication, so that it was necessary to stop the use of that drug. The idea then occurred to employ cucaine in the following manner. After the usual syringing of the part, a wad of appropriate size, soaked in a 10 per cent. solution of cucaine, was placed into the hollow ulceration excavated by the disease. A second similar wad, with string attached, was placed into the vagina. Half an hour after the dressing, all pain had ceased, and she passed the entire day without suffering. The treatment has been continued with equal success for several days, the patient being completely eased, notwithstanding the abrupt discontinuation of the morphine.

Surgeon-Major Sergeant.—Received and shall have due attention.

To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications chiefly by reason of their unnecessary length.

Undue Publicity: An Explanation.

Sir,—I was much pained to see, in your issue of January 23rd, an extract from an Irish country newspaper concerning me, under the heading "Undue Publicity." I emphatically deny having any connection with the original publication. It was, I find, supplied by a well-meaning but injudicious relative from private family letters. It contains obvious errors, and no one regretted its appearance in print more than I.—Faithfully yours, A. J. Smith.

Dublin.

Heald Defence Fund.

Sir,—I beg to acknowledge the following further subscriptions received towards the above fund: W. Mair, Esq., £2 2s.; Dr. J. Dobson, £1 1s.; J. Hudson, Esq., £1 1s.; Dr. B. G. Heald, £1 1s.; Dr. Cheeswright, £1 1s.; R. N. Brindley, Esq., 10s. 6d.; F. V. Smithson, Esq., 10s. 6d.—I am, sir, yours, etc.,

H. Arthur Allbutt, M.R.C.P.E., Hon. Sec. Heald Defence Fund.

24, Park Square, Leeds.

The Professional Preliminary Examination at the College of Preceptors.

Sir,—I think intending candidates for the above examination should be made aware that, if they fail to satisfy the examiners in one or more subjects, they are rejected for the whole examination, and are not credited for any good work they may have done. The above College does not grant the privilege that has been recommended by the General Medical Council, and adopted by other examination boards, namely, "Candidates who fail in one or more subjects need be re-examined in those subjects only." This is certainly a boon and privilege which cannot but be most acceptable to pupils, teachers, and parents.—I am, yours truly, A Parent.

Home for Incurables.

Sir,—In answer to "Nemo," I beg to state that the Bolingbroke Home Hospital, situated on Wandsworth Common, takes in such cases on the payment of a small weekly fee.—I remain, yours faithfully, Cecil R. C. Lyster, M.R.C.S.

Bolingbroke Home Hospital, Wandsworth Common, S.W.

Sir,—If "Nemo" will write to "B.," "The Woodlands," East Hoathly, Hawkhurst, he will find, I think, exactly what he seeks.—Yours truly,

E. George.

Doctor's Gig.

Sir,—I should be very much obliged if any of your readers who have had practical experience of "Beddoes Moore's doctor's gig" in its most recent form will give me information with regard to it, especially with reference to the following points. Is there any "knee-motion" perceptible with it? and is there any weight on the horse's back going down-hill? Any answers to my queries may be forwarded direct to me, or through the medium of your Journal.—Yours faithfully, A. de W. Baker.

2, Lawn Terrace, Dawlish.

Ling's Swedish Gymnastics.

Sir,—In reply to "Dr. L. M.'s" question in your issue of January 23rd, respecting Ling's Swedish gymnastics, I can recommend *The Gymnastic Exercises, according to Ling's System*, by Dr. Matthias Roth, published by Joseph Myres and Co., London. This pamphlet gives directions and figures, and the exercises put in function all the muscles in the body without requiring special apparatus.—I am, etc., William W. Ireland.

M.A., LL.B.—We see no objection; the words M.D. Brussels.

Pure Terebene.

Sir,—In the Journal of January 23rd, a writer, who signs his letter on the above subject with the initials "A. S. G.," practically attributes to me shameful conduct. If "A. S. G." will show, by attaching his name to his attack on me, that he is not ashamed to avow his identity, I shall be prepared to supply him with the elementary information for which he asks, as to the difference between a so-called "patent medicine" and a patented article, as well as to enlighten him on other points on which he appears to be equally ignorant.—Yours truly,

1, Beaufort Buildings, Spa, Gloucester. Francis T. Bond, M.D.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. D. G. Brinton, Philadelphia; Mr. R. Clement Lucas, London; Mr. Felix Davidson, London; Mr. J. Court, Chesterfield; Mrs. Reaney, London; Mr. A. Stokes, Wansford; Mr. Simeon Snell, Sheffield; Mr. W. H. Anderson, Harleston; The Honorary Secretaries of the Odontological Society; The Honorary Secretary of the Harveian Society; Dr. Gairdner, Glasgow; Dr. W. Hind, Stoke-on-Trent; Mr. H. Bateman, York; Mr. W. Berry, Wigan; Mr. A. Chapman, London; Mr. D. J. Browne, Londonderry; Dr. Fenn, Dover; Mr. Cresswell Baber, Brighton; A Victim; Militia Reserve; Dr. Fletcher Beach, Dartford; Mr. Thomas Partridge, Stroud; Mr. C. G. Howell, Felixstowe; Mr. W. Stuart Low, Yealand Conyers; Dr. Imlach, Liverpool; Dr. S. Martin, London; Mr. D. W. Aitken, Edinburgh; The Secretary of the Royal College of Surgeons, Edinburgh; Dr. A. J. Smith, Dublin; Messrs. Brady and Martin, Newcastle-on-Tyne; M.B.; Dr. J. S. Cameron, Huddersfield; Mr. David Cannon, London; Mr. T. Almond Hind, London; T. Y. C.; Dr. Walter Smith, London; Messrs. Mawson and Swan, Newcastle-on-Tyne; Mr. J. B. Unwin, Dunchurch; Our Manchester Correspondent; Mr. H. S. Robinson, Monkwearmouth; Mr. R. Longford Jones, Bangor; Mr. A. H. F. Cameron, Liverpool; Mr. Lawson Tait, Birmingham; Mr. W. A. Fox, New Barnet; Dr. C. J. Cullingworth, Manchester; Mr. J. Brindley James, London; Mr. Alexander Thomson, Huntly; Mr. J. Quirke, Birmingham; Dr. Ireland, Prestonpans; Dr. Rentoul, Liverpool; Mr. R. W. Parker London; Dr. Atthill, Dublin; Dr. F. T. Bond, Gloucester; Mr. J. N. G. Biggs, London; Dr. John Lowe, London; Dr. M. Martin de Bartolomé, Sheffield; Dr. Rudolf H. Heller, Prague; Dr. T. Maxwell, Woolwich; Mr. J. B. Cooke, Portland; Mr. Armand Bernard, Liverpool; Dr. A. Simpson, Perth; Mr. F. W. Kirkham, Downham; Mr. W. L. Nash, Teignmouth; Mr. T. Richmond, Glasgow; Dr. J. Eaton, Cleator Moor; Mr. T. G. Davy, Westland, New Zealand; Mr. J. B. Mann, Manchester; Mr. J. S. Wood, London; Mr. J. W. Reid, London; Mr. Gubb, London; Dr. F. Simms, London; Dr. A. Downes, Chelmsford; Dr. E. M. Cosgrave, Dublin; Dr. D. H. Tuke, London; Lord Wantage, London; Dr. J. A. Lycett, Wolverhampton; Dr. Rickards, Birmingham; Dr. Robert Bowles, Folkestone; Dr. Arlidge, Stoke-upon-Trent; Dr. Holdsworth, Wakefield; Dr. Macdonald, Liverpool; Dr. J. W. Moir, St. Andrew's; Dr. J. W. Hunt, Dalston; Mr. R. T. Richardson, Frampton-on-Severn; Mr. H. E. Cornworth, London; Mr. H. H. Tomkins, Gloucester; Dr. J. Strahan, Belfast; Dr. Lowe, London; The Peat Fuel Company, London; Our Paris Correspondent; Our Edinburgh Correspondent; Our Dublin Correspondent; Dr. T. O. Wood, London; Dr. Norman Kerr, London; Dr. D. Mann, Cambridge; Our Aberdeen Correspondent; Mr. A. M. Alcock, Innishannon; Dr. Champneys, London; Dr. B. G. Morison, London; Mr. T. G. Alderton, London; Dr. J. W. B. Mason, London; Dr. Tatham, Salford; Dr. de Watteville, London; The Principal of Owens College, Manchester; Dr. W. Corry, Drumquin, co. Tyrone; Mr. W. V. M. Koch, Cottingham, near Hull; Mr. R. W. Savage, London; Mr. Vacher, Birkenhead; Mr. Blackett, London; Dr. B. Shillitoe, London; Mr. J. Willcocks, Overton; Mr. W. T. Grant, London; Mr. T. G. Horder, Cardiff; Mr. F. Horton Villanueva, London; Dr. Stretch Dowse, London; Mr. E. Challis, Brighton; Sir E. Lechmere, London; Dr. Joseph Rogers, London; Mr. E. White Wallis, London; Mr. H. Taylor, Coltishall, Norfolk; Miss Waugh, London; The Secretary of the Local Government Board; Mr. H. A. Allbutt, Leeds; Mr. F. W. Hodder, Newry; Mr. John Brown, Bacup; Mr. S. W. Knox, London; Dr. J. A. Lindsay, Belfast; Mr. N. C. Humphreys, Swansea; Dr. F. P. Atkinson, Surbiton; Mr. Charles Boyce, Maidstone; Mr. W. F. Haslam, Birmingham; Dr. Sutherland, London; Dr. Barnardo, London; Messrs. Baillière, Tindall, and Cox, London; Mr. J. Vesey Fitzgerald, Birmingham; Dr. Thomas Buzzard, London; Mr. H. T. P. Hardy, Surbiton; Dr. Parsons, Dover; Mr. Vincent Jackson, Wolverhampton; Mr. James Startin, London; Mr. Hardy, Oakham; Dr. Wagstaffe, London; Mr. G. R. Beardmore, London; Mr. E. Evans, Bromsgrove; Mr. D. Hellier, Leeds; Mr. A. Hamilton, Thornliebank; The Secretary of the Sanitary Assurance Association; Dr. Styrap, Shrewsbury; Mr. S. Macdonald, Elgin; Dr. J. Braxton Hicks, London; Mr. G. F. Poynder, Gravesend; Mr. Keen, Aylesbury, etc.

BOOKS, ETC., RECEIVED.

Speech for the Dumb; a Lecture Delivered on October 2nd, 1884, in the Town Hall, Manchester. By H. W. White. London: W. H. Allen and Co. Manchester: J. Heywood.

Refraction of the Eye. By Gustavus Hartridge, F.R.C.S. Second Edition. London: J. and A. Churchill. 1886.

Sore-Throat; Its Nature, Varieties, and Treatment. By Prosser James, M.D. Fifth Edition. London: J. and A. Churchill. 1886.

Alphabetical Catalogue of the Library of the Faculty of Physicians and Surgeons of Glasgow. Preceded by an Index of Subjects. By Alexander Duncan, B.A. Glasgow: Printed for the Faculty of Physicians and Surgeons by R. Maclehose.

Short History of the House of Recovery and Fever Hospital in Manchester, from its Establishment in 1796 to the Present Time; Compiled from Printed Returns and Personal Reminiscences. By Frank Renaud. 1885.

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LETTSOMIAN LECTURES
ON
SOME MOOT POINTS IN THE NATURAL HISTORY OF SYPHILIS.

Delivered before the Medical Society of London, 1886.

By JONATHAN HUTCHINSON, F.R.S.,
Emeritus Professor of Surgery to the London Hospital College.

LECTURE III.

Questions concerning the Inheritance of Syphilis.—On Transmission to many Children in Succession.—The supposed connection between Syphilis and Rickets.—Ulcers of the Palate and Pharynx.—Malformation of Joints consequent on Syphilitic Periostitis in Infancy.—Ringworm of the Tongue, possibly sometimes connected with Inherited Syphilis.

Questions concerning the Inheritance of Syphilis.—The number of important questions which are still undetermined in respect to the transmission of syphilis from parent to child is very great. Indeed, it is remarkable how comparatively young almost all our knowledge on this subject is. It is not very long since it was held that contagion during parturition was the only method by which the mother could convey syphilis to her child. Next, when intra-uterine acquisition came to be admitted, there was still vehement scepticism as to whether the father could transmit. I myself well remember a debate at a sister society, in which a leading physiologist of the day ridiculed such an idea. It was held, and with a vigour of assurance which may well excite the marvel of a timid reasoner, that the mother only could convey it, and that she must necessarily have had the disease prior to the time of conception. Part of this creed, *a priori* improbable as it may seem, lingers still. Almost every one, I believe, now accepts the doctrine that a tainted father may beget tainted offspring, but some of our best authorities hold that, if a pregnant woman contracts syphilis, it is quite impossible that her disease can hurt the child in her womb. I need hardly say that the converse proposition, that, namely, of the possible ill influence of a tainted fœtus upon the mother who carries it, is still a matter of dispute. We must not complain of the results of healthy scepticism, nor must we ignore the great and peculiar difficulties of the investigation. So manifold, indeed, are the latter, that we ought perhaps not to be surprised at the vigour with which every inch of progress is disputed, nor disappointed if the battles which had seemed to be won a quarter of a century ago have to be fought again.

The evidence which is available in questions relating to the inheritance of syphilis is but seldom absolutely conclusive. It is almost always circumstantial, and yields at the best only a strong probability. Our isolated facts are usually weak in themselves, and assume strength only when they are accumulated. It is the old story of the bundle of sticks which make up a faggot. Now, different minds display great differences of capability in yielding assent to conclusions based on evidence of this kind. There are those who seem capable of trusting implicitly to any single fact, or seeming fact, which has occurred under their own cognisance, and yet can reject with confidence a large body of evidence based upon the general experience of others. To my own mind, I may confess that the general tenour of facts conveys much more of conviction than does the seeming lesson of an isolated case, however clearly the latter may be stated. Many have been the occasions in which subsequent revelations have confirmed me in the creed that, when an isolated case seems to be strongly in opposition to the more general, but it is to be admitted, vague and uncertain deductions from many others, it is wise to suspend the judgment, and to feel much doubt as to the accuracy of the asserted fact.

The evidence which leads us to believe that a father can transmit syphilis quite independently of the mother, is peculiarly of the kind referred to. In any given case, it is next to impossible to prove that the mother has never suffered. When, however, we find that the history is repeated not once or twice, but hundreds of times, that a man known to have had syphilis, marries a woman apparently healthy, and believed to have been chaste, and that, without any obvious illness in the mother, a syphilitic child is produced, we become obliged to believe that inheritance from the father is not only possible but common. If it be suggested that in these cases the mother always first receives the disease, we reply that, although it is quite possible that now and then this might occur without the primary and secondary symptoms being recognised, it is simply inconceivable that it should happen often. Primary symptoms in women are often overlooked, but secondary ones are obvious enough. Yet, in the case of syphilitic children, it is a matter of common occurrence for the mother to show no symptoms, and to assert that, from the day of her marriage to the birth of her child, she has never ailed anything. The firmness of our belief on such a point will probably depend much upon the extent of our personal experience; for, however willing we may be to accept courteously the facts offered us by others, we seldom believe with confidence, till the evidence has passed under our own eyes.

Exactly the same kind of proof of probability is offered us in respect to the influence of an infected fœtus upon a previously healthy mother. I published, more than twenty years ago, a long series of cases, which, I thought, illustrated the assertion of Ramsbotham, Harvey, and others, that the fœtus might infect its mother. The fallacy in them all was the obvious one that the mother might possibly have had syphilis herself. Probably a certain portion of the cases given were to be so explained. The women possibly did not give candid statements of their own ailments, or the latter had been so slight that they had not observed them. Again, however, I assert that there is a limit to an acceptance of such an explanation. When we find the same statement given by mother after mother, we become obliged to believe that it is probably true. It will be seen that we want proof of two things; first, that a woman may carry a syphilitic child without herself suffering in any obvious manner, and secondly, that, although she shows no symptoms, yet she does in reality receive a taint. Of the first I submit that the proof is abundant; of the second it is possibly less convincing. It consists in the fact that women not unfrequently present tertiary symptoms who have never had primary or secondary ones, and next, that they are not susceptible of contamination by their infants. In the paper to which I have referred, I gave many instances of the occurrence of tertiary phenomena under the conditions mentioned; and I have since, on several occasions, appealed to the now well-known law of Colles, as affording proof that the mother does in this way acquire protection against syphilis, although she may never have shown a symptom. I cannot say that recent years have supplied any large number of well-marked examples of tertiary symptoms under the conditions referred to, but they have been sufficient, both as to character and to frequency, to support the conclusions at which I formerly arrived.

It remains to ask whether Colles' law stands the test of time. I certainly think that it does. Although now for many years it has been widely known, and much effort has been made to draw the attention of the profession to the very remarkable fact which it asserts, yet no well-accredited exceptions to it have been placed on record. I have most certainly myself never witnessed a single case which in any way resembled an exception. I have seen a certain number of cases in which women contracted chancres on the nipple from the mouths of infants whom they had suckled, but in not one case of this kind was the infant which conveyed the infection the offspring of the woman who acquired the chancre. I have seen innumerable instances of mothers nursing their own syphilitic infants, and yet acquiring no disease. I therefore believe, with confidence, in Colles' law, and hold that it will, with every additional year of experience, become less and less a moot question.

About two years ago, my friend, Dr. David Lees, of the Great Ormond Street Children's Hospital, sent to me an interesting case bearing upon this point. A mother, who was suckling an infant, had a chancre on her nipple, and her child also showed symptoms of syphilis. Here, then, was an apparent exception. We found, however, on careful inquiry—and this, let me say, was the conclusion to which Dr. Lees had come independently of my investigations—that the infant was the subject of primary acquired syphilis, and not of inherited taint. Thus, so far from being an exception, it was, in some sense, a confirmatory fact. The mother had borne a healthy fœtus, and had, therefore, never acquired any immunity as regards the contagion which reached her accidentally through her own infant.

It will be seen that these several statements of law are mutually connected, and give each other support. If it is true (and the proof is overwhelming) that a father can give the syphilitic virus to his child, it follows that previously healthy women will often become the bearers of contaminated embryos. That, as a rule, they do not suffer

materially or even noticeably during pregnancy, must, I think, be conceded; whilst, lastly, we have the seeming fact that they are afterwards insusceptible of contamination from their own children. To those who still, with Kassowitz and others, doubt that the fœtus infects its mother, I would suggest that there is nothing in the least improbable in such an occurrence. To me, indeed, it seems exceedingly improbable that it should not do so. That with a disease so virulently contagious as syphilis is, a tainted organism should for nine months remain in such close contact as that of intra-uterine life, and yet cause no contamination, would surely be a very extraordinary fact. At the same time, I fully admit that we have no facts which would have led us *a priori* to expect that in most cases, as seems to be fact, the contamination would be effected quietly and without any obvious outbreak of secondary symptoms. This, I repeat, is an occurrence which we could not have anticipated, but we must remember that it takes place under conditions for which we have no parallels. It is not more exceptional than is the well recognised fact that, during intra-uterine life, as a rule, the fœtus itself, although severely tainted, remains in perfect health. It may, perhaps, be that it is owing to this state of suppression of the vigour of the virus in the fœtus, that it is possible for it to contaminate its mother without exciting any immediate indications of disease. The virus is possibly for a time in a minimised condition. A few cases occur of seeming fœtal contamination in which a violent outbreak of secondaries does take place, and these are, I believe, always instances of death of the embryo and early abortion. There is usually, however, in these, room for much suspicion that the mother may possibly have had a chancre, for they almost always occur within a few months of marriage. Unquestionably, the rule is, as I have indicated above, that a woman married to a diseased husband who begets tainted children, yet remains herself free from symptoms.

I must pass on to other questions. We will next ask whether it is possible for a mother who contracts syphilis during her pregnancy to infect her fœtus. As a matter of inference, I should have been inclined to reply that, if time sufficient were allowed, she must almost necessarily do so. The poison breeds with virulence in her system; how can possibly the child in her womb escape its influence? To other minds, however, the probabilities look different; and, on the assumption that the virus cannot possibly pass through the walls of the placental vessels, the suggestion that the fœtus can receive contamination has been met with a vehement denial, even by good authorities. I have myself met with several cases which appeared to be very conclusive as proof of its occurrence. Many years ago, I was asked by Dr. Barnes to examine a pregnant lady who had syphilis. She was then near the end of her term. I saw her chancre, and I saw her secondary rash. They were of quite recent acquisition. In fact, her husband had gone astray because, on account of her pregnancy, she had ceased to be attractive to him. I had attended him, and was cognisant of the date of his chancre. The evidence that neither parent was suffering from syphilis at the time of the conception of the fœtus is, I submit, conclusive; yet the child, which could have derived its taint from no other source than the mother's blood, suffered severely, in the ordinary manner, from infantile symptoms, and in later life had severe keratitis and other specific ailments.

As regards the influence of inheritance from one or the other parent, from the father or the mother, I will state broadly my conviction that it makes no difference; the inheritance is just as certain, and just as uncertain, in the one case as in the other. Nor have I been able to trace any difference in the severity. I shall mention incidentally a few facts supporting these general statements, but shall not attempt any detailed proof. To give it would involve much loss of time; and on such a matter it is perhaps fair to say that the *onus probandi* rests with the assertor. It has been, I believe, a widely accepted belief that, when the mother is the parent who has suffered, transmission is both more sure and more severe. Of this, from a careful examination of facts, I feel assured that there is no evidence.

Nor can I believe that the fact of both parents having suffered makes any difference in the severity of the disease in the child. Inheritance from both parents instead of one probably makes no greater difference to the child, than does vaccination on both arms instead of one only. It renders transmission more certain, but in no material degree intensifies the disease transmitted. Scarlet fever is the same malady when contracted by simultaneous infection from two persons as when from one only, and it is not probable that any different law obtains in the case of syphilis. It is impossible to intensify or to alter it. It is a specific disease, and must necessarily be complete, and cannot possibly be more than so. Contagion from one source is sufficient for the full result, contagion from more than one brings with it no aggravation. It is not improbably as absurd to think that the disease will be more severe when the transmission is from both parents, as to suppose that the acquired disease is worse when there are two chancres. In saying this, I am not forgetful that multiplicity on the part of a primary lesion—as, for example, in vaccination—does, to some slight extent, heighten the disease.

On Cases of Transmission to Many Children in Succession.—It is but seldom that proof can be obtained of a tendency to transmit syphilis extending over many years. Usually, one, two, or perhaps three, children suffer; and then there is an end of it, and the younger ones appear to be in every respect healthy. The fact that interstitial keratitis is met with in first-born children in very disproportionate excess is well known. The explanation of this which is usually given is, of course, that the taint is in the parents a temporary thing; that they are gradually getting rid of it. The period of its duration—the length of time, in other words, during which transmission is possible—may, however, vary much; and I purpose to say a few words as to certain exceptional cases, in which children of the same parents born at long intervals yet suffered definitely from the taint. In doing this, we must first direct our attention especially to two or three questions which are still matters of debate.

1. Is there any reason to believe that, when syphilis shows itself in several children of the same family, its degree of severity is less in the younger than in the elder ones?

2. Is it usual for some children to escape entirely, when elder and younger ones suffer severely?

3. When children in the same family show very widely different degrees of severity in symptoms during infancy, can anything be predicated from that fact as to their proneness to suffer later on in life?

I will state beforehand what my impressions are on those several points, but we will still keep our minds open to any doubts which may be suggested by the critical analysis of facts. I believe, then, that there is no reason for thinking that the transmission of syphilis is ever a thing of less or more, but rather, that if a child inherits any taint, it inherits the whole malady. The very varying degrees of severity which we constantly witness, are due to causes similar to those to which we have recourse to explain the different degrees of severity which we constantly witness in the acquired disease. When scarlet fever is passing through a family, or a school, we do not expect every child to have it with equal severity, nor do we seek to explain inequality by supposing that, in the mild cases, only a half dose of the poison was received. Rather, we are content to believe that something in the pre-existing state of the different children disposed one to suffer much and another but little. Just the same in acquired syphilis. Why should we introduce a new theory to explain a parallel fact in respect to the inherited taint? It is very easy to speak of "the taint dying out," and of one child as having received a larger dose in consequence of being born nearer to its parents' acquisition; but the question is, are such expressions in accordance with probable fact? We cannot, I suspect, be too liberal in our allowance for different degrees of severity from, so to speak, accidental cause, from idiosyncrasy, or from causes which we cannot estimate.

I had once under my care, at Moorfields, a brother and sister named K. The boy was aged 15, and had been under Mr. Hulke's care for interstitial keratitis three or four years before I saw him. He had a most characteristic set of syphilitic teeth. His sister was six years younger than him, and she attended for very severe interstitial keratitis; it affected both eyes, and was, I think, much more severe than even her elder brother's had been. Her teeth, however, were much less malformed than his; in fact, there was only one in which any defect of development could be asserted. As regards physiognomy, the two children were much alike, neither of them presented very marked peculiarities. Thus, we have here proof of the taint persisting for six or seven years, and there was no reason to think that it had diminished in severity, for the younger child suffered as much as her elder brother.

The next case which I shall cite is that of a family named R. John Henry, a boy aged 9, was brought to me with recent keratitis of the left eye; it was characteristic. His teeth could scarcely be said to be suspicious. We examined his right eye for choroiditis, and could find none. An elder sister named Ruth came with him; her teeth were typical; she suffered from nystagmus, was deaf, and in her choroids were numerous patches of pigment-accumulation. Ruth was aged 12, John Henry 9, so that we have proof of the taint affecting two children with an interval of three years, and we find the younger suffering scarcely less than the elder. But I have not told you all; there was a long family-history at which we must glance; and when we have done so, I think we shall see reason to believe that Ruth was herself born ten years or more after her parents acquired the taint. I may tell you that I saw their father, an intelligent

candid man, who gave me all the help he could. He did not admit having had any fresh syphilis since marriage.

Mr. and Mrs. R. were married in 1854, she being then 18, and he 23. Their eldest child was born within the year, and is now living (aged 31). This child had an eruption in early infancy, and was very ill. He survived, however, and there is no proof that he has suffered anything since. In 1857, a girl was born dead at full time; in 1858, were born twins, one dead, and one destined to die on the third day; in 1859, a boy, who lived only three weeks; and in 1860, 1861, 1862, and 1863 in each year, a child, none of them living more than six months. After these comes Ruth, whose case I have mentioned; she was born in 1864. Between her and John Henry two were born, both of whom died. John Henry, as we have seen, suffers rather severely. After him came, in 1869, a boy who died of scarlet fever at the age of 4, having been quite healthy. Thus out of thirteen children, three only are living.

The following is a yet more remarkable narrative in proof that a younger child may suffer most. The elder one appeared, indeed, to escape entirely; but as it died young, we cannot feel sure that nothing would have followed.

Case in which the First-Born Child of a Mother who had Suffered from Syphilis Escaped any Evidence of Taint in Infancy, whilst the Second Suffered Severely.—Some years ago I saw, with Mr. Cooper, of Bow, a very interesting case of heredito-syphilis. Our patient was a male infant, aged three months, born quite healthy-looking, but now covered with a syphilitic rash, and much emaciated. Both parents appeared healthy. They had been married nearly three years. Before marriage the mother had contracted a sore on her lip from kissing a brother who had syphilis. This sore was recognised by her medical attendants as a chancre; it was followed by a rash, and she was treated for syphilis by mercury. The gentleman, now her husband, was then engaged to her. He was made acquainted with the facts, and declined to allow the occurrence to affect their relations. About a year after the syphilis they were married, the young lady having then for six months been apparently in perfect health. A year after marriage the first child, a girl, was born. She remained quite free from symptoms, and seemingly in excellent health, until at six months she was carried off by a short attack of whooping-cough. Mr. Cooper confirmed to me the parents' statement that this child never showed any indications of syphilitic taint. During the whole of her married life the mother had remained free from symptoms, and she appeared to be quite well at the time that I was consulted about her second child. The father had never had syphilis, either before marriage or afterwards.

We seem to have here a case in proof that a mother, in whom the taint has been wholly latent for three years, may bear a child destined to suffer severely in the usual manner, and at the usual age. It is also proved that a first-born child may escape (so far as infancy is concerned) the effects of a maternal taint, from which a younger one may yet suffer severely.

It is a matter for interesting speculation whether the sex of the infant has any influence on its liability to suffer. The one which apparently escaped was a girl, the one who suffered was a boy; the taint was a maternal one only. I call attention to this fact, but without suggesting that it has any importance. I have in vain attempted to find any law or rule in reference to difference of severity of incidence of inherited syphilis in the two sexes. That a majority of those who suffer from iritis in infancy, and from keratitis when adolescent, are girls, seems, so far as present statistics go, to be established.

Inherited Syphilis in Two Sisters, the Younger suffering the most severely.—In 1861, a man brought to Moorfields two girls, his daughters, both of whom suffered from interstitial keratitis. In both the inflammation of the corneæ was just beginning, yet the elder was three years (12) older than her sister (9). The younger, in whom it was beginning earlier, appeared to suffer more severely throughout. Her physiognomy and teeth were characteristic, whilst her elder sister showed very slight peculiarities of physiognomy, and had perfect teeth.

I cite this as a very important item of evidence in proof of the unequal severity of inherited syphilis, quite independently of the period which has elapsed since the disease in the parents. It was unquestionable that both had suffered, yet the elder one had apparently almost escaped the symptoms common in the infantile period. The case is also of interest as showing how almost wholly latent the taint may be up to the time of the outbreak of keratitis. Had the sisters been in reversed positions, that is, had the younger one suffered as lightly as did the elder, the case would have seemed very strong in support of the creed that the taint is minimised by time.

The Supposed Connection between Rickets and Syphilis.—The dependence or otherwise of the bone-affections usually known as rickets upon an inherited taint of syphilis, is one which has been much discussed during the last ten years. The late M. Parrot ventured on the bold heresy that all rickets is due to syphilis, and in the course of his investigations he made known to us some very important matters of pathological fact. He had been to a large extent preceded by Wegner, of Berlin, and by Taylor, of New York, and he has since been admirably supplemented amongst ourselves by the investigations of Dr. Barlow and Dr. David Lees. I cannot now venture on more than a very brief summary of the facts which have been elicited. It is now quite certain that, during the secondary stage of syphilis in infants, that is, from the first to the sixth month, or longer, bone-affections are very apt to occur, and that they are attended by extensive deposits of new porous bone, constituting what have been called bosses, on the skull. The long bones also suffer, but more rarely, and they are affected chiefly near to their epiphyses. Suppuration may, in rare cases, occur. These nodes are at this stage always multiple, and usually symmetrical. They disappear under specific treatment, and do not usually recur until some years later. As childhood advances; for example, from the age of five to ten years, or more, bone-affections of another class are common. The shafts of the long bones now chiefly suffer, and the skull but seldom. Suppuration is very uncommon, and sclerosis, or the production of large osseous nodes, is common. Sometimes the nodes are large enough to simulate new growths. Now, at both stages, syphilitic bone-affections may be and often are mistaken for rickets. Many years ago I called attention to the fact that children with chronic periostitis, producing alterations in the form of the tibia and overgrowth, found their way to the orthopædic hospitals, and were liberally treated by splints. These cases are, however, far less common than those in which, in early infancy, it is difficult to tell whether the child has syphilis, or rickets, or both. The simultaneous occurrence of the two is very common, and hence the difficulties which investigators have found in coming to clear opinions as to the relationship between them. We may, however, I think, believe with confidence that there is a pure rickets dependent upon dietetic causes, which has nothing whatever to do with syphilis. It may easily be the fact that the existence of the rachitic state in an infant who has also an inherited taint of syphilis may give a decided tendency to bone-disease, and more especially to affections near the epiphyses. The local pathological product may also be a mixed one, and partake of the combined influence of the two causes. There is no reason why the two causes should not mix.

Ulcers of the Palate and Pharynx.—The question as to whether deep ulcerations of the palate and pharynx, when met with in young persons, are usually due to syphilis or to scrofula is one of great interest. I long ago ventured to record, as the result of some observation, my conclusion that it was rare in these cases to meet with syphilitic teeth; and I felt obliged, in not a few cases of this kind, to leave the diagnosis uncertain. As the result of further observations, I may now say that, year by year, the balance of evidence has more and more inclined towards the creed that such lesions are almost always syphilitic.

We admitted into the London Hospital a lad who had a perforating ulcer of his soft palate, almost phagedænic. He was cured by cauterisation of the ulcer. The most careful examination of the lad himself and of his family history failed to elicit a single fact supporting the suspicion of inherited taint. His teeth were of good form; his physiognomy was good; he had not suffered from either choroiditis or keratitis. So the case stood. A year later, this same patient came to me at Moorfields for his eyes, and passed through a characteristic attack of interstitial keratitis. Of late years, I have seen no case of deep ulceration in the throat in a young person without being able to make the diagnosis of inherited syphilis probable.

Some years ago, Dr. Wilks was kind enough to lend me, from his private library, a most interesting religious tract, which bears upon this subject. It was an autobiography, printed before I was born, which contained an excellent portrait of the heredito-syphilitic physiognomy. It is entitled, "The Conversion and subsequent History of Benjamin Lawson, an Afflicted Youth, deprived of his Speech by Scrofula; on account of which he was for nine weeks an indoor patient in King's Ward, St. Thomas's Hospital, in the year 1815." The portrait prefixed showed the bridge of the nose sunk level with the cheeks, and the forehead large, with prominent frontal eminences. The subject of the autobiography records that he was born in 1798, in Coppergate, York, "of poor but honest parents." At the age of 12, he began to suffer from a very bad sore-throat, and subsequently had a discharge from his nose; at the age of 16, a loose piece of bone came out of his nose; at this time, he was very feeble, but still worked as a fly-boy in a printing office.

After this, bone continued occasionally to come away, and he was Mr. Cline's patient at St. Thomas's Hospital in 1815.

He recovered from a condition which appears to have been thought almost hopeless, and lived ten years longer. The precise cause of his death is not recorded; he mentions, however, a fact which corroborates the diagnosis of syphilis. Whilst he was in the hospital, his father had a bad throat; it had been bad three months, and still kept getting worse, so that he could scarcely eat.

"A kind female friend, Mrs. G., who called to see me, got my father visited by the Methodist Society for relieving and communicating religious knowledge to the poor. The kind friend who came last to visit my father was a medical gentleman, who, on looking at my father's throat, told him, if he did not get into some hospital, he might soon be a dead man; he might get cured then, but he was dying for the use of means." He "got a letter for Middlesex Hospital;" and, when "he had been there but a week, he appeared much better. I was afraid to take anything solid, for fear it should stick in the hole in my palate and choke me; which, by the long progress of the disease, was as large as a shilling, directly over the throat; and, by the frequent loss of pieces of bone, occasioned such a vacancy that, if anything lodged there, it nearly caused suffocation, and almost choked me till I got it away. I got so hungry, I was afraid I should be starved to death; for, though the thick milk was very nourishing, yet I always felt hungry after it."

This narrative is, I think, valuable as evidence in favour of the syphilitic nature of disease of the bones of the palate and nose, such as are frequently called strumous.

Permit me to mention one or two other cases illustrating the same point. A young man from S., aged 19, presented a good instance of destruction of the palate and nasal bones by congenital syphilis. His nasal chambers were one cavity, every trace of the vomer and turbinated bones having disappeared. The uvula and adjacent parts of the soft palate had been destroyed. His nose had fallen down considerably, and the right ala had been in part destroyed. In 1885, six years after the beginning, all the parts were soundly healed, and there appeared no fear of a relapse. His teeth were good, and his physiognomy showed but little peculiarity. No projections on the frontal eminences were recognisable by the eye, but to the finger they were distinctly so. There was a considerable osseous node on one tibia.

It will be seen that in this case, although the destruction within the nose was so extensive, there was but little else by which to recognise the diathesis. It might easily have been a case in which all hereditary taint might have been deemed to be absent. The node of the tibia alone revealed the taint, and it by no means decided the question as to whether we had to deal with inherited or with acquired disease. When I add that the boy was the youngest of his family, and that all his brothers and sisters were quite healthy, it will be seen yet more clearly how near we might have been to a mistaken conclusion. The final evidence was given by the family surgeon, who was cognisant of the fact that his parents had both had syphilis shortly before his birth, and that his mother still suffered. Such a case ought, I think, to be allowed very considerable weight whenever, in the absence of history or of corroborative lesions, we may be tempted to say that destruction of the nasal bones or ulceration of the palate is of strumous origin.

A year or two after I saw this patient, his mother consulted me. She was the subject of locomotor ataxy, and had suffered, twenty years ago, severely from syphilis. Since ataxy is of comparative rarity in women, it is of interest to note this fact as to antecedent history.

Malformation of Joints Consequent upon Syphilitic Periostitis in Infancy.—Singular and very deceptive malformations of joints are sometimes produced by the irregular overgrowth of long bones in congenital syphilis. They are sometimes helped by alterations in the epiphysal extremities, due to the same cause. Many years ago, I had under my care, in the London Hospital, a girl aged about 6, who had large nodes on both her femora, and was unquestionably the subject of inherited syphilis. The forms of her elbows were altered in such a way that the end of the radius was displaced upwards in the external condyle, and simulated a partial dislocation. We were doubtful whether or not it was a congenital condition, but I was more inclined to refer it to influences mentioned, and to think that the radius was overgrown. Some facts subsequently supplied to me by Mr. W. E. Hacon, of Upper Holloway, gave support to this opinion. Mr. Hacon's patient was a girl aged 14, the subject of specific disease, who had formerly suffered from keratitis and multiple nodes. One elbow looked exactly as if the radius were dislocated forwards, "but, on more careful examination, it was certain there was no dislocation, and that the deformity was owing to flattening of the external condyle." There was such alteration in form of the lower epiphysis that, in measuring across the back of the joint, from one condyle to the other, there was the difference of nearly an inch in favour of the affected side. Thus the external condyle projected much more than the internal one (contrary, of course, to what is normal).

Mr. Hacon told me he had seen two somewhat similar cases. The deformity is probably due to overgrowth of some parts of the epiphysis itself, just as we get overgrowth of long bones, under similar circumstances, as the result of lasting syphilitic inflammation.

Periostitis in Infancy: Arrested Growth of Radius.—Mr. and Mrs. C. suffered from syphilis together, and rather severely. Both were treated with mercury, but I believe not for long. An infant born in May 1880, died. The second, born in 1881, was brought to me when fourteen weeks old. She had bad snuffles, and was covered with a dusky papular eruption. These symptoms had begun at six weeks old; she had also swelling and pain about the left wrist, and it is on account of this symptom that I mention the case. Six or eight months later, I saw the child again. She was a very small child, but had got rid of all symptoms excepting enlargement of the lower end of the radius, which was still considerable. It appeared that the growth of the radius had been arrested, for the overgrowth of the ulna was pushing the carpus over to the radial side. I was told that there had been nodes on the skull, but they had now disappeared.

Ringworm of the Tongue possibly sometimes in connection with Inherited Syphilis.—A few words must be said as to the possible dependence of what has been called ringworm of the tongue upon inherited taint. It is well known that affections of this organ at later stages are exceedingly rare in connection with inheritance, whilst they are very common in the acquired form. I have placed on the table some wax casts, which were given me by M. Parrot, showing this affection in young children the subjects of taint. M. Parrot taught that the so-called ringworm of the tongue was usually a symptom of congenital syphilis. Although I have seen several marked examples of it in which there was no reason whatever to suspect such a cause, I have also seen others in which that diagnosis was probably correct. An infant (George R.), aged 8 months, was sent to me by a surgeon in Scarborough. All history of syphilis in the parents was denied, but two very suspicious conditions were present together. They were wandering semicircular patches on the tongue, and periostitis of the lower part of the humerus. There was much swelling and tenderness of the affected bone; dislocation of the radius had been diagnosed. Under iodide of potassium, the periostitis entirely subsided, but the elbow was left somewhat stiff. The tongue also recovered.

In another case of ringworm of the tongue, in a young child, I had myself treated the father for syphilis within a few years. The child, however, appeared to be in excellent health, and had never shown any suspicious symptoms excepting the tongue.

We may probably conclude that this form of superficial glossitis is in some cases of syphilitic origin, but in the majority not so. It is exceedingly difficult to diagnose between the two.

[*To be continued.*]

HYPERTROPHY OF THE BREAST.—Dr. Speth, of Munich, has described, in a recent number of the *Münch. Aertlich. Intel. Blatt*, an instructive case of this disease, under the care of Professor Helferich. The patient was subject to a steady hypertrophy of the right breast during every pregnancy; after labour, the enlargement remained stationary for about six days, and then decreased, but the breast never returned to its natural size. The enlargement was accompanied by severe pain. She was 26 years old, and had been five times pregnant in the space of five years and a few months. The weight of the breast towards the end of the fifth pregnancy was about twenty pounds, and its greatest circumference over twenty-five inches. It hung down to the anterior superior spine of the ilium. In its substance, six large tough glandular lobules could be detected. It secreted no milk, though the left breast was in perfect order during lactation. Dr. Speth considers that pure hypertrophy of the breast is exceedingly rare, most alleged cases being instances of hypertrophy accompanying fibroma or sarcoma; indeed, he declares that an indisputable case is unknown. Even the hypertrophy itself appears to be invariably associated with chronic inflammation and serous infiltration. The interstitial connective tissue is greatly increased, and, at the end of labour, it begins to contract, so as to cause atrophy of the glandular substance. No treatment, excepting amputation, is of any avail; Professor Helferich's patient refused to undergo that operation. On the other hand, the only danger to which a patient with this affection is exposed, is the chance of very acute inflammation after labour.

A CLINICAL LECTURE ON THE SURGERY OF THE MALE PERINÆUM AND EXTERNAL ORGANS OF GENERATION.

Delivered before the Pupils of the Medical Department of the Yorkshire College, December 9th, 1885.

By C. G. WHEELHOUSE, F.R.C.S.,
Consulting Surgeon to the General Infirmary at Leeds.

(Concluded from page 188.)

Now let me tell you how we used to see the operation performed here in my early days, and you will see how my method grew up in my mind. A full-sized silver catheter, or as large a one as the urethra would admit, was passed down to the stricture; then the point was turned round, and pressed outward in the perinæum until it could be clearly and unmistakably felt there. Next, it was cut down upon, and the urethra was opened upon its point, and the parts in the middle line were carefully divided, until the point of the catheter could be carried on into the bladder. In this way, no doubt, a road of some kind was cleared into the dilated portion of the urethra behind the stricture, from which Mr. Cock would have made his start; and happy was the patient in whose case it was effected in any moderate time, and the catheter was then passed onwards into the bladder.

But, gentlemen, I cannot adequately describe to you the difficulty which seemed generally to attend upon this part of the proceeding. The very recollection of it is distressing to me now; and, after all, we had no guarantee that we had really followed the true course of the urethra through the stricture. Further, we had nothing really to guide us to the distal portion of the urethral track, and the efforts I have seen made to find that have been painful beyond description, and often unsuccessful after all. Was it not possible then to think out some means of simplifying this, apparently the crucial difficulty of all?

I suppose there were no greater or more skilful lithotomists in England than the late Mr. Smith and the late Mr. Teale, and in watching their operations I learned the next step in my own. They were always very careful in their teaching to point out to us the infinite danger accompanying too free division of the prostate; and Mr. Teale, in order to avoid this, invented a special dilator with which, after he had opened the urethra, and had lightly incised the prostate, he used to dilate the neck of the bladder gently to enable him to introduce his finger without violence or force; this is his dilator.

I could not help seeing how, if I could only find the posterior orifice in the urethra, after division, or supposed division of a stricture, I had in this instrument an absolutely safe guide through the prostatic urethra and neck of the bladder, along which I could not fail correctly to reach the bladder itself with my catheter; and light seemed now to be breaking in on my course. Could I make as sure of opening the urethra at a point in front of the stricture, where it was certainly healthy, as Mr. Cock was of opening it in the distended membranous urethra behind it? Yes, without difficulty I could do that. I had only to use a straight grooved staff, and stop off the last half inch of the groove, and I could not go wrong there. I had only to pass my staff, with the utmost gentleness, down to the stricture, and allow the point to rest lightly against that, without attempting to enter it, and then, if I cut straight into the groove, and followed it till I came to my "stop," I knew that I must be exactly half an inch in front of the obstruction. Then I wanted to see that obstruction; so, with a pair of long straight nibbed pointed catch-forceps, I seized the edges of the opened urethra, and drew them apart. Then I found that, if it were not for the presence of my staff, I could probably see into the urethra, and that, if I could only draw that up a little, I should have a still better chance of doing so. I next, therefore, put a slight hook on to the end of my staff, so that, by turning it round, I could hook up the anterior angle of the wound in the urethra, draw the tube up to the surface, and look down on the face of the stricture. By the aid of very careful sponging, I found I could readily do this, and, in my first case, I was able to see the orifice of the contracted urethra, and to insert a fine director into it. On this director I was, of course, able carefully to follow the course of the contraction, and to divide it with the absolute certainty that I had never left the true track. The stricture thus divided, I had no difficulty in passing my now freed director straight on into the bladder, and had thus secured my entrance into the posterior section of the urethra; then I had only to turn the groove in my director downwards, insert the beak of a Teale's dilator into it, pass that on into the bladder, and I had then an unmistakable guide, with the aid of which it was impossible to err.

But, gentlemen, I must not mislead you, and I am bound, therefore, to tell you that you will not always find matters so simple as this, nor will the operation always run quite so smoothly as this description would imply. I have already said that, if the stricture be a very old one, and have been long neglected, you may find the perinæum so indurated and riddled with fistulæ as to make it very difficult to expose the urethra at all; and not only may it be surrounded by gristly lymph, but its course may have been greatly altered and distorted also.

When I have had such a case as this to deal with, I have usually passed as far as I could into each fistulous track, a black bristle, or some such guide—or, where I could, a very fine director—and on these I lay open each sinus till I reach its termination. Some one of them may lead me into the urethra; but I do not rely upon that, as they are often very indirect, and only communicate with the urethra in round-about fashion; but I find that they always lead to the neighbourhood, and generally more or less converge upon the true track, so that they give me some help, though they may not be altogether trustworthy guides, and, with care and patience, I generally succeed in effecting the object I have in view. And, even if you should find it impossible to make quite sure, I would not have you despair. Under such circumstances, though I have never yet done it myself, I should not hesitate to follow the example of my colleague, Mr. Robson, and entirely cut out the bad piece of the urethra, leaving Nature to form a new one around a very full-sized catheter, which I should, for that purpose, retain many days longer than usual. Mr. Robson tells me that, on one occasion, he was driven to do this, and that the case made an excellent recovery.

Or, again, I would offer another suggestion for your consideration. You will have noted, by the whole tone and tenour of every lecture it has been my privilege to deliver before you, that the bent of my mind is eminently conservative; that, looking backward through all that it can remember of the past, it clings with tenacity to that which has stood the test of time, and has proved itself to be good; that it is equally ready, on proof, to reject all that remains doubtful or uncertain; and that it is no less ready to welcome with open hands every true scientific advance in surgery. I claim, then, even while specially engaged in reviewing the past, to be permitted to look onward, also, into any vista that seems bright with hope; and, in this matter of the cure of urethral stricture, I am eminently inclined to do so.

Hitherto, no true method of permanent and lasting cure has been reached. We may dilate; we may burn out; we may split; we may cut strictures whether from within or from without; but, up to the present time, we cannot cure them, that is, both take away the obstruction and restore the parts to their primitive condition of original health.

Whatever method of treatment we may employ, however good a result we may obtain, we never overcome the tendency inherent in every stricture, and inveterate, to recontraction. If left to itself, or even in spite of occasional treatment, every stricture is doomed to recontraction, until we find some way in which the abnormal deposit of heterogeneous lymph around the urethra, which causes it, can be truly removed. To effect this, every known method has hitherto failed; but, if certain reports which come to us from America prove trustworthy and true, we are not unlikely to find in electrolysis a simple means of arriving at true cure. It is said (*Lancet*, December 5th, 1885, p. 1040) by Dr. Anderson, of Illinois, that it is capable of effecting this most truly desirable result. His words are these: "Apply electric force in a proper manner to the tissues which produce the condition we call "stricture" and "disintegration" results. The parts are not "burned out," as some infer, but the abnormal growth is resolved into its primary elements, is absorbed and permanently removed, whether the stricture be the result of injury or of the "ordinary inflammatory causes."

This is too bright a light to be ignored. It may, like many another vaunted remedy, prove only an *ignis fatuus*, and may lead us no nearer the goal of true cure of stricture than other methods have done. So far, personally I have no practical knowledge of it; but, with opportunities so abundant as are at our disposal in this hospital, we shall be culpable if we do not test the matter fully and firmly, and you are fortunate in that you will be privileged to watch the results.

Another obstacle that sometimes arises is this; there may be "penile" strictures, which make it very difficult, occasionally impossible, at the moment, to introduce the staff as I have directed. Should this be so, I should, if I could, delay the major operation until I could so dilate these as to get the staff through; and, if matters were so urgent as to make the necessary delay improper or impossible, I should resort to some means, such as aspiration of the bladder above the pubes, or through the rectum, for the relief of immediate danger, and leave the stricture to be dealt with in after and quieter times.

Against one thing only I warn you; you must never, under any circumstances, open the spongy, that is the penile urethra, from without. A wound made into the urethra, in front of the scrotum, will infallibly lead to a permanent and most distressing fistula, which, if you ever succeed in curing it at all, you will only close with the utmost difficulty; for, readily as a wound into the urethra through the perinæum behind the scrotum will heal, it will not do so in front of it.

At this point, and, having regard to the extreme importance of the subject, I might be excused if I were to branch off into the subject of stone in the bladder, and might tell you of the changes that, even in my day, have come to pass, in that wide field of surgery. I might show you how fruitless have been all the attempts, from Allarton's onwards, to shake the position of the old, and grandest of all surgical operations, that of lateral lithotomy, from its pedestal of pre-eminence; and yet, in doing so I should be compelled to show you that, whilst no cutting operation has ever been able to displace it, it is certainly doomed, in coming time, to become as rare as it has, hitherto, been frequent and successful. The introduction, by Professor Bigelow, of litholapaxy or "lithotrity at a single sitting," and the all but universal success that has attended that operation, will, if I am not greatly mistaken, have sounded the death-knell of lithotomy in any form, except in the cases of young children, in whom the passages are not sufficiently developed to admit the use of the necessary instruments, and in whom, providentially, lithotomy can hardly be reckoned as a very serious operation.

For a few years yet to come, lithotomy will be seen from time to time; but, I venture to predict that beyond the days of the students of the present generation it will only be seen as a rarity, and only be rendered necessary by a negligence or an ignorance which will be equally culpable and unpardonable. To enter upon the subject now would be impossible, it is far too important; but, if we be spared, it may be that, at some future time, either I, or one of my colleagues, may make it the subject of one or more of these addresses. And so, this brings me to the only other region of the perinæum, about which the surgeon has much to say; namely, the anal region.

Last year, my colleague, Mr. Teale, thought "the surgical neglect of the sphincter ani" a matter of importance sufficient to justify him in bringing it specially before you as the subject of an entire lecture. What he said to you concerning it, I do not know, for, at the time I am writing these lines, his lecture has not yet been published; but I, who know, or think I know, all his mind upon the subject, can very well suppose what the drift of his teaching would be. If, therefore, I repeat something of what he told you, I must ask you to pardon me, not only on the ground that a good thing will bear telling more than once, but also because it may be well to look at even familiar objects from different points of view, before coming to definite conclusions concerning them.

By London surgeons, as a rule, the operation of "stretching the sphincter" is neither recognised, nor taught, nor appreciated; indeed, I have heard of its being scouted, as unsurgical and unnecessary. It is well that you should know this, at any rate; for some of you, who, having seen the infinite good to be derived from it, having seen it regularly practised here, and having arrived at the conclusion that you believe it to be both surgical and valuable, may sometime be presenting yourselves for examination, and may there be called upon, if you aver its utility, to give your reasons for the faith that is in you, and by doing so will show your examiner that, though you and he may differ in opinion, it is not ignorance on your part that leads you to do so, nor want of thought or study, but simply conviction derived from practical knowledge.

Introduced into Leeds by the late Mr. Teale, the practice of "stretching," in preference to "cutting," the sphincter has been upheld for twenty-five years at least, and of late years has rather grown than declined in your favour. The principle upon which it is based is, of course, the one formulated and eloquently preached by the late Mr. Hilton, that the true cure for parts suffering from irritation is to place them physiologically at rest; and the ground upon which we prefer it is, that by it we can attain our end without causing an external wound, and thereby rendering our patient liable to septic poisoning.

Consider, for a moment, the position and office of the sphincter, to guard the rectum from the involuntary discharge or escape of its contents. This, so long as the rectum is at peace, it is capable of effecting easily, perfectly, and without strain, and its ordinary action is neither violent, nor spasmodic, nor irritable. But suppose some sort of irritation to have arisen in the bowel—acute diarrhœa, chronic ulceration, fissure, fistula, or piles—and what will be the state of the sphincter then? In direct proportion to the amount or of the duration of the continuance of the disease, it will become hypertrophied and strengthened to enable it to maintain its power and its office, and, in time, it comes to be enormously more powerful than is natural, or, were the parts in a healthy condition, necessary.

Piles, supposing them to be the cause of the irritation, are perpetually tending to protrusion, and are ceaselessly warring with the muscle; from time to time, when the fæces are passed, the piles are protruded with them, remaining after defæcation in the grasp of the sphincter; they are crushed, and bruised, and become inflamed and painful; and, even though they be released from their imprisonment, as they usually are, by the patient, and are returned into the bowel, it is only to continue there the war with the sphincter and to prolong the agony. Or, suppose that a painful ulcer or fissure exists within the margin of the anus, and immediately within the anus is their most common seat, what will then be the state of affairs? The discharge from an ulcer or from fissures cannot get away, the sphincter will not permit it to do so; it accumulates and irritates the muscle, this retaliates by increased contraction, and thus the war goes on, to the infinite disadvantage of both parties concerned; the ulcer spreads, the fissure deepens, and the sphincter hypertrophies.

Sometimes, in the case of fistulæ, matters do not become quite so accentuated or acute, for the matter finds a vent in the perinæum, beyond the range of the action of the sphincter, and the direct irritation to the muscle is so much the less; but, in one and all these cases alike, you will have been, or you will be taught, and every text-book you read will reiterate the fact that, for their cure, you may do whatever you will, but you will not succeed until you have put the sphincter at rest, and you are invariably assured that its division with the knife is the only way to do it.

Now this is the point which we in Leeds contest. We assert, and we assert it upon abundant practical experience, that careful, deliberate, and efficient stretching will do all that incision will do, and, doing it without causing any external wound, will subject the patient to far less risk than is possible by incision. Some of you may smile at the idea of there being any risk in so simple an operation as division of the sphincter, but there are such things as accidents; Sir James Paget has most appropriately termed them "catastrophies of surgery," which ought never to be forgotten and should be avoided, where possible, by any amount of foresight on the part of the surgeon. One such, in connection with the subject under consideration, happened to me in my early days; and, so profound was the impression it made upon me, that to forget it even now is quite impossible. For a painful fissure of the anus, I passed a bistoury along its track, divided its indurated base, and, with that, the resisting sphincter underlying it; but in less than a week my patient, the father of a young family, was dead, having very speedily after the operation been attacked with acute and fatal septicæmia. By stretching in preference to cutting, we have it in our power to avoid this risk, at any rate; and, in my experience, the best method of doing it, where possible, is with the fingers, or, if need be, the thumbs alone. Let the patient be placed fully under the influence of ether, and then, according to the amount of the hypertrophy, or the degree of resistance in the sphincter, dilate it steadily, either with the fingers, or with some appropriate instrument, until you have overcome all undue resistance, and can leave the anus soft, patulous, and free from irritable tension.

I have heard the question carefully discussed, as to whether the digital or the instrumental method of dilatation is the best. Personally I prefer the digital, because, my object being to tear so much of the muscle across (the mucous membrane over it remaining intact) as shall be sufficient to diminish, without destroying its whole power, I can, when my fingers are the instrument used, feel with them when I have done what I wish, and I need do no more. But so great is the hypertrophy sometimes, that the fingers, even of the strongest hands, are quite inadequate to the task of overcoming it. In such cases I usually dilate steadily first with the instrument I show you, till I can withdraw it (wide open) with freedom and without resistance; or, with a tenotomy knife, I divide subcutaneously a given proportion of the hypertrophied muscle; and after that I carry on, where it is necessary, any further dilatation with my fingers.

Gentlemen, I commend this proceeding to your careful study and

consideration; and the more thought you give it, and the more experience you have of it, the more, I feel confident, will you cling to it as a decided advance in surgery.

ON ADDISON'S DISEASE.

By BEDFORD FENWICK, M.D., M.R.C.P.,
Assistant-Physician to the City of London Chest Hospital, Victoria Park; and to the Hospital for Women, Soho Square, etc.

For nearly a quarter of a century, Addison's disease has been recognised by the medical profession in England. More have believed in its specific existence, more have worked at its pathology in this country, than in any other. And yet to-day our knowledge on the matter is but little greater than when its first historian died. And this is the more to be deplored, because we have not here a mere medical curiosity, of rare occurrence, of definite duration, of certain cure, but a disease which has killed its hundreds, whose course is not accurately known, whose pathology and etiology are involved in obscurity, and which is still an *opprobrium medici;* for hitherto, I believe, no case of permanent recovery has been put on record. Our present knowledge may be very briefly summed up. The patient suffers from intense weakness, which gradually but steadily increases, despite all treatment. He is languid, and utterly indisposed for any exertion of body or mind. He generally suffers from breathlessness on exertion, from anæmia, from pain in the epigastrium and across the loins. There are usually no physical signs of disease found to account for the symptoms, and these are at first diagnosed as due to atonic dyspepsia, and the patient is treated accordingly. But the asthenia and the intense feebleness of the heart increase; the anæmia does not diminish, and, if the patient live, a new feature presents itself, or, in some cases, is evident before the onset of the constitutional symptoms. The skin becomes abnormally dark, and this pigmentation increasing, and extending, may cover the whole surface, and give the patient the aspect of a mulatto. Then, with still advancing feebleness, comes death, either very suddenly or in gradually deepening coma; and, on *post mortem* examination, we find caseous degeneration of one or, more commonly, both suprarenal capsules, with chronic inflammatory changes in their immediate vicinity. Now, some argue that these bodies play no essential part in the disease. But, inasmuch as in some hundreds of cases showing the above symptoms during life, a caseous degeneration of the adrenals was the only or chief lesion found after death, it is only logical and scientific to conclude that there may be, and probably is, a very close connection between them. And inasmuch as in nearly every case where the capsules are, *post mortem*, found in an advanced state of caseation, pronounced symptoms of Addison's disease have been noticed during life, it is hard not to believe that the relation between the facts is simply one of cause and effect. Now, the constitutional symptoms have for many years past been generally supposed to be due to nerve-changes. These, for example, would cause the relaxation of the abdominal vessels, and so the intense blood-stasis evidenced by the condition of the spleen and mucous membranes, and the consequent external and cerebral anæmia. In like manner, the characteristic cardiac, gastric, and pulmonary symptoms, are explicable as due to reflected nervous irritation. So far we know or we theorise at present; but now three great practical questions suggest themselves. 1. What is the cause of the bronzing? 2. What is the seat of the cause of the constitutional symptoms? 3. Will increased pathological knowledge suggest a method of cure? It is the object of this communication, first, to detail a well marked case of the disease, and then to offer some original and, it is hoped, some practical views on the above questions.

William McC., a labourer, aged 33, was admitted into the London Hospital on September 22nd, 1881, under the care of Dr. Samuel Fenwick. The following is an abstract of his case. He had always been addicted to beer, generally consuming from five to six pints a day. He had suffered from gonorrhœa and a soft chancre fifteen, and from typhus fever twelve, years ago. Otherwise, except for an annual attack of psoriasis, his health had always been very good. Four months before admission, he suffered from a "cold," attributed to exposure, and never felt well thereafter. A month later, his urine became scanty, scalding, and high coloured. He began to suffer from vomiting, headache, giddiness, and great lassitude, and ceased to work. These symptoms steadily increased in severity. On admission, he was noted to be a well made, fairly well nourished man, anæmic, deaf, and very dull both in mind and manner. He slept badly, ate little, and rarely spoke. He lay in bed utterly "limp," and profoundly quiet. There was tenderness on pressure over the epigastrium, the left hypochondrium, and the spines of the first and second lumbar vertebræ. The skin was in no part abnormally dark; the tongue generally appeared red at the tip and edges, with fur down the centre and at the base. The teeth were regular and good. There was no discoloration of the gums or inside the cheeks. He occasionally vomited, and complained only and entirely of weakness and lassitude. There were no marked physical signs of disease in the chest or abdomen, but the heart-sounds were dull and feeble, and the first sound, both at the base and apex, was prolonged. The pulse varied from 72 to 80, always weak and compressible; the respirations generally about 18, easy; the temperature between 97.6° Fahr. and 99.2° Fahr. The urine was straw-coloured, faintly alkaline, with a specific gravity of 1012 to 1015, with albumen always present, from a mere trace up to about one-half on the morning of his death; the urea was generally 1.3 per cent., and there was usually a deposit of phosphates and epithelial casts.

On September 27th, Dr. Samuel Fenwick saw him, diagnosed Addison's disease from the constitutional symptoms, and prognosed death, probably by syncope, at an early date.

On September 28th, the patient endeavoured to get out of bed against orders, and fainted. He rallied, but died suddenly a few hours later.

The necropsy was made twenty-nine hours after death. Much adipose tissue was found beneath the skin and around the various organs; the skin seemed generally dark compared with that of a very fair-complexioned body next to it, but not abnormally so, and no patches of pigmentation could be found. The liver was fatty, and weighed seventy-two ounces; the spleen was enlarged and congested. The kidneys, lungs, and heart were perfectly healthy. The brain and spinal cord, the nerves in the vicinity of the capsules, the blood-vessels, and the spinal column were all closely examined, and presented no naked-eye changes. There was no ulceration or evidence of tubercle in the intestines or peritoneum, but the mucous membrane of the stomach and duodenum was of a dark slaty colour, and covered with a thick ropy mucus. Microscopically, the gastric tubules seemed fewer than normal, but no abnormal pigmentation was found. Both suprarenal capsules were enlarged, hard, and nodulated. On section, it was found that the normal gland-tissue had been transformed into a translucent softish grey matter, mixed with a yellow opaque substance, which in parts was quite calcareous and gritty. It was very observable that the former translucent appearance seemed almost confined to the cortical portion, while the central or medullary part seemed to be mapped out in white, and also that this caseous material was much more abundant at one end of each capsule, gradually diminishing in extent thence to the opposite extremity of each organ. Microscopically, except in parts here and there of the cortex, no normal structure could be found. It all appeared to be transformed into a mass of oil-globules, scattered fibrils, and a few small indifferent cells.

The chief point of interest in this otherwise typical case, was the absence of all bronzing of the skin. It suggests afresh the old question, "Why should bronzing occur in most cases, and yet not in some few others, of undoubted Addison's disease." In the hope of obtaining some faint light on this matter, I collected and tabulated all the cases of the disease recorded in the last sixteen volumes of the *Transactions of the Pathological Society*, and this in order to be sure that each case had been critically tested and typical. I now desire briefly to lay before the profession the facts the above obtained table exhibits, and the theory as to the course of the disease which these facts seem to support.

1. *Age.*—The average age at death in males was 30.1 years; the extremes were 5 and 55. The average age in females was 35 years, the extremes being 19 and 55.

2. *Sex.*—Of the thirty cases in the table, 23 were men, and only 7 women, or rather more than three of the former to one of the latter. In Dr. Wilks's classical monograph on the subject, he gives (p. 18) the proportion of his cases as 19 men to 6 women, or almost exactly the same ratio. Dr. Headham Greenhow, however, in the Croonian lectures for 1875 (p. 94), deduces from his collection a much lower proportion; namely, 119 men to 64 women, or not quite two to one.

3. *Duration of Illness.*—This varied very much, and very remarkably. (*a*) For bronzed cases the average duration of life from the onset of the symptoms was 23.6 months; the extremes being (?) three months and five years; but (*b*) in non-bronzed cases the average was only 4.8 months, the limits being six weeks and twelve months.

The fact seems remarkable at first sight, but the more it is considered the more remarkable does it become. Dr. Addison thought that in some cases bronzing did not occur, because the patients did

not live long enough for the slowly occurring skin-change to take place ; but though I have searched through many monographs on the subject, I cannot find that any one has tried to discover *why* they died so early. And I venture to believe that the explanation is not only a perfectly simple one, but that it opens up a marvellously wide field for future investigation. For if patients, without bronzing of the skin, die in almost exactly one-fifth of the time lived by those in which pigmentation occurs, it is perfectly plain that bronzing of the skin, *per se*, does not conduce to death, and therefore that the cause of the greater fatality, in the first class, must be looked for in an unusual gravity of the constitutional symptoms, which, together with the skin-change, make up the whole outward expression of the internal capsular disease. That these are unusually grave, is self-evident, seeing that the heart fails so rapidly. It may, therefore, plainly be inferred that the mischief which produces these, must be more intense in non-bronzed than in bronzed cases. Now, inasmuch as the skin-change occurs sometimes long after, and sometimes before, the onset of the constitutional symptoms, and sometimes not at all, it follows that these two constituent features of the disease cannot be of absolutely identical origin. In other words, either two distinct causes must be at work, or the same cause must act upon two separate parts, attacking first one and then the other, in order to produce these two non-contemporaneous results. I think that the idea of two distinct causes may be dismissed, because, after twenty years of patient and accurate investigation of this subject, by the most able pathologists and clinicists of this and other countries, no evidence in favour of such a theory has been shown to exist. It is probable, therefore, that we have to deal with one settled cause, acting upon two separate organs, or upon two separate parts of one and the same organ. Now, let us turn to the pathology of the disease, and what do we find? First, we find that the constitutional symptoms, the anæmia, the asthenia, the breathlessness, the evidences of cardiac and of gastric irritation, have all been, and I think well, explained by the theory of nerve-implication. But this has hitherto been looked for, and supposed to occur, *outside* the suprarenal bodies. And the one weak point in the theory has hitherto been, that nearly every observer has found different or modified changes in these nerves from that recorded by nearly every other investigator. Turning, however, to the minute anatomy of the capsules themselves, we find that Leydig (*Lehrbuch der Histologie*, Frankfort, 1857, p. 189), as the result of his laborious investigations, comes to the conclusion that the medullary portion of the organ is essentially a "ganglionic nerve-centre," and also that numerous observers have traced branches from the sympathetic, from the pneumogastric, and from the phrenic nerves, into the substance of the medulla. I would ask, then, what need have we to hunt through neighbouring structures, when it seems that we have, in the very capsules themselves, both nerves to be affected, and a degeneration which must affect them?

And now I would suggest, what our argument has led us to believe to be at least possible, that the constitutional symptoms of Addison's disease are due to degeneration of the *medullary portion* of the suprarenal capsules, and that the reason, therefore, why bronzing does not occur in some cases, may be because, in such, the intensity of the mischief is greatest in that part, and causes death before the slowly developed skin-change is perceptible.

But, secondly, as to the bronzing of the skin. We find, histologically, that it is due to the deposit of pigment in the deeper layers of the rete mucosum. Clinically, we find that it is predominant where pigmentation is normally present ; and, so far as I can discover, that is all we know about it. Our argument above led us to the belief that we have to deal with one common cause, a caseous degeneration, acting on two separate parts, perchance of one and the same organ. Now, it is noteworthy that we have, apparently, in the suprarenal body, an organ which is, it seems, in a superlative degree, composed of two totally distinct parts. For, turning again to the minute anatomy of the capsule, we find that Kölliker (*Manual of Human Histology*, Sydenham Society's Translation, vol. ii, p. 219), while agreeing with Leydig, above quoted, in referring the medullary portion to the nervous system, regards the cortical part as made up of "blood-vascular glands." If this be correct, I would suggest, as an almost logical sequence, that bronzing of the skin may be due to degeneration of the *cortical layer* of the suprarenal bodies, perhaps in consequence of some physical or chemical change in the constitution of the blood, taking place through the affection of the "blood-vascular glands."

I have noted, in my description of the case above given, that parts of the cortex were healthy, and that generally, in that portion, the disease appeared to be in its initial stage ; whereas the medullary portion had undergone much caseous, or farther advanced, degeneration; and in several museum-specimens, I have found the same naked-eye appearances where bronzing was absent. Argument then, and the still more forcible logic of hard facts, seem to point to the above conclusions. The truth, or the error of the theory, must be decided by accurate and extended observation as to the distribution of the disease, macroscopically and microscopically, in future cases. If it be true, I need hardly point out what a wonderful field for investigation it will open up, not only into the functions of the ductless glands, not only into the chemical phases of degenerative changes, but also into the great practical question of cure. For, seeing that the disease is inevitably fatal, if it be proved to be confined simply to the suprarenal capsules, why should not the organs be extirpated? Physiologists have shown that their presence is not essential to life. I venture then to think that the question I would leave future observations to finally settle, is not only important theoretically, but, in its aim, intensely practical also.

I would briefly summarise, therefore, that (1) the average age at death in Addison's disease is between 30 and 35 ; (2) males are much more subject to the disease than females ; (3) cases with bronzing of the skin usually die within three years, and cases without bronzing, within five months from the appearance of symptoms from progressive asthenia ; (4) the *constitutional symptoms* are probably due to degeneration of the *medullary portion* of the suprarenal capsules ; (5) *bronzing of the skin* may be due to degeneration of the *cortical layer* ; (6) if death be chiefly due to the capsular changes, then the successful extirpation of these bodies might cure the patient.

EVISCERATION OF THE EYE, AND ITS RELATION TO THE BACTERIAL THEORY OF THE ORIGIN OF SYMPATHETIC DISEASE.

By P. H. MULES, M.D.,
Surgeon to the Eye Hospital, Manchester.

In the last paragraph of my paper on "Evisceration of the Globe," British Medical Journal, Dec. 19th, 1885, I assume that "freedom from sympathetic inflammation, after evisceration, will prove conclusively the bacterial origin of sympathetic disease." I will shortly give my reasons for this statement.

For sympathetic disease to arise in a sound eye, it is necessary that the infecting eye shall have, first, a nidus, or point of infection or irritation ; secondly, a track by which such shall be forwarded to the second eye.

In removing the contents of the globe, we certainly remove all soil for the growth of bacteria ; but we leave the "tracks," be they blood-vessels, lymph-spaces, or nerves ; and although such forcible removal may eventually obliterate the blood and lymph-channels, this can hardly be said of the nerves themselves, at least, for a very long time. Now, if the tracks are there ready to conduct whatever may be required of them, be it sympathy, blood-poison, nerve-inflammation, or bacteria, and we irritate them to the utmost by forcible tearing, medicated application, a permanent foreign body, and other hitherto supposed incentives to secondary sympathetic disease ; yet under this treatment, the injured globe quietens down, the sympathetic irritation (reflex neurosis) of the sound eye passes away, and sympathetic inflammation does not occur, obviously the tracks in that portion where they are ruptured, cannot originate sympathetic disease, but must be the conductors only of what is produced, irrespective of themselves. Can the removal of the end organs account for this absence of initiative? Such a view has never been held, nor has it anything to recommend it. Experiment, then, having so far proved that from eviscerated globes sympathetic inflammation does not extend ; that the nerves, blood and lymph spaces, under excessive provocation, cannot originate of themselves a disease capable of progression to the sound eye ; we arrive, by a process of exclusion, at the fact that it can only be a new formation, an independent cell-growth, introduced probably from without. This point, once allowed (and it appears to me incontrovertible), we have left only the views of Berlin, Leber and Snellen, and Mr. Hutchinson.

Berlin, Leber, and Snellen agree as to the nature of the infective material being bacterial, but differ as to its track, whether vascular or lymphatic; so that, for the purpose of this paper, we may assume them to be one. There remains Mr. Hutchinson's view ; "that sympathetic ophthalmitis is of a simple inflammatory character, depending on parallelism of structure for its secondary deposits." To emphasise this Mr. Hutchinson (*Ophthalmological Transactions*, vol. v, p. 74) refers to pneumonia. Now this is a disease in which infecting micro-organisms must bear a large share in the production, and is strong evidence in favour of the "bacterial theory of sympathetic

disease;" and another point which I believe I am right in stating as opposed to Mr. Hutchinson's view is, that no well-authenticated case exists (at least of late years) where true sympathetic ophthalmitis originated without a traumatic interference with the exciting eye. Certainly the evidence, as at present adduced, is incomparably stronger in favour of a bacterial origin; and the demonstration by Max Knies of lymph-space infection acquires such additional force and certainty as to make the evidence overwhelming. It is interesting, before closing the subject, to compare the three methods of treatment now in vogue.

In evisceration we have the antithesis of neurectomy. The neurectomist, with a courage that might be better employed, seeks to secure the safety of his patient by a process of "bottling up;" he professes a sublime indifference to bacterial gambols, and by "cutting off their exits, hopes to confine them within the globe." The eneucleationist assimilates his treatment somewhat to that of evisceration by removal of the *fons et origo mali;* but like a heavy man seeking to catch a butterfly, throws himself headlong upon insect and flower, and congratulates himself upon his skill, though the flower be broken and the insect crushed. Of the three operations, I cannot doubt that the profession will elect, in all suitable cases, "evisceration." The medical profession is notoriously conservative; but the public, when cosmetic operations are required, are apt to decide somewhat for themselves, and will naturally prefer a pleasing result to the ofttimes hideous deformity which at present exists.

As an example of the method of traumatic infection, I may quote a case from my outpatient clinique of Wednesday, November 21st. "A mechanic was struck on the left cornea by a small chip of steel; a corresponding mark on the iris showed the track of a minute foreign body, which we could not detect" (that it is in the eye is certain). Vision was good, in spite of a streak of blood in the vitreous body; but the point of special interest was a bubble of air floating in the aqueous, which had evidently been carried through the cornea, but wiped off as the chip penetrated the iris. There had been no escape of aqueous humour, the iris being in its proper plane and the anterior chamber full. We shall watch the further development of this case with great interest; at present, operative interference is contraindicated.

REMARKS ON THE THEORY OF BRONCHIAL ASTHMA.

By E. CRESSWELL BABER, M.B.Lond.,
Surgeon to the Brighton and Sussex Throat and Ear Dispensary.

Dr. Bulkley's paper, in the British Medical Journal for November 21st, 1885, on Asthma as related to Diseases of the Skin, and the article by Sir Andrew Clark, on the Theory of Bronchial Asthma, in the current number of the *International Journal of Medical Sciences*, lead me to make a few remarks on the congestive theory of asthma, more especially as the views which I have formed agree to a great extent with those expressed by the latter author. I do not propose to discuss the validity of the spasmodic theory of asthma. This has been ably done by Sir Andrew Clark; I merely wish to bring forward a few facts, the result of a prolonged study of the nasal mucous membrane during life, which appear to lend support to the view that the bronchial mucous membrane undergoes a temporary swelling similar in kind to that which occurs in certain morbid states of the nasal mucous membrane, though of course infinitely less in degree.

The respiratory nasal mucous membrane contains, as is well known, a large tract of erectile tissue, which is chiefly situated on the inferior turbinated bones. This consists, roughly speaking, of numerous large venous vessels, which, by their distension, cause temporary swelling or erection of the turbinated bodies. The swelling may be observed going up and down very rapidly, and within certain limits, is a normal occurrence. When excessive, and accompanied with sneezing and serous secretion, it constitutes the neurotic attacks which are very commonly seen quite independently of hay-fever. Sir Andrew Clark describes these cases as "hay-fever;" but, inasmuch as they are unconnected with pollen, and are not accompanied by fever, the term is obviously inapplicable to them, and should be confined to those instances in which, from their occurrence at certain periods of the year, pollen is the probable exciting cause. The symptoms already mentioned may be attended by any of the numerous reflex phenomena now known to be associated with the nose, the chief of which are: cough, asthma, redness and itching of the outside of the nose, nightmare, migraine, constant headache, supra-orbital neuralgia, giddiness, epilepsy, etc. Hay-fever is, therefore, according to this view, simply a neurosis of the nasal mucous membrane, accompanied by certain reflex phenomena, which at particular seasons of the year is produced by the pollen of plants in specially predisposed persons. In other cases, these neurotic attacks are caused by some local irritation in the nasal cavities (such as nasal polypi) or by other irritants inhaled in the air, or they are produced reflexly by the irritation of some other organ (for example, by the action of strong light on the eyes). The constitutional element is, as Sir A. Clark insists, a very important factor in the causation of these symptoms. When a morbid predisposition to erection of the turbinated bodies exists, very slight and trivial causes, which it is unnecessary to detail here, are sufficient to produce swelling of these structures.

The intimate connection which exists between the bronchial mucous membrane and that of the nasal cavities is shown, not only by the occurrence of neurotic nasal symptoms (swelling of the turbinated bodies, watery secretion, and sneezing) at the commencement of an attack of bronchial asthma—a circumstance, in my experience, of very common occurrence—but also by the fact mentioned above, that asthma is frequently a reflex symptom produced by intranasal irritation, many cases of this description being now on record. If further proof were needed, Hack has reported a case in which an attack of bronchial asthma was produced by the application of a powerful irritant (galvanic cautery) to the nasal mucous membrane, in a person who had previously never suffered from the complaint. In many cases, also, bronchial asthma has been temporarily or permanently relieved by treatment applied to the nasal cavities. These few points, which might easily be enlarged upon, suffice to indicate the intimate relation existing reflexly between the nasal and bronchial mucous membranes.

It is, moreover, a remarkable fact that, in true hay-fever, all the other symptoms, with the possible exception of the sneezing, appear to be of a congestive (vaso-dilator) character, whence it may be argued that the asthmatic symptoms are probably of similar nature.

Sir Andrew Clark not only compares the supposed bronchial swelling to that occurring in the nose, but speaks of "mucous wheals" in the bronchi, and likens the swelling, which he supposes to occur there, to patches of urticaria, whose pathology, according to a recent authority (Fagge's *Principles and Practice of Medicine*, vol. ii, p. 673) is that of "acute inflammatory œdema of the cutis, which fills the lymph-spaces and expels the blood from the venules." The much greater frequency of association of asthma with neurotic nasal symptoms than with urticaria, and the closer resemblance of the two mucous membranes, I venture to think, favour the view that if the dyspnœa of asthma, as seems probable, is produced by temporary tumefaction of the mucous membrane, such swelling partakes more of the nature of that occurring in the nose than of the wheals of urticaria.

Whether the structure of the bronchial mucous membrane admits of its undergoing a pathological swelling, by simple distension of its blood-vessels, is a question which must be decided by future research.

An attentive study of the nasal mucous membrane, I have for some time thought would throw light on the pathology of the less accessible parts of the respiratory tract. It is impossible, for instance, to treat many nasal cases without arriving at the conclusion of the importance of distinguishing between the local symptoms which are neurotic, and those which are truly catarrhal in character. The former are marked by distension of the erectile tissue and watery secretion; the latter, by distension of the capillaries near the surface, and by the presence of a mucous or muco-purulent discharge. In the nose, we are able very fairly to separate these two conditions, although, of course, they are very commonly associated. The importance, if possible, of drawing a similar distinction in the bronchial mucous membrane needs no recommendation of mine; it has not only a theoretical, but a very practical, significance.

Brighton Throat and Ear Dispensary.—At the annual meeting of the Brighton Throat and Ear Dispensary, it was stated that the number admitted during the past year alone was 757; of these, 163 were paying patients, from whom the amount received was £44 9s. 11d., including the "mites" placed in the surgery boxes by many others. The subscriptions, donations, etc., amounted to £217 14s. 9d., which sum had enabled the committee, for the first time for several years, to meet all expenses, and to discharge their last year's indebtedness to the treasurer, amounting, together, to £184 6s. 3d., leaving a balance in the hands of the treasurer of £33 8s. 6d. There was, however, still a debt of £700 on the building fund.

Oxford University: Demonstrators.—J. R. Green, B.A., of Trinity, has been appointed Demonstrator in Physiology, in place of Dr. Lea, resigned; and H. D. Rolleston, of St. John's, Assistant Demonstrator of Physiology, in place of J. R. Green.

CLINICAL MEMORANDA.

ACUTE TONSILLITIS AND RHEUMATISM.

SEVERAL communications have recently appeared in the JOURNAL on the connection of acute tonsillitis with rheumatism. For some time I have been making notes on these two diseases. I hope to write a paper showing the close relationship that exists between these affections, in their etiology, pathology, and treatment. In my experience, it is a rare event for suppuration to occur in acute tonsillitis, if treated early with the following mixture: ℞ Sodæ salicyl. ʒiss; pot. bicarb. ʒiss; tinct. aconiti ♏xl; liq. opii sed. ♏xxx; sp. chlorof. ʒij; aquæ ad ʒviii; one ounce to be taken every two or three hours for the first thirty-six hours. The same mixture is my sheet-anchor for rheumatic fever. I find that the large doses prescribed in the London hospitals are not needed. Small doses, frequently repeated, are more effective, and almost free from the nauseating effects produced by large doses of salicylate of soda.

JOHN BROWN, L.R.C.P.Lond., Bacup.

I NOTE a paper in the JOURNAL of January 23rd on the connection of tonsillitis with rheumatism. I am glad the subject has been brought to the front, for my experience shows me that inflammatory sore-throat is frequently the first symptom in acute rheumatism; and I should like to draw attention to the fact that, in gouty constitutions, sore throat, in some form, is a frequent symptom. I do not recollect to have seen this mentioned in text-books, but I am convinced of the fact.

A few years ago, a patient of mine was attacked with severe sore-throat during my absence from home. The symptoms were so grave that a friend, who was called in to the case, felt the greatest anxiety for the result. On my return home, the condition of the urine led me to suspect gout, and the administration of colchicum and alkalies speedily effected a cure. Further investigation convinced me that the patient was an unmistakably gouty subject.

I may mention another case of extreme interest. A man of gouty diathesis showed symptoms of sore-throat and hoarseness; the case rapidly grew worse, and œdema glottidis ensued. The patient was stout, and an undesirable one for tracheotomy; but the application of leeches and the administration of calomel relieved the immediate symptoms. Calomel and opium were continued, and antimony was given, with the result that in a few days a well-marked attack of gout in the right great toe showed itself. The patient made a good recovery, and has since had other gouty attacks, unaccompanied by sore-throat.

I have mentioned these two cases, in hopes that others may give their experience of the connection of inflammatory sore-throat with gout.

A. H. F. CAMERON, Liverpool.

THE SOURCE OF UREA.

IT appears to me that the following case is interesting as bearing upon the source in the body of urea.

Early this month (January) I was called to see a boy who had, the day previous, received a rather severe blow upon the right lobe of the liver. When seen, he was complaining of much pain in the right hypochondrium. The skin was slightly, and the conjunctiva distinctly, jaundiced. The stools were pale, while the urine was bile-coloured, and gave the bile reaction with nitric acid; there was no fever. But herein lies the important matter. The urine was highly alkaline. On the addition of nitric acid, there was such violent effervescence, that the froth was forced out of the test-tube, although the urine was not much more than one inch deep. I got my friend, Dr. Drinkwater, to carefully examine the urine. He reports that the alkalinity was due to ammonium carbonate, and, on estimating the urea, he only found 3 per cent.

This evidence seems to me to point strongly to the liver as the seat of producing of urea. Dr. Graves has already reported several cases of absence of urea which he believed to be represented in the urine by the ammonium carbonate, but here we have a history of the organ involved.

D. W. AITKEN, 3, Argyle Place, Edinburgh.

CARDIFF MEDICAL SOCIETY.—The following are the office-bearers for 1886-87: *President*, Dr. William Thomas Edwards (President of the British Medical Association). *Committee*, A. P. Fiddian, M.B; C. T. Vachell, M.D.; A. Plain, M.B.; W. M. H. Evans, M.R.C.S.E. *Honorary Secretary*, Thomas Garrett Horder. Meetings are held on the second Thursday in each month, from October to May.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

STATION HOSPITAL, DUNDALK.

PLEURISY, FOLLOWED BY EMPYEMA: RECOVERY WITHOUT RETRACTION.

(Reported by T. H. PARKE, Surgeon, Medical Staff.)

PRIVATE T., 16th Lancers, aged 24 years, of strong physique, and healthy, was admitted to hospital on April 5th, 1884, suffering from pleurisy of the right side, following a wetting a few days previously; the "stitch" was intense, and pleuritic friction very distinct over the lower lobe. Next morning, the temperature was 104.2° Fahr.; pulse 104; and the respiration 40 per minute. During the subsequent course of the case, the pleura became completely filled with serum, increasing the circumference of the right side by two inches, displacing the heart downwards and to the left, and the liver downwards. Simultaneously with this effusion, he got "pneumonia" in the lower lobe of the left lung; the sputa became rusty, and crepitus unmistakable. This complication practically left only the upper part of the left lung for respiration. The temperature, pulse, and respirations increased, and there was slight delirium. He was dry-cupped and blistered, and the "pneumonia" decreased.

The right side had now increased to two and a half inches more than the left; there was great prostration and urgent dyspnœa and orthopnœa, and he sweated profusely.

On the evening of April 22nd, these symptoms increased, and he became quite cyanotic; his temperature had gradually gone down to normal, although his pulse was 132, and the respirations 44, per minute.

The pleura was tapped between the sixth and seventh ribs, the entrance of air being carefully prevented, and sixty ounces of opaque highly albuminous fluid, slightly tinged with blood, were drawn off; on standing for a short time, it separated into a thick curdy portion beneath, and a small quantity of clear fluid on top. The operation gave almost instantaneous relief.

He continued to improve for some days, when his temperature began to go up, and the fluid again collected in his pleura, and the legs and the affected side became œdematous.

He was tapped a second time on May 3rd with Dieulafoy's aspirator; ten ounces of thick yellowish fluid were drawn off, containing pus-cells under the microscope.

His temperature decreased, and he was greatly relieved for some days, when he again became restless, extremely weak, and could only breathe with difficulty when propped up in bed. He sweated profusely, and had frequent attacks of orthopnœa. There was absolute dulness all over his right side, as the fluid had almost completely filled the pleural sac.

He was tapped for the third time on May 11th between the sixth and seventh ribs, but nearer to the spine, and 176 ounces of purulent fluid was drawn off; the pleural sac was afterwards washed out with carbolic lotion, 1 in 50. The operation was performed by the stomach-pump, to which the needle was attached by means of an India-rubber tube. Immediately after the operation, he could lie in the horizontal position with ease.

On May 13th, a silver cannula was introduced, and twenty ounces of the same sort of fluid drawn off.

On May 14th, twenty ounces more were removed, of a darker colour and more liquid. The cavity was washed out each time with carbolic lotion, 1 in 50; this was done by attaching No. 4 gum-elastic catheter to the stomach-pump, and introducing it through the cannula.

On the three following days six ounces were drawn off, and on May 19th, 21st, 23rd, two ounces each day; the pleura being carefully washed with carbolic lotion 1 in 40 after each operation.

The cannula was kept in by a bandage and pad, and was removed on May 23rd, and the puncture completely dried up in a few days afterwards.

There was a good deal of retraction of the side, the antero-posterior diameter being especially diminished, and the shoulder was lowered; for this, he was made to hold his right arm over his head for hours during the day, so as to open out the intercostal spaces, and prevent the ribs from being crowded together. The retraction subsequently completely disappeared, and the ribs moved as freely as on

the other side, each side of the chest measuring exactly 18½ inches, and the lung expanded to its normal extent.

REMARKS.—With regard to the time when the operation should be performed, I think that, if there be no signs of absorption, it should be done about the end of the third week, provided that there has been no urgent dyspnœa; in which case, even if the pleura be not completely filled, removing the fluid much earlier would save the patient a great deal of subsequent mental anxiety, and relieve his system of a more or less prolonged drain, consequent on absorption of the fluid. Considering the above case, it seems to me that the entire quantity of fluid in the pleura should be removed, unless syncope occur, and then perhaps it would be better to leave some behind. The entrance of air into the pleural cavity in this case did not seem to be followed by any injurious effects; only forty-four ounces of fluid were secreted after the entrance of air, as compared with two hundred and sixty-six secreted before it was admitted; also the fluid was not changed in character. As regards the instrument which should be used, I consider a small sized trocar and cannula the best instrument for removing the fluid and washing out the pleural cavity; the cannula can easily be kept in for several days, by a pad and bandage, and causes very little local irritation.

CITY OF GLASGOW FEVER HOSPITAL.

CASE OF ENTERIC FEVER COMPLICATED BY PERITONITIS AND SEVERE INTESTINAL HÆMORRHAGE.

(Under the care of ANDREW STEWART, M.B., C.M., Assistant-Physician.)

JOHN W., aged 26, was admitted on August 13th, 1885, on the eighth day of what seemed to be a very mild attack of enteric fever. The pyrexia was slight, the temperature never having exceeded 102.2°; and on the evening of the thirteenth day it had fallen to 99.8°, the morning record being normal.

On the sixteenth day of illness, at 1 A.M., he complained of very severe abdominal pain; his face had a haggard expression; his breathing was shallow and thoracic, and the pulse feeble (112); tympanites soon followed.

Temperature.

	A.M.	P.M.
15th day of illness	98.6°	100.2°
16th ,, ,,	103.0°	104.6°
17th ,, ,,	101.4°	102.0°
18th ,, ,,	101.4°	100.4°
19th ,, ,,	99.4°	98.8°

This attack of peritonitis passed off very satisfactorily; the temperature gradually fell to normal on the nineteenth day. The treatment consisted in keeping the patient under the influence of opium, and the application of turpentine stupes to the abdomen.

From the twenty-first day of illness, there was again a rise of temperature; and, as this was gradual and decided, a recrudescence of the original fever was suspected; this was confirmed by an attack of epistaxis and the recurrence of diarrhœa, the motions having the usual pea-soup appearance. The pyrexia never exceeded 103.6° Fahr., and the diarrhœa was slight, there being never more than two motions in the twenty-four hours. At 9 A.M. on the thirty-third day, he had a very severe intestinal hæmorrhage, passing two and a half imperial pints of pure blood. The lips were blanched, the pulse almost imperceptible, and the temperature fell from 101.6° to 99.4° Fahr., and later to 98.4°. Ice-bags were immediately applied to the abdomen, and ten minims of turpentine were given every hour till half a drachm had been given, when he complained of nausea. Thirty minims of liquid extract of ergot were then given every half-hour, till five drachms were administered. Two lead and opium pills were then given, a short interval being allowed between each. On the following day, the lead and opium pills were repeated, until three had been taken. The cautious administration of stimulants was also resorted to, in the form of one-drachm doses of brandy, according to the state of the pulse. Decided reaction set in; so that, on the morning of the thirty-fifth day, the temperature had risen to 102.6° Fahr. On the following morning, there was a sudden fall to 97.2°, but a rise occurred, towards evening, to 101.4. Next day, the morning and evening records were subnormal; and, as recurring hæmorrhage was feared, the patient was kept under the influence of opium.

The temperature remained subnormal for several days; and, on consultation with Dr. Allan, we came to the conclusion that the state of semi-collapse in which the patient lay, was, in all probability, due to the initial hæmorrhage. He therefore received eight ounces of port wine and the whites of two eggs *per diem*, and under this treatment the pulse and general condition rapidly improved. As his bowels had never acted since the hæmorrhage occurred, an enema was given after eleven days had elapsed; the motion passed being very dark. On the forty-sixth day, corn-flour and beef-tea were commenced; and on the forty-eighth day a simple enema was given, the motion passed being still of a dark colour. The corn-flour and beef-tea diet were soon replaced by chicken-soup and light food, and the patient was dismissed well on October 28th.

REMARKS BY DR. STEWART.—As this was a very mild case at the beginning, it seemed rather remarkable that peritonitis should have supervened, especially as it took place towards the termination of the lysis. The cause, however, became very soon evident on cross-examining the man. The following is the note made in the ward-journal. "August 23rd. The suspicions held this morning have been confirmed to-day concerning the administration of food unknown to any of the officials. The patient confessed that he had received a piece of bread from a convalescent patient on the evenings of August 21st and 22nd." There cannot be the slightest doubt that, in this case, the bread was the exciting cause of the inflammation. If the above table be referred to, it will be seen that the temperature on the evening of the thirteenth day (the night on which he had received the second piece of bread) was 100.2, and on the following morning it had risen to 103.0°, when the abdominal symptoms asserted themselves. This, I think, points to the great significance of the dietetic treatment of enteric fever, which should consist, for the most part, of milk; and, in cases where the diarrhœa is mild, beef-tea should also be allowed, and this regimen should be continued for several days after the temperature has reached normal. That recovery resulted after such severe hæmorrhage in one already debilitated by typhoid fever, is remarkable.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 2ND, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

EXHIBITION OF CEREBRAL TUMOURS.

THE PRESIDENT showed a specimen of tubercular tumour from a case already fully described in *Brain*. A mass of tubercle, of the size of a marble, occupied the site of the corpora quadrigemina, and apparently destroyed the nervous substance. The patient was a boy aged 7. The chief symptoms during life were general paresis and tremors. The boy died of tubercular meningitis, after a short illness.

Dr. GOODHART showed the following specimens: 1. An example of gliomatous enlargement of the pons Varolii and medulla oblongata. The patient was a boy, aged 9. The chief symptoms noticed when he first came under observation were staggering gait, difficulty in swallowing, and inability to close the right eye; subsequently, he had right hemiplegia; the optic discs were natural. Later in the case, the paralysis became more generally distributed, and was accompanied by rigidity. Death was preceded by coma. The pathological condition resembled that described by Dr. Angel Money, from cases under the care of Dr. Gee, at the Royal Medical and Chirurgical Society, but the condition had already been recognised and described by Dr. Wilks in 1856. 2. The second specimen was a large psammo-sarcoma, originating at the junction of the tentorium with the falx cerebri. The patient presented no symptoms. 3. Three specimens of tumours in connection with nerves at the base of the brain. The first was a specimen in which two fibro-sarcomata were symmetrically disposed, one on each seventh nerve. The patient was a woman, aged 26, in whom the first symptoms were loss of hearing and unsteadiness of gait; later symptoms were, dilated pupils, and almost complete blindness of the right eye; the face became drawn to the left side; finally, she became comatose, and died. The second was an instance of a large tumour seated on the seventh nerve on one side only. The patient, a woman, had been deaf in the right ear for five years, and had lost her voice; subsequently, the face became paralysed, and so remained for four years, when she was admitted into Guy's Hospital, on account of great difficulty in swallowing, wasting of the sterno-mastoid muscle, and complete aphonia. The difficulty of the diagnosis in this case was pointed out. The third specimen was a fibrous tumour in the situation of the left Gasserian ganglion. There were complete anæsthesia of the left side of the face, ptosis of the left eye, ophthalmoplegia externa and interna, and severe pain in the left side of the face. The left optic disc was healthy; treatment gave no relief. The patient, a man, died of acute cellulitis of the neck and forearm. 4. A tumour of the temporo-sphenoidal lobe. The patient was a woman, aged 66, under the care of Mr. Sams. She

had all her life been subject, at irregular intervals, to epileptic fits, and had been imbecile for many years. The first symptom referable to the tumour was pain in the right temporal region. She gradually lost power on the left side; the fits became more severe. Subsequently left hemiparesis developed, and the arm became rigid. She was not deaf. The optic discs were hazy; there was some tenderness on pressure above the right temple. After death, Mr. Stokes found a tumour occupying the right temporo-sphenoidal lobe, and extending inwards into the substance of the white matter, and probably pressing upon the motor tracts. Dr. Goodhart said, in conclusion, that his experience in the *post mortem* room of Guy's Hospital had been against the supposition that cerebral tumours were often sufficiently localised to allow surgical interference to be successful. Symptoms were chiefly produced by involvement of the cortex, and the probability was that, where marked symptoms were produced, the tumour occupied also a large area of the white matter.—Dr. ANGEL MONEY said that, in his paper on gelatiniform enlargement of the pons Varolii, his object had been to show that it was not inflammatory, but gliomatous.

Dr. FREDERICK TAYLOR showed the following specimens. 1. A tumour of the cerebellum involving the pons Varolii and the fourth ventricle. Symptoms came on six months after an injury. The patient, a boy aged 9, became blind on the right side, and sometimes fell towards the right side. He had double optic neuritis. He died a year after the injury, the chief symptoms being increasing blindness and emaciation. Microscopic sections showed that the tumour consisted of small round cells, sharply demarcated from the nervous tissue, but not encysted. He considered that the tumour was a sarcoma, not a glioma. 2. Microscopic specimens from a case already published by Dr. Habershon in the *Guy's Hospital Reports*, 1879. It was an example of a glioma affecting the pons; the whole pons, especially the right half, was greatly enlarged, and the nerve-fibres—for instance, the root-fibres of the hypoglossal nerve—were widely separated. The patient was a man aged 40, who had partial right hemiplegia. He died almost suddenly, by failure of respiration. 3. A glioma, involving the anterior two-thirds of the external and internal capsules, the right corpus striatum, and the adjacent parts; it extended into the grey matter in front; and the olfactory lobes were degenerated. The patient had several fits of unconsciousness, followed by rigidity of the left arm and leg, and of the right arm. The optic neuritis was most pronounced on the right side, the left being little, if at all, affected. 4. Microscopic sections of a fibro-sarcomatous tumour growing out from the flocculus of the cerebellum. The patient suffered from no symptoms.

Mr. PEEKE RICHARDS showed a specimen from the body of a woman, admitted into Hanwell Lunatic Asylum on account of dementia. The only exceptional symptom was extreme drowsiness. She developed left hemiplegia three days before death. A tumour, of the size of a Tangerine orange, occupied the left ventricle, and extended into the interpeduncular space.

Mr. BUTLIN exhibited a spherical glioma, lying in the middle line of the cerebellum, but extending further to the right side than to the left. The tumour was very soft, semitranslucent, and clearly defined from the surrounding cerebellum, from which it could be raised up. It was a solitary tumour, and probably began to grow after a fall, six months before death, in which the forehead was struck. The patient, a girl, had optic neuritis. The movements were slovenly, and this was most marked on the left side. The most prominent symptom was a continual general shaking.—Dr. HALE WHITE had found that, in a hundred cases of cerebral tumour in children, the predominance of the male sex (ten to six) was the same as in adults; this fact rendered it doubtful whether the predominance in the adult male was to be attributed to greater liability to injury.

Dr. ORD showed two specimens illustrating the possibility of localising lesions at the surface of the brain. The first was a gumma, involving in the left hemisphere the parts in and around the upper part of the fissure of Rolando. The dura mater was thickened and adherent, and the gumma lay beneath it. The second specimen was an example of tuberculosis, involving a considerable portion of the posterior part of the two superior frontal convolutions. The symptoms were, in both cases, convulsions, followed in the second case by unconsciousness and hemiplegia, which ultimately became complete. In reply to the PRESIDENT, Dr. Ord said that there was no general involvement of the membranes in the tubercular process.

Dr. SAUNDBY showed a diagram of glioma of the brain. The patient, a man, when admitted, had an ataxic gait, vomiting, fits, and some mental disturbance. He became comatose on several occasions; double neuro-retinitis was present, and after death a gliomatous tumour was found occupying, on the right side, the second and third frontal convolutions, the lower part of the ascending frontal convolution, and the island of Reil, and pressing on the corpus striatum. He also showed microscopic sections from a second case. A boy, aged 11, suffered from vomiting, headache, twitching of the left side of the face, spasms of the left arm, and deviation of the eyes to the left. He became deaf, and blind from double optic neuritis. At the necropsy, several tumours were found; one on the left side involved the lower half of the ascending frontal convolution. On the right side, all the tumours were outside the motor area. In the course of some general observations, Dr. Saundby observed that most tumours of the brain were difficult, and many were impossible, to diagnose, since the great part of the brain was outside the motor area, and no trustworthy means of localisation existed for tumours outside that area.

A specimen sent by Dr. MACDONALD was shown by Dr. COUPLAND (honorary secretary). The patient was a man, aged 52, who had been imbecile from youth. He was admitted into an asylum on account of acute mania, followed by dementia. Before his death, right hemiplegia came on slowly. At the necropsy a large cyst, covering the whole left hemisphere, not adherent to the dura mater, and very slightly to the pia mater, was found. It contained altered blood-clot and viscid mucoid material. Dr. MacDonald was inclined to the view that it was a congenital cyst, but Dr. Coupland thought it was purely a hæmorrhagic cyst, perhaps arising during intra-uterine life. This specimen was referred to a committee for report.—The PRESIDENT recollected an analogous case, shown to the Society several years ago. There was one large cyst in a similar situation, and no doubt was entertained that it was due to hæmorrhage.

Dr. TURNER exhibited two specimens of cerebral tumour. 1. A soft, and in part gelatinous, growth in the white matter of the left hemisphere, involving the convolutions about the upper part of the fissure of Rolando, from a man aged 31. The symptoms of cerebral disease developed suddenly in a convulsive attack, affecting the right arm and leg. This was followed by loss of power in the limbs and in the face on the same side, and by failure of sight from double optic neuritis. Headache and vomiting, with mental confusion, were also present. The patient died comatose. At the necropsy, a medullary sarcomatous growth was also found in the left lung. 2. The second specimen showed a well-defined firm nodule of growth at the surface of the right hemisphere, at the posterior part of the line of junction of the parietal and tempero-sphenoidal lobes. In the white matter between this and the central ganglia was a much more extensive growth of softer character, vascular at the borders and caseous in the centre, which had involved the posterior part of the corpus striatum and optic thalamus. This was obtained from the body of a man, aged 55, who had suffered from headaches and occasional vomiting seven months before his death, and loss of power and sensation on the left side from a sudden apoplectic attack eleven weeks before the fatal event. He also had double optic neuritis with loss of sight. In this case, there was thickening with atheroma of the arteries at the base of the brain, and enlargement of the heart with increase of fat on its surface. These specimens were adduced as illustrating the origination of growths in the cortical and white medullary tissue of the cerebral hemisphere; the occurrence of extension of the disease in a centripetal direction, the course of the fasciculi to the basal ganglia and great central commissures probably presenting channels favourable to the advance of the morbid lesion; the rapid extension of the disease through the white matter, and the comparative limitation of its extension in the cortex.—In reply to the PRESIDENT, Dr. TURNER said that he looked upon the two tumours in the first case as independent the one of the other.

Dr. S. WEST showed a specimen obtained from the body of a man aged 62. He had only presented symptoms for six months. At that time he had fallen on his head; this was followed by some amnesic aphasia, remarkable for complete loss of memory for nouns. There was no sensory disturbance. There was no right hemiparesis; optic neuritis subsequently developed, and two days before death he became unconscious. Fine muscular tremors, most marked on the left side, were noted during the last few weeks. The left side of the brain was found to be larger than the right, owing to a gliomatous growth, which occupied the temporo-sphenoidal lobe; it did not reach the surface. It had displaced the ganglia at the base, and had finally occluded the ventricle. The tumour contained some large cavities. No other growths were found in other parts of the body. Dr. West commented on the long absence in this case of symptoms characteristic of cerebral tumour.

Dr. HADDEN exhibited drawings of the naked eye and microscopic appearances of the psammomata of the choroid plexus. He also showed (1) specimens and drawings of a myxochondroma of the falx cerebri, pressing on and embedded in the right paracentral lobule. There were no symptoms during life. 2. A round-celled sarcoma, in-

olving the white matter and deeper layers of the cortex of the left scending frontal and adjacent parts of the second and third transerse frontal convolutions. The patient died soon after admission, ut there was a history of numerous epileptic fits. 3. A glioma, inolving the right caudate nucleus, the posterior two-thirds of the nticular nucleus, the claustrum, the external capsule, the posterior alf of the motor part of the internal capsule, and all the sensory porion, as well as the upper two-thirds of the optic thalamus. The only calising symptom was slight anæsthesia of the left leg. 4. A mple cyst in the left lobe of the cerebellum, one inch in diameter, ntaining clear limpid fluid. There were no traces of old hæmorrhage, of hydatid membrane. The chief symptoms were paroxysmal cipital headache, vomiting, optic neuritis, and staggering gait.

Tumours of the brain were also shown without comment by Dr. EDIARD (of Carlisle), Dr. SAVAGE, Dr. BEEVOR, Dr. CHAFFEY, Dr. EORGE OGILVIE, Dr. HEBB, Dr. ASHBY, Mr. D'ARCY POWER; and living specimen by Mr. ERNEST CLARKE.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JANUARY 28TH, 1886.

HENRY POWER, F.R.C.S., Vice-President, in the Chair.

Polarisation Ophthalmoscope.—Dr. THOMAS REID showed a polarisan ophthalmoscope designed to detect colour-defects in the spectrum, d their exact position; a similar instrument could be arranged to termine the position of the neutral point or points in dichroic ion. He also showed a perimeter for use in achromatopsia, and an hthalmoscope adapted for use with the electric light, and provided th a grating by which the condition of the superficial layers of the ina as to transparency could be ascertained.

Ophthalmoscope with Electric Light.—Mr. JULER showed his ophlmoscope for the electric light. A concave mirror of short focal gth, and a small Swan light, were the essential characteristics of ophthalmoscope.—Mr. BRUDENELL CARTER thought that the ht from this instrument was more pleasant to the patient than the inary gas-light.

Amblyopia from Bisulphide of Carbon.—Mr. R. MARCUS GUNN owed a case of amblyopia from bisulphide of carbon. The patient l suffered from the deleterious vapours in the process of extracting from cocoa-nut fibre. Though he had worked for twenty years at s occupation, he did not experience any ill effects until he began work in a badly ventilated room, when the symptoms appeared hin four months. His vision was reduced to J. 19, and there was -green blindness. The general symptoms were well marked; no provement had occurred under treatment.

Synchysis Scintillans.—Mr. RICHARDSON CROSS showed a woman, d 73, with synchysis scintillans. The glistening particles could seen by direct examination with lenses from 0 to 20 D, and e distributed with almost perfect uniformity through the vitreous y; they shifted very slowly with the movements of the eye, and h held a definite position in the vitreous body. It was urged t this case, and many others of this disease, showed that the dition did not depend on an alteration in the ciliary body, roid, or vitreous humour; and that they ought not to be grouped h fluid vitreous and ordinary synchysis. Mr. Cross believed the e pathology of the condition was a primary atheroma of the cellu- elements of the vitreous body.

Essential Shrinking of the Conjunctiva.—Dr. W. A. BRAILEY wed a patient who suffered from shrinking of the conjunctival sac, bably due to old granular lids, and identical with the condition cribed as pemphigus of the conjunctiva. The appearances in this were consistent with those of chronic granular lids, although it true that in ordinary granular lids there was no such shrinking he sac. There was no history of pemphigus.—Mr. LANG also wed a case of essential shrinking of the conjunctiva, which recently occurred in his practice. In this case, there was no evice of granular lids, or of pemphigus of the body or mucous memnes. One eye was quite blind; with the other, only large objects d be seen.—Mr. BRUDENELL CARTER said that, in the case which been under his care, there had been no pemphigus, but a proged chronic conjunctivitis. In this case, he had transplanted a piece onjunctiva from the rabbit with temporary success, but it eventually erwent the same process of degeneration as the original conjunctiva.

Atrophy of Iris.—Mr. G. L. JOHNSON showed drawings of a case of ost complete atrophy of the iris after injury. Eighteen years ago, patient was struck by a wheel, and sustained an injury of the t eye, which was excised. Two years ago, the sight of the remaining eye began to fail, and his friends noticed that the pupil grew larger. During the last seven months, Mr. Johnson had noticed a progressive atrophy of the iris, until at the present time only a small band of iris remained above and below. Vision was very imperfect, and could not be improved by any combination of lenses beyond Jäger 5 and $\frac{20}{60}$. The optic disc and macula were unaffected, and the fundus immediately around was healthy; but elsewhere there was general atrophy of the choroid.

Meningitis after Excision of the Eyeball.—Mr. E. NETTLESHIP read a paper, based on the case (at the Moorfields Hospital, in July, 1885) of a young man who was operated upon unsuccessfully, for dislocation of the lens into the anterior chamber. The eye was excised in a state of early, but violent, suppurative inflammation, seventy-two hours after the attempted removal of the lens. The orbit was irrigated with a very weak solution of biniodide of mercury. The man became restless and excitable, with high temperature, within forty-eight hours, and died seventy-five hours after the excision. He was attended by Dr. Stephen Mackenzie. Purulent meningitis was found at the base, and between the cerebrum and cerebellum; there were no tubercles. It was remarkable that well-marked tough thickening of the pia mater, and firm adhesion of the opposite edges of the longitudinal and Sylvian fissures, were found, undoubtedly indicating a previous attack of general meningitis, but the early history of the patient was almost negative. Mr. Nettleship had tabulated all the other cases of meningitis after excision of the eye, twenty-nine in number. No cases were included in which it was known that the operation was complicated by injury or disease of the walls of the orbit. Of the thirty cases, twenty-six were fatal, and eighteen of these were examined after death, and meningitis found in all; the remaining four cases recovered, usually after a long and severe illness. In a considerable majority, the meningitic symptoms set in within forty-eight hours of the enucleation, but the duration of the illness, when fatal, varied more than the period of onset. Except that the meningitis usually affected the base, and was sometimes more marked towards the front, and on the side of the excised eye, and that twice there was thrombosis of the cavernous sinus, there was very little macroscopic evidence of transmission from the orbit; but microscopic examination, in four cases, showed inflammation in or around the optic nerve, and in one, inflammation and micro-organisms in the sixth nerve. It is suggested that, in spite of the rarity of visible thrombosis, the veins may in some cases be the carriers, and that (owing to the numerous anastomoses) the blood-current in the cerebral veins might sometimes be reversed, allowing septic material to pass from the orbit upwards to the brain, instead of into the jugular vein. In some cases only the convexity was affected, and in others the disease was more marked on the side opposite to the excision. In a considerable majority, the excised eye had been wounded; but the author dissented from Von Gräfe's statement (1863) that the risk of meningitis was much greater if the eye were suppurating when excised, since it appeared that in exactly half of the cases no visible suppuration was going on, or had occurred, in the lost eye. The disease was probably due to infection of the orbital wound, either by the decomposition of discharge pent up by tight bandaging, or (as was probable in two cases) to erysipelas. Complications were present in a few cases. Mr. Nettleship believed that, with care, the cases might be rendered even much more rare than they had hitherto been, especially by providing free drainage from the orbit when there was much inflammatory swelling. He at present preferred excision, with suitable precautions, in all cases, to evisceration, as it had not yet been proved that the latter operation might not cause sympathetic disease. Only four cases of meningitis following other operations upon the eyeball were known, and in only one was a *post mortem* examination made. In certain cases of meningitis after excision, sympathethic inflammation had set in some time before the meningitis, a fact which seemed to militate against the theory that sympathetic disease passed from the exciting to the sympathising eye by the meningeal coverings of the optic nerve.—Mr. HENRY POWER had met with but one case of meningitis after excision during suppuration; after the eye had been excised, the orbit was cleared out; and as there was sharp hæmorrhage, the orbit was filled up with layers of lint soaked in chloride of zinc. The patient died of meningitis on the following day.—Mr. BRUDENELL CARTER said that he had always felt himself bound by Von Gräfe's dictum not to enucleate an eye in a condition of acute inflammation. Referring to the weak solution of biniodide of mercury used by Mr. Nettleship, he said that he found, on experiment, that the prescription recommended by M. Panas (see BRITISH MEDICAL JOURNAL, January 30th, 1886, p. 225) did not contain a quantity of mercury appreciable by chemical tests.—

Mr. HIGGENS thought the frequency with which suppuration of the eyeball was an antecedent of meningitis, seemed to show that suppuration played some part in the causation. He had never excised a suppurating eyeball, and was strongly of opinion that it was an unsafe thing to do. He preferred to excise the eye and wait.—Mr. PRIESTLEY SMITH said that he had met with two cases of meningitis after excision. In his second case, the meningitis was the consequence of tightly bandaging the orbit. If it were safe to excise an eye in a condition of panophthalmitis, it would certainly be advantageous; and if two precautions were observed, he believed that excision might be performed. These were, firstly, to introduce a considerable quantity of iodoform into the orbit; and, secondly, if the temperature rose, to at once remove all bandages, and thoroughly syringe out the orbit with a bland antiseptic solution.—Mr. P. H. MULES said that the general rule in Manchester was not to excise a suppurating globe; in the only case in which he had excised such an eye, the patient died of meningitis. He urged the advantages of evisceration in the treatment of these cases.—Mr. LAWFORD read for Mr. WAREN TAY the notes of a case which occurred in the North Eastern Hospital for Children. The patient, a boy, aged 9, sustained an accidental wound of the sclerotic; ten days later he began to complain of pain in the eye, and vomited; iritis was noticed. On the following day, there were changes in the vitreous humour. On the thirteenth day the eye was removed; suppuration was found to have commenced. Twenty-four hours after the operation the temperature had risen to 102°, and he was delirious. He gradually grew worse, and died on the fourth day after the operation. At the necropsy extensive meningitis, involving the upper surfaces of both hemispheres, the interpeduncular space and the base, and both surfaces of the medulla oblongata, were found. There were no signs of old standing or tubercular disease. The microscopic examination showed no signs of disease in either optic nerve.—Mr. R. MARCUS GUNN felt incredulous as to the existence of any special danger of meningitis, as he had seen fully six hundred cases of excision, under such conditions, where no antiseptics were used, without any meningitis.—Mr. M. M. MCHARDY said that he had met with two cases at King's College Hospital, which bore on the question. One was that of a man, aged 46, who was admitted with symphathetic ophthalmitis; the injured eye was excised, but the patient insisted on taking his discharge on the following day, in order that he might go to the Derby; he died of suppurative meningitis two days later. The second case was that of a young man, aged 24, suffering from religious melancholia; he plucked out his eye, and four days later died of acute suppurative meningitis. Mr. McHardy added that he was in the habit of removing eyes in a condition of panophthalmitis, and could recall no mishap, unless the death of an old woman, over 80 years of age, whose eye was removed on account of suppuration, after iridectomy, and who died suddenly on the following day, could be set down to the operation.—Mr. W. H. JESSOP said that Mr. Vernon, who had at one time practised evisceration, had abandoned the operation on account of sloughing of the sclerotic.—Mr. MULES said that Von Gräfe, of Hallé, had eviscerated suppurating eyes in fifty instances without any mishap; he had himself had one case of sloughing of the sclerotic, but since he had used perchloride of mercury solution he had had no accident.—Mr. JOHN TWEEDY had never seen any mishap after excision which could be attributed to the operation. He had always looked upon suppuration of the globe as an indication for excision. He was in the habit of washing the conjunctiva before operating, and the orbit, after excision, with a solution of chloride of zinc (ten grains to the ounce).—Mr. NETTLESHIP, in reply, said that the discussion had surprised him, by showing the diversity of opinion on this point which prevailed even in London. He failed to feel the force of the argument advanced by Mr. Higgens; and, with regard to the point raised by Mr. B. Carter, as to the antiseptic solution used, he would make inquiries. [Mr. Nettleship informs us that he has since ascertained that the solution of biniodide of mercury, with which he syringed out the orbit, was made with iodide of potassium, in which the biniodide is freely soluble.]

Optometer.—Dr. C. E. FITZGERALD showed an instrument for rapidly estimating errors of refraction, which had been made for him by Mr. Prescot, optician, of Dublin. A set of spherical lenses and of cylindrical lenses were adjusted in two frames, which could be moved up and down in a curved frame, somewhat resembling the arm of a perimeter. The cylindrical lenses could be rotated each on its own axis.

SUPERANNUATION.—Mr. Isaac Flower, late Medical Officer of the Codford St. Peter District of the Warminster Union, has obtained a superannuation allowance of £50 for one year.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, JANUARY 21TH, 1886.

G. S. BRADY, M.D., F.R.S., President, in the Chair.

Sarcoma of Kidneys, with Carcinoma of Periosteum of Femur in the same Subject.—Dr. SQUANCE showed microscopic specimens of a round-celled sarcoma, found in each kidney; and of a scirrhus, growing on the thigh, and springing from the periosteum of a man who had been injured in the back by falling coal. Since the injury, the scirrhus had grown rapidly, though the patient stated that a small lump had been in the same place from a boy.—Mr. MORGAN and Dr. DRINKWATER made some remarks.

Neuroma of Median Nerve.—Dr. SQUANCE also showed a specimen of the above, discovered accidentally while examining an arm which had been amputated for diseases of the elbow-joint. It was nearly as large as a walnut, and composed chiefly of fibrous tissue.

Congenital Absence of Kidney.—Dr. WATSON related a case where he had found only one kidney, on making a *post mortem* examination of a child who had died from starvation. The one kidney was double the normal weight.

Myoma of Uterus: Hysterectomy.—Mr. MORGAN showed a large myoma, for which he had performed hysterectomy, the patient having died forty-eight hours after operation, from collapse. There was no hæmorrhage from the stump. The ordinary Kœberle's clamp was not strong enough to secure the pedicle, and a Chassaignac's ecraseur had to be used to control the bleeding, the vessels then being ligatured, and the edges of the stump stitched together.—Mr. WHITEHOUSE asked why the "appendages" were not removed instead of the tumour.—Mr. MORGAN said, in reply, that the ovaries could not be distinguished from the myomatous mass, or he should have preferred removing them.—The PRESIDENT and Dr. DRINKWATER made some remarks.

Dermoid Cyst of Ovary.—Extra-Uterine Fœtation: Rupture of Fallopian Tube.—Dr. G. E. WELFORD showed these specimens.

Ulcer of Stomach in a Case of Lead-Poisoning.—Mr. W. H. MALING showed the perforated stomach of a man who had died suddenly from extravasation of its contents into the abdominal cavity. He was a painter, and suffering from symptoms of lead-poinoning at the time of death.

Vesical Calculi.—Mr. HOPGOOD exhibited thirty-three calculi, removed from a patient with enlarged prostate.

Sympathetic Ophthalmia, following Injury.—Mr. HOPGOOD read a paper on this subject.

The Influence of the Sympathetic Nervous System in Hemicrania.—Dr. LOWE read a paper on this subject. After describing the symptoms usually found, and giving his opinion that mental worry or excitement was the most common cause of the disease, he detailed the results of experimental physiology, and to show that most of the symptoms of the disease might be produced by irritation of the sympathetic in the neck. He thought the greatest benefit from treatment was derived from drugs combatting the angio-paralytic condition, and had found astonishing results from a combination of bromide of potassium, ergot, and belladonna, and quinine and ergot.—A discussion followed, in which the PRESIDENT, and Drs. WELFORD, SQUANCE, DRINKWATER, HOPWOOD, and WHITEHOUSE took part.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

WEDNESDAY, JANUARY 27TH, 1886.

GEORGE BUCHANAN, M.D., President, in the Chair.

DISCUSSION ON CANCER.

DR. JOSEPH COATS, in opening the discussion, defined cancer as a tumour whose tissue was essentially epithelial in structure, but with a peculiar mode of growth, by virtue of which the epithelium penetrated into neighbouring structures. He stated his belief that sarcomata and cancers might be distinguished, not only by their structure, but also by their clinical characters. In treating of the origin of cancers, he accepted Waldeyer's view that the epithelium of the cancer took origin in existing epithelium; and he enforced this view from his own experience, citing in particular a case of cancer of the kidney in which the tumour had the appearance of a great expansion of the kidney, and the microscopic appearances showed the epithelium of the cancer originating from that of the uriniferous tubules. In dealing next with the extension of cancer, he referred particularly to the manner in which the primary tumour insinuated itself among neighbouring structures, and referred to some illustrations of this which he had shown under the microscope to the Society the preceding evening. In these, he showed a cancer of the os uteri penetrating among the muscular trabeculæ of that organ, and cancer of the stomach, also

enetrating the muscular coat. Besides this extension deeply, there as also a lateral extension, the normal epithelium at the borders of he tumour taking on the abnormal growth which characterised ancer. In the extension to parts removed from the primary tumour, hether to the lymphatic glands or to more distant organs, a striking ct was that the secondary tumours exactly imitated the primary one their minute structure. This was illustrated by cases of cylinder- lled epithelioma with secondary tumours in the liver and lungs, and y a case of bleeding cancer of the stomach, in which the secondary mours in the liver had a similar hæmorrhagic character. This exten- on to parts removed occurred, in the first instance, to the lymphatic ands for the most part. An apparent exception was the case of ex- nsion from the stomach to the liver; but it was pointed out at probably here also there was first the affection of the glands, d from them of the portal vein and liver. In considering e nature and causes of cancer, Dr. Coats referred to the ques- on of heredity. He pointed out that, in the inheritance of rmal characters, it was fine details of structure, such as made e features, complexion, stature, colour of hair, etc., that were the terial of inheritance. In diseases which were demonstrably here- tary, such as hæmophilia, Daltonism, ichthyosis, it was again fine tails of structure or growth, sometimes involving entire systems, ch as the vascular system in hæmophilia, and the epidermic system ichthyosis. If cancer were hereditary, it must be some peculiarity the epithelial structures that was transmitted. Dr. Coats then re- red to the analogy which had been drawn by several speakers in e debate in the Pathological Society of London, between syphilis and berculosis on the one hand, and cancer on the other. He rejected s analogy, except in so far as there might be, by inheritance or erwise, a cancerous constitution, comparable with the prediposition tuberculosis. In all three diseases, the actual occurrence was due local influences, but those which induced cancer were widely dif- ent from those which cause syphilis and tuberculosis. In the latter e, there was a definite poison, which led, wherever carried, to ions of irritation essentially the same as those of inflammation, l analogous to those met with in other diseases where micro- anisms occurred, such as pyæmia. In cancer, on the other hand, re was the new formation of a well-formed delicately adjusted sue, a process strictly of growth, similar to the original growth of tissues. Even the secondary growth, in all its details, was deli- ely and completely formed. This was very different from the alts of mere irritation, and cancer was not to be compared with hilis and tuberculosis in regard to its local cause. The determining se of cancer was some local peculiarity in the tissue, as in the case n epithelioma forming in a cicatrix, or an irritation, mechanical hemical. The usual seats of cancer were such as to indicate that tation was the most frequent determining cause. In the case of the trix, there was an imperfect tissue, and in the case of irritation, re was local injury of a mechanical or chemical kind. Taking se along with such facts as the prevalence of cancer in advanced it would seem that one had to look rather to decadence of tissue n to increased activity. The epithelial tissues were naturally very ve in their growth, and the cancerous constitution presumed an sual activity. The local cause, by injuring the less resistant erlying tissues, might allow of the epithelium growing into them. s view, formulated by Thiersch, seemed to commend itself to Dr. ts. In conclusion, Dr. Coats referred to the question of recur- e. If, as he believed, the cancer was both in its primary and econdary manifestations a single growth, all the newly formed tissue g derived from the tissue of the primary growth, then there uld be the certainty that, if all the growth were removed, the our would not recur. Considering the mode of growth, however, especially the manner in which the cancer insinuated itself ng the normal tissues and into the lymphatics, it must be difficult nsure complete removal. Still, if this were kept in view, there ıt be more and more an approach to success.

PLYMOUTH AND DEVONPORT MEDICAL SOCIETY.

T MONTHLY MEETING, PLYMOUTH, WEDNESDAY, JAN. 27TH, 1886.

G. JACKSON, F.R.C.S., President, in the Chair.

ecimens, etc.—Dr. C. ALDRIDGE showed an anomalous Spinal e case; also a typical case of Tabes Dorsalis associated with Oph- noplegia Externa.—Dr. A. H. BAMPTON showed and compared of Infantile Paralysis and Progressive Muscular Atrophy in ts; one of the latter with a history of long continued masturba- another of obscure origin.—Mr. A. BUCHAN showed a case of al Sclerosis and Iritis, recovering under specific treatment.—Surgeon ASTLEY COOPER, R.N., showed a pathological specimen of Perforation of the Duodenum, occurring in a healthy sailor after a drinking bout.—Mr. G. JACKSON exhibited a living case of Malignant Growth of the Head of the Humerus, occurring in a lad after slight injury; also a pathological specimen of Cancer of the Omentum, weighing several pounds, taken from a patient who was enabled to pursue his occupation up to a few days of his death.—Mr. R. W. MURRAY showed cases of Colles's Fracture after Treatment with Carr's Splint, with excellent results.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, JANUARY 20TH, 1886.

J. HOLMES JOY, M.D., President, in the Chair.

Mr. Furneaux Jordan's Operation for Naso-Pharyngeal Growths.—Mr. WALTER FOWLER showed a boy, aged 16, who had been subjected to this operation. When he was first seen, there were symptoms of nasal polypus. This was removed by a snare, and found, on examination, to be an alveolar sarcoma. It recurred at once; and, after a month's interval, Mr. Fowler completely removed the growth by dividing the upper lip and the nose on one side of the septum, and turning this flap outwards so as to thoroughly expose the nasal cavity in the manner adopted by Mr. Furneaux Jordan. The line of cicatrix was hardly visible.

Ophthalmoplegia Externa Cured by Iodide of Potassium.—Dr. SUCKLING showed a man, aged 67, who had been sent to him in November last, suffering from paresis of the muscles supplied by the third nerve on the right side, and total paralysis of those supplied by the third and sixth nerves on the left. The pupils were a little dilated, the left being the larger, and responded to light and accommodation. There were no changes in either fundus; the knee-jerk was present; and there was no history of syphilis or of rheumatism. The patient attributed his illness to the cold weather, to which he had been much exposed. Five weeks after Dr. Suckling saw him, he had, after exposure, conjunctivitis of the left eye, followed by dropping, first of the left, and then of the right, upper lid. The patient was treated with large doses of iodide of potassium (thirty-six grains thrice daily), rapidly improved, and had now completely recovered.

Case of Athetosis.—Dr. SIMON showed a woman, aged 24, who had left hemiplegia when two years of age. At seven she began to walk, and it was noticed that she had rhythmical contractions of the fingers of the left hand, as well as talipes equino-varus on the same side. The movements had continued ever since, though she had been told they ceased during sleep. The arm was shorter than the healthy one, but there was marked muscular hypertrophy due to the excessive movements.

Specimens.— Dr. MALINS showed the following specimens. 1. An iron hammer-head, weighing five ounces, taken from the vagina of a girl aged 14. 2. Cystic ovaries taken from a patient, aged 33, weighing respectively 6¼ and 5½ drachms. There was a history of five years' illness, and pain in the left iliac region and back; the left ovary was prolapsed behind the uterus. The patient had been much better since the operation. 3. A fibroid polypus, weighing nearly eight ounces, from a patient aged 46. The cervix was divided antero-posteriorily by the thermo-cautery, a fortnight previously; the tumour was removed by the écraseur, and delivered by midwifery forceps. Before admission to the hospital she had been in bed for two years and four months. At the time of report, she was practically well.

Some Injuries and Malformation of the Urethra.—Mr. THOMAS read a paper on this subject. It was illustrated by the histories of various cases which had come under the author's care; and a considerable portion of it was devoted to extravasation of urine in boys, four cases of which were related. The causes of this were discussed; calculus of the urethra was considered an important agent, but slight injuries of the urethra, followed by inflammatory action, were frequently the precursors of extravasation. In one case, phimosis was proved to be the cause. All the cases had made good recoveries. The treatment pursued was free incision, and irrigation with warm carbolic lotion (1 in 100). Immediate circumcision was found more effectual in reducing the swelling than incisions elsewhere. Other cases related were, one of ruptured urethra from a fall on the perinæum, with considerable separation of the divided ends, treated by suture without catheterism, recovery being perfect. Another was a peculiar congenital malformation of the urethra in a boy, causing obstruction to the flow of urine, and attended with chronic cystitis. The bladder was opened above the pubes, the urethra explored from behind forwards, and found to terminate in a blind extremity at the end of the glans penis, alongside which was a portion of the urethra, about three quarters of an inch long, admitting a No. 7 catheter. The urethra

was opened on the point of a bougie, and remained open without further interference. The suprapubic wound healed slowly, probably on account of the chronic cystitis, and the fœtid retained urine.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, DECEMBER 17TH, 1885.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Extra-uterine Fœtation.—Mr. E. SKINNER related this case. E. D., aged 34, had been married four years; she always had good health before marriage. She was delivered after a severe labour on October 1st, 1883, and recovered well. She menstruated eight weeks later; then not again for nine months. On January 1st, 1884, she was pale and anæmic, suffering from pain in the abdomen, accompanied by severe sickness, which nothing would alleviate. This went on for eight or nine weeks, when she began to recover. A slight tumour could now be felt in the right iliac region. At the end of February, 1885, she passed a bone by the rectum. She had had little or no pain since, except after a hard day's work, and just before passing a bone. On August 1st, Mr. Skinner removed from the rectum one of the bones of the head. He examined the rectum and vagina by the finger, but could feel no opening. She was still well and going about her duties. She menstruated regularly.

Calculi in Kidney.—Dr. LAW related this case, and showed the specimens. The patient, a woman aged 37, had a good family history. She took a cold in August, which was followed by pains in the legs, cold sweats, and great prostration. Pain suddenly commenced on August 28th, whilst lying down, in the hypochondriac region, and was followed very shortly by jaundice. The necropsy revealed a large abscess in the under surface of the right lobe of the liver, connected with another in the upper part of the right kidney, which latter was filled with irregularly shaped, dark-coloured calculi; one of these also lay loose in the liver-abscess. The right pleura contained fœtid pus, which had made its way through a perforation in the diaphragm. The kidney was opened, and calculi were found *in situ;* the kidney was enlarged and thickened.—The specimens were referred to the Pathological Committee for report.

Cases of Lead-Poisoning from Drinking-Water.—Dr. THOMAS related a few cases out of a number which had come under his observation during the last three years, of decided lead-poisoning from drinking-water.—Dr. PORTER read the notes of six cases of lead-poisoning due to contaminated drinking-water, five of which had occurred within the last six months. Three of his patients were employed in the same workshop, where the water had to pass through three hundred yards of leaden service-pipe. In every case the symptoms were characteristic, and the water was found to contain more than one-twentieth of a grain of lead per gallon. Dr. Porter attributed the difficulty in determining the minimum poisonous quantity of lead in water partly to differences in individual susceptibility, instancing the predisposing influence of gout and of previous exposure to lead, an important consideration in a town where one of the prevalent trades was a frequent cause of plumbism, and partly to differences among individuals as to quantity, and the conditions under which the water containing lead was consumed. After alluding to the experiments of Heubel and Gusserow in reference to the amount of lead in the tissues and organs, he went on to speak of the action of the Sheffield water upon lead, which appeared to depend upon the presence of a free acid, but whether a mineral or an organic acid was less easily determined. He alluded to the so-called protective coating formed by hard waters, which was itself a source of danger, a hot dry summer favouring its decomposition. Sulphate of lead was soluble to the dangerous extent of three grains per gallon; and though the carbonate was less so, it might be influenced by water containing excess of carbonic acid. Referring to Dr. Thomas's paper, Dr. Porter said he believed that a red line on the gums had no connection with lead, but was often a symptom of dyspepsia. As to the effect of the use of a tooth-brush on the blue line, he had often remarked that it was only partial, due to the removal of the tartar which facilitated its formation, thus tending to prove that the deposit of sulphide of lead was interstitial. He had several times seen the blue line around molar teeth, disproving the assertion that light was essential to its formation.—The discussion was adjourned to the next meeting.

THURSDAY, JANUARY 14TH, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Iodoform mixed with Coffee.—Mr. SNELL exhibited iodoform mixed with coffee (Oppler's method) to disguise the odour. It was quite successful.

Multiple Abscess of Liver.—Mr. C. S. KILHAM exhibited a specimen from the body of a man, aged 50, a heavy drinker. There h been jaundice, but the colour of the stools and urine was unaltere there was tenderness over the liver, but no pyrexia; he had slig delirium; two years before, also, he had jaundice and delirium. H had never been abroad. The liver was full of small abscesses, so as large as a marble; it was large, irregular, and semi-fluctuating places; there were also indications of cerebral meningitis.

Caseating Bronchial Glands Opening into Trachea.—Mr. KILH showed a specimen from a boy, aged 11, who was admitted into t workhouse for bronchitis on December 2nd last. Later, he develop pleuritis, with effusion on the right side. This cleared up, and, December 20th, after trying to sing, he was attacked with sudd urgent dyspnœa, and died in ten minutes. The right lung was ve adherent. There were a number of large bronchial glands; one large o had caseated, forming a cavity, one inch in diameter, containing caseo matter, and which opened into the trachea close to the bifurcation a hole one-third of an inch across. This spot, and up to the co mencement of the bronchi, was blocked with caseous matter.

Malignant Disease of Labia.—Mr. KILHAM also showed a specim in which the whole right labium was occupied by the tumour, whi was hard and white on section. The superficial and deep inguin and iliac glands were involved. The patient was aged 26.

Partial Ossified Loose Cartilage from Knee-Joint.—Mr. GARRA showed, for Dr. LYTH, this specimen. It had been removed und strict antiseptic precautions. The patient had two attacks of syn vitis, in the early part of 1884, and remained troublesome down February, 1885, when a substance was detected on the outer aspect the joint, between the condyle and head of tibia. At this time it w soft to the touch, and Mr. Favell, who saw the case, was disposed regard it as a thickened fringe of synovial membrane, studded wi harder bodies, like millet-seeds. Before removal, however, it had b come true cartilage, and was ossified at its centre; it was of the size a large bean.

Carcinoma of Tongue; Removal with Scissors.—Dr. HUNT showed tongue, removed by him a few days previously with scissors. T hæmorrhage was easily arrested with the actual cautery; the case w doing well. He spoke in favour of this method of operating.—T PRESIDENT spoke favourably of the scissors-operation for removal of t tongue.—Mr. GARRARD referred to the case of a gentleman, who h had repeated operations performed, portions of his tongue being remov each time. He had been under observation for twenty years, and r mained well.—Dr. KEELING spoke of the two classes of cases met with namely, those in which the disease returned in the tongue after oper tion, and those where it recurred elsewhere. He thought in the latt class great benefit had been accomplished, and that death, in a mo loathsome and painful form, had been avoided. He wished it we possible to form an accurate prognosis always, as to where return disease would take place, when considering the question of operatio —Dr. S. WHITE drew attention to Mr. A. Barker's investigation showing that cases left to Nature succumbed in eleven months, whi those operated upon lived nineteen months. Mr. Barker also favoure operation from below the jaw, with extensive removal of glands, etc

Epileptic Fits, following Acute Rheumatism, and ceasing after Second Attack.—Dr. HUNT related particulars of this interesting cas The patient was a young man, aged 22, an accountant. He suffere in April, 1881, from acute rheumatism, and was treated with t salicylates with excellent results. His previous health had been good subsequently, however, he suffered from severe and constant pain i the head. In the following June, he had the first epileptic fit; the attacks steadily increased both in frequency and in severity, recurri two or three times weekly. His mental powers became affected, and h was unfitted for business. This state continued until July, 1885, whe he had a second attack of rheumatic fever, from which he made a excellent recovery, with the unlooked-for and fortunate result of complete disappearance of the fits, and restoration to a perfect sta of health.

Adjourned Discussion on Lead-Poisoning by Drinking-Water.—D SINCLAIR WHITE remarked that he had been engaged for sever months in investigating the action of the Sheffield water on the leade service-pipes. He found that, of the two water-supplies of the tow one acted freely on the lead piping, while the other had no appr ciable action. He ascribed the action of the first-mentioned water t the fact that it contained a trace of free acid. The nature and origi of the acid were still obscure. He had notes of about twenty cases lead-poisoning due to drinking the Sheffield water. The water con tained a maximum amount of lead in the morning, after standing al night in the lead piping. Filtration through carbon removed th acidity of the water, and its power of dissolving lead. Nearly al forms of carbon filters, and Bischoff's spongy iron filter also, remove

completely all traces of lead from the water. He advocated dealing with the evil by (1) bringing the water into contact with fragments of limestone for fifteen minutes before distributing it; (2) cautioning people not to drink water that had been standing in a lead pipe all night; (3) abolishing lead-lined cisterns for storing water for drinking purposes; and (4) substituting iron or lead-cased tin pipes for the present lead ones in houses where the service-pipe was of considerable length.—Dr. BARTOLOMÉ gave two very striking examples of poisoning by lead in drinking-water which had come under his observation, and urged the dangers likely to arise from the use of leaden water-receptacles.—Dr. LAW followed with remarks on the local causes, in the trades, of lead-poisoning.

REVIEWS AND NOTICES.

UEBER DEN SHOCK. Einer Kritische Studie auf Physiologischer Grundlage. Von Dr. G. H. GROENINGEN, Stabsarzt am Königl. Med.-Chir. Friedrich-Wilhelms-Institut in Berlin. Mit einem Vorwort von Dr. A. BARDELEBEN, O. Profes. der Chirurgie, Geheimer Ober-Medicinalrath, General-arzt, I Class. *à la Suite* des Sanitätscorps, etc., in Berlin. [On Shock.] Wiesbaden: Bergmann.

DR. GROENINGEN has produced a most valuable treatise on a subject of great importance to surgeons. It is remarkable that continental writers have so readily adopted the English word shock. The author devotes several paragraphs to the naturalisation of the term in French and German works, and prefers to retain the English orthography rather than to adopt Germanised or Gallicised variations, such as shoc, choc, shok, schok, choc, and schock, every one of which mongrel words has appeared in the pages of well-known authors.

The author adopts as the motto of his work two aphorisms. The first is Vulpian's declaration, that every function tends to destroy the instruments by which it is discharged; and the second is the equally well-known observation of Savory, "Action involves exhaustion, and repose is needful for repair; the greater the effort, therefore, the greater the exhaustion."

Ueber den Shock consists of a long series of clinical, physiological, and pathological reports and observations. Of necessity, convincing arguments cannot be securely founded upon remarkable cases of death by shock, since even the least sceptical reader must ever be cautious about clinical reports, though endorsed by very high authority. The fatal cases of shock where organic lesions are most evident, are those which will be the most readily believed in; but the sceptic can always say that the lesions and not the shock killed the patients. When no lesions are described, the critic may fairly ask if they might not have been overlooked; nor can anybody who has some knowledge of practical pathology, as carried on in a hospital, forget that the best authorities do not always make necropsies with their own experienced hands. Hence many disbelieve in death from simple concussion of the brain. Many look doubtfully on cases of death from sheer fright, or from fear of chloroform or pain before the commencement of an operation, and, in some instances, before the administration of the anæsthetic. Death may certainly occur from a broken heart, from sheer vexation, and from other causes in the same category; but such are proximate, not immediate, causes; they provoke organic lesions. So it is with death from shock, in the majority of cases at least. The question whether exceptionally it may be otherwise is fiercely disputed. On that question all the arguments contained in the treatise on shock must necessarily turn.

The author discusses traumatic and surgical shock, including burns, lightning-strokes, gunshot-wounds, major and minor operations, and dwells on the relation of shock to anæsthetics. He devotes a good chapter to psychical shock, and considers the whole question from every possible aspect. Dr. Groeningen writes clearly, and concludes with a valuable summary. He denies that shock is the result of a profound impression on the vagus, or the effect of paralysis of the heart; that it is caused by general vaso-motor paralysis or spasm, or by a sudden change in the composition of the blood. He considers that clinical and pathological research proves that shock signifies sudden exhaustion of the medulla and cord caused by great functional violence. Irritation of any sensory nerve causes four different effects, according to its degree; when very slight, there is but consciousness of the irritation; a higher degree involves distinction of touch; more severe irritation causes pain; but the effect of the most extreme amount of irritation is a transitory or long-enduring loss of sensibility. This last degree is seen in shock. As irritation of a nerve causes exhaustion of itself and of its centre, the greater amount of irritation the greater the exhaustion; hence, in shock, symptoms which can be explained by profound nerve-exhaustion are constantly present.

Dr. Groeningen does not believe in the so-called erethitic shock (the "irritability" of Hunter, the "prostration with excitement" of Travers), except as the premonitory sign of true shock, or of the commencement of reaction after shock, or the result of hæmorrhage. Reaction, he declares, does not always follow shock, and may often be seen where shock has not occurred. The fever of reaction, and even reaction itself, he attributes, as a rule, to the injury independently of the shock. The most important symptoms of shock are weak and irregular action of the heart, diminished blood-pressure, fall of temperature, lowering in different degrees of motor, sensory, and reflex nerve-power, and weakening of the functions of the brain; all other familiar symptoms are, in the author's opinion, of little value. He does not strongly believe in pain as the immediate cause of shock. Great importance is attached to the relation of anæsthetics to shock. He is careful to note how it has been repeatedly proved that incomplete anæsthesia predisposes to shock, whilst shock cannot occur during an operation when the patient is thoroughly under the influence of the anæsthetic.

Shock following operation is considered by Dr. Groeningen as the result of an exhaustion of the medulla, due to a long series of influences acting before, during, and after the operation, and all to be taken into account, as well as the mere fact of an incision or ligature. The same is the case with shock after an accident; the act of violence at the moment of the injury is seldom, if ever, the sole cause of shock. The presence of predisposing influences must be sought out, and only if several be manifestly present can shock be satisfactorily diagnosed. The author can find no positive *post mortem* appearances after death from shock.

Acting upon the principles of his aphorisms, the author speaks strongly against any operative measures or treatment which may increase exhaustion when such exhaustion may be avoided, such as amputation immediately after a crush or during intoxication, imperfect administration of anæsthetics, bandages applied so as to involve much disturbance at every dressing, placing the patient in a cold bed after operation, in short, every kind of mismanagement which the careful surgeon scrupulously avoids. Dr. Groeningen warns the surgeon against attempting artificial respiration in cases where shallow or imperceptible breathing exists, which may be solely due to loss of blood.

It will be seen that exhaustion of the medulla is the keynote of *Ueber den Shock*. Every individual subject which, as we have above noted, has been introduced into the work, has been previously considered by other writers; but it is at the same time carefully discussed by Dr. Groeningen, so that his work is a valuable record of collective experience and wisdom, written in intelligible language and in a scientific spirit. We hope that it may soon be translated—a task of no great difficulty, since the author writes the German of Goethe and Lessing rather than the clumsy dialect of the same language familiar to readers of many Teutonic works on scientific subjects.

REPORT ON THE HEALTH OF BRITISH TROOPS SERVING IN THE MADRAS COMMAND IN 1884. Dated, Ootacamund, 30th Sept., 1885. By Surgeon-General IRVINE, M.D.

THE annual average strength of non-commissioned officers and men was 10,812. The admissions into hospital were 11,960; 93 died, and 350 were invalided to England. Of these last, 20.90 per 1,000 were for change of climate, 11.47 for discharge from the service. The death-rate, so far as our knowledge goes, is the smallest on record, being only 8.60 per 1,000. The tables in this most satisfactory report show that, in the year under notice, the admission-rate was less by 67.69 per 1,000, the death-rate by 5.38, and the invaliding rate by 7.73, than the average of the previous ten years. Southern India was far from being free from cholera in 1884; there was, indeed, "a very high rate of mortality among the civil population." It says much for the care taken of the troops in the command, that only twelve cases occurred among the British troops, with ten deaths, a rate of mortality that sufficiently stamps the severity of the type of the disease. Enteric fever was unusually prevalent, there being 192 admissions, with 18 deaths. It is noted, however, that although the number of admissions per 1,000 rose from 4.34 in the two previous years to 11.94 in 1884, the mortality-rate fell from 2.12 to 1.67. Bangalore had 60 admissions from this scourge of young soldiers in India, heading the list—a bad eminence, which we do not hesitate to attribute to

the unsatisfactory condition of the water-supply. Secunderabad follows with 39, Kamptee with 15 cases; Cannanore had 4, three of which were contracted on the line of march. Bellary and Port Blair (in the Andamans) contribute 3 each, these being the first cases observed at Port Blair. Other stations occupied by British troops, three in number, gave one case each, and one occurred at Thyntmyo in British Burmah. The difference in the relative prevalence of this disease in the various stations named is remarkable, and points to differences either in climatic or in hygienic conditions, calling for careful study. Enteric fever is, in fact, at the present day, perhaps the most important disease in the whole range of military medicine. Its prevalence in the Soudan is a noteworthy fact, not at Suakim only, where we may reasonably conjecture that the causes to which its prevalence are usually assigned prevail, but in the desert, where it is difficult to believe that such causes can be present. Be this as it may, the experience of the writer is that impure water is the cause assigned, eight times out of ten, by intelligent non-commissioned officers and men who have suffered from this fever even in the desert, although it may be supposed that in such a place fæcal impurities can hardly be present.

No deaths from malarial fevers occurred in the command in 1884, a fact which speaks well for the treatment of the 886 cases admitted, and does great credit to the executive medical officers. Tubercular diseases account for 4 deaths out of 25 cases; 3 of the fatal cases occurred in Burmah, where the disease appears to prevail. Sunstroke gives 13 admissions and 7 deaths. The mortality from this formidable affection is always high. Diseases of the digestive system always reach a high figure in the medical statistics of India, and in the Madras command they contributed over one-fifth of the entire admissions from all diseases. Dysentery contributed 602 cases, with only 4 deaths, a fact that redounds to the credit of the medical officers, marking, as it does, a progressive improvement in the treatment worthy of high commendation and of national importance. Hepatitis, including suppurative inflammation of the liver, contributed 310 cases with 23 deaths.

The average annual strength of officers in the command was 292; the admissions to hospital were 260, with 4 deaths, and 25 invalided. Of the deaths, only 2 were attributable to disease.

The death-rate among the women was higher than among the men, being 10.15. Among the children it was, as is always the case among soldiers' children, lamentably high, being 31.39.

The Surgeon-General gives a summary of the hygienic condition of the various stations and barracks in the command, with recommendations for remedying the defects. We note in particular a defect of great importance at Secunderabad, the greatest station in the command, namely, the want of surface-drains. The rain-water percolates into the soil and the foundation of the buildings, a state of matters incompatible with health in any climate, and certain to cause fevers in that of India.

The great difficulty is to procure for the troops at many stations a pure water-supply. Neither pains nor money should be spared to obtain this first essential to health. Until this is done, we cannot look for any permanent diminution in the mortality from enteric fever.

On the whole, this is a very satisfactory report, giving evidence, as it does, of the watchful care taken of the health of the troops, and the yearly increasing success in the treatment of disease by the medical officers of the army.

THE SURGICAL DISEASES OF CHILDREN. By EDMUND OWEN, M.B., F.R.C.S., Surgeon to St. Mary's Hospital, and to the Hospital for Children, Great Ormond Street. London: Cassell and Co. 1885.

UNLIKE some of the manuals for students and practitioners, of which series this is one, this useful book treats of a rather extensive subject, and in a comparatively small compass. The information contained in its pages is systematically arranged, and the use of special types renders reference easy. The diagrams are useful, and the coloured plates, though not numerous, are good; they include strumous dactylitis and ulcerative stomatitis, a figure showing extreme rickets, condylomata and hiatus of the bladder on the third plate, and myeloid sarcoma and molluscum contagiosum on the fourth.

After a few pages of clear and characteristic introductory remarks, there follow thirty-four short and readable chapters on different subjects. They form a series of practical essays on the surgical diseases of children, beginning with croup, diphtheria, and laryngitis. The limited size of the work necessitates brevity, but we do not find any important subject omitted, and, what is perhaps of greater moment to the work, clearness has not been sacrificed, nor thoroughness impaired.

Every surgeon has his preference for particular methods of treatment, and some readers will, of course, miss the form they think most suitable in certain cases; but we must acknowledge the soundness of the author's principles, and principles are, after all, the best guides to treatment. One of the commonest deformities which surgeons may have to treat is nævus. The author condemns the use of nitric acid unless very carefully used; and for capillary nævi he advocates the use of sodium-ethylate, "a sodium-alcohol which robs the skin of the elements of water, and the caustic soda which is left against the tissue quickly destroys it." For the larger nævi, Mr. OWEN prefers destruction by the thermo- or galvano-cautery. We are not surprised to find that he has abandoned subcutaneous ligature and the injection of perchloride of iron, but we hardly think that he does justice to excision for large and deep nævi.

In his chapter on operations for Phimosis and Paraphimosis, the author advocates the use of an India-rubber ring round the root of the penis, to enable the operator to circumcise by the bloodless method and condemns the simple slitting up of the prepuce. He adheres to the old, and, as we think, rather clumsy method of treating paraphimosis, by squeezing the glans between the thumb and finger. Would not the graduated pressure which can be obtained by tape or its equivalents be more effectual, quicker, and less painful or injurious?

There is an interesting chapter on the Rectum, and the author has performed Littré's operation of opening the bowel in the groin in as many as six cases, but his results are not encouraging. He puts, we think, hardly with sufficient force the possibility of success in operating carefully from the perinæum, nor does he, on the other hand, refer to the difficulties in after-treatment, if success be achieved.

There is an useful chapter on Intestinal Obstruction; and we find with reference to spontaneous recovery, the very pertinent observation that "the report of one instance would attract much attention whilst very possibly fifty children might have died of unrelieved strangulation without special record being made. Thus Nature becomes accredited with a power of working a cure in internal strangulation, which, if misapprehended, is likely to involve grave disappointment." In the treatment of acute strangulation, Mr. Owen does not express much faith in copious enemata or insufflation, and only just mentions massage before going into the subject of abdominal section very thoroughly. Careful massage deserves more attention in these cases, and is, we think, destined to play a more important part in treatment of this and other diseases than surgeons have hitherto allowed. Surgeons have not studied the subject carefully, and unfortunately the treatment by this means has fallen too often into the hands of unscientific and unscrupulous persons.

The author gives a good deal of space to the consideration of Hip-joint Disease. He is of opinion that it most often arises through a strain of the ligamentum teres, and he enters very thoroughly into the questions of the mechanics of the disease, the peculiarity of the pain, the attitude, the walk, differential diagnosis and deformity, the treatment by weight and pulley, Thomas's splint, complications, and prognosis. This is all so thoroughly and clearly discussed by the author, that it forms a most useful chapter, and it is illustrated by a few characteristic and original woodcuts.

On the whole, this is a most commendable manual.

SURGICAL DISEASES OF THE KIDNEY. By HENRY MORRIS, M.A., M.B., F.R.C.S., Surgeon to, and Lecturer on Surgery at, the Middlesex Hospital. London: Cassell and Co. 1885.

This is a thoroughly reliable monograph upon a special subject, and it would have been difficult to find an author more identified with his subject than is the case here.

Mr. MORRIS writes clearly and forcibly, and handles his subject very thoroughly, so that the reader rises from the perusal of the work impressed with its importance. The nearly five hundred and fifty pages seem only too short, instead of alarming the reader, and we do not find that there has been any unnecessary padding by tables and appendices.

The author was the first to perform the operations of nephrolithotomy for calculus of the kidney in 1880; and he gives a coloured plate, showing the stone removed from this case, and on the same plate a representation of the kidney removed from another case, in which a branching calculus was found. This latter was reported in the *Medico-Chirurgical Transactions*, and the author refers the reader to this source of information and to the medical journals of November, 1884, for the clinical history of the case, and for the arguments in favour of nephrectomy. Readers of the manual would have been glad to have seen this information given in some form in the book itself, and we miss, at the end of this chapter, a list of references to papers written upon the subject, whereas such a list forms a very useful sequel to other chapters of less practical importance. This omission

is found in the last hundred pages, and might with advantage be remedied in future editions.

We are glad to notice that the advice of the author with regard to operative interference is temperate and judicious. The following may be quoted as an example of the style of the writer, and of the advice given: "Nephrolithotomy should be performed when symptoms of stone are severe, and are not removed or rendered bearable by several months of medical treatment and rest; or when, in order to remove or diminish pain or hæmaturia, or both, the patient is compelled to abandon the ordinary pursuits of life, and pass his days, as well as nights, upon his couch. When anuria supervenes upon symptoms of calculus in one or both kidneys, the kidney which has last become affected should be first explored."

Each chapter forms a short and original essay upon the subject treated, and contains good pathological details, often from sources not hitherto made use of for the purpose; and the arrangement is clear, an important matter in which assistance is afforded in this and other works of the series by a judicious use of types, so that a reference to the pathology, symptoms, diagnosis, and treatment of the different affections is readily made. And it is satisfactory to notice that too much stress has not been laid upon or space given to either the theoretical or practical aspect of the subject. The author, however, does not seem to give as much attention to the question of development in the causation of abnormalities as the subject will permit of. Embryology and comparative anatomy now form so important a part of the study of pathological anatomy, that the great fear perhaps is that monographs will overdo it with this, to the exclusion of more practical and useful aspects of the subject.

A short account is given of the normal anatomy of the kidney, and a diagram of its relations to the abdominal walls; but though the latter shows, as we are accustomed to accept, that the left kidney is lower than the right both at its upper and lower border, the description in the text only says that the left sometimes reaches lower than the right, owing to its more elongated shape. The diagrams, or other sketches, are marked for reference with A, B, C, etc., and this plan is much more trying to the reader than when the indications are plainer by the use of initials which show at a glance what is intended. This suggestion we throw out for future modifications, which would, we think, make the woodcuts more valuable. The coloured lithographs are excellent, and we have noticed that in other manuals of this series similar excellence is found in this direction.

Most of the chapters are about twelve or fifteen pages in length, but greater space is given to the consideration of hydronephrosis, pyelitis, urinary and catheter fever, and renal calculus; the number of subjects engaging separate chapters is no fewer than thirty-four. It would be difficult to find these subjects treated more carefully and thoroughly.

IE AETIOLOGIE DER CHRONISCHEN LUNGENSCHWINDSUCHT, VOM STANDPUNKT DER KLINISCHEN ERFAHRUNG. Von Dr. H. BREMER, Sen. Berlin, 1885.

HE ETIOLOGY OF CHRONIC PHTHISIS FROM THE STANDPOINT OF CLINICAL EXPERIENCE.

HIS is a bulky volume of 517 pages, which might, with advantage to the reader, have been much reduced. The book is divided into n chapters; the first, of 142 pages, deals with the history of the infectiveness of phthisis, especially in connection with the tubercle-bacillus; the second, with the constitutional anomalies in phthisis; and the remainder with the development of the disease under various conditions, with and without heredity or association with scrofula. As the result of his experience in the Sanatorium for Lung-diseases, Görbersdorf, Dr. BREMER gives two important factors in the etiology of phthisis; first, an abnormal relation between the lungs and the heart, in which the lungs are impoverished by a diminished blood-supply; and, secondly, the small appetite in persons who develop phthisis, a fact almost always to be noticed. Stress is also laid on palpitation of the heart, at or about puberty, as a sign of the difficulty in the pulmonary circulation; and the relationship (?) of phthisis to epilepsy, brain-mischief, and deaf-mutism is dwelt on at some length. Five hundred cases are quoted in support of the author's statements.

MEDICAL AID FOR THE WOMEN OF INDIA.—The objects of the Countess of Dufferin's Fund are said to commend themselves to all classes; and many very small subscriptions, down to sums of one rupee, have been received. A public meeting in connection with the Fund was held in the Town Hall, Calcutta, on January 27th.

THE INFLUENCE OF SEX IN DISEASE. By W. ROGER WILLIAMS, F.R.C.S., Surgical Registrar to the Middlesex Hospital, Surgeon to the Western General Dispensary. London: J. and A. Churchill. 1886.

MR. ROGER WILLIAMS has made good use of his opportunities as registrar to a hospital, and has carefully studied statistical records collected at other institutions besides that to which he is attached. He has succeeded in compiling a valuable series of tables, which must be taken into account by future workers who have to consider the relation of sex to disease in general, or to any particular disorder. The author openly lays more stress upon his statistics than on his own general observations and opinions, which are confined to five pages of introductory matter. He compares the tendency to anatomical variability in the male to a like tendency to disease, or variability from health in the same sex; after duly considering and eliminating deaths from violence, to which men are far more exposed than women. The subject is far too wide for the limits of criticism in these pages: every one of Mr. Roger Williams's opinions is based upon reasonable evidence, yet might reasonably be opposed upon the strength of further evidence; but the statistics remain as facts, to which due import may henceforth be attached by those who make use of them.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

GELATINE DISCS AND LAMELS.

OUR attention has been called by Messrs. Savory and Moore to a statement made in a circular recently issued by another firm of chemists, the purport of which would be to deprive them of the priority of invention and manufacture of the medicated gelatine discs now extensively in use for ophthalmic and hypodermic purposes. The fact is on public record, that these discs were first prepared by Messrs. Savory and Moore in the latter part of 1863, when they were extensively employed by Mr. Ernest Hart in the ophthalmic department of St. Mary's Hospital, as well as in private practice. This settles the question.

PEPTONISING POWDERS.

THESE peptonising powders (Pulvis Pancreaticus Alkalinus Benger) prepared by Mottershead and Co., Manchester, consist of the purified pancreatic enzymes prepared by Mr. Benger, and exhibited and described by Sir William Roberts, F.R.S., at the Cardiff meeting of the British Medical Association, diluted with the requisite quantity of bicarbonate of soda to adapt them for peptonising milk. They are colourless, odourless, and soluble; one powder, mixed with a pint of warm milk, slightly diluted, as indicated on the label, will peptonise it sufficiently for all ordinary cases in ten minutes; a little longer may be required to convert the whole of the casein; but this is unnecessary, except in rare cases. No curdling takes place when milk, thus partially peptonised, is boiled up to prevent further action of the ferment, so that the product need not be consumed when sufficiently peptonised, but be boiled up and set aside for use as required. The activity of this preparation is very remarkable, and where great portability is of importance, it will be found a convenient substitute for the well known liquor pancreaticus.

INDIA.—It daily becomes more evident how thoroughly the National Association for the Supply of Female Medical Aid to the Women of India is appreciated by the public. Efforts independent of the fund are being made in every direction in furtherance of the objects of the Association. In the Central Provinces, a resident of Nagpur has come forward with a large donation to establish a training-school for nurses. At Kattak, a considerable sum of money will, it is hoped, shortly become available for the establishment of a female ward. Sir Walter Da Souza has announced his intention of placing a certain sum at the disposal of the proposed Calcutta Female Medical College in aid of such students as are unable to obtain scholarships, or otherwise obtain help to maintain themselves while prosecuting their studies. —Deputy Surgeon-General S. B. Roe, who has lately arrived from England, is appointed to be Deputy Surgeon-General of Her Majesty's forces in the eastern district of Madras, in the place of Deputy Surgeon-General R. A. Chapple, whose tour of duty has expired. —It is believed, that the order abolishing staff-surgeoncies of stations in Bengal will shortly be declared applicable to Madras and Bombay. Staff-surgeons of divisions, districts, and brigades will, however, continue to be allowed.—The appointments of Surgeon-General and Deputy Surgeon-General being considered staff-appointments, tenable for five years, officers holding such appointments are not entitled to travel at the public expense when proceeding on leave to England.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications chiefly by reason of their unnecessary length.

SATURDAY, FEBRUARY 6th, 1886.

MORTALITY IN THE MEDICAL PROFESSION.

DR. OGLE'S paper on the vital and mortal statistics of the medical profession, read at the last meeting of the Royal Medical and Chirurgical Society, is not only of personal interest to us as members of the profession in question, but is of special value as the first contribution of the kind making any pretensions to accuracy and completeness. We are so accustomed to hasty and reckless statements as to the comparative healthiness of this or that occupation, and the longevity of different classes of men, that few persons fully realise the difficulties, often insuperable, attending such generalisations, and the fallacies incident thereto.

There are employments which men or women follow only for a short period, exchanging them at the earliest opportunity for less laborious or more lucrative pursuits; others which, demanding responsibility rather than bodily strength, are reserved for elderly and steady men; and others, again, which represent one or other extreme of working life. The mean age at death in the first will be low, and in the second high, not from the unhealthiness or healthiness of the occupation, but from the fact that the persons following it are all young or all old; while all attempts at an examination of the hygienic conditions of the third are apt to end in confusion and paradox. To this class of fallacies belong the apparently irreconcilable discrepancy between the remarkable longevity of Chelsea pensioners and retired officers, and the notoriously high death-rate which exists in the army, and which would be absolutely as well as relatively higher, were it not for "invaliding" or discharge from the service of all men suffering from chronic disease or broken constitutions.

Of all professions, those of the law, physic, and the church offer the most favourable conditions for inquiries of this kind. The members are drawn from the same classes of society, enter them at about the same age, and, as a rule, continue to follow them for the remainder of their lives. They, being registered, constitute well-defined groups, so long as clerks and assistants are excluded from the calculation. The inquiry which Dr. Ogle has conducted into the extent and causes of the mortality of the medical profession could, at a certain cost of time and money, be extended to the others; but, in the practice of the General Medical Council of requiring and paying for a certificate of the cause of the death of every registered practitioner, Dr. Ogle had his materials ready to hand.

He has given us a mass of facts, matters for reflection, but has abstained from venturing on any explanation or comment. He showed that, at all ages, the total mortality of medical men, as well as the deaths from the great majority of diseases, exceeded those of the community generally. The classification of the causes of death is peculiarly trustworthy, since it is rarely that a medical man dies without having had at his command the highest diagnostic skill available. The only exceptions to this excessive mortality are in the cases of small-pox, phthisis, and pulmonary diseases, and accidents; though in the last—occurring, doubtless, almost exclusively among country practitioners—they rank only below the seafaring, mining, metal-working, and building classes.

With regard to pulmonary diseases, the comparison is, as Mr. Noel Humphreys very properly observed, too favourable. These are not so much due to cold and exposure, as to overcrowding and want of the necessaries and comforts of life. It is not fair, then, to compare one section of the well-to-do classes with a public largely composed of the very poor. Acute pneumonia, which is most often due to direct chill, is, we believe, a not unfrequent cause of death among medical men, whose outdoor life probably saves them from much phthisis.

Naturally, the mortality from infectious diseases is very much in excess of that of the community, except (and this is instructive) that from small-pox; but we think that one gentleman was rather too confident when he said that proper vaccination ought to give absolute, not comparative, immunity. The writer of this was twice vaccinated successfully, and yet has subsequently had small-pox twice, though perhaps his case is unique. The higher mortality from other diseases, as cancer, diabetes, calculus, and diseases of the circulatory system, is not so easily explained by any special conditions attaching to the practice of medicine, as active and immediate causes. We should rather look on them as the indirect consequences of a multiplicity of causes tending to impair the constitution, and to render the organism prone to physiological derangements, that is, to pathological changes of any and every kind.

We fear that alcoholism, though one of those causes of death which, like syphilis in the infant, are more often than not described in certificates by less offensive expressions, is too frequent among the overworked practitioners in mining and manufacturing districts, and in the class from which ships' surgeons and assistants are largely recruited, though we firmly believe that the higher ranks of medical men in every branch of the profession are, as a rule, more temperate than others of the same social position.

Dr. Ogle did not touch on the mean duration of life among medical men; this is everywhere admitted to be lower than among lawyers, and still more so than among the clergy. We are aware that Dr. Guy thought otherwise, but we believe that he had in view the remarkable longevity of many eminent physicians and surgeons. But the conditions of life of the consultant and of the general practitioner are totally different. The hours of the former are regular, even to monotony; and, unless he be an obstetrician, his nights are undisturbed. He can devote his evenings to study or recreation, and, however hard he may have worked during the year, he can enjoy his autumn vacation.

The general practitioner, especially in the country, can never call an hour his own. Irregular meals and broken nights, with the constant worry of studying the whims, no less than the maladies, of his patients, often the greater the less lucrative his practice, are enough to try the strongest; and, unless he have a trusty partner, he may consider himself fortunate if he can snatch a week or two of holiday once in several years.

As to the professions of the Church and the Law, we cannot see why the same information as to their mortality and its causes should be held unattainable; it seems to us to be simply a question of industrious search in the registers for the certificates of death of each name as it disappears from the clergy and law lists, aided by the notices in the clerical and legal journals, a work which the Statistical Society might well undertake, and for which, if necessary, a grant in aid might be sought.

TEREBENE AND ITS DERIVATIVES.

This substance, which has lately come into prominence as a therapeutic agent, was first manufactured many years ago. As far back as 1873, M. Riban read a series of papers before the Pharmaceutical Society of Paris on this and similar substances. By acting on twenty parts of well-rectified oil of turpentine, boiling at 160° C. (320 Fahr.), with one part of concentrated sulphuric acid, a product is obtained by distillation of 250° C. (482 Fahr.), which is a mixture of terebene and cymene. The liquid so prepared is treated several times with caustic potash, in order to eliminate any acid products. By fractional distillation the following products are obtained: 1, terebene, with a boiling point of 156° C. (312.8 Fahr.); 2, cymene, boiling at 170° C. (338 Fahr.); 3, a camphoraceous substance, which distils over at 200° C. (392 Fahr.); and 4, colophene and several higher compounds. Pure terebene (C_{10} H_{16}) is a colourless mobile liquid, with a faint odour, of specific gravity of .877 to 1,000. Treated with dry hydrochloric acid gas, a crystalline mass forms, which consists of hydrochlorate of terebene (C_{10} H_{16} HCL), commonly known as turpentine camphor. This substance, when the uncrystallised liquid has been expressed, consists of white friable crystals, which can be reduced to a powder without much difficulty, which distinguishes it from its isomeric hydrochlorate of turpentine, which is soft and pasty. Indeed, it was in seeking the causes of this divergence of qualities that M. Riban, who could not attribute it to the presence of impurities, was enabled to discover one of the most remarkable properties of the hydrochlorate of terebene, namely, its separation into camphene and hydrochloric acid, under the influence of cold, and its rapid resolution into the same substance by the action of cold water, which takes up the acid. The preparation of the hydrochlorate is by no means easy, if the compound be desired in a state of purity, and it can only be effected by means of special precautions and delicate manipulation. The raw material is dissolved in rectified spirit, at a temperature which must not exceed 55° to 60° C., as otherwise the major part of the mass may be converted into liquid products. On cooling the solution, large flakes of the hydrochlorate, now rather poorer in chlorine, are deposited. These crystals, deprived of their alcohol in a dry cold atmosphere, are then submitted to the action of hydrochloric acid gas. The crystals are melted in presence of this gas, at a temperature of 130°, and allowed to cool gradually. The hydrochlorate of terebenthene is obtained by acting on the oil of turpentine with hydrochloric acid, and this is isomeric with the analogous compound of terebene. Other isomers exist, as for instance, the hydrochlorate of camphene, as well as the hydrochloric ether of natural or artificial borneol. Terebenthene was separated in a state of purity by M. Berthelot, by distilling the crude material *in vacuo*, after neutralisation of the acid impurities.

THE NEW PRESIDENT OF THE LOCAL GOVERNMENT BOARD.

For reasons into which it is not our province to enter, Mr. Gladstone's Cabinet-making has this time been more than usually difficult. The list of the new Ministry, which is now officially made known, reveals perhaps not more than the usual amount of fitting round men into square holes, which is the characteristic of most Cabinets. But it contains at least one genuine surprise—the appointment of Mr. Chamberlain as President of the Local Government Board. It is said by those who profess to be in the confidence of Ministers, that Mr. Chamberlain's delegation to this post is due to his definite and positive refusal of the headship of the Admiralty, for reasons which we have yet to learn, but are not difficult to divine. As to Mr. Chamberlain's capacity for the post which he is now called upon to fill, there can be no two opinions. His past experience, first as Town Councillor, and then for three successive years as Mayor, of Birmingham, in many ways the most progressive of English municipalities, peculiarly fits him for the office of chief representative and guardian of the local government of the country.

It is an open secret that, before Mr. Chamberlain became so important a factor in imperial politics, it was his chief ambition to one day fill the post which has now been allotted to him. In the autumn of 1879, during the Ministry of Lord Beaconsfield, Mr. Chamberlain was credited with the remark—then regarded as a boastful flight of fancy—that, before six months were over, he would be installed at the Local Government Board. This remarkable prophecy came, indeed, very near fulfilment, and it was only the necessity for finding a post for Mr. Dodson—now happily relegated to the House of Lords—that prevented Mr. Chamberlain from attaining at that time the object of his early ambition. Events have moved rapidly since then; and Mr. Chamberlain's acceptance of the post of President of the Local Government Board is now talked of by professing *cognoscenti* as in a measure a concession on his part. We do not in the least see why it should be so regarded. On the contrary, if there be any virtue at all in the passionate pleadings for the reform of local government which—at any rate, at the beginning of the recent electoral campaign—were heard on every platform and from the mouths of candidates of the most diverse opinions, we shall want at the head of local affairs a strong man, with clear ideas as to what is wanted, and force of character enough to resist the temptation of merely patching the present system, instead of reforming it from the bottom.

By universal consent, Sir Charles Dilke was marked out as the man to tackle the knotty question of local government reform in the spirit which is required; and he had made himself so complete a master of the subject, that his return to his old office was looked upon as a certainty. But, unhappily, there are extraneous circumstances which render impossible Sir Charles's inclusion in the Cabinet at the present moment. No doubt, when the necessity for his enforced keeping in the shade has passed away, there will be a re-shuffling of the Ministerial appointments, and then we may perhaps see Mr. Chamberlain's translation from a post which he has been keeping warm for his friend

and colleague to another which is held in more repute by the undiscerning public.

We must protest, however, against the too-prevalent view that the official guardianship of the health and well-being of the community, and therefore inferentially of social order and prosperity, is a secondary post which may very well be filled by one of the make-weights which constitute a part of every administration. If we except its last occupant but one, the Presidential Chair at the Local Government Board has never been filled by a minister of commanding talents and business-like capacity. The possession by Mr. Chamberlain of both these qualifications is of course undeniable; and whether his committal to an extreme line of policy with regard to a particular phase of local government will militate against his success as Minister of the Interior, time alone can show. But we incline to the belief already expressed, that his tenure of this particular office is not likely to be a long one, should litigation now pending end in a way favourable to the resumption of office by one of the ablest members of the last Liberal Cabinet.

MR. J. BLAND SUTTON has been elected Assistant-Surgeon to the Middlesex Hospital.

WE are informed that the published statements concerning the death of Major Morley at Malta, from hydrophobia of long incubation, are unfounded.

A BEQUEST of £10,000 has been added to the funds of the Durham County Hospital, and new wings are to be erected to the memory of the donor, the late Mr. Eden, of Beamish Park.

IT is announced that the city of Amsterdam will send Dr. Saltet, of the hygienic laboratory, to Paris, to study M. Pasteur's methods of inoculation for rabies. The expenses will be paid by the municipal funds.

DR. FILECHNE, teacher of Pharmacology in the University of Erlangen, has accepted an invitation to the professorship of the same subject in the University of Breslau, in the room of the late Dr. Haeser.

ON the occasion of the tercentenary festival of the University of Heidelberg, a large gold medal was founded for contributions to the scientific knowledge of the human eye. It has been awarded to Professor Helmholtz, of Berlin, for his discovery of the ophthalmoscope.

WE regret to announce the sudden death, on Thursday, January 28th, of Mr. Osman Vincent, at his residence in Seymour Street. Mr. Vincent, who was the grandson of John Painter Vincent, Surgeon to St. Bartholomew's Hospital, practised as an orthopædic surgeon, and contributed several memoirs, on subjects relating to his speciality, to the medical press.

THE fifteenth Congress of the German Surgical Society will be held n Berlin from April 7th to 10th. Among the subjects put down for discussion are: tuberculosis (continued); the results of operation on complicated hare-lip; operations on the urinary bladder, including high and median lithotomy. Information may be obtained from Professor Gurlt, Bernburger Strasse, 15-16, Berlin.

OYSTER-POISONING.

A NEW danger has arisen in Bombay, the cause of which well-known scientists are already busily investigating. There have recently occurred in that city several well-authenticated cases of death from oyster-poisoning, death in some instances occurring on the morning following the fatal repast. Until the last few years, it is stated, the Bombay oyster was as harmless as the oyster of Kurrachee is now, and it certainly ought to be possible to explain the reason for the change.

GENERAL MEDICAL COUNCIL.

A MEETING of the English Branch Council of the General Medical Council will be held this day (Friday) to investigate certain irregularities which have come to light in the conduct of the business of the office, and for the transaction of ordinary business.

COOKING FOR HOSPITALS.

A CULINARY exhibition is organised at the flower pavilions of the Ville de Paris. The buffet is 180 mètres (197 yards) long, and is well covered with competitive dishes made by the Paris *chefs*. Every necessary cooking apparatus and cookery utensil will also be exposed to view. After the respective merits of the food prepared has been decided on, all that remains will be handed over to the Assistance Publique, for the benefit of the hospital-patients.

THE DRAINAGE OF THE HOUSE OF COMMONS.

THE labours of the committee appointed last session to inquire into and report upon the drains of the Houses of Parliament do not seem to have had any very satisfactory result. Some of the main drains passing along Palace Yard were opened during the recess, and it was hoped that the nuisance had been effectually cured. Monday's rain showed that this hope was delusive. In Palace Yard and in Star Court, through which members walk or drive to the private entrance, foul odours rose from the grating of the drains, and was unpleasantly perceptible to the police on duty and others who had business at the House. Further steps will doubtless be taken to remedy the evil.

THE PAYMENT SYSTEM FOR OUT-PATIENTS.

A CORRESPONDENT writes:—"We hear, on good authority, that the system of exacting the payment of a fee from out-patients for medical attendance at Guy's Hospital has been, or is about to be, abandoned. At the recent meeting of the Hospital Association, the system was condemned without a dissentient voice; and, while all acknowledged the necessity for reform of some kind, the fact was made evident that the levying of a contribution, however small, might have for result the partial exclusion of the very class for whose benefit these charities were established, in favour of more doubtful claims by individuals whose delicate sense of honour might have been wounded by the receipt of gratuitous relief."

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THE annual meeting of this Association was held on January 19th, 1886. The report of the Committee showed continued prosperity, with a steady increase of members and funds. The following gentlemen were elected office-bearers and members of committee for the year:—*President:* F. H. Walmsley, Esq. *Vice-Presidents:* H. Ashby, M.D.; W. H. Barlow, M.D.; S. Buckley, M.D.; F. M. Pierce, M.D. *Treasurer:* D. L. Roberts, M.D., F.R.S.Edin. *Secretaries:* A. Wahltuch, M.D., and J. Broadbent, Esq. *Committee:* G. Bowring, Esq.; H. Collins, M.D.; J. Foster, Esq.; R. Dacre-Fox, Esq.; A. Hodgkinson, M.B.; D. de Vere Hunt, Esq.; A. Emrys-Jones, M.D.; S. H. Owen, M.D.; T. C. Railton, M.D.; E. Rayner, M.D.; W. Walter, M.D.; and S. Woodcock, M.D.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

THE following resolution was passed at a meeting of the committee of this association: "It being understood that a committee of the Coun-

cil of the Royal College of Surgeons is considering a proposal made by one of the members of the Council to the effect that twenty Members of the College shall be elected annually and without examination to the Fellowship, the Committee of the Association of Fellows—though favourable to the institution of increased facilities for Members of the College to become Fellows by examination—hereby expresses its disapproval of every attempt to lower the acquired academical status of the Fellowship, and pledges itself to resist such to the uttermost."

TYPHUS FEVER IN SALFORD.

THE medical officer of Salford (Dr. Tatham) calls attention to the following paragraph in his report. "In the fourth quarters of the years 1883 and 1884, diphtheria was reported to have occurred in thirty and thirty-six instances respectively. Only one case of typhus, and that a doubtful one, was notified during the quarter. In the first quarter of the year, this disease had been observed in fifteen instances, in thirteen during the second, and in one only during the third quarter of the year. It is encouraging to note that, although during the past year typhus has been introduced again and again from unprotected outside districts into some of the most unhealthy parts of Salford, yet the disease has never obtained a foothold amongst us; but has been successfully exterminated on each occasion of its introduction by speedy removal of first cases, and thorough disinfection of houses, clothes, and bedding. This fact is important as illustrating the protective power of the combined systems of notification and hospital-isolation now happily in vogue here."

GONORRHŒA IN THE FEMALE.

DR. LOMER has published in the *Deutsche Med. Wochenschrift*, a contribution entitled "The Significance and Diagnosis of Gonorrhœa in the Female." Professor Bumm has recently asserted that the disease in question chiefly involves the cervix uteri where the ciliated cylindrical epithelium appears to afford it better nourishment than it could receive from the pavement-epithelium of the vagina. Indeed, he looks upon gonorrhœal colpitis or vaginitis as a secondary disease, due to irritation of the vagina, through contamination caused by escape of the discharge from the diseased cervix. Neisser's diplococci are said to be pathognomonic of gonorrhœa; but they are difficult to find when mixed up with numerous other organisms in vaginal discharges, nor are they specially affected by any particular staining fluid; besides, diplococci are sometimes found in non-gonorrhœal vaginal secretions, and especially within pus-corpuscles. Dr. Lomer has examined the vaginal secretions of several hundred women in Schroeder's wards. He has come to the conclusion that the vaginal secretion is unsuited for the detection of diplococci in suspected cases; they must be sought in discharges taken direct, with the assistance of a speculum, from the cervical canal. Only those cases where diplococci are found within pus-corpuscles are, in Dr. Lomer's opinion, truly gonorrhœal, but he admits several sources of fallacy, since he has found the same conditions in the vaginitis of children and in women in childbed. Clinical appearances must be taken into consideration, such as inflammation of the vulva, vagina, and urethra. In purulent catarrh of the cervix, Dr. Lomer, like many other authorities, considers that a greenish coloration of the pus is very suspicious. He is able to authenticate previous opinions on the relation of gonorrhœa to sterility, and finds that chronic gonorrhœa is frequently associated with scanty menstruation. The presence of hydrosalpinx or pyosalpinx tends strongly to confirm the suspicion of gonorrhœa. Dr. Lomer found that a very considerable number of the patients whom he examined were subject to gonorrhœa without being aware of it. Whilst the most frequent cause of disease of the uterus and its appendages was the puerperium, gonorrhœal infection came next in order of frequency. Sänger, of Leipzig, found that one-ninth of all the gynæcological cases under his charge were of gonorrhœal origin.

THE SANITATION OF NAPLES.

IT is only two years since the Editor of this JOURNAL gave a graphic account of the pollutions of soil, air, and water, which were converting Naples into a pesthouse, and threatened to make it a focus of zymotic disease. Soon afterwards came the epidemic of cholera, which verified the most alarming warnings. A German correspondent gives now a graphic account of the great improvements which are about to be commenced at Naples, and which will completely renovate the city from a sanitary point of view. One large main thoroughfare will traverse the whole of the poor quarters, Porto, Pendino, Mercato, and Vicaria, while regular cross-streets will run at fixed intervals. Some sites considered to be too unhealthy will not be allowed to be occupied. For the large crowd of artisans, labourers, and their families who will be dislodged by these changes, new and healthy quarters will be found in the Arenaccia district, beyond the railway station. The entire drainage and sewer-system in the lower part of the city will be remodelled, and will be made to discharge beyond the harbour. The dye-works and similar manufactories, the operations of which are calculated to pollute the water, will be required to remove beyond the city boundary. The State is contributing £4,000,000 to carry out these great works. When they have been finished, the Chiaja will, indeed, be one of the most delightful, as well as most wonderful, promenades in Europe; but the habits of the people require, also, reformation, and a sanitary crusade needs to be preached on the basis of that which societies such as the National Health Society have carried out here. In this propaganda, the medical men of Naples might well take an initiative and active part.

PROVISION AGAINST SICKNESS, ACCIDENT, AND DEATH.

IT will be seen with satisfaction, from the short report in another column, that the facilities for medical providence afforded by the Medical Sickness, Annuity, and Life Assurance Society are increasingly appreciated in the profession, and that the Society has not only achieved a large membership and complete financial security, but that its active operations are of the most beneficent character, and that its membership is steadily increasing. Reserves of upwards of £9,000 accumulated within two years, and sick-payments of £120 a month to disabled members, speak for themselves. The economy of management has realised a saving of £700 in two years beyond that estimated at the lowest actuarial scale, and the auditor's report on the balance-sheet is warmly congratulatory. The whole of the work of the managers is given gratuitously; and seeing that among them are such busy men as Dr. Ord, Mr. Sibley, Mr. Noble Smith, Mr. Wallace, Dr. De Havilland Hall, and others, this will entitle them to much thanks and ultimate gratitude. Such good services speak for themselves. Self-help has been too little practised, perhaps, among the profession; in this instance, it has achieved a brilliant success.

PURIFICATION OF THE THAMES.

A STRIKING and in some respects novel plan for obtaining at least a partial diminution in the amount of impurity which is daily discharged into the river Thames has, according to the *Globe*, been drawn up by Mr. J. O. Phillips, the Secretary of the Gas-Light and Coke Company. The vast works of this undertaking, situated at Beckton, adjoin the present northern outfall, where about two hundred million gallons of sewage are daily discharged into the river. The manufacture of gas at Beckton is carried on on an immense scale, about 1,500,000 tons of coal being annually carbonised in the twelve gas-houses. This coal is brought to Beckton by screw-colliers, each of from 900 to 2,500 tons burthen; and the appliances at the Beckton pier have been brought to such perfection that five of these vessels can be cleared within twelve hours. The proposal of Mr. Phillips is, that the sewage at present discharged into the Thames shall be treated by precipitation and pressure; and that the product, in the form of dry cakes, shall be shipped in the colliers when returning unladen to the North; and

shall be conveyed by these to sea, when it can be thrown overboard. Putting aside the consideration of the waste, which, in the present state of our chemical knowledge, is inevitable in such a process as this, it cannot be questioned (says a correspondent) that the scheme has much to recommend it. As a permanent mode of sewage-treatment, it would be objectionable in the highest degree, being, besides, exceedingly costly. As a temporary resource, however, it presents a distinct advance on the present unsatisfactory method. Mr. Phillips states that the Gas-Light and Coke Company would be able to deal with the entire quantity of sewage at Barking; and the cost would, it is said, hardly exceed that at present incurred in the so-called deodorising process.

HOSPITAL SATURDAY FUND.

THE twelfth annual meeting of the supporters of this fund was held this week, at the Memorial Hall, Farringdon Street. According to the report of the Council for 1885, the continued progress of the movement was evidenced by an increase of £500 in the awards to the participating institutions; £9,500 had been awarded to seventy-one hospitals, forty dispensaries, and nineteen convalescent homes and charities. Nearly 2,000 ladies—1,000 more than in 1884—collected on the occasion of the street-collection in July last, and a large increase of funds resulted; but the workshop-collection showed a falling off. The president, in moving the adoption of the report, said he had always regarded the establishment of that organisation as a vindication by working men of their disposition to be as much as possible independent in relation to the benefits they had received from the hospitals and dispensaries of London. During the past twelve years, they had, through the medium of that fund, contributed £74,271 altogether towards the support of those institutions. The receipts had advanced from £6,141 in 1874 and £6,150 in 1879 to £11,192 last year. He again impressed upon the representative working men managers of the fund the desirableness of reducing the expenses. In the first four years of its existence, he found that £17,201 was collected, the expenses being £6,000, or 35.20 per cent.; in the second four years, £23,050 was collected, and the expenses were £4,228, or 18.30 per cent.; and in the third four years, £34,020 was collected, the cost being £5,083, or 14.50 per cent. Thus the percentage of expense of collection was being reduced, and he suggested that the best way of still further decreasing it was by doubling the contributions. He hoped and believed that, when the existing depression in trade passed away, workmen would largely increase the resources of the fund. Mr. G. C. T. Bartley, M.P., in proposing a resolution in favour of a weekly collection in metropolitan workshops, said that, if every working family in London contributed one halfpenny weekly to that fund, £60,000 or £70,000 would be realised, instead of £11,000.

HOSPITAL-WORKSHOPS FOR THE EPILEPTIC.

THIS scheme was propounded in the *Charity Organisation Review* some time ago, and there is no doubt a good deal to be said for it. Patients afflicted with epilepsy and insanity, or epilepsy and imbecility, are accommodated in asylums, but for the patient suffering from epilepsy alone there is no public place of treatment. Epileptics are distinctly benefited by employment. In training-schools for imbeciles, where epilepsy is combined with imbecility, the advantage of employment, not only in subduing excitement, but in conducing to a cheerful state of mind, is distinctly evident. It would be necessary that there should be a training department for teaching trades, and a department for those who had been taught. An attendant skilled in the treatment of epileptics should, of course, be provided; and it would probably be found advisable to have a sleeping-department and a sitting-room attached to the workshop or shops. Whether the epileptics should be allowed to go backwards and forwards from home to work, is a question which would require attention. Some, who have fits very seldom, might do so; the others might be provided with sufficient amusement in the sitting-room referred to, after work is over. The workshops should be conducted on strictly commercial principles. A visiting physician should be attached, and, if the skilled attendant before mentioned were up to his work, facts might be collected which would be useful to the profession at large. Many details would require to be worked out in establishing the workshops, but, with patience and the expenditure of some trouble, these would be overcome. We commend the scheme to the notice of charitable persons.

FOOD-ANALYSIS IN FRANCE.

THE Académie des Sciences, in awarding the Prix Montyon to M. Girard, the director of the laboratory opened in Paris seven years ago for testing the quality of the food and drink sold by the tradesmen of the capital, has issued a report which shows how much good this laboratory has done. The laboratory was first opened in 1878, and specimens of wine, beer, cider, milk, chocolate, coffee, tea, etc., are examined daily; so, too, are the colours used for toys, sweetmeats, and liqueurs, as well as pork suspected of containing trichinosis, and tinned meats. Some of these samples are brought by the public, and the analysis is made free of cost, when all that is asked is whether they are free from adulteration. If, however, an analysis of their proportionate composition be required, the laboratory makes a small charge, and this brings in an annual income of about £1,200. A larger number of samples are, however, brought in by the twenty inspectors who are attached to the laboratory, and whose duty it is to visit the different taverns and grocers' shops, and examine the articles offered for sale. These inspectors are provided with a microscope and with acids, which enable them to test a good deal of merchandise on the spot, and they only bring back to the laboratory specimens of the articles which they have reason to suspect to be adulterated. There are twenty-five chemists attached to the laboratory, each of whom has his own special department, one taking milk, another wine, and so on. Each sample is divided into two parts, one of which is kept as evidence in case it should be found to be adulterated. The municipal laboratory analyses about 25,000 samples *per annum* at a cost of about £8,000.

EXAMINATION OF THE METROPOLITAN WATER-SUPPLIES.

IN his report just published on the quality of the metropolitan water-supplies during the month of December last, Colonel Sir Francis Bolton reverts again to the subject of the biological examination of the supplies, which was described, as it now appears, somewhat imperfectly, in his report for November. In 1883, Dr. Angus Smith carried out some experiments to determine the value of a biological examination of water, and the results which he obtained were published by the Local Government Board in 1884. These experiments came to an end at Dr. Angus Smith's death; but Dr. Percy Frankland, taking up the subject, has for some time past been making a systematic examination of the London waters by a biological method, which is stated to be simpler and more effective than that used by Dr. Angus Smith. Dr. Frankland's examination is made by cultivating with gelatine, and furnishes a means of counting the actual number of micro-organisms capable of being developed in a given sample of water. The result of his observations shows a comparison between the number of such micro-organisms found in the river-water previously to filtration, with the numbers found in the filtered water supplied by the companies. From this can be gathered the efficiency of the method of sand-filtration which has been adopted by the companies, in removing these lower forms of life from water. It must, however, be pointed out that it is by no means ascertained that the gelatine-peptone method of cultivation reveals all the micro-organisms which may be present. Relatively to this, Dr. Percy Frankland observes that the quantity of organic impurity present in water is now determined by a chemical method of combustion, which, in his opinion, certainly does not reveal all the organic impurity which may be present; and yet, as this method is the best known, the "relative freedom from organic matter" is stated as determined by that method.

He submits that, similarly, the gelatine-peptone process being the best known "developer," tests made by it may form the basis of comparison. This method of gelatine-examination, when taken in conjunction with the results of chemical analyses, will probably furnish a more complete view of the condition of water-supply than can be obtained by chemical analysis alone. Dr. Frankland dealt with this subject in a paper which he read before the Royal Society in May last, and to which reference has been made in the JOURNAL (see page 874 of the last volume). His results have from time to time been communicated to the water-examiner; and, being considered of sufficient importance for publication, the results of the examination of samples from the different water-companies will henceforth be published monthly. Dr. Frankland observes, of the results of his experiments of December, that, "if the unfiltered samples be assumed to represent the average of the river-water entering the reservoirs of the companies, in the process of treatment to which it was submitted by the latter, such an average reduction in the number of micro-organisms capable of growing in the gelatine-peptone medium employed had taken place that the colonies resulting from their development were diminished to the extent of 98.5 per cent. in the case of the Thames, and of 88.8 per cent. in the case of the Lea (East London Company) water." The corresponding reductions, in the case of the Thames, amounted to 98.9 per cent. in November, 96.5 per cent. in October, and 97.8 per cent. in September. One of the objects in publishing particulars of this process in the water-examiner's reports is to induce the water-companies to adopt a method of examination of their water which their engineers can apply themselves, and which will possibly give them a further insight into the working of their filter-beds; and, by the regular employment of the process, means may be furnished of determining when a filter-bed has ceased to be efficient, and when, consequently, it should be shut off for cleansing. A practical application of this process for the above purpose is in successful operation at the Berlin Waterworks, under Dr. Koch's supervision.

METROPOLITAN SMALL-POX HOSPITALS.

AN important discussion has taken place at the St. Pancras Vestry on the presentation of the 29th annual report of the medical officer of health on the sanitary condition of that district of the metropolis. This report, which is of an elaborate and valuable character, is by Mr. Shirley Murphy, the late medical officer of health, now one of the medical inspectors of the Local Government Board. It will be remembered that the treatment of Mr. Shirley Murphy by the vestry was such, as to compel his resignation under circumstances which excited much public and professional indignation. After referring to the general health of the district during his last year of office (1884), which he considered to be most favourable, being but at the death-rate of 19.0 per 1,000, Mr. Murphy mainly directs attention to the results of the epidemic of small-pox, more especially in relation to the effects produced by the hospitals for small-pox patients at Hampstead and at Highgate, both on the borders of St. Pancras parish. By a series of diagrams, the districts and houses in which the epidemic prevailed are indicated by spots; and from his practical and personal observation, Mr. Murphy states that the lessons these figures teach are, first, that in the four years when the Hampstead Hospital was closed, the houses in the special area surrounding that hospital were attacked less than those in the rest of the parish; but that, in the year 1884, when the hospital was re-opened, the special area suffered three times as much as the rest of the parish. During the four years when the hospital was closed against small-pox, the houses in the rings nearest the hospital were not invaded more than those farther away; but, in 1884, when the hospital was open, the houses in the ring nearest the hospital suffered more than twice as much as those in the next ring, and more than five times as much as those in the outer ring. Notwithstanding that, by the admirable ambulance arrangements of the Metropolitan Asylums Board, introduced in 1884, the opportunities of disseminating small-pox through defective ambulance administration was reduced to a minimum, and the other precautions as to visiting patients and the outgoing of hospital servants, he had found it difficult not to believe that the Small-pox Hospital at Hampstead had been the cause of small-pox in the St. Pancras houses situated near to it. Precisely similar observations applied to the Highgate Small-pox Hospital. While confessing that the distribution of the disease did not warrant him in expressing any definite opinion on the question whether the disease was spread through personal communication, or was aërially diffused, he considered that the evidence which St. Pancras affords tended to show that these small-pox hospitals, as at present constructed and managed, were a source of disease to the neighbourhood in which they were placed. Upon the value of vaccination and revaccination, Mr. Murphy speaks strongly, and, after giving some elaborate statistics, states that the figures are not only most striking, but are conclusive, and show clearly enough that, but for vaccination, more than half the people of St. Pancras over ten years of age would be disfigured by small-pox. The report was unanimously received and adopted, and it was ordered that it be extensively circulated to the local authorities throughout London.

EARLY PUBERTY.

A CURIOUS case of early puberty was shown by Mr. Bruce Clarke at the meeting of the Pathological Society on January 19th. A large muscular boy, apparently ten or twelve years old, came under treatment on account of bowing of the tibiæ due to rickets, and the parents made the astonishing statement that he was born on May 17th, 1882, a statement subsequently confirmed by a reference to the birth-certificate preserved at Somerset House. He was three feet eight and a half inches high, and weighed four stone six pounds. There was some down on his cheek, and, though there was no hair on the chest on in the armpits, he was as hairy as a man about the pubes and in the perinæum. His penis was as large as a man's, and was noticed to be erect every morning, though the testicles were rather smaller than those of an adult. The pomum Adami was well developed, and his voice was cracked like that of a boy losing his "childish treble." The development of his brain, however, had not kept pace with the growth of his body, and his mental state was about that of a child of his years. The girth of the head round the occipital and frontal protuberances was twenty-one inches, which is certainly not very small for his bulk. It is interesting to note that, in spite of the great development of his sexual organs, he has never given any evidence of sexual desire, and that no seminal emissions are known to have occurred. The boy was the third child in a family of five, and he was bigger than the eldest child, who was over seven years old. He was suckled for nine months. At about one year of age he began to grow rapidly and to eat voraciously, so that nothing seemed to satisfy him. Hair began to grow on the pubes, and, before he was a year and a half old, he was as hairy as a man. At about that time this very rapid rate of growth ceased, and, since then, his mother thinks he has only grown with ordinary rapidity. Mr. Bruce Clarke performed osteotomy on the bowed tibiæ, and the boy made a good recovery. A few cases are on record where puberty developed between the ages of two and three years, but Mr. Clarke informs us that he has been unable to find any other case recorded where it developed before eighteen months of age.

MR. HUTCHINSON ON THE TRANSMISSION OF SYPHILIS.

IN the third and last Lettsomian lecture, Mr. Jonathan Hutchinson concluded by giving his views on several of the vexed questions bearing on hereditary syphilis. That the syphilitic father or mother may, and often do, transmit the disease to their offspring, is now a matter, he said, of common observation; and, as regards the mother, such contamination must almost of necessity take place, even when the primary affection in the mother was subsequent to impregnation. If both parents were the subjects of syphilis, then the infection of the

child might be more certain, but not necessarily more severe. He alluded to the curious but indisputable fact of the occasional infection of the mother from the contaminated offspring of a syphilitic father while still *in utero*, and remarked the immunity which mothers who apparently escaped infection during pregnancy seemed to possess against infection from their diseased offspring subsequently to birth. He had often seen, he said, cases of chancres on the nipples from this source, but never on the nipples of the child's own mother. Mr. Hutchinson disposed of the popular belief that the later offspring were likely to contract the disease in a milder form, by saying that, although they had a better chance of escaping it altogether, if they did contract it they suffered from it in its integrity; and he quoted several instances where the later children suffered the most severely. That the earlier offspring was more likely to be infected was evidenced by the proportion of cases of interstitial keratitis in first-born infants. Touching the liability of syphilitic children to skin-affectious, Mr. Hutchinson declined to allow it to have a large share in the etiology of eruptions occurring after the period of infancy, such specific skin-affections being, indeed, of rare occurrence after that period. As to the influence of inherited syphilis in the production of rickets, he expressed his opinion that this belief was often based on an error of diagnosis. The lesions of the bones resulting from transmitted syphilis are quite distinct from those of rickets, although they may easily be mistaken for the latter, and probably very often are so mistaken, and treated in consequence. This is the more likely to happen from the fact that they are not unfrequently found together. Finally, as the result of many years of observation on this particular point, Mr. Hutchinson is disposed to suspect syphilis in those cases of excavated ulcers of the throat in young people.

THE VISITATIONS OF THE GENERAL MEDICAL COUNCIL.

DURING the year 1885, a body of visitors representing the General Medical Council made a tour of the universities of the United Kingdom. From the recently published minutes, it appears that the examinations of four universities in England, four in Scotland, and two in Ireland, were thus visited. The visitors were Drs. Balfour, Leishman, Finny, Buchanan, Kidd, Bristowe, and Barnes, and Messrs. Holden and Rawdon Macnamara. Three of these gentlemen visited each university, and obtained, it is to be hoped, much valuable information for the guidance of the General Medical Council. The visitors devoted much time to the study of the method of examination adopted by the University of London, spending no less than eleven days in this way, at the cost of £370, or rather more than double what the visitation of the examination of six universities and five corporations cost in 1866-7. The visitation at the University of Glasgow in 1885 cost £285; at the Royal University of Ireland, £252; at the University of Dublin, £200; at the University of Edinburgh, £241; and so on; the most economical visitation being the two days spent at St. Andrew's, which cost £108. These visitations have, as will be perceived, become very costly undertakings; and we have a right to look for some public advantage commensurate to the expenditure of so large a sum of public money. Is it really necessary for two gentlemen from Scotland and one from Ireland to come to London to "visit" the London University, which, with all its faults, cannot be accused of setting its standard too low? Cannot the Universities of Oxford, Cambridge, Edinburgh, and Dublin, for instance, be trusted not to grant their degrees except to candidates who have shown adequate proficiency? The visitation of these four universities cost over £750. The sum expended on these visitations shows a great and progressive growth, from £172 in 1866-7, and £110 in 1868, to £961 in 1881-2, and £2,030 in 1885—a sum more than £200 in excess of the expenditure as estimated even so recently as last November. As we pointed out last year, the General Medical Council now command a very large income, and spend about half in fees to members of Council and visitors of examinations. The printing and publishing of the new edition of the *British Pharmacopœia* has entailed an expense of £2,638 during the year; but the edition already shows a balance on the right side, for, up to December 31st, 1885, no fewer than 13,522 copies had been sold. The expenses of the General Medical Council may give us some foretaste, perhaps, of what is in store for the country when Members of Parliament shall be paid a fee for each day of attendance during the session. Deliberative bodies which are paid so much a day for deliberating are apt to hold very long sessions; the Storthing of Norway, for instance, sits for the greater part of the year. The system is a direct premium on loquacity; and most persons who have followed the debates of the General Medical Council, as they drag out their wearisome length, will be inclined to wish that such arrangement could be made with the members as the Chinese make with their physicians, and only pay when they do not sit.

OBSTETRICAL SOCIETY OF LONDON.

THE annual meeting of this Society was held on Wednesday evening, February 3rd. Dr. Griffith exhibited a nulliparous uterus, showing anteflexion and dilatation of its cavity. The rectum was cancerous, and adherent to the back of the uterus. Dr. Graily Hewitt believed that the anteflexion drew the anterior wall forwards; whilst the adhesion to the cancerous rectum held the posterior wall backwards, this condition explaining the dilatation of the cavity. Dr. Griffith also showed a specimen of sarcoma of the uterus and vagina. A pedunculated tumour had been removed from above the urethra. The patient died in a few days, and the tumour was found to be part of a round-celled sarcomatous mass invading the uterus and vagina. There were secondary deposits in the lungs and liver. Mr. Knowsley Thornton exhibited papillomata of both ovaries fungating into the peritoneum, which led to a discussion upon the question of tapping. Mr. Doran showed that certain facts in relation to Mr. Thornton's case proved that it was not only useless, but dangerous, to attempt the cure of broad-ligament cysts by tapping. The most experienced operators could not tell beforehand whether the cysts were free from solid growths or contained papillomata. In the latter case, tapping led to disaster; in the former, it often failed to cure. Dr. Matthews Duncan disagreed with Mr. Thornton and Mr. Doran, and declared that tapping was sufficient to cure broad-ligament cysts; but they stoutly maintained their objections to tapping, upon clinical evidence, and upon the little risk attached to operation or exploratory incisions in such cases. Mr. Thornton then read a paper on a case of removal of both ovaries during pregnancy, for double dermoid cyst. The patient was delivered at the eighth month, and was able to suckle. This paper led to a good discussion. The Secretary then read the audit report of the Treasurer. Dr. Playfair moved its adoption, Dr. Carter seconding the motion. The Librarian's report was then read. It appeared that, in December, 1885, the Society's library contained 3,584 volumes. Dr. Godson moved, and Dr. Horrocks seconded, a resolution that the report be adopted. The report of the Board for the Examination of Midwives was then read. Dr. Matthews Duncan, in moving that the report be adopted, regretted that political reasons interfered with any prospect of an early consideration of the Midwives' Bill in Parliament. Dr. Malins seconded the resolution. Dr. John Williams pointed out that the number of candidates had greatly increased, and that it was necessary to add more members to the Board. Dr. Graily Hewitt observed that the members desired payment for their services. The President then declared the result of the ballot for new officers, as announced by the scrutineers, Dr. Lewers and Mr. G. T. Thomas. The following is the new list. *Honorary President:* Dr. Arthur Farre. *President:* Dr. J. B. Potter. *Vice-Presidents:* Dr. J. Watt Black, Dr. P. L. Burchell, *Dr. C. J. Cullingworth, Dr. W. H. Day, *Dr. G. E. Herman, Dr. E. Malins. *Treasurer:* Dr. A. L. Galabin. *Chairman of the Board for the Examination of Midwives:* Dr. John Williams. *Honorary Secretaries:* Dr. F. H. Champneys, *Mr. J. K.

Thornton. *Honorary Librarian:* *Dr. Percy Boulton. *Other Members of Council:* *Mr. Frank Argles, *Dr. R. W. Batten (Gloucester), *Dr. E. Burd (Shrewsbury), *Dr. J. Matthews Duncan, Dr. W. A. Duncan, *Surgeon-Major G. Elkington, Dr. A. T. Gibbings, Dr. J. T. Griffith, *Dr. W. S. A. Griffith, Mr. F. B. Hallowes (Redhill), *Dr. P. Horrocks, *Mr. Evan Jones (Aberdare), Dr. A. E. Aust Lawrence (Bristol), *Mr. W. A. Meredith, *Mr. Arthur Roper, *Dr. Amand Routh, *Mr. E. W. Tait, and Mr. J. Hopkins Walters (Reading). (Those gentlemen to whose names an asterisk is prefixed were not on the Council, or did not fill the same office previously). The President then read his address, an abstract of which will be published in our report of the meeting. Dr. Graily Hewitt moved a vote of thanks to the President, seconded by Dr. West. Dr. Gervis proposed, and Dr. Black seconded, a vote of thanks to the retiring officers. Dr. Routh proposed, and Dr. W. A. Duncan seconded, a similar vote in favour of the retiring Vice-Presidents and the rest of the retiring members of Council; Mr. Worship, of Sevenoaks, thanking the Society for the vote in a short speech. All the above resolutions were carried unanimously.

THE MORBID ANATOMY OF CEREBRAL TUMOUR.

If the success of a meeting of a learned society could be gauged by the quantity of material submitted for examination, then the last meeting of the Pathological Society of London might be considered one of the most important in its useful career. More than fifty tumours, growing in almost every region of the brain, were exhibited, though only half this number were described. A very large assembly of members attended the meeting, actuated by the desire to see the tumours, and to hear the papers, which however could only be read in abstract. If the subject be resumed, as is intended, at a future meeting, then perhaps the dry bones may be stirred, and pathology may be enriched by some new facts or deductions founded on this large collection of morbid specimens. So far, the exhibition appears to have resulted in but one generalisation, which perhaps might have been arrived at *à priori;* that a tumour, namely, may occur in any region of the brain, that the region within which symptoms permitting localisation occurs is very limited, and that therefore surgery can do nothing for a large proportion of the patients who suffer from such tumours.

SCOTLAND.

We regret to hear that Dr. Angus McDonald, Physician to, and Clinical Lecturer on Diseases of Women at, the Royal Infirmary, Edinburgh, is very seriously indisposed.

EXAMINATIONS OF THE EDINBURGH COLLEGES AND THE GLASGOW FACULTY.

At the examinations recently held for the triple qualification of the Royal Colleges of Physicians and Surgeons, Edinburgh, and Faculty of Physicians and Surgeons, Glasgow, 39 candidates passed the first professional examination, 28 passed the second professional examination, and 14 passed the final examination and received the diploma. The list of names is given elsewhere.

EDINBURGH ASSOCIATION FOR INCURABLES.

The institution of the Edinburgh Association for Incurables continues to fill efficiently what was a long felt want in Edinburgh. At the annual meeting of contributors held in Edinburgh on Monday, and presided over by Principal Sir William Muir, it was reported that the Hospital for Incurables had been fully occupied during the year, the number of inmates at the close of the year being fifty-two. The subscriptions during the year amounted to over £2,061, showing an increase of a few pounds on the previous year's subscriptions. During the year the committee have taken steps to secure additional accommodation, and this step, as well as the report generally, was approved by the meeting, which also passed votes of thanks to the staff for the excellence of the work done.

GLASGOW ROYAL INFIRMARY.

We regret to observe that the Glasgow Royal Infirmary is suffering to an unusual extent from the present bad times. At the annual meeting of qualified contributors held last week, Lord Provost McOnie, who presided, in moving the adoption of the Directors' report, stated that he regretted to find that the ordinary income continued so much below the ordinary expenditure as to make it necessary to withdraw £3,726 from the capital, and use it along with the whole amount of the extraordinary receipts in order to square accounts at the end of the year.

THE GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

The opening debate on the subject of Cancers took place at the above Society on January 27th, before a large attendance of the profession. Dr. Joseph Coats commenced the discussion, and, in his address, he cleared the way for future speakers by defining very distinctly what modern pathology includes under the term Carcinomata, as distinguished from the sarcomata or connective tissue growths; and he also distinguished the morbid processes of syphilis and tubercle, showing how materially they were distinguishable from that of cancer. In his remarks on the hereditary tendency of the latter, he did not lay so much stress on this as on the possession by the tumour of a special power of growth of its own. He had a strong supporter of this view in the speaker who followed him, Dr. William Macewen. He saw in cancer a local growth, which tended to spread by extension into the lymphatic spaces, and thence by the lymphatic system to different parts of the body, so that the earlier it was dealt with and removed by the surgeon, the better was the patient's chance of freedom from that secondary infection, which was the chief danger to be reckoned with. At the adjourned meeting, on February 3rd, the debate was resumed by Mr. Jonathan Hutchinson, of London, Mr. Maylard, and Dr. H. C. Cameron.

GLASGOW TRAINING HOME FOR NURSES.

The importance of having properly-trained nurses at the command of members of the community, and the extent to which their services are in demand, were well shown at the twelfth annual meeting in connection with the Training Home for Nurses, Glasgow, held there on Monday, and presided over by Mr. John Burns, of Castle Wemyss. The secretary submitted a report, from which it is seen that during the year, trained nurses were sent out to 386 cases of illness in private families, while 238 patients had been treated at the Home. The income received from nurses' fees exceeded by £400 the sum derived from the same source last year. A satisfactory feature in the financial report was, that after defraying all expenses, a sum of £372 was carried over to the credit of the building fund. The Earl of Aberdeen addressed the meeting, and spoke of the value of such institutions, while he specially congratulated the Glasgow one on its efficiency and success.

THE GLASGOW STUDENTS' UNION.

At the meeting held last week of the Senate of Glasgow University, Professor Macleod was the medium of a communication which was quite unexpected, but has caused a very general feeling of satisfaction in student circles. He announced that a gentleman, who desires his name to be withheld at present, has offered to defray all the expenses connected with the building of a Students' Union at Gilmorehill. We have already noticed the movement that was set on foot last year among the students for the establishment of a Union, and the appointment of a committee to promote the scheme. The present generous offer removes all the difficulties connected with the matter. It is understood that designs for a building, consisting of a hall that

will hold about 400, with smaller rooms for the meetings of affiliated university societies, have been prepared, and that the estimated cost of the undertaking is from £5,000 to £6,000.

AMBULANCE TEACHING IN GREENOCK.

THE extension of ambulance teaching in the town of Greenock was discussed at a largely attended meeting on Friday of last week, when a proposal, brought forward by Dr. Wilson, that a committee be appointed to form a Greenock centre in connection with the St. Andrew's Ambulance Association, was accepted, and office-bearers and members of the committee were thereupon elected. Dr. Crawford stated his intention of doing his best to establish similar ambulance work at Port Glasgow, where it was much needed. At the close of the meeting presentations were made to Dr. Wilson of a handsome carriage clock, and to Dr. Black of a pocket aneroid from the ladies who had attended their ambulance classes.

A VERY NECESSARY PROSECUTION.

THE sanitary authorities of Govan, through their inspector, obtained last week an injunction from the court interdicting a milk dealer in the burgh, who had scarlet fever on his premises, from supplying milk to the public until all danger of infection to the milk is removed. Seeing the innumerable instances that have occurred of the spread of fever under similar circumstances, and the publicity that has been given to them, it seems strange that it should be requisite to call in the aid of the law to enforce precautions that past experience should have taught dairymen were absolutely necessary for the safety of their customers.

DUNDEE AND DISTRICT SANITARY ASSOCIATION.

AT the second annual meeting of the Dundee and District Sanitary Association, held on Monday, February 1st, the Provost of Dundee presiding, the report submitted showed that during the year the engineer of the association made seventy first annual, and seventy-six second annual inspections of members' houses, and 211 supplementary visits to premises, to inspect the work in progress. A number of public institutions and county residences had also been inspected, and sanitary arrangements carried out in them. During the year twenty-two new members had joined, but against this had to be placed the withdrawal of thirty-two former members. The expenditure exceeded the income by nearly £30, but the substantial balance left from last year more than covered this. The association expressed its deep regret at the loss it had suffered in the death of Professor Fleming Jenkin.

ABERDEEN ROYAL INFIRMARY.

THE committee of managers have resolved to recommend to the managers of this institution that, at the earliest convenient period, zymotic diseases ought to be excluded from the infirmary. As soon as some definite arrangement is come to, the local authority must make provision for the reception and treatment of these diseases. Thus a good many beds will be set free by this for the general purposes of the infirmary.

DR. FRANK OGSTON AND OTAGO COLLEGE.

DR. FRANK OGSTON, formerly Assistant to the Professor of Medical Jurisprudence, University of Aberdeen, has been appointed Professor of Medical Jurisprudence in Dunedin College, Otago, New Zealand. Dr. Ogston leaves Aberdeen in February to begin work in his new sphere in May.

PRESENTATION.—Mr. Harwood Casson has been presented with a handsomely chased silver tankard, and a case containing four salt-cellars, mustard-pot and spoons by the inhabitants of Wylye, as a mark of esteem on leaving the neighbourhood. The tankard is inscribed—"Presented to H. Casson, Esq., by friends in Wylye and district. January, 1886." The salt-cellars and mustard-pot, etc., bear an engraved monogram.

IRELAND.

MR. RAWDON MACNAMARA has been re-elected representative of the Royal College of Surgeons of Ireland in the General Medical Council.

MEDICAL STUDENTS' CLUB.

WE are sorry to hear that this club, which was established about four years ago in Dublin, under favourable auspices, as a limited company, has not been successful. A special general meeting of the club is summoned for Monday next, to consider a resolution for the voluntary winding up of the company, passed at a special general meeting held on January 23rd.

CARMICHAEL COLLEGE OF MEDICINE.

WE hear with much pleasure that the students of this flourishing medical school have, with the warm approval of their teachers, resolved to form a scientific association in connection with the college. The great value of such an association in after-life to those who join it as students, and take an active part in the proceedings and discussions of a scientific debating society, are obvious, but too often ignored. The lines upon which the "Carmichael College Medical Science Association" have been formed ought to ensure it the success we hope it will long maintain. Dr. Gordon, the President of the College, has accepted the office of president for the first year; and the lecturers and teachers in the school have all been elected vice-presidents. Dr. Ninian Falkiner—to whom the credit of initiating the movement is due—and Mr. McHugh will act as honorary secretaries for the first year. The opening meeting is fixed for Tuesday, February 16th.

ACTION AGAINST THE LOCAL GOVERNMENT BOARD BY A MEDICAL PRACTITIONER.

IN the Queen's Bench, last Saturday, liberty was given to plead and demur to an action brought by Dr. Davis against the Local Government Board, to recover damages for alleged wrongful dismissal from his position as medical officer of Newport Workhouse, on the amalgamation of the Newport Union with the Westport Avenue. The plaintiff agreed to the application, the demurrer to be argued first as involving his right to recover. The matter at issue turns upon the construction of the Act of Parliament authorising the Local Government Board to amalgamate unions by sealed order, and as to whether the rights of officers are preserved in like manner as existing contracts are upheld, and also whether they are officers of the guardians or of the Local Government Board.

DUBLIN HOSPITAL SUNDAY FUND.

THE Committee of Distribution have made their report to the Council of this Fund, as based on the result of the twelfth annual collection made on the 8th November last. The Committee, having ascertained that a sum of about £4,000 was available for distribution, determined to distribute the sum of £3,900 amongst the participating institutions in consideration of subscriptions received and work done with an added bonus of 7½ per cent. to those institutions which have provided trained supervision for their nurses, thus following the same plan as in the year 1884. The addition of this bonus of 7½ per cent. absorbed a further sum of £279 2s., making the total sum distributed for 1885 £4,179 2s. It is highly satisfactory to know that this sum exceeds that distributed on any former occasion. The following is the amount of the awards to the participating institutions. All received awards for improvement in nursing arrangements, with the exception of Mercer's Hospital and the Whitworth (Drumcondra) Hospital. Sir Patrick Dun's, £254 7s. 3d.; City of Dublin, £780 10s. 11d.; Dr. Steevens', £92 3s. 9d.; Meath, £816 8s. 3d.; Mercer's, £133 18s. 9d.; Whitworth (Drumcondra), £44 14s. 2d.; Coombe (Lying-in), £97 4s. 11d.; Rotunda (Lying-in), £152 14s. 1d.; St. Mark's (Ophthal-

mic), £160 11s. 9d.; National Eye and Ear Infirmary, £145 14s. 2d.; Convalescent Home, £195 13s. 6d.; Cork Street (Fever), £128 17s. 6d.; Adelaide, £712 7s. 3d.; Monkstown, £164 15s. 0d.; Orthopædic (Great Brunswick Street), £184 17s. 6d.; National Orthopædic and Children's, £114 3s. 3d.; total, £4,179 2s. 0d. The annual meeting of the friends of the Fund will be held on Tuesday next in the Molesworth Hall.

CITY OF DUBLIN HOSPITAL.

A GRAND fancy fair and carnival in aid of this hospital was opened in the Artisans' Exhibition Buildings, Dublin, on Wednesday last, by Her Serene Highness the Princess Edward of Saxe-Weimar. The central hall of the building was arranged as an "Avenue of Nations," the stalls being designed in approximately chronological order to represent the history of architecture from the earliest times, exemplifying types of the buildings and special features in the styles of the various periods and nations. There were in all twenty-four stalls, including a naval and a military stall, presided over by a number of ladies, many of whom wore fancy costumes. The orchestra was arranged as a winter garden, and at its base was a flower-stall. The entire scene, viewed from the entrance, presented a most picturesque appearance. Various entertainments, such as amateur theatricals, concerts, waxworks, and marionettes, were also provided. The attendance at the opening ceremony and subsequently was very large, and it is anticipated that the exertions of the Bazaar Committee and of the stall-holders will be rewarded as they and the charity itself deserve.

PROGRESS OF MEDICAL PROVIDENCE.

AT the monthly committee meeting of the Medical Sickness, Annuity, and Life-Assurance Society, on January 13th, it was announced that, during the preceding month, payments had been made to the amount of £121 11s. to members on the sick list, whose illnesses respectively (duly certified from week to week) were locomotor ataxy, rectal abscess, rheumatic iritis, intestinal catarrh, acute tuberculosis, intermittent cardiac disease, quinsey, peritonitis, etc., and the results of accidents. All these members were, for the time, totally incapacitated by illness, and prevented from following their profession. Letters were read from some of them, expressing their sense of the immense value of the Society.

A claim of £100 on the Life-Assurance Fund was paid, being the first claim on this fund. A further sum of £1,200 was ordered to be invested, bringing the invested reserves of the Society up to £8,375 (standing in the names of the Trustees, Mr. Ernest Hart, Dr. W. M. Ord, Sir T. Spencer Wells, and Mr. J. R. Upton, solicitor to the British Medical Association), in addition to the current balance of £654 5s., making the total funds of the Society £9,029 5s., which had been accumulated in less than two years. Mr. Jennings (Public Auditor under the Friendly Societies Act) attended and expressed his satisfaction with the clear and complete manner in which the accounts were kept; and, on the motion of Mr. Sibley, seconded by Mr. Noble Smith, the report and annual balance sheet were received and adopted. Great satisfaction was expressed by the members present at the excellent progress of the Society, and at the stable results attained. The expenditure of management was found to have amounted to only 5 per cent. of the premium income, in lieu of 10 per cent. allowed by the actuarial estimate of Mr. Neison, the well known actuary, by whom the tables had been calculated.

The sum of £772 10s. stands to the credit of the Society on the management account, being the saving by economy in management on the two years' work. The claims in each department were well within the limits estimated, and each of the funds was accumulating a satisfactory surplus, thus assuring the stability of the Society without any further accession to its numbers. During the last year, however, one hundred new members had joined, and fresh applications for new membership were received from week to week. The regulations, and actuarial tables, and copies of the annual report, with forms of proposal, will be forwarded on application to Mr. C. J. Radley, Secretary, 26, Wynn Road, Brixton, London, S.W.

ARMY MEDICAL SCHOOL, NETLEY.

THE prizes gained during the last session by the students, in connection with the Army Medical School, Royal Victoria Hospital, Netley, were distributed in the lecture-room, at the Institution, on Monday, by Dr. Richard Quain, F.R.S., and Censor of the Royal College of Physicians, in the presence of a large number of ladies and gentlemen, including Sir T. Crawford, LL.D., K.C.B., Director-General of the Army Medical Department; Sir J. Fayrer, K.C.S.I.; Surgeon-Gen. W. Sim Murray, P.M.O., of Netley; Surgeon-General Longmore, Professor of Military Surgery; Dr. D. B. Smith, Professor of Military Medicine; Dr. Aitken, F.R.S., Professor of Pathology; Colonel Linden Bell; Rev. G. N. Godwin, chaplain; Surgeon-General Mackenzie, of the Indian Medical Service; Surgeon-General Dr. Maclean; and the whole of the medical and military staff of the hospital.

Forty surgeons on probation for the British Medical Service, and eight of the Indian Medical Service, who had gone through the courses of instruction during the winter, were present. The lists of those who passed are given at page 275.

Professor LONGMORE said the first fact he had to mention was one which had been a source of pleasure to the professors, assistant-professors, and to all connected with the teaching during the session, and that was that the surgeons on probation in the British Medical Service, and those of the Indian Service, had all of them gained sufficient marks to warrant the professors in recommending them for commissions. Professor Longmore continued that the Herbert Prize of £20—the first prize in the school—had been gained by Mr. Yarr, who had taken the highest place at the Netley examination, with 2,931 marks out of a possible 3,500. Mr. Yarr had also gained the Martin Memorial Gold Medal; the Montefiore Medal and prize of £21. The second Montefiore Prize had been won by Mr. Adie, of the Indian Medical Service. The Parkes Memorial Bronze Medal had been obtained by Mr. Yarr, for the highest number of marks in hygiene, having gained 720 out of a possible 900. Sir Joseph Fayrer's prize for pathology had been gained by Mr. Woolbert, of the Indian Medical Service, with 694 marks out of 800 attainable. There had been certain names favourably recommended to the Secretary of State for War and the Secretary of State for India in Hygiene, and they were, Mr. Grainger, with 740 marks out of a possible 900; Mr. Adie, 690, both of the Indian Medical Service; Mr. Mills, 685, and Mr. Woolbert, 670, the latter of the Indian Medical Service. Messrs. Mumby, Melville, Alcock, Baker, Woolbert, Youman, Cox, Baker, and Grainger, were also honourably mentioned in the various departments, although they had failed to secure prizes.

Dr. QUAIN subsequently delivered an address. He said that in the first place he was desirous of expressing the sympathy and kindly feeling which existed in the minds of civil practitioners towards their brethren in the Army and Navy. Trained, as they all were at first, in the same grooves of professional education, there came a point at which they diverged, each to pursue, with varying success and in different spheres, the practice of their common art. This divergence was not without benefit to the civil department. They were much indebted to their brethren in the army for a knowledge of diseases differing from those with which they were in practice familiar in this country. Many complex problems of etiology and pathology had received important contributions to their solution from the careful work of the army surgeon. He need not do more than mention cholera, for much of what was known of that disease came from the labours of army medical men. Who had instructed them so well on the many-headed forms of malaria, or those dreadful scourges, dysentery and scurvy, yellow fever, liver-abscesses, and parasitic diseases, as army doctors? The Army Medical Department had contributed much to the honour and glory of the medical profession; and proud as they were of its successes, jealous as they were of any slur cast upon its fame, they failed to recognise any distinction in their united struggling for the common good. Were not the labours of Annesley, Pringle, Martin, Guthrie, Longmore, Morehead, the Goodeves, of Parkes, of Maclean, of Fayrer, Muir, Chevers, Murchison, De Chaumont, Brigden, Macnamara (all men whose invaluable services to medical science they cheerfully recognised) a glory to them all, and did they not claim them to be of themselves? Even now a practical expression of the closeness of their alliance was taking shape in the formation of a volunteer medical staff and bearer-companies, to be recruited for field-service from among students and practitioners. He was glad of the opportunity that day afforded him to make himself personally familiar with the work which was done at Netley. He was aware that it had been asserted that the existence of such an institution as this should be unnecessary, and that the ordinary curriculum which sufficed to qualify for civil practice was and should be sufficient for the army

surgeon. This he believed to be a profound mistake. It was a subject of grave consideration with those who were concerned in the education of medical men how best to supplement their routine instruction by that special training which was called for in the needs of everyday practice. It was most interesting to him to observe that the very want they felt in civil life was here adequately provided for those who might be said to need still more this special training. He would see to what extent Netley fulfilled these requirements. Taking, for example, the syllabus of their late professor, Dr. Maclean, they found how completely were described such essentially tropical diseases as malaria, yellow fever, dysentery, and the like, which would form a large proportion of the future work of those now leaving Netley. How, without such preparation, would they feel justified in venturing on the practice of their profession with no further insight into these diseases than was afforded by the ordinary teaching of a medical school? He had felt it his duty to inquire into the character and amount of work which Netley had done. He had ascertained that, since its establishment in 1860, 2,337 medical officers had passed through the school. Netley appeared to him to be pre-eminently calculated to furnish a knowledge of those duties which devolved on the medical staff of an army in preserving the health and the life of the soldier. How better could this be illustrated than by a reference to some of those campaigns where the services of the medical staff were unavailable compared with those in which their services had been rendered available. In 1809, the Walcheren expedition set out from these shores, and resulted in placing in the island a garrison of 18,000 men in the September of that year. Within the three following months, more than half of them died, or were invalided to England, and the place was finally evacuated at the end of December. So terrible a calamity called forth, as might have been expected, loud censure; and popular indignation caused a Parliamentary investigation to be held, at which it was elicited from Sir James M'Grigor, the chief medical officer of the expedition, that the stores were deficient, and that the supply of Peruvian bark, so essential for the treatment of malarial fevers, was wholly inadequate, and almost entirely dependent on chance adventurers who followed the army. Nor were the medical staff themselves in a better position in respect to their notions of the nature of the diseases they had to contend with, while nothing in the shape of preventive measures seemed ever to have been contemplated. When the Government determined on a special mission to Holland to inquire into the nature and causes of the great sickness and mortality prevailing in the British Army, each member of the Civil Medical Board excused himself from going; the chief, Sir Lucius Pepys, at the bar of the House of Commons, pleaded his advanced age, and that he knew nothing of the investigation of camp and contagious diseases. At length Sir Gilbert Blane was sent; but he, after rightly concluding that the diseases were mainly intermittent and remittent fevers, together with typhus and dysentery, proceeded to argue, with a complacency that to them appeared shocking, that, since the native inhabitants regarded the season, as far as they were concerned, as rather less sickly than usual; and, further, that since a like degree of illness had prevailed among the French and Dutch troops on previous occasions, the causes of the frightful ravages were clearly out of the reach of human control. Thus, from ignorance and incompetence, was a British army sacrificed to disease, and an expedition rendered entirely ineffective. Passing from this sad history to the Crimean campaign, it appeared that the results of it were not very dissimilar. The total mortality of the British troops engaged in this campaign amounted to the enormous number of 18,058, exclusive of those killed in action. Of this number, 16,297 were the result of disease alone, and 1,761 of wounds and mechanical injuries. It was a recorded fact that in the month of January, 1855, nearly ten per cent. of the troops succumbed to diseases. What share of this terrible result should be ascribed to the ignorance and lack of preparation of the Army Medical Department, and what to failure of other branches of the service, it was not for him to decide. It would suffice for him to say that a Royal Commission was appointed, under the presidency of Lord Herbert, one of the most important results of which was the establishment of this school. From the time of the Crimean war commenced that system which, intelligently and skilfully developed, had resulted in what might almost be termed perfection at the present day. The very obvious principle, that it was more economical to preserve in every way the health and strength of the soldier as a mere fighting machine, was at last grasped by the authorities. The first thing clearly was to ascertain what was really required; and much credit was due to Dr. A. Smith, who could only find, when preparing for the Crimean campaign, the records of two surgeons for the whole Peninsular war, for establishing an organised system of reports as a basis for formulating future requirements. How valuable was the information thus gathered, and how unrealised was Dr. Smith's prophecy that the best that could ever be expected had been attained in the Crimea, had been shown in the recent Egyptian campaign, as a very few figures would clearly indicate. The average strength of the troops serving in Egypt from July 17th to October 9th, 1882, was 13,013; the admissions into hospital were 7,590, giving a ratio of 583.3 per 1,000; but the number of deaths, including 93 killed in action, amounted to only 172, giving a ratio of 7.15 per 1,000 deaths from wounds and disease. Even still more striking were the results of the Suakin expeditionary force for a similar period—namely, from March 1st to May 14th, 1885, where, with an approximate strength of 9,944, there were only 17 deaths out of 2,047 cases of sickness admitted to the hospital, giving a ratio of 1.71 deaths per 1,000; while absolute perfection was reached in the first Suakin expedition from February 15th to April 6th, 1884, where, with an average strength of 4,018, of which there were 314 cases of sickness admitted to hospital, the mortality was *nil*. To illustrate still more forcibly the improvement that had taken place, he might point out that in the Egyptian Expedition of 1804, Sir James M'Grigor reported that, plague excepted, the most formidable disease in the army was ophthalmia; of the Indian Contingent alone, 50 were invalided blind, at the same time that the French were said to have sent home 1,000 men absolutely deprived of sight. In the first of our recent campaigns in Egypt not a single man lost his eyesight, though, nearly 1,500 cases of inflammatory affections of the eyes were admitted to hospital. To have reduced the death-rate of an army from sickness alone to *nil* was a triumph which could not be too strongly dwelt upon when urging an extension of the means by which these results had been accomplished. Equally remarkable were the results obtained in the Indian army as regarded the diminution of mortality. Learning from these recent Egyptian campaigns what could be accomplished by principles based on scientific knowledge and applied with practical skill, they turned to the question how such results were to be maintained under the unfavouring circumstances of climate, season, and great fatigue. In the first place, they must give credit to the constitution of the medical department of the army, to which had been assigned complete control of its own work, subject only to the general in chief command. To insure the permanence of their recent success every effort should be made to induce a high class of medical men to enter the service, a result to be accomplished by maintaining a high rank for the medical officer, by insuring a due recognition of the value of his services, and, lastly, by taking care that his special education, such as that afforded at Netley, was made even more thorough and extensive, especially by a more prolonged course of instruction. He could not conclude without a reference to a subject which he knew occupied the thoughts of many officers of the Army Medical Department. It was that they felt they had a claim to honorary distinction and rewards not inferior to that which was recognised in other departments of the service. He would gladly see some special recognition of the services of medical officers, and it would be a great and gracious act of the Queen to institute a decoration which might be called "The Order for Medical Merit." Such an order would be a fitting recognition of noble services rendered from a conscientious sense of duty.

Sir THOMAS CRAWFORD proposed a vote of thanks to Dr. Quain for his address. He said that the officers of the medical department of the army could not but feel deeply gratified at the sympathy shown towards them by one of the most distinguished members of the medical profession in the metropolis.

Sir JOSEPH FAYRER seconded the motion, which was carried by acclamation.

Dr. QUAIN briefly returned thanks, and the proceedings terminated.

The visitors, including Dr. Quain, Sir T. Crawford, Director-General of the Medical Department, and a number of ladies, were subsequently entertained to luncheon at their mess by the officers of the medical staff at Netley.

COLLECTIVE INVESTIGATION COMMITTEE.

THE quarterly meeting of the above committee was held at the Holborn Restaurant, on Wednesday, January 20th, 1886. The Committee of Direction met at five o'clock. The members of the General Committee dined together at six, and proceeded to business at half-past seven. The chair was taken by Dr. Duckworth.

A report was presented from the Standing Subcommittee. It stated that the printing of the chorea tables had been completed, and that the report upon the cases was in progress; that the production of the tables on acute rheumatism had been taken in hand; that, following the production of the reports on these subjects, the tabulation of the

returns on diphtheria would be proceeded with, and that thus the earlier inquiries issued would be practically concluded. The report also stated that arrangements had been made, at the instance of the Collective Investigation Committee, by the Section of Medicine of the annual meeting of 1886, to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years, without causing serious symptoms;" and that the Section of Public Health had in like manner undertaken a discussion upon the "Duration of Infectiousness in certain Infectious Diseases." It was also stated that the issue of the first inquiry of the International Collective Investigation Committee, upon the Geographical Distribution of Certain Diseases, to the Members of the Association, was almost completed, the actual issue of the circulars being, in the great majority of cases, undertaken by the honorary local secretaries for the different branches. The returns to the inquiry were reported to have been thus far satisfactory.

Certain changes were announced in the General Committee.

On the recommendation of the Standing Sub-committee, the following inquiries, which had not been found to produce an adequate number of returns, were ordered to be closed, viz., Paroxysmal Hæmoglobinuria, Albuminuria in the Apparently Healthy, Sleep-Walking, and Acute Gout.

The issue of the first inquiry, undertaken in conjunction with the Therapeutic Section of the annual meeting, was referred to the Standing Sub-committee.

The Secretary showed a series of maps prepared by Dr. Ogilvie Grant, the honorary local Secretary for the North of Scotland Branch, showing the relative prevalence of rickets, cancer, acute rheumatism, chorea, and urinary calculus, laid down in different shades of colour, in the manner which is contemplated by the International Committee.

The following returns to the cancer inquiry were also received by Mr. Butlin, in the month of December, 1885: Eastern Counties Branch, R. T. Hales, M.D.; Metropolitan Counties Branch, Patmore Sheehy (2); W. B. Thorne; South-Western Branch, J. Harper.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA,	ACUTE RHEUMATISM,
OLD AGE,	CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 18th, at 8.30 P.M., when Dr. Stephen Mackenzie will demonstrate a number of patients suffering from various forms of Skin-diseases.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North-Western Railway Hotel, Stafford, on Thursday, February 25th. The President (Mr. J. H. Hartill) will take the chair at half-past three o'clock. Papers.—Mr. F. Marsh: On the Use of Kocher's Method of Reduction of Subcoracoid Dislocations of Humerus. Dr. McAldowie: Paralysis of the Arm from Lesions of the Nerve-Trunks. Mr. Vincent Jackson: The Removal of Vesicle Calculi from Boys and Male Infants.—VINCENT JACKSON, General Secretary, Wolverhampton, January 27th, 1886.

SHROPSHIRE AND MID-WALES BRANCH.—The half-yearly meeting of the Branch will be held at the Salop Infirmary, Shrewsbury, on Tuesday, February 23rd, at 3 P.M., J. D. Harris, Esq., President, in the Chair. Gentlemen desirous of introducing patients, exhibiting specimens, or making communications, are requested to signify their intention at once to EDWARD CURETON, Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above district will be held at The Infirmary, Gravesend, on Friday, February 26th, at 4 P.M., O. R. Richmond, Esq., in the Chair. Dinner at the New Falcon Hotel, 6 P.M.; charge, 6s., exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, O. R. Richmond, Esq., Lodgewood, Gravesend, not later than February 24th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers.—1. Dr. Curnow: Typhoid Fever and its complications; their treatment. 2. Mr. W. Rose: Some points connected with the operative treatment of Inguinal Hernia. 3. Dr. Firth: Three cases of Puerperal Convulsions. 4. Mr. Bryden: Cases of Foreign Bodies in the Ear. Several interesting cases will be exhibited by the medical staff of the infirmary.—A. W. NANKIVELL, Honorary Secretary of the District, St. Bartholomew's Hospital, Chatham.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE third ordinary meeting of the session was held at the Grand Pump-Room Hotel, Bath, on Thursday evening, January 28th, E. C. BOARD, M.R.C.S.Eng., President, in the chair.

New Members.—The following gentlemen were elected Members of the Association and Branch: C. E. Matthews, M.R.C.S., of Clifton; H. C. Thurston, M.R.C.S., of Bristol; and C. A. Homfray, M.R.C.S.

Communications.—The following papers were read: Surgeon-General W. B. Beatson, M.D., read a paper on Cholera, which gave rise to a discussion, in which Mr. D. Davies, Dr. Swayne, and Messrs. Prankerd, Pagan Lowe, and Scott, took part; 2. Mr. H. W. Freeman read a paper on Parker's Method of Radical Cure of Hernia, and showed two cases.

MEDICAL MAGISTRATE.—The Lord Chancellor has, on the recommendation of the Earl of Charlemont, Lieutenant of the County, been pleased to appoint William Corry, Esq., M.D., of Drumquin, to the Commission of the Peace for the county Tyrone.

PROCEEDINGS OF COUNCIL.

At a meeting of the Council, held in the Council Room, Exeter Hall, on Wednesday, January 20th, 1886, Present,—

Dr. Balthazar Foster, M.P., President of the Council, in the chair,

Dr. W. Withers Moore, President-elect, Brighton
Mr. C. Macnamara, Treasurer, London
Mr. B. Barrow, Ryde
Dr. T. Bridgwater, Harrow-on-the-Hill
Mr. H. T. Butlin, London
Dr. A. Carpenter, Croydon
Dr. A. H. Carter, Birmingham
Dr. C. Chadwick, Tunbridge Wells
Surgeon-General Cornish, London
Dr. J. Ward Cousins, Southsea
Dr. G. W. Crowe, Worcester
Dr. J. L. H. Down, London
Dr. D. Drummond, Newcastle-on-Tyne
Dr. G. F. Duffey, Dublin
Dr. W. A. Elliston, Ipswich
Dr. C. E. Glascott, Manchester
Dr. W. C. Grigg, London
Dr. C. Holman, Reigate
Mr. H. R. Ker, Halesowen
Dr. D. J. Leech, Manchester
Dr. W. G. V. Lush, Weymouth
Mr. F. Mason, Bath
Dr. F. Needham, Gloucester
Dr. C. Parsons, Dover
Mr. J. Prankerd, Bath
Dr. A. Sheen, Cardiff
Mr. S. W. Sibley, London
Dr. E. M. Skerritt, Clifton
Mr. T. Sympson, Lincoln
Mr. F. Wallace, London
Mr. C. G. Wheelhouse, Leeds

The minutes of the last meeting having been printed and circulated, and no objection taken to them, they were signed as correct.

Resolved unanimously: That the Council of the British Medical Association beg to offer their hearty congratulations to their President, Dr. B. Foster, on his being elected a member of Parliament for Chester. The Council are convinced that in this they express the sentiments of the entire Association, and they sincerely trust that Dr. Foster may enjoy many years of health and energy for the work that lies before him. Among his other Parliamentary duties, the Council of the Association hope that, in the interests of the public, and of the profession, Dr. Foster will impress on the Government the necessity that exists for enforcing those measures of Medical Reform which have been so constantly urged on Parliament by this Association, and which have already received the approval of the House of Lords, and of a Royal Commission appointed to enquire into the subject.

Read minutes of the Habitual Drunkards Committee of December 9th, together with proposals for amended legislation.

Resolved: That the following be the basis upon which the Council be requested to present to the Legislature proposals for amended legislation:

1. A permanent measure instead of present temporary Act.
2. Attestation by one justice instead of by two justices, as at present; the signature of applicant to be attested at the house of the applicant or elsewhere.
3. The escaped patient, instead of, as at present, after recapture on a warrant having to appear before a magistrate, to be sent back to the retreat from which he has escaped direct; immediate notice being given to the Secretary of State of his return to the retreat.
4. Power to licensee to open all correspondence, if he should think this necessary, and to retain any money-inclosures, postal orders, or cheques. A memorandum of the amount to be handed to the patient.
5. Magistrates should have the power to commit well-defined cases of habitual drunkenness to a retreat, for care and control, without consent of the patient.
6. The Metropolitan Asylums Board, and other like authorities throughout the kingdom, to have power to make provision for the care and treatment of habitual drunkards of limited, or no, means.
7. Guardians to be empowered to detain paupers who are habitual drunkards, for a period not exceeding twelve months, for treatment, either in the particular workhouse or in some licensed retreat, with power, in the latter case, to pay for their maintenance.

Resolved: That the proposals for amended legislation submitted by the Habitual Drunkards Committee be referred back to the Committee for the purpose of submitting them to the Home Secretary, and obtaining his opinion as to the prospects of legislation.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date be approved, and the recommendations contained therein carried into effect.

The minutes of the Journal and Finance Committee contain report on examination of accounts for the quarter ending December 31st, 1885, amounting to £4,322 8s. 2d.; and report of auditors, and a recommendation that a further sum of £2,000 be invested in some first-class security.

Resolved: That the minutes of the Scientific Grants Committee of January 19 be approved, and the recommendations contained therein carried into effect.

The minutes of the Scientific Grants Committee contain the proposals to grant sums of £46 10s., completing the amount granted at annual meeting.

Resolved: That the minutes of the Premises Committee of January 19th be approved, and the recommendations contained therein carried into effect.

The consideration of sites was continued from last meeting.

Dr. Ward Cousins reported, on behalf of the Branch Organisation Committee, that the map of the Branches in Great Britain and Ireland was not yet completed.

Mr. Sibley reported on behalf of the Committee for the consideration of the appointment of committees, and placed before the Council the proposed regulations for this purpose.

Resolved: That the rules be received and considered again at the next meeting.

Read resolution of the Reading Branch, of which the following is a copy, and letters from the honorary secretary, Dr. Shettle, and Mr. Young, representatives of the Reading Branch:

Mr. May brought forward the subject of the present state of the law relating to the signing of lunacy certificates, and the following motion was carried: "That the Council of the British Medical Association be requested to consider the expediency of promoting a change in the law which permits actions to be brought against medical men for signing lunacy certificates."

Resolved: That the letters and resolution from the Reading Branch, with reference to the expediency of promoting a change in the Lunacy Laws—to prevent an action being brought against a medical man for signing a lunacy certificate—be referred to the Parliamentary Bills Committee, with the request that they take the necessary steps for promoting a change in the laws of lunacy.

The President of the Council announced a deputation from the British Gynæcological Association.

Dr. Robert Barnes, the President of the Association, was then introduced, by Dr. Grigg, who also read a memorial, of which the following is a copy.

A MEMORIAL TO THE COUNCIL OF THE BRITISH MEDICAL ASSOCIATION.

At the beginning of last year we had the honour of forwarding to your late Council a Memorial from the President and Council of the British Gynæcological Society, in which the need for a Gynæcological Section at the Annual Meeting of the Association was pointed out. Your late Council was good enough to consider the matter, but was unable at that time to accede to our petition. We venture to hope, however, that your present Council may see fit to give the subject their kind consideration. We respectfully beg to refer to our former memorial, in which is set forth in detail the various reasons which seem to us to call for the institution of a Gynæcological Section.

We would remind you of the fact that many physicians and surgeons, who practice Gynæcology, do not pursue the study of obstetrics, and justly feel themselves placed in a false position when assisting at the meetings of a Section, the designation of which implies neither more nor less than the study of midwifery. We could easily name several distinguished Gynæcologists who would not, for this very reason, accept office in an Obstetric Section.

We would respectfully suggest, in the event of your Council being unable to institute a Section in Gynæcology, that the case might be met by changing the title of the Obstetrical Section for that of "Section of Gynæcology and Obstetrics," the President of the Section being alternately a Gynæcologist and an Obstetrician.

We humbly pray that our petition may be granted, and have the honour to remain, gentlemen,

Your obedient servants,

ROBERT BARNES, Hon. President.
ALFRED MEADOWS, President.
ARTHUR W. EDIS, Treasurer.
FANCOURT BARNES, M.D., } Hon. Secs.
W. C. GRIGG, M.D., }

Dr. Barnes, having made a statement and answered questions in reference to the memorial, was thanked by the President and Council for attending, then withdrew.

It was moved and seconded: That the section be called the Obstetrical and Gynæcological.

Whereupon an amendment was moved: That the programme of the Annual Meeting in August next stand as it has been published in the Journal.

The amendment having been put from the chair, the same was declared to be carried.

The amendment was then put as a substantive resolution, and also declared to be carried.

The President of the Council reported that the programme of the Annual Meeting had been completed, as far as possible, in accordance with the minutes of the Arrangement Committee.

Read letter from Dr. Isambard Owen, the Secretary to the Collective Investigation Committee, asking for the approval of the Council to the co-optation of the following gentlemen: Dr. Barling (Birmingham), Dr. Eddison (Leeds), Dr. Ward Cousins (Southsea), and Mr.

nathan Hutchinson, F.R.S.; and reporting the resignations of Mr. ssop and Dr. Saundby.

Resolved: That the resignations of Mr. Jessop and Dr. Saundby be cepted, and that the following gentlemen be added to the Com- ittee: Dr. Barling, Dr. Eddison, Dr. Ward Cousins, and Mr. Jonathan utchinson, F.R.S.

Resolved: That 131 of the 134 candidates whose names appear the circular convening the meeting be and they are hereby elected embers of the Association.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

otal Extirpation of the Larynx.—The Blood as a Means of Diagnosis in Rheumatism.—Adulteration of Hopeine.—Guarana and Paullinia Sorbilis.—Hamamelis Virginica.—Urinary Secretion.—Congenital Amputation.—School-Hygiene.—General News.

. LABBÉ, last March, extirpated the larynx from a patient for a umour (see BRITISH MEDICAL JOURNAL, April 18th, 1885). At the st meeting of the Academy of Medicine, M. Labbé gave further formation concerning the progress of the patient. Fourteen days ter the operation, on March 24th, the patient was in a satisfactory ndition; he could be fed by means of the sound. On June 4th, four onths after the operation, he was completely cured; the wound was ealed, and the glands were healthy. He was imprudent, caught old, and died from an attack of pneumonia.

M. Hayem continues to read papers on his researches on the blood the Société Médicale des Hôpitaux. In his clinical experience, he as observed that, patients with rheumatic fever, whose blood is ery fibrinous, and who have not localised inflammation, have always ooner or later had the characteristic articular inflammation. In heumatic fever, the blood contains an increased quantity of fibrin be- re the articular inflammation appears. M. Hayem cited the follow- ng case. Last year, a young man, aged 23, was admitted into his ards. He presented a very serious typhoid condition; he was de- rious; his temperature rose to 41° C. (105.8° Fahr.) in the evening. he thoracic and abdominal organs were healthy; the joints were either swollen nor painful. There was very slight abdominal tym- anitis; the house-surgeon diagnosed a form of typhoid fever. M. ayem examined the blood, and observed that the fibrin was greatly ncreased in quantity. This occurs only in pneumonia and rheu- atism. M. Hayem diagnosed cerebral rheumatism; applications ere made of water at 8° Cent. (6.4° Fahr.); his temperature fell, nd, a few days later, arthritis attacked the right knee, which became xcessively swollen; this condition lasted a month, and left the joints artially ankylosed; the heart remained healthy.

M. Dujardin-Beaumetz stated at the Academy of Medicine that he ad analysed the new substance called hopeine, and had ascertained hat it was morphine scented with hops, and behaved the same as morphine when submitted to the influence of reagents. M. Beaumetz oncluded that either hops contain morphine, or that the substance old as hopeine was an instance of dishonest practice which had its pre- edents. M. Méhu observed that hopeine can only be extracted from he hop-plant of central America, which perhaps explains the false ubstance sold in France under the name of hopeine.

The *Paris Médical* of January 13th, 1886, publishes a summary of L. Gosset-Deslongchamps' work on *Guarana and Paullinia Sorbilis*. M. Gosset-Deslongchamps concludes from his researches that guarana toxic to frogs in doses of 9 to 10 centigrammes, injected under the kin. Guaranin introduced in the same way kills them in doses of centigramme. Guinea-pigs are killed by 10 grammes of guarana; ve centigrammes of guarana do not produce any effect. The injection f 100 grammes of guarana into the veins of a dog kills it in twelve r fifteen hours. One gramme of guaranin injected into the saphenous ein kills the dog in fifteen or eighteen hours.

M. Campardon has published, in the form of a pamphlet, his paper, ead at the Paris Therapeutical Society, on hamamelis virginica. The uthor dwells on its power in removing congestion. He recom- ends it for fevers, hæmorrhage, exaggerated arterial tension, vari- ose veins, and congestion; in anæmia and aortic valvular lesions it ught not to be used, as it has a depressing influence. M. Campardon refers the tincture of hamamelis virginica to any other form. He ives it in doses of five drops, repeated according to circumstances.

MM. Lépine and Aubert have made a series of experiments in order to ascertain how the renal secretion is modified when the renal epithelium has lost its normal condition. The functions of one of the kidneys were disturbed by obliterating the renal artery, or by constricting the ureter during some hours; the results were as follows. Most frequently the urine secreted by the kidney under experiment contained half the quantity of solid principles that the urine of the healthy kidney contained. A decrease in the quantity eliminated was less frequent and less marked. Sodium chloride was more easily eliminated by the injured kidney than the other urinary salts. Sometimes the percentage of sodium chloride was greater in the urine of the injured than in that of the normal kidney. Phosphoric acid and potassium were less easily eliminated by the injured kidney. These data have a certain clinical value, and explain the small proportion of phosphoric acid present in the urine of patients with Bright's disease.

M. Reclus showed, at a recent meeting of the Paris Surgical Society, a female patient who presented a curious lesion. One of her legs was partially amputated by a congenital fibrous band. Last year, M. Reclus removed two-thirds of the band, and subsequently the remaining third; the success resulting has been perfect.

Dr. Fieuzal has drawn up a long report concerning school hygiene for the Société de Médicine Publique et d'Hygiène Professionnelle de Paris. It may be summarised as follows There should be strict observance, both in school and in homes, of the hygienic rules published in every report concerning lighting, school-furniture, desks, chairs, method of writing position, and the type of copy used. Actual school-education ought not to commence until a child is 7 years old. All pupils should be forced to write legibly. The school-physician should examine the eyes of the pupils, and ascertain that their powers of refraction and accommodation are normal. All short-sighted pupils should be examined once during the scholastic year. Dr. Fieuzal indicates the utility of using suitable spectacles, and the danger of those not suitable. If a pupil leave on account of an attack of contagious ophthalmia, he or she should not be readmitted until the sanction of the school-physician is obtained.

The Conseil de la Salubrité de la Seine forwards to M. Armand Gautier, Professor of Chemistry at the Paris Medical Faculty, a report submitted to them by M. Gerard, Chief of the Municipal Laboratory, in which he comments on the frequent occurrence of cases of poisoning caused by using water that has remained in lead reservoirs, or others painted with lead-pigments, as stone-ware pots, and clay receptacles, varnished with lead-oxide and lead-silicate. M. Gautier informs the Council that M. Girard has indicated a real danger, and that the public must be warned of it. The Council has decided to print and distribute M. Gautier's report, and proposes to prohibit the use of red lead for painting the inside of water-cisterns and reservoirs.

The Chamber of Appeal has settled the question whether chemists and druggists can form commercial partnerships. The decision has been in the affirmative. The law promulgated March 21st, 1884, gives the right to all merchants and manufacturers to form partnerships, whatever may be the character of their commerce and manufactures. This law specially concerns chemists and druggists, who are merchants included in the category specified in the Article 632 of the Commercial Code, and do not belong to a liberal profession.

UNITED STATES.

[FROM A PHILADELPHIA CORRESPONDENT.]

International Medical Congress.—General Catarrhal Œdema.—Torticollis.—Hydrophobia.—Amyloid Disease.—Pyridine.—Joseph Cook, the Temperance Advocate.—Dr. Austin Flint.

THAT your readers may keep posted on the affairs of the International Congress, I will say that at the next meeting of the American Medical Association, to be held in St. Louis, in May, an effort will be made to have the Association reconsider its present position, accept the report of the present Committee of Arrangements, discharge them from further service, and commence all over again. This movement is being promoted by those of the profession to whom I referred in my last letter. The first step in this scheme was taken at a recent meeting of the Philadelphia County Medical Society, when the nominated delegates to the American Medical Association were defeated by the substitution of a list pledged to endeavour to reverse the present views of the Association. If the Association do alter its arrangements (which is, however, very doubtful, as the West and South are solidly united against the Eastern would-be autocrats) every right-minded man will give his hearty support to the change, so that your readers can rest assured that, whatever may be the decision of

the Association, a great congress, well worthy of attendance, will be held.

Dr. Da Costa has been recently showing his classes some cases of what he terms general catarrhal œdema, a disease written of in the last century, but rarely alluded to at present. It is characterised by an œdema of the cellular tissue, without lesion of the kidneys, liver, or any other organ, and it is caused by exposure, or any agent that will ordinarily produce inflammation of the cellular tissue. It tends to spontaneous recovery, which is aided by tonic treatment.

Dr. Roberts Bartholow has derived most excellent results from the combined use of faradism and galvanism in obstinate cases of torticollis. The continuous current is applied to the contracted muscles, while the slowly interrupted current is used on those in a state of paresis.

It is well known that Dr. C. W. Dulles does not believe in the reality of hydrophobia, alleging that this so-called disease is but a condition of fright, born of apprehension ; and at a recent meeting of the Philadelphia County Medical Society he made an attack on Pasteur, alleging, among other things, that the great scientist is not a physician, and is therefore incapable of diagnosing hydrophobia. It seems to your correspondent hardly logical to infer that a title or a degree makes a physician, or that the want of it disproves his medical ability.

Dr. James Tyson gives us a practical point in the diagnosis of amyloid disease of the kidney when he tells us that it is never confined to the kidney alone, but that the liver, and often the spleen, are implicated as well. It is never idiopathic, that is to say, it is due either to syphilis or to some suppurative disease of long standing, and the treatment must be directed towards removing the cause. The surest evidence of improvement is to be found in the diminution of the size of the liver, rather than in the quantity of albumen, which is likely to vary without any change in the disease.

Dr. Neff is still much pleased with pyridine in asthma, but he finds that, as with other drugs, custom breeds tolerance, and the dose must be constantly increased.

As in England, we have our temperance agitators, and one of our most distinguished, Joseph Cook, in a recent address, said : "What if the Commonwealth should pass a law that everyone who drinks habitually should lose his good judgment, be allowed to make no bargains, or transact business ? Civilisation's hair would stand on end. What if it went further, and said that every habitual drinker should lose his good health ? You would stand aghast. What if, finally, it should say that, the habitual drinker having lost his health, his disease should be carried down to the third and fourth generations ? You would withdraw with disgust from any campaign for the support of such laws. If you please, the supreme powers have made all these laws, and for 6,000 years have executed them."

We are all pleased to learn that Dr. Austin Flint, the distinguished President of the International Congress, will deliver the Address in Medicine before the next meeting of your Association, and we are satisfied that he will assure you all of the reality of the coming Congress.

NEWCASTLE-UPON-TYNE.

[FROM OUR SPECIAL CORRESPONDENT.]

Office of Coroner.—Deaths from Chloroform.—Poisoning from Phosphorus.—North Shields Dispensary.—Medico-legal Case, Durham Assizes.—Newcastle-upon-Tyne Clinical Society.

THE office of coroner has been filled by the almost unanimous election of Mr. T. Hoyle, who for some years past has acted as deputy coroner. The appointment is popular with the profession, though doubtless there are many who would have preferred a medical man to have been elected. The coroner intends holding his inquiries as far as possible in private rooms, and is in favour of the establishment of a coroner's court, thus abolishing the old-fashioned custom of holding inquests in public houses.

Since my last letter, two more deaths have occurred while under the influence of chloroform. The first occurred in the practice of Dr. Davison of Scotswood, the chloroform being administered to facilitate the reduction of a dislocated hip; the second occurred in the infirmary, the anæsthetic being used in a case of abscess of the lacrymal sac. No blame was attributed to the surgeons in either case, and verdicts of accidental death were returned.

Two more cases of poisoning from infusion of match-heads are reported, one fatal, and one at present under treatment at the infirmary. The fatal case occurred in the practice of Dr. Young, of South Shields; all the symptoms of phosphorus-poisoning were well marked. At the inquest, the coroner made some strong comments on the sensational manner in which the press reported these cases. Cases of the above have been very frequent in this neighbourhood of late. At the December meeting of the Pathological Society, five cases were discussed, four from infusion of match-heads, and the fifth from rat-paste, the latter proving fatal ; in all the cases there was collapse, increased quickening and compressibility of the pulse, and epigastric pain. In the fatal cases, the pathological effects of phosphorus were not well marked, death having taken place early.

A project is on foot at North Shields to amalgamate the dispensary and infirmary, which are at present worked separately. A meeting was held a short time ago, and resulted in the election of a committee to consider the subject and report. The result has not yet been made known, but it is believed the outcome will be the joining of the two institutions.

At the late Durham Assizes, before Mr. Justice Smith, a clergyman of the Church of England was charged with stealing some gloves from a draper's shop. Dr. Schofield, Superintendent of the Camberwell House Lunatic Asylum, and Dr. Smith, of the Durham County Asylum, gave evidence for the defence. The former gave evidence of an acquittal (on the ground of insanity) for a similar offence in 1875. He was in Camberwell for some time, suffering from epilepsy. Both medical gentlemen described the results of the disease, after evidence of good character had been given by several clergymen. The judge carefully reviewed the evidence, and said the question for the jury was really whether prisoner knew what he was doing at the time he committed the theft. A verdict of not guilty was returned. The prisoner had a severe attack immediately before leaving the dock.

The January meeting of the Clinical Society was held on Thursday evening last, Dr. Oliver, the Vice-President, occupying the chair, in the absence of Dr. Limont. Dr. Purdie showed an interesting specimen of strangulated intestine. It was removed, *post mortem*, from the body of a young man, aged 22, who, on a winter's night, ran against a lamp-post, the lamp not being lighted. Death occurred in eight days, with symptoms of peritonitis. The bowels acted between the receipt of the injury and death. The specimen showed the vermiform appendix much lengthened, and its free end attached to a gland. It had in some way formed a loop, and into this loop a knuckle of bowel had passed and become strangulated. The case had passed into the hands of the lawyers, damages having been claimed, as the lamp was not lighted. It will be interesting to know the result.—Mr. Black showed a successful case of Macewen's operation for knock-knee. —Mr. Waldy read a practical paper on Injuries of the Head and their Treatment; most of the members present taking part in the subsequent discussion.

CORRESPONDENCE.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

SIR,—The whole profession is much indebted to that scientific surgeon and distinguished reformer, Mr. Macnamara, for his able letter in the last impression of your valuable JOURNAL ; but the bulk of its members will regret that "such a man of progress" should be prepared to deal with old and large abuses at the College of Surgeons with half-hearted measures only, denying to Members the just privilege of election to the Council.

I would most respectfully remind him and the profession generally that in the University of London, which is, *par excellence*, the leading medical university of the world, "all graduates" of a proper standing, without restriction as to faculty or quality of degree, are eligible for Convocation, and therefore at once not only possessed of a vote for members of the Senate, but are themselves eligible for that august body, which is composed of gentlemen quite equal in social distinction and scientific culture to the members of the Council of the Royal College of Surgeons.

I would also add that the Bachelors of Arts, who are by far the youngest members of the university, are about four times as numerous as all the other graduates put together ; and, although they may swamp others in voting power, by turning to the list of the Senate the feeblest observer may convince himself that only men of the highest standing have found their way to that distinguished position. A very large majority of the profession would, indeed, be glad to see the two Royal Colleges firmly cemented into a great Medical University, having full powers to confer medical and surgical degrees on all deserving alumni ; but the governing powers, as at present constituted, having but little knowledge of educational progress and university procedure, seem quite content to let our valuable institution

ven in this age of progress, remain a corporation possessed of ample nds, but with very shallow claims to educational distinction.—
remain, yours, RALPH GOODING.
Blackheath, S.E.

SIR,—Both Mr. Macnamara and the Council generally lay great ress upon certain words contained in the College charters, but it oes not seem to me that either he or they have studied those char-rs very deeply, or that the Council usually takes any great pains to bey them, except when it suits its own convenience. Perhaps, when e or they next quote the charters against the claims of the mem-ers, they will also kindly deal with the following observations.

1. It was in order to "the due promotion and encouragement of the udy and practice of the said art and science" of surgery that the embers of the College of Surgeons, forty years before the "new ass of Members to be called Fellows" were thought of, were, in the ar 1800, constituted a body corporate and politic, with perpetual ccession and a common seal, and with power to take, purchase, pos-ss, hold and enjoy a hall or council-house, with its appurtenances, r the use and purposes of the said College. How much opportunity e Members have had of "enjoying" their own hall from the time of r. Wakley to the present, none know better than the Council to hich Mr. Macnamara belongs.

2. The words which Mr. Macnamara quotes from the Charter of 43, "in order more effectually to promote and encourage the study d practice of the said art and science of surgery," are applied in that harter, not only to the creation by election and without any examination of the "new class of Members to be called Fellows," but also the abolition of life-tenancies by examiners and members of ouncil, to the enlargement of the numbers of the latter body, and to e new provisions made by the Charter for the election of members of e Council by the 300 Fellows who were to be created, instead of by e twenty-one members of Council themselves, who had hitherto en the sole constituency.

The Charter, in fact, effected a great reform, comparable only to at for which the Members are now asking.

3. None of the Charters have taken from the Members any of the ghts which they previously possessed of holding lands or houses, etc., the value, at first, of £1,000, but, since 1822, of £2,000 a year, d the "new class of Members, called Fellows," only share in that ght as Members, and not as Fellows. Hence, when a Fellow is ad-itted who has not previously been a Member, it is specially provided the Charter of 1843 that he shall, by virtue of his admittance as a llow, become and be considered admitted as a Member of the Col-ge. Notwithstanding the above limitation, and quite regardless of e Members' rights, the Council hold lands and houses far in excess £2,000, as their published accounts show. They receive £1,455 for use property in Lincoln's Inn Fields; they pay over £1,000 taxes, tes, and insurance on the college buildings (which must, therefore, one be worth far more than the prescribed amount), and their pro-rtion of the rent of ground on the Thames Embankment, taken con-intly with the College of Physicians, will, I suppose, be one-half, or 1,100. Perhaps Mr. Macnamara will point out the Charter in which wer is given the Council to hold lands or houses in conjunction ith the College of Physicians, or without authority from their own embers. If I am rightly informed, the Members of the College could, they liked to try the question in a court of law, make the members Council personally responsible for any action by which they had ceeded the powers given them in the Charters.—Yours, etc.,
H. NELSON HARDY.

R. JONATHAN HUTCHINSON'S LETTSOMIAN LECTURES.

SIR,—As my letter, which you kindly published in the JOURNAL of nuary 23rd, was written before I had read Mr. Hutchinson's second cture, I shall be much obliged if you will kindly allow me space for a w further remarks.

Mr. Hutchinson's preference for grey powder is confirmed by the perience of our predecessors, my colleague, and myself, at the iverpool Lock Hospital. For many years past it has been the actice to give, in the great majority of cases, two grains of grey wder, combined with three grains of Dover's powder, twice daily. rmerly these were given in the form of powder, but now as pills, ade up with confection of roses. In private practice, I have used the me formula, modified according to circumstances, with very satis-ctory results. It brings patients gradually but surely under ercurial influence, the Dover's powder correcting any tendency to-ards griping or purging, of which patients sometimes complain when ey powder is given alone. I may mention for the benefit of those who are particular on this point that these pills, as well as blue pills, will, contrary to what is often believed, both take and retain silvering without becoming discoloured. In cases of indurated chancres which have been neglected, and where it is desirable to bring the patient more rapidly under the mercurial influence, a modified form of inunction acts extremely well. A small quantity of mercurial ointment, either strong or diluted, is spread upon a piece of lint, sufficient to go round the penis; it is wrapped round the latter, close to the pubes, and left on, being changed twice a day. I have noticed that the ointment thus used causes much less irritation to the skin of the penis than to that of any other part, and also that this mode of inunction appears to act more rapidly than when the ointment is rubbed in all over the different parts of the body in succession. In cases of phimosis with indurated ulcers beneath the prepuce, it is very useful, reducing the induration very quickly, enabling the patient to retract the fore-skin, and allowing the ulcers to be seen.

In cases of skin-eruptions on exposed surfaces, such as the face, neck, hands, etc., the ointments of zinc and white precipitate combined with glycerine, as mentioned in Dr. Bernard's letter in the JOURNAL of January 30th, will be found a most useful adjunct to internal mercurial treatment. One of the great difficulties in connection with venereal practice is that we are required so often to treat patients who are pursuing their usual avocations, when they would be much better at home. I had very recently to treat a gentleman who had a papular rash all over his body, including his face and neck, and he assured me that he could not give up his business even for a day. The "mercurial cream," as we term it, acted like a charm in his case, and in many others in which I have used it. I have also tried with great success mercurial vapour baths, both in hospital and private practice.

I am glad to see that mercury is, according to Mr. Hutchinson, so perfect an antidote to syphilis, though my experience does not enable me fully to endorse his view. That it retards and considerably modifies the secondary stage, I feel convinced, and also that it may entirely prevent tertiary symptoms. But, in the large majority of cases which I have seen and treated from the first, some slight secondary affections have appeared; and my experience would show that a case of syphilis properly treated from the first, generally terminates in a mild attack of secondary syphilis. With very rare exceptions, tertiary syphilis is seldom seen in cases which have had mercurial treatment from the onset.—I am, sir, yours faithfully,
Liverpool. FREDK. W. LOWNDES.

SYPHILIS AND TABES DORSALIS.

SIR,—I share Dr. Buzzard's scepticism as to the frequency of syphilis in the causation of tabes dorsalis; and I do so on pathological grounds. Diseases of the nervous centres have of late been divided into the coarse and system diseases; the former including tumours and blood-effusions, the latter those chronic affections of the various regions of the brain and spinal cord which have distinct anatomical and physiological boundaries. The coarse and external diseases, as cancer, tubercle, or aneurysm, may involve any part indiscriminately, whereas the system diseases arise from changes commencing in the tissues themselves, and confine themselves to certain well defined regions, under the influence of their own limited nutrition. Syphilis, as far as our present knowledge extends, belongs to the coarse diseases; it is usually made manifest as a gummatous deposit in connection with the blood-vessels on the surface of organs, and penetrating their interior in the most indiscriminate manner. As regards the brain, it may affect any part of the surface, so that the greatest variety of symptoms may own syphilis as their cause; and it is often this variety, and the impossibility of referring them to any centre, which suggests the nature of the case; and as for the cord, syphilis may affect a large part of the cervical region with its nerves, and may be seen involving a dorsal nerve, and penetrating the medulla, or growing along the cauda equina into the lumbar portion. The expression, therefore, syphilitic disease of the spinal cord, would convey to my mind no more knowledge of the case than would cancer or tubercle of the cord. It might be said that a more general morbid condition might be produced through the blood-vessels; but, as far as my experience goes, a syphilitic change in the vessels has always been limited, and, therefore, the degeneration of the medullary substance which has followed has also been circumscribed. It is true, also, that some very general changes are sometimes met in the liver in infantile syphilis; but I do not remember to have heard it suggested that a well marked sclerosis of the columns of the cord in any particular case was of a syphilitic nature. In our present state of knowledge, we ought to be slow in accepting the statement that syphilis has a special affinity for some regions of the spinal

cord, or more prone to produce one form of nervous disease than another.—Your obedient servant, SAMUEL WILKS.

Grosvenor Street.

STRYCHNINE IN UTERINE HÆMORRHAGE.

SIR,—Dr. Walker's brief letter on the value of strychnine as a preventative of *post partum* hæmorrhage, which appeared in the number of the JOURNAL for November 14th last, has called forth several communications on the subject. The treatment not being new, I did not propose to take any part in the discussion; but as, in the JOURNAL for January 23rd, Dr. Hoey alludes to my recommendation of the drug in cases in which hæmorrhage is anticipated, and asks for information as to the effects of the drug on the fœtus *in utero*, I think it right to state my views, and to give the results of my experience.

For many years, I have been in the habit of administering strychnine in combination with ergot in the five following classes of cases.

1. Where, from previous experience, I had reason to anticipate the occurrence of *post partum* hæmorrhage.

2. Where, during the progress of a tedious labour, the uterus becoming exhausted, I had reason to believe that hæmorrhage would follow on delivery.

3. In cases of menorrhagia depending on imperfect involution of the uterus.

4. In certain forms of hæmorrhage caused by the presence of uterine tumours.

5. In some forms of amenorrhœa.

In the first class of cases, I generally commenced the treatment three weeks before the expected advent of labour. If the patient was anæmic, I combined the strychnine with iron; if plethoric, with muriatic acid; in all cases, the vehicle being the infusion of ergot; and I have had the most satisfactory results. After the patient has taken the medicine for a week or ten days, I discontinued its use for forty-eight hours, recommencing it again. In several cases in which the patient had invariably suffered, previous to the adoption of this treatment, from severe *post partum* hæmorrhage, none occurred; in all the others, it was markedly less. I never once have known any unpleasant result follow; in none was the fœtus affected, all the children were born alive, and, as far as I know, none suffered from convulsions subsequently. I may here add that I believe ergot to be absolutely innocuous to fœtal life, unless it produces its specific effect, that is, excites almost continuous uterine action; and my firm belief, founded on a very extended experience, is that ergot is powerless to originate uterine action; it will stimulate an uterus previously in action, or one in which uterine action is about to commence, as in the case of an uterus containing a blighted ovum or foreign body; but not, as far as my experience goes, under any other circumstances, and not always under these. The formula I generally use is the following: Infusi ergotæ ad ℥vj; ext. ergotæ liq. ℥ij; liq. strychniæ ℥j; acid. hydrochloric dil. ℥ij. A tablespoonful, by measure, three times a day. In anæmic cases, substituting a drachm of the ammonio-citrate of iron for the muriatic acid.

With respect to the second class of cases, I may quote the following paragraph, from a paper of mine which appeared in the BRITISH MEDICAL JOURNAL for November 1st, 1873, "On the Anticipation of *Post Partum* Hæmorrhage." Referring to that form of it which depends on relaxation of the uterus the result of nervous exhaustion, I say: "Ergot here is still more unreliable than in the previous class of cases; strychnine promises better results. I generally combine it with ergot, giving ten drops of the liquor strychniæ (*British Pharmacopœia*) with the first dose, and five with a subsequent one, if necessary. I can confidently recommend this combination."

In conclusion, I append the following extract from my Lectures, to which Dr. Hoey refers, as it clearly and briefly conveys my views on the subject. "That strychnine exerts a direct action on the uterus, is to my mind clearly established. Added to ergot in cases of parturition, it greatly increases the efficacy of that drug, being specially useful when *post partum* hæmorrhage is anticipated. It appears to have the power of increasing the tonic contraction of the uterine fibres, and of preventing their undue relaxation when the pain has subsided. It is specially valuable, administered in combination with ergot, in cases of menorrhagia depending on imperfect involution of the uterus. Its use is contraindicated in all cases where any inflammatory condition of the uterus or ovaries exists. Strychnine is also useful in many forms of amenorrhœa, where it seems desirable to stimulate the uterus and ovaries; and in such cases it is often prescribed with advantage, in combination with iron. It should be administered cautiously, commencing with three or four drops of the liquor; the dose to be gradually increased to eight or even ten three times a day. I have, however, known even small doses produce very unpleasant symptoms, some patients being apparently very susceptible to the effects of the drug." (*Diseases of Women*, 7th edition, p. 386.)—I am, etc., LOMBE ATTHILL, M.D.,

Ex-Master of the Rotunda Hospital.

94, Merrion Square, Dublin.

DR. IMLACH'S CASE OF DOUBLE UTERUS WITH PREGNANCY.

SIR,—The reason why my letter was written was, to remove any wrong impression regarding the diagnosis of the case previously to operation that might have been occasioned by the criticism of the case made by Mr. Steele.

I did not enter into my own conduct of the case, had I been the operator; what that would have been was expressed to Dr. Imlach subsequently to the operation, and also to others privately; to that I still adhere. What led Mr. Steele to think otherwise, I am at a loss to understand. Why Mr. Steele should have taken up such a hostile position to one of his colleagues, I do not know. In my opinion, shared by others, it is in the highest degree reprehensible; the least that he could have done, differing as he does from Dr. Imlach's conduct of the case, was to have held his peace. In performing my work as Assistant-Surgeon to the Hospital for Women, I have sought to do my duty, and am under the patronage of no one.—I remain, sir, yours truly, JOHN BUTLER EDIS, M.R.C.S.,

Hon. Assistant-Surgeon, Hospital for Women, Liverpool.

169, Islington, Liverpool.

THE GENERAL MEDICAL COUNCIL AND THE ARMY AND NAVY MEDICAL SERVICES.

SIR,—I propose for consideration these suggestions.

1. "That one officer of the Army Medical Service and one officer of the Naval Medical Service be added to the General Medical Council, in addition to the existing official nominees."

2. "That, as the General Medical Council acts practically as a committee of the Privy Council, the status of Privy Councillors be given to the official nominees, and certainly to the President of the Council."

On the Continent, the rank of "Geheimrath" is often conferred on medical men.—Yours, etc., G. J. H. E.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PROFESSIONAL ETIQUETTE OF NEW COMERS.

SIR,—I should like your opinion on the following case. About eight years ago, seeing that there was not room for two medical men in this town, and knowing that my opponent wished to move, but could not sell his practice on account of my presence here, I made him an offer, which he accepted, and joined the two practices together, and, with the aid of an assistant, have carried them on since, the two combined not bringing in £700 a year. A few years ago, a speculating builder came to the town, bought a bit of land, and put up a few small houses and a shop or two, and also built a large house as a residence for himself; but finding his scheme did not answer, he was compelled to let the latter. For some time he tried to get me for a tenant, but failing in this, he advertised it as "suitable for a medical man," and finally met with a tenant.

1. Is it strictly honourable and professional conduct on the part of the new-comer to try to take my living away from me when there are so many practices to be bought for small sums, and when I have already bought two practices in the town?

2. Is it the correct thing for the new-comer to go round the town and be introduced to my patients by his landlord, a man who, within the last few years, has filled the positions of landowner, builder, preacher (in any chapel), auctioneer, guardian, etc. I should mention that the new-comer has called on me, when I told him I did not approve of his conduct in coming here. At that time, I did not know that he had been calling on my patients.

I shall be glad to hear what you think of the case. I dare say he has strict right on his side; but is it not a very mean way of getting a practice—especially his mode of introduction? Excuse the length of this letter, and believe me, sir, yours faithfully, M.R.C.S. and L.S.A.

*** That our correspondent, under the circumstances related, should feel sorely annoyed at the advent of a second practitioner is very natural, and a vexatious incident with which we can fairly sympathise; but, damaging as it may eventually prove to his practice, such prospective event would afford no justification to the exceptional, and, to our mind, ill-judged reception given to the new-comer on paying the customary professional visit of courtesy to the resident practitioner; in reference to which, it may be observed, that, in so acting, the latter, in our opinion, failed in his duty to himself, and in courtesy to his visitor, who had a legitimate right to avail himself, if so minded, of the alleged "opening for a medical man." If, on the other hand, the practitioner in question, in accepting his landlord's professed introduction to friends, knowingly called upon our correspondent's patients with the covert intent to enlist their professional support in place of the ostensible one of courting mutually agreeable social intercourse, such conduct would constitute a professionally improper and reprehensible proceeding.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

PUERPERAL MALADIES AND EXTRA FEES.

E have had forwarded to us a copy of a correspondence that has ssed between Mr. H. Wadams, Clerk to the Evesham Board of ardians, and Mr. H. E. Haynes, Medical Officer, of the third dis- ct, from which we learn that, on January 13th, the clerk wrote, In your account for extras for Christmas quarter, you charge £2 in e case of Elizabeth Perkins, for which I can find no authority owing the guardians to pay the same. The relieving officer states at no order was given you to attend the woman until eleven days er her confinement; and, therefore, I cannot see how you can im the fee, as the Local Government Board's orders say that the endance in midwifery, for which a claim can be made, must be in, immediately after, childbirth. If you have anything to say in the tter, I shall be glad to hear from you at once."

In reply, Mr. Haynes stated "that he claimed the fee of £2 for endance under Article 183 of the Local Government Board orders, ich says that in any special case in which long subsequent attend- ce, in respect of some puerperal malady or affection, may have been quisite, any district medical officer shall receive the sum of two unds. She suffered from white leg (phlegmasia dolens), a puerperal lady, in which long subsequent attendance was necessary."

We learn that such attendance went on over several weeks, the man living four miles away; and such attendance implied a great mber of special visits.

To this, the clerk replied as follows: "You say you claim the fee der Article 183 of the Local Government Board Orders; but this not be, as Article 182 and 183 must be read together; and unless work prescribed by the former has been done, the latter cannot oly. Article 182 provides for payment of a certain fee to the dical officer for attendance on a woman on or immediately after ldbirth. This Article goes on to provide an increased fee in any cial case of difficulty in delivery, or long subsequent attendance— t is, as I read it, attendance following the attendance on or imme- tely after the delivery. But you do not attend at all till eleven ys after the woman is confined, and therefore Article 183 cannot ly to the case, which must be treated as a case of ordinary illness. the woman had gone on all right, nothing would have been heard the case, and therefore I cannot possibly see how either of the ticles referred to can be construed to meet it."

We have given the correspondence *in extenso*, as it exemplifies in a iking manner the course followed by certain clerks to boards of rdians, sometimes through the mere love of legal "hair-splitting," t much more frequently from the desire to stand well with their rd of guardians.

In the case before us, we take a different view of the 182nd and 3rd Articles of the General Orders from that taken by this clerk. It lear to us that the 183rd was framed to meet such cases as that of legmasia dolens, an affection which, coming on most frequently ween the fifth and twelfth days after confinement, is distinctly of erperal origin, and always involves long subsequent attendance; l we also hold that the Article is to be read irrespectively of the 2nd, for in many unions, with the view to economy, the district dical officer is not called in at all except in cases of urgent neces- y, a midwife only being employed. Something similar to this, ubtless, holds in the Evesham Union, where, as our readers will member, we recently called attention to the abortive attempt made Mr. Haynes to get an increase of his miserably low stipend.

It will be further noted that the clerk contends that, if the woman l gone on all right, nothing would have been heard of the case. rtainly not; but that does not strengthen the argument on which relies to deprive Mr. Haynes of his fee, which is that, as he was t present at the birth, his subsequent attendance on this distinctly erperal ailment must be held to come within the terms of his con- ct. Again, we hold that if, as this clerk contends, Articles 182 l 183 must be read together, there was no necessity for separating m.

We would advise Mr. Haynes to forward a copy of the corre- ndence to the Local Government Board, and ask its opinion; and the Board hesitate to express its view of its own articles, return an ambiguous reply, then to try the case in the county rt; for, if the clerk's view be sustained, we are satisfied that many ilarly ill-paid district medical officers will be deprived of the fees provided by the order, and it is therefore as well that the point should be determined by some competent authority.

NOTIFICATION OF INFECTIOUS CASES.

SIR,—I have received from the clerk to the guardians of the union in which I am a district medical officer, forms headed "Notice by Medical Officer to Medical Officer of Health of Infectious or Contagious Disease," with the request that, with respect to such cases occurring in my practice, I should fill in the particulars required by the form, namely, "Name of Patient, Nature of Disease, Situation of Premises," etc., and other particulars, and forward the same to the medical officer of health of the district. I should be glad to know if the filling in and forwarding of these forms is compulsory, and if any distinction should be made between pauper and private patients in furnishing particulars of cases. —I am, sir, yours faithfully, MEDICAL OFFICER.

*** No medical man is obliged to give information as to infectious sickness in his private practice, except in cases where notification of infectious disease is compulsory under local Acts. As regards cases coming under a medical man's care in his capacity as a poor-law district medical officer, he is, of course, bound to obey the instructions of the authority which appoints and pays him. So far, therefore, as "pauper" cases of infectious disease are concerned, our correspondent has no option but to comply with the request of the clerk of the guardians; but as to any information to the medical officer of health concerning infectious cases in his private practice, this would be quite a voluntary act on his part. We do not know the date of our correspondent's appointment under the guardians; but it may be useful to point out, for the guidance of others, that under the General Order of the Local Government Board of February 12th, 1879, it is incumbent for all district and workhouse medical officers appointed since February 28th, 1879, to furnish the medical officer of health with returns of pauper-sickness and deaths, as well as to notify to him the outbreak of dangerous infectious disease.

SCARLET FEVER FROM THE COW.

SIR,—Having read the article in the JOURNAL of January 30th headed "Scarlet Fever from the Cow," and relating to an outbreak of scarlet fever in Marylebone district supposed to be caused by milk derived from a Hendon farm, I must deprecate the hasty publication by Mr. Wynter Blyth of a number of statements respecting a Hendon farm, the majority of which, I have reason to know, are based on conversations that Mr. Blyth had with Mr. Power and myself.

I need hardly say that these conversations, the primary object of which was to protect London consumers from danger, did not contain all, or nearly all, the facts that are accumulating respecting the relations of milk and scarlet fever, and submit that the public should wait for Mr. Power's report, which will embody the results of our united investigations here, before arriving at any definite conclusion upon the matter under inquiry.

Under the circumstances, I cannot but think that Mr. Blyth would have done well to confine his report to matters which came under his own observation in his own district.—I am, sir, yours very truly, JAMES CAMERON, M.D.,
Guildford House, Hendon. Medical Officer of Health, Hendon.

NAVAL AND MILITARY MEDICAL SERVICES.

BRITISH MEDICAL SERVICE.—List of Surgeons on Probation in the Medical Department of the British Army who were successful at both the London and Netley Examinations. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows.

	Combined Marks.		Combined Marks.
*Yarr, M. T.	5911	Kendall, H. W. M.	4408
Mumby, L. P.	5570	Elkington, H. P. G.	4364
Melville, C. H.	5494	Gordon-Dill, R. C.	4324
Mills, B. L.	5356	Buchanan, J. B.	4314
Rayner, H.	5184	Skerrett, F. T.	4307
Genge, R. E.	5018	Adamson, H. M.	4301
Cardew, G. S.	5006	Ramsay, H. M.	4299
Renny, C. A.	4935	Lavie, T. G.	4299
Thiele, H.	4911	Rose, J.	4271
Cocks, H.	4905	Cox, R. H.	4226
Wilson, J. B.	4877	Brown, H. H.	4191
Lee, W. J.	4849	Corkery, T. H.	4150
Black, J. G.	4818	Locker, E. H.	4142
Kearney, J.	4790	Crooke, W. R.	4018
Hennessy, F. W.	4773	Squire, W. P.	3930
Saw, F. A.	4659	Walsh, C. L.	3923
Stokes, W. B.	4489	O'Donnell, J. J.	3922
Hall, F. W. G.	4481	Hayman, S. J. W.	3893
Kennedy, A.	4413	Hayes, J. P. S.	3730
Tate, G. S.	4410		

* Gained the Herbert Prize, £20, with the Montefiore Medal and Prize of 20 guineas, the Martin Memorial Gold Medal, and the Parkes Memorial Bronze Medal.

INDIAN MEDICAL SERVICE.—List of Surgeons on Probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley Examinations. The final positions of these gentlemen are determined by the marks gained in London added to

those gained at Netley, and the combined numbers are accordingly shown in the list which follows.

	Combined Marks.		Combined Marks.
†Woolbert, H. R.	5979	Younan, A. C.	5417
Baker, G. H.	5618	Alcock, A. W.	5362
Grainger, T.	5594	Edwards, A. R.	5107
*Adie, J. R.	5487	Cadell, J. M.	4994

† Gained the Prize in Pathology, presented by Sir Joseph Fayrer.
* Gained the Montefiore Second Prize.

TITULAR RANK FOR MEDICAL OFFICERS OF THE ARMY ON RETIREMENT.

SIR,—When the authorities at No. 6, Whitehall Yard were casting about for a plan whereby the block in promotion in the Army Medical Department might be removed, and when they found, for obvious reasons, that it would never do to recommend that administrative medical officers should be removed after five years' administration, I wonder it did not occur to them, instead of instituting that wretched examination for promotion to brigade-surgeon's grade, that if they could only secure titular rank on retirement, many senior medical officers would only be too pleased to go.

We know Sir Thomas Crawford is very anxious for Senior Surgeons-Major to go; let him try if this scheme could be adopted. If successful, I make no doubt that he would even get rid of a number of most disappointed men from the department over which he presides.—I have, etc., IGNIS VIA.

TRAINING OF HOSPITAL CORPS.

VOLUNTEER surgeons will find all the necessary information and instruction for training stretcher-bearer and bearer-companies, the training of orderlies for the Medical Staff Corps, and other valuable information, in the new Manual for the Medical Staff Corps, 1885, just published by the War Office, price 2s., and which can be had of Clowes and Son, Charing Cross, or any other large bookseller.

SIR,—I shall esteem it a favour if any gentleman will give me information with regard to the duties, expenses, and mode of living, of a naval surgeon; also any other particulars that may be useful to one thinking of entering. Could a careful man save money?—I am, sir, yours, etc., M.B.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON AND ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following is a list of the successful candidates at the first examination held by the Examining Board of the Colleges in January, 1886.

Part I.—[2]Augustus H. Aldridge, Manchester; [1]Henry Andrew, St. Thomas's; [1]John Atcherley, Leeds; [1]Alfred H. Atkin, Guy's; [1]Cecil F. Beadles, University College; William E. Bennett, Birmingham; William P. Birnie, St. Bartholomew's; John W. Bowd, St. Bartholomew's; [2]Charles S. Bowker, Middlesex; Arthur M. Braund, Middlesex; [1]Charles Butler, St. Bartholomew's; Albert W. Caporn, St. Thomas's; George Carolin, University College; Herbert J. Carstairs, St. Thomas's; Raymond T. Cassal, University College; Isaac Cohen, Charing Cross; Robert J. Colmer, London; Charles E. Cornwall, St. Bartholomew's; [1]Willoughby F. Cotton, St. Bartholomew's; Alfred H. Cresswell, London; James M. Crocker, Leeds; Frederick W. S. Davies, Guy's; [2]Cecil L. Dawson, St. Bartholomew's; Robert B. Debenham, London; Robert K. Ellis, St. Thomas's; Henry L. Ewens, Bristol; Charles E. P. Fowler, Bristol; Robert H. French, London; Thomas W. F. Gann, Middlesex; [2]George F. Glinn, St. Mary's; [2]Frank A. Godfrey, London; Edward M. Goldie, University College; Harry Gordon, Manchester; James Gordon, Middlesex; [1]John H. P. Graham, St. Bartholomew's; James Hake, London; Ernest J. Hayford, St. Thomas's; John G. Henniker, St. George's; William Higgins, St. George's; Richard Hopkins, London; Gerald S. O. Howes, Guy's; [1]John C. Hughes, Guy's; Walter E. James, University College; [1]Morgan Jenkins, Guy's; Henry D. Johns, Charing Cross; Henry M. Jordan, Guy's; Arthur E. Joscelyne, London; Luigi W. Keiffenheim, Guy's; [1]James K. Kempthorne, King's College; Fredk. W. R. J. King, Middlesex; Allan R. Lacey, Guy's; George H. Lancashire, Manchester; [1]John W. Lloyd, Liverpool; Joseph J. MacGregor, St. Bartholomew's; Herbert M. Manley, Guy's; Ferdinand B. Marin, Westminster; Charles D. Marshall, University College; [2]William E. Marshall, University College; Albert E. Martin, London; William Molesworth, Bristol; Percy Thomas Naden, Birmingham; William R. Naylor, Leeds; William A. Odling, St. Bartholomew's; Oswald Osborne, London; William Penberthy, London; Herbert L. Penny, London; [2]Frederick W. Pogson, Leeds; Geo. L. H. Revill, Charing Cross; Austin E. Reynolds, University College; [2]John H. Roberts, Guy's; John M. Roberts, St. Mary's; Hougel G. Rosedale, Guy's; [1]Alfred L. Roth, Middlesex; Eusebius R. Rouse, St. Bartholomew's; Henry A. Rudyard, University College; Charles E. Russell-Rendle, St. Bartholomew's; Patrick J. Ryan, Private; Edward Rye, Manchester; Edgar S. Sanderson, London; James H. Sequeira, London; Edward W. Sharman, Guy's; Francis O. Simpson, Liverpool; William C. Smith, St. George's; Ernest R. W. Spratley, Liverpool; Frederick C. Spurgin, Middlesex; [2]Frank H. Squire, London; [1]Percy Stainsby, Leeds; Thomas W. Swales, Leeds; John Taylor, Manchester; John Terry, St. Thomas's; Felix Tinoco, King's College; Herbert Vallance, London; Francis H. M. Vanderpant, Charing Cross; Edward Y. Watson, St. Thomas's; Harry Watts, London; Frank Webb, Manchester; Frederic H. Westmacott, Manchester; [2]James A. Whistler, St. George's; [1]Charles H. White, Middlesex; Sylvester D. Willard, St. Bartholomew's; Alfred J. Williams, King's College; Robert J. Williams, London; [2]John Wood, St. Thomas's; Charles S. Woodd, St. Bartholomew's; Thomas S. Warboys, St. Bartholomew's; Walter Wright, St. Bartholomew's.

Part II.—Joseph Brearley, Leeds; Charles Butler, St. Bartholomew's; James M. Crocker, Leeds; Edmund Denison, Leeds; Alfred H. V. Duckham, University College; [4]Henry H. Fawcett, University College; Emilien E. Frossard, King's College; [3]Alfred H. Grace, Bristol; Matthew L. Hughes, King's College; [4]S. Kirkpatrick, Liverpool; Henry G. Lang, St. Bartholomew's; John W. Lloyd, Liverpool; Walter D. Macdonald, Guy's; William H. Macpherson, St. George's; Stephen L. Martin, London; [3]Robert H. Norgate, Bristol; [3]Carroll O'Sullivan, London; Edward P. Paton, St. Bartholomew's; [3]Albert E. Perry, Cork; Enrique Prada, King's College; [4]Herbert Ransome, Manchester; [3]John H. Robert's, Guy's; Harry Romer, St. Thomas's; James W. Russell, Birmingham; Cyril A. Ryde, London; John S. E. Selby, St. Bartholomew's; Benjamin P. Viret, St. Bartholomew's; Leslie H. Walsh, King's College; Frederick H. Westmacott, Manchester; [4]Augustus White, Guy's; Charles Williams, King's College; Robert J. Williams, London; John Wood, St. Thomas's; H. E. Worthington.

[1] Passed in Chemistry and Chemical Physics only.
[2] Passed in Materia Medica, Medical Botany, and Pharmacy only.
[3] Passed in Elementary Anatomy only.
[4] Passed in Elementary Physiology only.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Members January 28th, 1886.

O. A. Browne, M.B.Camb., 30A, George Street, W.; J. Limont, M.B.Edin. Newcastle-on-Tyne; J. M. Prendergast, M.D.Roy.Univ.Ireland, Victoria Australia.

Admitted Licentiates.

E. Apthorp, 51, Gurney Street, S.E.; H. C. Bartlett, Temperance Hospital Hampstead Road, N.W.; F. A. Bennett, 57, St. Paul's Square, Birmingham M. Benson, Wigan; P. C. C. Billups, 163, Friern Road, S.E.; B. M. Bond 38B, Granville Square, W.C.; E. L. Burd, 9, Gray's Inn Square, W.C.; H Burnett, Onecote, Leek; W. H. C. Candler, 40, Manor Park, Lee, S.E. G. T. Cattell, 11, Crowhurst Road, S.W.; T. H. F. Clarkson, 5, Heathcot Street, W.C.; F. W. Collingwood, 95, Manor Road, Brockley, S.E.; R. H Combes, 3, Argyll Square, W.C.; R. J. C. Cottell, 26, Cheyne Row, S.W. H. E. Counsell, Guy's Hospital, S.E.; J. Crisp, 13, Kennington Par Gardens, S.E.; E. L. De Chazal, 69, Albert Street, N.W.; H. W. Dodd Royal Free Hospital, W.C.; A. J. Drew, 77, Gloucester Place, Hyde Park W.; F. Edge, 90, Bury New Road, Bolton; O. C. P. Evans, St. Bartholo mew's Hospital, E.C.; F. C. Evill, 13, John Street, Gray's Inn, W.C. G. F. W. Ewens, Carey House, West Hammersmith, W.; E. A. Far Andover; E. Felix, 192, Shirland Road, W.; E. O. Fountain, Hillingdon Uxbridge; H. A. Francis, 5, Priory Road, N.W.; F. J. Freeland, 4, Kingdo Road, N.W.; E. C. Freeman, 21, St. George's Square, S.W.; O. F. Frol wein, Portsea; W. T. Gardner, Weddon House, Rosslyn Hill, N.W.; J. H Gibson, 40, Trinity Square, S.E.; J. Girling, 59, St. Peter's Road, E.; J. L Gostling, 36, Granville Square, W.C.; A. Green, 33, Brickell Terrace, S.E. E. C. Greenwood, 17, Highgate Road, N.W.; W. J. Greig, 54, Bernar Street, W.C.; H. E. Harris, 21, Duncan Terrace, N.; R. W. Hazell, Cap Town; A. W. Hill, 7, Vartry Road, Stamford Hill, N.; S. R. Hodge, Fern leigh, Sunnyside Road, N.; G. Hope, 15, Bramah Road, S.W.; F. B. Hulke Admiralty House, Deal; J. S. Hutton, St. Thomas's Hospital, S.E.; E. F Jones, Hyde Villa, Wrexham; H. E. Jones, 41, Trinity Square, S.E.; T. S Jones, 41, Trinity Square, S.E.; R. F. Jowers, 3, Upper Vernon Street W.C.; S. M. Káká, 3, Whitehall Gardens, S.W.; E. E. King, 34, Burto Crescent, W.C.; F. S. Le Quesne, 33, Blatchington Road, Brighton; C. F Liesching, 54, Elm Park Road, S.W.; W. A. Maggs, 16, Hanover Square W.; F. K. Mandvivala, 17, Woburn Place, W.C.; E. S. Marder, 9, St Thomas Terrace, S.E.; H. T. Marriott, St. George's Hospital, S.W.; F. G. C Martin, 644, Commercial Road, E.; E. H. Meaden, 19, Westfield Park Bristol; F. J. Morgan, Westminster Hospital, S.W.; E. J. Nixon, Worcester Cape of Good Hope; J. B. Okell, St. Thomas's Hospital, S.E.; H. C. Otway 13, Kennington Park Road, S.E.; S. W. Owen, 14, Landcroft Road, S.E. F. G. Parsons, Westfield, Lee, S.W.; E. F. Potter, 56, Berners Street, W. R. J. Reece, St. Bartholomew's Hospital, E.C.; A. Y. Reily, 42, Charlott Street, W.; A. Rigden, 231, Brompton Road, S.W.; J. A. Rigge, Grays J. S. H. Roberts, Royal Southern Hospital, Liverpool; G. H. Russell, St Bartholomew's Hospital, E.C.; M. R. Saunders, 30, Keppel Street, W.C. H. C. Smith, 12, Fitzroy Street, W.; W. J. Staddon, 159, Fentiman Road S.W.; W. H. C. Staveley, 115, Akerman Road, S.W.; J. Thomas, 56, St Peter's Street, E.; K. Totsuka, 65, Lambeth Palace Road, S.E.; N. H Turner, 13, Redcliffe Gardens, S.W.; C. H. Upham, 9, De Vere Mansions W.; J. F. Vincent, 14, Church Crescent, South Hackney, E.; S. Wache Guy's Hospital, S.E.; J. B. Webb, 28, Leigh Road South, Bristol; F. W Weir, 1, Dowry Parade, Bristol; S. W. Wheaton, 10, Church Terrace Battersea Park, S.E.; G. H. Wilkins, 134, Brixton Road, S.W.; T. H Williams, 48, Seymour Place, W.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gen tlemen, having undergone the necessary examinations for the diploma were admitted Members of the College at a meeting of the Court o Examiners on January 28th.

J. B. Webb, L.R.C.P.Lond., student of Bristol General Hospital; R. W. Bat man, L.S.A., of the London Hospital; Walter G. Earle, of University College.

Twelve candidates were approved in Surgery, and, when qualified i Medicine and Midwifery, will be admitted Members; two cand dates were referred for three months, nine for six months, and on for one year.

The following gentlemen were admitted Members on January 29th.

C. E. Adams, M.B.Lond., E. L. de Chazal, L.R.C.P.L., of University College G. S. Ware, L.S.A., of Middlesex Hospital; N. Allen, M.D.Toronto, of th University of Toronto.

Eight candidates were approved in Surgery, and, when qualifie in Medicine and Midwifery, will be admitted Members; two can didates were referred for three months, twelve for six months, an two for nine months.

MEDICAL VACANCIES.

The following vacancies are announced.

LDON, Yorks.—Medical Officer. Salary, £30. Applications to W. H. Hines, Baildon, Shipley.

MALE LOCK HOSPITAL, Harrow Road, W.—House-Surgeon. Salary, £100. Applications by February 13th.

ENDLY SOCIETY MEDICAL INSTITUTE, Northampton. — Assistant Medical Officer. Salary, £150. Applications by February 9th.

EAT NORTHERN CENTRAL HOSPITAL, Caledonian Road.—Two Clinical Assistants.

SPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by February 13th.

IRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, Margaret Street, Cavendish Square.—Honorary Visiting Physician. Must reside within one mile of the institution.

CESTER PROVIDENT DISPENSARY.—Medical Officer. Applications by February 9th.

TH HOSPITAL.—House-Surgeon. Salary, £70. Applications to the Secretary.

ERPOOL INFIRMARY, Myrtle Street, Liverpool. — Assistant House-Surgeon.

NDON SCHOOL OF GYNÆCOLOGY, Hospital for Women, Soho Square, W. —Two Clinical Assistants.

NDON TEMPERANCE HOSPITAL, Hampstead Road.—Clinical Clerks. Applications to the Secretary.

NDON TEMPERANCE HOSPITAL, Hampstead Road.—Surgical Dressers. Applications to the Secretary.

NATIC HOSPITAL, The Coppice, Nottingham.—Assistant Medical Officer. Salary, £100. Applications to Dr. Tate by February 18th.

TIONAL HOSPITAL FOR CONSUMPTION, Ventnor.—Clinical Assistant.

ENS COLLEGE, Manchester.—Lecturer in Dental Anatomy and Physiology. Applications to the Registrar by February 8th.

EEN'S HOSPITAL, BIRMINGHAM.—Two Casualty Surgeons. Honorarium, £50 each. Applications by February 13th.

GWOOD UNION.—Medical Officer of Health. Salary, £40. Applications by February 6th.

MEN'S HOSPITAL SOCIETY, Greenwich.—Visiting Physician. Applications before March 5th to W. T. Evans.

HELEN'S FRIENDLY SOCIETY MEDICAL AID ASSOCIATION.—Medical Practitioner. Applications by March 1st.

IVERSITY OF SYDNEY.—Professor of Physics. For particulars apply to S. Samuel, 5, Westminster Chambers, Victoria Street, S.W., by February 17th.

MEDICAL APPOINTMENTS.

BAZON, Henry Moore, M.B., B.Ch.T.C.D., appointed House-Surgeon to Sir Patrick Dun's Hospital, Dublin.

WNE, Oswald, M.A., M.B.Cantab., M.R.C.P., appointed Honorary Physician to the St. Marylebone General Dispensary, *vice* P. M. Chapman, M.D., resigned.

KHILL, J. G. G., L.R.C.P.Ed., M.R.C.S.Eng., appointed Junior House-Surgeon to the Stanley Hospital, Liverpool, *vice* H. C. Chapman, L.R.C.P.Lond., M.R.C.S.Eng., resigned.

ON, J. Bland, F.R.C.S., appointed Assistant-Surgeon to the Middlesex Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

MS.—On February 1st, at 184, Aldersgate Street, E.C., the wife of John Adams, L.R.C.P.Lond., of a son.

RRELL.—February 2nd, 1886, at Dagshai, near Simla, India, the wife of Surgeon-Major T. O'Farrell, M.A., M.D., Medical Staff, of a son. (*By telegraph*).

NER.—On February 1st, at Hanwell, the wife of H. Rayner, M.D., of a son.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

DAY.—Medical Society of London, 8.30 P.M. Mr. Bernard Pitts: Subperiosteal Resection in Certain Cases of Acute Necrosis. Dr. D. W. Finlay: A Case of Empyema with Cerebral Abscess.

SDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. J. Edward Squire: Enteric Fever at Suakim, with some Cases of Malarial Enteric or Typho-malarial Fever. Dr. Cayley: A Case of Thoracic Aneurysm treated by the Introduction of Iron Wire into the Sac.

DNESDAY.—British Gynæcological Society, 8.30 P.M. Specimens will be shown. Adjourned discussion on Dr. Chalmers's paper on Puerperal Septicæmia.—Epidemiological Society of London, 8 P.M. Dr. D. A. Gresswell: Chronicity and Rejuvenescence of Diphtheria in the Individual; and their Bearings upon Sustained Prevalence of Diphtheria in a Community.—Royal Microscopical Society, 8 P.M. The Rev. Dr. Dallinger will give his Presidential Address.

DAY.—Clinical Society of London, 8.30 P.M. Dr. Tyson: On Three Cases of Universal Alopecia. Mr. Bellamy: An Obscure Case of Femoral Hernia; Operation; (?) Double Reduction *en masse*. Dr. Hale White: Hysterical Pyrexia. Dr. Goodhart: Cases of Meningitis of Obscure Origin. Dr. Stephen Mackenzie: Two Cases with Unilateral Paralysis of Tongue, Soft Palate, and Vocal Cord, etc. (living specimens).

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W. 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

RETENTION OF URINE; APPARENTLY HYSTERICAL.

SIR,—The following case may be worth recording. On the morning of December 15th, 1885, I was asked to see a young man, aged 21, living a short distance from my house. On my arrival, I was informed that he had not voided urine for four days. On palpating the abdomen, the bladder was found enormously distended, reaching above the umbilicus. I attempted to pass a catheter, but failed, so aspirated, and drew off 164 ounces of urine. A draught of tincture of opium and liquor potassæ was given him, and at my evening visit I was able to pass a No. 10 catheter (English) with ease. A few days afterwards, symptoms of retention occurred again, and, knowing there was no organic lesion, I gave valerian, bromide of potassium, and strychnine, with a perfectly successful result, as the patient made a good recovery. A marked feature in the case was that, until an hour or so before my first visit, the patient complained of no pain.—Yours truly,

G. HENRY BROWNE, L.R.C.P.

The Hermitage, Brynmawr.

ARREST OF DEVELOPMENT IN UTERO.

SIR,—Mrs. G. was delivered, on January 11th, of a healthy living female child at full term; but, on my attention being drawn by the nurse to the latter, I found on examination that the left hand and part of the corresponding forearm were wanting, a stump about an inch and a half long alone remaining, resembling a circular amputation at this part; this consisted of the ulna only, the radius being absent. Can anybody tell me the cause of this freak of Nature? as I believe it is rare.—I am, etc.,

R. TIPPETTS RICHARDSON, M.R.C.S.

Frampton-on-Severn.

M. GREENWOOD.—J. Vesey Fitzgerald's *Epitome of the Laws affecting Public Health* (Waterlow Brothers); Hime's *Handy Guide to Public Health* (Baillière, Tindall, and Cox), 1884.

MORTALITY FROM ROUND WORMS.

SIR,—The letters which have appeared in your recent issues on mortality from round worms remind me of an experience of my own about ten years ago. I was asked to prescribe for a child who was said to have passed a round worm, and ordered santonine in the usual way, without result. Shortly afterwards, I attended the child through a sharp attack of pneumonia, from which a satisfactory recovery was made. About ten days after my last visit, I was asked for a death-certificate for the child, he having died suddenly. I found on inquiry that he was put to bed in his usual health, but was noticed to be restless about the middle of the night; and, on his father going to him, the child sat up, threw his arms round his father's neck, and fell back dead. On *post mortem* examination, I found the usual signs of death from suffocation, and in the trachea a round worm. In the intestines were eighteen other worms. No worms had passed by bowel from the time of my first attendance to his death, a period of about six weeks.—I remain, yours faithfully,

PHILIP BIRCH.

2, Tretower Road, West Kensington, W.

SIR,—In the JOURNAL for January 9th, among the Clinical Memoranda, there is reported a fatal case of convulsions from round worms, in Trinidad. In the sister colony of British Guiana, only about 300 miles off, such cases are not looked upon as curious. Convulsions among children, whether white or coloured, coolie or African, are so common that many parents even do not think it worth while to send for a medical man, and use local worm-remedies, as salt, pink-root, and other supposed remedies. The almost invariable rule among the older practitioners is, in such cases, to administer one to three grains of santonine, with calomel to the same amount, followed by castor-oil four hours afterwards; besides this, the warm bath, with cold applications to the head at the same time; if continuous, blisters to the neck, mustard to the feet, etc. Such was the routine in my hospitals, whether I was called or not, and our results were very satisfactory. In extreme cases, wet packing, that is, wrapping the naked body in a cold water wet sheet and packing in dry ones or blankets, was used. I have tried the bromides, chloral, chloroform, etc., and never found them of much use in such cases.—I remain, yours truly,

Strawberry Dale, Harrogate. HENRY DALTON, M.D.Edin.

STAMMERING.

SIR,—Can any of your correspondents inform me if there be a professional curer of stammering in London who gives lessons by the hour to patients? No system which professes to cure by correspondence or by manuals can be said to be thoroughly satisfactory, nor is the plan of making an audible note in expiration before each word (Broster's practice, see JOURNAL, vol. ii, 1884, p. 644) easy to carry out at home when the patient is a nervous or obstinate youth.—I am, etc.,

DEMOSTHENES.

TREATMENT OF WHOOPING-COUGH.

SIR,—Will some kind brother kindly inform me what is supposed to be the best treatment for pertussis? We have an outbreak in this small town of this disease. I have tried belladonna and the usual old remedies, but they do not seem to do much good.—Yours faithfully,

E. W. P.

RINGWORM OF THE SCALP.

IN reply to "A Member's" inquiry, in the JOURNAL of November 7th, Surgeon J. C. BATTERSBY (Trincomalee) suggests a trial of fresh goa-powder, or, better still, chrysophanic acid ointment. For the past few years, Mr. Battersby has successfully used goa-powder and chrysophanic acid ointment in the treatment of parasitic skin-diseases in Ceylon, than which he knows no country for its size where a greater amount and variety of cutaneous affections can be seen, especially among the natives.

CANDIDUS.—Yes: the qualifications are adequate.

PARISIAN.—No lectures on medical subjects are delivered in English in Paris. There are plenty of special courses in French delivered by *agrégés* and extra-mural teachers. See students' number of *London Medical Record*.

X. Y. (Lambeth).—The question is and always has been quite open for discussion. It has been prominently raised by Mr. Hutchinson, and we shall be happy to receive any further contributions to a knowledge on the subject.

Mr. P. H. EMERSON.—Yes; marked for insertion.

CYMRO.—*The Code of Medical Ethics* is published by Messrs. Churchill, New Burlington Street, London, W.

T. Y. C.—We cannot publish a request of this kind.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. J. G. S. Coghill, Ventnor; Mr. W. R. Cook, London; Mr. A. Hamilton, Glasgow; Dr. T. Churton, Leeds; Dr. J. Cameron, Hendon; Mr. F. Mason, Bath; Mr. C. J. Ireland, Tadcaster; Mr. H. Nelson Hardy, London; Mr. Hall, London; Mr. S. Watson, Cottingham; Dr. S. Lockie, Carlisle; Dr. J. J. Bailey, Marple; Mr. T. F. Hopgood, Sunderland; Mr. E. D. Bauer, London; Mr. C. E. Richmond, Warrington; Dr. Blanc, Cannes; Dr. Huggard, Davos Platz; Dr. Dreschfeld, Manchester; The Secretary of the Parkes Museum; Dr. Power, Portsmouth; Mr. F. Vicars, London; Mr. T. M. Stone, Merton; Mr. Scott, Bath; Dr. Tobin, Dublin; Mr. Pearson, Rock Ferry; Dr. W. A. McKeown, Belfast; Our Aberdeen Correspondent; Messrs. Grimaldi and Co., London; Mr. W. W. Wagstaffe, Sevenoaks; Mr. F. H. Moore, Leicester; Dr. Bowles, Folkestone; Dr. J. Rutherford Morison, Hartlepool; Mr. W. R. Toagh, Durham; Dr. Styrap, Shrewsbury; Dr. James Barr, Liverpool; Dr. Garson, London; Messrs. W. Wood and Co., New York; Mr. A. Ambrose, Bournemouth; Mr. C. G. Ethelston, Balham; Dr. W. R. Thomas, Sheffield; Mr. Gurner, London; Dr. W. Moro, London; Mr. H. W. Freeman, Bath; Sir William Mac Cormac, London; Dr. A. T. H. Waters, Liverpool; Dr. T. Maxwell Woolwich; Miss I. Thorne, Lewes; Mr. E. Edwards, London; Mr. R. Denison Pedley, London; Dr. W. J. Smith, Shipley; Associate; Mr. R. B. Wild, Withington; Dr. A. H. Bampton, Plymouth; Mr. R. Gooding, London; Mr. P. H. Emerson, Southwold; Mr. P. C. T. Symonds, London; Mr. S. B. Nason Pontypool; Dr. F. W. Pavy, London; Mr. G. Rigden, Canterbury; Dr. William Blackley, Wood Green; Dr. Sidney Martin, London; Mr. William Berry Wigan; Dr. G. E. Herman, London; Mr. Vincent Jackson, Wolverhampton Mr. Simeon Snell, Sheffield; Dr. W. L. Reid, Glasgow; Mr. Wheelhouse Leeds; Mr. Alfred Orchard, Ashby-de-la-Zouch; Dr. Lindsay, Belfast; Mr Thomas Laffan, Cashel; Dr. W. Newman, Stamford; Mr. W. G. Black, Newcastle-on-Tyne; Dr. Fancourt Barnes, London; Dr. Wilks, London; Mr. J. B Edis, Liverpool; Dr. Rentoul, Liverpool; Dr. Joseph Rogers, London; Dr. J. Kent Spender, Bath; Our Cairo Correspondent; Our Birmingham Correspondent; Dr. A. D. Macdonald, Liverpool; Mr. W. T. Jackman, Coggeshall Mr. W. Adams Frost, London; Dr. Imlach, Liverpool; Dr. J. Tatham, Salford Mr. H. L. P. Hardy, Kingston-on-Thames; Dr. E. E. Moore, Downpatrick Mr. S. D. Hine, Ilminster; Mr. A. Campbell Munro, London; Mr. T. R. Atkinson, Madley; The Secretary of the College of Surgeons, Edinburgh; Mr. A. G R. Foulerton, Ryde; Mr. A. W. Nankivell, Chatham; Mr. J. Bland Sutton London; Mr. F. W. Lowndes, Liverpool; The Honorary Secretaries of the Epidemiological Society; Mr. B. Given, Edinburgh; E. I. F. M.; Mr. C. D. S M. Palmer, Buxton; Dr. H. Hornfield, Berlin; Mr. J. F. Bridgwood, Stafford Dr. Monte, London; Mr. James Manseagh, London; Mr. R. T. Gravely London; Our Dublin Correspondent; Our Glasgow Correspondent; Our Edinburgh Correspondent; Our Liverpool Correspondent; Mr. S. Johnson London; Messrs. A. Essinger and Co., London; The Secretary of the Royal Medical and Chirurgical Society, London; The Secretary of the Clinical Society, London; Mr. W. J. Penny, Clifton; Dr. G. A. Gibson, Edinburgh Mr. J. P. Maunsell, Derby; Mr. Brown, Bacup; Mr. Shirley Murphy, London Mr. J. Startin, London; The Director-General of the Army Medical Department; Messrs. Cleaver and Sons, London; Dr. S. Enkin, London; Dr. S. Norton, Staplehurst; Dr. J. Stuart Nairne, Glasgow; Dr. J. Hutchison, Glasgow Dr. W. Armstrong, London; Mr. T. S. Watson, St. Helena; Mr. J. Warnock London; Mr. Cresswell Baber, Brighton; Mr. G. Radcliffe, Leamington; The Secretary of the Social Science Association, London; Mr. George Eastes, London Mr. J. W. Ekens, Alresford; Dr. A. W. Edis, London; Our Paris Correspondent, etc.

BOOKS, ETC., RECEIVED.

Elements of Practical Medicine. By A. H. Carter, M.D. Fourth Edition. London: H. K. Lewis. 1886.

Handbook of the Diseases of the Nervous System. By James Ross, M.D., LL London: J. and A. Churchill. 1886.

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LETTSOMIAN LECTURES
ON
SOME MOOT POINTS IN THE NATURAL HISTORY OF SYPHILIS.

Delivered before the Medical Society of London, 1886.

By JONATHAN HUTCHINSON, F.R.S.,
Emeritus Professor of Surgery to the London Hospital College.

Lecture III.

(*Concluded from page 242*).

Are there any Chronic Skin-Diseases which are due to the Inheritance of Syphilis?—The Nervous System.—Idiocy in Connection with Inherited Syphilis.—Conclusion.

Are there any Chronic Skin-Diseases which are due to the Inheritance of Syphilis?—The question which I next propose to consider is, as to whether there are any chronic skin-diseases which are caused by the inheritance of a syphilitic taint. We shall pass by those which occur in infancy; with these we are all sufficiently familiar. We know well that an infant born with this taint is very likely to display, during the first six months of life, various forms of eruption. We know also that these are usually transitory, and that, if the child survive, it will in all probability be quite free from rashes before it is a year old. In a large majority of cases, and especially in those treated by mercury, the liability to skin-eruption does not last more than a few months. It may be that condylomatous patches at the anus or on the lips may persist longer, or even originate later, but nothing which can be properly called a skin-disease is commonly seen. In inherited syphilis, we seldom witness the relapses which are common in the eruptions due to the acquired disease. We look at later periods for the results of former skin-affections, for fissures at the angles of the mouth, for little scars or pits on the face and other parts, and we value these as evidences which help our diagnosis, but we never expect to see any extant eruption. The skin may be pale, thin, abnormally soft, but it does not show any liability to inflame. I am stating broadly the general fact; I purpose now to examine the question in a little detail; to ask whether this suggested immunity applies to all periods, or only to those immediately following infancy.

Before we proceed further, permit me to remind you that the infant who inherits syphilis gets the disease in a different manner from that which obtained in the case of its parent. I hold that it is almost certain that in each instance a particulate and living virus passes into the victim's fluids. The infant who inherits syphilis does not simply take over from its parents tissues which have peculiar proclivities to disease, as in the case of inheritance of cancer, gout, or scrofula. It takes over, *plus* the peculiar tissues, a virus which is capable of multiplying in its blood, and of producing a somewhat acute febrile illness; a virus which, whilst it is active, makes its bloods and fluids contagious, but which after a time ceases to be active, and loses its contagious properties. In this important feature, the inherited and the acquired forms are alike; both pass through a definite stage of secondary symptoms; but, as regards the primary stage, they differ in a very important and possibly a very influential point. In the acquired disease, the virus in the first instance breeds in a group of epithelial or epidermic cells, whereas, in the case of the infant, there is no local breeding; but it exists, it may be in the blood, it may be throughout the body, from the first. I will assume that we are all aware that, in many cases of inheritance—perhaps almost all—there are at the time of the child's birth no signs of the disease. The virus is latent, and it appears to be necessary that respiratory processes shall have been carried on for a certain time to enable it to assume activity. Most syphilitic infants look quite well when born, and only begin to be ill at the age of a month or six weeks. At the age named, and for a month or two afterwards, they often suffer very severely. To return to my point, it is conceivable that the special nidus of first growth of the virus may have a modifying influence on its later tendencies, and that which has begun its life in mucous or cutaneous tissue may retain ever afterwards a proneness to attack these. I scarcely think, however, that this hypothesis is the correct one, for I shall have to assert presently that not only is the skin comparatively exempt from attack in the later periods of inherited syphilis, but that the nervous system in a scarcely less degree shares the immunity.

Let us ask for a moment how the skin behaves in cases of acquired disease. Well, it usually displays a general and symmetrical eruption during the secondary period, and this is usually cured by mercury, or disappears of itself. There remains, however, a great risk, even in the cases of most rapid and complete disappearance, and of most efficient treatment, that a recurrence of the eruption may occur. The patient may have a rupia which may last him a year or two, on and off, or he may have milder symptoms, which we sometimes term "reminders," amongst which psoriasis palmaris, and erythematous rings on the trunk and limbs, which come and go, are amongst the commonest. Who ever saw a child with psoriasis palmaris, or with syphilitic rupia? I am speaking, of course, of postinfantile periods. But even commoner in the adult than those which I have mentioned, though occurring at a later period, are the various forms of syphilitic lupus. These may vary in severity from the most superficial form of serpiginous erythema to the most exaggerated types of the lupoid tubercle, and they may occur at periods of many years after the original taint. As a rule, we never see such diseases in those who have inherited their taint. What I have said applies not only to the skin, but to the mucous membranes also. We do not see, in those who have taken the disease by inheritance, the ulcers in the mouth, the sore tongues, the strictures of the rectum, with which we are so unfortunately familiar in adults. I appeal to the general experience of all who have seen much of inherited syphilis for confirmation of statements. I shall now proceed to examine the exceptions to them.

First, then, let me grant that there is a rare form of lupus which is directly due to inherited syphilis. It occurs usually at about the same age as the interstitial keratitis; that is, from five years old to adult life. It differs from common lupus, and even from the forms of lupus which occur in connection with acquired syphilis, in that it is never preceded by any tubercular stage, but is from the beginning erosive, or even phagedænic. It is, in fact, a form of phagedæna, but it attacks usually the favourite position of lupus, the nose. Its progress is rapid, and it may in a few weeks destroy the whole nose, and spread upon the cheeks. I have seen a good many well marked examples of this malady, but none during the last five years, and I do not possess a single good portrait of it to show you. I have, however, several photographs which show its ravages, and the kind of scars which it leaves; these are very different from those caused by common lupus. The latter, as is well known, usually leaves a border of skin near to its margin more or less involved, it being difficult to get it absolutely well. This disease, on the contrary, heals absolutely, and the skin, up to its very edge, is left quite sound. Hence there results a puckered scar, which suggests that healthy skin had been more or less undermined, and its edges in the healing had fallen down together. This malady is never chronic. It may be cured in a few weeks by free cauterisation, and is always restrained, if not cured, by the iodide of potassium. The latter remedy is not nearly so effectual as cauterisation. In this fact, you will see an item of evidence in support of the view which regards it as a form of phagedæna rather than of lupus. Such, indeed, it is. It seldom or never recurs after once stopped, and it never leads to anything resembling common lupus. Whether, indeed, it is originally a skin-disease I am not certain. I have never seen it in its very earliest stage, and it may be that it usually commences as a periosteal or perichondrial gumma of the septum nasi. The septum is always, to some extent, involved.

By the side of this disease, which we may suitably call phagedænic lupus, and which has its exact analogue, and one far more common, in the acquired disease, we may place certain similar forms of ulceration which occur on various parts of the limbs in association with disease of the bones. Let me here remark that it is precisely in respect to the bones that the subjects of inherited taint suffer more severely than do those who have acquired it. Multiple nodes are in them very common, especially in the long bones; and a large proportion of the specimens of chronic sclerosis of long bones, so frequent in our museums, are from those who have been the sufferers from inherited taint. As a rule, the chronic periostitis which occurs under these circumstances does not lead either to suppuration or to necrosis. It leads to sclerosis and overgrowth in all directions. Sometimes, however, suppuration takes place, and the roughened bone is exposed, and may exfoliate. In these cases, a sort of secondary implication of the skin may result. As a rule, it is obviously

secondary, and is limited clearly to the region of the diseased bone; but, in some, the appearances may suggest the diagnosis of skin-disease from the extensive implication of the latter.

I show you here a portrait of a young lady from Dublin, in whom a very peculiar sort of lupus of the skin of the forehead occurred in association with periostitis. It is, however, so rare, that really I have never seen anything else exactly like it, so that I am sure you will admit that, for practical purposes, I need not dwell upon this disease.

If you ask me whether there be not some forms of psoriasis, of lichen, or of eczema, which really acknowledge a parentage in hereditary syphilis, I unhesitatingly answer, No. I know of nothing of the kind. I have seen great numbers of those who, by their teeth, their keratitis, or other conditions, could be recognised as beyond doubt the subjects of this taint, and I have scarcely seen one who was the subject of a chronic skin-disease. I never saw acne either common or in any way peculiar in these patients. In numberless cases, nervous parents, or medical men almost equally anxious, have quoted to me the fact that a child was liable to spots on the face or body, in proof that an inheritance of syphilis existed. Many a father, cognisant of dangerous antecedents in himself, has made himself miserable by suspicions of this kind, and in not a few have I seen that my most explicit assurances failed to remove his doubts. To you, I may now say that I do not remember a single instance in which I have recognised an eruption in a child after the first two years of infancy, which I believed to be syphilitic. I, therefore, feel justified now, when I am asked about eruptions when it is impracticable to examine the patient, in assuring those who consult me that, in all probability, the rash is nothing but a simple one, and that, as a matter of fact, inherited syphilis never discloses itself in that way. You will see that this observation, if it be trustworthy, is very important. I should examine, with the utmost interest, any cases produced by others, or published records, which might seem to confute it. For the present, I simply record my own belief.

The Nervous System.—In my paper introductory to the discussion on syphilis, at the Pathological Society, in 1876, I mentioned amongst the features of difference between acquired and inherited syphilis, that diseases of the nervous system were rare in the latter. This subject has, since then, received much attention. Dr. Hughlings Jackson,[1] as was fitting, led the way in a valuable paper read before the St. Andrew's Graduates' Association, in 1868, in which he recorded examples of epilepsy, hemiplegia, idiotcy, and other affections occurring in the subjects of inherited taint. Dr. Barlow also published cases, and proved to us that disease of the arteries of brain from syphilis might occur even in young children. The zealous investigation of observers such as those I have mentioned, and many others, have, however, not resulted in showing that any large number of cases of central brain-disease occur in this association. Almost all the variety of affections which we see in connection with acquired syphilis, may be met with occasionally in those who have inherited it, and in association with similar lesions. We may have meningitis, neuritis, and diseases of vessels with all their variety and consequences, but they are far more rare than in the subjects of acquired disease. Nor are we justified in all the examples of such maladies as epilepsy and chorea, when we meet with them in those who are unquestionably hereditarily syphilitic, in believing that they are necessarily in any kind of causal relation with that taint. I have Dr. Hughlings Jackson's authority for saying this. He tells me that under such circumstances he has repeatedly met with these maladies presenting no features of difference from their non-specific prototypes, and curable by the ordinary measures. Respecting epilepsy, it is, he thinks, only when it assumes the unilateral character (Jacksonian epilepsy), and is therefore presumably due to a local and cortical lesion, that we are justified in suspecting that it may be due to syphilitic changes.

The large group of nervous affections attended by neuritis and sclerosis which we encounter in the late stages of tertiary syphilis of the acquired form, appears to be scarcely represented in the subjects of inherited disease. I do not know of any case of locomotor ataxy which has been recorded as occurring in such association. I have never myself seen one, and exceedingly few of those paralyses of single ocular nerves which are common in the acquired disease. I have seen one example of ophthalmoplegia externa—indeed, possibly two—but of the more generalised disease (ataxy) not a single one. It may be plausibly objected, that the number of the subjects of inherited taint who survive to adult life is far smaller than that of those who have passed through the acquired disease; and also that we but rarely trace them up to that period of life at which ataxy usually occurs. These suggestions may be adequate to a certain extent, but do not, I think, explain the whole; and I cannot but believe that it remains a very remarkable fact that inherited syphilis does not appear to damage the tissues, and to leave them permanently vulnerable, in the way that the acquired disease frequently does. Diseases of the secondary class occur during a much more protracted period; but, when they have passed, the patients remain, as a rule, free from any tendency to other maladies. In a word, true tertiaries, such as are non-symmetrical, and serpiginous affections, are rare in congenital syphilis. Not only do we but seldom encounter disorders of the nervous system, but palmar psoriasis, chronic affections of the tongue, sarcocele, and gummata of the viscera, are alike rare. Excepting in the infantile period, congenital syphilis but rarely shortens life. It does not in any special manner predispose to anything.

Late one evening, not long ago, my servant announced that a shabbily dressed man wished to speak to me. My man would evidently have been pleased, had I obeyed my first inclination of declining to see him. I did not do so, and was rewarded for my self-denial, as on many other occasions, by obtaining a valuable clinical fact. The man brought with him his photograph of more than twenty years ago, which I had had taken in the early days of our recognition of the syphilitic physiognomy and teeth. He was then a boy aged 9, and now a married man aged 32. His features were very much deformed, and his teeth typical. I had formerly treated him for a severe attack of double keratitis, and his mother, at the same time, for a tertiary ulcer on the leg. I had not seen either of them for more than twenty years. He told me that he had enjoyed excellent health ever since, and that he worked constantly in a paper-staining business. A fear that his sight was failing him had now made him wish to see me. At first I thought it would probably be an example of progressive choroido-retinitis, but, on examination, it proved to be only aggravated myopia. Thus it appeared that all kind of activity in his taint had ceased with the attack of keratitis. I may add, in passing, that he told me that his mother also had remained perfectly well ever since her treatment. He was himself married, but had no children. It may be replied that isolated cases prove nothing, and that, after all, the lad's mother should be allowed to pair off against himself, showing that neither after acquired nor after inherited disease do remote sequelæ always follow. I have, however, had many opportunities for similar observations of the immunity in those who suffered up to the age of puberty from all other forms of disease. In nearly all cases, the attack of keratitis is the last of the phenomena.

Idiocy in Connection with Inherited Syphilis.—Idiocy in connection with congenital syphilis, is certainly not common. I have seen a very great number of the subjects of inherited taint who had attained adult life, and whose intelligence was excellent. I have at the same time seen a few in whom, at different periods of life, cerebral disorders were slow to develop, which were attended with mental derangement now and then mounting to imbecility. In one case, a lad whom I had long known as having suffered from interstitial keratitis, etc., became an inmate of Colney Hatch Asylum, and there died; but I do not know what precise form his insanity took. A girl, aged about 10, who was brought over from New Zealand quite blind with white atrophy, and in whom the evidences of inherited taint were perfectly clear, was passionate and uncontrollable in an extreme degree, and, I believe, became ultimately insane. In another case, a poor woman aged about 35, married, and the mother of a healthy child, but herself quite deaf and almost blind as the result of inherited taint, became gradually sleepless, peevish, and restless, until her condition really amounted to that of lunacy. I once had an opportunity for making a necropsy in the case of a young man the subject of inherited syphilis, who had died after very slowly aggressive symptoms of brain-failure. We found the skull considerably thickened, but did not discover any other noticeable changes.

I have seen several times, in consultation with Dr. Langdon Down, a young lady who has been for long under his care as an imbecile. Under his treatment, some of her faculties have been much developed, but she is still in many respects quite childish. She has a well-marked syphilitic physiognomy, a pair of characteristic teeth, and she has passed through a very severe attack of interstitial keratitis. The state of her eyes when I last saw her was very peculiar. She is so nearly blind that she can only just see large objects, and cannot read the largest type. In both eyes there is a little haze of cornea remaining, and the ciliary regions are dusky. In both, the pupil dilates well with atropine, and the fundus can be inspected. The conditions are, however, not alike in the two eyes. In the right, the optic disc is white and the central vessels very small, but I could

[1] See Cases of Disease of the Nervous System in Patients the Subjects of Inherited Syphilis (*Trans. St. And. Med. Grad. Assoc.*, vol. i, 1868). Nervous Symptoms in Cases of Congenital Syphilis (*Journal of Mental Science*, January, 1875).

ind no disease in the choroid ; in the left, the fundus is obscured by considerable opacity in the lens and by films in the vitreous humour. It can be made out beyond doubt, however, that, in addition to a white optic disc, there are signs of very extensive choroidal disease. These consist, not, as usual, in patches of absorption, or in changes resembling retinitis pigmentosa, but chiefly in dense round black dots and patches, which occur plentifully on all parts of the fundus without special arrangement, and resemble spots of ink on a sheet of blotting-paper. I have noted just such appearances before, in cases of brain-defect allied to idiocy. It is interesting to note that, in this case, there has never been any failure in hearing. There can be little doubt that she has been the subject of optic neuritis, but it is impossible to assign dates with exactness. She asserts that, a few years ago, she could see well enough to read, so that it is certain that there have been some aggressive changes of late years.

The precise date at which the brain began to suffer in Dr. Down's patient was not known, but it was certain that the idiocy was not congenital. It is at about the age of eight or nine that the brain begins to fail. Even in the early period the attack rarely proceeds to any high degree of intensity ; acute outbreaks are very rare. This is in keeping with what we observe in connection with choroiditis, which rarely destroys the sight, but produces, as a rule, changes only in the periphery of the fundus. Dr. Hughlings Jackson has drawn our attention to the probability that a pia-matritis may be in some sort the analogue of choroiditis, and may occur under similar conditions ; and Dr. Judson Bury has proved, from necropsies, that a state of secondary atrophy of the grey substance of the convolutions may be the result.

As a matter of clinical observation, I would suggest that it is not at all uncommon to note a slight deficiency in vigour of intellect in the subjects of infantile syphilis, but that anything amounting to dementia is certainly rare. These defects, whether very slight or more severe, are, I think, rarely aggressive, though I have known a few in which the symptoms implied slowly advancing changes. In one such, many years ago, I obtained a *post mortem* examination, and found the skull-cap thickened and sclerosed, and the brain atrophic.

It has been a matter of general remark amongst authorities on that subject, that well-marked examples of inherited syphilis are not frequently seen in our idiot asylums. Many years ago, my friend, Dr. Daniel Hack Tuke, persuaded me to visit with him the Earlswood Asylum, with special reference to this point, with the result that, as I have already said, we found only a very few who could be reasonably suspected of being syphilitic. Dr. Langdon Down subsequently, from more extended investigations, recorded a similar opinion; and only the other day, in conversation, this high authority told me that he had seen no reason to alter his opinion. In the BRITISH MEDICAL JOURNAL of January 30th, Dr. Shuttleworth, of the Lancaster Asylum, in a lecture upon the causes of idiocy, upholds the same view, stating that he had not one patient under care in whom syphilis could be suspected, and adds that characteristic teeth are rare in idiot asylums. Dr. Judson Bury, in an excellent paper in *Brain* of April, 1883, maintains a somewhat different opinion, and thinks it not improbable that there are more cases due to this cause than have been suspected. He urges the importance of taking a wider basis for diagnostic recognition, more especially the examination of the choroid. It is quite true, as I have indeed often urged, that we must not content ourselves with the inspection of the teeth. Probably only in a minority of the examples of inherited taint do the teeth show any peculiarities, and in many in which they are damaged, they are yet far from being characteristic. If we would wish to be successful in our diagnosis, we must take into simultaneous consideration the whole group of phenomena which we now know are often connected with the taint. If this were done, Dr. Judson Bury thinks that we may probably find syphilis as a cause in not a few cases of juvenile dementia.

As might have been expected from the fact that syphilitic infants are generally born with all the appearances of perfect health, we do not find congenital idiocy, whether microcephalic or otherwise, in other than the very rarest connection with this taint. It is at the same period of life that we encounter disorders of the sense-capsules, choroiditis, keratitis, deafness, and the like, that we find the chief risk to the brain, and thus the failures of intellect are to be classed rather as the dementia of children than congenital idiocy.

Case of Defective Brain, with Atrophy of Optic Discs, in association with Inherited Syphilis.—A young man, who was sent to me by Dr. Barnes, of Ewell, afforded an excellent example of the slighter form of the mental defect sometimes met with in connection with inherited syphilis. There could be little doubt that there had been in infancy a temporary condition of meningitis, attended by optic neuritis. The lad was brought to me on account of defective sight, and in the hope that he might be helped by spectacles. I found that his pupils were of unequal size, and not very active, and that he could see only $\frac{2}{8}$. He was 17 years old, and engaged in a builder's office. He had a pair of typical teeth, and a physiognomy which was fairly characteristic. There was no history of any illness that he could remember, but he had been told that he was ill in infancy. He was the eldest of his family, one older than himself having died young. His father had died, after a four years' illness, of "softening of the brain." Long before his illness, he had suffered from "headaches, which made him eccentric and of unbearable temper." It may be conjectured that the so-called softening was really due to slowly aggressive syphilitic changes. On using the ophthalmoscope, I found the optic disc in each eye very pale, and its margins indistinct. The central vessels were not in the least concealed, nor were they much diminished. Near to the disc were some groups of faintly marked minute pale dots in the choroid. None of these had any pigment at their edges. In the extreme periphery of both were ill-defined patches of similar dots, and after considerable search I found a few lines of black pigment in the retina. There were no large patches of absorption in the choroid, and the changes were altogether very inconspicuous. Still, there could be no doubt that he had experienced an attack of neuro-retinitis, and that slight changes were now in progress in the direction of retinitis pigmentosa. It should be stated that it had been observed that he could not see well by artificial light, and that his pupils dilated but little under the use of atropine. As yet, no attack of keratitis had been experienced, but probably it is to come. Nor was there any deafness. As regards his brain-condition, the lad was so nervous that I could scarcely get him to speak to me or to read the test-types. A friend who came with him told me that he was decidedly defective in intellect, and much behind other boys of his age. It was believed that his sight was slowly becoming worse.

It is, I think, not uncommon for congenital syphilis to damage, in some slight degree, the whole bodily development ; its subjects are not very unfrequently short in stature, and a shade below the average in general capacity. Sometimes there appears to be special defect in sexual development. In a few rare cases, this general defect is very marked. I have seen two or three young women (adults), the subjects of inherited taint, who were dwarfed, and had no sexual characteristics. Their mammæ were not larger than those of boys, and little or no sexual hair was present. In one such, we had the opportunity of a *post mortem* examination, and found the uterus and its appendances of extremely small size. Thus, the extreme length of the uterus was less than an inch and a half. Lancereaux has related a somewhat similar case. I have seen young men also, under similar conditions, in whom the sexual development was exceedingly slight. To what local lesion in infancy, or during intra-uterine life, we should assign such general arrests, I do not know ; unless, indeed, we conjecture that they have to do with changes which have taken place on the surface of the hemispheres. In a few, very exceptional, instances, indications of cerebral failure continue to advance with extreme slowness during life. These are probably analogous to the pseudo-retinitis pigmentosa which occurs in inherited syphilis.

Conclusion.—Had time permitted, Mr. President, there are yet many questions which I should have much liked to bring before you. For example, I should have liked to state the extremely difficult problem as to the true nature of pemphigus of infants. This affection, which attacks for the most part the hands and feet only, is a disease of the first week of life, and usually ends fatally before the infant is a fortnight old. It often carries off several infants in succession. Why should the inherited taint so deviate from rule? Why should it show its effects so soon after birth? and why should a local and not very severe skin-disease be so prone to end in death?

Another question of great interest is as to how it comes about that, whilst syphilitic infants are generally quite healthy at birth, and remain so for three or four weeks at least, yet syphilis is so common a cause of abortion. Why, if it can kill the fœtus so commonly, does it at the same time leave so many in perfect health, until the influence of open-air life has been brought to bear through a definite period? Why, if it can kill so many *in utero*, is it so infinitely rare for a child to be born showing either past or present evidences of taint? Is it the fact that, if the virus take on activity at all in the fœtus *in utero*, it almost invariably kills it? Have we for certain a state of the virus in which it is absolutely inactive, and neither retards development nor evokes local inflammations? Without doubt, in the facts to which I have adverted, we have to face a very obscure problem.

Nor is it easier to explain why one sex should suffer more fre-

quently from the results of inherited taint than the other. According to my statistics of heredito-syphilitic iritis, the proportion between the sexes is sixteen females to five males; whilst, although not so great, the disproportion is still very definite in the same direction in the case of interstitial keratitis. A re-examination of these facts, and the collection of evidence on a larger scale, might possibly disclose some higher law, of which as yet we have no suspicion.

In referring to the re-examination of facts, I may perhaps be permitted to mention certain classes of facts which it is very desirable to collect. They are chiefly of a character which can be obtained only by those engaged in family practice. Our knowledge respecting some of the most important moot questions as to the natural history of inherited syphilis would be much helped, if all who came across cases belonging to any of the following categories would carefully record them.

Cases in which twins, one or other, or both, suffer from inherited syphilis. They should be followed up through as long a period as possible.

Cases in which women acquire syphilis during pregnancy: with especial attention to the question of the freedom of both parents from any former taint. In these cases, it is desired to ascertain the effect upon the previously healthy fœtus of syphilis acquired by the mother at different periods of pregnancy.

All exceptions, or apparent exceptions, to Colles's law (that a sucking child cannot infect the nipple of its own mother).

All instances of children born alive with indications of syphilis upon them.

All cases of pemphigus infantum, or of other syphilitic eruptions, making their appearance during the first week of life.

And now, Mr. President and gentlemen, in conclusion, I have to thank you all heartily for the kind attention with which you have listened to my lectures. I have also to express my sense of indebtedness to those, not few in number, nor deficient in repute, who have added to the value of what I have said by the comments and new facts which they have published in the journals during the last few weeks. For the most part, the letters to which I refer have given support, not unneeded and often valuable, to the opinions which I have expressed. In other cases, where the comment has been more or less critical, I desire to take this opportunity of saying that I am equally grateful and desirous of profiting, but that at the same time I shall ask to be excused from controversy. On the difficult subject of the relationship between the infecting and non-infecting sore, I observe with regret that I have failed to make my meaning clear to all. I am willing in this failure to take a share of the blame, but only a share, for really I did my best.

This is, I believe, the third or perhaps the fourth time, that your Lettsomian lecturer has taken for his topic some subject in connection with syphilis. In 1859, Mr. Victor de Méric, in 1873, Mr. Lee, and in 1874, Dr. Broadbent, dealt with subjects more or less identical with those which I have ventured to discuss. In apology for what I have felt to be almost presumption in attempting to supplement the work of such men, I must allege the boundless and perennial interest of the subject. Nor will this be the last time, I trust, by many that the study of syphilis will engage the mind of your lecturer. We are as yet but on the threshold of its investigation, and discoveries of great importance await, I doubt not, the industry of observers yet to come. If in any small degree their labours should be helped by hints thrown out in the short course of lectures which I now close, my task, which has already had its pleasure in your approval, will then have received also its abundant reward.

[At the conclusion of the lecture, which was warmly applauded, it was proposed by Mr. Wm. Adams and seconded by Dr. Stephen Mackenzie that an expression of thanks be accorded to Mr. Hutchinson for his great and original research on the interesting and difficult questions which he had treated; further, to express the wish of the society to see them published in book form. After a few congratulatory remarks by the President, the proposition was adopted unanimously.]

PRESENTATION.—Mr. Oded Lowsley, of Reading, has been presented with a clock and a pair of bronze ornaments, the former bearing the following inscription:—"This clock, together with a pair of bronze ornaments, was presented to Oded Lowsley, Esq., M.R.C.S., L.S.A., by upwards of six hundred patients and a few friends of the Reading Medical Dispensary, upon his retirement from the position of one of its medical officers, and in remembrance of his kind and skilful treatment during a period of eleven years."

OBSERVATIONS
ON
THE PRACTICAL USES OF LANOLIN.

BY OSCAR LIEBREICH, M.D.,
Professor of Materia Medica in the University of Berlin.

FROM my investigations of the composition of the cholesterine fats found in keratinous tissues, I conjectured that the absorption into the skin would be best in the case of those fats which have their origin in keratin-bearing substances, as hair, epidermis, etc. The old theory, that the skin was only oiled from glandular secretion, did not harmonise with my research; and lanolin, upon my suggestion, is now being tested as to its efficacy in therapeutics as a new basis for salves and ointments. It possesses such peculiar properties, also noticed by Berthelot, that it becomes a matter of necessity to give a number of formulæ, in order that the druggist may more easily compound and dispense the remedy. It is also of importance to add other ingredients to make it more pliant, as it is a too sticky mass in itself to be employed alone; and, from the many trials which I made with different substances, as vaseline, paraffine, ointment, glycerine, oils, and fat for this purpose, I found the latter by far the best, as the others generally interfered with the absorbing qualities of lanolin.

I must also state that the many substances, under the name of pure wool-fat and wool-oil, which have found their way into the trade before and since the introduction of lanolin, are injurious, as they contain free acids and various animal substances.

I shall not fail to publish, in the near future, its more exact chemical composition; but for the present I may suggest the following tests for its purity in therapeutics.

1. A small quantity, on being heated in water over a water-bath, must show the absence of glycerine.

2. If a solution of caustic soda be added, ammonia must not be developed.

3. The fat, if a small portion be heated with water on a water-bath, must separate in oily drops without producing an emulsion. If the quantity employed be large, it must separate as a clear oil.

4. With blue litmus-paper, the reaction must not be acid.

5. For examination, if it be mixed or well rubbed with water upon a ground-glass plate with an iron spatula, the result must be a product containing over 100 per cent. of water; and, if the lanolin employed be pure, the kneaded mass will be sticky and paste-like, to which the spatula readily adheres, but, if impure, the mass will have a soap-like smoothness, from which the spatula readily glides.

6. On exposure, the upper surface of lanolin and all lanolin salves and ointments becomes darkened, due to the evaporation of water, and not to its decomposition.

7. It never becomes rancid, and its smell should remind one of wool.

My experience with the remedy, with that of other physicians, has been but limited, yet I do not hesitate to pronounce the results so far obtained most promising.

The first question which presented itself was, whether the skin would bear it well. From its use, in over 400 cases, in the hospital and private practice of Dr. Lassar, the dermatologist, no irritation of the skin was ever produced, a result which my own experience, during the years in which I have been experimenting with it, confirms. For this reason alone, it is to be highly recommended for massage, for which purpose I should suggest the formula No. 11.

It is true it is not as smooth as vaseline, but it has the advantage that the skin, after being rubbed dry with a cloth, still remains soft and pliable.

In cases where the epidermis is fissured, as, for instance, in chapped hands, the following recipe may be advantageously employed: that is, No. 11.

The parts affected, particularly the hands, are to be well washed with some good soap, and then to be thoroughly rinsed with water. Upon the moist surface a small quantity of the ointment is to be well rubbed in, and the parts afterwards to be wiped with a dry towel. The skin is left soft and supple, on account of the rapid absorption and retention of the lanolin; and, what is more remarkable, the hands are not greasy, yet the water flows from them as if oiled. Accordingly, it may be especially useful for the hands of surgeons

and obstetricians. Hands thus treated show a greater resistance towards cold and water.

The influence produced upon the skin in seborrhœa sicca is remarkable. On combing the hair with a fine comb, the scales disappear rapidly. For this purpose, I should employ prescription No. 21, which may be somewhat varied according to the taste of the individual.

In pruritus ani, I have used lanolin with sulphur, with admirable results.

Dr. Lassar, in his polyclinic for skin-diseases, has found that psoriasis heals very easily and quickly, and without irritation, through the use of a 25 per cent. lanolin-chrysarobin ointment. It remains for the future to determine whether in all cases equally favourable results will be reported.

In connection with the lanolin-chrysarobin treatment, I had the opportunity of seeing an interesting and remarkable result obtained by Dr. Wende, of Buffalo, New York. The patient, a boy aged 13 years, from the polyclinic of Dr. G. Behrend, had tinea favosa over the greater part of his head. The case was of eight years' standing, and had resisted the most careful and thorough treatment. It was shown that the case was undoubtedly favus by Dr. Grawitz, assistant of Professor Virchow, who made a pure culture of the fungus, of material obtained from the head of the boy, and inoculated it on the left arm of Dr. Wende, where the most characteristic scutules appeared.[1] At first, only one-half of the head was treated in this manner. After a few applications, it showed marked improvement; and the advance was so rapid, that it was decided to treat the remaining half in a similar way. In twelve days, the case was apparently cured, and the treatment was for the present discontinued. The favus on the arm of Dr. Wende disappeared upon one application of a 10 per cent. and one 20 per cent. lanolin-chrysarobin ointment. Dr. Wende further informs me that a radical cure in herpes tonsurans, and in pityriasis versicolor, was produced with a 10 per cent. ointment.

Such fine results further illustrate how great a benefit was conferred by Squire upon the medical profession through the introduction of chrysarobin. Dr. Lassar employs salicylic lanolin in the treatment of eczema. This may answer well in many cases; but, inasmuch as water is not always tolerated in eczema, Dr. Wende recommended formula No. 3, the water to be expelled before applying. Lanolin is excellently adapted to form the basis for blue ointment; the mercury is found more minutely divided than I have ever before witnessed. Upon my request, my friend Geheimrath Mayer, in Aix-la-Chapelle, in connection with Geheimrath Brandis, made a thorough test of it. They consider it superior to other vehicles for this purpose. In no case did it show an inclination to produce eczema.

As can be seen from the formulæ, no fat is required in compounding salves where fluid extracts are used; but I must especially warn against employing the full dose of toxic agents, as only one-half the dose is necessary. Thus a veratrine salve, consisting of fat 10 grains, veratrine 0.25 grain, produced no irritation on the skin; while a salve of lanolin 10 grains, veratrine 0.25 grain, was so strong that for five hours an intense burning sensation was perceptible on and about the point of application.

I annex the following formulæ, which may be changed by the physician, as necessary.

1. ℞ Argenti nitratis partem 1; lanolini partes 9. This ointment is somewhat solid; good to be spread on charpie.
2. ℞ Cerussæ partes 30; adipis partes 10; lanolini partes 60.
3. ℞ Emplastri plumbi simplicis partes 50; olei olivarium partes 20; lanolini partes 30. This salve appears solid, but becomes pliant as soon as brought into contact with the skin. In eczema, it should be heated until the water has evaporated.
4. ℞ Emplastri plumbi simplicis, lanolini partes æq. As an ointment, this form is too solid, but useful as a plaster.
5. ℞ Hydrarg. præcipitati albi partes 10; adipis partes 10; lanoli i partes 80.
6. ℞ Hydrarg. oxydati partes 10; lanolini partes 90. When used as an eye-salve add 30 per cent. of fat.
7. ℞ Liquoris plumbi subacetatis partes 8; adipis partes 10; lanolini partes 80.
8. ℞ Zinci oxydi partes 10; adipis partes 10; lanolini partes 80.
9. ℞ Cinnabar partes 10; adipis partes 10; lanolini partes 80.
10. ℞ Hydrargyri partes 50; lanolini partes 12; unguenti hydrarg. cinerei partes 2.5; sebi ovilli partes 25; lanolini partes 87.5, according to the formula of Dr. Dieterich.
11. ℞ Potassii iodidi partes 20; aquæ partes 10; adipis partes 20; lanolini partes 150.
12. ℞ Cetacei partes 10; olei olivarum partes 30; lanolini partes 40; aquæ rosarum partes 50.
13. ℞ Iodoformi partes 10; adipis partes 10; lanolini partes 80.
14. ℞ Chrysarobini partes 10 and 20; adipis partes 10; lanolini partes 80.
15. ℞ Picis liquidi partes 20; lanolini partes 80.
16. ℞ Balsami Peruviani partes 10; olei terebinthinæ partes 20; lanolini partes 70.
17. ℞ Acidi boracici partes 10; adipis partes 20; lanolini partes 70.
18. ℞ Acidi carbolici partes 5; adipis partes 5; lanolini partes 90.
19. ℞ Acidi salicylici partes 10; adipis partes 20; lanolini partes 70.
20. ℞ Naphthol partes 5; adipis partes 10; lanolini partes 85.
21. ℞ Lanolini, butyri cacao, āā partes 50; adipis suilli partes 5; olei rosarum gr. iij: a hair-pomade.

[1] A full account of the case will be published by Dr. Wende.

ABSTRACTS OF ERASMUS WILSON LECTURES ON EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

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Lecture I.—Correlation and its Effects.

Darwin's greatest disciple in this country, Professor Huxley, has enunciated the principles of evolution in the form of three laws. Firstly, there has been excess of development of some parts in relation to others; secondly, certain parts have undergone complete or partial suppression; and, thirdly, certain parts, which were originally distinct, have coalesced. Huxley uses the term "law" as a general statement of facts ascertained by observation. A good example for the illustration of these laws is the female generative organs. Many forms—for example, the cirripedia, land-mollusca, etc.—are provided with male and female organs, constituting hermaphroditism. Ascending the scale of animated beings, we find, although every animal possesses, at some period of embryonic life, male and female organs in a potential form; yet, normally, one set—either those peculiar to the male or those peculiar to the female sex—gain the ascendency. This serves as an illustration of the first law; that is, there has been an excess of development.

Associated with this excess, we find suppression, or more or less complete disappearance of the opposite set of organs. Thus we obtain an excellent illustration of the second law. In the ichthyopsida (fishes and batrachians), and in sauropsida (reptiles and birds), the female generative ducts are, for the most part, represented by oviducts (Müllerian), quite separate, although in birds one usually disappears. In mammals, the representatives of the oviducts fuse in the middle line through a greater or lesser extent, and constitute a median uterus. This illustrates the third law, or coalescence of parts originally distinct.

My object in these lectures is to endeavour to show that the structural aberrations of animal bodies of which pathological anatomy takes cognisance follow the same laws, which, when expressed in the terminology peculiar to that science, may be reduced to two:

1. Correlation { (*a*) Hypertrophy. (*b*) Atrophy.
2. Coalescence.

Correlation leads to abrogation of function, and gives rise to rudiments; these rudiments, or remnants, may serve as the germs of origin of many forms of cysts and neoplasms.

To anyone who has devoted serious attention to the matter, it must be evident that the term hypertrophy has come to be used by pathologists, physicians, and surgeons in an exceedingly indefinite manner, to include almost any kind of enlargement of the organs, limbs, or bones of the body, without that careful attention necessary to discriminate between simple overgrowth, functional enlargement, or increased size, the result of adventitious elements in the part affected. True hypertrophy may be defined as "the enlargement of an organ beyond its usual limits, as the result of increased function, or of some unusual condition of the corresponding or correlated organ." Before proceeding to discuss the question, it will be well to illustrate the definition

with an example. Every known vertebrate normally possesses two kidneys, a right and a left one. In the case of the fowl, whose left kidney is here shown, the right one had, from some cause or other, entirely disappeared. Nothing but the ureter remained to inform us of the previous existence of the associated kidney. Such a case as this is by no means rare; I have seen it in five instances in man; also in sheep, oxen, horses, and twice in birds. The important fact in these cases is this: in all instances of single kidney, the size and weight of the persistent organ far exceed these of the normal, and in the majority of instances it is double the usual size. The kidney, in consequence of the loss of its fellow, has had to perform twice the amount of work usually required of it, and has doubled its bulk in consequence of this increased functional activity.

Similar changes have been described in the lung, in the testicle, and other organs.

Let us now consider some examples of simple overgrowth, as compared with true hypertrophy. Dermal organs supply us with many examples. In old bedridden females it is no unusual event to find the nail of the great toe enormously overgrown, and in texture, as in appearance, resembling a ram's horn. In animals living in confinement, it is no unusual thing to find the hoofs three times their usual length, or the claws of birds enormously elongated. The beaks of parrots, peacocks, pheasants, partridges, etc., are extremely liable to this abnormal growth, on account of deficiency of usage. I have seen one of the claws of the two-toed sloth describe a complete circle.

The same kind of excessive growth may also be studied in those mammals whose teeth grow from persistent pulps. If there be accidental displacement of the teeth in their sockets, or loss of antagonism from fracture of the tooth or of the jaw, the unaffected tooth or teeth will grow unduly, in some instances re-entering its own pulp-chamber: or it may even describe two and a half circles. All such cases as these are loosely alluded to as examples of hypertrophy, but, as a matter of fact, they should be regarded as instances of simple overgrowth. These cases will occupy our attention later.

Bones are exceedingly liable to enlarge, and it is necessary to exhibit extreme caution in determining whether a given specimen is an example of hypertrophy or of simple overgrowth, or enlarged as the result of inflammation. Very many cases described as hypertrophy are no more worthy the designation than the enlarged sural muscles, characteristic of that remarkable disease, pseudo-hypertrophic paralysis.

The following will serve as a type-specimen of what I consider true hypertrophy. An old man fractured his tibia, and, though he lived for ten years afterwards, the fracture never united. When he died the body came under my observation; and, on dissection, it was found that, so far as actual thickness of the shaft was concerned, the fibula opposite the fracture had the best of it, for the tibia in the neighbourhood of the injury had undergone atrophy, but the fibula, in consequence of increased function, had hypertrophied, exceeding its normal thickness two and a half times.

In no structures of the body can hypertrophy be studied better than in muscular tissue, whether of the voluntary, involuntary, or cardiac variety. With regard to the heart, illustrative specimens are to be found in every pathological museum of any pretension. The urinary bladder, when stricture of the urethra or calculus impedes the free flow of urine, submits to this sanitary process. The same changes may be seen in the gall-bladder; and the various stages of hypertrophy may be traced with great precision on that remarkable mill of many birds—the gizzard.

Corns are interesting examples of hypertrophy, resulting from intermittent pressure, and their anatomy is well known. There are one or two varieties of epidermal thickening which occur in animals, well worthy a few moments' attention. In some monkeys, especially the group Cynomorpha, which includes the baboons and macaque monkeys, there exists over each tuber ischii a naked pad of dense callous skin, known as the ischial tuberosities, upon which the body rests when in a sitting posture. Now, a corn upon the hand or foot is a pathological production beyond dispute; ischial callosities are, in structure as well as in function, corns. Ischial callosities differ from corns only in the fact that they are inherited; but, as I shall take occasion to show later, pathological defects may be inherited as well as any other peculiarity; hence the view is forced upon me, that ischial callosities are pathological productions which have been transmitted so as to become race peculiarities.

This opinion is materially strengthened by the fact that dogs, cats, and other carnivora possess five corns, in the shape of callous pads, on each of their paws; and, under the influence of lesions of the spinal cord, these callous pads may become the seat of perforating ulcers.

Up to this point, we have chiefly devoted our time in indicating the points which guide us in distinguishing simple overgrowth from true hypertrophy; we must now consider the relation, often of the most intimate kind, which exists between hypertrophy and atrophy. It is a thoroughly established physiological fact, that those organs which are in most constant demand are richly supplied with blood; hence function and blood-supply are inseparably united in producing hypertrophy. This was well illustrated in the case of the kidney first considered. The work of purifying the blood had been previously shared by two kidneys, but now, the right one having disappeared, increased work and increased blood-supply affected the remaining organ, and it hypertrophied to meet the requirements of the organism. Thus there has been a diversion of the nutrient stream, and this is largely brought about by the extreme plasticity of the arteries. Coincident with the enlargement of an organ, the nutrient arteries undergo commensurate development, and lead still further to a diversion of the nutrient stream, which, in many instances, is detrimental to some other organ.

We all bear in our legs a striking example of the truth of this statement. In man, the tibia, as compared with the fibula, by weight is as four to one; if sections be made of the leg of a fœtus at the third month, it will be seen that the transverse section of the fibula is not very much smaller than a corresponding section of the shaft of the tibia. If we examine the legs of the *Menobranchus*, which simply uses its legs as paddles, we find the two bones of equal thickness; but when the water-animals began to take to the land, the weight of the body was far more conveniently transmitted to the ground by one bone than by two; increased function leads to increased blood-supply, and the tibia grows in size, in fact, hypertrophies. The hypertrophy of the tibia, by causing diversion of the blood-stream, leads to atrophy of the fibula; at least, that is how my study of the question leads me to decipher the matter. Nevertheless, so truly does the fibula obey the great law of heredity, that, in the fœtus, it does its best to indicate to thoughtful minds its former eminence. We must also remember that in aquatic mammalia the fibula is often no mean rival of the tibia. The relation which exists between hypertrophy of one organ and the atrophy of some associated organ, may be conveniently termed correlation; and I shall now adduce evidence in support of an opinion that the division of animals into those that are males and those that are females is a consequence of this remarkable law.

Many anatomists are of opinion that hermaphroditism is the primitive condition of the sexual organs.

Hermaphrodites are found in every group of the animal kingdom, but, except in some of the lowest forms, self-fertilisation is wholly exceptional. Concerning this matter, Darwin makes the following observation. "Turning for a brief space to animals, various terrestrial species are hermaphrodites, such as land mollusca and earth-worms; but these all pair. As yet, I have not found a single terrestrial animal which can fertilise itself." The rule in hermaphrodites appears to be this: The male organs in one animal are used to impregnate the female organs of another, or *vice versâ*. From this arrangement, it would easily come to pass that, if one animal used the male portions of its reproductive organs more freely than the female parts, they would, as a result of increased function, undergo hypertrophy.

In the first portion of this lecture, I emphasised the fact that any marked degree of hypertrophy in one organ nearly always leads to dwarfing of the correlated organ or set of organs; hence, in the example considered, the female portions of the hermaphroditic organs remain dwarfed, or *in statu quo*. This peculiarity would, in the natural course of events, be transmitted to the offspring, until at last the differentiation attains such a high degree that, unless hypertrophy of one set of organs occur in each individual, propagation is impeded. Evidence on this point is afforded by the ontogeny of any mammal. Whilst the two sets of reproductive organs, male and female, up to a certain point maintain the same degree of growth, it is impossible to determine the sex of the embryo. As soon as one set begin to enlarge at a greater rate than the other, the sex becomes pronounced. The remaining organs may eventually disappear, or exist in such a rudimentary condition as to be discerned only by the most diligent search.

In the invertebrate form, *Myzostomum*, which occurs as a parasite on the arms of feather-stars, the majority are hermaphrodite. It has recently been discovered by Dr. von Graaf, whilst working over the *myzostomida* collected by the *Challenger*, that, in certain species which occur in pairs in single cysts, one would find the male organs only functional, the other the female; and it is possible to trace every stage, from typical hermaphrodites, up to forms where the individual may be classed as a male or a female. Somewhat analogous conditions were detected by Darwin in the case of the barnacles, but the conditions in these animals are even more remarkable than in the myzostomida,

for the males in this case are minute animals attached to the female, and often difficult of detection. In these complemental males, the entire organism is modified for sexual function; for, as Darwin describes it, there is no mouth, no stomach, no thorax, no abdomen, no appendages, no limbs of any kind, yet all these parts are represented in the female. It seems to be simply a bag of spermatozoa, furnished with a few muscles, an eye, the pupal antennæ, and a proboscidformed penis, which, when uncoiled, is equal to eight or nine times the length of the animal. Darwin's observations have recently been confirmed by Professor Hoek's observations on the cirripeds collected by the *Challenger*.

Among mammals, the most striking examples of the peculiar value of hypertrophy must be mentioned, the curious malformed generative organs which occur in the cattle known as "free martins." Hunter carefully investigated the condition of the reproductive organs in these cases; and the valuable dissections he made, now in the Hunterian Museum, are striking monuments to his inquisitiveness in this matter. Careful comparison of the detailed descriptions of the dissections of these malformations, and similar cases of sheep and goats which have come under my observation, show most conclusively that in these cases we have to deal not with any one malformation common to all examples of free martins, but rather with instances in which both sets of organs have attempted to attain a functional condition, with the result that both have failed to reach it. In some of these cases, the Wolffian ducts have advanced many stages towards making a fairly complete set of efferent ducts for the testicles, and the calf approaches somewhat to a bull-calf. In other instances, the Müllerian ducts have made great progress, and a diminitive uterus can be made out, and in this case the calf most resembles a cow-calf. Between these two extremes, there is every gradation and variety. Similar cases occur in fishes, reptiles, amphibians, birds, etc. I have seen many cases, and numberless instances have been recorded out of curiosity.

These cases show most conclusively how impossible it is for both sets of reproductive organs to attain a functional condition in the same individual. Hypertrophy of one set must arise and establish preminence over the other.

The facts on which the argument rests, that hypertrophy is one of the causes of division of sexes, may be summarised as follows.

1. In the lowest forms of animal life, hermaphroditism is the prevailing condition.

2. Cross-fertilisation in hemaphrodites is the rule, and may, as in some of the *myzotomida*, lead to a division into sexes within the limits of a single group.

3. Sporadic cases of adult hermaphroditism are far more common in the lowest forms of life.

4. If in mammals both sets of organs grow concurrently, the individual is sterile.

5. Both sets of organs grow equally to a definite period in embryonic life.

6. Reproduction of vertebrata, so far as is known, is impossible, unless hypertrophy of one set of organs occur.

Among other remarkable examples of the wonderful correlation which exists between hypertrophy and atrophy, must be mentioned the disappearance of gills in all forms above the ichthyopsida (fishes and amphibia). Balfour has pointed out that the allantois can be regarded in no other light than that of an enormously hypertrophied urinary bladder, which, having become a vascular sac, assumed the functions of respiration in the embryo. Hypertrophy of one organ, or set of organs, leads invariably to atrophy of some other organ. Before the work of embryonic respiration was performed by the allantois, many and various contrivances existed for the performance of this important function; for example, by means of external gills, the tail, and vascular adhesions of the yolk-sac; but, when once a functional allantois appears on the scene, all these methods are rendered obsolete, and gills for ever disappear.

It is to be hoped that the examples of what should be considered as hypertrophy, as compared with simple overgrowth, have been sufficiently convincing to impress upon my audience the importance of the distinction. Viewed in this light, hypertrophy shows itself to be a process of extreme beauty, utility, and interest, especially so when we reflect that the same process which enables one kidney to recompense the organism for the loss of its fellow, is only an instance of the method by which the tibia has outgrown the fibula. The disappearance of gills in all forms of vertebrates above ichthyopsida (fishes and batrachians) has been brought about by the allantois. The division of reproductive labour and the institution of sexes, and many other equally important results, are the effects of the indisputable correlation which exists between hypertrophy and atrophy.

Let us now proceed to consider certain examples of simple overgrowths which appear to have been transmitted so as at length to become race-characters. In no structure is this so admirably illustrated or so easily studied, as in the teeth of mammals. I have already referred to those instances of teeth which grow from persistent pulp, and, from lack of antagonism, occasionally exceed their normal dimensions many times, describe circles, re-enter their own pulp-chamber, or even penetrate the skull of their owner, and bring about death.

One of the most remarkable forms of dentition among mammals is that of the Babirussa. The extraordinary canines of this animal have afforded plenty of scope to imaginative minds to account for their strange mode of growth. These teeth grow from persistent pulps; and it may easily be conceived that, from some cause or other, the upper and lower canines failed to antagonise each other, and in consequence became enormously elongated. This abnormality frequently recurring, the peculiarity became transmitted to the offspring, eventually becoming perpetuated as a common feature in the males of this particular species. This isolated case does not carry much weight, but it must be remembered that, in all members of the pig-family—the common boar, the peccary, the wart hogs, the hippopotamus, as well as the babirussa—the canines have a great tendency to overgrowth, and to describe circles. Thus, in the wild boar, the upper canine is slightly curved; in the wart-hog, its curve is very extensive, and clears for some distance the upper lip; whilst, in the babirussa, the curve is so exaggerated as to pierce the upper lip. Hence the careful consideration of these facts forces me to the conclusion that these peculiar canines were brought about in the first instance as an example of overgrowth due to loss of antagonism, and the defect has been transmitted to the offspring. The remarkable teeth of mesoplodon, the narwhal, and other of the cetacea, are probably examples of the same process.

Lastly, when considering hypertrophy, it was shown that this process led to dwarfing of other organs associated with the enlarging organ, in that it led to diversion of the nutrient fluid. This is well shown in the teeth, for in all cases the teeth which are immediately adjacent to these overgrown examples are, as a rule, the smallest functional teeth possessed by the animal; and in very many cases they fall out early, and in some instances are suppressed whilst yet embryonic, and never appear above the gums.

A CASE WHERE LITHOTOMY WAS TWICE PERFORMED WITHIN FOURTEEN MONTHS: WITH REMARKS ON THE RECURRENCE OF STONE IN THE BLADDER.

Read before the Liverpool Medical Institution.

By REGINALD HARRISON, F.R.C.S.,
Surgeon to the Liverpool Royal Infirmary, and Lecturer on Clinical Surgery in the Victoria University.

Cases of recurring stone in the bladder, requiring removal by lithotomy, are sufficiently rare as to need no apology for their narration. The particulars of this instance are as follows.

Thomas S., aged 62, was admitted into the Royal Infirmary in July, 1884. He had suffered from symptoms of stone for some months, and, on examination, it was found that he had more than one calculus in the bladder. The prostate was large, and impeded the easy introduction of the necessary instruments for sounding and exploring. Under these circumstances, I selected lithotomy, with the view not only of removing the stones, but of improving the prostatic urethra by the method I have already described ("On the Treatment of certain Cases of Prostatic Obstruction by a Section of the Gland," *Trans. International Medical Congress*, Copenhagen, 1884). On July 25th, 1884, I performed lateral lithotomy, and made a free section of the prostate, which, by the elevation of its floor from hypertrophy, rendered access to the bladder difficult. I removed two and a quarter ounces of stone, which broke in extraction; allowing for portions that were lost during this piece-meal removal, the stones must have weighed nearly three ounces. They were composed chiefly of phosphates, but with some urates. The bladder was then carefully explored, both with straight and curved forceps, and with the finger, and, finally, was well washed out with the pipe of a Higginson's syringe passed in through the wound. The section of the prostate referred to rendered these various manipulations quite easy. One of my bladder drainage-tubes was introduced. There was some free oozing after the operation, requiring a plug of lint soaked in turpentine to be inserted by the side of the tube. The

patient made a good recovery. The bladder-drainage-tube, which was retained for the purpose of rendering the section of the prostate permanent, was changed several times, but was not finally removed until six weeks after the operation. The patient left the infirmary shortly afterwards, apparently well, but with a sinus through which urine passed in small quantities. Considering the time the drainage-tube had been retained, I did not attach any importance to this; and, guided by other experiences, assured the patient that the wound would soon heal.

After leaving, though he returned to his work, his bladder never quite recovered itself; the wound did not entirely close, and he suffered more or less at times from cystitis. This led me to think the bladder was sacculated, but I could detect nothing more. In August, 1885, my house-surgeon, Dr. Bristow, sounded him, and thought he felt another stone. On a subsequent examination, I confirmed this diagnosis; and, on September 12th, 1885, I again performed lateral lithotomy for him on the old line, in the course of which there was a small sinus remaining from the previous operation. Surgeon-General Mackinnon, C.B., and Dr. Frank, of Cannes, were present. The operation was perfectly easy, the access to the bladder being greatly improved; for, on this occasion, the largest staff could be readily passed. I removed a stone, which, with its encrusting shell of friable phosphates, weighed one ounce. A double bladder-drainage-tube was inserted, and retained for a few days. The patient was up on the twenty-third day, and left the infirmary exactly five weeks after the operation, with the wound soundly healed, and all the functions of the bladder entirely restored. He has since reported himself as remaining quite well. There is now no prostatic bar nor residual urine.

I was somewhat puzzled at first to explain satisfactorily the course of events in this case. I have mentioned the various processes employed at the first operation, so far as improving the entrance into the bladder was concerned, for the purpose of showing how thorough an examination of the viscus was necessarily made, both by the finger and by different kinds of instruments. It seemed almost impossible that a stone, however sacculated, could, under these circumstances, have escaped detection. Still, on the other hand, considering that the wound never entirely closed after the first operation, and that, in the interval, the patient was never free from signs of vesical irritation, it seemed probable that the whole of the stone had not in the first instance been removed. A careful examination of a section of the stone itself further convinced me that this was the case. If the mass of calculous material removed at the second operation be carefully examined, it will be seen to consist, as geologists would say, of two different strata: the inner portion or nucleus, of the size of a flattened French prune, evidently belongs to the same period and formation as the calculi removed at the first operation; the outer friable crust of phosphate being of recent production. I have no hesitation in concluding that a stone, of considerable size, escaped detection and removal at the time of the first operation, even in spite of all the precautions which the state of the prostate prompted.

As I have now performed lithotomy close upon one hundred times, in children and adults, in about equal proportion, with a mortality of four or five per cent., I think I may plead that both experience and care proved unequal on this occasion in avoiding a contingency, which, had death happened after the first operation, might have exposed one less accustomed to operate for stone than myself to unjust obloquy and criticism. Hence my desire, apart from the general interest of the case, to record it.

One circumstance afforded me considerable satisfaction, and that was my being able to ascertain, beyond all reasonable doubt, how feasible it is permanently to improve the condition of the large prostate by its section, as already referred to, in cases uncomplicated with stone. One great objection I have urged against the suprapubic operation for stone is, that it prevents anything from being done to improve the condition of the large prostate, when this complication is present, and to obviate recurring symptoms, which may continue, though no stone is left to account for them. Mr. C. Williams, of Norwich, has recently published a case (BRITISH MEDICAL JOURNAL, June 15th, 1878, and November 14th, 1885), which adds importantly to our knowledge relative to operative procedures on the large prostate. It was an instance where he operated twice for stone, in a patient over seventy years of age. On the first occasion, the whole of the middle lobe of an enlarged prostate was removed, and, subsequently, another stone, by lateral lithotomy. Referring to what had previously been done, Mr. Williams remarks: "The next point is the condition of the floor of the bladder. Two years and a half had elapsed since the part was removed, and no further growth from the prostate had taken place. The wound made by such removal had healed, and the floor of the bladder was soft, even, and natural."

Reverting to my own case: in the improved state of the outlet from the bladder may be found the explanation as to how it happened that the sacculus or depression, which concealed the stone and rendered a second operation necessary, got rid of its occupant, and led to the bladder again resuming its normal shape and function. I do not think there can be any doubt that, of the various causes which bring about sacculation and changes in the shape of the bladder, anything which permanently obstructs micturition is the most fertile; and, in the recognition of this explanation, we have the best indication for the correction of this lesion. The case I have narrated serves to illustrate this point. It may be doubted whether a bladder is capable of becoming so completely sacculated as to conceal a large stone from detection. One of the best specimens, illustrating the possibility of this, I casually met with in the Museum of Queen's College, Birmingham, on a recent visit.

As to the frequency of relapses in cases of stone, Mr. Williams states, in reference to the practice at the Norwich Hospital ("The Relapse of Stone after Lithotomy," *Lancet*, May 18th, 1878): "This makes a total of 28 relapses in 1,015 operations (lithotrities and operations on females included), between 1772 and 1869, a period of ninety-seven years; and gives a proportion of one in 36, or, in 935 lithotomies (lateral and median), one in 33. All the patients were males, no instance of recurrence having shown itself in the female. In one case, a sacculated calculus was left undetected in the bladder, and removed with a loose one at a second operation." The case referred to in the last paragraph seems similar to the one I have related.

In connection with Mr. Williams's statistics relative to relapses of stone, it must be remembered that they are drawn from a locality where calculous disorders may be said to be endemic; consequently, if a larger area be taken, we may conclude that the proportion of recurrences is still less—a conclusion which my own experience would warrant. Amongst the causes favouring the reproduction of stone, I believe the large prostate is a very common one; and it seems to bring this about, so far as my observation has gone, in two ways. In the first place, persons who may have been in the habit of voiding for a considerable number of years renal calculi, find, after a certain age has been attained, that they cease doing so, and continued vesical irritation follows the attack of renal colic. The explanation lies in the fact that their prostates have enlarged; and thus stones, which previously escaped spontaneously, become practically trapped. I frequently remove from the bladder, by crushing, small uric acid calculi formed under these circumstances. In the second place, the large prostate, by permanently altering the shape of the outlet from the bladder, and thus causing urine to be constantly retained, engenders a state of continued cystitis and of excessive mucous secretion, which are the invariable preliminaries to the formation of phosphatic stones. In these directions may be often found explanations for the recurrence of stone in instances where there cannot be the least doubt that the primary formations had, on a previous occasion, been completely removed, either by lithotomy or by lithotrity.

ON REPEATED LITHOTOMY.

BY DONALD D. DAY, B.S., F.R.C.S.,
Late House-Surgeon to the Norfolk and Norwich Hospital.

THIS subject has already been discussed by Crosse in his Jacksonian essay on Urinary Calculus, and by C. Williams in a contribution to Holmes' *System of Surgery*, but in neither case has it been thoroughly exhausted. About a year ago, a celebrated operator stated that he had done his last case of lateral lithotomy; and, now that the operation is threatened with extinction, on the one hand by Bigelow's plan of crushing, with immediate extraction, and, on the other, by Petersen's method of the suprapubic operation, it seems desirable to weigh well its merits and demerits.

The question of mortality has been fully gone into by many writers. I now propose to discuss the liability to recurrence of stone afterwards, and to attempt to define its causes. By the kind permission of Mr. T. W. Crosse, curator of the museum of the Norfolk and Norwich Hospital, I have been enabled to compile the annexed table, giving a complete list of all the cases which have occurred in the hospital up to Christmas 1884, giving the museum-catalogue reference in each case. That this method is imperfect I am well aware, as it represents the statistics, not of those who suffered from a recurrence of stone, but of those who could summon up courage to face the operation again, which, in the pre-anæsthetic days, was no light matter. That some of these cases did again have stone without

oming back to the Norfolk and Norwich Hospital is certain, as No. 27 vas afterwards cut in a London hospital. But all statistics of operation are liable to the same errors, unless the after-history of the atient can be traced. Besides these cases, I know of others in which ecurrence took place; but for purposes of statistics I have confined myself to the specimens actually in the museum, which can be consulted by all.

Table of Cases of Repeated Lithotomy from the Museum of the Norfolk and Norwich Hospital.

No. of Series.	Initials.	Museum Number.	Age at 1st Operation.	Interval in months.	Weight.	Composition.	Group
1	N. E.	14	15	16	3ij	Urates and phosphates—3 : broken.	D
		25			3iij	Similar : more phosphates.	
2	R. H.	27	37	46	3v	Urates and triple phosphates.	D
		64			3iiiss	Mixed phosphates : broken.	
3	T. W.	116	9	34	3ij. ℈ij	Phosphates and urates—3 or 4 : broken.	A
		159			3j	Phosphates.	
4	R. N.	144	48	12	3iij	Smooth oval uric acid.	B
		158			3v	Similar : broken in cutting.	
5	T. F.	153	54	23	℥j	Soft urates—much broken.	C
		175			℥j. 3iv	Oxalates and phosphates—soft.	
6	R. C.	156	38	73	℥j	Smooth urate—unbroken.	C
		218			3iv	,, ,, nucleus of foreign body.	
7	J. C.	212	54	23	3vj	Smooth flat uric acid—broken in cutting.	B
		226			℥j 3j	,, ,, ,, unbroken.	
8	J. C.	242	2	90	3j	Long oval urate—phosphates at ends.	A
		336			3i	Globular uric acid : centre phosphatic.	
9	W. C.	323	24	24	℥ij	Phosphates and urates—comminuted.	C
		348			3vj	1 urate & phosphate—1 pure phosphate.	
10	C. R.	333	3	49	gr. xv	Uric acid—unbroken.	A
		376			℈ijss	Urate—with cap of phosphates.	
11	S. F.	381	8	39	3j	Urates and phosphates—broken.	D
		438			3iiss	Similar : more phosphates.	
12	J. B.	384	63	32	3iv	Flat oval uric acid—unbroken.	A
		432			3iij	Similar.	
13	H. H.	440	2	15	gr. L	Discoid urate—crust phosphates—broken	D
		459			3j	Mixed urates and phosphates—fragments.	
14	R. L.	461	55	141	℥j 3iv	Flat oval uric acid—unbroken.	A
		603			℥ij	Similar.	
15	S. P.	501	3	25	3iiss	Discoid pale urates—unbroken.	A
		519			3ij ℈ij	Similar.	
16	G. S.	554	8	20	3ij ℈j	Flat oval uric acid.	D
		577			3ivss	Phosphates with a few urates.	
17	B. B.	562	3	14	℈j	Oval urate—unbroken.	A
		579			3iiss	Two : similar.	
18	W. H.	609	7	26	3iss	Globular urate centre—oxalate crust.	A
		630			gr. xliii	Uric acid centre : phosphatic crust.	
19	B. C.	614	18	9	3vi	Urate centre : crust phosphates—broken.	D
		621			3ivss	Phosphates.	
20	J. C.	615	46	12	℥j 3iiss	Smooth oval uric acid & urates: unbroken.	D
		624			3i ℈j	Phosphates : soft and crumbled.	
21	E. T.	646	61	13	3i gr. iv	Oval urate : broken.	B
		656			3iij gr. xxvj	Alternating urates and phosphates.	
22	D. F.	668	58	35	3i gr. xlvij	Oval uric acid : crust urates—chipped.	A
		693			℥j gr. v	Similar.	
23	S. B.	729	43	202	℥j	Urate : slight crust of phosphates.	A
		805			3i gr. xiv	Similar.	
24	J. B.	761	60	111	3iv gr. xliij	Oval : Uric acid centre : crust urates.	A
		818			℥iij℥j gr. xliv	Oxalate centre—dense crust uric acid.	
25	S. B.	799	62	70	3i ℈j	Two filbert-shaped urates.	A
		855			gr. x	Small angular urate and phosphate.	
26	J. W.	825	66	29	3iv	3 : phosphates and pale urates : 2 broken.	D
		849			3i ℈ij	Soft phosphates—broken.	
27	D. W.	831	33	103	℥ij	Uric acid and blood-clot : much broken.	C
		943			℥j 3i ℈j	Pale urates and phosphates : soft : broken.	
28	R. R.	832	68	7	3ij gr. xxxviij	6 or 7 : urate of ammonia—some broken.	B
		841			3ij	2 similar—coated with phosphates.	
29	W. S.	845	31	22	℥j gr. iv	Irregular—phosphates : point broken.	B
		859			3ivss	1 pyriform—broken : 1 oval : phosphates.	
30	J. H.	864	60	35	℥j	4 oval—urates and oxalates : unbroken.	A
		914			3iv	1 similar but less oxalates.	
31	H. H.	896	66	4	gr. xxij	Urate—crust broken.	B
		899			3ij gr. xLiv	5 similar—coated with phosphates.	
32	J. A.	921	59	94	3iv	2 oval—uric acid : unbroken.	A
		1010			3iij	Soft phosphatic fragments.	
33	J. B.	951	57	33	℥j 3iss	5 urates and phosphates : broken.	A
		985			3ss	Few similar fragments.	
34	J. G.	953	71	28	℥j ℥j ℈ij	3 large : 7 small urates—unbroken.	B
		978			℥iss	1 large pale urate with uric centre, and 1 small phosphatic.	
35	G. B.	989	63	7	℥j gr. viij	Oval: uric acid : unbroken.	D
		994			3ij gr. vi	Soft phosphates : broken.	
36	I. T.	1008	61	27	3vi ℈ij	Three oval urates : much broken.	C
		1031			3iij	Oval urate—unbroken.	
37	R. W.	1029	2	68	℥j gr. L	,, ,,	A
		1076			3v gr. iv	2 centre uric acid and urate: crust pale urates and phosphates.	
38	R. S.	1061	65	4	℥iss	2 discoid urates—one chipped.	B
		1065			3iij	1 similar : paler.	
39	W. R.	1066	8	47	3iij ℈j	Mulberry oxalate—unbroken.	D
		1118			gr. lviij	2 cylindrical—oxalates and phosphates.	
40	G. S.	1107	63	5	3vij	Oval : uric acid and urates—unbroken.	B
		1112			3v gr. xv	Similar—slight crust of phosphates.	
41	W. H.	801	7	*17	℥ij	2 oval : urates—unbroken.	D
		807		†9	3iij ℈j	Oval : phosphates.	
		817			3iv	,, ,,	
42	J. H.	830	69	*9	3ij gr. xxxviij	Numerous : urates.	D
		840		†32	gr. lvi	Phosphates—broken.	
		874			℥j	Phosphatic *débris*.	
43	W. P.	839	59	*58	3ij gr. xviij	Oval : uric acid—unbroken.	A
		900		†77	3i ℈ij	Similar.	
		920			3ij gr. vi	Similar.	
44	J. S.	885	58	*78	℥i 3ij ℈ij	5 oval : urates—unbroken.	A
		970		†11	gr. xlvj	Urate centre : crust phosphates—broken.	
		980			3ij gr. vi	Urate : with similar *débris*.	
45	G. R.	1084	77	*9	3iv gr. xxxiij	Uric acid and oxalates : unbroken.	D
		1096		†8	3ij gr. iv	Very soft phosphates—broken.	
		1105			℥j gr. L	Very soft phosphates—broken.	

* Interval between first and second operations.
† Interval between second and third.

Note.—30, 31, and 32, were cases of median lithotomy.

Causation.—These cases seem to me to fall naturally into the four following groups, though several cases form intermediate links between, and mask the sharp outline of the various groups.

Group A.—Stones formed quite independently of the previous ones (Nos. 3, 8, 10, 12, 14, 15, 17, 18, 22, 23, 24, 25, 30, 32, 33, 37, 43 (A. and B.), 44 (A. and B.). These are by far the most numerous, 20 cases out of 50; the interval between the operations varying from 11 to 202 months, with an average of 64 months. That, however, is a point of little consequence, as the stones have no connection with each other. This group of cases ought not to be charged to the lateral operation, as they would have occurred after any operation, however perfect.

Group B.—Stones undetected at the first operation (Nos. 4, 7, 21, 28, 29, 31, 34, 38, 40; 9 out of 50 cases). The interval between the operations varied from 4 to 28 months, the average interval being 13 months.

Group C.—Stones formed on a fragment left behind at first operation (Nos. 5, 6, 9, 27, 36; or 5 out of 50 cases). The interval between the operations varied from 23 to 103 months; average 48 months. No. 6 is formed on a curious nucleus, like a tiny fragment of leather, probably left in the bladder during the operation. No. 27 is a doubtful one, and perhaps should have been relegated to the next group, though, from the excessive fragmentation of the first stone, it seems right to class it in this group. As one would expect, the interval in this group is longer than that of the preceding one, since the stone would require longer time to arrive at the same size; though I do not assert that the size of the stone always is proportionate to the pain produced by it. Knowing the extreme difficulty of absolutely clearing an empty bladder of fragments of stone, I was surprised to find that this group was smaller than Group B.; and I can only explain it thus. When the surgeon finds that he has a broken stone to deal with, he takes extra care to thoroughly evacuate the bladder; but, when he has extracted the calculus entire, he generally looks for a facetted surface, and finding none, is apt to conclude too hastily that it was a single stone. Now this is a most misleading idea, for out of all the cases in Group B., only one, No. 34, was facetted; that really was a narrow point of attachment

In that series of 1,125, there were 51 females with no recurrence, leaving 1,074 males. Of these, 50 were repeated operations, thus leaving 1,024 individuals. To the first operation 140 patients succumbed, an average of 1 in 7.31, or 13.67 per 100. Thus we have 884 individuals in which recurrence might occur; it occurred in 45, an average of 1 in 19.64, or 5.09 per cent., and in 5 patients it recurred a second time. Seven of the 45 cases of second operation proved fatal, Nos. 6, 14, 20, 24, 25, 33, 39. All of the third series, recovered; 12 individuals were children, 23 of the rest being upwards of 50 years old. In this there is a point of interest to be noted, that in the pre-anæsthetic group (previous to No. 800), 9 of the 12 children occur against 16 adults, the proportion afterwards, 3 to 17, being very different. I think we may infer from this, that other recurrences took place in the earlier adults, who, however, not only had the will, but also the power, which children had not, to refuse to submit to the torture of operation a second time.

to an encysted stone, which was removed subsequently. In looking over the cases of multiple stone, I was surprised to find how few present facets, and I believe it may almost be laid down as an axiom that facets only occur when one or more of the stones is to some extent fixed. The moral to be drawn is: Always search the bladder thoroughly as a matter of routine.

Group D.—Stones of bladder formation due to chronic cystitis (Nos. 1, 2, 11, 13, 16, 19, 20, 26, 35, 41 A. and B., 42 A. and B., 45 A. and B.; 16 out of 50 cases). The intervals varied from 7 to 47 months; average 19½ months. This group may fairly be divided into two subgroups. In subgroup *a*, the cystitis was present before the operation (Nos 1, 2, 11, 13, 19, 26, 41 B., 42 B., 45 B). In these cases the operation of cystotomy, with drainage, might fairly have been expected to cure the cystitis, by removing the irritating stone and allowing escape of the decomposing mucus. In Subgroup *b*, the cystitis was directly caused by the operation (Nos. 16, 20, 35, 39, 41 A, 42 A, 45 A.). In this group, the calculi are composed of soft phosphates with mucus, and would be more correctly termed agglomerations than concretions. These cases are frequently complicated by fistula, perineal or rectal; and these two conditions mutually interact; the cystitis predisposing to fistula, and the fistula prolonging the cystitis.

These views are in the main those held by the late J. G. Crosse, and it does credit to his surgical acuteness that, from the meagre amount of twelve cases, he should have drawn such accurate conclusions. I cannot conclude this better than by quoting his words (page 164). "So far as recurrence of the disease is connected with the first operation, a large stone leaves little subsequent danger; the most likely cases for a relapse being those where the stone is small, and breaks in the extraction, the wound healing quickly afterwards, so as to prevent the escape of fragments. Next to fragments left in the bladder, an imperfect cure after the first operation from rectal or perinæal fistula remaining may be regarded as almost certain to cause a relapse. Without such circumstances being present, a second stone may form unavoidably from small calculi, previously occupying the cavities of the kidneys, descending into the bladder and remaining there, or from continuance or fresh occurrence of any deranged condition of the urinary organs capable of giving rise to a calcareous deposit. When a second concretion forms, the symptoms rarely become so severe as to induce submission to a second operation within twelve months; and where several years of health elapse, the return of the disease is independent of the first operation, and of any morbid condition of the bladder then present."

A CASE OF EXTRA-UTERINE PREGNANCY:

DEATH OF THE FŒTUS AT FOUR MONTHS: INTESTINAL OBSTRUCTION FROM PRESSURE: REMOVAL OF THE FŒTUS BY PERINEAL SECTION: RECOVERY.

By GEORGE J. ROBERTSON, M.B.,
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I WAS called to see Lavinia B., on May 29th, 1885, when she was in a state of well-marked but not profound collapse, very sick, and sweating profusely. She was 33 years of age, and the mother of two children, aged four and two years. Previously regular, she missed her period ten weeks ago, and from her symptoms believed herself to be pregnant.

On May 22nd, she was suddenly seized with severe pain in the lower part of the abdomen, followed by faintness and sickness. The present attack was ushered in by pain in the same region, but far more agonising. With the greatest difficulty, she was able to cross the room to summon assistance. At this time, the abdomen was quite flaccid, and free from tenderness; the uterus was somewhat enlarged; in the left fornix was a tumour, the characters of which will be presently described. In the course of a few days, the condition of collapse passed off, while the abdomen became slightly distended and tender on pressure, especially in the hypogastric region, where she suffered from sharp stabbing pains.

During June and July, the patient suffered frequently from colicky pains in the bowels, which were always induced when she sat up in bed for any length of time or attempted to walk. She had two attacks similar to the one described, but less severe, and followed, like it, by slight abdominal distension and tenderness. There was no regular menstruation. On June 24th, and again on the 30th, she had a slight discharge of blood, but neither then nor at any time was a membrane or solid substance of any kind expelled.

The tumour, when first observed, was about the size and shape of an orange, situated to the left of the uterus, and quite separate from it; it was also painful on pressure, but the tenderness passed off in the course of a few days, to be present again after the other attacks mentioned above. It was neither so smooth nor so hard as a fibroid, yielding to the pressure of the finger, but giving no sensation of fluidity. It seemed to be firmly fixed in the pelvis. It slowly but steadily increased in size till it bulged above the brim. Stethoscopic examination gave no result. The uterus remained unaltered in size, but was displaced upwards and forwards, so that the fundus could be felt on placing the hand on the hypogastrium.

Toward the end of July, I thought the tumour was becoming smaller, an opinion which further observation confirmed.

On August 12th, she complained of pain in the epigastrium, suffered from sickness, and vomited slightly; she also had intermittent attacks of pain in the bowels; the abdomen was becoming distended.

August 13th. She had sickness, hiccough, and vomiting; the vomited matters were bilious and in small quantity. The abdomen was more distended, and pains were more severe, though still intermittent. There was no action of the bowels.

August 14th. She had incessant vomiting of stercoraceous matter during the night. There was dulness on percussion over the ascending colon; the transverse and descending colon were tense and tympanitic; the outline of three coils of distended small intestine was observed on the left of the umbilicus. The patient exhibited the usual symptoms of intestinal obstruction. Though greatly exhausted, and with a pulse scarcely perceptible, she was quite conscious, and remarked that the pains were like "labour pains." The tumour was quite immovable, and bulged more prominently in the pelvis than before the present attack. Enemata were ineffective.

Diagnosis and Treatment.—When the case was first seen, the previous history, the tumour, and the characters of the attack gave rise to strong suspicion of tubal pregnancy that had undergone rupture. During the following two months the development of the external signs of pregnancy, and the continued absence of menstruation without increase in the size of the uterus, together with the colicky pains in the bowels, and the steady rate of increase of the tumour, gave additional strength to this view; nor, on the supposition of the death of the fœtus, was it weakened by the gradual diminution of the tumour. It must be confessed, however, that the occurrence of this symptom shook my confidence in the opinion I had formed, without suggesting a probable alternative.

There could be little doubt that the intestinal obstruction arose from the pressure of the tumour upon the large bowel. Whatever was the structure of the tumour, it was, and had been ever since it was first examined, pressing upon the pelvic floor, to which there were good reasons for believing it was adherent. Immediate interference was required to relieve the obstruction. In preference to colotomy, treatment was directed to attain the double object of relieving the obstruction, and of dealing with the tumour.

The operation to be described seemed to offer a reasonable chance of success if it were an extra-uterine pregnancy, an abscess, or a hæmatocele; and, if none of these, it would not prevent recourse to other methods of treatment, and might assist in the diagnosis.

Operation.—On August 14th, at 6 P.M., the patient was chloroformed, and placed in the lithotomy position. A straight incision from before backwards, two inches in length, was made through the skin and fascia of the perinæum, commencing a little in front of the anus, and being about an inch and a half to the left of the middle line. The left index-finger was now pressed along the left vaginal wall, with the tip resting upon the tumour in order to serve as a guide; and by digital dissection, aided by the knife, to divide a few fibres of the levator ani, the most prominent part of the tumour was reached. Into it I passed a bladder-trocar, which, after it penetrated the sac, was pushed onward without encountering any solid resistance. On withdrawing the trocar, there escaped from the cannula a few drops of dark brown fluid, which had neither the colour nor the consistence of freshly shed blood. I then enlarged the opening in the sac, withdrew the cannula, and introduced my finger. It passed through a very friable substance, a small portion of which was removed for inspection. It looked like partially decolorised blood-clot. Not quite satisfied, I brought down a second portion, the structure of which was distinctly placental. The fœtus was next discovered; a foot being drawn into the wound was seized with a long polypus-forceps, and the whole removed by gentle traction. The umbilical cord was divided, and replaced in the cavity after removal of a small quantity of old blood-clot; so far, there had been no hæmorrhage. For the purpose of draining and irrigating by the method described in the *Medical Chronicle*, October, November, and December, 1884, two rubber tubes, without side holes, were tied together; the one for drainage having a

alf inch diameter, the other for irrigation being of small size, and bout two feet in length; these were inserted into the cavity. carcely had this been done, and it was done carefully and without difficulty, when alarming hæmorrhage set in. As speedily as possible irrigated with very hot water, with the result that bleeding stopped efore serious loss had been sustained; thereafter pieces of absorbent otton soaked in sublimate solution were packed round the tubes in he wound, and outside it. This dressing was retained in position by T-bandage, to which, also, the tubes were secured. I omit details f the method of drainage, except such as are necessary to make the rogress of the case intelligible. It may be stated that the discharges ere carried off entirely through the drainage-tube, from which they assed into a receptacle; that the dressing required to be removed only hen it became soiled with urine or fæces; and that, by means of a Higginson's syringe attached to the smaller tube, irrigation was effected ithout disturbing the patient's posture, sometimes even without her nowledge. The fluid used was simple warm water, unless when it is stated otherwise.

August 15th. At midnight she vomited a large quantity of offensive fluid, after which she passed a comfortable night. Temperature, at 10 A.M., 98.4°. There was a discharge of 5 to 6 ounces of blood. All symptoms of obstruction had disappeared; the bowels were beginning to act; an enema was ordered, with the result that they continued to be moved during the rest of the day.

August 16th, 10 A.M. Temperature 98.6°. During twenty-four hours, four or five ounces of blood free from odour had been discharged. The bowels had been moved several times during the night. The nurse had failed to pass the catheter. The dressing and bedclothes were soaked with urine.—9 P.M. Pulse 120, intermittent and shaky. Temperature 99.8°. She had sharp pains in the bowels, though flatus and urine passed freely. Opium was ordered.

August 17th. Pulse 125; temperature 100.4°. She was very restless during the greater part of the night. There was no discharge from the drainage-tube till early morning, when over two ounces escaped, after which she felt much relieved. On examination, I found that the tubes, though still in the wound, were withdrawn from the cavity, the explanation being that the nurse had, the previous afternoon, loosened the bandage, because the patient complained of being uncomfortable. On removing the tubes and introducing my finger into the cavity, a considerable quantity of very offensive bloody discharge escaped. The tubes were replaced, and the cavity thoroughly washed out. Irrigation was ordered to be done every two hours. In the evening, the patient was much better. Temperature 98.6°; pulse 108, steadier and stronger.

August 19th. Temperature 98.8°. The patient was resting well, and taking nourishment freely. The discharge was still bloody, and now contained a quantity of *débris*. As the fluid did not flow freely in irrigating, the tubes were withdrawn, and along with them came the umbilical cord and numerous shreds of placenta. Irrigation was ordered to be done every two hours.

August 22nd. The discharge was now free from blood. The tube, being again blocked, was taken out. Introducing my finger into the cavity, I found that the placenta was still adherent, and proceeded cautiously to detach it, which I succeeded in doing without exciting any hæmorrhage. Then, by pressure of the finger, I broke it up, and removed it piecemeal by the aid of a long polypus-forceps. The tubes being reapplied, thorough irrigation with carbolic lotion (1 in 40) completed the process, which occupied nearly an hour. The patient, who had not been chloroformed, being very faint and exhausted, was ordered brandy and opium.

August 23rd. The temperature was normal; there was no bad symptom of any kind. From this date, the improvement in her general condition was rapid and uninterrupted. The *debris* that came away in irrigating consisted now only of small particles without any pus.

September 1st. There had been no hitch of any kind since the last date. There was now no *débris*, nor fœtor, and merely a trace of pus. The patient was allowed to sit up in bed.

September 6th. I found her downstairs, attending to her household duties. The discharge now contained nothing but a little mucus. I withdrew the tubes from the sac, leaving them in the wound for some days, when, as no bad symptom arose, they were finally removed, after which the perineal wound speedily healed.

October 28th. The patient menstruated a fortnight ago in her usual way. There was some rigidity in the left fornix, and a cord-like hardness could be felt along the left vaginal wall in the track of the wound. The uterus occupied its normal position, was movable, and in other respects free from disorder.

NOTES.—The following observations upon the tumour and its contents during and after the operation may be of interest. The sac, or at least that portion of it which was incised, was contractile. I was conscious of my finger being grasped when introduced into the opening made in it, the closure of which, on removal of the finger, was so complete, as to cause some difficulty in finding it again. It was also dilatable, as, in extracting the fœtus, the wound was not enlarged by rupture. The position of the wound was about the centre of the floor, and afforded the greatest facility for exploration. Internal to it was the placenta, adherent to the floor and inner wall, while the fœtus lay in the outer portion. The cavity was oval in shape, with its greatest diameter in the transverse diameter of the pelvis. In extracting the fœtus, and on two or three occasions during the operation, there were observed well-marked labour-pains. The fœtus appeared to be about four months, shrunken and macerated to a moderate degree. The placenta was considerably larger than is usual in a four months' pregnancy. The small portion removed for inspection was in the same condition as the fœtus, and so, no doubt, was the entire fœtal division of it. As the outer border lay close to, if it were not involved in, the incision in the sac, the detachment of a small portion in introducing the tubes explains the hæmorrhage that occurred. The wound being about the centre of the floor of the cyst, as has been mentioned, when the finger was inserted at the time of operation, there was an equal division of the cavity internally and externally to it. On September 6th, when the tubes were removed, I took the opportunity of making an examination, when I found that the external division was entirely obliterated; the finger lay in contact with the outer wall.

REMARKS.—It appears probable that the attack of obstruction of the bowels was preceded and induced by false labour, the pains of which jammed down the tumour in the pelvis, causing pressure upon the bowel. Perineal section is easy of performance; considered anatomically, it is a safe procedure, no important vascular or other structure being, with ordinary care, endangered; it affords a direct and dependent route to the pelvic floor, and is, therefore, well adapted for the drainage of fluids in that situation. These advantages might, to a considerable extent, be claimed for vaginal section, which, however, establishes a fistulous communication between the vagina and the tumour, and is in this respect so objectionable as to be seldom practised. In a large number of cases that are amenable to treatment by incision and drainage, as opposed to excision, the tumour is intimately adherent to the pelvic floor, as, for instance, in abscess, pyosalpinx, and hæmatocele. It is this condition that makes excision difficult and dangerous, sometimes impossible; and it is precisely the condition that is required for perineal section. Comparing the latter operation with abdominal section for the purpose of drainage, it would seem to be safer, inasmuch as it does not necessitate opening into the peritoneal cavity, and is free from the risk attendant upon stitching the sac to the abdominal wall; and it appears to afford a better outlet for discharge.

ON DRAINAGE OF THE BLADDER.

WITH SPECIAL REFERENCE TO A POSTPROSTATIC OPERATION.

BY E. H. HOWLETT, F.R.C.S.

SURGEONS have long been acquainted with different methods of emptying the bladder other than through the urethra. Endeavours have, however, been chiefly directed to the alleviation of immediate troubles, the tiding over till such time as nature shall reassert herself, and remove the temporary obstruction to the flow of urine. Of these methods, the one most in favour is suprapubic aspiration of the bladder, a proceeding generally considered to be both safe and expeditious. Individually, I have the highest opinion of the proceeding, and in any difficult case of retention of urine would rather aspirate the bladder than interfere in any except the most gentle manner with the urethral track; and I venture to think that, were suprapubic aspiration more frequently employed, we should see and hear less of alarming symptoms following the use of the catheter; indeed, it requires but a limited experience to come across cases hurried to an early grave by the too liberal employment of that instrument. As illustrating my confidence in aspiration, I here incidentally mention the case of a man who called at my house in December last, in the agonies of acute retention of urine. There was a history of stricture of some years' standing, with a diminished stream on micturition. The obvious cause for the retention was wanting, as the man, at the time of seizure, was following his usual occupation as a clerk. Having failed to introduce either a soft or a metal catheter through the stricture, and preferring not to meddle much with the urethra in its excited condition, I proceeded to suprapubic puncture, using a small

needle, and by siphon action withdrew a quantity of very ammoniacal urine, the probable exciting cause of the urethral spasm. The patient then walked back to his house, and went to bed, and, as no ill effects followed the puncture, I proceeded at leisure to attack the stricture, the spasmodic condition having subsided. There are so few recorded fatalities following suprapubic aspiration (Mr. Treves, of the London Hospital, has recorded one), that I think it my duty to publish one that occurred in my own practice. In January, 1885, a patient who for years had suffered from prostatic troubles, and had been in the habit of relieving himself with a catheter, was attacked with retention. The practitioner in attendance having failed to relieve symptoms, my services were called in; and having made a gentle endeavour to pass a catheter unsuccessfully, I performed suprapubic aspiration, drawing off a considerable quantity of ammoniacal urine, which deposited a ropy pus on standing. The next morning, the operation was repeated, after which time a catheter could be passed into the bladder. On the following morning, it was evident that some septic element had been inserted at the suprapubic punctures, for an indolent blush was seen to surround them, and to spread in red streaks over the abdomen. It is possible that, in withdrawing the needle from the bladder, some of the decomposing urine was inoculated; at any rate, I prefer to suspect the condition of the urine rather than that a poison had attacked the wound from without. Every precaution was taken to ensure cleanliness in the instrument, a perfectly new needle, dipped in 1 in 10 carbolic oil, being used. It is needless to relate further details of this case; suffice it to say that the man died, his death being attributable, doubtless, to the small operation.

Continuous drainage of the bladder has hitherto attracted but little attention from the profession; for if we except the practice of Sir Henry Thompson and Mr. Reginald Harrison and a few others, it cannot be said to have been employed in anything like a systematic manner. Chronic cystitis, enlarged prostate, atony of the bladder, paralytic retention, ruptured urethra, impassable stricture, and malignant diseases of the prostate or bladder, are some of the affections in which continuous drainage might be employed with success, whilst in plastic operations about the urethra it will be found invaluable. Dr. Macan has advocated the formation of a vesico-vaginal fistula in the treatment of chronic cystitis in the female; in other words, "continuous drainage." Surgeons for long enough have been treating chronic cystitis by drainage and antiseptic washes, but I humbly suggest that in so doing they have been attacking the disease from the wrong side. If we desire to irrigate the bladder, what can be more rational than to make use of Nature's irrigators, the kidneys? Urine, as it flows into the bladder, is in an aseptic condition, but it is readily decomposed by any ferment existing in that viscus. We are able, however, to alter the condition of the urine, so that, instead of a bland aseptic fluid, it will become an active antiseptic one. This can be done by the administration by the mouth of either boracic acid or salicylate of soda; both drugs answer well, but the boracic acid (1 in 20) is, as a rule, better borne than the salicylate. It is often marvellous to watch the effect of the administration of these drugs in some cases of chronic cystitis, for urine, which on being passed has for days and weeks been stinking, in a few hours becomes bland and clear. In this place I may add that, before undertaking any operation on the bladder or urethra (except in cases of emergency), the patient should be placed on a course of one of these drugs for at least three days previously. Many cases of fractured spine with paralytic retention have been hurried to their grave by intractable cystitis, whereas, by a well-timed operation, life might have been prolonged, and recovery of some sort perhaps have taken place.

Assuming, then, that there are conditions which might best be treated by continuous drainage, we have next to consider what method of operating gives the greatest prospect of success. Five methods have been employed, namely, suprapubic, rectal, and interpubic puncture, opening the membranous urethra, and prostatic puncture. To these I would add a sixth, the postprostatic puncture from the perinæum. The objections to suprapubic and rectal tapping are too obvious to need further discussion. Interpubic puncture is difficult; and, according to Sir Henry Thompson, by the time the trocar has penetrated the pubic bone, it is too blunt to enter the bladder. Opening the membranous urethra, though strongly advocated by Sir Henry Thompson, has the great disadvantage of interfering with the urinary canal; whilst Mr. Reginald Harrison's prostatic puncture requires a condition of that body not always obtainable in the class of affections which I have suggested as likely to be benefited by continuous drainage. The postprostatic operation is free from any and all the objections which can be raised against the other operations; it is well placed for drainage, it does not interfere with the genital tract, nor is it in the way in defæcation. The part of the bladder attacked is the same as in the rectal operation, the site long since selected by surgeons as most favourable for tapping. On the other hand, the risk of urinary extravasation behind the deep pelvic fascia, of injury to the vesiculæ seminales, and to the peritoneum or knuckle of intestine in the recto-vesical pouch, may be urged as disadvantages of the operation. They are, I believe, largely imaginary, as with proper care the dangerous rocks can be avoided; the most real danger is that of urinary extravasation; but, as will be pointed out in the cases to be mentioned, the muscular and mucous coats of the bladder contract immediately after the withdrawal of the instrument, and prevent any urine from escaping, whilst, even should some do so, it will choose the path of least resistance and appear at the perineal puncture. To perform the operation, the patient is placed in the lithotomy position, and, if the bladder be contracted, it can be filled from the urethra in most cases. The forefinger of the left hand is then passed into the rectum, and made to explore the prostate and inferior surface of the bladder. Some sort of idea can then be formed of the distance the trocar will have to travel to reach the bladder, and the direction. The forefinger being retained in the rectum, a trocar and cannula, of the size of a No. 12 catheter, is thrust through the skin about three-quarters of an inch in front of the anus, and slowly pushed on till resistance is felt to have disappeared; the trocar is then withdrawn, and the bladder emptied. The subsequent steps of the operation require no description. In my cases, the metal cannula was maintained, but it would be better to pass through it into the bladder a No. 8 red elastic tube, and withdraw the cannula. It is a great advantage to be able to introduce so large a tube, as the chances of its becoming blocked are reduced to a minimum. Finally, to make the patient comfortable, a tube is attached to the catheter, and the urine drained into a bottle. To retain the catheter, Mr. Appleton, of Beverley, devised a very simple apparatus. It consists of a triangular piece of thick leather, with a hole in the centre, through which the catheter passes. One small hole behind, and others at either of the front corners, permit the tapes passing, which are attached to a belt round the loins.

I will now relate two cases in which this plan of drainage was employed.

A lad, aged 10, the subject of complete epispadias, who had been operated on frequently by Mr. Hardie with considerable success, was admitted into the Manchester Royal Infirmary, under the care of that surgeon, in 1881, for further treatment, there still being some fistulous openings. Mr. Hardie very kindly surrendered the case into my hands (then resident surgical officer). Recognising the importance of keeping urine from any wound, I determined to drain the urine straight from the bladder through the perinæum, and for this purpose first employed the method described above. The operation, as regards the fistulæ, was a failure; but the perineal drain answered the highest expectations, although its performance was rendered more difficult by the contracted condition of the bladder. A repetition of the operation was not more successful, owing to the patient managing to displace the cannula. An attempt was immediately made to reinsert it, but the muscular bladder-walls had contracted and closed the opening, so that it was necessary to repuncture with the trocar. The size of the instrument was equal to a No. 6 catheter, and the cannula was retained in position by horsehair stitches, through the skin of the perinæum, a suggestion of Mr. G. A. Wright, who assisted at the operation. Two points were prominently forced on my mind by this case: firstly, the great advantage of a perineal drain; and, secondly, the slight risks of urinary extravasation. So satisfactory did I consider the method of drainage, that I determined, should any case come under my care in which drainage was required, to again put this method in practice; but it was not till July, 1885, that a suitable case presented itself. This was one of slight prostatic enlargement, with a feeble dilated bladder. The man was under the care of Mr. Appleton, of Beverley, who had on different occasions treated him for retention and bladder-trouble, and, at his request, I examined the patient. Nothing but a catheter life was before him; but, taking into consideration the feeble power of the bladder, and that soon an aggravated condition of affairs might be expected, I did not hesitate to urge the expediency of some more energetic proceeding. The patient consenting, and Mr. Appleton having administered the anæsthetic, the postprostatic puncture was carried out, the large No. 12 trocar being employed. The cannula was left *in situ*, my intention being to retain it for ten days, and then replace it by a rubber tube. Next day the condition of the patient was fairly satisfactory, urine draining away by the cannula; but considerable pain was felt, and referred by the patient to the tip of the penis.

During the next two days, the drainage at times ceased to act, owing probably to the superior wall of the bladder obstructing the orifice of the cannula, the cause also of the pain at the end of the

penis. On the fourth day after the operation, the patient was in a most unsatisfactory condition, and had a rigor; he complained also greatly of the pressure of the tube in the bladder. Suspecting that the thrust of the rigid tube, projecting into the bladder and against its upper wall, was setting up ulceration, I reluctantly withdrew it. From this time the general condition improved, owing to the assiduous care of Mr. Appleton, so that, a week later, I felt justified in endeavouring to reopen the perineal route. An olive-pointed No. 6 catheter, to my surprise, after a little persuasion, entered the bladder; but there being objections to any unnecessary projection into the bladder, it was withdrawn, and a soft red elastic No. 8 tube was passed in its place, being retained in the ordinary method. Recovery was uninterrupted. And in December I had the satisfaction of exhibiting the patient at the meeting of the local Branch of our Association. He was then wearing the perineal tube, the outside portion of which was clamped and fixed to a belt round the waist. The patient is now able to micturate at will, without any trouble. During the night, instead of draining into a vessel, he prefers to get up once or twice and turn on the tap, a much simpler operation than micturating. He has gained three-quarters of a stone in weight, and altogether expresses himself as being in a more comfortable condition than he has been for months past, that is, before the operation. I made an examination in December of both prostate and bladder, but could not satisfy myself that any marked change had taken place in either organ.

In a case of prostatic puncture, recorded by Mr. Harrison, a decided reduction in the prostate took place after wearing the tube for over two months, a change which Mr. Harrison regards as analogous to that occurring in the prostate of elderly persons after lithotomy. It may be also partly due to a subsidence of the engorgement which takes place in enlarged prostates during the repeated efforts at micturition. In cases in which the prostate is enormously hypertrophied, it is obvious that there is no room to perform the postprostatic puncture, and any attempt to carry it out would resolve itself into Mr. Harrison's operation. The case above related shows the disadvantage of retaining the solid cannula in the bladder, and it is for this reason that I advise the immediate passage of a large sized soft tube through the cannula, and the withdrawal of the rigid tube; also that, in atonic conditions of the bladder, it is the falling together and possible sliding of the mucous lining, and not simply the muscular walls, that prevents the outward passage of urine. I regret very much that my opportunities of carrying out the operation of postprostatic puncture are very limited, that I cannot bring forward a large number of cases illustrating its employment in the aforementioned diseases; but I believe I have succeeded in placing before the profession a novel and simple method of operating, which, if carried out on the lines indicated, may be the means of saving or prolonging life, and I trust that there may be some who will be induced to try, and report on, the operation.

REMARKS ON INCONTINENCE OF URINE IN CHILDREN.

By WILLIAM H. DAY, M.D.,
Physician to the Samaritan Hospital for Diseases of Women and Children.

THERE is scarcely any disease occurring among children more annoying and troublesome than incontinence of urine. It is particularly vexatious to parents, and is often regarded by them as an incurable infirmity. After their patience has been long tried, they abandon one remedy after another, and look forward to puberty, when, they are told, the disease may depart never to return. Failure in treatment is frequently owing (1) to an erroneous diagnosis of the cause of the affection; (2) to the inefficiency with which the treatment is carried out; (3) to its being discontinued too soon; hence, in hospital practice, where patients can be watched, we meet with better results than in private practice.

Among the causes of enuresis, the following may be enumerated. If the urine be excessively acid, or loaded with urates, the bladder becomes overstimulated, and readily discharges its contents. If the bowels be habitually costive, or there be worms in the intestines, reflex irritation may ensue; or, if the child be guilty of masturbation, there will be no chance of cure till the habit is corrected. Weakness of the muscular coat of the bladder from general debility or anæmia is a very common cause; the bladder, not being able to tolerate any quantity of urine, readily excites the motor apparatus. I have known a troublesome case follow typhoid fever in a boy, 10 years of age. If the disease be owing to a long prepuce, causing phimosis, it should be removed. Sometimes no cause can be ascertained. Children, two or three years of age, frequently wet the bed, either from laziness, or from lack of control over the bladder. It is important to remember that, even though the secretions are in perfect order, the incontinence may continue; and thus a habit may be formed, which the poorer classes and stern people occasionally endeavour to correct by punishment. In some idle and dirty children, such a course may be of benefit; but in others, who are nervous and timid, there is the possibility of increasing the evil we desire to remove. I make no allusion to those cases of enuresis associated with disease of the bladder or brain.

Enuresis is sometimes seen in connection with chronic albuminuria, and is occasionally so persistent as to require special treatment. The following is a good illustration.

CASE I.—G. M., aged 9, was sent to me from the country, April 4th, 1885. His bed was wet both night and day. Before he was 6 years of age, he had measles and whooping-cough; then, after a short interval, scarlet fever, followed by dropsy. A year after his recovery from the dropsy, he could only pass his urine in drops. "He would stand up and cry, and say he wanted, and could not." He suffered in this way for two months, and then he would pass urine every ten minutes, but without pain. Some time before he left his home in the country, he was tested for stone in the bladder, as he frequently had pain, and blood was occasionally present in the urine. The urine, on admission into hospital, was highly albuminous (one-tenth part), of specific gravity 1020, pale, cloudy, and of acid reaction. A few casts were seen under the microscope. There was no fever, nor cardiac disturbance. He was confined to bed, and, as he had pain across the lumbar region, he lay during a part of the day on his abdomen, to lessen local congestion. He was ordered a milk-diet, and a mixture of belladonna, nux vomica, and tincture of perchloride of iron three times a day. Four days after admission, he ceased to wet himself in the daytime, and on the 10th, 11th, and 12th he was dry at night. The bowels were kept open, and the albumen diminished. On the 30th, it was reported that he had not wetted the bed since the 14th. He passed a much less quantity of urine, but it was still albuminous. He went home, after staying in the hospital for six weeks, wonderfully relieved, his urine only containing a trace of albumen, and no blood-corpuscles. In November, I heard that the frequency in micturition had returned, that he was worse in cold weather, and that the urine was very albuminous. I have mentioned this case merely to show that the treatment, which mainly consisted in a milk-diet and attention to hygienic conditions, had for a time a very salutary effect.

CASE II.—E. F., aged 7, was admitted into the Samaritan Hospital under my care November 3rd, 1884. The patient was a twin, highly nervous and excitable, with mitral disease, probably congenital. She never had scarlet fever or rheumatic fever. She first began to ail fifteen months before admission, wanting to pass urine frequently. She wetted the bed every night; the urine was pale, copious, and contained phosphates, specific gravity 1020, acid. A solution of nitrate of silver was applied to the neck of the bladder (two scruples to one ounce), and for a few days it seemed to be of benefit. A mixture of tincture of belladonna and tincture of perchloride of iron was ordered three times a day, but no good result followed; and on December 1st I began to employ Stohrer's smallest induction-apparatus (interrupted current) with one closed cell, for ten minutes daily, one sponge being placed over the sacrum, and the other over the pubes. An improvement almost immediately set in, and the patient left the hospital cured on January 10th, 1885. She was readmitted into hospital on September 30th, 1885, suffering from general debility and pain over the cardiac region, but she had no return of the enuresis whilst she remained in the hospital for six weeks. This is the second case I have recently seen associated with heart-disease.

CASE III.—G. R., aged 7, was admitted into the Samaritan Hospital under my care November 27th, 1884. For upwards of eighteen months, he had wetted the bed at night, and frequently during the day. The mother fancied that he had been tampered with by some boys of his own age. The urine was very pale, of acid reaction, and contained a few phosphates. He was ordered a milk-diet, and meat once a day. Faradisation was used daily for ten minutes. He took a mixture of tincture of belladonna and tincture of perchloride of iron three times a day, and left the hospital cured on January 9th, having wetted his bed only five times since his admission, and some of these nights very slightly.

CASE IV.—A. H., aged 8, a pale and irritable boy, was born in South America, a healthy baby. He had incontinence of urine from birth. When brought to me on December 13th, 1884, he wetted himself both night and day, and was invariably wet after being in bed ten minutes. He passed large quantities of high-coloured offensive urine, containing much uric acid. When the urine had become

normal, he was ordered tincture of belladonna, and tincture of perchloride of iron, in five-minim doses, three times a day. On January 12th, the appetite had improved, but the enuresis was the same. Stohrer's apparatus was now used for ten minutes daily, the sponges being placed over the sacrum and pubes. The iron and belladonna mixture was continued. On the 18th of February, the report states that he had passed several nights without wetting his bed; but, as the urine contained phosphates, and the boy seemed very weak, he was ordered ten minims of dilute phosphoric acid, with two minims of liquor strychniæ, three times a day. On March 9th, the urine being normal, fifteen minims of the tincture of belladonna were given twice a day. The use of the battery was discontinued. From the 17th to the 21st, he was not wet at night, but was wet on the nights of the 22nd, 23rd, 25th, 26th, 27th, 30th, and 31st. From April 1st to the 12th the bed was dry at night; on the 13th it was slightly wet, and, therefore, the tincture of belladonna was increased to forty-five minims daily. He invariably awoke to pass urine, whereas formerly he wetted the bed without knowing it. On April 19th, he went to Brighton, and stayed a month there. He had a sea-bath morning and evening, and was out the greater part of the day. For seventeen consecutive nights he did not wet the bed. During this time, he took two drachms of the belladonna mixture twice a day, being equal to one drachm of the tincture daily. The use of the battery was discontinued. It was noticed that his pupils became very large, and when he attempted to read he saw a mist before his eyes. On September 1st, it was reported that he had perfect control over his bladder in the day time, and had not wetted the bed oftener than once a week, and then but slightly. He has had no return up to the present date, January 25th, 1886.

CASE V.—A young lady, aged 9, was brought to me by her mother in September, 1885, suffering from enuresis of nearly a year's duration. All treatment had failed to relieve her. The use of the battery was ordered every night for ten minutes, and a mixture of belladonna and iron three times a day. These measures were continued for six weeks, when the patient was well, and she so remained for three weeks afterwards, when the symptoms returned slightly, "but not nearly in the same degree." The battery got out of order, and, the patient living in a remote Irish district, there was a difficulty in getting it repaired. If the use of the battery be resumed regularly, the cure will be complete.

REMARKS.—It seems impossible to lay down a plan of treatment for general adoption; the peculiarities of constitution and habits of life must be taken into consideration, and haphazard treatment guarded against. The cases recorded were cured or relieved by the combined influence of electricity, iron and belladonna. Cases 2 and 3 are good examples of the utility of faradisation. Case 4 is a very important one; the symptoms dated from birth, and resisted various methods of treatment. The successful issue is in a great measure attributable to the constant care which the mother took in feeding the child, and rigorously attending to my instructions. Those cases that date from birth, or have lasted upwards of a year, are invariably intractable, and often incurable, especially if the child be of nervous parentage, or were delicate when born, or pass large quantities of urine. With respect to the utility of faradism there can be no question; it requires to be used regularly, and to be continued for a considerable time, but it sometimes fails altogether. When the nervous system is weak, and there is general debility, the sphincter loses its power, and urine escapes by night and day without the child's knowledge. It is in such cases as these that iron and nux vomica are of service.

If there be excess of muscular action, and the child have frequent inclination, without power of control, belladonna is an admirable remedy. It occupies a prominent place as a therapeutic agent, and sometimes, when combined with iron, even in small doses, it seems to do good; but it should not be given up in obstinate cases, till either soreness of the throat is produced, or dilatation of the pupils takes place. In my hands it has often failed when administered in any form or dose. It certainly tends to lessen irritability of the bladder, and should always have a fair trial.

Cold sponging in the morning is very serviceable in cases of enuresis that appear to have their origin in general debility. It braces up the nervous system, and is a powerful tonic. The slight sensation of chilliness soon passes away, without leaving any depression, if vigorous friction with a towel be employed for a few minutes. In a case under my care about three years ago, the cure was attributed to this simple measure, when one remedy after another had failed. The vital functions are brought into a healthier state, the skin acts better, and the appetite and digestion improve. However delicate a child may be, ree sponging in tepid water, followed by a good rubbing, is of great value. The water may be used at a temperature of 90° at first, and as the child becomes stronger, may be lowered to 70°.

Now, a word as to diet. Milk is an important non-irritating article of food, and should be mainly relied upon in these cases; but the quantity given at one time should be restricted, especially on going to bed. Farinaceous puddings, containing eggs, are admissible. When the urine is turbid and acid, or the child is rheumatic, milk ought to take the place of nitrogenous food. A child, under my care at the present time with "a large white kidney," is troubled with frequency of micturition when allowed a little beef-tea, whilst, when adhering to the milk, she only passes urine twice, or at most three times in the twenty-four hours. In states marked by anæmia and general debility, however, animal food is an essential article of diet.

A CASE OF GASTRO-ENTEROSTOMY FOR CANCER OF THE PYLORUS AND STOMACH: GOOD RECOVERY. A NEW METHOD OF SUTURE.

BY ARTHUR E. BARKER, F.R.C.S.,
Surgeon to University College Hospital, and Teacher of Practical Surgery at University College.

I DESIRE to publish the following case simply as a record of facts bearing upon a most important question in the surgery of the present day; namely, the position which operations on the stomach are to take in the future. The whole question is now, and must remain for some time still, *sub judice*. For, though a good deal has been already done, both at home and abroad, in the field of gastric surgery, the cases have been so isolated, and the operations have been performed by different surgeons under such varying conditions, that we have as yet but slender grounds for safe generalisation. It appears desirable, then, that every item of information regarding these operations should be recorded as fully as possible, and carefully studied. If it be true that it is difficult to decide as to the exact position of radical operations for cancer of internal organs, it is immeasurably more so to arrive at a decision as to the position of palliative operations.

Since first designed and performed by Wœlfler in 1881, gastro-enterostomy has been undertaken at least twenty times abroad. In sixteen of these cases it was done on account of advanced carcinoma of the pylorus, with ten deaths, and in four for non-malignant pyloric stenosis, with one death. Most, if not all, of the first sixteen were desperate cases for any operation.

As the following appears to be the first recorded instance in which the operation has been performed successfully in this country, and as the foreign sources of information are scattered, and not accessible to the general reader; and as, further, I devised and practised here a new method of suture which seems likely to offer advantages in the future, I venture to describe this case rather in detail.

The patient, Mrs. L., aged 37, the mother of eight children, one of whom died of a malignant growth in the neck in infancy, began to suffer from severe gastric disturbance a year and a half ago. This consisted of great sickness and vomiting, with pain in her stomach. Since then, hardly a day passed without retching; this was always worse after dinner, but was less in the evening, and when the patient was at rest.

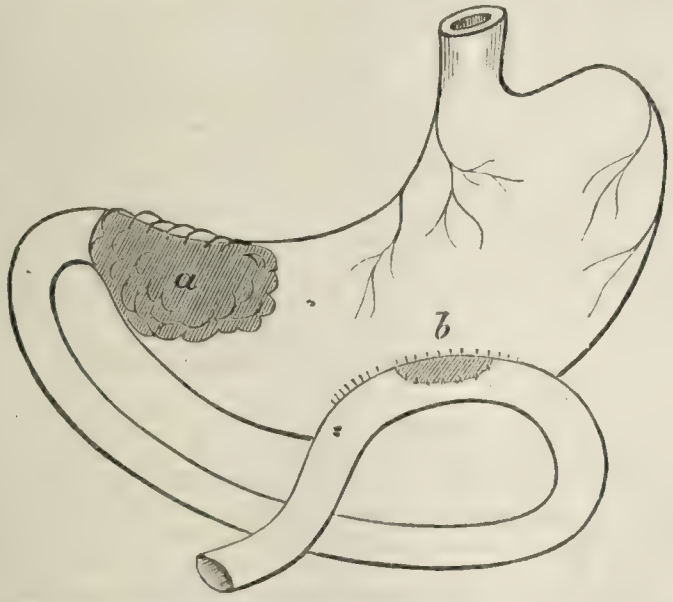
On August 25th, 1885, the patient noticed a lump, about the size of a walnut, in the epigastric region, and, at the same time, the vomiting and pain became much worse; the latter was aching and dragging in character. The tumour had grown larger since, especially within the last three months. When first noticed, the lump, the patient thought, was a little more to the left than now; it appeared irregularly nodulated from the first.

On admission into University College Hospital on December 19th, 1885, the chief complaint was pain in her left side, and great weakness and loss of flesh (weight 7 stone 3 lbs.). During the week preceding, her attacks of sickness had not been so severe; she had had only four or five. The vomit was watery and frothy, but never consisted of food, and never showed traces of blood; there had been much constipation for a long time.

State on Admission.—In the middle line of the body, about two inches above the umbilicus was a hard nodular swelling, about the size of an egg, very superficial, and very mobile. It shifted spontaneously from side to side during the day, and ascended a little, but did not descend below the point indicated. When in the middle line, it pulsated with the stroke of the aorta. It was tender on pressure, and caused most suffering when it lay towards the left side. There was no deficiency of resonance to be detected over it, and there was no gastric dilatation

the tumour moved with respiration; the abdominal organs appeared quite healthy.

On December 28th, I made a careful examination of the abdomen under ether. The tumour could now be easily grasped through the thin parietes, and was found to be rugged in outline, about half the size of an orange. It showed the most remarkable mobility in all directions except downwards. It could be easily pushed under the last rib on the right side, and be there felt with the hand. It could be pushed almost into the same position on the left side, but with greater difficulty. It could not be made to descend. Nothing else abnormal was discoverable in the abdomen. After this examination, the patient was sick several times, but brought up no blood. The urine remained normal. From this examination, I strongly suspected cancer about the pylorus, though it was clear that there was much room for a difference of opinion as to the nature of the tumour, and I thought it might possibly turn out to be a floating kidney. One of my colleagues suspected a collection of biliary calculi in the gall-bladder. As the patient was very anxious for operation, I explained the matter fully, and agreed to make an exploratory incision, and be guided by what was found. Every preparation was made for dealing with whatever kind of tumour should be found, and especially for excision of the pylorus, should it be necessary. The stomach was washed out twice on the day before operation, and again two hours before the latter with warm water, introduced through a long flexible tube; and no food was given afterwards. With the most scrupulous care as to antisepsis, I operated on January 5th, 1886, under the spray. An incision was made in the middle line, from just below the ensiform cartilage to the left side of the umbilicus. When the peritoneum was opened, the tumour presented at once to view. It was then easily diagnosed to be a mass of new growth, reaching from the anterior border of the pylorus about three inches to the left, and upwards towards the lesser curvature of the stomach. It was about the



size of half an orange, flat externally underneath the serous covering of the stomach, and projecting into the narrow end of the latter. The posterior segment of the pylorus appeared sound to the touch. The tumour was perfectly non-adherent, but there were a few small hardened glands in the gastro-colic omentum. From the position of the growth and the presence of infiltrated glands, I concluded that excision of the pylorus was contra-indicated, and at once commenced the palliative operation of gastro-enterostomy, or the establishment of an artificial opening between the stomach and jejunum (*vide* plate *b*. After pushing the omentum, which was not voluminous, to the left, the first part of the jejunum was caught in the fingers, and a loop of it was drawn out of the incision. The middle of the anterior surface of the stomach was also drawn out, and was supported all round by warm carbolised sponges. I now passed a piece of the India-rubber tubing through the mesentery at each end of the loop of intestine; and, having emptied the portion of gut between by gentle pressure, drew the ends of the tubing tight enough to prevent access of the contents of the bowel into the loop to be operated on, and fixed each piece of tubing with a catch-forceps. The empty loop of gut was now laid upon the portion of the stomach to be opened; and a longitudinal fold of the latter, about an inch and a half from the great curvature, was pinched up between the finger and thumb of the left hand, together with the collapsed gut. I now made an incision about an inch and a half long in the fold of the stomach, and another corresponding in the approximated fold of gut. These incisions only penetrated through the serous and muscular tunics, and left the mucous coat of both viscera intact for the present. Still holding the parts, as before, between finger and thumb, I now united the corresponding posterior edges of the wounds by a continuous suture, the needle entering and emerging in each case between mucous and muscular coats, and the threads crossing the cut edges of the muscular and serous coats. In this way, the serous surfaces were closely united from end to end before either viscus was opened. This row of stitches (which were about an eighth of an inch apart) was carried about a quarter of an inch beyond each end of the incision in the coats of the bowel. The moment had now come to open both the stomach and intestine completely; and this was done with a stroke of a scissors through the mucous coat in each case, special sponges being ready to receive any fluid which might escape. A few drachms of *succus entericus* flowed from the bowel, little or nothing from the stomach-opening. After careful cleansing, the anterior borders of both openings were now united by a row of interrupted fine silk sutures, introduced according to Czerny's method. When this was completed, the two openings were securely closed; but, as an extra precaution, the intestine was turned over, and the posterior suture was reinforced by a second row of interrupted sutures, placed about a quarter of an inch away from the first. The anterior row was then similarly reinforced by a row of continuous suture, taking up, as before, only the serous and muscular tunics. The elastic compressors were now removed from the gut. Lest there should be any "kinking" of the latter, as in one of Billroth's cases, I stitched its efferent portion to the stomach-wall, about three-quarters of an inch from the right extremity of the opening between the stomach and jejunum now established. The "toilet" of the peritoneum, replacement of the viscera, and closure of the external wound, completed the operation, which had lasted an hour and thirty-six minutes. The wound was dressed with salicylic wool. This mode of suturing the posterior edges of the opening before the stomach is actually opened appears to be a new departure, and offers many advantages, which are obvious.

The patient bore the operation, on the whole, well, though towards the end the pulse became a little feeble. She was warm and comfortable when removed from the table. Peptonised enemata were ordered every six hours, and only ice by the mouth. There was no marked shock noticeable when she had recovered from the anæsthetic, but she complained of pain about the abdominal wound and to the left of it internally. She soon vomited some turbid fluid, and continued to do so for a couple of days, at intervals of four or five hours, bringing up from one to two ounces each time. This was not relieved much by hypodermic injections of morphine. As the vomiting went on, the fluid brought up became more and more turbid, and then became very fœtid. It clearly contained matter regurgitated into the stomach from the jejunum, appearing most like pancreatic secretion very slightly stained with bile. The eructations, which were frequent, were also fœtid. Thinking all this was due to simple gravitation of the contents of the jejunum through its dependent opening into the stomach, and as there were none of the signs of peritonitis, I had the patient placed in the semi-recumbent position in bed on the third day; at the same time, she was ordered one minim of creasote every hour in half an ounce of emulsion by the mouth. Whether as the result of the change of position, or of the use of creasote, the vomiting now ceased, and did not again return until next morning, when she vomited for the last time. I am inclined to attribute the result to the change of position allowing the intestine to sink a little downwards, so that its opening into the stomach came to lie not exactly over that in the stomach as before. It probably returned the next morning on account of her slipping again into the recumbent position. She was now (third day) given a drachm of brandy every second hour by the mouth, and half an ounce of beef-tea every two hours

The improvement was now uninterrupted; the rectal temperature was usually below 100°. It is marked as 102° on the fourth day, but this is believed to be an error. Two hours later, it was 99.2°. On this day, she was rather depressed, probably on account of menstruation having set in. The amount of brandy and beef-tea was doubled. On the fifth day, she was given beef-tea by the mouth in ounce-doses every hour, and on the sixth day an ounce of champagne every second hour and a tablespoonful of arrow-root. On the eleventh day, she took some minced chicken, all of which was well digested. On the sixth day, there were two natural stools, accompanied by a good deal of pain. On the thirteenth day, I ordered half a drachm of confection of senna; and on the fourteenth day, she complained of a good deal of pain about the descending colon, which was relieved by a high reaching enema, which brought away a large quantity of fæces. Her general appearance began to improve after the first week, and the

sunken look under the eyes to disappear. She also became cheerful, and expressed herself as very grateful for what had been done for her. She seemed so well on the seventeenth day after operation, that she was allowed to sit up in a chair for half an hour, and enjoyed it greatly.

The stitches in the abdominal wall were all removed on the ninth day, and the wound was found to have united by first intention everywhere. It was still supported by broad strips of American rubber plaster in case of straining of any kind.

That the patient has been relieved by this operation, anyone who has watched her can see plainly. That the greater rest secured to the diseased stomach by its new aperture of exit directly into the commencement of the jejunum may lead to a retardation in the development of the growth, there are some grounds for hoping. The food has not now to force itself past the cancerous and ever narrowing pylorus, but can pass easily through the new opening, and so, perhaps, that ulceration of the surface of the growth, which leads to grave complications in many cases, may be staved off. As there is no interference here with the processes of digestion, the secretions of the liver and pancreas mixing as before with the food from the stomach, that slow process of starvation, accompanied by distension of the stomach and frequent vomiting, is prevented, which often renders these cases so painful and distressing to witness; the more so because, in many cases, the process is often very slow.

Finally, I think it is fair to hope that not only does this operation diminish suffering, but it may also materially prolong life by sustaining the vital powers. But, as remarked above, it is too soon to pronounce upon the procedure definitely; we must suspend our judgment for a time. In the meanwhile, one thing may be most decidedly deprecated, namely, undertaking such a measure in utterly desperate cases where the patient is *in extremis* and unfit for any prolonged operation of any kind.

It is now more than a month since the operation, and still the patient continues well. She has suffered a little from constipation on one occasion, but has been relieved by enemata, and, to prevent this trouble recurring, is now taking small doses of laxatives. She sits up every day for some hours, after being confined to bed for more than five months. Her pulse is 78, her temperature normal, her bowels acting well, and altogether she is much improved and cheerful.

CYANOSIS IN NEWLY BORN CHILDREN CAUSED BY ANILINE MARKING INK.

By W. RAYNER, M.R.C.S.,
Visiting Medical Officer, Marylebone Workhouse.

Early one morning, in July last, the night nurse of the Marylebone Workhouse, on going round the lying-in ward, noticed that one of the infants looked, as she said, "very blue and queer." The mother, with whom the child (a week old) was sleeping, was fast asleep, and the nurse thought the child must have been overlaid; but as the lividity remained, I was sent for.

I found the child apparently just recovering from asphyxia. The lips, gums, and palate were of a wimberry colour, and the whole surface of the body was dusky. The blueness did not, however, decrease, although the child was quite roused and lively. The breathing was quite natural, there was no sickness or diarrhœa, the temperature was normal, and the child had taken the breast well before the mother went to sleep.

On looking round the ward, four other children were found to be affected in the same way, though not to quite so great an extent at first; and during the next three days five more infants were similiarly affected. They all took the breast well, and, except for colour, seemed as bright and healthy as any children under a fortnight old usually are. The cases were not all in the same room, nor on the same story; they lasted about a week, and all recovered. The drainage was fully examined, and found to be in good condition. Then the milk supplied to the mother was inspected, it being thought there might be something to affect the children, though the mothers were quite healthy and unaffected, more especially as it was remarked that the milk served out on the previous day had been much yellower than usual. Consequently, inquiries were made at the dairy and farm, but without finding any likely cause, and no other customers had complained of anything of the kind. Next, inquiry was made at Queen Charlotte's Hospital to find out whether they had experienced any like outbreak, but they had not then, or at any time.

Several of my medical neighbours were kind enough to come and see the cases, but could not assign any cause. The epidemic gradually faded out, and there was nothing more of the kind until last December, when again the same kind of epidemic appeared, and this time seven infants were attacked, the mothers, as before, doing perfectly well, and the children only having the breast.

The midwife was asked to very carefully think over what could be in common between the two attacks and unusual during the interval. She could think of nothing except that she had just got a fresh supply of napkins, and fancied she had a new supply in July also, but was not quite sure of this latter fact. As the napkins were made out of old sheeting, this did not seem to help us much; but, on examining one of the cyanosed infants, a counterpart of the stamp of the workhouse (a 4½ inch oval) with which the napkins were all stamped was observed on its buttocks and vulva; and although the marking-ink was stated not to be an aniline preparation, it was suspected; and, on being analysed by Mr. Greenish, of New Street, was found to be a chloride of aniline.

It came out, on inquiry, that the napkins had not been washed after being newly stamped, as they had generally been, before use; and it was observed that the cyanosis gradually died away after the napkins had been washed, and then none of the dye came off.

A fortnight later, all the affected children had recovered or gone out. A freshly stamped napkin was used for a strong healthy infant, and this became cyanosed in less than twenty-four hours.

CLINICAL MEMORANDA.

METASTATIC RHEUMATISM.

The following note was handed to me by a professional friend in the East; and, as the combination or complication it portrays is at least rare, I reproduce it, without comment, in the *ipsissima verba* of its author, and will only add that I have not myself seen anything like it in my own practice up to date.

"I return your paper on Metastasis, etc., and will give you, in return for the pleasure the perusal of it has caused me, a bit of my own experience on the point. Whenever I am attacked with rheumatism—an old friend, by the way—I invariably suffer from a gleet; it is, indeed, almost my first symptom, and it is always accompanied by excessive irritability of the bladder. As soon as the gleet begins to subside, my irides become involved, and this sometimes to such an extent as to deprive me for a time of accurate vision. The disease, or whatever else it is, having exhausted itself on these structures, migrates to the joints, whence it retires, by resolution, in the usual way." Wm. Curran, L.R.C.P.Edin., etc., Auriol Road, W.

OBSTETRIC MEMORANDA.

CASE OF LABOUR WITH KYPHOTIC PELVIS.

I was called on January 3rd, 1886, to M. E., aged 23, pregnant for the first time, a patient of the Royal Maternity Charity. There was angular curvature involving the vertebræ from the ninth dorsal to the last lumbar, the most prominent part of the spinal column being at the third lumbar spine. There was no appreciable lateral curvature. The patient had been in labour for thirty-six hours, and the midwife had given ergot. The uterus was in a state of tonic contraction, and projected nearly horizontally over the pubes. The head was in the pelvic cavity, forced down so far, that the most advanced point of the scalp was about an inch within the vulva. The caput succedaneum was of such size, that it was impossible to feel the sutures. The external conjugate measured 7 inches; the distance between the iliac crests was 10⅛ inches, and between the anterior superior iliac spines 9 inches; the measurement between the tubera ischii was 3 inches, the antero-posterior diameter of the outlet 4 inches. The cephalotribe was used, and the child delivered. The blades of the instrument, applied in the sides of the pelvis, were found to have seized the head, the left just behind the left mastoid process, the right just behind the right malar bone. The conjugate and the transverse diameter of the brim were discovered, after delivery, to be each more than 5 inches. The child measured 20¼ inches in length, and weighed (exclusive of squeezed-out cerebral matter) 6½ lbs.

The case is published on account of its bearing on the mechanism of labour in the kyphotic pelvis. The head was exactly in the usual first position in the pelvic cavity, so that the peculiar shape of the pelvis did not seem to have modified the manner in which the head entered the pelvis. The mode of passage of the outlet is not illustrated by the case, as the cephalotribe was used.

G. Ernest Herman, M.B., F.R.C.P.,
Obstetric Physician to the London Hospital.

CHILDBIRTH DURING AN ATTACK OF SMALL-POX.

In the British Medical Journal of January 30th, I read with interest Mr. Quirke's account of his case which appeared under the above heading. I am in a position to corroborate his citation of the fact that an uninfected child may be born of an infected mother, and also to controvert his surmise that, had the birth occurred when the disease was developed, the child would no doubt have been infected.

In 1877, I was medical officer at the Manchester (Monsall) Fever Hospital. During an epidemic of small-pox in the earlier part of that year, a woman was admitted with well marked discrete small-pox. Early one morning, when the pustules were at their fullest development, she was confined, and I vaccinated the child (a fine healthy one) within an hour or two of its birth. It was suckled by the mother, and stayed in the general ward among the other cases. The vaccination "took" perfectly; the child had no symptom whatever of small-pox, and left the hospital with its mother on her convalescence.

It may also be of interest to mention that, during my tenure of office at Monsall, a patient died of, according to his statement, his third attack of small-pox; he showed ample traces of a previous attack, and I well remember his telling me that he had a brother who had died of his second attack of the same disease, and that more of his family had had it twice. Of course the evidence in this case is not absolutely reliable, but is, to say the least, remarkable.

C. E. Richmond, Warrington Infirmary.

Has not Mr. Quirke, in his memorandum on January 30th, under the above heading, missed the point and moral of the tale? Mr. G. F. Masterman had said that he believed no woman suffering from any disease of the class which includes variola, scarlatina, etc., could "contemporaneously give birth to an uninfected living child." Mr. Quirke, in opposition to this statement, adduces a case in which a child, born from a mother who, eight hours after the birth, was covered with the eruption of small-pox, lived and showed no sign of the disease. But Mr. Quirke had vaccinated the child "at once." Is it not possible, indeed, most probable, that the child may have been infected, but that the judiciously prompt vaccination aborted the impending attack of small-pox? Again, Mr. Quirke remarks that, "had the birth of the child occurred later, when the disease was developed upon the mother, the child would, no doubt, have been infected." In reply to this, I may refer to a case of my own.

A woman was admitted to the Borough Hospital here, suffering from small-pox. On the day after admission, and while covered with a copious eruption, she was prematurely delivered of an eight months' child. The child was retained in hospital, and nursed by its mother for two days, during which time a nurse to take charge of it was being searched for outside. The child lived for three or four months, and never showed any signs of the disease. This happy result, however, I attributed not to chance, but to the fact that I had at once vaccinated the infant, puny as it was, believing that the vaccine virus, from its more rapid development, might overtake and abort the variolous infection which had probably been received.

A. Campbell Munro, M.B., D.Sc., South Shields.

PARTIAL PLACENTA PRÆVIA: ARM-PRESENTATION: PROLAPSE OF CORD: TURNING.

Mrs. G. has had four children and four miscarriages, the latter caused, I believe, by retroflexion of the uterus, for which she had worn a pessary before she came under my treatment. On December 22nd, being, as she believed, about her full time, she was suddenly seized with severe flooding. On my arrival, I found her sitting on a commode, with blood streaming from her at the rate, I should think, of forty to forty-five ounces in five minutes, of which most came away in gushes with each pain. As soon as she had got into bed, I found the maternal surface of the placenta presenting and visible in the vagina. On passing my finger round the internal os, which had evidently rapidly dilated, the placenta became detached from the posterior wall of the uterus, and immediately the left hand of the child and about two feet of the umbilical cord came down through the vagina. As the hæmorrhage had stopped considerably, and the cord was pulsating strongly, I endeavoured to replace the cord, but without effect; and I can fully endorse Dr. Brydon's remark in his article on January 16th, that it is an absurdity to attempt it. In this case, it was absolutely impossible, and the postural position insisted on by obstetricians seemed only to make matters worse. As time was precious, I inserted my hand, and found, just over the os, the other hand and the two knees of the child, the body being in the transverse diameter, with the head to the right. The placenta could also be felt attached to the anterior uterine wall, except the small part (about one-sixth), which was now lying in the vagina. I seized hold of the left knee, and pulled it down, the nurse meanwhile giving the patient chloroform; and, as the child was small (only weighing 6½ lbs.), it was easily and rapidly delivered, and, before the cord was cut, was placed in a warm bath. Artificial respiration had to be resorted to vigorously, and, in the course of a few minutes, the child was able to cry lustily. When the pulsation in the cord ceased, I separated the child from the mother, and then extracted the placenta. The mother and child have both done very well since.

The important point in the management of such a case is, of course, to get the child delivered as rapidly as possible, so that the uterus may contract and stop the hæmorrhage. In this case, this was easily done, as the child was small, and the mother was kept quiet by chloroform. It also appears important in such a case not to separate the child from the mother sooner than absolutely necessary. My usual mode of managing the third stage of labour is, if the child be all right, to cut the cord and immediately remove the placenta. Had I done so in the present instance, the child would have died; but, again, had the placenta been more completely fixed over the os, the probability is that the mother would have died from hæmorrhage, any possibility of which would have indicated the necessity of immediately removing the placenta, even if the child had to be sacrificed. In this case, the happy medium was fortunately arrived at, with the result of life both to mother and child; but I have seldom met with a more anxious or more complicated state of affairs for all concerned.

Wm. Duncan, L.R.C.S.Ed., etc., Ridgeway, Frome.

SURGICAL MEMORANDA.

AN UNUSUAL CAUSE OF BURNS OF THE FACE.

I have thought it right to put on record the following case, as it seems to me to be one of some rarity, and to have some importance from a medico-legal point of view. I cannot do better than give the facts in the words of the patient himself, who communicated them to me by letter. He writes as follows:

"A rather strange thing happened to myself about a week ago. For a month or so I was troubled very much with foul eructations. I had no pain, but the smell of the gas which came from my stomach was disagreeable to myself, and to all who happened to be in the room. About a week ago, as I said, I got up in the morning, and lighted a match to see the time, and when I put the match near my mouth, to blow it out, my breath caught fire, and gave a loud crack like the report of a pistol. It burnt my lips, and they are still a little sore. I got a terrible surprise and so did my wife, for the report awakened her."

From the above occurrence it would appear that the condition known as "halitosis" or diseased breath, is not only a source of misery to the sufferer, and to those compelled to associate with him, but may, under certain circumstances become a condition of danger to the unfortunate possessor of it. In the present instance, the gaseous results of the imperfectly digested food had their atoms of carbon and hydrogen so arranged as to give rise to the presence of carburetted hydrogen, the inflammable and explosive qualities of which came into play when mixed with a due proportion of atmospheric air in presence of the unguarded light of the burning match. I may add, that the patient to whom this accident happened, is a most intelligent and observant man, and that the diet I prescribed for the indigestion from which he suffers from time to time has alcohol excluded from it, and I know that my instructions in that respect are acted upon.

George T. Beatson, B.A.Cantab., M.D.Edin., Glasgow.

THERAPEUTIC MEMORANDA.

TREATMENT OF THE CHRONIC GOUTY FINGER.

A few months ago (*Bristol Medico-Chirurgical Journal*, June, 1885) I pleaded for a better management of the fingers in their surgical difficulties. Of the medical troubles which invade the fingers, there are none more common than rheumatism and gout; and the abiding deformity and weakness which are often the issue of these diseases, should lead us to treat the early (or subacute) stage with special care.

A valuable suggestion by Dr. Illingworth (*Lancet*, October 13th, 1883) on the application of a light splint to the back of a finger afflicted with whitlow, made me think that the same plan would be helpful to any finger in which the acute effervesence of the gouty paroxysm had passed away, leaving a chronic œdema or thickening,

or small ulcers with "chalky substance" lying in them. These little ulcers are slow to heal; rude stimulating applications provoke them to anger; poultices and compresses keep them in a sodden lazy state, antagonistic to all healthy action. Side by side with the ulcers are often petty nodules of gouty concretion, pale or purple, and likely to inflame, if injured, by any of the traumatic chances of daily life. Now, to keep the finger at rest and in seclusion is to keep it away from harm, to quiet local heat, and to help local repair. Make a paper splint with mucilage of acacia, mould it while moist to the front of the finger, wrapping it a little around the nail, and retain it in position by a few turns of very narrow plaister; over all, with a light muslin protection, like the loose finger of a glove, allowing free access of air; remove the splint night and morning for the sake of cleanliness; and apply a new splint every three or four days.

The exceeding comfort of this plan is best appreciated by those who have tried and enjoyed it. By keeping the finger always straight, an obstacle to the healing of the gouty ulcers is at once removed; inflammation is subdued, and other awkward contingencies are prevented. The little useless member is interred for its own benefit, instead of dangling about and frustrating the offices of its comrades. The fetters may be taken off in due time; gentle friction restores disused tendons and muscles; and the finger will again assume its place in the honourable society of digits to perform its functions until the next attack of gout lays it low.

JOHN KENT SPENDER, M.D.Lond.,
Physician to the Mineral Water Hospital, Bath.

HYDROPHOBIA: CHLOROFORM-INHALATIONS: RECOVERY

THE following case of hydrophobia, treated with chloroform, may perhaps interest your readers. It occurred in one of the suburbs of Bombay, three months ago.

L. M., a native Christian, aged 18, had been bitten on the calf of the right leg, two months before, by a dog believed to be rabid. The wound had healed, and there were three cicatrices resembling those caused by a bite. The night before he was seen, he was restless, and alarmed with dreams. On the following morning, there was a constant hawking and spitting of frothy mucus, with a frequent ringing scream. These symptoms were increased in paroxysms from time to time. He looked anxious and distressed. He did not seem to be affected by currents of air, but became much excited when water was brought near him, and was unwilling to drink or even to touch it. Noises distressed him very much. The pulse was feeble, the skin of natural temperature. Occasional twitchings of muscles were observed, but no marked spasms. Half a drachm of chloroform (afterwards increased to a drachm) was dropped on a handkerchief, and gradually brought near to the face; it was inhaled with apparently partial relief. This was repeated every half-hour, and in all twelve drachms were used. On the following morning, the patient was to all appearances well, and three days after resumed his usual duties.

D. A. D'MONTE, M.D., M.Ch., 3, Whitehall Gardens, S.W.

TOXICOLOGICAL MEMORANDA.

THREE CASES OF POISONING BY PARAFFINUM MOLLE.

THE following facts may prove of interest, more especially as the domestic use of vaseline internally for colds, etc., is daily becoming more common.

On Thursday, January 14th, I was summoned to see three children, aged from 8 to 14 years, who, it appeared, had been each given about half a teaspoonful of vaseline on sugar, the previous evening, as they were suffering from sore-throats. Soon afterwards, whilst in bed, they were all seized with pain in the knees and cramps of the lower extremities, together with severe vomiting, which continued for eight or nine hours. On visiting them the next morning, the severity of the symptoms had passed off, although the eldest child was still inclined to vomit, and was in a somewhat collapsed state. There were no febrile symptoms, and they all quickly recovered their usual health. I carefully inquired for any other cause for the symptoms, but neither in their diet nor elsewhere was one to be discovered.

At the request of the father I saw the druggist who had sold the vaseline. He showed me two samples, one in a tin case and the other in a stone jar. The former was labelled vaseline, and the latter paraffinum molle, *B. P.* The *British Pharmacopœia* preparation was the one supplied to my patients. It would be interesting to know whether vaseline should be administered internally at all, and, if so, in what doses?

H. SHAPTER ROBINSON, M.R.C.S.Eng., L.R.C.P.Ed.,
Monkwearmouth, Sunderland.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ST. MARY'S HOSPITAL.

CASE OF REMOVAL OF SARCOMA FROM BASE OF SKULL, FOLLOWED BY PYÆMIA: RECOVERY.[1]

(Under the care of WALTER PYE, F.R.C.S.)

J. M., aged 16, a poorly nourished lad, was admitted on June 22nd, 1885. His complaint was of a frequent bleeding from the throat and left nostril, dating from a year and a half earlier, and latterly very persistent. On examination, a growth was found which projected forwards into the left nostril (completely obstructing it), from behind the soft palate, pushing this down into the mouth, causing pain and difficulty of swallowing; there had been lately some alarming attacks of dyspnœa. The growth resembled a large nasopharyngeal polyp. On June 24th tracheotomy was performed, as a step preliminary to the removal of the growth.

As soon as the patient began to take chloroform through the tube quietly, the lower pharynx was plugged with a sponge, with some difficulty on account of the growth. The soft palate was then divided in the middle line to its whole extent. It then became obvious that the tumour was a more formidable one than had been supposed. Instead of springing from the neighbourhood of the posterior nares by a narrow stalk, it had a broad base of attachment to the basilar process of the occipital, and probably to the front of the atlas, and filled the whole of the upper pharynx, being much larger than it had appeared to be. It was plain that the growth could not be removed with a simple wire loop; a stout cord of twisted wire and a large screw écraseur were therefore chosen; the cord of wire, however, would not pass through the nostril, so, after some trouble, a Bellocq's sound was passed, and the ends of the wire cord being twisted together, and attached to the watch spring of the sound in the mouth, they were brought out through the nostril from behind, forwards. The ends being then untwisted, were attached to the écraseur. This loop, which was hanging out of the mouth, was then adjusted round the neck of the growth, as close up to the bone as it could be got, and the écraseur tightened through the nostril. The growth was very vascular, and it was necessary to tighten the loop very gradually, so that it was almost an hour altogether before it finally came away. There was a good deal of bleeding, which was checked by ice. The divided palate was sewn up.

During the following week, there were frequent and rather exhausting attacks of bleeding, and very little food could be given by the mouth, the patient being fed chiefly with nutrient suppositories and enemata, but this trouble soon subsided.

The tracheal opening did well throughout; the tube was taken out on the fourth day after the operation, and the wound closed at once. The palate also closed up quite well. The mouth was frequently washed out with Condy's fluid, and a solution of chlorate of potash was swallowed so long as there was any appearance of slough in the mouth. The patient's highest temperature was 100.8° Fahr., and he was discharged apparently well, three weeks and five days after the operation. The tumour, on microscopic examination, proved to be a vascular myxosarcoma.

On July 30th, ten days after his discharge, he was readmitted; the temperature was 105.4° Fahr., and he had pain in the shoulders, knees, wrists, and one ankle.

He stated that the pain was first felt in one shoulder on July 28th in the evening (he had been playing in the park in the afternoon and evening of a very cold day). Next morning he was very sick, shivered once slightly, and the pain had spread.

On admission, he had a coated tongue, a profusely sweating skin with a sour smell, a pulse of 140, and the signs of capillary bronchitis. The right ankle and the wrists were swollen and red; the other joints were also tender. His respiration was so noisy, that the heart-sounds could hardly be made out. His symptoms thus resembled at that time those of an acute attack of articular rheumatism, rather than pyæmia.

For the next two and a half months, he continued to be acutely ill. The joints mentioned remained swollen, and the synovial sacs, first of

[1] Read before the Medical Society of London.

the ankle and then of the wrists, became converted into loose bags of thin curdy pus. They did not present at any time the appearance of common destructive arthritis. These abscesses were opened and drained (about August 18th), ten ounces of pus escaping from one of them.

Then on September 8th a large abscess formed in the substance of the muscles of the right thigh; on September 23rd, another in the gluteal region, the wrists the while improving; and so on, in various parts of the body, abscesses were continually appearing, and being opened, drained, and subsiding, the expenditure in the shape of pus being enormous.

About the beginning of October, his temperature, instead of averaging about 101° Fahr., with occasional exacerbations as the abscesses developed, fell to about the normal, and he began to gain a little. From that time he steadily improved, and finally recovered. The growth at the back of the throat has shown no sign of return.

REMARKS BY MR. PYE.—The case is really an account of two cases—the record of a somewhat unusual operation, and of its sequel, which is at least unusual in its termination, in recovery. The main interest lies apparently in the question whether the one and the other were certainly connected.

I cannot myself entertain any doubt that the acute fever, with multiplied abscesses in joints and in muscular planes, for which he was readmitted, was a genuine pyæmia, in spite of the absence of any definite or repeated rigors; and bearing in mind that all who saw him thought at first that he was suffering from an ordinary attack of acute articular rheumatism. His coated blanketty tongue, and his copious sour-smelling perspiration, together with the appearance of the joints at that time, certainly suggested rheumatic fever very strongly. We also have a history of exposure to guide or misguide us. But the progress of the illness, and the absence of any heart-affection, do not seem to be compatible with any condition except a pyæmic one; and if this be granted, it seems to be a fact worth relating that a large operation about the air-passages, in which the risks of septic pneumonia were guarded against by preliminary tracheotomy, should be followed by an apparent recovery as complete as it was speedy, and that upon the top of this a general pyæmia should supervene, itself recovered from after the most extensive and damaging suppuration.

With regard to the purely operative, or first part of the case, the only points which may be worth while pointing out are (1) the very great, indeed essential, advantages of the preliminary tracheotomy; without this proceeding, it would have been, I am convinced, impossible to have removed the growth at all, impeding as it did the air-passages; (2) the greatly increased width of view given by the division of the palate in the middle line, a proceeding which was practically bloodless; (3) the manner of the introduction and working of the écraseur—that is, through the nostril. In this case, at any rate, the base of the skull could hardly have been got at in any other way. [A sketch-diagram of a preparation, No. 2283 in the museum of the College of Surgeons, which bore a very close resemblance to the case here reported, was shown in illustration, when the paper was read before the Medical Society of London.]

SALOP COUNTY INFIRMARY.

A CASE OF RUPTURE OF THE HEART.

[Reported by HERBERT MACANDREW, M.B., C.M.Edin., Junior Assistant Medical Officer.]

T. S., a man aged 70, was admitted in 1864, and, after residence at another asylum, was readmitted in March, 1885.

He had been in weak physical health for some time, and, about a week before death, was noticed to take his food rather badly, and to vomit once or twice, but, at the time of his death, he was apparently in his usual health, although, owing to his mental state, little or no information could be gathered from subjective symptoms. On admission in March, 1885, no organic disease was found to exist. It may be stated that he was quiet and inoffensive, and was not subject to attacks of excitement or of passion.

On November 12th, at 5 P.M., he was noticed, while walking from the lavatory, to fall suddenly to the ground; he was at once carried to bed. When seen, he was extremely pallid, with very shallow respiration, and his pulse was almost imperceptible; before any treatment could be adopted, he was dead, death having occurred in not more than ten minutes from the time when he fell down.

The necropsy was performed next day, and the more important morbid appearances are as follows. The body was fairly well-nourished; rigor mortis was well marked. On opening the cavity of the chest, the pericardium was noticed to protrude unduly; it was opened, and found to contain four fluid-ounces of blood-stained serum, and a clot weighing five ounces and a half. The heart, together with the arch of the aorta, was then removed, and weighed fifteen ounces. On the anterior surface of the heart, corresponding with the interventricular septum, were two small fissures, each about half an inch long, one being placed nearer the base of the heart; these were three-quarters of an inch apart, and were vertical in direction; a probe passed into the upper rent reached the left ventricle, and, if pushed in a downward direction, emerged at the lower opening, which did not communicate directly with the ventricle. On opening the left ventricle, its walls were found to be hypertrophied, but no sign of fatty degeneration of the tissues was discovered; in the vicinity of the inner opening of the rent, the muscular substance was soft and friable, and studded with minute coagula; the left cusp of the mitral valve was contracted and thickened, and well marked commencing atheroma of the aorta was noticed.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 9TH, 1886.

GEORGE JOHNSON, Esq., M.D., F.R.S., President, in the Chair.

Enteric Fever at Suakin; with some Cases of Malarial Enteric or Typho-malarial Fever. By J. EDWARD SQUIRE, M.D.—By the courtesy of the medical officers of the Suakin Field Force, the author was entrusted with the charge of a division of the base-hospital at Suakin, and was thus enabled to see much of the fever which occurred among the troops. The analysis of nearly eighty cases showed that, though the large majority—about seventy—were of the ordinary enteric fever type, as verified in two cases by necropsies, some were so modified by climatic causes as to merit the designation of malarial enteric. Two or three showed stronger evidence of malaria. One of these, believed to be enteric during life, was found *post mortem*, after four weeks' illness, to have no specific enteric lesions at all; to this class of cases, the term typho-malaria might be restricted. In two of the fatal cases, hæmorrhagic effusions occurred under the conjunctivæ or in some parts of the skin; these cases were not due to scurvy, the diet of the troops being varied with fresh meat and vegetables. Typhus was unknown in the force. Diarrhœa was a prominent symptom in all the cases. As regards the cases of enteric fever, it would seem that the disease was imported from Cairo, and that the infection was spread by the air; the use of none but condensed water for drinking and cooking purposes excluded it as a means of transmission. In opposition to the views of some Indian and army medical authorities, the seasoned troops, represented by the East Surrey Regiment from India, were attacked earlier than those unused to tropical climates, as represented by the Guards who came direct from England; and the mortality was not proportionately greater among the younger soldiers. Cases of enteric fever were admitted into the base-hospital soon after it was opened in March; the malarial cases did not occur till about two months later. Seventy-three temperature-charts, and some cases in full, were given in illustration of the points referred to in the paper.—The PRESIDENT congratulated Dr. Squire on the interesting character of the subject he had introduced, and remarked that he did not himself suppose that water was the only vehicle of contagion in typhoid fever, nor did he think anyone at present adopted that theory. In his own experience at King's College Hospital, there had been two cases among the nurses of the hospital which were undoubtedly traced to contagion by the air.—Surgeon-Major MYERS had been also at Suakin with the Guards, and had given a good deal of thought to the question which Dr. Squire had raised. He remained at the base during February and March, and saw much dysentery and diarrhœa. Then he went to the front with the Scots Guards, and great care was taken with the sanitary conditions of the camp. No severe illness, except a single case of disease of the brain, was contracted there. When he returned to the base, he felt doubtful as to whether they could have had true enteric fever, and asked what had been observed as to the *post mortem* appearances of Peyer's patches. Ulceration, he heard, had been observed in one or two cases. Still, he was inclined to think that dysentery was at the bottom of it. The soil of the place was extremely foul. It had been occupied for a long time, and the sand of which it was composed had no deodorising power. When he had been there ten years earlier, it was very different. After the Scotch Guards had moved away from Suakin, he paid special attention to the *post mortem* appearances in all the cases which had died after typhoid symptoms, and noticed great sloughing about the ileo-cæcal valves, a

peculiar appearance of Peyer's patches, which led him to think the disease had not been pure enteric fever, but a form of dysentery which had travelled upwards beyond the valves.—The PRESIDENT inquired if he had seen any rash in these cases.—Mr. MYERS replied that he could only remember it in one case. As to what the real nature of the fever was, he remained still in complete confusion.—Surgeon-General MARSTON felt Dr. Squire's observations of great value in a subject in which he was himself interested. He had made many *post mortem* examinations of cases of enteric fever in India, Egypt, and England. The two factors that contributed most to make men liable to enteric fever under such conditions were, firstly, that they were young, and, secondly, that they were unused to the climate. That youth contributed to it was long ago pointed out by Andral, and any examination of Indian statistics continually showed the same thing. The deaths between the ages of 20 and 25 were six times as numerous as between 30 and 35, and new arrivals constantly suffered the most. More than 70 per cent. of the total deaths in India occurred in the first or second year of a man's service there. In fact, about a third of the whole mortality of the army from typhoid fever occurred during the first year's residence in India. The same results were to be seen in Afghanistan in places which had never before been trodden by the foot of man; and the French fever experience in Tunis showed the same. The nature of the fevers was certainly doubtful; but for his part, he regarded them as in the main true typhoid with an admixture of a much rarer fever which was remittent, and did not attack Peyer's patches. As to the first appearance of of the fever at Suakin among the seasoned soldiers, he pointed out in them it had only shown itself one day before it affected the others, and that in the most recent records the new arrivals had suffered much the most. The period of incubation in Egypt was decidly longer than what was supposed to be the rule in England. The men had slow pulses but high temperatures. As to what had been called typho-malarial fever, he thought it was merely a coincidence of two separately diseases, and he saw no reason why malaria should not attack a man before, during, or after the course of enteric fever.—Dr. F. D. DREWITT had observed in Palermo the prevalence of what the Italian authorities called typho-malarial fever, and thought the rise and fall of the typhoid and malarial symptoms were too closely coincident to be accidental. The mixed symptoms of various fevers which attended armies had always been a very remarkable feature in disease, and had not received full explanation. —Dr. W. SINCLAIR THOMSON was decidedly of opinion that the differences in typhoid fever were due to the soil on which the germ alighted, and he had observed a predominance of abdominal symptoms in the cases in which the affection had been conveyed by water, and of diphtheritic symptoms where it had been conveyed by air. —Brigade-Surgeon W. G. DONN had had experience of typhoid fever in the East and West Indies and in the Mediterranean, and felt no doubt in adopting the military, as opposed to the civil, theory as correct; namely, that typhoid was a disease which might originate *de novo*. He had seen it under conditions in which he did not think any human imagination could conceive infection possible. It often supervened after a considerable period of ill-health, which might or might not lead up to it. When applied to a military experience, the common English theories broke down.—Brigade-Surgeon G. C. GRIBBON had been at Suakin on the ship *Ganges*, to which many of the patients were sent, mostly in a convalescent stage, some under the diagnosis of "remittent fever" or "heat apoplexy." He felt no doubt that the fever was mainly, if not entirely, enteric, as the four *post mortem* examinations he had made, which were on patients diagnosed as "remittent fever," showed all the lesions of enteric. He did not regard Suakin as such a malarious place as some of the former speakers.—Dr. BROADBENT was glad that Dr. Squire had elicited so valuable a discussion, but felt that more facts were necessary to complete it. Dr. Marston's facts, though they tended to prove that the younger men and new arrivals were more liable to enteric fever, yet contributed nothing to establishing the specific character of the disease. His own conclusions, based on some experience of cases which had been contracted abroad, and on some attention to the literature of the subject, was that in tropical and subtropical climates there was some other fever which, though like typhoid in its intestinal ulceration, was not identical. He thought the fatal case of Dr. Squire's, which showed no ulceration, could not be even modified typhoid. He had seen cases which came from the Mediterranean, for which some name was wanted, and he thought typho-malarial fever as good a name as any other. They were more protean even than typhoid. Of three officers who had returned from Besika Bay, by Malta, to England, one had come under the charge of a high authority, who diagnosed typhoid with a very irregular course; another, under his own care, had shown symptoms of a protracted fever, with high temperature, often reaching 105 degrees, but which was not typhoid, in his opinion, or in the opinion of Dr. Murchison; and the third had some indeterminate symptoms, which were described as subacute rheumatism. More experience was needed before these fevers could be satisfactorily differentiated.—Dr. SQUIRE thanked the meeting for the attention paid to his paper, and was very glad that Dr. Broadbent agreed with him in thinking that there was an admixture of fever, which was not enteric, in his cases.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 13TH, 1886.

J. B. POTTER, M.D., F.R.C.P., President, in the Chair.

The Case of Dr. Heywood Smith.—The PRESIDENT stated, with regard to Dr. Heywood Smith's conduct in the Armstrong case, that the Council, after careful and anxious consideration, had come to the conclusion that they were not justified in recommending the Society to put in force the law which provides for the removal of a Fellow. He then read the following resolution of the Council.

"Having heard Dr. Heywood Smith's explanation of his conduct in the Armstrong case, it is resolved that the Council emphatically disapproves of his action in that case. That this resolution be read from the chair at the next meeting of the Society."

Specimens.—The following specimens were shown: 1. Rupture of Uterus, Dr. Drage; 2. Section of Cancer of the Body of the Uterus removed by enucleation, Dr. Galabin.

On the Production of the Shape of the Oblique Pelvis of Naegele.—Dr. HERMAN said he did not propose to discuss the nature of the disease resulting in this pelvis, but only the reason of the change of shape. He showed by measurements that the disease, whatever its nature, produced dwarfing of the sacrum, and destruction of part of the ilium on the affected side. He did not think that the explanation of the pelvis put forward by Dr. Matthew Duncan, namely, that it was the result of ankylosis of the sacro-iliac joint was adequate. There were three main forces which produced the shape of the pelvis; 1, the body-weight; 2, the action of muscles and ligaments; 3, the innate tendency of the bones in their growth to assume a particular shape. The action of muscles and ligaments he believed to be far less effective in modifying the shape of the pelvis than the body-weight the most powerful force he believed to be the tendency of the bones to grow into their proper shape, in spite of mechanical influences. In the Naegele pelvis, the bones retained this power; and that was an essential difference between the Naegele pelvis and pelves, such as the rickety and osteomalacic, in which the bones were rendered by disease abnormally flexible. The Naegele pelvis was one of the simplest of all pelvic deformities, because in it there was little to deal with except altered distribution of the body-weight. This was carried by the iliac beams on to the femora at angles differing on the two sides. The author believed that, as had been shown by Dr. Champneys, the effect of the pressure of the femora was to carry the acetabula upwards and outwards. He adduced, in support of this view, the evidence of experiments, which showed that, when the femora were pushed upwards in a parallel direction, the pubic bones were divaricated; and that of pelves wasted from disuse of one side, in which the acetabulum on the side on which the unopposed pressure of one femur was exerted, was carried upwards and outwards. The shape of the Naegele pelvis, he believed, was due to the differences in the effect of this pressure on the two sides. The outward pressure was exerted to greater advantage on the sound side; therefore the acetabulum was, on this side, carried outward, and the symphysis pubis dragged over to that side. The iliac portion of the pelvic brim was less compressed on the sound side of the Naegele pelvis than in the healthy pelvis, owing to the pressure of the femur being less directly upwards. The author adduced measurements in support of these assertions. According to his view, the lessened breadth of the sacrum and the iliac bone on the ankylosed side was the essential change, not the ankylosis. In support of this view, he cited cases in which oblique deformity resulted from atrophy of the sacrum without ankylosis; and also cases in which, with ankylosis and oblique deformity, the degree of obliquity was proportionate to the breadth of the sacrum. Lastly, he showed that the shape of the transversely contracted pelvis of Robert was explicable on his view.—Dr. GALABIN said that the action of the body-weight on the posterior sacro-iliac ligaments, exercising force on the iliac beam, and tending to evert its lower extremity, would be abolished if the joint were ankylosed. The body-weight and the pressure of the femora must act vertically; but besides this there was an inward pressure of the femora, and a corresponding outward pressure of the pelvis upon the femora due to muscles. The outward thrust of the lower end of the iliac beam could not be sub-

jected to the paralellogram of forces as the author had done. The important point was the relative length of the arms into which the sacral beam was divided by the incidence of the body-weight. He thought that the study of certain pelves showed that, on the whole, inward pressure at the acetabula predominated. He agreed with the author that the obliquity of the Naegele pelvis could be accounted for by other causes than ankylosis, and that the deficiency of the sacral wing was more important. If for any reason the acetabulum and tuber ischia were displaced towards the middle line, the forces causing obliquity acted with constantly increasing force. There was one peculiarity of the shape of the Naegele pelvis which supported strongly Dr. Duncan's theory of the leverage exercised through the posterior sacro-iliac ligaments, this was the absence of curvature at the posterior end of the innominate line on the affected side. In the scoliotic pelvis, and in the oblique pelvis from disease of one leg, the posterior part of this line was more curved than usual; in the Naegele pelvis less curved, and this could only be accounted for by the ankylosis preventing the action of the iliac beam on the affected side.—Dr. MATTHEWS DUNCAN was indebted to the work of Dr. Champneys, particularly as correcting his former view of the direction of the upward push of the head of the femur in standing. Dr. Champneys showed that the pressure, as unaffected by the action of the adductors, was not upward and inward. The ultimate result, as Dr. Galabin pointed out, of the pressure, as modified by the adductors, was upward and inward. He regarded the Naegele pelvis as rather a malformation than as the result of disease; it was congenital, and might be due to deficiency of the ossific centres. The discussion at present should be confined to the normal pelvis, and its modifications in the pelves of Naegele and Robert, the introduction of others plunged one into an insoluble mass of complexities, while these pelves were well marked and uniform; and as to their shape, congenital character, and absence of bone-disease, there was unanimity. He was inclined to believe that the absence of one or both sacro-iliac joints was the great factor in these pelves. In the other morbid pelves there were several factors of cardinal importance, whose influence it was difficult to ascertain and weigh.—Dr. CHAMPNEYS said that the whole subject of pelvic deformities was most difficult, and the great facts finally settled were few. As regarded the assertion that ankylosis of the sacro-iliac joint could not prevent bending of the iliac beam, he could conceive that, besides the objection brought forward by Dr. Galabin, another might be urged, namely, that a wooden beam laid across a wooden block might not be so easily bent if glued to the block, as if not glued. Again, with regard to the statement that in the Naegele pelvis the bones retained their power of growing into their proper shape, the abolition of action caused by ankylosis, and its effect on the nutrition of the component bones, must be remembered. In the pelvis of a child in which disease of one sacro-iliac joint had produced oblique deformity, the whole side of the sacrum, as far as the coccyx, was dwarfed on the side of the ankylosis. Whatever disordered the equal balance of the "couple of forces" produced by the downward presence of the body-weight at the sacro-iliac joint, and the upward pressure of the heads of the femora (which normally fell outside the line of action of the body-weight) on each side, tended to a progressively increasing disorder of the balance of the two sides. Moreover, the overweighted side was naturally the side of the greater muscular action, including increased pressure of the femora, and increased muscular, and therefore osseous, nutrition. He had endeavoured to prove (1) that the action of gravity must tend to evert the distal end of the iliac beam (this being directly contrary to the accepted view); (2) that the inward pressure of the femora, which undoubtedly exists in the malacosteon and other pelves, could not be due to this action, but could only be accounted for by the action of muscles. As to the question whether outward or inward pressure predominated, he could not at present either agree or disagree with Dr. Galabin. No doubt, in a softened pelvis, inward pressure eventually predominated; but, he thought, more than one explanation was possible.—Dr. WALTER GRIFFITH said that, until the question as to the cause of the sacro-iliac ankylosis was settled, the effects of it were but to be guessed at. He referred to a case of oblique deformity described by Dr. Sinclair in the *Dublin Medical Journal* for 1855, as being exactly like those described by Naegele, and due to disease of the joint in childhood. The study of four pelves with extroversion of the bladder showed great differences as regarded the shape of the pelvis. Cases of extreme scoliosis were found with little or no obliquity of the pelvis.—Mr. HERMAN, in reply, did not think that the fact of ankylosis of the sacro-iliac joint would affect the shape of the part of the ilium between that joint and the acetabulum. His grounds for rejecting Duncan's theory of the Naegle pelvis were that ankylosis was found without the oblique deformity, and the deformity without ankylosis, and that the degree of obliquity was proportionate to the degree of lateral dwarfing of the sacrum. He differed from Drs. Galabin and Champneys in thinking that no comparison could be drawn between the Naegele and the scoliotic and malacosteon pelves, on account of the softening of the bones present in the two latter. He thought that the effects of use and disuse of a limb and of vascular supply were comparatively small.

Gastrotomy for Extra-uterine Gestation, in which the Placenta never came away.—Dr. BRAITHWAITE related this case. A full-grown fœtus, which had been dead about three weeks, was removed from the abdominal cavity. The placenta fitted on the uterus like a cap, and spread posteriorly on to the neighbouring parts. The operation was done aseptically, and the wound closed, except at its lower part, where the funis was left hanging out. The recovery was perfect, though slow. The placenta never came away, except a morsel about twenty grains in weight on the sixth day. The placenta must have been slowly absorbed; and in this the case was unique.—Mr. THORNTON asked Dr. Braithwaite if some mass representing the atrophied placenta was not still to be detected.—Dr. BRAXTON HICKS remarked that, whether the placenta had been absorbed or encysted, the fact was of much importance, for he had for a long time thought that it would be best to treat the wound antiseptically and close it, leaving in a drainage-tube. In four of six cases on which he had operated, however, the sac was already putrid.—Dr. CHAMPNEYS thought that Dr. Braithwaite only meant that the placenta had not come away, and in this respect his title was more accurate than his description; it might quite possibly have grown in its site, receiving progressive nutrition. He intended, when occasion offered, to strip off the amnion if possible from the interior of the sac, and to wash out the vessels of the funis with boroglyceride, this would be a powerful aid to prevent sepsis, and could do no harm if absorbed.—Dr. GRAILY HEWITT believed that the placenta might disappear. The vascular connection was very intimate, and it would probably shrink up and be for the most part absorbed.

HARVEIAN SOCIETY OF LONDON.

FRIDAY, FEBRUARY 4TH, 1886.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

On the Neurotic Treatment of Catarrh.—Dr. LEES limited the word catarrh, in his paper, to its original meaning of coryza, and pointed out the many troublesome and even disastrous results which might ensue from a neglected cold, and the unsatisfactory nature of a merely diaphoretic treatment. He defined catarrh as a neurosis of the vaso-motor nerves, excited in a reflex manner by impressions of cold on the cutaneous nerves. He pointed out that congestion and hyperæsthesia of the nasal mucous membrane was a result of this vaso-motor paralysis, and that, conversely, there were reasons for thinking that a morbid irritability of this part might itself excite catarrh; an illustration of this latter process being found in hay-asthma. The question of the origin of catarrh from germs was considered, and the arguments in its favour stated, including the undoubted contagiousness of some colds, and the analogy of such diseases as influenza, measles, and whooping-cough. But to ascribe all catarrhs to germs was premature and probably incorrect. Catarrh being a neurosis, relief must be sought by the aid of neurotic remedies. The indications for treatment were three: to quiet the excitement of the central nervous system, to soothe the local congestion and hyperæsthesia of the nasal mucous membrane, and to arrest the flux, if it had already commenced. The first indication was to some extent met by opium, but much more satisfactorily by a full dose of bromide of potassium, and this drug had the further advantage of great safety. The second object was easily accomplished by painting the interior of the nose with solution of hydrochlorate of cucaine. The arrest of the flux was to be arrested by the administration of belladonna, a drug whose first obvious physiological action was to cause dryness of the mouth and throat. The author had found the following method promptly and permanently successful in cutting short a cold. From forty to sixty grains of bromide of potassium were given at once, the dose being repeated in six hours, and again, if necessary, six hours later; and twenty drops, equal to fifteen minims, of tincture of belladonna were also given every hour, or every two hours, until the throat felt a little dry. Painting the nasal mucous membrane with a 4 per cent. cucaine-solution gave great relief, and might even by itself suffice to arrest a cold. Dr. Lees concluded with the account of a case in which ten grains of bromide of potassium, with eight minims of tincture of belladonna, had in less

than forty-eight hours completely arrested a very pronounced nasal and pulmonary catarrh, with much dyspnœa, in a highly rickety child aged 4, whose chest was much deformed; and he suggested that, from the known danger of this condition in such children, it was not improbable that, in this instance, a life had been saved by the adoption of a neurotic treatment of catarrh.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 8TH, 1886.

W. M. ORD, M.D., F.R.C.P., President, in the Chair.

Subperiosteal Section in Cases of Acute Necrosis.—Mr. BERNARD PITTS read the notes of the case of a girl, aged 15, who was admitted on November 15th, 1882, with pain and swelling in the lower end of the right tibia. An incision had been made above the ankle, giving exit to a quantity of matter. On admission, the patient was very prostrate, and had a temperature of 102° Fahr. The previous incision was freely enlarged, and the patient's condition at once began to mend. On December 16th, a further operation was undertaken, and the lower two-thirds of the tibia removed, when it was found to be extensively necrosed; the epiphysis was almost entirely destroyed. Care was taken to save the periosteum. The astragalus was scraped, and the epiphysal remains removed. On June 23rd, a small residual sequestrum was removed, and, on August 21st, a sinus in the foot was opened. Since then, the wound had healed up, and remained quite sound. The leg was now a very useful limb, with very little shortening. The second case, aged 7, was under Sir William Mac Cormac from October 11th, 1881. The site of the disease was the same; and, as the epiphysis was found to be separated, the lower two inches and a half of the tibia was removed. The patient rapidly improved, and left the hospital on December 23rd. The case was seen later, and there had been no return.—Mr. H. H. CLUTTON admitted the difficulty of deciding on the line of conduct to pursue in such cases, and he congratulated Mr. Pitts on the success of his conservative treatment.—Mr. J. H. MORGAN mentioned a similar case which had been under his care.—Mr. WALTER PYE expressed his opinion that it was often necessary to remove a good deal of new bone in these cases, as this new bone was often firmly adherent to the bone undergoing necrosis. He did not think that the involvement of the joint ought to constitute a hard and fast line for the treatment.—Mr. A. PEARCE GOULD doubted whether the whole of the bone before the meeting was really dead bone. He thought, too, that the general condition of the patient was of more importance than the local condition.

Case of Empyema followed by Cerebral Abscess.—Dr. D. W. FINLAY read this paper. The patient, a governess, aged 20, had suffered from an empyema which had opened spontaneously, and, on recovery from which, she had been sent to the seaside. Later however, as it did not heal, portions of the fourth and fifth ribs were excised, and the cavity washed out. This was followed, in the course of eight days, by attacks of an epileptiform character, vomiting, coma, and death. At the necropsy, an abscess, three inches long, was found in the anterior lobe of the right hemisphere of the cerebrum.—Dr. HADDEN, Dr. DE HAVILAND HALL, and Dr. J. J. PRINGLE, quoted cases with similar sequela, Dr. Pringle's case, however, recovering.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY,

THURSDAY, JANUARY 28th, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Meningitis? after Removal of Aural Polypus.—Mr. C. ATKIN read notes of a case which occurred at the infirmary, where severe head-symptoms, after removal of an aural polypus, ended in recovery; and commented on the difficulty on diagnosing between severe cranial erysipelas and meningitis. Affection of the optic discs, secondary to aural affections first noted by Zaufal, was alluded to, and doubt was expressed as to whether it occurred when the meningitis spread from the internal auditory meatus, or only through the roof of the tympanum. The value of strict antiphlogistic treatment, and of repeated large doses of quinine, was well-marked.

Ear-Disease: Abscess of Brain.—Mr. C. S. KILHAM related particulars of this case occurring in a girl, aged 15, who was admitted into the workhouse on September 28, 1885. The right ear had been deaf since childhood, and there had been a discharge from it for three years. The symptoms commenced with faintness, which caused a discontinuance of her work, a fortnight before admission, when the right ear was found discharging, and over the mastoid process was a semi-fluctuating swelling, tender to the touch. This was freely laid open, and a quantity of thick fœtid pus escaped; bare bone was detected. She suffered from pain in the forehead, vomiting, delirium, became comatose, and died on October 2nd. There had not been severe pain, rigors, high temperature, or paralysis. At the necropsy a large space of bare bone ($2\frac{1}{2}$ inches by $1\frac{3}{4}$) was found over the mastoid and extending into the auditory meatus. The meninges were adherent over the parietal lobe and petrous bone, and in the right parietal lobe was a large abscess-cavity, containing five or six ounces of thick fœtid pus. This cavity communicated with the auditory meatus.

Orbital Nævi, treated by Electrolysis.—Mr. S. SNELL related particulars of three cases of nævus of the orbit treated by electrolysis. All occurred in young babies, and the situation in each was similar, namely, in the upper eyelid, towards the inner angle of the orbit. One seemed more confined to the lid than the other two, which reached more deeply; one, also, was as large as a small walnut, and the others were somewhat smaller. They were all increasing in size. In each instance, a satisfactory result had been obtained; and Mr. Snell, referring to other plans adopted for the treatment of nævi, remarked that he questioned whether any other method would have succeeded with as little deformity as was the case in these instances.—The PRESIDENT, Dr. KEELING, and Dr. S. ROBERTS, made remarks.

Fracture of Patella: Specimen.—Mr. LOCKWOOD exhibited a patella which had been fractured six years before. A longitudinal section showed that the fracture, which had been apparently starred, had united in front, but the posterior fragment had fibrous union. The patient had had an useful limb.

Fracture of Neck of Femur.—Mr. LOCKWOOD also showed this specimen, from a man aged 74, who died about a month after the accident from pneumonia. The specimen displayed clearly a fracture (extracapsular), extending through the trochanters.

Vicarious Menstruation?—Dr. WHITE (Retford) related the particulars of this case, occurring in a young girl aged 14, the child of parents in a good position. Commencing as an abrasion of the lower lip, which bled freely, when first seen by Dr. White, there were five deep fissures, from which blood flowed freely, and which was only arrested by direct pressure. After a time, the bleeding, instead of being more or less constant, became periodic, these discharges corresponding also to the menstrual periods, at which times the discharge was scanty. Examination of the blood showed, Dr. White thought, that it was different from ordinary blood, and strongly resembled menstrual fluid. The girl was seen at different times by a large number of eminent London practitioners, and as many different opinions as to the nature of the affection were expressed; only one suggested that it might have been self-inflicted, and that the patient kept up the irritation. Inherited taint was suspected, but denied. On the supposition of hysteria, a careful watch was made by the friends, but no evidence of self-infliction was detected. Matters reached a grave issue, life appeared in question, and Dr. White removed her to his own house, and, under chloroform, applied nitric acid to the deep fissures. The result was excellent. A good deal of deformity resulted, which was treated by closing the fissures as a hare-lip would be treated. Dr. White had noticed, since recovery, that the onset of the menstrual periods was always accompanied by deep flushing of the lip, as if bleeding were threatening to break out again. The girl was of a hysterical nature, and, after the cauterisation, suffered from hysterical paraplegia. After the wounds healed, menstruation became properly established. Dr. White discussed the views held by different writers on the subject of vicarious menstruation; and whilst dwelling upon the aspects of the case, pointed it out as belonging to such a class of cases, though he felt by no means positive on the subject.—Remarks were made by the PRESIDENT, Dr. KEELING, Mr. ATKIN, and Dr. ROBERTS.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, JANUARY 8TH, 1886.

J. B. BRADBURY, M.D., President, in the Chair.

Salivary Calculus of Unusually Large Size.—Mr. CARVER showed a specimen which he had removed from a man aged 70. It formed a swelling in the floor of the mouth, to the right of the middle line, and just behind the sublingual gland; and, when explored with a needle, was found to be of stony hardness. It was easily removed with scissors. The patient had only noticed some tenderness there for the last five or six weeks. There was no enlargement of any of the salivary glands, or other symptoms. The stone was ovoid, pointed at both ends, and of a pale yellowish white colour. It weighed $141\frac{1}{2}$ grains and measured $1\frac{7}{32}$ of an inch by $\frac{7}{8}$ of an inch broad, with a circumference of $2\frac{1}{4}$ to 3 inches. Mr. Carver remarked upon the large size of the calculus, being one of the largest recorded.

Retro-uterine Hæmatocele.—Dr. BRADBURY read the notes of Charlotte C., aged 28, married, admitted into Addenbrooke's Hospital on May 13th. All her sisters suffered from excessive menstrual periods as well as herself. She was quite well till marriage nine years ago, but nine weeks afterwards miscarried. She subsequently had several miscarriages, and bore one child at full term, but suffered from *post partum* hæmorrhage. The history of the present illness was that she went ten days over time for her menstrual period, and then had severe bearing-down pain, followed by profuse hæmorrhage and sickness. Vaginal examination showed the os uteri more open than normal. The abdomen was distended and tender, and the patient was unable micturate, and kept her legs drawn up. After a time, the distention gradually subsided, allowing a swelling to be felt just below the umbilicus, tender to the touch, fairly resonant all over except in the left iliac fossa; and friction could be heard over it. The bladder contained three ounces of urine. The uterus was pushed close under the symphysis pubis, and Douglas's pouch was distended by a soft doughy mass. On June 8th, she passed a quantity of blood by the bowel; soon afterwards, the tumour began to subside. On July 24th, the swelling in Douglas's pouch had disappeared, leaving the uterus anteverted, and more fixed than natural. On August 15th, she was discharged, being almost well. Dr. Bradbury remarked that this was a well marked case of pelvic hæmatocele in a hæmorrhagic subject. The treatment was rest in bed, and when the patient was suffering from the effects of the hæmorrhage, a hypodermic injection of one-sixth of a grain of morphine, which proved very effective.

Tubercular Meningitis following a Blow of the Head.—Mr. MARTEN was able, through the kindness of Dr. MacAlister, under whose care the patient was admitted, to bring forward the case of a boy, aged 7, who, previously to his fatal illness, had appeared to be enjoying fairly good health, with the exception of a slight discharge from both ears, which had persisted for some months. His head was knocked against the wall on December 10th, and, from this date, he suffered from sickness and persistent headache. He continued to go about till the morning of the 20th, and was then found by his mother totally unconscious. When admitted to the hospital, on December 22nd, he was perfectly unconscious; the pupils were equal, and reacted to light. The breathing was quick and shallow; the pulse small, but regular; the lips covered with sordes; the tongue thickly coated; the abdomen was much retracted; the *tâche cérébrale* was very marked; all his limbs were quite stiff. He continued in the same unconscious condition, and died ten days after the blow was received. The mother, one brother, and sister, had died of phthisis. The *post mortem* examination showed the body well nourished; there were no evidences of any injury. The convolutions of the brain were found to be much flattened, and a few scattered tubercles were seen about the base of the brain and up the Sylvian fissures, with obvious meningeal inflammation around. There was a marked excess of fluid in the ventricles, and a dilated foramen of Monro. The lungs were studded with tubercles, especially at the apices. The kidneys showed caseous deposits in the pyramids, and some pyelitis. There was no evidence of extension of the inflammation from the tympanum. Mr. Marten said the case was of interest from a medico-legal point of view, as it was difficult to determine to what extent the blow was the cause of death. The meningitis proved to be tubercular, and a verdict of death from natural causes was returned.

Exostosis of Great Toe.—Mr. WALLIS showed this specimen, removed from a woman, aged 33. It had been growing for fifteen years, and had caused great pain. The whole of the last phalanx was removed. The growth sprang from the knotty terminal part of the phalanx, and not the epiphysis, and was covered with cartilage.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 8TH, 1886.

F. H. ALDERSON, M.D., Vice-President, in the Chair.

Cases.—Mr. WEISS showed a case of pustular syphilide; Mr. LLOYD one of acquired syphilis, with copious papular rash, in a boy; and Dr. MALCOTT FOX one of favus. Dr. SAVILL showed two cases of myxœdema. In one patient, a widow, aged 46, whose illness dated from three years and a half ago, jaborandi and nitrite of amyl were tried in the treatment, but were discarded in favour of a mixture of arsenic and nux vomica. The patient gained seven pounds in the hospital during a period of three months.

Gangrene of Leg.—Dr. PICKETT and Mr. KEETLEY described a case of obstruction of the bowels from impaction of fæces, followed by gangrene of the left leg, in which a large syphilitic gumma of the gastrocnemius muscle had developed.—Mr. PICK remarked that, in a similar case which he had seen at St. George's Hospital, the gangrene was due to embolism.—Dr. BALL asked if antisyphilitic remedies had been given while the patient was in the hospital. To this, an affirmative answer was given.—Dr. PICKETT and Mr. KEETLEY briefly replied.

Three Cases of Excision of the Tongue.—Mr. JOHN R. LUNN related these cases. The first was one of epithelioma of the tongue in a man aged 50. The tongue was removed by the écraseur, and the patient made an uninterrupted recovery. The operation was performed on November 27th, 1884, and as yet no signs of recurrence had appeared. The second case was that of a man aged 75, who had cancer of the right side of the tongue and enlarged glands under the lower jaw. The lower jaw was divided; and the whole tongue was easily removed by the galvanic écraseur, without any hæmorrhage. The enlarged glands were also taken away. On the fourth day, septic pneumonia appeared. He died on the eighth day after operation. The third patient, a man aged 42, had cancer of the tongue and floor of the mouth. In the operation, a chain-écraseur was used, and most of the growth was cut away with curved scissors. The right lingual artery was accidentally snipped with the scissors, and was tied with a catgut ligature. On the twelfth day, he got up. Recurrence took place, and the patient died five months and a half after the operation. No secondary deposits were found after death. Mr. Lunn said that in his next case he would follow Mr. Whitehead's method, as he did partially in the third case related. The chain-écraseur was difficult to manage, and sometimes the wire or chain broke. With regard to the galvanic écraseur, the separation of the eschar was liable to be followed by secondary hæmorrhage, and septic dangers were more to be feared than in other modes of operating. Division of the lower jaw materially increased the risks of the operation. In order to obtain room, it was best to cut the cheek as far back as the anterior border of the masseter muscle. The patient should be fed through the nose. Ice and a piece of lemon only should be placed in the mouth during the first few days, and no talking allowed. In the last case, a solution of cucaine was painted over the tubing before it was used, and it was found that the patient bore the introduction of the tube into the nose much better.—Mr. M. COLLIER considered that, when the disease was very extensive, a partial operation was worse than useless. He thought that it was absolutely impossible to say, before operating, that the glands in connection with the tongue were not involved; and to remove the tongue without removing the glands was a worthless procedure. Division of the lip and lower jaw added a serious element of danger to the operation, and was totally inadequate for the complete removal of the diseased structures. He described at length a method of operating which he had introduced.—Dr. THUDICHUM thought that the best method for removing the tongue was to tie the lingual arteries first, and then remove the organ with the electro-cautery at white heat.—Mr. F. S. EDWARDS said that, when the disease involved the floor of the mouth, no operation should be done. The operation which he preferred was that of dividing the tongue down the centre, and applying an écraseur of whipcord to the base, behind a curved needle.—Mr. PICK said that a surgeon was quite justified in removing the disease as far as possible, without removing it wholly. With regard to the troublesome hæmorrhage which sometimes occurred from the lingual arteries, the best plan was to pass two fingers well back into the pharynx, and thrust the base of the tongue forwards, as suggested by Mr. Christopher Heath. The septic pneumonia and bronchitis which occurred in these cases were due to the fœtid inhalations from the foul ulcers. After fixing the wire écraseur as a tourniquet, he removed the tongue with the knife. He was much in favour of preliminary tracheotomy.—Mr. LUNN, in reply, agreed with Mr. Pick that something should be done in extensive cases of the disease. The objection to using the white hot wire was that it frequently broke.

A Case of Infantile Scurvy.—Dr. BALL read a paper under this title, describing a case of the disease in a female infant, aged 14 months. There was nothing special in the family-history. The child had been fed on Nestlé's food and a little condensed milk, for four months previously to the occurrence of symptoms. Cow's milk was ordered to be given, also a little meat-juice, and two teaspoonfuls of orange-juice three times a day. Immediate improvement followed, and the child was quite well in a few weeks. Such cases had been recorded chiefly under such designations as acute rickets, osteal cachexia, and hæmorrhagic periostitis, until Dr. Barlow established their true nature. The characteristic lesion was swelling of bone due to subperiosteal hæmorrhage; spongy gums were often absent in infants, always so if no teeth were through. Rickets had no necessary connection with scurvy. The disease was due to the absence of antiscorbutic substances from the diet. The great majority of the cases occurred in children fed exclusively on some mealy or amylaceous

food, with, perhaps, condensed milk. Meat-juice was a good anti-scorbutic if made from freshly killed meat, and might form a part of the diet when milk could not be borne. Probably not more than one in twenty of the cases recognised and treated as scurvy died.—Mr. KEETLEY described three cases which had come under his notice. He believed that the complaint was far more common than it was generally supposed.—Dr. BENNETT considered that diet played the most important part in the causation of these cases, and it was generally the quality of the milk which was at fault when scurvy occurred. He related the case of a child which was well until weaning. It was then fed with cow's milk, and became ill. The milk was stopped, and Savory and Moore's food given. Improvement at once began; good cow's milk was obtained, and the child became strong.—Dr. POPE had met with two well-marked cases of infantile scurvy. He thought that Nestlé's was a good food, but the directions given with it were scarcely correct. The proper way to give the food was to mix it with milk and water in equal parts.—After some remarks from Dr. OWLES, Dr. BALL replied.

Specimens.—Mr. DUNN showed several pathological specimens.

HARROGATE MEDICAL SOCIETY.

THURSDAY, JANUARY 21ST, 1886.

G. OLIVER, M.D., President, in the Chair.

Eczema.—Dr. RUSSELL brought forward a case of acute eczema distinctly traceable to nerve-shock, the patient being attacked within twenty-four hours of hearing he had lost a large sum of money.

Terebene. — Drs. OLIVER and RUSSELL mentioned the value of terebene in bronchitis.

Hydrotherapeutics.—Dr. R. S. VEALE read a paper on hydrotherapeutics. Beginning by giving a short outline of the early history, he then discussed in detail the internal and external uses of both hot and cold water, and gave illustrative cases where benefit had been derived from wet sheet-packing, and other hydropathic means. He then dwelt upon the value of the Turkish bath, and pointed out how it should be taken to secure the most benefit. Lastly, he made a few remarks upon diet and regimen, laying down certain rules for patients undergoing a course of mineral water or hydropathic treatment.

REVIEWS AND NOTICES.

A REFERENCE HAND-BOOK OF THE MEDICAL SCIENCES, Embracing the Entire Range of Scientific and Practical Medicine and Allied Science, by various Writers. Illustrated by Chromo-Lithographs and Fine Wood Engravings. Edited by ALBERT H. BUCK, M.D., New York City. Vol. I. New York: William Wood and Co. 1885.

THIS is the first volume of a work of very ambitious scope, and very considerable size. The entire work will include eight volumes (about 800 pages) large quarto. These are arranged in alphabetical order, and it constitutes, in fact, a dictionary of the medical sciences of a very ambitious and exhaustive character. Naturally, however, with so extensive a plan, and so wide a range, even in a work of this size, it would be exceedingly difficult to treat exhaustively all the subjects, for which provision is to be expected. Dr. BUCK tells us, therefore, that he has had to make a choice between treating a number of subjects so briefly as to cause well-founded disappointment, and limiting the range of subjects with judgment, so as to select such as shall seem to have greater importance, and to omit altogether unimportant subjects. He has resolved to adopt the latter alternative, and has determined to give the largest share of space to practical matters, such as the diagnosis and treatment of disease, etc. Nevertheless, he does not omit to deal with such departments of knowledge as medical botany, climatology, embryology, physiological and pathological chemistry, applied anatomy, medical jurisprudence, military and naval surgery. To aid him in dealing with these subjects, he has secured the assistance of a large staff of American contributors, including the best known persons at the great medical centres of the United States. We miss from the list such names as Agnew, Billings, Austin Flint, and Fordyce Barker; but, in looking through the list of contributors to the first volume, we find a list which gives preliminary assurance that the subjects have been carefully distributed. To review the first volume of a dictionary of this kind would involve more careful study and larger space than can well be given; nor, indeed, do dictionaries usually admit of exhaustive review. It will suffice to say of this volume that it is crowded with interesting matter carefully condensed, and with an excellent regard to just proportio and relative importance of the subjects treated. The series of article on the pathology of the brain is particularly good. The who volume is copiously illustrated; and when the series is complete, will constitute in itself a compact library of medical and surgical i formation of an encyclopædic character, and the practitioner who po sesses it may dispense with ordinary handbooks, except for subjec on which he desires full and special information. It is a considerab undertaking on the part both of editor and publisher; but no doul many practitioners are glad to have upon their shelves an extensiv work of this kind, giving condensed information on a wide range subjects alphabetically arranged, and capable of easy reference.

RÉCHERCHES CLINIQUES ET THÉRAPEUTIQUES, SUR L'ÉPILEPSI L'HYSTÉRIE ET L'IDIOTIE. Par BOURNEVILLE, BUDOR, DUBARR et LEFLAIVE; et P. BRICON. Paris: 1885.

(RESEARCHES, CLINICAL AND THERAPEUTICAL, ON EPILEPSY, HY TERIA, AND IDIOCY.)

THIS work is the annual report for 1884 of the Bicêtre Hospital, which M. Bourneville is physician. The patients include ep leptics, idiots, and backward children. The section for children h been much improved and enlarged, after the usual complicated dipl macy with the authorities; and there is now sufficient space, wit workrooms for joining, shoemaking, needlework, basketmaking, ar locksmiths' work. The first part of the book is taken up with a account of the new section for children and the statistics; the secon part, with an account of the most important cases. This part co sists of seven chapters, of which two are devoted to therapeutics, an the remainder to cases. The accounts of the latter are models case-taking, of complete and detailed observation; they all repa perusal.

The first paper (by Bourneville and Bricon) deals with a case Jacksonian epilepsy in a man aged 25 years, who was und observation for four years previous to death. Some of the chi features of this case may be mentioned. At ten years of age, th patient had an attack of complete left hemiplegia, the leg subsequent recovering, while the arm and facial muscles remained paralysed; afte wards, there was a contracture of the arm. Attacks of giddine supervened at fourteen years of age, followed in three years by defini epileptic fits, preceded by an aura travelling up the left arm an involving chiefly the left side of the body. The fits became pr gressively worse in spite of treatment with bromide of potassium an hydrotherapy; they could be stopped by forcible extension of the le hand, and brought on by fixing an object with the eyes, in which ca there was a subjective sensation in the left eye. After death (fro asthenia) the following brain-lesions were found: atrophy (? from o hæmorrhage) of the right anterior frontal convolution posteriorl the lesion extending into the lower half of the ascending parietal an frontal convolutions, and into the parietal lobule; the lobe of th cerebellum on the same side (right) was atrophied. For further de tails of the case and lesion, the original must be consulted. It interesting, however, to notice the onset of epileptic attacks seve years after the cortical lesion, and the associated atrophy of the cer brum and cerebellum on the same side of the body, an anomaly f which there seems no reason in this case.

Two articles are devoted to the treatment of epilepsy, by curare an by sclerotinic acid. An excellent historical account is given of th use of curare in the disease which some observers (for exampl Benedikt) have alleged to be benefited in two ways, by an amen ment of the mental condition, and by a diminution of the number fits. The limiting dose of curare for a man must be determine experimentally, especially as the drug is variable in composition; th is done by calculating in proportion to the patient's weight from th lethal dose for a rabbit of known weight. Bourneville and Bricon hav given the drug hypodermically in daily doses not exceeding six cent grammes ($\frac{3}{10}$ grain) in twenty-one various forms of idiopathic epileps (children and adults), and have noticed no amelioration of th symptoms, except in one doubtful case, suffering from attacks of shak ing, which were slightly relieved. The treatment was continued f about two months in each case; and the authors conclude that it valueless in epilepsy. They arrive at the same conclusion with rega to sclerotinic acid; for, though some benefit was observed in fiv patients under its influence (dose, hypodermically, up to $\frac{3}{10}$ grain yet the change was not so marked as to be ascribed unreservedly t the drug.

An outbreak of rötheln (rubeola) in the Bicêtre, in 1881, is describe some interesting charts of the variation of the temperature bein

iven. Bourneville and Bricon noticed swelling of the cervical glands
i all their cases, sixteen in number; the importance of this symptom
insisted on by Thierfelder.

A case of late epilepsy (at 48 years of age) ending in death from
xtensive central cerebral hæmorrhage, is a careful clinical study. In
nother case described, congenital idiocy, a horse-shoe kidney was
und, which was provided with double arteries and veins on each
de, and presented the further anomalies of the ureter being in front,
d the convex curve of the "shoe" looking downwards; the ureters
ere much dilated. The last three chapters of the book are devoted
two cases of "mental instability," one of which improved greatly
der treatment, the other succumbed to pulmonary tuberculosis.

The publication of reports such as this, containing careful clinical
udies of selected cases, tends greatly to improve medical knowledge
nd literature; for, as a rule, the great fault of published cases is the
sproportionate relation of detail to their importance, clinically or
thologically.

CLINIQUE OBSTÉTRICALE. By Dr. RODRIGUES DOS SANTOS, Accoucheur-in-Chief at the Municipal Maternity Hospital of Rio de Janeiro; with a Preface by Dr. A. PINARD, Agrégé à la Faculté de Médicine de Paris. Vol. i. Paris: Octave Doin. 1886.

HIS practical manual on the science and practice of obstetrics is
ritten by one of the most promising pupils of Dr. Pinard, of Paris,
well known for his work on abdominal palpation in the diagnosis
fœtal position. Due weight is therefore given in this volume to
e advantages to be derived from a systematic employment of this
ethod of examination. It is satisfactory, from an English point of
ew, to see to what a large extent our own authorities are quoted in
e course of the work, and the importance attached to their views
controversial points. Very often, authors of the Latin race are much
arrear of British medical science and practice, and little acquainted
th foreign literature. The arrangement of this work is different
om most of its kind, the description of the pelvis only occurring far
in the volume, after the chapter on positions and presentations.
e method of conducting labours in Brazil is evidently the same as
at in use in France; and it accordingly differs materially from the
glish procedure. The style of the book is clear and unembarassed,
d the illustrations (the best of which are evidently copied from Dr.
nard's *Traité du Palper Abdominale*) are numerous and well con-
ived.

HANDBOOK OF THERAPEUTICS. By SYDNEY RINGER, M.D., Professor of the Principles and Practice of Medicine, College Physician to University College Hospital, etc. Eleventh Edition. London: H. K. Lewis. 1886.

HE fact of the appearance of an eleventh edition, is a proof of the
pularity of this well-known handbook, the general plan of which
probably familiar to most students and practitioners. Recent
ditions to the stock of medicinal agents render alterations indis-
nsable, but, beyond this, the edition before us does not differ ma-
ially from those which have preceded it. The value of the pre-
inary chapters on the tongue, the pulse, etc., remains as great
ever, and will be perused with interest and instruction by succes-
e generations of students. Dr. Ringer is particularly well known
his elaborate researches on the physiological action of drugs, and
hough the data so obtained are not always proof against criticism,
directly useful in directing their application in disease, yet, as it
a truly scientific method of inquiry, and offers, moreover,
cellent mental training at a period of study when such training is
the greatest importance, it cannot be considered inappropriate or
necessary. Most of the drugs which have of late years acquired a
mblance of reputation for themselves are described, although the
ace allotted to each of them is not always in proportion to their im-
rtance. This is particularly the case with cascara sagrada, anti-
rine, and one or two others whose *locus standi* is by this time esta-
shed. There are also one or two omissions, the reasons for which
is difficult to understand, as for instance the abrus precatorius or
uirity bean, a now recognised agent in the treatment of pannus, or
nular lids, homatropine, the useful substitute for ordinary atropine
en dilatation of the pupil is required for ophthalmoscopic examina-
n purposes only, and strophanthin the drug so well reported on by
. Fraser, of Edinburgh.

On the other hand, the chapter on anæsthetics is much enlarged and
proved. Dr. Buxton, the anæsthetist at the University College Hos-
al, has contributed the articles on nitrous oxide gas, cucaine, and
ier, on the latter of which his great experience as administrator of anæsthetics enables him to speak with authority. These subjects ar judiciously handled, and are well worthy of the close attention of those who have to do with anæsthetics. Dr. Buxton does not believe in the good effect said to be derived from the use of nitrite of amyl, in cases of syncope under chloroform, and this may possibly account for the fact that in the chapter on this drug no mention is made of its extensive and often successful use in such cases.

In the few paragraphs devoted to nitrite of sodium, no credit is given to Dr. William Murrell for his extensive observations as to its physiological and therapeutic action, the publication of which excited much interest at the time.

The practitioner may derive some useful hints from the chapter on the employment of alcohol in disease, and some check given, possibly, to its use as a matter of routine, a practice which is often attended by such undesirable results. The book concludes with a liberal supply of directions for preparing food for the sick, and a copious analytical index prepared by Dr. Theodore Maxwell, both of which will be found invaluable for reference. A grateful acknowledgment is made of Dr. George Bird's valuable assistance in revising this and previous editions.

BASIC AURAL DYSCRASIA AND VASCULAR DEAFNESS; also Notes on the Deafnesses. By ROBERT T. COOPER, M.A., M.D. Univ. Dubl. London: Baillière, Tindall, and Cox. 1886.

THIS work is a reprint of a series of articles in journals. The first and by far the larger part of the book is devoted to what the author terms basic aural dyscrasia and vascular deafness. To give some idea of what he means by these expressions, we may quote the statement (p. 57) that "the basic aural dyscrasia represents a condition of ill-health in which a diffused irritability attacks the walls of the blood-vessels, which, left untreated, very often settles upon the ear, giving rise to two prominent ear-symptoms. One of these is an enfeebled hearing-power, or the deafnesses; and of these the majority are divisible into the obstructive and the non-obstructive class; and of these, again, the latter can be comprehended under the term vascular deafness." The author considers that in nearly 95 per cent. of aural patients, as they occur in the out-patient department of a hospital, functional murmurs in the vessels can be heard, although he objects to the term functional. These murmurs he appears to consider indicative of a certain measure of inflammation, or irritation, affecting the coats of the blood-vessels. Hence he argues that the blood-vessels of the ear are progressively afflicted with morbid alterations of a precisely similar description. He also describes certain eye-symptoms as present in the early stage. "Vascular deafness" the author defines as "a variety of impaired hearing unattended by visible alteration of, or destruction in, the tissues of the ear, and not fairly ascribable to the blocking up of the external meatus or of the Eustachian tube, nor to hyperplasia of the anatomical elements of the middle ear, nor yet to paralysis of the auditory nerve."

These few references will give some idea of the author's theories in regard to the pathology of ear-diseases. Practically, it is to be regretted that he has not given more of his experience in the prevention of deafness, more especially as the work bears the subsidiary title of "A New System of Aural Therapeutics and Pathology." We learn, however, that the author is a strong advocate of the application of warmth in ear-diseases, which he considers always beneficial. Internally, he recommends the administration of picrate of iron, the indications for its use being hepatic inertia, coated tongue, etc.; and in nervous deafness, with symptoms of Menière's disease, he has used gelseminum with benefit.

NOTES ON BOOKS.

Beasley's Pocket-Formulary (J. and A. Churchill) is now in its eleventh edition. It is amplified and corrected to make it correspond with the new editions of the British, United States, French, and German Pharmacopœias, which have been published since the last issue in 1877. It is a very convenient feature of this volume that the formulæ of the *British Pharmacopœia* of 1867 have been retained, and placed after the corresponding ones of 1885, for the purpose of convenience. The indices contain a good deal of useful unofficial information; the weights and measures of the *British Pharmacopœia* are compared with those which are in other countries employed in the preparation of medicines. A table is also given, regulating the ordinary proportion of doses according to the age of the patient

and for those who are in the habit of reading foreign books, or have to deal with foreign prescriptions, there is here useful information as to English and French synonyms of preparations which are in our *Pharmacopœia* known exclusively by their Latin names, or under the titles of their inventors. The short list given of eclectic remedies is far from complete, and conveys very little useful information. More, however, must not be expected from a book of this sort than is implied in its title; and it must always be remembered that it is in no sense critical, but only a pocket-formulary.

Lieutenant Mary: a novel. By J. T. COLLIER. In two volumes. (London: Remington and Co.).—Among the amusements of a medical practitioner, may be counted the art of literary composition. Comparatively few medical men, however, have ventured in the field of pure romance, and medical authors of novels of the circulating library may almost be counted on the fingers. Dr. J. T. Collier has produced a novel which has at least the merit of being very readable, and it contains a number of sketches of medical experience in daily life, which will give it a special interest for medical readers. More than one type of provincial medical man is sketched with a good deal of literary skill, and with a frank recognition of the strong, as well as the weak, points of medical men seeking promotion by legitimate as well as by illegitimate methods. As a piece of literary workmanship, or as an example of subtle characterisation, *Lieutenant Mary* will not rank very high, but it brings into strong relief some interesting features in modern life, and the heroes are principally chosen from our own profession. Lieutenant Mary is a medical man's daughter, who is drawn into the Salvation Army, and her life and adventures, together with the influence which they have on her lover, Ion Trafford, M.D., are told with much vivacity and feeling.

Burmah and the Burmese. By W. ALEXANDER, M.D., Brigade Surgeon, Medical Staff.—This pamphlet, which originally appeared in the columns of the *Illustrated Naval and Military Magazine*, is a very able sketch of a lengthened visit paid some years ago by Dr. Alexander (now of Streatham) to Upper Burmah, a country which recent affairs has rendered interesting to Englishmen. The climate, the health, habits, and customs of the people, and the general bearings and relations of the country, are sketched in a light and interesting way very creditable to the author.

Dr. Royston Fairbank's Clinical Note-Book (John Smith and Co., 52, Long Acre), is a very conveniently arranged little pocket-book, which is useful for the record of cases observed at the bedside, and gives separate columns for date, days of illness, pulse, temperature, urine, respirations, with a ruled page for general remarks; which, however, is so arranged that it can be used for temperature-charts. In the pocket of the book is a little brass stencil plate for rapidly sketching an outline of the body, which may be marked by shading the seat of effusion and other mischief, as also the position of displaced organs and tumours. The latter part of the book is ruled specially for long reports of physical examinations, both *ante* and *post mortem*, for operations, and for cases for which the first part is not suited. Altogether, it is a very conveniently arranged and portable little note book, and we are not surprised that it has proved popular, and reached its fourth edition.

The Insurance Year Book, 1886: A Guide for Persons Effecting Insurances. (London: Simpson, Marshall and Co.)—This is a plain and useful handbook on all kinds of assurances,—matters rendered of almost national importance by the continually increasing number of the insured, and the magnitude of the capital involved. A popular explanation is given of the general principles which underlie the systems of annuity, life, fire, marine, and accident insurance. Of greater value than this, however, is a very full and clear statement of the income, expenditure, management expenses, and reserves of almost all the established assurance associations, with comparative tables of premiums, rates of interest, results of last valuations, etc. It is notable that, while the cost of management of the ordinary companies presents a moderate average, that of the associations which describe themselves as "industrial" is scandalously excessive. This is fully apparent from the fact that, while the ordinary cost of working is well under 20 per cent. of income, and in some few cases less than 10 per cent.—a group of the "industrial" societies exhibit an outlay of over 50 per cent., in one case the expenditure being over 62 per cent. Making an annuity or life assurance contract generally involves the investment of a considerable amount, and this handbook places it within the power of intending insurers to ascertain, with a minimum of trouble, the trustworthiness, or the reverse, of any of the concerns undertaking such business.

The Science of Change of Air. By DAVID S. SKINNER, M.D. (London; Tinsley Brothers. 1885. 8vo., pp. 62).—This work furnishes a short summary of the factors at work in producing the effec on the human constitution of change of air. The subjects discuss in the first chapter are respiration and its physiology. The next t chapters are devoted to the products of waste, and to urea and f The fourth chapter discusses atmospheric pressure. Then follow t watery vapour of the breath, ozone, and electricity and animal el tricity. In the last chapter, the author descends from his wi generalities, and treats shortly of the climate and topography of pa of England. None of the subjects are fully worked out, but the wo is very suggestive; and it is well that, in so complicated a subject climatology, our attention should be occasionally called from deta to generalities. We have noted one or two matters. Dr. Skinn thinks that in ozone we may have too much of a good thing; and attributes the mortality in the Hebrides from phthisis (the curre notion is the opposite as to its prevalence there) to excess of ozone the atmosphere, just as some French dread excessive oxygenation in t Riviera. He is inclined to attribute an outbreak of jungle-fever whi he witnessed in India to ozone, rather than to decaying vegetatio We hear nothing from him of malaria-germs and microphytes, whi at present occupy so prominent a place in medicine. Dr. Skinn confines himself strictly to air, and we hear nothing of water or so which also are important factors of climate. Nevertheless, the notes are quite worth looking at.

Diagnostic et Traitement Chirurgical des Tumeurs Abdominal Par Sir Spencer Wells, Ex-President du Collège Royal des Chirurgi d'Angleterre, Chirurgien Consultant du Samaritan Hospital, e Édition français publiée avec le concours du Dr. J. KESER, chirurgi de l'Hôpital Français de Londres. (Paris: Aux Bureaux de *Semaine Médicale*).—Translation is like imitation, a sincere form flattery, and, unlike some forms of imitation, it must, if necessa respect original claims, since the translator cannot take all the cre to himself, as certain imitators are wont to do. Sir Spencer We may, perhaps, be considered the most translated medical writer in t country, a proof of the high confidence which his surgical princip enjoy on the Continent. It must be remembered that a more pur scientific work would be less likely to prove a success abroad, si men tend to believe most in the theories of native teachers, thou they cannot overlook the operative triumphs of a foreigner. In t case of *Tumeurs Abdominales*, the translation has been made by surgeon, who is not only conversant with colloquial English, but a understands the idioms in vogue in British and in French medi schools, a self-evident advantage which needs no comment. M Keser, with commendable modesty, has confined his labours to t rendering of Sir Spencer Wells's work into French, without any ec ing beyond two or three references, in foot-notes, to French authoriti There are plenty of good surgeons in French-speaking countries w are competent to follow out Sir Spencer Wells's directions, but wh is especially desirable in those lands is the cultivation of a class ovariotomy nurses, such as exist amongst our countrywomen. T kindly nursing "sisters," from Catholic institutions, are genera amenable to discipline in French hospitals; the new lay-nurses often enthusiastic about their duties; but kindness and enthusia alone are insufficient to make a good ovariotomy nurse, ready and a to act upon her own responsibility, and therefore competent to ensu as far as possible, the recovery of the patient.

British Lying-in Hospital: Report for the Year 1885. By F. COURT BARNES, M.D., and JOHN PHILLIPS, M.B., Physicians to Hospital.—During the year 1885, there were 151 women delivered the hospital, with 1 death, or a mortality of .65 per cent. Th were born 78 male children, or 51.6 per cent., and 75 female, or per cent.; of the mothers, 37 were primiparæ, or 24.5 per cent., were multiparæ, or 75.5 per cent. Of the children, 9 were still-bo or 5.9 per cent. There were two cases of craniotomy, both patients with rickety pelves; the mothers recovered. In four ca it was necessary to induce premature labour, on account of contrac pelvis. In the first case, the child survived, the mother having p viously been delivered in two labours by craniotomy. In the sec case, the patient, a II-para, was admitted with albuminuria a general anasarca. After induction of premature labour, she w delivered with forceps by Dr. Fancourt Barnes of a living male chi The third case was that of a VII-para, delivered of a living fem child. The fourth case was a VII-para, delivered by craniotor Seven patients were delivered by forceps, or 4.6 per cent., with still-born child. There was one case of version in contracted pel the child, a male, being born dead. There were six presentations the pelvic extremity, the children being born alive. There was case of *post partum* hæmorrhage in a primipara; this was control by clearing out the clots from the uterus with the hand. There w three cases of adherent placenta removed by the hand *in ut*

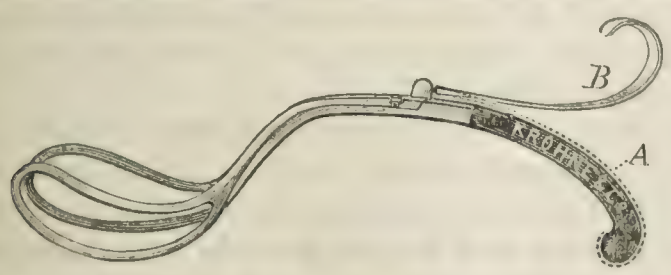
There was one case of puerperal mania. This patient had been previously delivered by Dr. Phillips in the out-patient department, when she suffered from melancholia during the puerperium. During her attack in hospital, she became violent on the sixth day after labour, refused her food, and had to be kept in bed. She was treated with bromide of potassium and hydrate of chloral, and left the hospital eighteen days after delivery, in good health. The morbility in the hospital was extremely low, 37 only of the women delivered having at any time a temperature above 100° Fahr. It should be stated that since the year 1880, the hospital has been conducted under strict antiseptic precautions. Every patient is delivered under the carbolic spray (1 in 80). In all the wards, the carbolic spray of the same strength is continually playing. All ointments used during vaginal examinations are carbolised, as are any vaginal or intra-uterine injections. Since the introduction of the antiseptic system into the hospital, the maternal mortality has not exceeded the low average of 3 per cent. This is, at all events, a strong testimony in favour of that treatment in lying-in hospitals.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW AXIS-TRACTION FORCEPS FOR HIGH DELIVERY.

By Edmund Holland, M.D.,
Physician to the Hospital for Women.

The forceps, of which I enclose an electrotype, has for its object the simplification of the high delivery, and a greater control over axial direction. It has the double curve, after the manner of Dr. Aveling's instruments, and their chief peculiarity attaches itself to the small metallic handle, which slips on the wooden handle of the upper blade, and is capable of easy circular rotation to the left or right. When in operation, this supplementary handle (B), having its fixed ball and socket-joint half an inch below the lock, on the anterior surface of the



handles, acts as a lever of the first kind, as well as a tractor, and by its means a greater axial control over the instrument is effected than by any other mechanism with which I am acquainted; whilst the whole additional contrivance is out of the patient's body and in sight, and all increase of bulk or complicity of the internal portions, are avoided. Moreover, the perineal pressure of such instruments as Tarnier's is advantageously relieved. The clever details of the mechanism were worked out by Messrs. Krohne and Sesemann, of Duke Street, where instruments are ready for inspection.

A REFRACTION OPHTHALMOSCOPE,
WITH A SPECIAL ARRANGEMENT FOR THE ELECTRIC LIGHT.

By Henry Juler, F.R.C.S.
Junior Ophthalmic Surgeon, St. Mary's Hospital, London.

This instrument (Fig. 1) consists of nine convex and fifteen concave spherical lenses arranged on a single disc. The strength of the series of convex lenses is 1, 2, 3, 4, 5, 6, 7, 12, and 20 Dioptres, and that of the concave is 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 20, and 30 Dioptres. These lenses are successively brought opposite to the sight-hole of the mirror by means of a driving wheel (A).

The special arrangement for the electric light consists of a small lamp (B), which is fixed just below a small concave mirror. The necessary galvanic current is produced by a small Le Clanché battery (C). This could be equally well obtained by any other form of battery, or even by a pocket accumulator, but this form has hitherto been found to give the least trouble, and to be the most reliable. One of the great advantages of this arrangement is that the mirror is fixed in one position, and does not require to be rotated or altered for either eye. The electric lamp (B) is also stationary, and so does away with that co-ordination between the observer and the patient, and between the mirror and the light, which, with the non-electric illumination, are often found difficult. The mirror should be held as close as possible to the cornea, and immediately opposite to the pupil. The effect of the light is in no way unpleasant. The fundus can be easily examined without the use of a mydriatic.

FIG. 1.

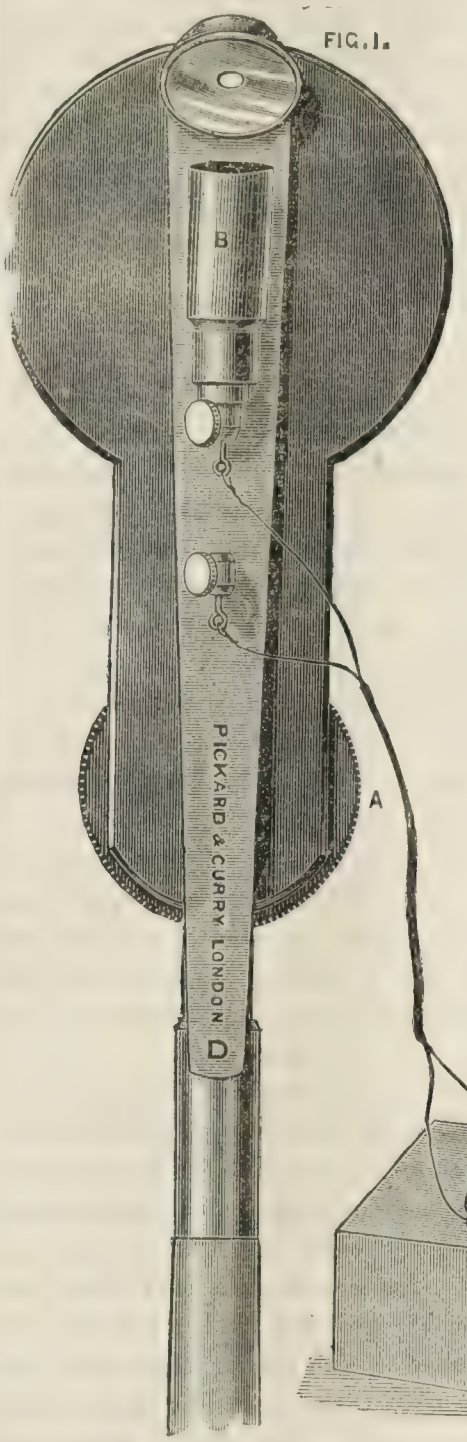
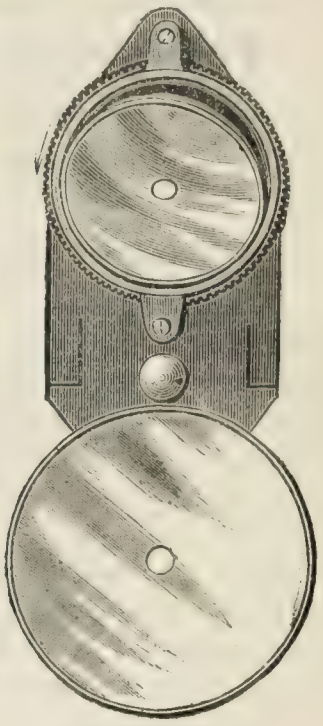


FIG. 2.



When the ophthalmoscope is required to be used with the usual gas or oil lamp, the electric apparatus can be removed in a few seconds, and replaced by the arrangement shown in Fig 2. This consists of two concave mirrors, revolving on a central pivot; the larger of these can be used for the indirect method and the shadow test; the smaller is employed for the direct method; it is fixed at an angle of 25°, and can be rotated around its central axis.

The instrument is beautifully constructed by Messrs. Pickard and Curry, 195, Great Portland Street, W., and its price is so moderate as to enable any student to purchase it.

The Briton Medical and General Life Association.—A petition to wind up the Briton Medical and General Life Association came on Saturday, January 23rd, before Mr. Justice Kay. By the consent of all parties, the petition was allowed to stand over generally, and the matter was referred to Chambers, with the view of calling meetings of policy-holders and shareholders to agree to schemes for the reduction of contracts and the winding up of affairs, to the benefit of all concerned.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 13th, 1886.

THE GENERAL PRACTITIONER AND THE POORER CLASSES.

THE medical relief of the poor presents a problem of ever-increasing interest, and occupies a place among the most important social questions of the day. It addresses itself to us by its relations to the public at large, to the department of Government concerned with the administration of the poor-laws, to the recipients themselves of the relief, and, lastly, to the members of the medical profession. In medical discussions of the matter, the last-named relations are apt to assume undue consideration. This is very explicable, and largely excusable, inasmuch as medical men are, by their interests, intimately connected with the issues involved.

In dealing with the subject, we may advance several propositions not likely to be disputed; namely, that the amount of gratuitous medical relief is excessive and ever advancing; that it is detrimental to the interests of its recipients and of the medical profession; and that it is fostered by the multiplication of institutions to administer it.

The first proposition is tangible to every observer. There is an uninterrupted demand for more hospitals and dispensaries, and every such institution points annually to an augmented list of applicants, and on this fact bases its appeals for continued and extended support, that it may enlarge its field of usefulness. Now, this growing demand for gratuitious medical services goes hand-in-hand with a progressively increasing charge upon the poor-law funds; and, what is more, with a larger distribution of wealth among the artisan and labouring classes, and, consequently, with increased means on their part to pay for services which they require. That there is gross abuse of the privilege of gratuitous medical assistancce, we need not stay to demonstrate.

The next proposition is, that this excess of gratuitous medical aid is detrimental to the interests of its recipients and of the members of the profession. To establish its validity requires no array of arguments. In fact, it is universally admitted. The power to obtain a valuable commodity without labour or cost demoralises its recipients. It destroys the natural stimulus to exertion and thrift to gain it, and lessens in estimation the value of the article given. Indiscriminate medical relief, like indiscriminate alms-giving, demoralises and pauperises, and implants no germ of gratitude in the breast of the receiver; and, turning to its effects upon the prosperity of the profession, even a visitor to out-patient rooms cannot fail to perceive how large a proportion of those found there have no claim upon the unpaid services of the physicians and surgeons, and are depriving them of the just reward of their labours. In short, in all towns where hospitals are found, there is a perpetual and augmenting drifting away of clients from the lists of the general medical practitioners to the hospital-books; and so great is this transference of patients from the paying to the non-paying class, that the prosperity of medical men is largely sapped, and the ever-arduous struggle for existence intensified.

But apart from, and in addition to, the pecuniary injury consequent on indiscriminate gratuitous treatment, other ill results follow to the bulk of the profession, which, though less insisted upon, are unquestionably real. On the one hand, the hospital-wards attract cases of special interest and importance in practice; on the other, they offer inducement to the practitioners in their neighbourhood to forego the anxiety and responsibilities of such cases, and to hand them over to the staff of the hospital, or, if some particular organ be involved, to a specialist. This course of action must be tainted by evil. It must render the medical man less self-reliant, curtail his experience and his opportunities for applying his knowledge and skill; and, in short, make him a less all-round man for the exigencies of practice.

The third proposition is but a corollary upon the two preceding. If gratuitous medical relief be unduly extended and largely abused, then the institution of fresh agencies, constructed on the same vicious model, must exaggerate the evils deplored. Yet, without doubt, within the last half century, the multiplication of hospitals has been extraordinary, particularly of special hospitals; and although such an expansion of free medical aid is damaging to the profession, yet it is largely by the exertions of medical men themselves that it has been brought about. At the present time, it is not for us to explore the motives operating with professional men in taking this course; it is enough now to indicate the fact.

The discussion of the proper aims and limitations of medical charity cannot be compressed within the limits of an article in this JOURNAL, and we must content ourselves by a brief glance at them. In general terms, it is the sick poor who have claims upon the charity of the public and the profession. In theory, the poor-law system should satisfy these claims. It ramifies throughout the land, and every parish has its paid medical officer, engaged to render assistance within his district to all cases of illness adjudged to have a claim upon it by a duly appointed authority. However, this elaborate system has proved inadequate to meet the demands of the sick poor of the whole country. This is especially the case in large towns. In rural districts it, on the whole, fulfils its purpose; but when the needy sick of large towns, with dense populations of labourers and artisans, have to be succoured, the poor-law machinery breaks down. The appointment of a medical officer to a district containing many hundreds, or thousands of the poorer working classes—among whom sickness implies arrest of work, and of the means of paying for treatment, and even food—cannot, except to a remote degree, count as a means adequate to its professed end.

Here the hospital, with its offer of gratuitous medical aid, steps in and supplements the deficiencies of the medical organisation of the poor-laws. And this aid is presented to the poor under the most engaging aspects and conditions. It is well known to them that the poor-law medical man is very scantily paid; and, accustomed as they are to measure the amount of work by the payment for it, their conclu-

n is that they cannot expect very assiduous attention from him. oreover, they view him as a busily engaged man, with private prac- e also to look after; and seldom can they be impressed by his pro- ssional status, unsupported as it is by the usual trappings of the shionable medical man. On the other hand, they think highly of the spital and its officials, whose reputation is familiar to them. They e attracted to it by the belief that they can get there the best vice, the choicest prescriptions, and the best drugs without stint. is no wonder, therefore, that hospital-patients have rapidly in- eased, and are increasing. By largely supplementing the relief orded by the poor-laws, the hospital shifts, so far, the burden of xation from the shoulders of the ratepayer to those of its own ntributors.

Were this the whole of the matter, no substantial objection might taken; but the defect of hospital-relief is, that, in contrast with at offered by the poor-law, it takes no pains to discover who are its oper recipients, and who not.

The rivalry of hospitals—general and special—and of the one kind th the other, and likewise of medical men ambitious of hospital- pointments and fame, have encouraged the resort of patients to eir wards and consulting-rooms, and acted adversely to any scheme regulating and limiting the aid given. The system of letters of ommendation, prevalent in many, has operated in the same way. vertheless, if the abuse of hospital-relief is to be controlled, some n for rejecting unfit cases must be acted upon. The mechanism the poor-law in the appointment of relieving-officers to investigate ses soliciting assistance, is one that works fairly well, and sug- sts that a plan in some measure analogous might be applied to spitals.

But the drifting away of patients from private practitioners, and e all-engulfing capacity of hospitals, are not likely to be completely t by the expedients of separating the worthy from the unworthy. e hospitals do not stand alone in depriving practitioners of their due oluments. Practice, chiefly in poorer districts, is preyed upon by druggists, some of whom, not content with remunerative counter- scribing, visit patients at their homes, and assume the functions licensed medical men. Benefit societies and clubs which, by their ganisation, promise assistance in sickness to their members, and ould bring some advantages to the profession, appear to be falling, an increasing extent, into the hands of unqualified men, a circum- nce calling loudly for legislative remedy.

Self-supporting dispensaries, and medical provident societies, give mise of retarding the medical pauperisation of the population. t, defects and abuses cling even to these well-intentioned organisa- ns. Fit and unfit members are to be found on their lists, and the re so when the governing body consists of laymen, anxious rather secure the solvency and prosperity of their institution, and to our friends and connections, than to guard their medical officers inst imposition.

But, particularly in manufacturing towns, practitioners of late rs have, in their emergency, and in order to ensure a practice icient for their maintenance, adopted the expedient of "private pensaries," undertaking attendance upon people belonging to the louring and artisan class, for the modest sum of a few pence, pay- e weekly or monthly. As it is their own private arrangement, power remains with them to include or exclude whom they please. have often objected that such plans make medical skill too cheap and are derogatory to the position of medical men. To this objection it is replied, that the rate of payment by weekly or monthly subscription is equal to, if it do not actually surpass, that obtainable from clubs; and that the medical man continues master of the situation, and escapes the annoyances often inflicted by club committees and members.

Moreover, it is urged that medical men do not live and practise for themselves. They receive licence and recognition from the State; and the public is instructed to resort to them, and them only, for aid when sickness overtakes them. Hence medical men are charged with the care not only of well-to-do patients, but of people struggling with poverty; consequently, circumstances will compel many of them, in poor localities, to adjust their fees by the resources of their patients. It is argued that this conduct is forced upon them by necessity, and it is better that the least wealthy classes should be able to secure the services of qualified practitioners, rather than fall into the hands of quacks, or of prescribing druggists. And if medical men are to be disowned as unworthy members of their calling because of the smallness of their charges, injurious consequences are indicated, both to the profession and the public; for the next step, it is suggested will be the avoidance by medical men of poor districts, and the handing over of their inhabitants to the ever-encroaching hospitals, or to the druggists; and withal a speedy demand, analogous to that in 1815, for the recognition of these tradesmen as apothecaries or licensed practitioners, of a lower grade, indeed, than the perfected products of higher examinations and more extended study, but one possessing the potentialities of evolution to push it forward as a rival to the latter. The whole subject is one which will repay full and serious discussion. On the one side are ranged the question of professional dignity, and the adherence to rates of remuneration which shall be adequate; and on the other are the facts of club payments, and the power of association and the allegation that the pennies of the million are everywhere becoming as important as the pounds of the upper ten thousand. There has been a tendency, to which we incline, to object to low fees, even as a means of combating hospital and poor-law abuse. But the power of the penny is growing, and the increase of private dispensaries is a fact to be considered. They involve often false pretences; apart from these, how are they to be considered and dealt with?

ON THE POSITION IN NUTRITION OF THE VARIOUS CLASSES OF FOOD-STUFFS.

In no department of science perhaps, has more energy been shown, than in the enquiry as to the part played by the various classes of food-stuffs in the animal economy. Nowhere has the evolution of ideas and theories followed more rapidly its course, thanks to the indefatigable zeal of the workers in this branch. Liebig was one of those who did much to place the subject on a scientific basis, and by the contribution of carefully ascertained facts to give the whole research a stimulus to which we are largely indebted for the progress accomplished. We have had to modify, it is true, his views on the correlation of exercise and the excretion of urea; and the altered views materially influence the theory of nutrition. The opinion formerly entertained that urea represented the wear and tear of the tissues of the body, and therefore bore a constant relation to the work done by them, has to be abandoned. The albuminoid-constituents of the tissues are in such a condition of stability, that they do not them-

selves readily undergo metabolism in conditions of health; and it is only under the influence of an acceleration of metabolism on the one hand, or a diminished supply of albuminoids on the other, that they are decomposed. That portion of the albuminoid-constituents of the food which circulates with the blood is more easily split up; and, as the activity of the cellular elements in effecting these changes is to some extent dependent on the amount of this "circulating albumen," so the excretion of urea will correspond to some extent to the amount of nitrogenous material taken in with the food. There is, however, for every individual a limit to the activity of his cellular elements, and, if this be surpassed, metabolism will be diminished and oxidation only imperfectly performed. Hence a liberal nitrogenous diet does not, of itself, tend to an increase of body-weight or strength.

Contrary to the behaviour of the albumens in the organism, the extent of fatty metabolism is independent of the ingestion of fat, but is markedly affected by the amount of work performed by the organism, and by the maintenance of bodily heat. The material effects of albumen and fat in the system are in a certain sense opposed, for the former increases the tissue-waste, and secondarily the oxidation, while fat induces the opposite effects. This action of fat is of special importance, when we have to consider how best to attain an increase of the constituents of the body. With an exclusive supply of albumen, only very small quantities of this substance can ever be retained in the body; for each accession of albumen to the food gives rise to an increase of waste until, after a few days, the balance between income and expenditure is again established. With a simultaneous administration of albumen and fat a less amount of albumen is on this account necessary to meet the material wants of the organism, and if it be present in excess the metabolic processes do not attain the same proportions as with a diet consisting exclusively of albumen, so that a larger proportion of the excess remains undecomposed in the body and adds to its weight. The fat stored in the body acts in like manner with the fat contained in the food, since it likewise lessens the waste of tissue and secondarily the oxidation. This is the reason why corpulent individuals frequently continue to gain in bulk, although they are not in the habit of indulging immoderately in food. The action of carbohydrates resembles that of fat in protecting from metabolism a certain amount of the circulating albumen; and if given in excess they will, in consequence of the greater facility with which they undergo metabolism, lead to the more hardly metabolisable fat being left unchanged and deposited in the tissues. From this we may conclude, that the generally assumed transformation of carbohydrates into fat does not take place.

As already stated, an increase in the nitrogenous substances in the ood leads to increased metabolism, and at the same time the amount of "circulating albumen" is augmented. This explains why a highly fed animal can better withstand privation than one more poorly nourished, since it is only after several days that the stock of circulating albumen will become exhausted, and the organism is forced to draw on its own tissues for nitrogenous material. Let us take an animal fed on a quantity of albuminoids insufficient for its needs, it will then have to draw upon its own tissues to make up the deficiency. If some fat be added, a part of the albumen is economised, and the amount of nitrogenous waste, as shown by the urea excreted, is lessened; so that in a well-fed animal starvation provokes a diminution, but in a poorly fed animal an augmentation of nitrogenous metabolism. Similarly alcohol, in consequeuce of it metabolism and of its fat-sparing action, behaves in the charact of a food. The main value of stimulants is, however, more in th direction of slowing metabolism and so lessening waste, than fro any nutritive qualities which they may possess. Most of them, mor over, have an influence on the process of digestion which in certai cases may, by rendering it slower, conduce to more perfect assimila tion.

DR. QUAIN'S ADDRESS AT NETLEY.

In our issue of the 6th instant, we gave a brief summary of the a mirable address delivered by Dr. Quain on the occasion of the di tribution of prizes on the last day of the winter term at Netley. W highly commend the practice of the Senate of the Army Medic School, in not confining the principal part on such occasions t military officers and statesmen, however distinguished. There wisdom in inviting men in the front rank of the civil profession deliver addresses which, like the one under notice, really enlight the public. It is a matter of great satisfaction that publicity has bee given to Dr. Quain's address by the press. We have reason to kno that it has done much to make known the good work which has bee and is being done by a class of public servants, whose services a generally left in the cold shade. There are two subjects dealt wit by Dr. Quain, on which we desire to offer a few observations, whi we are sure that distinguished physician will take in good part.

Dr. Quain very properly made use of the miserable Walcheren ar Crimean expeditions, to contrast them with the splendid medical an surgical triumphs in our late wars. It should be distinctly understoo however, that the terrible mortality, more especially in the Crime was not the outcome of ignorance and want of skill on the part of t medical department of the Army. Doubtless this was the way which men in authority, from the Prime Minister down to the smalle Horse Guards' official, wished the public to regard the matter. T blame rested, in the first instance, "on the system," and the mise able way in which that system was worked by the incompetent milita officers in command. In the Crimea, there was no lack of ab military surgeons, but they were without means, without influenc without authority; but, although they were powerless to pr vent the misery they had to contend with, they had to bear best they could the tempest of public indignation which fell on the for the sins and shortcomings of others. Yet, and it is well the pub should know it, to this miserable system, if the military authoriti had their own way, they would return to-morrow. It was to forwa this end that the unfounded charges against the department wc brought at the close of the first Egyptian campaign, which melt into air under the strong light of Lord Morley's Committee.

The next part of Dr. Quain's address on which we have a word say, is his well-meant suggestion for the creation of an order of medi merit for the public services. This suggestion is open to the grave objections. The medical staffs of the British and Indian armies for an indispensable part of both armies; they share in the risks of t battle-field, and have a double share of all other contingent risks war, and they claim, as of right, a fair share in the honours of w Money can never adequately reward the services they render, and, it could, it is not, and cannot be, forthcoming. They are, and alwa have been, eligible for the Victoria Cross, and, thanks mai to the untiring and unselfish exertions of Ranald Martin, to t

honour of the Bath. What they complain of is the grudging and miser-like hand with which such honours are meted out to them. When an application is made for an honourable mark of distinction for a man who has served his country well, in peace and in war, on many battle-fields and in many pestilential climates, he is put off to a more convenient season, to make way for those who have more powerful friends and greater "interest;" and the man whose claims are thus scorned goes to his grave unhonoured and unknown. So went Edmund Parkes, who, in his lifetime, did more for the soldier than any man who went before him; and so have gone many more who have been animated by his example, and have striven to follow in his footsteps.

A merely departmental order of merit would not meet the requirements of the case of a service so intimately associated with the army; and, besides, there would arise a difficulty about other branches, leading either to jealousy, bad feeling, or to an unnecessary multiplication of orders of merit. What is wanted is a more just and generous distribution of existing decorations, "the cheap defence of nations." The public now know the priceless value of the service rendered; will they allow a mere clique to intercept the just reward?

Dr. Sattler, director of the ophthalmic clinic at Erlangen, has accepted the offer of a professorship in the University of Prague.

Dr. von Pettenkofer, of Munich, has lately been elected a foreign member of the Academy of Sciences in Stockholm.

Several deaths from cholera are reported to have occurred last week at Tarifa.

Mr. Cyril Flower, M.P., has kindly consented to occupy the chair on the occasion of the anniversary festival of the Metropolitan Free Hospital, to be held on May 12th.

It has been decided, subject to obtaining the land at a moderate cost, to make the size of the Princess Alice Memorial Hospital, Eastbourne, more adequate to the demands made upon that institution.

Prince Christian has promised to preside at the forty-first anniversary dinner of the German Hospital, to be held at the Freemasons' Tavern on Wednesday, May 5th next.

Mr. Victor Horsley (Professor-Superintendent of the Brown Institute), will deliver a lecture on Hydrophobia at the Parkes Museum, 74A, Margaret Street, Regent Street, on Thursday, February 18th.

Professor Semmola of Naples has received from the King of Italy the gold medal of "Public Merit," in recognition of his zeal and devotion in directing the sanitary service of the White Cross during the cholera-epidemic of 1884.

An aged district medical officer, Dr. C. Weber, of Mursteken, in Bohemia, is reported to have died of the severe cold early in January, while on the way to make a professional visit. His body was found lying, frozen stiff, in the road.

A bureau of public health, on the plan of those existing in Germany, has just been instituted in Tokio, Japan. The Director is Professor Ogata, who has studied for several years in Munich, Leipzig, and Berlin, especially in the laboratories of Pettenkofer and Koch.

A paper on the comparatively recent rating of public charities, and advocating the restoration of their ancient exemption, will be read by Mr. J. S. Wood, at a meeting of the Hospitals Association on Wednesday, February 17th.

A Birmingham writer points out that London, with a population eight times larger than that of Birmingham, has succeeded in collecting for its Hospital Saturday Fund a sum only double of that collected in the latter town.

At the Levée holden on Tuesday last by H.R.H. the Prince of Wales, on behalf of Her Majesty the Queen, the following members of the medical profession were presented: Dr. Fancourt Barnes; Sir William B. Dalby, on receiving knighthood by patent; Dr. Robson Roose; and Surgeon Edward N. Sheldrake, Grenadier Guards.

The interesting portrait in oil of William Harvey, who was born at Folkestone in 1578, and died in 1658, painted by Cornelius Jansen, is about to be etched by M. Waltner for Messrs. Colnaghi and Co., of Pall Mall East. The original belongs to the College of Physicians.

An outbreak of small-pox has occurred at Birtley, in the Chester-le-Street Union, and the local press speaks of the disease as spreading. Cases have also occurred in West Stanley and Beamish, in the adjoining union of Lanchester, having been imported from Birtley. In both unions, steps are being taken to stamp out the disease.

At the meeting of the East London and South Essex District of the Metropolitan Counties Branch of the Association, to be held at Brook House, Clapton, on February 18th, at 8.30 p.m., there will be an interesting exhibition of patients with skin-diseases. Dr. Stephen Mackenzie will show cases of lichen planus, lichen circumscriptus, morphœa (unilateral and symmetrical), pemphigus, tubercular eruption (leprosy and syphilis), exfoliative dermatitis, seborrhœa, etc.; and a case of elephantiasis of the scrotum will be shown by Dr. A. T. Gibbings. We are asked to state that all medical men will be welcome as visitors to the meeting.

SUICIDES IN ENGLAND AND WALES.

At the next ordinary meeting of the Statistical Society of London, on Tuesday, February 16th, 1886, at the Royal School of Mines, 28, Jermyn Street, S.W. (at 7.45 p.m.), a paper will be read on Suicides in England and Wales in Relation to Age, Sex, Season, and Occupation, by Dr. William Ogle.

THE TUBERCLE-BACILLUS.

Dr. Theodore Williams commences on Wednesday, February 17th, 24th, and March 3rd, at 4 p.m., at the Brompton Hospital for Diseases of the Chest, a practical course of demonstrations on the clinical value of testing for the tubercle-bacillus in phthisis, illustrating it by a series of selected cases from the wards. The demonstrations are free to medical practitioners.

THE LATE PROFESSOR SANTESSON.

Professor Carl Gustaf Santesson, who died lately at Stockholm, was born in Gotenburg in 1819. He took an active part in the two last International Congresses. His school-days were passed at the gymnasium there; and, in 1836, he entered as a student in the University of Upsala. He afterwards studied at Copenhagen. He was appointed prosector at the Caroline Institute in Stockholm very early in his career. He afterwards became Surgeon to the Serafim Hospital, and, finally, Professor of Surgery in the Caroline Institute. He was one of the most renowned of Swedish surgeons, a careful and painstaking observer, a profound student of the science and art of surgery,

and a most successful operator. One who knew him well, writes of him, "He was a remarkably correct diagnostician, he knew where he cut, how he cut, and why he cut." His death was due to endocarditis and myocarditis.

THE DARLINGTON HOSPITAL.

A CORRESPONDENT writes that the whole of the honorary staff of the Darlington Hospital have sent in their resignations to the Committee, owing to the extremely unsatisfactory state of the nursing department, and the refusal, on the part of the Committee, to take needful measures to ensure reform. There have been several changes of house-surgeons during the last twelve months on account of the same difficulty.

STATUE OF CLAUDE BERNARD.

LAST Sunday, February 7th, the statue erected in honour of M. Claude Bernard was placed on its pedestal, occupying a commanding position in the garden, in front of the College de France. Several eloquent and appreciative addresses were made by M. Bert, the President of the Subscription Committee; by Professor Chauveau, who represented Lyons, Bernard's birth-place; and by M. Dastre, who represented M. Bernard's most recent pupils. M. Guillaume is the sculptor. The house in which Bernard lived and died is exactly opposite the standing place of the statue.

DENTAL HOSPITAL OF LONDON.

THE annual dinner of the past and present students of the Dental Hospital of London will be held on Saturday, February 27th, at the Holborn Restaurant, when the chair will be taken by Mr. Woodhouse Braine. Gentlemen either now or formerly connected with the hospital or medical school, who may, through inadvertence, not have received special notice, and who desire to be present, are requested to communicate with the Dean at the Hospital.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE next quarterly meeting of the Medico-Psychological Association will be held at Bethlem Hospital, St. George's Road, S.E., on Wednesday, February 24th, at 4 P.M.; and a meeting of the Council will be held at 3 P.M. Dr. Mickle will read a paper on Some Abnormal Forms of Breathing. The members of this Association will dine together at the Holborn Restaurant, at 7 P.M., and members intending to dine are requested to send notice to Dr. Paul, The Terrace, Camberwell, S.E.

ANTIPYRETICS AND ANTISEPTICS.

THE *Liverpool Medical-Chirurgical Journal* publishes two reports on Antipyretics, by Dr. James Barr, and Antiseptics, by Dr. Alexander. Antipyrin is the drug chiefly considered in the first report, and the experience of Drs. Burton and Carter is quoted, and is well worthy of perusal. The account of the literature of antipyretics is somewhat meagre, the German work being scarcely noticed. The value of this and succeeding articles would be much enhanced by the addition of references to the original papers. This is an omission which will, no doubt, be remedied in future reports.

SEXUAL PSYCHOLOGY.

IDEM writes to us :—By a curious coincidence, two examples have occurred during the past week—one in London, and one in Paris—of men whose alleged ideas of sexual happiness and marriage might rival with the sentiments of Heloise and Abélard. Although the subject is not without a burlesque side, the possessors of these eccentric ideas in civilised communities are very apt to become the clients either of the lawyer or of the medical man. So long as the person's idiosyncrasy is confined to this one manifestation, only those directly influenced by this form of monomania are likely to know or care anything about it, with the exception of the family physician, whose tact and skill may both be found unavailing in a case of so much delicacy. Since, however, the unfortunate subjects of one or other form of aberration of the psychico-sexual functions very frequently exhibit a tendency to melancholia, which may lead to alcoholism, opium-eating, or suicide, it may at any time fall well within the province of the physician to intervene with treatment directed not only to the cure, if possible, of the patient, but to solve a social problem which is far too abstruse to allow of adequate compensation at the hands of the law. The inherent delicacy of such a case often renders it the more difficult to redress "the inexpiable wrong, the unutterable shame," which is apt to accrue to the unhappy victims of the persons afflicted with these aberrations. The remedy, if remedy there be, lies far more with the physician and the moralist than with the legal adviser, whose intervention most frequently only converts the dreadful into the intolerable.

BENEVOLENCE TO NEEDY SCIENTISTS.

AN appeal is being made to the Fellows of the Royal Society and other friends of science to increase the capital of the fund which the Society administers for the benefit of scientific men in necessitous circumstances. Sir William Armstrong has promised a sum of £6,500 on certain conditions, the principal of which is that an equal amount is raised by others who are interested in science. The fund has done good service in the relief of men of science and their families, but at present is quite inadequate to the demands made upon it.

THE HOSPITAL-STAFFS IN BRUSSELS.

ENGLISHMEN who propose taking a trip to Brussels this year for the purpose either of inspecting the hospitals or of undergoing an examination in them, may expect to find a considerable change in the staffs, the administrative body which has the direction of those institutions having come to the conclusion to supersede a number of physicians and surgeons, including even the clinical professors of the University. This apparently arbitrary determination has naturally produced a considerable commotion, both amongst the students and the staffs, whose members are to be treated in such a summary fashion. Meetings have been held, and protests signed, and pressure is being brought by various means to bear on the administrative body, so as to persuade it to revoke its decision. What effect this will have, a short time will probably show.

CALOMEL AS A DIURETIC.

THE action of calomel in causing diuresis in morbid conditions with dropsy is not generally recognised. In health, indeed, it may be said that the drug has no such action. Dr. Jendrássic has found in cases of cardiac dropsy, that calomel in appropriate doses causes well-marked diuresis, a "sort of diabetes insipidus," by which the results of want of cardiac compensation, dropsy and œdema, are dissipated. The effect comes on within twenty-four hours; one and a half grain of the drug being given three to five times a day. No diarrhœa is usually produced; but, in some cases, it had to be prevented by the administration of laudanum. Salivation and stomatitis were obviated by the prescription of a chlorate of potash gargle from the first. The result in all cases in which the treatment was adopted, was beneficial; no unfavourable depressing symptoms being noticed.

VACATION COURSES IN BERLIN.

THE following courses of instruction will be given in Berlin, commencing on March 22nd, and continuing until the end of April. 1. Normal and Pathological Anatomy and Histology: Professors Rabl-Rückhard, M. Wolff, and Mendel; Drs. Jürgens, Grawitz, P. Guttmann, Broesicke, and Israel. 2. Physiology, Medical Physics, and Chemistry: Professor Christiani, and Drs. Herter, J. Munk, and Weyl. 3. Materia Medica and Toxicology: Dr. L. Lewin. 4. Medicine: Professors A. Fränkel and Letten; Drs. Guttmann, Riess, Lewinski, Leo; Dr. Zuelzer (Diseases of Urinary Organs); Drs. Grun-

mach and Lazarus (Pneumatic Therapeutics); Drs. A. Baginsky, Ehrenhaus, and Klein (Diseases of Children); Professor Ewald (Diseases of Organs of Digestion). 5. Psychiatry and Cerebral Diseases: Professor Mendel, and Drs. W. Sander, Moëli, and Thomsen. 6. Diseases of the Nervous System, and Electro-Therapeutics: Professors M. Bernhardt and Eulenburg, and Drs. Remak and Oppenheim. 7. Surgery: Professors Küster, Busch (teeth and mouth), and Gluck, and Drs. Hahn and Hans Schmid. 8. Ophthalmic Surgery: Professors Hirschberg and Dr. Horstmann. 9. Aural Surgery: Drs. Schwabach, L. Jacobson, and B. Baginsky. 10. Diseases of the Larynx and Nose: Drs. Lublinski, B. Baginsky, and Krause. 11. Gynæcology and Obstetrics: Drs. A. Martin, Landau, Hofmaier, Veit, and Wyder. 12. Diseases of the Skin and Syphilis: Professors G. Lewin and Köbner, and Drs. Lassar and G. Behrend. 13. Forensic Medicine and Hygiene: Professor Liman, and Drs. Falk, Herter, W. Sander, and L. Lewin. Information may be obtained by application to Herr Anders, 57, Dorotheenstrasse, Berlin.

THE GERMAN MEDICAL CONGRESS.

We learn that the fifth Congress "*für innere Medicin*," will take place at Wiesbaden from April the 14th to the 17th, under the presidency of Dr. Leyden, of Berlin. The programme is as follows: At the first sitting, Wednesday, April 14th, the Pathology and Therapeutics of Diabetes Mellitus, introduced by Drs. Stokvis (Amsterdam) and Hoffman (Dorpat); second sitting, Thursday, April 15th, the Operative treatment of Pleural Exudation, Dr. Frantzel (Berlin) and Dr. Weber (Halle); third sitting, Friday, April 16th, the Therapeutics of Syphilis, Dr. Kasson (Vienna) and Dr. Neisser (Breslau). Other communications will be made on Antypyresis, by Dr. Riess, of Berlin; on Ptomaines, by Dr. Brieger; on Blood-pressure in Morphia-narcosis, by Dr. Fick, of Würzburg, etc.

CHAIR OF PHARMACOLOGY IN MELBOURNE.

This post has been filled by the election of Professor Alfred H. Jackson, B.Sc., M.P.S., F.C.S., Associate of the Owens College, Manchester, and thus forms the latest addition to the staff of professors trained in that rising college, which has supplied Atkinson to Sandhurst, Bedson to Newcastle, Carnelly to Dundee, Dougan to Belfast, Napier to Richmond, Poynting to Birmingham, Smithells to Leeds, Seyden to Headinley, Tait to Baroda, Thomson to Cambridge, Thorpe to South Kensington, and Young to Clifton, besides those who have returned to their "alma mater," as Hopkinson, Dreschfeld, Bailey, Cohen, Baker, Collier, Thorburn, Whitney, Harris, Haslam, Swanwick, etc. Professor Jackson was trained in the Science and Medical Departments of the Owens College, as well as in the Pharmaceutical Society's school at Bloomsbury Square, where he won the Council Silver Medal, besides several others in 1878. Amongst his published papers are one on "Dialysed Iron," one on "Tartar Emetic," and two on "Essential Oils of Cinnamon and Cassia." The College of Pharmacy at Melbourne is affiliated to the university there, and the Government have granted funds for the furnishing of laboratories and museums, as well as towards the new professor's salary.

MR. R. R. MADDEN.

The death is announced of Mr. Richard Robert Madden, F.R.C.S., formerly Colonial Secretary of Western Australia. Mr. Madden was in his 88th year, and had devoted many years of his life to philanthropy, politics and literature. After completing his medical studies and passing the College of Surgeons of England, he became connected by marriage with Jamaica, where he was led to take an interest in the condition of the black population. In 1833 he became a special magistrate in Jamaica, and a friend of the slaves, and the esteemed co-worker of Clarkson, Wilberforce, and Buxton. Subsequently as superintendent of Liberated Africans, and as Acting Judge Advocate (1839) of the Mixed Commission Court under the Foreign Office, he used his large discretionary powers to mitigate the evils of slavery; he earned the love and gratitude of the liberated population, and provoked the hatred of the slave-owners, narrowly escaping assassination. In 1841 he became Commissioner on the West Coast of Africa, and unmasked and suppressed the "pawn system," an invidious and disguised form of slavery. In 1847 he was appointed Colonial Secretary of Western Australia. His later life has been devoted to literary interests.

HUNTERIAN SOCIETY.

The annual meeting of this Society was held at the London Institution, Finsbury Circus, on Wednesday, February 10th, when the oration was delivered by Sir Andrew Clark, Bart., F.R.S. The orator alluded to the unfavourable and changeable circumstances of John Hunter's early life, the ill effects of which, in the shape of a defective education and want of self-control, he felt, and felt acutely, throughout his subsequent career. Indeed, nothing short of his great intelligence and intense capacity for work, could ever have secured for him his ultimate success, owing to the abruptness, and often even of the coarseness, of his manners. That John Hunter was the founder of scientific surgery could not be gainsaid, but at heart he was really a physician. His ardour in the pursuit of knowledge was simply marvellous, and probably few men ever managed to induce so many people to do so much in matters not of their own choosing as he did, when in need of some information or object for his museum. The life and objects of John Hunter might be resumed in the museum, which occupied every moment of time and every particle of energy which he could snatch from his professional work. Many anecdotes were told of his behaviour and language, some of them humorous, some of them only coarse, but all of them tending to show why, if he was disliked on the one hand by the profession, he was scarcely more popular with the public. With all his failings, however, John Hunter stood out pre-eminently as a great man, and as such he claimed and received our homage. We should be stimulated by the example of his industry, and warned by the disasters which attended his weaknesses. The orator followed out the history of John Hunter's life step by step, from his boisterous, rollicking student-days, when he, as a student, sought compensation in nights of revelry for days of hard work. Later on, his laborious commencements and indomitable courage, crowned at last by all the success that he could have wished for, and, finally, his dramatic and sudden death, at a meeting of the staff of St. George's Hospital, to which he belonged. There was a very fair number of people present, including several medical and surgical celebrities; and the oration, which occupied slightly over an hour, was warmly applauded.

BACTERIAL PATHOLOGY.

On Thursday, February 4th, Dr. G. A. Heron delivered a lecture at this institution on "How it is shown that living things cause some of the diseases of man;" Dr. Alfred Carpenter in the chair. The lecturer explained, with as few technicalities as possible, the means at our disposal for obtaining and breeding various bacilli separately, with the precautions to be taken to avoid admixtures. He alluded to the great discoveries of M. Pasteur in the matter of the bacillus of anthrax, and gave it as an example of the dependence of the disease upon the accompanying bacillus. Carefully avoiding, as far as possible, the debatable ground regarding the identity of the now famous comma-bacillus, and its etiological relation to cholera, he did not hesitate to state, as his firm opinion, that Koch was right. The natural history of his bacillus was sufficiently distinct to enable it to be recognised by that alone. Indeed, seeing the difficulty which existed in deciding whether a given case was really cholera, or only one of its analogues, he considered that the discovery of the comma-bacillus would prove a precious and not to be neglected element in the diagnosis. The microscopical characters of this bacillus might, he said, be rather vague, but its conduct under cultivation rendered its identification easy. Dr. Heron expressed his sanguine hope that the

scientific deductions of M. Pasteur in attenuating the virus of splenic fever would prove to have opened up a new era in the means of combatting these infinitesimal foes of human beings. He maintained that the science of bacteriology had gone far to dispel whatever doubts had existed as to the specific nature of certain diseases. As to the mode by which the bacillus effects its injury to the economy, the lecturer declined to express an opinion ; whether it were by depriving the tissues of their necessary food, or whether the tissues were poisoned by the excrementitious or other products of these organisms, bacteriologists were at present unable to do more than surmise. Although there were many dark corners still remaining to be cleared up, this science had made, and was still making, great progress, and we were justified in being sanguine as to the future results. After a desultory discussion, when the present unsatisfactory methods of disposing of London sewage was strongly condemned, a cordial vote of thanks was accorded to the lecturer. A number of cultivations were shown, together with an admirable series of microscopical specimens of the principal and best marked varieties.

IMPROVEMENTS IN PHARMACY.

During the last few years, great changes have been introduced into methods of compounding and dispensing drugs. It is not very long ago since the therapeutic value of a medicine was gauged, to some extent, by its nastiness. An allusion to taking medicine was invariably accompanied by a grimace of repugnance, or the sigh of resignation. This prejudice still lingers among the lower classes of patients, whose experience of "physic" is limited to such nauseating ingurgitations as an emulsion of copaiba, or a bolus of cubebs, or a mixture of tincture of iron and salts, with nothing in the shape of a palliative beyond a little glycerine, peppermint, or camphor water. With the more aristocratic and fastidious patients, however, the faith in disagreeable remedies has gone out to a very great extent, and their demand for a more agreeable, or rather for a less disagreeable, pharmacy, has been met by the introduction of a large variety of preparations, where, by some means or another, the distasteful qualities of the drug have been evaded or disguised. That greasy horror—cod-liver oil—by combination with an extract of malt (which, curiously enough, appears to possess the property of taking the oil into solution), is rendered almost a delicacy, while its assimilation is, moreover, thereby greatly facilitated. The compromising odour of copaiba is, at any rate during administration, securely sealed up in gelatinous capsules, with the additional advantage of enabling the unhappy patient to carry a supply of his scourge about with him. With a multitude of other drugs, the pharmacists have contented themselves with providing the active principle or principles, elegantly done up in small compass, and free from the accessory and unnecessary constituents. Instead of the blue pill and the black draught, dear to our ancestors, a judicious course of natural or artificial mineral waters in hot milk is employed to obtain the desired ease in defæcation, the termination of which is soothed by the use of specially prepared *serviettes* free from the objectionable qualities of wall-paper or printer's ink. The sticky mass known as a poultice may, in many cases, be advantageously replaced by a clean and comfortable contrivance whereby the heat and moisture, to which poultices owe their efficacy, may be obtained without the discomfort of the antique cataplasm. Its analogue of mustard should, by this time, be almost extinct, since the cleanly, easily applied, and economical mustard-papers have forced their way to the bedside of the more discriminating sufferers. Turning to another department of pharmacy, a department which has come well to the front since microbes have been discovered walking up and down the earth seeking whom they may devour, the irritating and disagreeable smell of chloride of lime, or crude carbolic acid, has given way to "parlour disinfectants." Indeed, the commerce of these articles has passed largely from the hands of the chemist to the laboratory of the perfumer ; and, instead of obtaining the disinfectants from our wholesale druggists, the patients provide themselves with Rimmel's ozoniser, etc. ; while the soaps, teeth-cleansers, and even Eau de Cologne, are made to immolate their share of disease-causing organisms. With proper care and discrimination, this movement can only be commended. When we consider the positive harm that may result to patients whose digestive apparatus is easily deranged by any avoidable disturbing agent, we shall soon come to appreciate the desirability of rendering medicines tasteful (or, at any rate, tasteless), just as we do with food when called upon to minister to a failing or absent appetite.

THE CORPUS CALLOSUM.

In a paper read on December 11th, 1885, before the Liverpool Medical Society, Professor D. J. Hamilton expounded his views on the significance of the corpus callosum. He differs from most anatomists and physiologists in considering this part of the brain as not commissural ; but, although this theory has been more or less generally held, there are no scientific proofs that it is correct, and the corpus callosum has been, indeed, one of the too numerous hidden secrets of the brain. Dr. Hamilton uses a special method of preparation, and of section-cutting ; a full account appeared in *Brain*, 1884. From extensive investigation, it is concluded that a large mass of fibres (called by Hamilton, the crossed callosal tract) originates in the cortex at the margin of the great longitudinal fissure, and after running for a short distance with Flechsig's direct motor fibres crosses over to the opposite hemisphere ; but, instead of going to the cortex, turns down to the inner and outer capsules. They form almost the entire anterior limb of the inner capsule. Hamilton corrects an erroneous impression which became current after the publication of his first papers, namely, that the "motor fibres of the pyramidal tracts decussated in the corpus callosum." As stated previously, the crossed callosal tract and motor tract (Flechsig's) run together for a short distance, afterwards separating. The crossed callosal fibres end chiefly in the optic thalamus, a few in the caudate nucleus. The mode of investigation of the course of the fibres in the brain, by a study of their development, which has led to excellent results in the hands of Flechsig, has been utilised by Dr. Hamilton, who found that, as early as the fourth month of gestation, the course of the crossed callosal tract is evident. A case is shortly quoted, showing the effect of disease on this tract. In the brain of a woman, aged 53, who had been imbecile from childhood, the first and second frontal convolutions of the right side ; and the anterior parts of the outer and inner capsules, and of the Island of Reil on the left side were found destroyed ; the crossed callosal tract was, as a consequence, absent on the left side, but present on the right. This case undoubtedly lends support to Dr. Hamilton's views on the course of these fibres. His continued research shows well the advantage of investigating the tracts of the brain from the anatomical, developmental, and pathological standpoints.

THE ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

The following address, "To the Queen's Most Excellent Majesty in Council" has been drawn up by the Association of Members. "The humble petition of the Members of the Royal College of Surgeons of England sheweth, That whereas a Petition has been prepared for presentation by the President and Council of the Royal College of Surgeons of England, praying for a supplemental Charter, or alterations in the existing Charters previously granted to the said Royal College, your humble Petitioners approach your Most Gracious Majesty respectfully to point out that, by the present Charters, the Members of the said College (who are in proportion to the Fellows as 14 to 1) have no status of any kind in connection with the governing body. Your Petitioners most humbly submit that it would be both equitable and politic that the Members should have a voice in the conduct of a Corporation of which they are, and always have been, numerically and financially the mainstay. At present the Council, elected by the twelve hundred Fellows only deals absolutely with the interests

operty, and moneys of the College, whilst sixteen thousand Mem-rs are wholly unrepresented. Your Petitioners do, therefore, most rnestly pray that before granting any Charter, or supplemental harter to the said Royal College, the present position of your Peti-oners may receive your Majesty's gracious consideration for such ovisions as will create and secure for the Members (who so largely ntribute to the prestige and welfare of the said College) the right representation and other privileges which should belong to the embers of a corporate body; further, that an inquiry may be in-ituted into the constitution of the Council, the management of the llege, the conduct of examinations, and the expenditure of the Col-ge funds. Finally, your Petitioners very humbly pray that, in the ent of no petition for a supplementary Charter, or otherwise, being esented by the Council of your Royal College, your Majesty may be aciously pleased, in your wisdom, equity, and discretion, to sanc-n and provide for certain alterations being made in the present isting Charter, so that it may contain such provisions as are herein-er mentioned. 1. That all Members of a certain number of years' nding, to be determined by your Gracious Majesty, may, after ving been registered, conjointly with Fellows, exercise the privi-ge of electing the Council. 2. That a certain proportion of the uncil may consist of Members. 3. That the period of office of embers of the Council be considerably shortened. 4. That Members d Fellows be permitted to vote by voting papers. 5. That no fees any kind be paid to any College fund by Fellows or Members on eir election to office. 6. That the Council prepare a yearly report, gether with an account of income and expenditure of the College nds duly audited by a public accountant, which (after its submis-ssion for approval to the Fellows and Members annually summoned this purpose by the President of the College) shall, on adoption, required to be published in the medical journals. 7. That en-ged power may be given to the Council to suspend or revoke the ence of any Fellow or Member on proof of discreditable conduct, ether professional or otherwise. And your Petitioners, as in duty und, will ever pray," etc., etc. Here follows the usual space for gnatures and addresses. This petition will be presented as n as a sufficient number of signatures have been obtained. In nsequence of a certain amount of co-operation between the Mem-rs' and the Fellows' Associations, an earlier draft of petition, of a re sweeping character, already signed by a few Members, has been aside in favour of the above, copies of which are being forwarded all Members of the College. It is hoped that in two or three eks the issue will be completed.

POLLUTION OF RIVERS.

An influential deputation, including Sir Guyer Hunter, M.P., Lieut.-Colonel Sandys, M.P., chairman of the Kent Fishery Board; Mr. Minister Fletcher, M.P.; Major Flower, sanitary engineer to the Lea Conservancy Board, and other representatives of the National Society for Secure Effectual Legislation against River Pollution, waited upon the Lord Mayor this week, to request the use of the Mansion House, for the purpose of a large public meeting on the subject of rivers pollu-tion. The Lord Mayor said the matter was one of immense impor-tance. Every day there were emptied into the Thames, at Crossness, from 80,000,000 to 120,000,000 gallons of sewage matter, and there were other cases of the same kind, which made it a subject of con-siderable moment to the public that the rivers should be as free from pollution as practicable. He should have much pleasure in granting the use of the Mansion House for the purpose of the meeting, which was fixed for Wednesday, March 10th. During the discussion which followed Dr. Heron's paper, at the Parkes Museum of Hygiene, on February 4th, several of the speakers, including the chairman, Dr. Alfred Carpenter, alluded in very strong terms to the reprehensible system of emptying the sewage into the Thames. Not only, it was known, do mud-banks threaten to render the once great port com-paratively inaccessible, but the swarms of organisms, all presumably of an objectionable character, which thrive and fatten on the highly suitable breeding grounds afforded by these deposits, may, under favourable circumstances, fall with fury upon the devoted city. That these or other influences are at work, regardless of the experience which has been acquired at the cost of innumerable lives, cannot be denied, and we are probably unanimous in deprecating their continuance. Still, there exists a tendency to create a bugbear out of these objectionable little organisms. It has been suggested that, after the principle of the Italian physician, who is alleged to have obtained such brilliant results in the treatment of phthisis, by using inhalations of a rival and innocuous bacillus, a certain amount of immunity may some day be secured to the population by the discovery of some bacillus which may destroy its more deadly sewage congeners.

ENTERIC FEVER IN EGYPT.

THE discussion at the Royal Medical and Chirurgical Society last Tuesday on the nature of the fevers which attacked the English troops in Egypt, cannot be said to have led to any very definite conclusions, but it awakened some interest in a very important subject, the origin of species in disease. The "specific fevers" is a phrase much in use, but the exact definition of what is a species offers several difficulties. Following the great lines of Darwin's inquiry, we naturally ask, Can they interbreed? and is any offspring of such union vigorous and independent and able to reproduce itself? Enteric fever we know, and ague we know; but is the "typho-malarial fever" of hot climates a genuine crossbreed, or the superimposition of one upon the other? Does it reproduce itself, and, if so, by what means? The Army Medical officers have much to tell us that deserves very careful attention, none the less careful that one piece of evidence is sometimes found to contradict another. They have opportunities that are absolutely unique in watching the experiment of the exposure of the self-same material, the English soldier, whose composition has been long studied and is well understood, to all the influences of infection and surroundings that can occur in an empire which is more truly world-wide than any other has ever been. It is far more difficult to draw any satisfactory conclusions from comparing the diseases of Hindostan as shown in the Hindoos with the diseases of Egypt as shown in the Egyptians, than it is from comparing the diseases of Hindostan and Egypt as shown in the English soldier. In the natives, there are the inherent differences of long-inherited habits; in the troops, the material is practically the same. Yet we are still much in want of more facts, as Dr. Broadbent very gently pointed out to the army surgeons among his hearers on Tuesday. Dr. Squire had had eighty cases under observation, among whom were 12 deaths, but only two *post mortem* examinations, and those, as far as the results were embodied in the paper, very incomplete. In the remarks of the other surgeons no numbers were given, but *post mortem* pathology was noticed very lightly, and, indeed, we can easily imagine that it is far more difficult to carry out during a subtropical campaign than in an English hospital; nevertheless, that does not make it of less importance in the classification of disease.

ERYSIPELAS AS A CURATIVE AGENT.

DR. BIEDERT, of the Hagenauer Hospital, has lately published (*Deuts. Med. Zeit.*, No. 5) an interesting case showing the effect of an attack of erysipelas on the course of a slowly growing sarcoma. The patient was a girl, aged 8 years, who presented herself two years ago, with a tumour, of the size of a hen's egg, in the left tonsil; an operation was advised, but refused. Three months ago, the child was again brought, and the growth was then found to involve the whole posterior half of the buccal cavity, including the tongue, which, moreover, presented an ulcerating mass at its apex on the left side; it had also involved the nasal cavity and the right eyelids. The general condition was serious, there being inability to swallow, and great dyspnœa, which was so urgent that tracheotomy was performed on November 14th, 1885. The patient was placed in a bed lately occupied by an erysipe-

latous patient; and, though the bed had been disinfected, and clean bed-linen used, an attack of erysipelas supervened in three days, beginning round the right eye. The attack was severe (temperature 104° Fahr.), and was allowed to run its course—six days; at the end of which time the growth had disappeared in every part, except two nodules, of the size of a pea, in the right upper lid and the nostril; these were afterwards excised. There was no infiltration in the throat and tongue, but much puckering and scarring. After the attack, the tracheotomy-tube was removed, the child regaining its appetite and strength. Up to the beginning of this year, there was no recurrence of the growth in any part. A further account of the course of the case is promised. Dr. Biedert remarks that the dispersion of the growth may be due to the micro-organisms of erysipelas destroying either the tissue of the sarcoma or an unknown sarcoma-microbe. The presence of inflammation, which is itself a destroying influence, is not taken into account.

PURITY OF DRINKING-WATER.

THE researches of sanitarians make it additionally evident, from year to year, that in all large cities the sources of drinking-water are apt to become so poisoned, that what should be the source of life is often the cause of disease and death; and this is quite as remarkably true in new countries, where it would be easy to avoid the dangers into which we have fallen in the overpopulated and crowded cities of Europe. Nor is it less marked in villages and isolated country-houses, where running streams polluted from above, or shallow wells insufficiently protected from soakage, afford easy access to polluting organic matter. The relative immunity with which such pollution is encountered, depends mainly upon the accidental presence or absence of specific germs in the polluting substances. This well known and fully ascertained law of health should be by this time commonplace and ordinary knowledge; nevertheless, it is true that it has not even yet penetrated to the minds of many of our local sanitary authorities. The Society of Sanitary Inspectors have just had an excellent paper read to them, which clearly pointed out that the existing data show that a very large part of the supplies of our country towns and villages, and of English mansions, are not wholly reliable, but have proved to be seriously affected, and may at any moment become sources of exceptional danger, while they must be regarded as permanent causes of deterioration of health. It is only by the individual activity of the sanitary inspectors and medical officers of health that this state of things can be remedied in rural districts, and it is for them to bring each individual case effectually and picturesquely before their local authorities. Fountains of water are sometimes the source of death. It is a matter of intense interest to every person to know whether, in any given case, he is drinking water that tends to life or to death. Sanitary researches have made it clear that founts of water in all large cities are apt to be sources of death instead of life. The same is true of many villages, and even isolated country-houses. Death from some sort of poison in the drinking-water is not an uncommon occurrence. This is a well-known sanitary law. But it is not well understood by the people at large, and never will be until it is preached more constantly and forcibly. To a special cause of poisoned drinking-water, Dr. Kedzie, in a paper published by the Michigan State Board of Health, has directed attention. He has been examining the drinking-water of what he describes as the sawdust towns and villages of Michigan. These towns are usually built on the marshes adjoining streams down which logs can be floated. The refuse matter, including sawdust, is utilised to fill up the marshy places. On this filled-in ground, a great part of these towns are constructed. In this same filled ground, wells are dug, and an infusion of the organic decaying matter fills the cavity, and furnishes the drinking-water of these places. Dr. Kedzie gives a full detail of the results of his examinations. These are horrifying to any person who prizes his alimentary canal sufficiently to care for supplying it with pure water. He examined the water from the wells of many of these sawdust towns, as the Saginaws, Bay City, Grand Haven, etc. From all these researches, he deduces the following conclusions. These sawdust waters all contain an amount of organic matter sufficient to condemn them for potable and culinary purposes. They all contain resinous extractive matter in solution. They all contain nitrogenous material, capable of yielding albuminoid ammonia greatly in excess of the sanitary limit. They all contain the chemical elements necessary to sustain low forms of plant-life. In the presence of so large an amount of organic matter and the essentials of plant-life, these waters may become dangerous, by nourishing and reproducing the germs of epidemic disease, should they find lodgment there.

JOHN HUNTER'S HOUSE UNDER THE HAMMER.

THE following advertisement appeared, under the heading "Sales by Auction," in the *Kensington Express* of January 30th:—"Earl's Court House (nearly facing Earl's Court Station). Messrs. John W. Morley and Letts, having been favoured with instructions by Mr James Whittaker, will sell by auction, on the ground, on Tuesday and Wednesday, February 16th and 17th, 1886, at 12 o'clock each day, the old building materials of the above historical mansion, the residence of the late John Hunter, the Duke of Richmond, and the Earl of Albemarle, comprising a large quantity of sound floor-boarding, beams, joists, roofing and partitioning, rough boarding, match lining, etc., old staircases, lantern-lights, etc., several tons of lead in hips, ridges, flats, cisterns, and piping, a quantity of wrought and cast iron work in railings, gratings, and balconies, verandahs, guttering, and piping, galvanised iron tanks, zinc work, sheet copper bells, wire, etc., over 120 four and six-panel doors, a large quantity of sashes, casements, frames, shutters, etc., a pair of antique six-panel doors, with beautifully painted panels, numerous old-fashioned fretwork, brass finger-plates and escutcheons, a quantity of tiling, stone coping and paving, the fittings of bath-room, w.c. apparatus, etc., about 100 feet run of glazed corridors, the historical copper, coving and fittings, used for the purpose of boiling the remains of the Irish Giant 'Byrne O'Brian,' statuary marble chimney-piece, old and modern grates, ranges, etc., lean-to glass-house, about 50 feet run, a large vinery and vine, about 42 feet run, with flues, staging, etc., a quantity of choice shrubs, fine variegated hollies, and some large holly trees, suitable for cutting up for turnery-purposes, oak, ash, and elm trees, a quantity of fruit trees and bushes, some splendid lawn-turf, iron hurdles, garden tile edging, etc., and sundries. On view days prior to sale days. Catalogues on the premises, and of the auctioneers, Earl's Court Road, near the racing station." A letter, addressed by Mr. John Merriman, sen., of Kensington, to the editor of the *Kensington Express*, in reference to a notice of Hunter as an inhabitant of Kensington, was published in that journal on Saturday, January 30th. It shows that the Hunter family mixed with the cream of the intellectual society of the period, including accomplished men of fashion like Horace Walpole. This fact is occasionally overlooked. John Hunter was devoted to science but was no ascetic. Mr. Merriman adds to the notice published in the local journal of the illustrious John Hunter, and his thirty years' residence at Earl's Court, Kensington, a few lines concerning the social receptions held by his wife. Mrs. Anne Hunter was sister of Sir Everard Home, and a very accomplished lady. On Thursdays, at her receptions, might be seen Sir Joseph Banks, Dr. Johnson, David Garrick, Horace Walpole, Sir Joshua Reynolds, Mr Montague, Dr. Solander, Mrs. Elizabeth Carter, Oliver Goldsmith, Miss Berry, Benjamin Stillingfleet (who was barrack-master at Kensington), Mme. D'Arblay, Mrs. Chapone, and a host of other artists, authors, and *virtuosi*. Mrs. Hunter published a volume of poems of considerable merit; she wrote a touching epitaph on her husband which, however, was not allowed by the rector to be placed in S

[artin's-in-the-Fields Church; and her sweetly simple charming song, My mother bids me bind me hair,' set to music by Haydn, is too ell known to need comment. Only one of her painted rooms remains the house shortly to be demolished. The panels to which Mr. erriman refers are interesting specimens of Mrs. Hunter's work, hich is of fair amateur quality.

POISONING BY CHLOROFORM.

N the evidence given last week before the coroner in reference to the ysterious death of a gentleman, he is stated to have died in consequence of having swallowed some chloroform. Without offering any pinion on this case, which is *sub judice*, it may not be amiss to call ttention to the comparatively innocent character of chloroform when aken by the mouth, even in what would by most practitioners be onsidered large doses. It has recently been recommended for the eatment of tapeworm, in doses of from one half to two drachms; ut Dr. Davidson Scott, of Washington, U.S., in advising its use in ases of "congestive chills," etc., says he frequently gives it in doses f a drachm upwards, repeating the dose every two or three hours, if ecessary, the only effect being to produce a pleasant and natural umber. Indeed, in one case, a confirmed old inebriate who was nder this treatment, contrived to secure possession of the chloroform-ottle, and actually took about twenty-five fluid-drachms of its conents during a period of twelve hours, without any but the best result. n Taylor's *Medical Jurisprudence*, one fluid-drachm is stated to have aused death in a child; but, if the observations of Dr. Scott and thers be correct, our ideas on the toxic effect of chloroform administered by the mouth must undergo modification.

PROPOSED LEGISLATION ON BUTTER.

HE Council of the British Dairy Farmers' Association had passed esolutions to the effect that a Bill be introduced into Parliament equiring the registration of every establishment for the manufacture f fats to be mixed with butter or sold as butterine, and that all ackages containing such preparations be branded with a Governent mark by the officers of the Excise, under a heavy penalty for eglect or evasion. These provisions would not interfere with the le of butterine in its true character, but the latter would effectually ar the plea of ignorance of the spurious or mixed nature of any mple retailed as butter. But a special committee has since been ppointed to consider and report on a far more stringent Bill, drafted y Mr. Barham, the head of the Express and Dairy Supply Associaons. In this a definition is given of butter as "such article made om the milk of the cow alone, unmixed with any other fat or oil;" nd it would prohibit the sale of any other preparation under the ame of butter, with or without any qualifying expression or under ny derivative thereof as butterine, or the colouring of such substiute so as to resemble butter. The registration, which, we presume, nplies inspection of the factories in question, and the branding of ll packages of prepared fats, are excellent suggestions, but we think Ir. Barham goes too far. All legalising of mixtures, that is, of dulteration, is treading on dangerous ground; but we do not think any persons would be deceived by the use of the word butterine, ough such descriptions as American butter and French coffee are to e deprecated. Nor can we see the need for prohibiting the ractice of colouring a good wholesome preparation of mutton-fat o as to make it pleasant to the eye as well as to the palate. uch a principle, applied to non-intoxicating beverages, or to ritish wines, might lead to very inconvenient restrictions. Mr. arham would very properly extend the examination and branding of ackages to imported goods; but here, again, it would be too bad to onfiscate, as he proposes, all not already described as "margarine" lone. Surely the brand would be sufficient for the dealer, and the ame of butterine or margarine-butter for the consumer. We are ot aware whether Mr. Barham proposes dealing with the cheeses in which mutton-fat takes the place of that of the milk. They ought not to be sold as entire or double cheeses; but, since the abstraction of the milk-fat has never been deemed an offence, and many persons prefer such single or fatless cheeses as the Dutch, and, on the other hand, the addition of a wholesome flesh-fat increases the nutritive value of a cheese, the practice, if openly avowed, ought to be recognised. Besides, though the name of margarine-cheese would give a correct idea of its nature, it would be hard to find and impossible to popularise any name for such goods in which the word "cheese," "or any modification of the word," should not enter.

CEREBRAL LOCALISATION.

A CORRESPONDENT writes: As is well known, various methods have been suggested for localising the position of the convolutions and other superficial parts of the brain in the living subject. There are certain grave objections to nearly all of these, the chief being, first, that they are mostly founded on the position of the sutures which are not always easy to find through the scalp; secondly, that, although the grosser convolutions and fissures may be mapped out with tolerable accuracy, yet finer details which are often exactly what are wanting in operative procedures are left very much to chance; and lastly, that the hair, and the position of the patient in bed, are serious inconveniences in making the various measurements. In cases of injury, there is another objection, namely, that one cannot always recall on the spur of the moment, the necessary rules laid down by the authors of these various schemes for finding the fissures of Rolando and other landmarks. What would be much more servicable than such methods, would be a means of automatically mapping out the position of internal parts by subdividing the scalp into a number of equal sized areas. Such a method has lately been devised by Professor Hamilton of Aberdeen, which promises to yield very satisfactory results, and to render the localisation of the surface of the brain through its various coverings a matter of greater certainty. The method briefly consists in this: a wire frame-work is made to cover the scalp, so as to map its surface out into a number of squares. The special advantage of employing wire is that it can be passed through the hair and brought to lie in actual contact with the surface. One strong wire or steel band runs round the head from the root of the nose to the occipital protuberance; another passes from front to back in the middle line, and between these run transverse and horizontal wires, which can be moved respectively backwards and forwards, or upward and downwards, so as to adjust themselves to the sizes of various heads. These are so placed as to map out the scalp into a series of squares of as nearly as possible equal size. In order to find what each corresponds to in the parts beneath, the apparatus is fixed on the dead subject, and, after it has been accurately adjusted, it is taken off until the scalp and calvaria have been removed. It is now readjusted over the exposed brain, and the relationship of the framework to the underlying parts is recorded by means of photography. As each square has a definite number, the comparison of a large series of photographs gives most instructive results. Another method of employing this apparatus is first to localise the fissure of Rolando by means of one of the many methods recommended. The apparatus is now adjusted, and, from the horizontal band which runs round the head, a wire passes upwards, which is placed over the situation of the fissure. The parts anterior and posterior to this can now be subdivided into squares, in the manner before mentioned, and the position of each recorded by photography. The numerous details important in operations necessitating trephining, as well as the equally important matter of diagnosing the exact position of a cortical lesion can, by these methods, be noted down in a chart, reference to which alone would be necessary to find where the underlying parts are located. The position, for instance, of the middle meningeal artery can be found without any difficulty. We believe that, before long, Professor Hamilton will describe the method in detail, and give the results of his observations.

THE MEDICAL STAFF IN BURMAH.

THE organisation of the medical department of the Burmah expedition has been pronounced a complete success. The principal part of the organisation was made by Brigade-Surgeon Pearse at Madras; the selection of hospital-ships by Dr. McNeale Donnelly and his colleagues. The steamer *Rangoon* and two flats served as a hospital-flotilla, and were fully equipped for every emergency at the storming of Minhla. The hospital-flotilla was brought to bank below the fort, and the hospitals were landed by sections, with their bearer-columns intact; and the British wounded and Burmese also were rapidly picked up, sent on board, and admirably provided for. On December 18th, cholera appeared, forty patients dying with it. The probability of a cholera-epidemic was fully anticipated by Dr. Donnelly, and provided for. The general hospital as a base was established at Thayetmyo, where full provision was made for the sick, wounded, and convalescents. The wounded Burmese were handed over subsequently to their relations at Mandalay. The issue of the treatment of the wounded was very successful, all recovering except one marine severely injured by a shell and two sepoys hit near the knee-joint. General Prendergast paid frequent visits to the sick and wounded, and his kindness was highly appreciated by them.

THE INTERNAL ADMINISTRATION OF ANTISEPTICS.

THE administration of antiseptic drugs, either as prophylactics or as remedies, has been frequently resorted to in the treatment of infective diseases, but not hitherto with an amount of success which has encouraged the profession at large to adopt the method. Some experiments, however, which Dr. Theodore Cash is now conducting for the Local Government Board, appear to justify the hope that this line of treatment may eventually be useful. In a communication recently made to the Physiological Society, he stated that he had been led to test the influence of perchloride of mercury, because it was retained in the body for some days after its administration had ceased, and because it was still a powerful germicide even when very greatly diluted. He found, in an experiment on a rabbit, that, after a quantity of perchloride of mercury, equal to about 8 milligrammes per kilogramme of body-weight, had been injected hypodermically, in divided and highly diluted doses in the course of seven days, the animal only suffered a passing disorder after inoculation with a virus of anthrax which killed another rabbit in forty-four hours. The animal, moreover, was found to be protected against further inoculations with virulent anthrax. A smaller dose (equal to about 5 milligrammes per kilogramme of body-weight) was found to delay, but not to prevent, the onset of the disease. The number of bacilli found in the blood after death in such a case was very small, but it was found that their virulence had not been diminished, the blood of the animal producing an unmitigated and unmodified attack of anthrax in other animals.

THE TREATMENT OF INFANTILE PARALYSIS.

THE clinical features of the common and distressing affection known as infantile paralysis, essential paralysis, and progressive paralysis, are familiar to everybody, but the treatment has always been difficult and uncertain. In a lecture recently delivered by Dr. William Murrell, a plan of treatment has been formulated which, it is to be hoped, may prove as successful in other hands as it appears to have been in his own. The treatment consists essentially in the administration of aconite during the acute stage while fever is present, followed, after the lapse of three or four days, by physostigma, combined still later with suitable doses of phosphorus. So much for the medicinal part; but, simultaneously with the latter portion of the treatment, recourse must be had to massage, not the massage ordinarily in use, which frequently proves inefficacious, but a massage conducted on the scientific plan laid down by Metzger, of Amsterdam, and Von Mosengeil, of Bonn. This process is divided into four forms, or gradations, first, *effleurage* (surface rubbing); secondly, friction, a more vigorous application of the preceding than the *pêtrissage* (kneading); and, finally, *tapotement*, which is a form of percussion. When the cases are taken in hand early, a marked improvement is promptly perceived, the temperature of the affected limb approaches the normal, and the nutrition of the tissues acquires a fresh stimulus. How massage applied to the limbs can affect the pathological processes in the spinal cord is not quite clear; but it would seem that, if the nutrition of the paralysed limbs or groups of muscles can only be maintained for a sufficient length of time, other motor nerve-cells in the anterior cornua of the cord may be called into play. This view is not without a clinical parallel in the subsequent acquirement of the faculty of speech by patients whose previously existing centre has been destroyed by hæmorrhage, embolism, or thrombosis. It is essential that the massage should be conducted on a dry skin, with dry hands; and it is not altogether improbable, under these circumstances, that, as Reihmayer of Vienna suggests, the current of electricity so created may be one of the factors in the results obtained. The massage should only be resorted to by the advice and under the supervision of, a medical man, as indiscriminate massage is not only likely to be useless, but may be positively injurious. Combined with the foregoing scheme of treatment, recourse may be had to such further adjuncts as hot pine-baths, the hypophosphites, extract of malt, and cod-liver oil, etc.

SCOTLAND.

Two new lectureships have recently been endowed in the University of Edinburgh. One, on Comparative Embryology, is held by Mr. G. Brook; the other, on the Philosophy of Natural History, endowed by Lord Rosebery, has, according to *Nature*, been accepted by Mr. G. J. Romanes, F.R.S.

PROFESSOR Stirling of Aberdeen, and Brackenbury Professor of Physiology and Histology in the Owens College and Victoria University, Manchester, has been appointed Examiner in Physiology in the Honour School of Natural Science, in the University of Oxford.

PROPOSED NATURAL HISTORY MUSEUM FOR ABERDEEN.

SOME time ago we mentioned that Professor Trail had interested himself in getting up a natural history collection for Aberdeen, and designed especially to illustrate the local flora, fauna and products of the north-east of Scotland. The Town Council refused the use of a building for the purpose, but now we are glad to state that through the liberality of a townsman, a large hall has been obtained.

LEITH MEDICAL OFFICER OF HEALTH.

BY the death of Dr. Williamson a vacancy was created in the Medical Officership of Health for Leith, a post of considerable importance considering the large business done by trading with the Continent. A number of candidates applied for it, and on Tuesday the Leith Town Council filled up the vacancy by appointing Dr. J. Allan Gray.

SAMARITAN SOCIETY.

AMONG the beneficial auxiliaries of a great public hospital may be mentioned convalescent homes, Samaritan Societies and Flower Missions. The Samaritan Society, working in connection with Edinburgh Royal Infirmary, has for several years been unostentatiously doing much real service to the patients requiring its aid. At the annual meeting held last week, the report submitted by the secretary showed that the income for 1885, including the balance from the previous year, amounted to £395, and the expenditure £322, leaving a substantial balance with which to begin the present year. There were also many gifts of clothing distributed by means of the Society and £75 had been expended in providing other suitable clothing, no fewer than 3,407 articles having been given away during the year. C

y, 768 payments had been made to over 200 patients, of which ients 584 were on weekly allowances (granted in some cases for hened periods) to families in which the bread-winner had been aside. Then, frequently, patients were unable to return to their s at a distance, through want of funds, and the Society had ed seventy-five such cases to do so. A suggestion was made at eeting that the Society might extend its beneficent efforts to the fever hospital, and this it is most probable it will do.

GATHERING OF ROYAL INFIRMARY NURSES.

nnual feature of considerable interest to the profession in Edin- is the yearly gathering of the nurses of the Royal Infirmary, burgh, when, in the presence of the managers, many members of taff, their friends, and those interested in infirmary work, the e staff of infirmary nurses meet, and an account of their work is , while they are entertained and encouraged in the performance eir many and often trying duties. The special training given to tioners is specially mentioned at the gathering, when prizes are buted to those who have acquitted themselves creditably in the s of surgery, anatomy and physiology, and diseases of women, nt by Drs. Joseph Bell, Cathcart, and Halliday Croom, respec- r. At these meetings, the resident physicians and surgeons, s, and dressers, vie with each other in their endeavours to make urses' party a thorough success, and in this they are assisted by g friends from outside.

NEW VACCINATION APPOINTMENT IN EDINBURGH.

Directors of the Western Dispensary, Fountainbridge, Edinburgh, this week received from the President of the Local Government l, notification of the powers of the Board in relation to public nation, and instructions therein, and that, in pursuance of such rs, "we hereby authorise John Brown Buist, Doctor of Medicine, . 1, Clifton Terrace, Edinburgh, subject to our orders, and until all otherwise direct, to give certificates of due qualification in ractice of vaccination, to any person or persons, after due instruc- or examination by him in the said practice, at the Public Vacci- n Station, at the Western Dispensary, Fountainbridge, Edin- ." This notice not only creates the Western Dispensary, Edin- , a Public Vaccination Station, but, by the appointment of Dr. , it fills up the vacancy of public vaccination officer, created by signation of Dr. Affleck, on his appointment to the staff of the burgh Royal Infirmary.

PERTH INFIRMARY.

cost of about £2,200, several important improvements have made in the internal appointments of Perth City and County nary. They consist in the introduction of the most approved ry arrangements, and of a well furnished bath-room, a new n, and offices on a complete scale; enlarged bedrooms for the s, and accommodation for linen, and the introduction of a hy- ic lift, whereby the patients who had previously to be carried retchers up several stairs, can be raised expeditiously and rtably. At the annual meeting of the friends of, and subscribers e institution, held in Perth last week, and presided over by Stormont, the directors' report for the past year was submitted, howed that, in 1885, there had been 530 patients treated in the , as against 567 in 1884. That the number of out-door cases ,154, as against 961 in 1884, while the number of patients l at their homes was 221, as against 203. The number of patients ling the out-patients' room for small accidents, etc., was 137, ainst 215 in 1884. The average period of residence of indoor- its was two days longer than last year, and there were only 29 s, as against 50 in 1884. The financial report showed that the ry income from all sources was about £2,448, as against £2,426 34; while the expenditure was £2,580, as against £2,526 in 1884; the deficiency was, therefore, £132. Legacies to the amount of £725 were left to the institution, so that, considering the state of trade, and contrasted with many similar institutions, the Perth Infirmary nas no reason to be condoled with on its present condition.

IRELAND.

BELFAST HOSPITAL FOR SICK CHILDREN.

THE report for the past year is a satisfactory one; and the financial condition of the hospital is all that can be desired, a sum of over £600 being in the treasurer's hands. Since its foundation, nearly 4,000 patients have been admitted to the wards, and 86,656 cases have been attended to in the extern department. It is satisfactory to learn that for the past six years the death-rate has not averaged quite four *per annum*, although many serious cases have been admitted during that period.

HEALTH OF DUBLIN: QUARTERLY REPORT.

DURING the quarter ended January 2nd, the births registered in the Dublin Registration District numbered 2,404, or 27.2 per 1,000; and the deaths 2,372, or 26.9. Deaths from zymotic diseases amounted to 278, a number slightly in excess of that recorded in the previous quarter. The mortality from scarlatina, typhus fever, diarrhœa, and dysentery, was below the average. Diseases of the respiratory system caused 509 deaths, or 53 below the average; of these, 325 were due to bronchitis, and 94 to pneumonia.

HOSPITAL FOR CONSUMPTION AND ALL DISEASES OF THE CHEST, BELFAST.

THE third annual meeting was held on January 27th. During the past year, 486 new cases were under treatment, the payments from those in a position to pay a small sum for medicine amounting to £27 3s. 6d. The fee required from the pay patients is only one shilling, while the very necessitous poor obtain advice and medicine without any charge whatever. Dr. H. S. Purdon, to whom belongs the credit of instituting this hospital, has consented to become a member of the consulting staff, in addition to Drs. Purdon and Ross. Consumption exists to a very large extent in Belfast, due probably to the humid nature of the climate, and also to the staple manufacture of the town; and it is a matter of extreme regret that the subscriptions to this hospital are so few, and that sufficient accommodation for intern patients is urgently required. The hospital meets a great need in Belfast, and it is to be hoped that, in the future, it will be more generously supported.

BELFAST HOSPITAL FOR SICK CHILDREN.

THE thirteenth annual meeting was held on January 29th, presided over by Sir John Preston. The committee, in their report, call attention to the satisfactory condition of the finances, showing the capital of the institution largely increased. This result was not due to any increase in the annual subscriptions, but by a special scheme, in which one hundred ladies promised to collect £5, or upwards, by a certain date. This arrangement proved very successful, and the funds of the hospital were increased by £715 14s. 6d. During the year, 316 children were under treatment in the medical and surgical wards, and nearly 9,000 at the extern department. Twenty-five senior students from the Queen's College, Belfast, are at present attending the hospital clinical classes, an excellent proof that the institution fulfils with efficiency the second object for which it was founded—to promote the advancement of medical science with reference to the diseases of infancy and childhood. Dr. Nelson has been added to the staff as ophthalmic surgeon, and Mr. Andrew has been appointed dentist, selections which have increased the efficiency of the hospital.

LUNATIC ASYLUMS, IRELAND: ANNUAL REPORT.

From the thirty-fourth report of the Inspectors of Lunatic Asylums in Ireland, it appears that on January 1st, 1884, there were 9,542 lunatics in the twenty-two district asylums, which, with 2,736 patients admitted during the year, raised the total to 12,278. Of these, 1,151 were discharged cured, 462 relieved, and 111 unimproved. With reference to cures, if calculated on admissions, the proportion was 41 per cent.; and this is the practice generally adopted in public reports at home and abroad; but if, on the more legitimate basis of a daily average during the year, it would decline to 9½, for the recoveries, though largely effected in recent cases, or to more than one-half, leave a wide margin for those of a comparatively chronic character previously in hospital. In other words, so far as curative results only are engaged, about a tenth of those under treatment have benefited in the district asylums during the year referred to, a return just as favourable as obtains elsewhere. The deaths amounted to 865, of which 306 were due to thoracic affections, 229 to cerebral and cerebro-spinal affections, 74 to diseases of the heart and arteries, and 67 to abdominal affections. As regards the social condition, as to marriage, of patients admitted into asylums during the year, we learn that 898 were married, 1,591 single, 146 widowed, and in 101 cases the condition was unknown. The remarkable disparity between the single and married cases of lunacy has, on several occasions, been pointed out, so that we shall not further refer to it, except to state that no satisfactory explanation has ever been given of the occurrence. The expenditure for the year amounted to £221,695 17s. 9d., and the maintenance per head £23 0s. 11d., from which, if the Capitation Treasury Grant of £10 8s., and also the extraneous receipts of about ten shillings per head per annum, be deducted, the actual cost for individual support upon the local rates was £12 2s. 11d., a little more than that of ordinary paupers in the Union Workhouse.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary meeting of the Council was held on Tuesday, February 11th.

The report of the Building Committee of the two Colleges was approved and adopted, and it was referred to the Committee to make arrangements for laying the first stone of the new building on the Savoy estate.

A letter from the Committee of the Association of Fellows, with regard to the reported proposal for the extension of the Fellowship, was laid before the Council.

Mr. G. R. Wyatt, of Tulse Hill, was elected a Fellow.

Poisoning by Misadventure.—Dr. G. Danford Thomas, Central Middlesex coroner, held at the Providence Hall, Paddington, an inquiry as to the death of Elizabeth Jolly, aged 70, wife of James Jolly, carpenter, of 9, Hermitage Street, Harrow Road. The frequent recurrence of these lamentable accidents continues to enforce the much neglected caution as to labelling and to the adoption of fluted bottles or other mechanical precautions for poisonous mixtures. The evidence showed that the deceased, being unwell lately, had been taking medicine from a local dispensary, whilst at the same time the husband, who suffered from rheumatism, had had forwarded to him from a relative in Yorkshire, a bottle of liniment or embrocation to rub into the joints most severely affected, and the bottles were very much alike, the liniment having no label marked "Poison" upon it or anything to distinguish it from the deceased's medicine. On Sunday night last, at bedtime, she poured out what she supposed to be a draught of her own medicine, and drank it off. The moment she had done so she found the mistake she had made, and exclaimed to her husband, "Good God, I have poisoned myself!" Medical aid was at once sent for, but she expired in twenty minutes. The medicine and liniment were much alike, both in colour and smell. Dr. Arthur Prince, who was called in, deposed that she had died from strong aconite poisoning. She had taken one ounce, or 400 minims, enough to kill forty persons. It was of such strength that ten minims would kill. The Coroner commented strongly on such a dangerous mixture not having been labelled "Poison," as the chemist who sold it was bound to do. It was a sad occurrence that an aged person should have lost her life through such neglect. The jury concurred in the observations of the coroner, and returned a verdict of "Death from misadventure."

A CRITICAL AND SUGGESTIVE NOTE ON THE WOR AND CONSTITUTION OF THE NATIONAL AID (RED CROSS) SOCIETY.

We are asked to publish the following memorandum, which has t approval of some of the best informed and most authoritative frien of the Society and its objects.

Numerous letters and articles have lately been published about t National Aid or Red Cross Society of this country. First, there w an article in the November number of the *Nineteenth Century*, fr Mr. John Furley. This was evidently intended to compare the ai lessness and apathy of this Society in time of peace (and conseque unpreparedness on the outbreak of war) with the ceaseless zeal a activity displayed by many of the Red Cross Societies on the Con nent of Europe.

The author has attained his object less by hostile criticism th by a sketch of the useful work in which many of the leading societ are engaged in peace, whilst preparing for the eventualities of w The *Broad Arrow* then published an article, in which more dir allusion was made to the shortcomings of the National Aid Societ and this was followed by a letter in the *Times* from Surgeon-Ma Evatt, in which, after an attack on the management of the Socie he gives a list of all the objects which, in his opinion, mig with advantage be undertaken by the committee with such funds it possesses. This and a subsequent letter were acknowledged, l not satisfactorily answered, by Lord Wantage, the Chairman of t Society. Still later, a leading article in the *Morning Post* has d doubtful service to the Society, by awarding it extravagant praise the expense of the military members of the medical profession.

We have no intention to enter into a discussion of all the questi that have been raised, especially of those mere personal considerati which have been put forward by one or two writers who have tak part in the correspondence, but, from the point of view of the medi profession, we think the subject deserves further notice.

Sooner or later it was inevitable that a Red Cross Society would established in this country similar to those which already existed the Continent of Europe. The Government had accepted the C vention of Geneva, and in 1865 had signed that treaty. The Fran German war was the accidental cause which originated in England Association, for which the energies of a few individuals had alre prepared the ground. But there was then no time for organisati the cry for help came to us in the early days of that great war; a if we remember rightly, the first agents who went forth to repres the Society at the seat of war started before there was any matu plan, and travelled at their own expense, without knowing to w extent they might rely on pecuniary assistance. That blunders w committed under these circumstances is not surprising, and it wo be useless now to criticise too closely what was then done. We only mention one instance, and that perhaps the most glaring mist of all, namely, the grant made by the Committee of a sum of £20, to each of the belligerents for the use of their respective sick wounded. It is true, that it was an act of perfect impartiality; it was nevertheless contrary to the spirit of the Convention of Gen as well as a serious abuse of wealth, and a grave injustice to country from which this large amount of £40,000 was drawn, wit any guarantee as to the manner in which it would be expended.

Our aim now is to invite attention to the fact that a Red C Society cannot accomplish its mission in time of war unless it posse a living and active organization in time of peace. In the pape which we have referred, Mr. Furley has briefly described what is d by the principal Red Cross Societies in preparation for war, the gramme in every case varying according to the distinguis characteristics of each country, and the greater or lesser degre freedom allowed to popular initiative. The general scope of t institutions is worthy of our consideration, although probably not could be taken in its entirety as an example to be imitated in land. Surgeon-Major Evatt, on the other hand, offers a programme for adoption, which is, undoubtedly, too extensive, we should have been better satisfied if his suggestions had reduced by one half, there would then be a better chance of se them realized.

Surgeon-General Longmore, Professor of Military Surgery at Ne who acted as delegate of the British Government at each of the Cross Conferences, and was one of those who assisted to draw u Convention of Geneva, foresaw the confusion that would arise if, on outbreak of a war, a society were formed in England for the reli

ick and wounded; and he strongly advocated that this should one during peace. In the first report issued by the National Aid ety in 1871, the following words are quoted from a lecture de- ed by Mr. Longmore at the Royal United Service Institution, on h 16th, 1866; in reference to the formation of a society, he said: this remains undone, you will be at a disadvantage. Committees be formed, subscriptions will pour in, but, as heretofore, there be an absence of system and independence of action." Probably lecturer had in his mind the recollection of Crimean experi-

1870, Mr. Ernest Hart and Mr. Berkeley Hill were requested by Committee of the newly formed Society to report on the work that then being performed by its agents in France and Germany; and, their statements, we gather that, notwithstanding the indi- al zeal which was manifested, there was a great waste of energy valuable material, owing to a want of adequate con- and guidance. No person will deny that an enormous unt of good work was done, but it is obvious that this accomplished at a cost far in excess of the results; and on rusing the reports and accounts of that time, we are inclined hink that quite as much was done in those districts where the onal staff was small, and the disbursement was limited to hundreds, in those places where there was a large staff and a pecuniary ay estimated in thousands of pounds. At the termination of the nco-German war, Dr. John Sutherland made a report on the eral work of the society in 1870-1, as far as he could judge from mass of correspondence laid before him. He remarks that the le of the earlier experience of the war "appears to indicate that essential part of the work of aid societies in war is to be ready at a nent's notice to meet emergencies. . . . . The correspondence ws that the National Aid Society was not prepared for this war of rgencies. . . . . After the first battles, funds, material, and rs of personal help flowed in. It was too late to organize the relief, to enter on any concerted plan of action with other aid societies." er some suggestions for further guidance, Dr. Sutherland adds: t is impossible not to feel that common sense and practical talent ived at results which might have been sought in vain from a ctly regulated procedure, but at the same time it must be admitted t to enter on such an undertaking without previous arrangements, ich in this case there was no possibility of making, is somewhat tly in the end."

We have thus seen that the British National Aid Society, after its t campaign, wisely invited criticism on its past proceedings, and vice for the future, from those who were competent to afford it. But ortunately, the record of these practical suggestions was pigeon- ed in some dark corner, and there is no trace or indication that the vice has since been referred to or acted upon by the Council. There been no attempt at preparation in time of peace, unless we except payment during two or three years of a certain sum towards the ining of a few female nurses at Netley Hospital; and even this tuitous assistance, in our opinion, might have been left with vantage to the military authorities at the War Office, who are prima- y responsible for the proper care of invalid soldiers.

The public who have subscribed the funds, know little or nothing of manner in which the Society has been occupied during the last een years. Occasionally, as during the Turco-Servian and Russo- rkish Campaigns, telegrams and letters have appeared in the daily pers, informing us that the Society was represented by its delegates the seat of war; and we believe that the balance, which in 1871 s between seventy and eighty thousand pounds, has been reduced nearly fifty thousand.

Within the last few days, the report of the operations of British National Aid Society during the Egyptian mpaign 1884-5 has been circulated, but we fail to ce anything like combined action between the Society and the my Medical Department. We learn that a sum of nearly twenty ousand pounds was expended, exclusive of the very large amount llected and disbursed by the branch society over which Her Royal ghness the Princess of Wales presided, and of which fund no count has yet been published. We have it on the best authority at, during this war, there were no emergencies which the Army edical Department was not quite able to meet; and we cannot, erefore, avoid the reflection that there was an extravagant waste of luable material, and much misdirected zeal. Under the head of nsport, there is an item of £12,156 18s. 3d.; this is a large outlay, pecially on a supplemental service, which competent authorities have ted was absolutely unnecessary. It would be interesting to know w many invalid British and Egyptian soldiers were conveyed by e two steamers belonging to the Society on the Nile, one of which, we are informed, cost £8,000, and went to the bottom, when at anchor, in a very early stage of its career. The numbers dealt with are stated to be disproportionately small, indeed almost infinitesimal. Some of the facts which have been brought to light would appear ludicrous were they not overshadowed by the melancholy thought that the same expenditure of money and energy might have been productive of so much good had they been devoted to other channels of a kindred character. A certain outlay for luxuries, which no Army Medical Department can be expected to supply, would, under any circumstances, be justifiable in war-time, but we earnestly hope that no British society will again be permitted to indulge in such a gratuitous and reckless squandering of valuable means as that of which the National Aid Society, on its own showing, has been guilty.

Quite recently, when war broke out between Servia and Bulgaria, there was the usual excitement on the part of the small executive who hold the purse-strings of the Society, and Commissioners and two or three medical men were at once sent out to Belgrade and Sofia, provided with such things as it was thought might be useful. We shall in time, perhaps, have an opportunity to see a report of what these gentlemen were able to accomplish.

Medical men, especially the younger members of the profession, have a great interest in the success or failure of such a society as that we are now considering; for it is chiefly in their ranks that are found the volunteers who, on the outbreak of nearly every war, are selected to supplement the official sanitary service in the field. They naturally have a feeling of pride in the success of the ambulances and hospitals to which they are attached; and, on the other hand, they are disheartened when, from circumstances over which they have no control, they are placed in such an absurd position as that of the young surgeon who lately gave in the columns of the *Standard* a pathetic description of the work he was called upon to perform on the Nile, as an improvised manufacturer of soda-water, lemonade, and other "ades."

Such things will inevitably happen again, unless steps are taken to inquire into the present condition of the National Aid Society, and to put it on a more useful and practical footing. Briefly, we would offer the following suggestions as a fresh starting-point.

1. That a Council be formed similar to that representative body which was appointed in 1871, and the present self-elected Executive Committee to be discontinued. The Council to meet not less than twice in each year.

2. That the War Office be invited to delegate a medical officer of administrative rank (if possible, the Director-General of the Army Medical Department) as its representative on the Council.

3. That a limited number of members—say seven—of the Council be selected as an Executive Committee, whose duty it will be to meet not less than six times in each year for the transaction of current business, and as much oftener as circumstances may require. The Chairman of the Council to have an official right to take part in the Executive Committee's proceedings whenever he chooses to attend.

4. That the Executive Committee have power to nominate Sub-committees of not less than three members (not necessarily members of their own body), to study and report on all questions affecting the general work of the Society, both at home and abroad, and thus enable them to act promptly, economically, and surely, in all wars to which the aid of the Society may be directed.

SMOKE-ABATEMENT.

A LECTURE recently delivered by Mr. Pridgin Teale at the Royal Institution, has had the beneficial effect of causing the *Times* and other journals to devote space to the important consideration of our domestic grates, and the smokiness of London atmosphere, of which we have, during the last few weeks, had such sad experience. We cannot well devote too much attention to the subject while the long looked for and deeply needed reform is unattained; but we much fear there is little practical good to be anticipated as the direct results either of the lecture or the comments which our contemporaries have made upon it.

While warmly acknowledging the zealous labour of the lecturer, and heartily endorsing his urgent appeal to householders to be more careful in the selection of their grates, and the manipulation of their fires, we must join issue with him upon the general proposition he advances, that, in order to obtain the maximum heat from coal, and prevent the evolution of smoke, it must necessarily be burnt with a less chimney-draught than would suffice to raise the fire to its highest intensity. Speaking broadly, the reverse proposition would be nearer the truth. The higher the intensity of combustion, the greater is the heat evolved in a given time, and proportionately to the completeness of combustion

the production of smoke is lessened. The whole of Mr. Teale's theory of economy appears to rest upon the initial fallacy that combustion is a process which is susceptible of acceleration or retardation, without variation of the total heating effect. In other words, he implies that it is possible to burn a given quantity of coal in such a manner as to realise its full calorific value independently of the *time* occupied in completing the operation. This is an obvious mistake. A given quantity of combustible can evolve but a given heat.

In the case of what Mr. Teale terms "slow combustion," he really expresses, though he does not appear to observe it, the simple fact that the heat produced by the combustion of coal in the class of grates he advocates is distributed differently—that is, more slowly—to what it is when burnt in grates which admit of its being consumed more rapidly. But the total heating effect is not increased by the slower method, as he erroneously assumes. He condemns a fire burning at what he terms a "white heat" (we assume he uses that term loosely for the purpose of comparison, as he is doubtless aware that it is impossible to burn a coal fire in an open grate at white heat, or 2,300° Fahr.), and asserts that it is more economical to burn the like quantity of coal at an "orange-heat," or about 400° Fahr. lower temperature. In doing this, he completely ignores the element of *time* wherein complete combustion is effected. It is no doubt true that, as a matter of convenience, it may be desirable to burn coal as he proposes, if a certain size of grate is assumed to be used in a room of a certain area, in order to prevent overheating that particular room; but this consideration is clearly irrelevant to the ostensible purpose of the lecture, which was to expound the true principles of coal-economy in relation to its use in open grates. We say without hesitation that, if Mr. Teale were able to test accurately the result of burning a given quantity of coal in a small fire at a high intensity, against an equal quantity of coal burnt in a larger fire at a lower intensity, all other conditions being equal, he would find the balance of economy in favour of the former. Having said thus much in opposition to the principles laid down by the lecturer, because we are convinced that they are illusory, we may fairly give him credit for popularising some useful knowledge by his advocacy of fire-brick grates in preference to iron ones, and his method of managing a fire when fresh coaling it.

We should not close without saying that to the shallow form, projecting back, and fire-brick construction of Mr. Teale's grate, we attribute whatever economy he may have realised; but we cannot think that that economy reached anything approaching such a high rate as 25 per cent. by merely stopping the draught through the fire by means of his "economiser." On the contrary, we believe there must have been some serious error in the calculations, or disturbing elements in the experiments which led him to form that conclusion. We should remark that the tests made by the Smoke Abatement Institution of the system he recommends have shown no very substantial economy results from its adoption.

We should be heartily glad to find Mr. Teale direct some of his indefatigable personal zeal and his public influence in the cause of smoke-abatement, to investigation and advocacy of some of those methods of domestic heating which possess advantages far beyond those that can ever be realised in connection with the use of open grates burning bituminous coal. Those grates have been improved, thanks to Mr. Teale and others, since the action of the Smoke Abatement Committee first directed public attention seriously to the matter; and the ⅞th waste found by Count Rumford, has been reduced to something like one-half in the case of the best modern grates. But beyond this improvement, we are hardly likely to advance by the methods which Mr. Teale approves; and we must face the fact that it is practically impossible to render our chimneys smokeless, or our fuel consumption economical, while we continue to burn crude bituminous coal in open grates. The words of Horace, "Non fumum ex fulgore, sed ex fumo dare lucem," with which Mr. Teale concluded his lecture, must be construed in a sadly narrow sense, if they are to be considered in the least degree applicable to such an inherently defective system of using coal as that of burning it in open grates.

THE HEALTH OF THE NAVY.

THE statistical report of the health of the Navy for 1884 was issued recently as a Blue-book. In presenting the report, which contains copious tables and appendices, Dr. W. H. Lloyd, Deputy Inspector-General of Hospitals and Fleets, writes:

"In comparison with the preceding year, and also with the average of the last ten years, an increase is shown by these returns in the amount of sickness, invalidings, and deaths in the total force employed, except in the ten years' average of deaths, which shows a trifling decrease. This increase, though distinctly marked, cannot be held to imply any retrogression in the general sanitary condition the force, but is due to exceptional causes in operation on some of stations during the period. Thus, while the Home, Mediterrane and East India Stations, and Irregular Force, show increases of si ness which are capable of explanation from causes chiefly tempora the other principal stations exhibit less disease than in 1883.

"On the Home Station, the effects of the non-enforcement of effectual clauses of the Contagious Diseases Act continue to be ma fested by an increase in the amount of the more serious forms of vene disease, the particulars of which will be found on pages 36 and The present returns show the highest yearly ratios of this form of ease which have ever been recorded in these reports since their co mencement in 1856, before there was any legislation on the subje The most that can be said is that, so far as may be seen by examin the figures, the first sudden rise in the ratios that took place after withdrawal of the compulsory examination clauses of the Act does seem to have been maintained.

"The returns from the Mediterranean Station show a large incre in all the forms of fever, resulting in much invaliding and seve deaths. While a portion of this increased sickness is due to serv in Egypt and the Soudan, where part of the force was employed, sh stationed at Malta also suffered to a large extent, partly owing, doubt, to a temporary local cause, namely, the construction of an i proved system of sewerage at Valletta, which will, no doubt, result good, but which has, during the progress of the works, apparen been the cause of much illness in the island.

"On the West Coast of Africa Station, the visit of a ship to t River Niger has again been followed by unfortunate results. T number of men exposed to the climatic influences only consisted, t year, of one ship's company, numbering about seventy men, who h only been about four months from England; after a stay in the ri of a little less than a month, during September and October, the wh crew, with only six exceptions, suffered from malarial fever of t type usual in those regions.

"The East India Station is again unfortunate in the amount climatic fever met with, although the stationary ship at Zanzib recently so prolific of this form of disease, has been removed. T ships from this station, employed in the Red Sea, suffered heavily this respect, the ports of Massowah and Suakim being the princi sources of disease. There was also a loss of life in this force at t actions of Tamai and El Teb, amounting to thirteen, out of a total twenty-five killed and wounded.

"There has been less cholera encountered in the China Station 1884 than in the preceding year; five cases, with four deaths, fo the total; in all the cases the disease was contracted at Amoy Shanghai.

"The Irregular Force shows a large increase of climatic disease the forms of fevers, dysentery, and diarrhœa. The portion of t force employed in the Red Sea, which includes the Royal Mari battalion at Suakim, had to bear the brunt of that unhealthy clima and suffered accordingly. The greater number of the injuries action during the operations in the Soudan in 1884, were also s tained by this battalion."

CITY OF LONDON LYING-IN HOSPITAL.—The annual report stat that, during the year, 259 women gave birth at the hospital to 2 children—namely, 114 boys and 116 girls; and 1,118 women w attended to at their own homes, and of the 1,135 children born, 5 were boys and 557 girls, seventeen women having twins. Ninet four women availed themselves of opportunities afforded for traini as midwives and monthly nurses in 1885; and they had all, with o exception, passed good examinations, and received certificates of p ficiency.

IMPROVED HOUSES.—At the fifth annual meeting of the Sanita Assurance Society—Sir Joseph Fayrer, K.C.S.I., F.R.S., in the ch —it was stated that "the properties inspected during the year have, usual, been of the most varied character, including cottages and re dences of every class in London and the provinces, also mercant offices, trading premises, and institutions of a public character. every case of first inspection, the sanitary arrangements have be found to be more or less defective; but with newly built proper there has been a marked improvement, necessitating fewer alteratio to secure the sanitary certificates."

AN officer of the Stoke-upon-Trent Police Force, on finding th a prisoner had cut his throat with a piece of glass, broken from t window of his cell, was able to put to good service the knowled derived from the St. John Ambulance Association, and to avert fatal result.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 18th, at 8.30 P.M., when Dr. Stephen Mackenzie will demonstrate a number of patients suffering from various forms of Skin-diseases.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting will be held in the Boardroom of the Great Northern Central Hospital, on Thursday, February 25th, 1886, at 8.30 P.M. The chair will be taken by Dr. Dickson, President of the Branch. Mr. W. Spencer Watson will read a paper on Recent Improvements in the Treatment of Nasal Polypi and Chronic Rhinitis, and will exhibit an instrument for applying dry antiseptic vapour to wounds, and during operations. Dr. Fancourt Barnes: Case of Uterine Myoma, treated by oöphorectomy. Dr. R. W. Burnet: Case of Cerebral Syphilis; Fits and Recovery. Dr. ——: Case of Pott's Disease; Compression of Lung; Hypertrophy of Right Heart. All qualified medical men are invited to attend.—GEORGE HENTY, M.D., Honorary Secretary, 302, Camden Road, N.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North-Western Railway Hotel, Stafford, on Thursday, February 25th. The President (Mr. J. H. Hartill) will take the chair at half-past three o'clock. Papers.—Mr. F. Marsh: On the Use of Kocher's Method of Reduction of Subcoracoid Dislocations of Humerus. Dr. McAldowie: Paralysis of the Arm from Lesions of the Nerve-Trunks. Mr. Vincent Jackson: The Removal of Vesical Calculi from Boys and Male Infants. Dr. Gibson: Notes on a Case of Supposed Perforating Ulcer of Foot, with Specimen.—VINCENT JACKSON, General Secretary, Wolverhampton, January 27th, 1886.

SHROPSHIRE AND MID-WALES BRANCH.—The half-yearly meeting of the Branch will be held at the Salop Infirmary, Shrewsbury, on Tuesday, February 23rd, at 3 P.M., J. D. Harris, Esq., President, in the Chair. Gentlemen desirous of introducing patients, exhibiting specimens, or making communications, are requested to signify their intention at once to EDWARD CURETON, Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above district will be held at The Infirmary, Gravesend, on Friday, February 26th, at 4 P.M., O. R. Richmond, Esq., in the Chair. Dinner at the New Falcon Hotel, 6 P.M.; charge, 6s., exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, O. R. Richmond, Esq., Lodgewood, Gravesend, not later than February 24th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers.—1. Dr. Curnow: Typhoid Fever and its complications; their treatment. 2. Mr. W. Rose: Some points connected with the operative treatment of Inguinal Hernia. 3. Dr. Firth: Three cases of Puerperal Convulsions. 4. Mr. Bryden: Cases of Foreign Bodies in the Ear. Several interesting cases will be exhibited by the medical staff of the infirmary.—A. W. NANKIVELL, Honorary Secretary of the District, St. Bartholomew's Hospital, Chatham.

DUBLIN BRANCH: ANNUAL MEETING.

THE ninth annual meeting of the Branch was held on Thursday, January 28th, in the Hall of the King and Queen's College of Physicians in Ireland. There was a large attendance of members. Dr. LOMBE ATTHILL, president of the Branch, occupied the chair.

Report of Council.—The honorary secretary, Dr. RICHARD A. HAYES, read the following report. "Your Council, in presenting the ninth annual report, are pleased to be able to congratulate the Branch on its flourishing condition. As compared with last year, the number of members, namely, 175, is practically unaltered, but the Branch has suffered the loss by death of five members, two of whom occupied distinguished positions in the profession, Dr. B. G. McDowel and Mr. Joliffe Tufnell, while three of them, Drs. Neill, Cahill, and Warren, were cut off at a comparatively early period of their career. Your Council have noticed that, among the large number of members of the Association residing in the district embraced by the Dublin Branch, namely, the province of Leinster, there are an increasing number who are not members of the Branch. Your Council trust that these gentlemen may see the advantage and importance of joining the Branch, and thus add to its objects and those of the Association at large, by uniting more closely in one representative organisation formed for the advancement and preservation of the interests of the profession. In compliance with the resolution passed at the last annual general meeting, the report of your Council on the condition of the Army Medical Department was sent to the Parliamentary Bills Committee. That committee having discussed the report, forwarded copies of it to the Secretary of State for War, and to the Director-General of the Medical Staff, pressing upon them the views expressed in the report, and requesting that their attention might be directed to the important subjects referred to in it. To this communication, the following reply was received by the Chairman of the Parliamentary Bills Committee, from the permanent Under Secretary of State.

War Office, Pall Mall, W.

SIR,—I am directed by the Marquis of Hartington to acknowledge your letter of March 10th, enclosing, on behalf of the Parliamentary Bills Committee of the British Medical Association, a report on the present condition of the Army Medical Department.

In thanking you for the same, I am to observe that the only way in which the promotion to administrative grades can be expedited, is to apply a more rigid system of selection; and steps have been recently adopted with this view.

I am glad to add that, bearing in mind the very liberal terms secured to the officers of the medical staff by existing warrants, the Secretary of State is not prepared to reconsider the rates of pension now offered to the senior executive grade, the members of which have, in addition to pension, numerous opportunities of continuous home employment on liberal terms.—I have the honour to be, sir, your obedient servant,

RALPH THOMPSON.

ERNEST HART, Esq., Chairman Parliamentary Bills Committee of the British Medical Association.

"Your Council regret the unsatisfactory nature of this reply, knowing as they do that the system of selection referred to is ineffectual in removing the block of promotion which still exists among the seniors of the executive ranks of the department. They have also to remark that no notice was taken of another subject of complaint in the report, namely, the short period of home service the majority of medical officers obtain, in consequence of the strength of the department having been reduced. Your Council having had their attention drawn to what they consider a substantial grievance of Irish medical practitioners residing in England, namely, that under the regulations of the Local Government Board for England, any practitioner desiring to act as public vaccinator in England must produce a certificate of having been instructed in vaccination at one of the educational vaccination stations named in the regulations of the Local Government Board for England, all of which stations are situated in England or Scotland. Your Council have written the following letter.

British Medical Association, Dublin Branch, Dublin, January 11th, 1886.

SIR,—I am directed by the Council of the Dublin Branch of the British Medical Association to request that you will be so good as to call the attention of your Board to the following circumstances which have been recently brought under the notice of the Council, and that you will move your Board to take steps to remove the difficulties at present in the way of our Irish Medical Practitioners becoming qualified to hold the appointment of public vaccinators in England.

Under an Order in Council of December 1st, 1859, the qualifications necessary for becoming "a contractor for vaccination" are defined, and, among other qualifications, it is required that he should "produce a special certificate given under such conditions as the Privy Council from time to time fix, by some public vaccinator whom the Privy Council authorise to act for the purpose, etc."

In order to provide for the granting of the before-mentioned certificates, certain stations are appointed, and certain persons determined as qualified to grant certificates by a notice published by your Board on April 18th, 1885.

Although the list contained in this notice comprise vaccination stations in England and Scotland, it does not include any stations in Ireland. Under these circumstances, Irish medical practitioners are unable, during the period of their medical studies in Ireland, to obtain the qualification in vaccination necessary to enable them to undertake the duties of public vaccinator in England, and are, therefore, under a disability should they settle in England; although, if they remain in Ireland, they are qualified when they become poor law medical officers to exercise the functions of public vaccinators.

When an Irish medical practitioner, resident in England, finds himself thus disqualified, he has, if he wish to become a public vaccinator, to go, at some expenditure of time and money, and often at great inconvenience, to an English or Scotch vaccination station, to obtain the necessary qualification.

The Council of this Branch of the British Medical Association consider that this, which the Council submit is a substantial grievance, ought to be as far as possible removed by the recognition by your Board, under order of the Privy Council, of vaccination stations where instructions might be given, and certificates granted either to those persons instructed by the vaccinator in charge of Irish stations, as in Section (2) of the notice of your Board, or on examination as in Section (3) of the rule.

The Council would take the liberty of suggesting that your Board should communicate with the Local Government for Ireland upon this question, and have no doubt that the Irish Board will be able to satisfy your Board that they have vaccination stations and public vaccinators which can fulfil all the conditions required by the Local Government Board of England.

The Council feel confident, now this question has been put before your Board, that it will be satisfactorily dealt with, and this disability of Irish medical practitioners resident in England speedily removed.—I remain, sir, your obedient servant, RICHARD A. HAYES, M.D., Honorary Secretary.

To the Secretary, Local Government Board, Whitehall, London, S.W.

"Up to the present date, no reply to this communication, beyond an official acknowledgment of its receipt, has been received. In connection with the subject of vaccination, your Council have also had under their consideration a recently issued sealed order of the Local Government Board for Ireland, a portion of which they cannot approve. Clause No. XII of the Order limits the revaccination of persons applying for that purpose, by the following conditions. 1st. That the person has attained the age of 15 years, or, if there be an immediate danger of small-pox, the age of 12 years; 2nd. That the person has not before been successfully revaccinated; and 3rd. That there are no circumstances present which would render the operation undesirable. The first two of these conditions seem to your Council, as a general rule, much too arbitrary, and to be an undue interference with the discretion and responsibility of the dispensary medical officer. To the third condition there can be no objection, and it would appear sufficient in itself to embrace the purpose intended to be laid down in the first and second. Dr. Richard Hayes having expressed his wish to resign the honorary secretaryship of the Branch, your Council desire to express its obligation to him for his past services, so ably and cheerfully rendered to the Branch and to the Association. Dr. William Cox Neville has kindly allowed himself to be nominated as honorary secretary, and your Council feel sure that he will be found an efficient successor to Dr. Hayes. The accounts of the Branch, up to January 27th, have been audited by Dr. E. H. Bennett, and show a balance in favour of the Branch of £25 12s. 2d. The thanks of the Branch and Council are again due to the President and Fellows of the College of Physicians for their courteous permission to hold our meetings within its walls."

Mr. STOKES, Vice-President of the Royal College of Surgeons in Ireland, in moving the adoption of the report, said that it showed that financially, and in every other way, the Branch was in a satisfactory condition. He thought it would be an advantage if the Branch met oftener than once a year to discuss matters of medical interest.

Dr. MAPOTHER seconded the motion. He concurred with what the Vice-President of the College of Surgeons had said as to the advantage of meeting at times during the year to discuss medical subjects. He believed the Council acted well in writing the paragraph in the report in reference to the difficulty in the way of Irish surgeons caused by the regulations of the Local Government Board, requiring that they should produce certificates of having been instructed at one of the educational vaccination-schools in England. He was happy to see that the Parliamentary representation of their profession had remarkably increased since they had last met, and that, in fact, all sides of politics were well represented. They had now in Parliament an exceedingly able member of their profession, who held the position of Chairman of the Council of the Association, Professor Foster, of Birmingham, whom they all held in the highest esteem, and who had been educated in Dublin. He was glad to see that a well-deserved tribute had been paid in the report to Dr. R. Hayes, who had, with much success, filled the offices of Secretary and Treasurer.—Dr. C. F. MOORE said that, in reference to the paragraph as to the difficulty of surgeons from this country being at once recognised in England as public vaccinators, they were themselves to blame, for the Irish College of Surgeons had given up requiring certificates of qualification as to vaccination. He would be glad to know whether the College of Physicians had also done so. He understood that the Apothecaries Hall did not require them. There should be a consensus of opinion on the subject. The Local Government Board and the Irish medical bodies should determine on recognising certain public vaccinators, so as to give them a strong claim on the English Local Government Board.—The report was adopted.

Officers and Council.—The result of the ballot for the officers of the Branch for the ensuing year was declared to be as follows. *President:* E. H. Bennett, M.D. *President-elect:* T. W. Grimshaw, M.D. *Vice-Presidents:* E. D. Mapother, M.D., W. Moore, M.D. *Council:* Lombe Atthill, M.D., John T. Banks, M.D., J. K. Barton, M.D., J. H. Chapman, F.K.Q.C.P.I., A. H. Corley, M.D., George F. Duffey, M.D., E. Hamilton, M.D., R. A. Hayes, M.D., J. W. Moore, M.D., Walter G. Smith, M.D., W. Stokes, M.D., J. J. Thompson, Deputy Surgeon-General. *Representative on the Council of the Association:* George F. Duffey, M.D. *Honorary Secretary and Treasurer:* William C. Neville, M.D.

New President.—Dr. E. H. BENNETT then took the chair, and was most cordially received.

Vote of Thanks to Outgoing President.—Dr. WILLIAM MOORE moved:

"That the marked thanks of the Branch be given to Dr. Atthill for the manner in which he had presided over the Branch, and for the attention he had bestowed to the interests of the Branch and of the Association during his year of office."

The motion, having been seconded by Dr. EDWARD HAMILTON, was carried with acclamation.

Presidential Remarks.—The PRESIDENT, having expressed his thanks for the honour done him in electing him to the chair, craved the indulgence of the members for his inability to deliver the customary presidential address in consequence of his late severe illness, from which he had but so recently recovered, that it was impossible for him to prepare one.

The meeting then adjourned.

Annual Dinner.—In the evening the usual annual dinner took place in the Hall of the College of Physicians, and was attended with even more success, perhaps, than the many former pleasant gatherings of the Branch. Additional *éclat* was given to the dinner by the presence at it of His Serene Highness Prince Edward of Saxe-Weimer, the General Commanding the Forces in Ireland. Covers were laid for seventy-eight. The President, Dr. Bennett, was in the Chair. Everything connected with the arrangements, including the after dinner speeches, and the charming vocal and instrumental music rendered by Professor Tichborne, Mr. W. B. Martin, Surgeon Carte Coldstream Guards, Drs. Tweedy, Browne, Jacob, and R. A. Hayes was excellent. Among those also present were Lord James W. Butler the Hon. Mr. W. Burrell, Sir Robert Jackson, C.B.; Sir R. Hamilton K.C.B.; Sir George Owens, Sir George Porter, Surgeon to the Queen Sir William Kaye, Q.C.; the Provost, the President of the King and Queen's College of Physicians, Dr. Banks, and Dr. William Moore Physicians to the Queen in Ireland; the President of the Irish Medical Association, Dr. Croker King, L.G.B.; Captain Twiss, R.N.

H.M.S. *Belleisle;* Mr. E. H. Kinahan, D.L.; Colonel Dease, Count Plunkett, The MacDermot, Q.C.: Lieutenant-Colonel Turner, R.A., Military Secretary; Dr. Robert M'Donnell, F.R.S.; Dr. Kidd, Captain Porter, Surgeon-Major Robinson, Scots Guards; Dr. Mapother, Dr. Atthill, Dr. Gordon, Professor Sigerson, Mr. George Smyth, Dr. Duffey, Mr. Wheeler, etc. etc.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.

THE members of this District met, by invitation of Dr. Amsden, at the Essex County Asylum, Brentwood, Wednesday, January 27th, at 2.30 P.M., under the Presidency of Dr. ELLISTON (Ipswich), President of the Branch. Nineteen gentlemen were present. Previously to the meeting, Dr. Amsden escorted the members round the wards of the Asylum.

Summer Meeting.—It was decided to hold the summer meeting at Halstead; and Mr. R. G. Kellett, of that town, was asked to take the chair at that meeting, in the event of the President being absent.

Honorary Secretary.—Mr. W. T. Jackman, of Coggeshall, was re-elected Honorary Secretary for the year 1886.

Administration of Medicines by Injection into the Rectum.—An interesting and practical paper on this subject was read by the President.

The Members of the Royal College of Surgeons—Mr. C. E. ABBOTT, Braintree, Honorary Secretary for Essex of the Association of Members of the Royal College of Surgeons, proposed, and Mr. R. G. KELLETT, seconded, the following resolution: "That this meeting expresses its sympathy with the Association of Members of the Royal College of Surgeons in its endeavour to obtain the College franchise and a proportion of seats on the Council for the Members of the Royal College of Surgeons, and protests against the action of the Council in refusing the demands of the Members."

Mr. W. A. ELLIS, Honorary Secretary to the Association of Members of the College of Surgeons, said that the Association was rapidly increasing in its numbers, and that there was a general feeling throughout the country that the Members of the College should have a share in the management of College affairs; and that that was the main object for which the Association was fighting. The two general meetings at Lincoln's Inn Fields had formed an epoch in the history of the College, and the resolutions advanced thereat by the Association had been carried by very large majorities in crowded assemblies. But the reform must be carried through, and this could only be done by the great bulk of the Members of the College declaring publicly, as in a petition to the Queen or Parliament, what they all must have at heart. Little was to be expected from the Council, as, even in its suggestion to take the opinion of the Fellows upon the question, it had left out of sight the demand that Members should themselves sit upon the Council—a point upon which Mr. Holmes, himself long a councillor, had laid the greatest stress. The Council had spoken, in its reply to the Members, of its being necessary to guard the exclusive privileges of Fellows; but prominent Fellows, such as Mr. Rivington, had declared that "he valued these privileges very highly, but he should not value them if they could only be sustained at the expense of injustice to the Members." The Council had also referred to the "social status" that its diploma conferred upon its Members, as being a sufficient return for the labour and cost of attaining Membership; but it forgot that it was the good bearing and high education of the Members that conferred its dignity upon the College, and therefore upon its Council. The Council, however, was strong in its position and reputation, and the Members must put forth their utmost strength against it to gain representation.

The PRESIDENT having spoken in favour of the resolution, it was carried *nem. con.*

Papers.—Dr. W. B. Hadden, of St. Thomas's Hospital, read a paper on Fits. Dr. Amsden and the President also made some remarks on the subject.—Mr. T. Taylor (Bocking) read a paper on the Relative Value of Different Life Assurance Companies.—Dr. G. Amsden, Medical Superintendent of the Essex County Asylum, read a paper on the Treatment of Acute Mania by Hyoscyamine.

Charges against Medical Men.—Dr. J. SINCLAIR HOLDEN (Sudbury) proposed, and Dr. BODKIN (Chelmsford) seconded, the following resolution, which was carried unanimously: "That, as medical men may at any time become liable to false and groundless charges of a ruinous nature, it is most desirable that a Medical Defence Fund be formed and administered in connection with the British Medical Association, and that its members should be asked to contribute a small sum annually to this fund, those who do so becoming entitled, should occasion arise, to legal advice and assistance."

Neurological Specimens and Drawings.—Dr. Hadden exhibited some sections showing naked-eye changes in the spinal cord, and some drawings of disease of the brain and spinal cord.

Dinner.—After the meeting, the members were most hospitably entertained by Dr. Amsden at dinner.

OXFORD AND DISTRICT BRANCH: MEETING.

A MEETING of the Oxford and District Branch was held in the Radcliffe Infirmary, Oxford, on Wednesday, January 27th; Sir HENRY ACLAND, President, in the chair. There were twenty members present, and one stranger.

New Members.—The following gentlemen were elected members of the Association and the Branch: W. Byares, Dorchester, Oxon.; F. H. Lyon, Thatcham; Geo. J. Wilson, Oxford; F. A. Dixey, Oxford; J. B. Bunny, Newbury; L. Williams, Wheatley; M. H. Humphreys, Thame; J. C. R. Freeborn, Oxford; Fred. Thos. Maisey, Charlbury; Thos. Walker, Hook Norton; Ed. W. Turner, Deddington. Five gentlemen were proposed as candidates for election at the next meeting as members of the Association and the Branch. Mr. James Cornwall, of Fairford, was elected a member of the Branch.

Collective Investigation.—The PRESIDENT made some remarks on the questions which had been sent round by the Collective Investigation Committee of the International Medical Congress.

Communications.—The following communications were read.

1. Dr. Brooks showed a case of Charcot's Joint-disease. The joint was enlarged and loose; there was some grating. The patient could use it with a crutch and stick; he had broken his leg lately while walking. He presented typical symptoms of locomotor ataxy.

2. Mr. Symonds showed a Bronchocele, which he removed from a girl who was present. It was very large, and the removal had alleviated many distressing symptoms. The operation was done a few months ago, and no signs of myxœdema had supervened.

3. Mr. Symonds showed three cases of Excision of the Knee; and Mr. Winkfield one.

4. Dr. Welsford showed a very interesting Brain from a woman who died from Thrombosis of the Cerebral Veins. The longitudinal sinus contained a firm *ante mortem* clot, and the veins of the arachnoid were like cords. She had only been ill three weeks, apparently with anæmia.

5. Mr. Morgan showed a man with a huge Tumour in the left flank, pressing up the lower ribs, and reaching down to the ilium. There was fluctuation in separate cysts, and some places were very hard. Mr. Morgan diagnosed an enchondroma growing from a rib.

Vote of Thanks.—The meeting closed with a vote of thanks to the Chairman, and adjourned.

Dinner.—Sixteen members met at dinner together after the meeting.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

A MEETING was held at the Hackney Town Hall on January 21st; F. COCKELL, Esq., in the chair.

Communications.—The following communications were made.

1. Mr. Major Greenwood showed specimens of granular contracted kidney, weighing two ounces and one and three-quarter ounces, from a woman aged 23, who died of uræmia. There was no albumen when the urine was examined shortly before death. The heart was very much hypertrophied. There was a family history of Bright's disease, but none of intemperance.

2. Mr. Major Greenwood also showed a modification of Squibb's apparatus for estimating urea. The principal feature consisted in reading off the amount of nitrogen displaced in a graduated curette instead of the displaced water.

3. Dr. Gilbart Smith gave short notes of a case of verrucose endocarditis. The patient, aged 31, had a history of heart disease of over twenty years. His last illness was about two and a-half weeks' duration, and was due to emboli carried from the heart to various organs, brain, kidney, bowel, etc. The heart, which was shown to the meeting, was hypertrophied, and showed numerous vegetations on the aortic and mitral valves. There were small ulcerations in the cæcum evidently due to emboli.—An interesting discussion ensued, and after the usual votes of thanks the meeting adjourned.

LARGE CALCULUS REMOVED FROM A YOUNG BOY'S BLADDER.—At a recent meeting of the surgical staff of the City Hospital, Jersey City, New Jersey, Dr. Theo. R. Varick, Surgeon-General of the State, removed a calculus weighing 3,440 grains (nearly 8 ounces) from the bladder of a boy twelve years old.—*Louisville Practitioner.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Animal Alkaloids.—Tuberculosis Treated by Intraparenchymatous Injections of Mercury Bichloride.—Primary Ocular Tuberculosis.—Early Menstruation.—Chloropeptonate of Iron.—General News.

THE *France Médicale* publishes an excellent summary of Professor Gauthier's communication to the Paris Academy of Medicine, on the Alkaloids of Animal Tissues. In the course of putrefaction in animal tissues, a certain number of poisonous alkaloids are called into existence. The alkaloids of putrefaction vary according to the character of the medium in which they develope, also according to the period that bacteridian fermentation begins. Hydropyridic compounds are almost always present ; they are apparently the alkaline products of the most enduring bacteria, which live and suppress the others. In the excretions of healthy living animals there are substances of the character of ptomaines. The alkaloids of urine found by Liebricht and Pouchet ought to be ranked with alkaloids of putrefaction. There are similar ptomaines in saliva and snake-venom, which M. Gauthier names leucomaines, in order to distinguish them from the alkaloids that form in dead bodies, called ptomaines. In 1881, M. Gauthier published a memoir in which he dwelt on the importance of the leucomaines in connection with the genesis of disease, when renal elimination, that of the skin and intestinal mucous membrane, was insufficient. Later on, M. Gauthier studied the muscular juice of large animals, and extracted five new definite crystallised alkaloids acting with more or less energy on the nerve centres, causing sleep, fatigue, and, in some instances, vomiting and action of the bowels, but in a less degree than ptomaines. These substances are called into existence during life just as are carbonic acid and urea. The transformation of the tissues of the higher order of animals are, in a large proportion, of the anaerobic order. M. Gauthier observes that this proposition may appear paradoxical, but he believes that he will demonstrate it experimentally and theoretically. Four-fifths of the products of animal combustion are positive aerobic formations, comparable to the oxidation of alcohol under the influence of mycoderma vini or aceti. The fifth part of the combustion of the animal economy takes place at the expense of the tissues without oxygen playing any part in the process ; or, in other words, that portion of the tissue lives, like the anacrobic or putrid ferments. Most of these toxic alkaloids are easily oxidised ; they enter into combustion, and disappear or do so in part. In a normal condition, a very small proportion of muscular leucomaine is found in urine. But if the air that reaches the blood be diminished in quantity, or the proportion of hæmoglobulin be diminished, as is the case in chlorosis or anæmia, or if substances be introduced into the blood which prevent hæmatosis, substances of the character of leucomaines or ptomaines accumulate in the blood. M. Gauthier further states that, with these toxic alkaloids, there exist nitrogenous substances, not alkaloids, which are still more poisonous. The septic poison of Panum contains hardly any alkaloid.

M. Gougenheim has been treating pulmonary tuberculosis by making intraparenchymatous injection of mercury bichloride. On the left side below the clavicle, through the first intercostal space, the injection passes easily and safely into the lung. On the right side, through the two first intercostal spaces, in order to avoid all accidents, it is necessary to make the injection at a distance from the sternum and the neighbouring rib, in order not to injure the intercostal and mammary vessels and nerves ; neither should it be made too near the clavicle, or the subclavian vein may be injured ; the subcutaneous veins should be avoided. The injection should be given slowly, in order to avoid coughing and hæmoptysis, which sometimes result from a sudden irruption of fluid into the pulmonary tissues. Dr. Gougenheim believes that these precautions prevent the occurrence of accidents. At the necropsies of patients who had been thus treated, Dr. Gougenheim had never observed any muscular, pleural, or pulmonary lesions which could be attributed to these injections. The Pravaz's syringe used was cleaned antiseptically. This treatment was adopted with thirty-three patients, most of whom were in an advanced stage of phthisis. In twenty-one instances, improvement was quick and undeniable. Ten patients out of thirty died ; among these, seven presented local modifications of lesions which were easily detected at the necropsies. The solutions injected were sometimes $\frac{1}{2000}$, sometimes $\frac{1}{1000}$, sometimes $\frac{1}{500}$. The injection-fluid was always previously heated to normal temperature, 37° Cent. (98.6° Fahr.). One patient had hæmoptysis, and the injections were discontinued ; another left the hospital during the time the treatment was going on.

M. Dujardin (of Lille) publishes the following case. Paul Cass, aged 5 years, had whooping-cough five months before he was taken to Dr. Dujardin to be treated for an affection of the left eye. Soon after he was cured of the whooping-cough, his left eye became affected. He continued in good health and spirits, and his parents did not pay any attention to the condition of the eye, which was always red and perfectly insensible to the effect of light. When taken to consult Dr. Dujardin, there were four little yellow tumours on the iris ; one was developed more than the others, it reached the anterior chamber, and its apex was almost in contact with the cornea. These yellow elevations were situated on the anterior surface of the iris. The pupil slightly dilated under the influence of atropine. It was impossible to examine the eye with the ophthalmoscope, as the vitreous body was no longer transparent. The sight of the eye was not quite lost ; the child could reckon the fingers at a distance of twenty-five or thirty centimètres. Absence of all pain was the striking feature, furnishing a remarkable contrast to the painful ciliary neuralgia provoked by syphilitic gumma. The child did not present any symptoms of scrofula. Tuberculosis of the iris, and probably of the choroid, was diagnosed. The absence of pain and of effusion in this iritis put hereditary syphilis out of the question. The father and mother were both free from syphilis, and had never contracted it. The treatment adopted consisted of cod-liver oil, iodide of potassium, and atropine dropped into the eye. The child's condition did not improve. The tubercles on the iris developed into pustules, one of which was always larger than the others ; here and there miliary granulations were observed ; these were easily distinguished, from the deposits on the membrane of Descemet, characteristic of serous or plastic iritis ; hypopyon never appeared, but the aqueous humour was much disturbed. The parents were probably frightened at the gravity of Dr. Dujardin's diagnosis, and soon ceased to take him to be treated.

The *Semaine Médicale* publishes the history of a case, observed by Dr. Mengus, of a little girl of 23 months who menstruated regularly. The child was well formed and fully developed for her age. The menstrual flux proceeded from the genital organs, there was neither lesion, neoplasm, nor a foreign body to explain this. The hymeneal membrane was absent ; examination could extend to the cervix uteri, which was excessively developed for a child of that age. After three days the catamenial flow stopped and reappeared six weeks later on. The child presented signs of puberty, which increased after the second menstruation ; the breasts were as developed as in the mobile period the pelvis presented the signs of commencing puberty, and the skin lost the satin-like surface peculiar to children, and presented the rougher one characteristic of puberty in young girls ; loss of blood weakened the child at first, but a few tonics restored her normal condition ; she continued to menstruate regularly and have perfect health she is now three and a half years old, precocious and intelligent, and measures 1.15 mètres in height, the stature of a child of seven. Her brother presents all the symptoms of cretinism.

Some time ago, the medical body of the Lariboisière hospital urged that the number of surgeons and physicians should be doubled ; the director of the *Assistance Publique* has decided that four surgeons instead of two shall be appointed.

SPAIN.

[FROM OUR OWN CORRESPONDENT.]

The Cholera Lingering in Spain.

THE bulk of your readers will not be surprised to hear that the cholera not only lingers in certain parts of this peninsula, but is actively invading others, causing great havoc in certain towns, and leaping on to others far distant from them. After leaving this province, it swept into La Mancha, then into Alicante, Murcia, and Granada, etc., lingering on the south coast, and last month getting so far west as Marbella, Alora, etc., where it was severe, although the population is sparse. Within the last week, it has invaded Tarifa the most southern town in Spain, where, out of a population of 3,000 fifty were struck down in one day, and the proportionate number of deaths still goes on. As Tarifa lies midway between Gibraltar and Cadiz, I daresay our people at the former stronghold are fully on the alert ; but it is quite clear that the Spaniards are not, as long ere this it might have been stamped out. "*Estàmos en el pais de no posemus.*" Yesterday we had the news that it has got as high up as Oviedo, and that several towns in Asturias have got the "*enpermida sospechosa.*" I fear very much that we shall have another outbreak this year, perhaps more fatal and general than the last, as I see no measures taken to prevent its return. We have lapsed into accustomed normal neglect and apathy in connection with preventi-

gienic measures, as our drains, sewers, and unventilated streets and ises, and filth and refuse of all kinds piled as it used to be, foul thing washed at the same centres of infection as of yore; and so are contented, but not happy.

CORRESPONDENCE.

☞ To Correspondents. ☜

R correspondents are reminded that prolixity is a great bar to publication; nd, with the constant pressure upon every department of the Journal, brevity f style and conciseness of statement greatly facilitate early publication. We re compelled to return and hold over a great number of communications chiefly y reason of their unnecessary length.

ANSFUSION IN THE EDINBURGH ROYAL INFIRMARY.

Sir,—I would wish to supplement the important paper of my end and colleague, Dr. John Duncan, which appeared in the Jour- L of January 30th, by stating that, among other good results nich I have recently obtained by transfusion of blood, according to . Pavy's principle, and with the aid of antiseptic precautions, has en the relief of acute traumatic pyæmia.

A case of severe injury, the result of an explosion of dynamite, s admitted into my wards about a month ago, and upon the fifth y after the injury, acute pyæmia, with a temperature of 107°, was esent. Transfusion has been performed upon four different occa- ns, and the patient is now making a slow but good recovery, not- thstanding that he has lost by amputation a thigh and forearm, s had his femoral artery tied in Scarpa's triangle, and has had veral large abscesses in different parts of his body. An interesting t in connection with the case is that, before the first transfusion, had a severe secondary hæmorrhage, which rendered him almost lseless.

Dr. Cotterill, who has shared the treatment of the patient with me, pes soon to publish a detailed account of this interesting case.—I , etc.,

Thomas Annandale.

Edinburgh.

NTRA-OCULAR INJECTION IN THE EXTRACTION OF CATARACT.

Sir,—In July, 1884, I had the honour, as President of the Oph- almological Section of the British Medical Association, of bringing fore the profession a new method of dealing with the cortex in taract-extraction. That consisted in removing the cortex, whether nsparent or opaque, by the force of water introduced within the psule (see British Medical Journal, August 2nd, 1884).

The reason of my writing to you now on the subject is that I serve a notice, by your Paris Correspondent, of a paper, by Pro- sor Panas, read at the Academy of Medicine in Paris, in relation to e use of an antiseptic solution of biniodide of mercury for injection thin the eye. One cannot criticise closely such a short abstract; t still I cannot help remarking that undue prominence is given to e antisepticism, and the intra-ocular injection is merely put as a rt of incidental.

I observe it is stated that Professor Panas has gone back to the old p-extraction, and that he has, by his intra-ocular injection of the tiseptic solution and his antiseptic dressing, reduced the losses by nophthalmitis from 10 per cent. (the old losses by the flap) to 5 per nt. By the modern linear and shallow flap methods, however, the sses from panophthalmitis are only about 2 per cent., so that unless ere be compensating advantages, or unless the percentage of losses m the cause specified be still further reduced, surgeons are not ely to revert to the old flap. I have not used antiseptic injections thin the eye save in three cases, to which I shall refer later on; yet, king all my cases of introduction of water within the eye, from the ne I started the practice, about May 1884—and they number about ghty—I have only lost one eye by panophthalmitis, and that was t even remotely attributable to the water. It occurred upwards of fortnight after operation. The history, however, is not material to is question. Forty-nine of the cases were operated on by the scoop- ringe, made for me by Messrs. Mayer and Meltzer.

I do not wish to minimise the importance of antiseptics in par- ular cases, but I do say from experience that in a healthy eye, and th healthy surroundings, the injection of pure water is all that is quired. If an antiseptic do no harm, however, there can be no jection to using it. Accordingly, influenced by the testimony of Pro- sor Panas and his high reputation, I have tried the solution recom- nded by him. I have used it three times, and with satisfactory results; it has not irritated. I may note that the solution is slightly opaline at the temperature of the air, but it clears on being heated. It tarnishes the scoop.

Whilst giving antisepticism its proper place, I must emphasise what is due to intra-ocular, or more particularly intracapsular, injection. I have had the longest experience of it, if not the most extensive. Although I have a very special interest in the method, from having introduced it and practised it regularly, I should not allow that consideration to warp my judgment. It must not be forgotten that the removal of the cortex is the most difficult and tedious part of the ordinary operations for cataract. It is often imperfectly performed. By my method, the difficulty vanishes. There are far more eyes lost from slow healing of the wound, iritis, and iridochoroiditis, than from panophthalmitis; and I attribute these mishaps, not to germs, but to prolonged manipulation and retained cortex. The method which shortens operations, and clears out the cortex easily, whether it be in the area of the pupil or behind the iris, is that which will be the operation of the future; and these advantages I claim for the injection-method, with or without antiseptics.

I may mention that, in the *Klinische Monatsblätter für Augenheilkunde* for November last, an article appears by Dr. Wicherkiewicz, of Posen, entitled "Ueber ein neues Verfahren unreife Staare zu operiren, nebst Beitrag zur Augen-Antiseptik," in which he states that he has used in nineteen cases a solution of 1 to 2 per cent. of boracic acid, with favourable results. The method is precisely the same as that brought before the profession by me in July, 1884, save that he uses a boracic solution of 86° Fahr., whilst I used distilled water of about the temperature of the body.

I believe any surgeon who has much experience in operating for cataract will, after using the scoop-syringe, never revert to the old method of scooping and rubbing to remove cortex.—Your obedient servant,

William A. McKeown.

Belfast.

STRYCHNINE IN UTERINE HÆMORRHAGE.

Sir,—When I stated in your columns my experience with regard to strychnine in preventing anticipated hæmorrhage in labour, I was not aware that this mode of treatment had previously been recommended, and I think that I should recommend a more prolonged course of treatment than Dr. Atthill advises.

As to its employment in post partum hæmorrhage, I have used this mode of treatment for something like eight years, to prevent post partum hæmorrhage, and to arrest the hæmorrhage after it has commenced. During that period, I have invariably given strychnine in abortion. My original use of strychnine after labour was uninspired. I did not mention this in my first letter to you, because I have since disregarded this mode of treatment for hypodermic injection of ergotine To your correspondent, Dr. Hoey, I may say that I have never seen any bad consequences to the fœtus in utero from the anticipatory treatment, and we should scarcely expect such effects, seeing that the influence of the drug is most marked in old people.—I am, etc.,

Newton Heath. Alexander Walker, M.D.

TEREBENE.

Sir,—The suggestion hazarded by me in the British Medical Journal of January 9th, touching the probable occurrence of terebene in the mango, having led several correspondents to ask for any further information I might be able to furnish concerning its medicinal and dietetic properties, I must again crave a corner in your columns for the subjoined summary, which, I believe, embodies all the principal facts that have been heretofore published by authoritative writers on the subject. As the works to which reference is made are not likely to be accessible to the practical modern pharmacist, in the regions where the mango is indigenous, a few suggestive hints, such as the following, may, I trust, prove of service. It will be seen that some of the facts cited seem to indicate the presence, in the kernel and bark of the mango tree, of medicinal properties, which only require to be systematically investigated, on the spot, in order to secure useful results.

In Smith's *Dictionary of Economic Plants* (Macmillan and Co., 1882), it is stated that the mango, *Mangifera Indica*, belongs to the family *Anacardiaceæ*, and is indigenous in the East and West Indies, and Tropical America; "some years ago fine luscious fruits, each weighing half a pound, having been produced in the Palm House, at Kew" (*op. cit.* p. 264).

In Murray's *Plants and Drugs of Sind* (Richardson and Co., 1881), the author says: "The bark, especially of the root, is a bitter aromatic, and is used in diarrhœa and leucorrhœa, etc. The kernel of the

fruit is said to have anthelmintic properties, Dr. Kirkpatrick having stated that he used it as an anthelmintic, in doses of twenty to thirty grains, with good effect. A gruel is also made of the flour of the dried kernel, for administration in obstinate diarrhœa, leucorrhœa, and hæmorrhoids. A resin obtained from the bark being considered anti-syphillic" (*op. cit.*, p. 87).

In Dr. Pickering's work (Little, Brown and Co., Boston, 1879), mention is made of a plant known as "mango ginger," the "curcuma amada" of Tropical Hindostan, called in Bengalese Amada, and in Sanscrit Amra. Roxburgh observed it in Bengal. Its root is used as a carminative and stomachic, according to Drury. Nimmo speaks of it as found in Guzerat, the fresh roots smelling like green mangoes (Grahasn). (*Op. cit.*, p. 872.)

Dr. U. C. Dutt, F.L.S., in *The Hindu Materia Medica* (Thacker and Co., Calcutta, 1877), says: "The ripe fruit of Mangifera Indica, 'Aam' in Hindostani, is somewhat laxative and useful to persons of constipated habits. The bark and kernel are regarded as astringent, and useful in hæmorrhages, diarrhœa, and other discharges. In bleeding from the nose, the juice of the kernel is recommended; and in bleeding from internal organs, a cold infusion of the bark is of service" (*op. cit.*, p. 140).

Lastly, in Waring's *Pharmacopœia of India* (Allen and Co., published by authority of the India Office), we are informed that the only part of the mango tree which claims notice is the kernel, which, not only in India, but in Brazil, is employed as an anthelmintic; Dr. Kirkpatrick having frequently employed powdered mango-seed for lumbrici (in the doses already specified above). He (Dr. Kirkpatrick) adds, that it contains a large proportion of gallic acid, and that he has administered it with great success in hæmorrhoids and in menorrhagia (*op. cit.*, p. 59).

I would observe, in conclusion, that although it may be possible now and then to obtain, in this country, the fruit and bark of the mango tree, as reared in the Palm House at Kew, it by no means follows that the active principle or principles which might be obtainable from such samples would be identical, either in kind or quantity, with those obtainable from the tree when grown in its natural habitats. Were proof of this statement necessary, it is to be found in the entire absence of the cannabis resin in the hemp-plant as grown in this country; whereas the resin is never absent in it as grown in India and elsewhere within the torrid zone. If, therefore, we are to arrive at a correct estimate of the nature and uses of the active principle or principles of the mango, it must be based on really scientific analysis performed in its normal habitats.

One thing seems quite clear, that a medicinal principle resides in the mango, whether it be in the pulp of the fruit itself, in the kernel of the fruit or in the bark, which is capable of exercising highly beneficial effects on inflamed or congested mucous surface. Without more complete data to go upon than have already become available, it would be folly to speculate as to whether the same active principle is efficient in such diseases as have been referred to by Dr. Murrell, and in those in which an anthelmintic action is sought for.—I am, sir, your very obedient servant,

G. C. WALLICH.

London.

THE CARNIVOROUS DIET.

SIR,—On Friday, January 8th, I read the account of Dr. Salisbury's treatment in the *Pall Mall Gazette*, and determined to try the effect of it in my own case. Seven years ago, I weighed 11 st. 12 lbs. (height, 5 ft. 9 in.), and when I trained for my college-boat I always lost five pounds. A month ago, I weighed 14 st., so I was at least two stone above my weight. If any of my lean brethren wish to know how I felt, let them put on a top coat with two stone of shot stowed away in the pockets, and wear it for a single day. When my friends congratulated me on my aldermanic appearance, their compliments were as gall and wormwood to my soul. If they had felt as I did, that the hills of life were growing steeper, and that the pleasure of living was contracting in a daily narrowing circle, they would have condoled with instead of congratulated me.

For the last six weeks, I have lived on lean meat and hot water, or its equivalent, and yesterday I weighed 13 stone. I have taken a pint of hot water (130° Fahr.) at 7 A.M.; a pint of "schoolroom-tea" with a squeeze of lemon in it at 11.30 A.M.; the same at 3.30 or 4 P.M.; and a pint of hot water (130° Fahr.) at 10 P.M.; a pound of beefsteak at 8.30 A.M.; a pound and a quarter at 1.30 P.M.; and a pound at 6.30 P.M. This has been hot, but preferably cold, and has been varied with hare, chicken, etc.

The result is this. I am a stone less in weight; I am six inches less in girth; my gouty "heirlooms," in the shape of "hereditary deposits," have disappeared; my flatulent indigestion has vanished; my mental and bodily activity have doubled; I spoke on Thursday for an hour with less effort than I did in December for ten minutes; I sleep for seven hours without moving; I can wear gloves and shoes a size smaller; I have lost my tendency to catch cold; my muscles are daily hardening; my kidneys are doing their duty nobly; my figure is altering so rapidly that my tailor is in despair, but I am triumphant.

When I have completed the course, if you will spare me room, I will finish my tale, and relate the lessons I have learnt in dietetics and therapeutics during the experiment.—Yours faithfully,

Ben Rhydding, Leeds. JOHN FLETCHER LITTLE.

ON A CONDITION OF THE INNER SURFACE OF THE UTERUS AFTER THE BIRTH OF THE FŒTUS, OF PRACTICAL IMPORTANCE.

SIR,—The point of practical importance at which Dr. Braxton Hicks arrived in publishing his original paper was to warn against the danger of mistaking something in the uterus, after the birth of the child, for adherent placenta, when there was no adherent placenta. Neither Dr. Braxton Hicks nor any other man can deny that this was pointed out, not only before the appearance of Dr. Hicks's paper in the BRITISH MEDICAL JOURNAL of October 10th, 1885, but before his communication to the Association at Cardiff last year.

As to the precise condition that may give rise to this mistake, there is no absolute proof. Dr. Hicks says it is one thing. He may be correct, or he may not. I may be wrong too; but that has really nothing to do with the point of practical importance, which is all I referred to. It is a pity Dr. Hicks cannot find the references I gave.—Yours very truly,

J. STUART NAIRNE.

MEDICO-LEGAL AND MEDICO-ETHICAL.

UNQUALIFIED ASSISTANTS AND THE DISPENSARY SYSTEM.

BEFORE his Honour, Judge Greenhow, at the Leeds County Court, a point of considerable importance was raised last week, in an action brought by Mr. Henry Arthur Allbutt, M.R.C.P.Edin., against a woman named Britton, to recover the sum of £1 for professional aid. Mr. Dunn, who appeared for the plaintiff, said that he believed that the question to be raised had been looked upon in some quarters as one of an important character, but, in his opinion, it was one of the most ordinary medical cases with which his Honour had had to deal. Mr. Allbutt lived in Park Square, where he had a surgery; and he also had surgeries in Sheepscar and in Hunslet. In Hunslet, the plaintiff attended whenever there was an absolute necessity for his doing so; but there resided regularly at his surgery there a gentleman named Bowell, who was not a qualified practitioner. Mr. Bowell attended to the ordinary cases; and, whenever a serious case arose, Mr. Allbutt himself was called in. When Mr. Allbutt sent out his accounts, some of his debtors turned round and said that, though they had received the attention of his assistant, they declined to pay, because the latter was not a qualified man. William Henry Gisburn Bowell said that the house in Hunslet belonged to him, but he allowed Mr. Allbutt to have a surgery there. Formerly, his cousin, Mr. Gisburn, carried on the business there; and, at his death, Mr. Allbutt took it over. Mr. Allbutt's name was on the bills, and it was well known that the business was his. By the Judge: Witness's name was on the door, and not Mr. Allbutt's. The profits of the business went to Mr. Allbutt, and the witness received from him a fixed salary. The Judge: How often is he there? Witness: He comes on Mondays for vaccination cases, spends all the forenoon, and during the week he comes whenever there is anything special. The Judge: But has he anything to do with the treatment you prescribe? Witness: I have to attend to the cases.—Do you report to him? Not in every case.—When do you make a report? Whenever I meet him. Defendant said that she had never seen Mr. Allbutt before, and had never been attended by him. His Honour said that Mr. Allbutt was not entitled to recover in this case. The Medical Act intended that a doctor should practise by his own mind and skill, and not by the mind and skill of an unqualified man who was not acting under his immediate supervision. Wherever a surgeon or physician carried on business in another house, by means of an unqualified assistant, who was not under the supervision and control of his master, he could not recover for professional aid rendered by that assistant. In this case the business was carried on separately and, while the plaintiff was liable for damages for the negligence o

owell, as his servant, he could not sue for services rendered by owell, because he was not qualified. His opinion was that, under the edical Act, it was illegal to leave an unqualified man in charge of a actice. In his opinion one broad point of distinction was, whether e assistant carried on the business under the direct supervision of the aster, or whether, as appeared to have been done in this case, the aster came but occasionally to render service. The plaintiff was n-suited, and a similar judgment was given in six other cases, in e seventh a verdict being given for the defendant. Mr. Allbutt was amined in one of the cases. He said he did not buy the late Mr. sburn's business, but took it by an arrangement with Mr. Bowell. e sent round circulars stating that he should continue the siness.

PHILANTHROPISTS AND FEES.

R,—I shall be greatly obliged if you would answer, in the next JOURNAL, the following questions. Dr. ——, the director of the Boys' and Girls' Homes at ——, last year took two houses in the country, to which he sent his family and wife, and a number of children from the Homes. I believe it was his intention to come to some arrangement with me as to the medical charge of the latter children, but it was not carried out. I attended his wife and family (for an operation on one of whom he presented me with a cheque), and a number of the children (among other cases, a fracture of leg).

1. Would it be in every way fair for me to charge for the attendance upon the wife and children?

2. Would it be also decent and charitable to charge for the attendance upon the children from the Homes? and if so, at what rate?

I may add that I believe Dr. —— is not, and never has been, in actual practice, and that he is comparatively well-to-do.—I am, sir, yours very sincerely, FELIX.

*** Our correspondent will find an answer to his first question in the second edition of the *Code of Medical Ethics*, page 53, Section 2, Rule 1, a copy of which is printed in the JOURNAL of December 12th, page 1136, col. 2. In regard to the second question, it is one for his own especial consideration. If, we would remark, his pecuniary position is such as to justify him in indulging in his philanthropic inclination, so much the better for the institution; if otherwise, we may suggest that remuneration to the extent of one-half of his usual charges to patients in the same class of life would probably be alike satisfactory to himself and to the authorities of the association referred to; or further, if the special residents (the staff excluded) be fairly numerous, our correspondent may be content to undertake the duties on the club-system, at a moderate payment per head *per annum*.

OLD ASSISTANTS AND NEW PRACTICES.

R,—Kindly give me your advice under the following circumstances. A has been an assistant, for the last fourteen months, with B, who has an old established general and consulting practice in a town of nearly 300,000 inhabitants, and proposes to commence practice. Is A justified in doing so in a new and semi-detached suburb, distant two miles from B's house? I may as well say B's practice in this neighbourhood is very limited. I have signed no bond, but have offered my word of honour, written or otherwise, not to see any patient known by me through being his assistant during his lifetime, unless it be his wish. An answer in your paper will oblige,—Yours faithfully, FAIR PLAY.

*** The one and all-important question that presents itself to our mind in relation to the case of "Fair Play" is, whether, in the absence of the usual legal bond not to practice within a specified distance of the engaging practitioner's professional residence, a mutual unwritten understanding was arrived at between our correspondent and the medical gentleman with whom he engaged himself as an assistant, so as to preclude him from commencing private practice in the neighbourhood; if no such tacit agreement, or other "bond of honour," exist, and if, consequently, the "still small voice within" acquit him of all unfair intent, we see no moral objection (provided that his proffered specified pledge be loyally fulfilled) to our correspondent practising in the suburb.

CHARGES TO FIRMS FOR CONSULTATIONS ON WORKMEN.

R,—I should be extremely obliged by your kind opinion upon the following case. I am attending a patient, a male, aged about 50, for rheumatoid arthritis. Some little time ago, as his employers wished for full particulars concerning him, they wrote me, and in my answer I gave full details, and also an unfavourable prognosis. My opinion was shared by a well known hospital surgeon and physician.

Last week I received a letter from a practitioner arranging a time for a consultation upon the same patient, in order that he might give his views of the case to the employers, and at their request. As I was put to so much extra trouble, I considered that I was entitled to a fee from the firm, therefore I sent in an account for £1 1s., at which they express much surprise, and refer me to my patient. It seems to me very hard that a medical man's time can be taken up in such way by any outsider—a solicitor charges per letter and gets his fee—without being compensated. I may add, since hearing from the firm, I have written to the practitioner in question.

I should feel greatly obliged by your kind advice as to whether I can legally recover from the firm, and should a similar case arise in the future, I shall know how to act.—I am, sir, yours obediently, L.R.C.P.E.

*** That our correspondent, under the circumstances related, is morally and justly entitled to the extra fee from the man's employers, we entertain no doubt; but as regards the strictly legal aspect of the case, we do not feel justified in expressing an opinion, other than that he has no such claim on the patient himself, as inferentially suggested by the firm. A friendly representation by the consultant practitioner called in by the firm would, we think, be the better and more effective plan to obtain our correspondent's well-earned fee.

PROFESSIONAL ASSISTANCE AND EXTRA FEES.

MEMBER.—The question of payment of the extra guinea by the patient, or otherwise, should, we think, be determined by the fact as to whether the second practitioner was sent for with her knowledge and consent, and whether such professional assistance was deemed really necessary; in the latter event, we consider that the husband is justly liable; if, on the other hand, there were no pressing necessity, and our correspondent, of his own will and accord, called in another medical man, with the simple view to relieve himself of "the sole responsibility," the husband, in our opinion, is neither morally nor legally responsible for consultants. "Member," moreover, should, in sending for his brother-practitioner, either have written a note explaining the actual circumstances of the case, or, on his arrival, have (in the absence of any urgent symptoms) done so in person. Under the circumstances, we are clearly of opinion that the consultant was justified in the action he took in regard to the fee. A personal explanation to the practitioner called in by our correspondent would probably set matters straight.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

FLEET-SURGEON JAMES THOMSON has been placed on the retired list, with the rank and title of Deputy Inspector-General of Hospitals and Fleets. Mr. Thomson entered the Royal Navy as Surgeon, November 13th, 1854; became Staff-Surgeon, February 17th, 1864; and Fleet-Surgeon, March 16th, 1878. He served in the *Dauntless* in the Black Sea Fleet in 1854-56; was engaged in the siege of Sebastopol and at the capture of Kinburn, for which he received the Crimean medal with Sebastopol clasp, and the Turkish medal. He was in the Mexican Expedition in 1861-62; and, during the Ashanti war in 1873-74, he served in the *Amethyst*, and received the medal for that campaign.

The following appointments have been made at the Admiralty during the past week: CYRIL J. MANSFIELD, Surgeon, to the *Excellent*, additional, for disposal; OCTAVIUS S. FISHER and HERBERT P. SHUTTLEWORTH, Surgeons, to the *Royal Adelaide*, additional, for Plymouth Hospital; JOHN LOWNEY, Surgeon, to the *Lion*, additional, for disposal; GEORGE D. TREVOR ROPER, Surgeon, to the *Indus*, additional, for disposal; ROBERT HICKSON, Surgeon, to the *Cambridge*, additional, for disposal; JOHN MOORE, M.D., Surgeon, additional, to the *Duke of Wellington*, for disposal; and JOHN S. FOGERTY, M.D., Surgeon, to the *Asia*, additional, for disposal; R. S. P. GRIFFITHS, Staff-Surgeon, to the *Serapis;* G. H. JOHNSON to be Surgeon and Agent at Teignmouth; JOHN HUNTER, Surgeon, to the *Tyne;* J. F. CONNIHAM to be Surgeon and Agent at Capper; CECIL DRAKE, Staff-Surgeon, to the *Britannia;* W. D. WALSH, Surgeon, to the *Defiance;* G. F. WALES, Surgeon, to the Plymouth Division, Royal Marines; W. D. WODSWORTH, Fleet-Surgeon, to the *Devastation;* CHRISTOPHER PEARSON, M.D., and H. L. CROKER, Surgeons, to the *Excellent;* JOHN HORROCKS, M.D., Fleet-Surgeon, to the *Alexandra;* H. E. MARSH and W. E. HOME, Surgeons, to the *Alexandra;* E. W. LUTHER, Surgeon, to the *Hyacinth*.

ARMY MEDICAL SERVICE.

SURGEON-MAJOR J. J. O'REILLY has been granted retired pay with the honorary rank of Brigade-Surgeon. He entered the service October 2nd, 1865, became Surgeon March 1st, 1873, and Surgeon-Major October 2nd, 1877. He was engaged in the recent war in Afghanistan, and received the medal granted therefor.

Deputy Surgeon-General J. B. C. READE, who has been serving in Bengal for several years past, has been appointed Honorary Surgeon to the Earl of Dufferin, Governor-General of India.

Acting Surgeon F. W. GIBBON has resigned his appointment in the 5th Durham Volunteers.

Mr. A. J. HUBBARD has been appointed Acting Surgeon to the City of London Rifle Volunteer Brigade.

Surgeon W. J. WALSHAM has resigned his appointment in the 1st Volunteer Battalion of the Royal Fusiliers (City of London Regiment), till lately known as the 10th Middlesex Volunteers.

Mr. E. B. PRIOR has been appointed Acting Surgeon to the 4th Volunteer Battalion of the Norfolk Regiment (late the 4th Norfolk Volunteers).

The Egyptian War Medal for Suakin, 1885, has been presented to Miss R. M. BURLEIGH, one of the nursing sisters at the Military Hospital, Fort Pitt, Chatham, for her care of the sick and wounded during the recent campaign in Egypt. Nursing Sisters Misses S. BROWNE and E. WRIGHT, attached to the Herbert Hospital, Shooter's Hill, have also been presented with a medal and clasp for the Soudan campaign.

Deputy Surgeon-General H. L. COWEN died at Drayton Park, London, on January 24th (the 69th anniversary of his birth). He joined the army as Assistant Surgeon June 17th, 1842, became Surgeon May 5th, 1854, Surgeon-Major June 17th, 1862, and Deputy Surgeon-General November 23rd, 1870; he retired January 24th, 1877. He had no war record.

Deputy Surgeon-General ROBERT MCNAB, M.D., died at Preston on January 18th in his 58th year. He entered the army service November 8th, 1850, became Surgeon July 26th, 1858, and Surgeon-Major September 24th, 1870, retiring with a step of honorary rank October 13th, 1875. From *Hart's Army List* we learn that he served during the Indian Mutiny in 1857-58, and was present with the 64th Regiment in the operations at Cawnpore under General Windham, at the defeat of the Gwalior mutineers on December 6th in the action at Khalee Nuddee, and the entrance into Futtehghur (medal).

Acting-Surgeon J. G. WEBB is appointed Surgeon to the 13th Middlesex (Queen's Westminster) Rifle Volunteers. MR. HUGH WEBB is appointed Acting-Surgeon to the same corps.

Surgeon-Major J. R. RAHILLY, serving in the Bengal command, has been granted leave to Australia for three months on medical certificate, with the necessary subsidiary leave.

Deputy Surgeon-General S. B. ROE, M.D., C.B., is, on arrival from England, appointed to the administrative medical charge of Her Majesty's Forces, Madras, *vice* Deputy Surgeon-General Chapple, whose tour of service has expired.

INDIAN MEDICAL SERVICE.

THE services of Surgeon C. ADAMS, M.B., Madras Establishment, Civil Surgeon of Bucaneer, are replaced at the disposal of the Military Department, from the date of his return from furlough.

Surgeon-Major B. FRANKLIN, Bengal Establishment, has been appointed Honorary Surgeon to the Earl of Dufferin, Governor-General.

Surgeon-Major R. POWER, of the Bengal Establishment, has retired from the service, which he entered as Assistant Surgeon, October 2nd, 1865, becoming Surgeon-Major twelve years thereafter. He served in the Hazara campaign, on the North-West Frontier of India, in 1868, including the operations on the Black Mountain (medal and clasp), and with the expedition sent against the Jowaki Afridis in 1877-78 (clasp). He also served in the recent war in Afghanistan, and was at the attack and capture of Ali Musjid (medal with clasp).

Surgeons G. W. P. DENNYS, J. A. CUNNINGHAM, M.D., and G. J. STRAND, M.D., all of the Bengal Establishment, are confirmed in their appointments as Second Class Civil Surgeons.

OBITUARY.

JAMES BALLS WOOLBY, M.B.Lond., M.R.C.S., L.R.C.P.

WE have to announce the death, by drowning, at the age of 30, of James Balls Woolby, M.B., of Engcobo, South Africa. Dr. Woolby was educated at King's College, London, where he obtained a scholarship at the end of the first year. At this time, a weakness of the lung showed itself, and, after qualifying, he accepted an appointment in South Africa, and returned two years later much benefited by the change. He filled the post of Assistant House-Surgeon to the Bristol General Hospital, and subsequently held the appointment of Resident Medical Officer to Queen Charlotte's Lying-in Hospital. Symptoms of incipient phthisis having reappeared, he was induced to return to South Africa in the latter part of 1884, with most favourable results to his health and prospects. Of genial manners, cultured and unassuming, the early death of Dr. Woolby will be read with much regret by those to whom he was personally known.

J. MAULE SUTTON, M.D.

THE death of Dr. J. Maule Sutton is announced from Oldham. Dr. Maule Sutton was the first Medical Officer of Health appointed at Oldham more than twelve years ago, and attained great reputation by the conspicuous ability, courtesy, and success with which he fulfilled the duties of his office. He was an able and skilful physician, and rendered great services to the West Hulme Hospital, the admirable arrangements of which are largely ascribed to his judgment. He was J.P. and Deputy Lieutenant for the County of Pembroke. Dying in the prime of life, at the age of 56, he leaves a large circle of attached friends.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE GUARDIANS OF THE OUNDLE UNION AND MR. A. S. STOKES.

SIR,—I read the report of what appeared in your issue of January 30th, at the meeting of the Board of Guardians, on February 4th, when, after the subject had been fully discussed, a resolution was passed, and I was directed to send a copy of same to you, for insertion in your next issue, in order that in fairness and justice towards the Board of Guardians, the *ex parte* statements made by Mr. Stokes, might be replied to and explained. I enclose copy of the resolution.—I am, sir, your obedient servant, W. RICHARDSON, Clerk.

Oundle Union, Union Offices, New Street, Oundle.

Copy of Resolution.—It was proposed by the Rev. E. M. Moore, seconded by the Rev. Dr. Brown, D.D., and carried unanimously, "That the case between the Guardians of the Oundle Union and Mr. A. S. Stokes, is entirely misrepresented in the statement published in the BRITISH MEDICAL JOURNAL, of January 30th, 1886, and further, that the Guardians accept Mr. Pink's assertion with regard to the statement that a pauper has had to pay tenpence a week for the carriage of medicines from Mr. Pink's surgery to her cottage, is wholly untrue."

*** We feel so strongly, that the action of the Oundle Board of Guardians, as described in our issue of December 5th, 1885, and January 30th, 1886, necessitated some explanation, if medical relief to our sick poor is not to degenerate into an absolute farce, that we very readily publish the letter from the clerk to the Board, and the resolution accompanying it. It cannot, however, fail to be noted, that the resolution is very general in its phraseology. Thus it ignores the statement that an unregistered medical man was appointed to the Weldon district; that on his leaving the locality, Mr. A. S. Stokes was appointed, at a salary less than his predecessor; that, on his resigning on that account, he was summarily dismissed from the office of public vaccinator; and that a gentleman was then appointed, who was not only non-resident, but actually lived eight miles away, and that, too, with the sanction of the Local Government Board's inspector. The whole of these facts were culled from the local Journal from which we quoted. The only statement the guardians directly deny is, that a poor bedridden woman, in the receipt of 2s. 6d. a week, had to pay 10d. to get her medicine, not a very extravagant charge, seeing that the said medicine had to travel eight miles from Mr. Pink's surgery, to this poor creature's cottage. It is not improbable that this question will be mooted elsewhere.

SIR,—I perceive that at the last meeting of the Board of Guardians of the Oundle Union, the statement that an aged and bedridden woman, in receipt of 2s. 6d. a week, has had to pay 10d. of that amount for carriage of medicine, was denied.

The statement, however, is correct, notwithstanding the assertion of the two reverend gentlemen whose resolution was moved and carried.—I am, sir, yours obediently ARTHUR S. STOKES.

Weldon, Wansford.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—Preliminary Scientific M.B. Examination, January 1886. Pass-list. Entire Examination.

First Division.—Medwin C. Clutterbuck, University College, Bristol; R. E. S. Krohn, University College and School and private tuition; C. E. Lansdown, University College, St. Mary's Hospital, and private tuition; C. G. Mack, St. Mary's Hospital and private tuition; John J. Macnamara, University of Edinburgh and University College, London; Sidney H. Snell, University College and private study.—*Second Division.*—William T. Atwool, University College, St. Mary's Hospital, and private study and tuition; Robert H. Cole, St. Mary's Hospital; Arthur J. Edge, Owens College, St. Bartholomew's Hospital, and private tuition; Alan J. Heath, University College and private study and tuition; George F. Murrell, University College School, St. Bartholomew's Hospital, and private study; John E. Paul, University College and private tuition; Arthur E. Price, St. Thomas's Hospital; Frederic R. P. Taylor, Westminster Hospital and private study; Atwood Thorne, St. Mary's Hospital and private tuition; Reginald C. Worsley, University College; Sydney F. Wright, St. Thomas's Hospital.—*Two Subjects of the Examination.*[1]—Albert J. Adkins (*c.*, *p.*), St. Thomas's Hospital; Frank G. Bushnell (*p.*, *b.*), St. Thomas's Hospital, University College, and private tuition; John N. Collins (*c.*, *p.*), London Hospital; Henry Corby (*c.*, *p.*), London Hospital; Henry J. Curtis (*c.*, *b.*), University College, Cardiff; William T. Davies (*c.*, *p.*), University College and private study and tuition; Albert A. French (*c.*, *p.*), St. Bartholomew's Hospital and private study; Albert Gurney (*c.*, *p.*), London Hospital; Frederick Johnson (*c.*, *b.*), St. Bartholomew's Hospital; Robert J. Langley (*c.*, *b.*), St. Thomas's Hospital and private study; Yarnold H. Mills (*c.*, *p.*), London Hospital and private study; Stephen Nesfield (*c.*, *b.*), University and Owens Colleges; Maurice E. Paul (*c.*, *p.*,), University College and London Hospital; Joseph A. Pickels (*c.*, *p.*), Owens College; William J. Procter (*c.*, *p.*), University College and London Hospital; Richard W. Richards (*c.*, *p.*), Mason and University Colleges; James H. Sequeira (*c.*, *p.*), London Hospital; Evan Staples (*c.*, *p.*), Polytechnic Institute; John L. Thomas (*c.*, *b.*), St. Bartholomew's Hospital; Henry E. Tracey (*c.*, *b.*), St. Bartholomew's Hospital; Lewis Williams (*c.*, *p.*), University College and private study; Howard S. Willson (*c.*, *p.*), St. Paul's School.—*One Subject of the Examination.*[1]—Frank A. Arnold (*b.*), Hartley Institution and St. Bartholomew's Hospital; Harold W. C. Austen (*c.*), St. Bartholomew's Hospital and private study; Arthur R. Badger (*p.*), King Edward's High School, Birmingham; William B. Bale (*c.*), Owens College; Henry M. Bowman (*p.*), St. Bartholomew's Hospital and private tuition; John H. Bryant (*p.*), King's School, Sherborne, and Guy's Hospital; Francis H. Cooke (*p.*), University College and private tuition; Walter M. Cox (*p.*), King Edward's High School, Birmingham; John D. Cruickshank (*p.*), Guy's Hospital; John Fawcett (*p.*), Dulwich College and Guy's Hospital; Alfred Heginbottom (*c.*), St. Bartholomew's Hospital and private tuition; Malcolm L. Hepburn (*c.*), St. Bartholomew's Hospital; George L. Hill (*c.*), Mason College and private tuition; Harold Hodgson (*c.*), University College; Ernest C. Lomas (*p.*), Owen's College; Algernon W. Lyons (*p.*), King's College; James Neal (*c.*), Queen's and Mason Colleges, Birmingham; H. Fitz Stephen Nunes (*c.*), International and University Colleges; Victor S. Saul (*c.*), London Hospital; Mildred E. K. Staley (*p.*), Mason College and private study; William Taylor (*z*), University College and Medical School, Bristol.

[1] The subjects taken up by these candidates are indicated by initials after the name—*c.* = Chemistry; *p.* = Physics; *b.* = Biology; *z.* = Zoology.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen were admitted Members on February 1st.

E. C. Greenwood, L.R.C.P.L., of Guy's Hospital; E. H. Meaden, L.R.C.P.L., of Bristol General Hospital; W. J. A. Adye, L.S.A., of St. Thomas's Hospital; H. C. Bartlett, L.R.C.P.Lond., of Middlesex Hospital; S. J. Daly, L.R.C.P.L., of St. Bartholomew's Hospital.

Five candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members; three were referred for three months, three for six months, one for nine months, and one for twelve months.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH.—*Double Qualification.*—During the recent sittings of the Examiners the following gentlemen passed their final examination, and were admitted L.R.C.P.Edinburgh and L.R.C.S.Edinburgh.

W. Booth, Innerleithen; D. Davis, Berkshire; F. P. Denman, Yorkshire; R. Hall, County Down; W. S. Fulshaw, Leicestershire; A. Haynes, Cork; R. E. Kane, County Cork; F. R. Longden, Australia; M. J. Lee, County Galway; W. G. Meade, County Cork; H. Peek, Wigan; R. A. Nesbitt, Belfast; A. E. Nevins, Liverpool; H. McKeon, County Leitrim; A. W. Wales, Belfast; G. J. E. Trotter, Durham.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following ntlemen passed their final examination during the January sittings the Examiners, and were admitted Licentiates of the College.

J. Strickland, Yorkshire; A. L. F. Robertson, Lanarkshire; and F. E. H. Daunt, Kinsale.

The following gentlemen passed their first professional examination r the Licence in Dental Surgery.

A. F. Benson, Yeovil; F. W. Masters, Manchester; and J. Masters, Manchester.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentleman ssed the Examination in the Science and Practice of Medicine, rgery, and Midwifery, and received a certificate to practise, on ursday, January 28th, 1886.

Duckworth, Alfred, Eaton Bank, Accrington.

The following gentleman passed in the Science and Practice of Medie, and received a certificate to practise.

Bateman, Robert Watering, 53, Carlton Terrace, Norwich.

The following gentleman passed the Examination in the Science and actice of Medicine, and received a Certificate to Practise, on Thurs-y, February 4th, 1886.

Henderson, James Threapland, Wibsey, near Bradford.

The following gentlemen, also on the same day, passed their Pri-ary Professional Examination.

Charlesworth, George, the Middlesex Hospital.
Mason, Francis John Gorringe, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

STRICT INFIRMARY, Ashton-under-Lyne.—House-Surgeon. Salary, £80. Applications by February 23rd.

MALE LOCK HOSPITAL, Harrow Road, W.—House-Surgeon. Salary, £100. Applications by February 13th.

REAT NORTHERN CENTRAL HOSPITAL, Caledonian Road.—Two Clinical Assistants.

OSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by February 13th.

ITH HOSPITAL.—House-Surgeon. Salary, £70. Applications to the Secretary.

NDON SCHOOL OF GYNÆCOLOGY, Hospital for Women, Soho Square, W. —Two Clinical Assistants.

NDON TEMPERANCE HOSPITAL, Hampstead Road.—Clinical Clerks. Applications to the Secretary.

NDON TEMPERANCE HOSPITAL, Hampstead Road.—Surgical Dressers. Applications to the Secretary.

NATIC HOSPITAL, The Coppice, Nottingham.—Assistant Medical Officer. Salary, £100. Applications to Dr. Tate by February 18th.

ANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Honorary Surgeon. Applications by February 17th.

ERCER'S HOSPITAL, DUBLIN.—Apothecary and Resident Medical Officer. Applications to the Registrar.

TIONAL HOSPITAL FOR CONSUMPTION, Ventnor.—Clinical Assistant.

EEN'S HOSPITAL, BIRMINGHAM.—Two Casualty Surgeons. Honorarium, £50 each. Applications by February 13th.

AMEN'S HOSPITAL SOCIETY, Greenwich.—Visiting Physician. Applications before March 5th to W. T. Evans.

HELEN'S FRIENDLY SOCIETY MEDICAL AID ASSOCIATION.—Medical Practitioner. Applications by March 1st.

IVERSITY OF SYDNEY.—Professor of Physics. For particulars apply to S. Samuel, 5, Westminster Chambers, Victoria Street, S.W., by February 17th.

CTORIA UNIVERSITY, University College, Liverpool.—Lecturer on Hygiene. Applications to the Registrar.

STERN GENERAL DISPENSARY, Marylebone Road, N.W.—Junior House-Surgeon. Salary, £63. Applications by February 22nd.

STERN OPHTHALMIC HOSPITAL, 153, Marylebone Road, W.—Assistant Surgeon. Applications by March 1st.

ST LONDON HOSPITAL, Hammersmith Road, W.—Assistant Physician. Applications by February 19th.

ST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon. Applications by February 19th.

MEDICAL APPOINTMENTS.

AMWELL, Hugh Ransom, M.B., C.M.Edin., appointed House-Surgeon and Secretary to the Staffordshire General Infirmary, *vice* F. Milnes Blumer, M.B., C.M.Edin., resigned.

AMWELL, J. W., M.D., L.R.C.S.E., appointed Honorary Surgeon to the Cheltenham General Hospital, *vice* J. Bubb, M.R.C.S.E., resigned.

OUGHTON, M. B., L.R.C.S., L.M., L.S.A., appointed Consulting Medical Officer to the Plymouth District of Three Towns Friendly Society.

RTER, R. Brudenell, F.R.C.S., appointed Ophthalmic Surgeon to the National Hospital for the Paralysed and Epileptic.

LINS, H., L.R.C.P.Edin., M.R.C.S.Eng., L.S.A.Lond., appointed Resident Medical Officer to the Plymouth District of Three Towns Friendly Society, *vice* Dr. Keily, resigned.

DAVIS, Henry, M.R.C.S.Eng., L.S.A., appointed Anæsthetist to the National Dental Hospital.

DONALDSON, Robert L. S., A.B., M.B., B.Ch.Univ.Dub., appointed Assistant Resident Medical Superintendent to the Monaghan Lunatic Asylum, *vice* J. A. Johnston, L.K.Q.C.P., resigned.

DOWLING, John Edward, appointed Medical Officer to the Tuam Union, *vice* Patrick J. Bodkin, L.K.Q.C.P., late Medical Officer of Tuam No. 1 Dispensary District, deceased.

EARLE, P. M., L.R.C.P., L.R.C.S.Ed., appointed Junior Assistant Medical Officer to the Salop and Montgomery Counties Lunatic Asylum, *vice* H. McAndrew, M.B. and C.M.Ed., resigned.

ENGLAND, W., L.D.S.Eng., appointed Honorary Dental Surgeon to the Home for Female Orphans, St. John's Wood, W.

EVANS, William Arnold, M.B.Lond., M.R.C.S., appointed House-Physician to the Wolverhampton and Staffordshire General Hospital, *vice* E. A. Dingley, M.D., M.R.C.S., resigned.

FLOYER, William W., M.B.Lond., M.R.C.S., appointed House-Physician to Guy's Hospital.

GODFREY, F. W., M.B., Ch.M.Ed., appointed House-Surgeon to the Scarborough Hospital and Dispensary, *vice* James Harvie, M.R.C.S., L.R.C.P., resigned.

GRAY, A., M.B., C.M.Ed., appointed Second House-Surgeon to the Sunderland Infirmary, *vice* W. H. Malin, M.R.C.S., L.S.A., appointed Senior House-Surgeon.

GUNN, R. Marcus, F.R.C.S., appointed Ophthalmic Surgeon to the National Hospital for the Paralysed and Epileptic.

HOGBEN, Edgar, B.A., M.B., T.C.D., appointed Physician for Out-Patients to the Queen's Hospital, Birmingham.

HOOPER, J. W. Dunbar, L.R.C.P. and S.Ed., appointed Senior Resident Medical Officer to the Hospital for Women, Melbourne.

HORSLEY, Victor A. H., M.B., F.R.C.S., appointed Surgeon to the National Hospital for the Paralysed and Epileptic.

JOLLY, S. Blake, M.R.C.S., L.S.A., appointed Junior House-Surgeon to the London Temperance Hospital, *vice* H. G. Nicholson, M.R.C.S.Eng., resigned.

LUCY, Reginald H., M.B., C.M.Edin., appointed House-Surgeon to the London Hospital.

MACANDREW, Herbert, M.B., C.M.Edin., appointed Assistant Medical Officer to the Seacliff Asylum, Dunedin, New Zealand.

WEAVER, John J., M.R.C.S.Eng., L.S.A., appointed House-Surgeon to the Oldham Infirmary, *vice* R. Holton, M.R.C.S.Eng., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

DOBSON.—On January 9th, at Bangalore, the wife of Surgeon-Major A. F. Dobson, M.B., of a daughter, prematurely.

MARRIAGE.

HILLS—FLETCHER.—On February 10th, at the Parish Church, Deeping St. Nicholas, Augustus Phillips Hills, M.R.C.S., of Carlton House, Battersea Park, S.W., son of the late George Hills, M.D., F.R.C.S., to Lizzie Jane Holland, younger daughter of the late John F. Fletcher, M.R.C.S., and niece of John W. Holland of the Shrubbery, Deeping St. Nicholas.

DEATH.

CHURCH.—On February 1st, at Rodwell Lodge, Weymouth, William John Church F.R.C.S., formerly of 22, The Circus, Bath, in his 88th year.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—**Medical Society of London**, 8.30 P.M. Clinical Evening. Dr. Maguire Case of Dystrophy of the Thumb-joints. Mr. Francis Mason and Mr. Hurry Fenwick: Case of Excision of the Elbow after Operation followed by Tubercular Testis. Mr. Spencer Watson: New Instruments for the Removal of Nasal Polypi. Dr. Radcliffe Crocker: Cases of Pityriasis Circinata and Tuberculated Leprosy. Mr. John H. Morgan: Case of Congenital Constriction by Band producing Perforating Ulcer of the Foot in an Adult. Living specimens at 8.

TUESDAY.—**Pathological Society of London**, 8.30 P.M. Dr. Moxon: Cerebral Tumour. Dr. Beevor: Cerebral Tumours. Dr. George Ogilvie: Cerebral Tumours. Dr. Hale White: Thinning of Skull from Cerebral Tumour. Dr. Carrington: Cancer of Body of Stomach. Mr. J. Hutchinson, jun.: Cylindrical Cancer of Humerus. Mr. C. J. Symonds: Syphilitic Hepatitis and Pneumonia in an Infant. Mr. Stephen Paget: Dermoid Cyst of Tongue. Mr. Clutton: Epithelial Tumour of Skin near Rectum. Dr. S. West: 1. Aneurysm of Aorta and Aortic Valves; 2. Abscess of Gall-Bladder (card). Mr. D'Arcy Power: Multiple Intussusception. Dr. Hadden: 1. Intestine in Lymphadenoma (card); 2. Malignant Disease of both Suprarenal Bodies (card). Dr. Turner (Card-Specimens): 1. Syphilitic Ulceration of Trachea; 2. Conjoined Kidneys and Unicorn Uterus. Mr. J. Poland (Card-Specimens): 1. Amputation-stump at Knee-joint; 2. Dislocation of Knee-joint. Mr. E. H. Fenwick: Atresia (? Congenital) of Orifice of Ureter; Cystic Kidney (card).

THURSDAY.—**Harveian Society of London**, 8.30 P.M. Mr. W. Rayner: Cases of Discoloration of the Skin in Newly Born Children, from Absorption of Aniline Dye. Dr. A. E. Sansom: On some Modern Remedies in Cardiac Diseases.

FRIDAY.—**Society of Medical Officers of Health**, 7.30 P.M. Mr. R. S. Lovett will make a statement on an Important Decision under the Sanitary Act of 1866 as to the Power of a Nuisance Authority to make Regulations for Houses let in Lodgings. Messrs. Wynter Blyth and Alfred Spencer: On the Supervision of the Milk-Supply of the Metropolis in Reference to the Propagation of Disease.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COLONIAL PRACTICE.

SIR,—I have seen "A Member's" letter in the JOURNAL of October 24th. Medical men should remember that, when they come to the colonies, they have to deal with the lowest classes of mankind, who have suddenly been released from all useful discipline, and who have acquired more wealth than they ever before dreamed of. Clubs, as "A Member" says, are the curse of the colonies. Their members are insolent, exacting, and tyrannical. Wealthy men belong to them, and exact attendance from the wretched medical man at a truly miserable remuneration. The medical man, being generally the only decently bred person in the whole district, is a target for the ruffians who inhabit it, and whom a fortunate country has carefully exported.

Let no medical man come out to the colonies in hopes of making his fortune. If he make a bare living by very small fees, and in spite of contumely and hardship, he will have met with average good fortune. My clubs pay me at the rate of 8d. a visit, and give me any amount of work. They expect more deference than people in good society at home would dream of demanding. I do not say that they get it; but their whole demeanour is at once ridiculous and offensive in the extreme. Hoping that these letters may prevent young medical men from leaving their friends, their country, and all the conveniences of civilisation, for the sake of penury and hardship.—I am, sir, faithfully yours,

New Zealand. Σχολαστικός.

LING'S SWEDISH GYMNASTICS.

SIR,—For the information of your correspondent, "L. M.," we would say that we publish translations of all Ling's books and pamphlets on "the movement cure," both with and without apparatus, a list of which we shall be happy to furnish, if he will send us his name and address.—Yours truly,

BAILLIERE, TINDALL, AND COX, Publishers.

20, King William Street, Strand, London.

SIR,—In answer to Dr. L. M.'s query in the JOURNAL of January 3rd, as to training in the above, I beg to inform him that Miss Bergman, who was, I believe, till lately, lady superintendent of physical education in the London School Board, has started a training college for teachers of scientific physical education (Ling's Swedish system), at Reremonde, Broadhurst Gardens, near Finchley Road, Metropolitan Station, Hampstead, N.W.; and I have no doubt all information on the subject can be obtained from her.

Miss Bergman is from the Royal Institute of Gymnastics, Stockholm, and during the International Health Exhibition, gave demonstrations with a class of girls from the London Board Schools in the "free exercises."

As to books on the subject, I would refer Dr. L. M. to one recently published by Messrs. Hachette and Co., on the *Ling System of Gymnastics*, by J. Haasum, another by Dr. Roth, on *The Gymnastic Free Exercises*, and also a work by Miss Concordia Löfving, on *Physical Education and its Place in a System of Rational Education*.—I am, sir, yours obediently,

Maidstone. CHARLES BOYCE, M.B.

DESTRUCTION OF SUPERFLUOUS HAIRS BY ELECTROLYSIS.

SIR,—After nearly two years' use of the process of electrolysis, for destruction of superfluous hair, I find that a well-pointed toughened gold needle wears the best, and is the best conductor. I should also recommend the application of 5 per cent. solution of hydrochlorate of cucaine to the situation of the superfluous hairs a few minutes before using the electrode. The success of this useful operation depends much upon whether or no the battery is in good working order. I find Grove's twenty-cell bichromate battery the best.—I am, your obedient servant, JAMES STARTIN, Honorary Superintendent Lecturer to St. John's Hospital for Skin-Diseases.

17, Sackville Street, Piccadilly.

THE OBSTETRICAL SOCIETY OF LONDON AND THE EXAMINATION OF MIDWIVES.

In the notice of the last meeting of this society, in the JOURNAL of February 6th, page 264, a misleading word was inadvertently placed in the sentence, "Dr. Graily Hewitt observed that the members *desired* payment for their services." For "desired," *deserved* was intended.

HOME FOR INCURABLES.

SIR,—With reference to letter from "Nemo," in the JOURNAL of January 16th, the Midland Counties Home for Incurables, at Leamington, has accommodation for paying patients. I shall be pleased to give any information on application.—Yours faithfully, G. RADCLIFFE, General Honorary Secretary.

DOCTORS' GIGS.

SIR,—Replying to your correspondent in the JOURNAL of January 30th, I beg to say that I have had two of Beddowes Moore's gigs, and found the second (built of steel) satisfactory in every way. With the window in the back of the hood made to open downwards; and, with a leather apron, I scarcely see how the gig could be improved.

I would be glad to know, from some of your readers, what fee is usually allowed to their medical officer, by the "Oddfellows" and "Shepherds" for examining candidates for admission to their lodges.—Yours truly, W. J. S.

FIRES IN BEDROOMS.

SIR,—In reference to your article on the English climate, I have much pleasure in informing you that a block of ordinary peat, as sold by London oilmen, will maintain a moderately warm and equable temperature during the whole night without requiring any attention.—Yours faithfully, WILLIAM R. COOK

24, Colvestone Crescent, West Hackney, E.

HEALTH-RESORT FOR A PHTHISICAL PATIENT.

SIR,—Let me recommend to "An Associate" an excellent book by Dr. Hardwicke, entitled *Health Resorts and Spas of Europe* (W. H. Allen and Co.). I also am phthisical, and found all I wanted therein.—Yours obediently,

Wood Green. WILLIAM BLOCKLEY, M.D.

L. S. A., Manchester.—1. Is it not necessary first to establish the evidence that any particular district is "preserved," before the question of "poaching" is raised? 2. What is the evidence that the druggist makes the statement in question as to distance (of which the inaccuracy would be self-evident); or, that the medical man is responsible for it? Telephonic medical consultation in a druggist's shop are a new development of medical enterprise.

G. R. P.—The explanation was hypothetical. Its correctness would depend upon many details, and remain open to discussion.

Gunshot-Injury.

,—As I find that I was wrong in supposing that the case of indirect gunshot racture of the femur described by me in a paper on the Surgery of the Suakin Expedition, published in the Journal of January 23rd, was unique in some of ts characters, will you kindly allow me to correct the mistake?

I find that three somewhat similar cases are described in the *Surgical History of the War of the Rebellion*, page 723, third part; and Surgeon Kirker, R.N., who as pointed out these cases to me, further informs me that there is in the auseum at Haslar a specimen of a gunshot fracture such as I described. How uch fractures are produced, is a difficult and interesting question. In my case, he bone was one of great strength, and of normal texture.—I am, yours faithully,

R. F. Tobin.

59, Stephen's Green, Dublin.

India-Rubber in Eczema.

,—"M.B." should try the "liquor gutta percha, *B.P.*" It may require a small ortion of gutta percha added. I make it by dissolving gutta percha in methyated chloroform. I can endorse what has been said with regard to cider and erry in eczema (and rheumatism). It must be old, and obtained from a farmer r good cider-merchant—not vinegar and water, which is often sold as cider.—I m, sir, yours obediently,

Wm. Woodward, M.D.

4, College Street, Worcester.

Sexual Ignorance.

,—If the gentleman, whose letter on the above subject in the Journal of aturday, January 30th, and who writes under the signature of a "Doctor and ather," will purchase a copy of the little book which I have recently published, and which he will find advertised on page 7 of the same Journal, entitled "The Special Temptation of Early Life," he will find, I think, very nearly, if not exactly, that which he is seeking.

If he would furnish me with his name and address, I would also forward to im a copy of the paper on "Social Purity," read before the Ripon Diocesan Conference in October last, out of which the little book has arisen.—I am, etc.,

Hillary Place, Leeds. C. G. Wheelhouse.

,—In the Journal of January 30th, I notice a letter from "a doctor and a father," on the subject of "Sexual Ignorance." Your correspondent seems roubled in his mind with the existing custom, of parents universally tabooing o their children the subject of the creative function of the human species. It appears to me to be one of those attempts of certain would-be moralists of the lay to be raking up indiscriminately subjects that are best let alone. The holy ame of innocence is to be dubbed by the harsh term of "ignorance," and the assing wondering question of childhood, "How was I made?" is to be nswered by the birthday present of a physiological treatise on "the general aws of generation." Nor it this all. Holy writ is to be dragged into the service of the pseudo-moralist; and the naturalistic command "know all" is to be ounteracted by the "shalt not" of Sinai. Who is there that regrets having pent his or her childhood in "sexual ignorance?" Who is there that regrets hat the box of sweetmeats, "on the twelfth or thirteenth birthday" was not work on "the general laws of generation?" I think none would be found to egret these things. I have heard of girls bursting into tears on the first onset of menstruation, not from any nervous reasons, but simply because they felt hat they had passed the border line of free and happy childhood, and stood hanged, and no longer free, on the threshold of womanhood. Poets, I believe, lo not take this view of puberty. But poets are not always right, and I am nclined to think that there is more of regret than of gladness in the female nind at this time of life.

That boys, before going to school, might, without harm, be instructed in such natters, I fully admit, because of the many pitfalls that beset the young schoolboy, and of the inevitable knowledge he must at school obtain. But, with regard to girls, it is, I think, an entirely different matter. The early training of a girl will influence her questionings on the subject; and her instinct of delicacy, nourished and cherished as it should be, by the care of wise parents, will overcome her natural curiosity, and teach her to shut her eyes to things that married life will reveal. There is not so much purity in the world that we should wish to open the portals to what, in young minds, may be dangerously nstructive. I do not believe that the vague idea of protection will weigh in any degree against the harm which may be introduced into the minds of many young girls. I do not believe that there is any occasion for this instruction. Girls, well brought up, rarely go astray. The cultivation of delicacy were far better than the satisfying of a supposed inordinate curiosity which is to do such harm.

It is said, by some author, that the most radical in public life are the most conservative at home; and I cannot but think that, in these days of popular novement of all kinds, when change is advocated in nearly everything and everywhere, there are few amongst our most prominent and most advanced public men, who would willingly change the old sweet symplicity and innocence of our English homes, for the doubtful blessing of such early physiological knowledge.—I am, your obedient servant,

F. G. V.

,—I have read, with considerable astonishment and indignation, as perhaps others have, the letter signed a "Doctor and a Father," in your issue of January 30th. Heaven forbid that such a treatise, however elementary, should ever reach the hands of my children. Young folks differ; some are more precocious than others; but is it not true that they lose their charming innocency only too early in this wicked world? I care not to affect cant or twaddle, but would not such a work put into little heads ideas, which might not have entered until later in life? Again, would it not be placing parents and offspring too much on a footing, both having a common knowledge, as to the *modus operandi* resulting in the introduction of the smaller fry into existence? Other reasons against such an innovation naturally present themselves to one's mind. Rather awkward situations might arise, and cause "*un embarras mutuel*." For one, I should not permit my children to use such a work, and would prosecute any one instructing them thereby. Modern life and education already do too much towards the premature ripening of the youthful brain.—I remain, your obedient servant,

Another Doctor and Father.

Meritas asks for the titles of essays or pamphlets on the subject of the social and political relations of the medical profession.

. D. G. Crawford (Calcutta).—Many thanks; already published.

Hospital Phagedæna.

Sir,—In Mr. Hutchinson's lecture, as reported in the Journal for January 9th, certain remarks are made with regard to the practical disappearance of hospital-phagedæna. He says, "It is not uncommon to see the disappearance of hospital-gangrene claimed as one of the triumphs of antiseptic practice. I hold this to be a mistake. It (phagedæna) is caused by a special form of contagious pus." In support of this view, he mentions the following case.

"A few years ago, a boy was brought into the London Hospital in consequence of his having been attacked by phagedæna in a workhouse infirmary; he was suffering from acute periostitis of the tibia. A free incision had been made, and this wound it was which had become gangrenous."

The following information was afterwards received. "There had been admitted under one of my colleagues a very bad case of syphilitic phagedæna from the same workhouse, only a little before the lad. On inquiry, I found that, in the workhouse, the man's prepuce had been slit up with the same instruments which, some time later, had been used for the boy's leg; it was possible even that the same sponges had been used."

Antiseptic precaution means the use of purified instruments and sponges in an antiseptic atmosphere by a surgeon whose hands are pure, and the subsequent dressing of any wound in such a manner as to exclude all possible contamination from external influences.

If the wound in the boy's leg had been made with such precautions, I think all believers in the antiseptic system of surgery would hold that no such infection (by "special form of contagious pus") would have been possible; but that the wound would have run a typically aseptic course in spite of unfavourable surroundings.

If it is reasonable to suppose that the infection and subsequent gangrene could have been prevented in this case, it could surely be prevented in all similar cases, and the practical disappearance of hospital-gangrene may still be claimed as one of the triumphs of antiseptic practice. The case, as reported, shows the lamentable results of the utter disregard of simple cleanliness, to say nothing of the intelligent application of antiseptic principles.—I am, yours faithfully,

Penrith. James Altham, M.B.Edin.

Sugar in Urine.

Sir,—It must appear late to call your attention to a notice in your annual summary of the bismuth test for saccharine urine recommended by Mylander, but the subject appears to me of so much importance that I take the liberty to do this. It is almost impossible to separate uric acid from urine even by filtration, even through wood-charcoal, as recommended by Professor Seegen; whilst, in glycosuric cases, creatinin is sure to be thrown down also by Fehling's solution, and confusion is the result, so that the milder malady (glycosuria), so constant a companion to gout, and many other disorders, is apt to be magnified to diabetes properly so-called, and with this result, that the patient is dieted to an extent and in a way most decidedly injurious to his general health and nutrition.

The exact method of preparing the test, where it can be best procured, and whether it be subject to any fallacies, are the points which can best be brought out by discussion in your columns. Dr. Oliver's test-papers are, without question, of some value, and especially for immediate use; but a good laboratory-test is still wanted.—I am, sir, yours obediently,

A Learner Still.

Oral Teaching of the Deaf and Dumb.

Sir,—I cannot refrain from writing to thank you for your notice of the above subject in the Journal of January 16th. It is well that the deaf and dumb have such powerful friends as the editor of the *Lancet* and yourself. We have been working for years against a strong opposition; but now that the editors of the two most influential medical journals in this country have come to the rescue, we may indeed fight on hopeful of ultimate success. The remarks of the Committee of the Old Kent Road Asylum at their recent meeting, are indeed most gratifying, as they show how favourable may be the results on the "pure oral" system, even under the most unfavourable circumstances. Now that this excellent institution has got into thorough working order, we may look forward to results of a much higher character at the end of the next five years.

"This is a triumph of science and common sense, and we earnestly hope that this method of teaching will become universal, not to say exclusive." Such words as these, proceeding from so high an authority, surely will not be lost upon an intelligent public.—I am, yours truly, Harry W. White,

Formerly Vice-Principal of the Training College for Teachers of the Deaf, Ealing; and late Lecturer on the "Pure Oral" System at the Manchester Institution.

Are Ergot and Iron Incompatible?

Sir,—I am much obliged to "I. M. C." for his reply; at the same time, I must remind him that, on the one hand, Dr. Atthill refers to "anæmic patients," where it is to be expected that "the addition of ten drops of tincture of perchloride of iron" would prove beneficial even if the ergot be decomposed; and that, on the other, evidence is still imperfect with regard to the reaction of the perchloride on the ergot. The administration of the liquid extract, carefully preserved by competent professional persons, during a labour, cannot be compared with the prescription of ergot in any form to an outpatient with chronic uterine disease. In the former case, the action of the drug is generally evident; in the latter, however improved the local condition of the patient may be after a short course of treatment, it is impossible to prove what share the ergot may claim in the satisfactory result. The mixture may never have been taken, or, more probably, may have been kept in a pint-bottle stoppered with wool or paper, and exposed to rapid decomposition. Very precise researches in long series of patients are necessary in order to prove the point at issue. At the outset, cannot some authority in chemistry and materia medica inform us if the active principle of ergot be really affected by salts of iron?—I am, etc.,

Odoacer.

Sir,—In reply to "Odoacer," Dr. Farquharson, in his *Guide to Therapeutics*, when treating on ergot, says, "ergot has been used successfully, and more especially when combined with iron, in that most troublesome affection, incontinence of urine; and again, when speaking of the mode of administration, he says, "In a case of amenorrhœa from anæmia, we may add a little ergot to any chalybeate mixture."—I am, etc., Samuel Eakin, M.D.

Sir,—Can you, or any of your readers, refer me to a work on chemistry answering to the following requirements: The elements of the science, with its application to medicine, pharmacy, and practical hygiene?—I am, yours, etc.,

Chemistry.

A Proposal for the Formation of an Association of those Qualified in Sanitary Science.

Sir,—I beg to call your attention to a proposal for the formation of an association of medical men, who are specially qualified in sanitary science, and to solicit your sympathy and support to the movement, should its aims be such as meet with your approval.

The chief objects in view would be to further the legitimate interests of all medical men, who at the cost of much time, labour, and expense, have obtained a sanitary qualification. To further this end, it is thought that combined effort might be used to urge on the public and those in authority the importance of appointing to health-officerships those only, when forthcoming, who possess some special training, as evidenced either by considerable previous experience, or the possession of a degree or certificate bearing on the duties of such an office, and to raise a protest against the way in which these appointments are almost invariably given through mere party interest, quite regardless of any substantial evidence of merit.

Secondly, to obtain a better general recognition of these degrees and certificates, so that they shall not be empty academic honours, but of practical utility to those who possess them, as was their original intention.

Thirdly, to be a bond of social and professional union between all duly qualified practitioners of State medicine.

More than ten years have elapsed since the universities and medical colleges affixed their seals to the speciality of sanitary science, and, in the case of the University of Edinburgh, even to the granting of a degree; but, in spite of all this, these qualifications are almost useless, unknown to the public in whose interest they are given, and so little recognised by the general body of the profession, that they are not even registrable, nor is there such a thing as a list of these diplomatists in the *Medical Directory*, as is the case with dentists. I might mention that I was informed at the Directory office that the reason why they did not insert the abridgement "S.Sc.Cert.Camb.," which is the correct title, was because if they did, people would not know what it meant, therefore it was necessary to make use of the clumsy form of "Sanit.Sci.Certif.Camb."

The subject of hygiene has vastly developed during these last ten years, and its importance has immensely increased since the universities and medical colleges first instituted these diplomas. No department of medicine has made greater strides, or gained more public recognition (this is strongly evidenced by the International Health Exhibition of 1884). How is it, then, that personal interest is alone all-powerful in spite of all this, and that these appointments, when obtained, are so precarious to the profession? It is because this sanitary service urgently calls for reform, and because it is honeycombed with abuses. The coming change in local government, we hope, is near at hand, and with it we trust the recognition of competent men to fill its future offices. If they will only step forward now and show their credentials, they must obtain ultimately the success to which they are entitled, and it is for this purpose chiefly that it is believed that an association of them might be productive of benefit.

Just a few words on the past history of medical education on the subjects of State medicine (that is, hygiene and medical jurisprudence), which, I think, is not without interest or warning. From my own experience as a student, and from a large experience of others, these subjects were never regarded as essential to mere qualification as medical practitioners; and certainly, up till quite recently, ninety-nine per cent. could pass into the profession without even reading an elementary primer on them. True, there was the officially stated liability that the candidate might be questioned on them; yet, past experience was so reassuring, that little fear was ever entertained of such a dire disaster.

Out of three corporations which examined me, not one asked me a question on public health, and one only on medical jurisprudence, and that, be it said to its credit, was the Apothecaries' Hall of London. Yet, in spite of this laxity, sanitary appointments of great responsibility are constantly given away, quite irrespective of any special knowledge, even over the heads of those well informed in the duties of such offices, provided sufficient interest is obtainable.

Unfortunately for this anomaly, there are outside influences at work which are antagonistic to its future existence. Public health is now becoming so popularised by science-primers, that it is even being taught in some of our public schools; and well informed engineers, architects, surveyors, inspectors of nuisances, and the well educated laity generally know so much now about these matters, that it must soon bring discredit on the present order of things.

Even a specially qualified medical officer of health must, at first, feel some misgivings, when his subordinates hold such certificates as the Sanitary Institute of Great Britain grant. How fares it then with the unfortunate medical man, who is placed in authority over such men, when he knows little about his own office, or the duties of those he has to control? He must, in fact, be a dummy, at their mercy, and if by hard work he at length gain the necessary experience, it must be at the public expense, and the sacrifice of much professional pride.

It therefore seems essential that this state of things should be altered as soon as possible; that competent men, when forthcoming, should be elected to health-officerships, and that sanitary degrees and certificates should be fairly recognised.

It is to be hoped that gentlemen holding positions of influence will be ready to support such a project, for without them none will hear our cry, but with them strong and powerful for good will be the union which aims at the reform and increased status of this much ill-used service. A provisional meeting will ere long be called, out of which it is hoped an association will be formed, due notice of which will be given.—I am, sir, yours faithfully,

St. George's Infirmary, Fulham Read, S.W. H. A. Fotherby.

*** Could not the objects in view be attained through the organisation of the Sanitary Institute and Parkes Museum of Hygiene?—Ed.

E. I. F. M.—If you enter, as you apparently propose, in May, you should purchase Dr. Lauder Brunton's *Text-Book of Pharmacology*, Dr. Mitchell Bruce's *Materia Medica and Therapeutics*, or any other text-book or materia medica, and also a standard text-book on chemistry. It may be observed that it is advisable to consult the dean or secretary of the hospital which you intend to enter, as to what books are read in the medical school attached to the hospital, for there are certain advantages arising from a unity in text-books at a school. Above all, we recommend you to purchase a Gray's *Anatomy* or a Holden's *Osteology*, and also a set of bones; it will be of enormous advantage for you to begin dissecting in October, after having gained a fair knowledge of osteology.

Transmission of Syphilis by Vaccine-Lymph.

Sir,—In reference to Mr. Jonathan Hutchinson's excellent and instructive Lettsomian Lecture, on the subject of Problems in Syphilis, I have a suggestion to put forward, with regard to the transmission of syphilitic virus by means of perfectly clean humanised vaccine-lymph. No one can be more impressed with the good produced by vaccination than I am. I also take credit of being very careful with my lymph, but I am sorry to say I have had and seen very suspicious cases of humanised vaccination, and I daresay most have had the same experience. I would propose, when Government insists on compulsory vaccination, they ought to supply calf-lymph, from a Government establishment for animal lymph. An order to the establishment could be supplied to each parent along with the vaccination-schedules by the registrar, when the birth of the child is registered. This would, perhaps, meet most of the objections to vaccination, and also lessen the medical man's responsibility.—I am, etc.,

L.R.C.P.Edin.

Childbirth during Small-Pox.

Sir,—If your correspondents, Mr. G. F. Masterman and Mr. J. Quirke (Journal, January 30th, p. 201), will refer to vol. i in the year 1877, they will find recorded seven cases of women having variola at the time of, or only a short time previously to their confinements, in which the infants were apparently not affected by the disease.—I remain, sir, yours truly, George Rigden.

Burgate Street, Canterbury.

Verrugas or Blood-Warts.

Sir,—I shall feel much indebted to you, or any of the readers of the British Medical Journal, if you can give me any information relative to the above curious disease. I believe I am correct in stating that the disease is peculiar, and almost entirely confined, to Peru, during the construction of the "Oroga" line, that wonderful railway that runs across part of the Peruvian Andes, and reaches a height of over 12,000 feet above the level of the sea. A number of the workmen were attacked with the complaint, and died very suddenly.

I am informed that the disease in these cases was generally attributed to drinking a certain class of mineral waters, called by the Indians "Aqua de Verrugas."—I am, etc., Alfred Corrie, Staff-Surgeon.

H.M.S. *Pelican*, Pacific Station.

Immisch's Metallic Thermometers.

Sir,—Replying to the inquiry contained in the Journal of January 9th as to the action of the Immisch metallic thermometers, I may say that I have found the one I have used for some months most reliable and satisfactory in its indications; and, in its freedom from risk of fracture, it possesses a great advantage over the ordinary clinical ones, no slight consideration in hospital-practice, in which I find the loss from breakage very great.

Of course, Immisch's thermometer cannot be used at all internally, and therefore, cannot entirely take the place of the others; but, for general use its advantages are great, its price being the only drawback, but this is much counterbalanced by its durability.—I am, sir, yours very faithfully,

1, Suffolk Lawn, Cheltenham. Francis Cook, M.D.

Terebene.

Sir,—In reply to Dr. Bond's letter in your Journal of January 30th, I do not see what advantage can be gained by introducing personalities. My letter was intended to criticise the taking out of patents by medical men for either the manufacture or compounding of drugs; and that this has been done in the present instance can scarcely be denied, seeing that the bottles of terebene in question bear the signature of "Francis T. Bond," without which none are genuine.

It is in no wise my intention to hurt Dr. Bond's feelings, or to make any imputation which is not justified by the facts of the case. As to the manner in which such conduct may be characterised, I must leave to your readers to form their own opinion.—I am, sir, yours etc., A. S. G.

Growth of Hairs on the Eyeball.

Sir,—In the British Medical Journal of December 19th, "A Member" desires to know the pathology and treatment of a "growth of hairs on the eyeball" of a dog. In the *Journal of Anatomy and Physiology*, vol. xiv, p. 143, Dr. G. E. Dobson describes a case of hairy growth on the right eyeball of a mongrel bull terrier. The growth resembled the ordinary integument of the animal; it was triangular in outline, having its base along the margin of the cornea, and its apex near the external canthus. The hairs projected between the lids when the were closed. The other parts of the eye and lids were normal. It was not removed.

In the same volume at p. 252, Dr. Garson, referring to this case, states that a specimen of a similar character is in the museum of the Royal College of Surgeons. The preparation, numbered 373 in the catalogue of the Teratological series, is one in which there is a lock of wool growing from the cornea of the right eye of a sheep. The preparation shows at the outer canthus, and superiorly, a projection resembling a mole of rounded form, measuring about five millimètres in diameter, situated along the edge of the cornea. From the top of this springs a lock of wool, some of the fibres of which are as long as six centimètres. The tumour or mole is of a brown colour, more deeply pigmented at some points than at others, so that it presents a mottled appearance.

In volume I of de Wecker and Landolt's *Traité d'Ophthalmologie* (1880), p. 419 will be found a very good plate and description of these growths on the human eye. They are known as dermoid tumours of the conjunctiva, and are supposed to be the remains of a fœtal condition of that membrane. They are nearly always found opposite the palpebral fissure, astride the sclero-corneal junction. They are round, smooth, and solid opaque white growths, about the size and shape of a split pea; and they very often have hairs growing from the surface.

The treatment consists in cutting them off on a level with the cornea, and if care be taken not to cut below this level, there is nothing to fear. In the human subject, the resulting scar on the cornea may be tattooed. If left, they are said to increase slowly in size. As a rule, dogs take chloroform well.—I am, sir, yours truly,

W. Lang.

Questator.—1. The Home Secretary, Whitehall. 2. The Local Police Authority.

J. B. H.—This is pure quackery, of a kind for which the law appears to provide no remedy. *Populus vult decipi.*

Dignity might with advantage communicate with the paper in which the letter appeared.

The Influence of Arterial Tension on Albuminuria.

,—Most writers on albuminuria more or less decidedly support the theory that ncreased arterial tension tends to cause albumen to appear in the urine ; and the ct that the two symptoms are frequently found co-existing, seemingly lends pport to the idea that they are associated as cause and effect.

I submit that the increased arterial tension and the albuminuria are both ymptoms of a common cause, an altered condition of the blood; and that the ncreased arterial tension, so far from causing albuminuria, delays and some- imes prevents its appearance. The increased arterial tension probably prevents lbuminuria, in the same way that it diminishes the normal solid ingredients of he urine ; in both instances, it increases the watery constituents of the urine; his creates a demand for diluents, and the diluents increase the tension. To xemplify, take an acute case, scarlet fever. The altered condition of the blood ets up increased arterial tension, which more or less effectually prevents albu- inuria. To follow the case, let us suppose an aperient is administered ; this lters the condition of the blood, and assists the increased arterial tension in reventing or dissipating the albuminuria; and the cause of the increased rterial tension (the altered condition of the blood) being removed, it also, at he same time, disappears.

Let us now look at a chronic case, interstitial nephritis. The arterial tension, s shown by sphygmographic tracings and by the polyuria, is greatly increased. ccompanying this, we find only a limited amount of albumen in the urine, until ardiac failure arises and arterial tension diminishes, when the albumen rapidly ncreases in quantity. Or take functional albuminuria. In such cases, I have equently observed that raising the arterial tension in any way (that does not at he same time increase to an equal or greater extent the solid ingredients to be ecreted by the kidney) diminishes the amount of albumen found in the urine, nd, if carried to a sufficient extent, will cause it to disappear. Or take the lbumen sometimes found in the *urina laboris*. This, in some cases, is owing to he exertion causing so much tissue-waste, and consequent loading of the blood, hat the increased vascular tension is insufficient to enable the kidney to liminate the excess of excrementitious matter. In other cases, the albumen in he *urina laboris* may arise in the same way as the albumen in the urine after a old bath, that is, from nervous shock and consequent diminished vascular ten- ion. The excessive escape of the serous fluid giving rise to dropsy, arises from iminished vascular tension, and is removed by increasing the tension. Why hould not the escape of albumen from the vessels of the Malpighian corpuscle rise from the same cause ?

Anæmia and extensive hæmorrhage diminish arterial tension, and are followed y albuminuria. Dr. McGregor Robertson's experiment supports this theory. e injected atropine under the skin of a cat, and found that, so long as the nimal remained under the influence of the drug, its urine was albuminous. ot to occupy more space, I submit that all experiments and all clinical bservations, when carefully looked into, support this theory ; which briefly is, hat increased tension tends to prevent albumen from appearing in the urine ; nd when albuminuria is already established, increasing the vascular tension ends to lessen it.—I am, etc.,

JAMES CRAIG, M.B.

Llandudno.

Sunshine at Undercliff (Isle of Wight) and Kew in 1885.

subjoined is a monthly summary of bright sunshine at the Undercliff, Isle of ight, compared with that recorded at Kew.

	Undercliff.			Kew.	
	Hs.	Ms.		Hs.	Ms.
January	34	50	.....	15	30
February	55	29	.....	53	0
March	123	5	.....	80	0
April	233	7	.....	187	0
May	186	3	.....	170	0
June	233	34	.....	271	0
July	232	28	.....	220	30
August	204	49	.....	156	30
September	180	55	.....	143	0
October	115	9	.....	89	0
November	46	15	.....	40	30
December	58	28	.....	50	30
	1704	12		1476	30

Note.—It should be borne in mind that the foregoing tables contain the record uly of bright sunshine, and do not include days which might otherwise come nder the head of bright and sunny days—haze or mist, or the passing of a ght cloud, arresting the power of the recording instrument.

With regard to the Undercliff, some allowance must also be made in con- quence of its falling into shade between six and seven in the evening during e summer months, depriving the instrument of a considerable amount of nshine, which would otherwise be recorded in fine weather. There is also e same loss from the sun rising in the morning behind the high ground of unnose.

Toxic Action of Cucaine.

—In reply to "Experience," who writes in the JOURNAL of January 23rd, mmenting on my memorandum on the toxic action of cucaine, I would beg to fer him to two recent numbers of the BRITISH MEDICAL JOURNAL, where he ll find that others besides myself have had experiences with this drug similar those which I described. In the JOURNAL of November 21st last, page 983, d in that of December 5th, page 1060, the testimony of Drs. Ziem of Dantzig d Grosholz of Towyn is recorded, and will be found worthy of perusal.

Far from being prejudiced against cucaine on account of the mishap which tended its use on one occasion, I have since employed it repeatedly, and, with e one exception above referred to, have always had reason to be satisfied with e results obtained.

The cause of fainting suggested in the second paragraph of "Experience's" tter is of course the possible one in the case recorded by me. I believe not, wever ; and, with due respect to the very much longer experience of your onymous correspondent than mine, I do not think that the cases cited by m tell against my theory of the case in question.—I am, yours faithfully,

25, Church Street, Huntly.

ALEXANDER THOMSON, M.B.

. asks if any one book is yet published which contains all that is necessary the examination in social science for medical officers of health ; and also if t most useful book, "Tanner's *Index of Diseases*" will be brought up to the quirements of the new *British Pharmacopœia*.

Vaccino-syphilis.

SIR,—Professor Jonathan Hutchinson, in his recent Lettsomian Lecture I, has very lucidly, ably, and impartially recorded his experience on the scientific value of the relation of vaccination to syphilis. He states : "A question which was a few years ago in dispute, but which has, I may say unfortunately, been finally set at rest, is the possibility of conveying syphilis by translucent vaccine lymph." At this period, it would not be out of place to recall to our minds the famous Blue-Book of 1857, "Papers relating to the History and Practice of Vaccination" by the revered sanitarian Mr. John Simon. He had addressed four questions on vaccination to many medical men of European reputation, of whom 542 gave replies. Question III, and the analysis of replies to it, drawn up by me for Transactions of Vaccination Inquiry, are as follows.

Question III. Have you any reason to believe or suspect (*a*) that lymph from a true Jennerian vesicle has ever been a vehicle of syphilitic, scrofulous, or other constitutional infection to the vaccinated person? (*b*) or that unintentional inoculation with some other disease instead of the proposed vaccination has occurred in the hands of a duly educated medical practitioner? This is a question which, though vaguely put, like the others, deserves serious consideration, and the replies require to be carefully analysed. Of the 539 tabulated answers, we find that six make no attempt to answer it. Twenty-four answered that the lymph from a vaccine vesicle has been a vehicle of scrofulous, syphilitic, and other constitutional infections ; while thirty-two expressed their suspicion. Fourteen attributed such inoculations to bad vaccination, and eighteen stated that it intensified the constitutional disorders that had been latent. From this it is evident that eighty-eight could not speak in its favour as an unmixed good, and six gave no answer. Were we to read the answers carefully, we would find that those who speak of the probabilities of the inoculation of other diseases through vaccination as *nil*, take it for granted that the lymph must be pure and healthy—a condition almost impossible to fulfil in the vaccination of hundreds of thousands of children by thousands of medical men with lymph from sources not always known, and not generally ascertained. Several experiments were made, both in England and on the continent, to inoculate from the vesicles of syphilitic children, and were met with no results. The wide diffusion and publication of such faulty notions have a source of mischief in them, as the negligence in the practice of many medical men who up to this day believe that lymph from a syphilitic child is innocuous, is defended on this authoritative belief!—I am, etc., MONTAGUE D. MAKUNA, M.R.C.S.Eng., L.R.C.P.Lond.

Cider and Rheumatism.

SIR,—Having lived for the last three years in this cider-drinking county *par excellence*, will you allow me to say in reply to "Eczema's" letter in the JOURNAL of December 19th, that, in my opinion, instead of there being any antagonism between cider and rheumatism, I am inclined to think that the one has a tendency, if anything, to cause the other. At any rate, rheumatism is, in this neighbourhood, in one or other of its many varieties, a very common complaint ; and the amount of cider consumed by the British workman about here is, especially in hot weather, something fabulous ; many a man drinking his three or four gallons a day, and thinking nothing of it. *Apropos* of this matter, I have just come upon a passage taken from an old author who, writing of Herefordshire cider, says, after extolling its many virtues : "Lastly, for it excites the appetite, clears the stomach, strengthens the digestion, frees the kidneys from gravel and the bladder from stone. That which is made from pippins, duly ripened and well fermented, is an excellent remedy for consumption." So it is very evident that cider is a remedy not to be despised, although not to be found in the *British Pharmacopœia*.—I am, etc.,

T. REUEL ATKINSON.

Madley, Hereford.

Twisted Membranes Simulating Umbilical Cord.

If not taking up too much of your valuable space, will you allow me to describe a little obstetric adventure I experienced the other night. At 3 A.M., I was roused to attend an urgent call about four miles away. The woman according to her husband's statements, had been delivered by a midwife, at 11 o'clock the night before, of a female child ; but some of the after-birth had not come away. I started off at once, and on arrival found the placenta lying in the bed untouched, and, except that the membranes were rather more torn than usual, in a perfect condition ; but out of the vagina, there still hung, however, what at first sight appeared to be an umbilical cord, and this had evidently exercised the mind of the midwife to a great extent, as she declared she had never in her life seen anything like it before. Neither had I. The woman said she had been afraid of her life to touch it, but not having her compunctions, I took hold of it, and finding it yield, drew it gently out, and then discovered that it consisted of a part of the placental membrane twisted round so as to bear in touch and appearance a most extraordinary resemblance to an umbilical cord. The uterus was well contracted, and all appeared to be normal, and the woman made a good recovery. I need not say I did not enlighten the midwife as to the nature of the case, but left her to think over this wonderful event at her leisure.—Yours, etc.,

T. R. A.

Obstinate Constipation.

SIR,—I shall feel much obliged to any member who can recommend some efficient remedy in the following case.

J. B., aged 30, strong and active, much given to all kinds of out-door exercises and sports, suffers from most obstinate constipation. He has a good appetite, but eats moderately, and is a total abstainer. He takes porridge made with oatmeal frequently for breakfast, and uses whole meal bread instead of white bread. He sleeps well and enjoys splendid health, but the bowels never act, I may say, unless he use aperients. I have tried almost every purgative with him, but after a time each loses its effect, and I have to fall back on another. My chief reliance has been on aloes, and cascara sagrada, but no permanent relief arises from one or the other.

Is there a remedy which can effect a cure in such a case? If so, what is it? I shall be grateful to anyone for any suggestion.—I remain, yours faithfully,

A MEMBER.

Climate at Indianapolis.

SIR,—Kindly allow me, through the medium of your JOURNAL, to ask if any member who has had experience of the above would communicate it. Would it be at all suitable as a residence for a family having a tendency to phthisis, and from which consumption has already removed one or two members in this country? I should add that the family wish to go there to join other members of the same family who have been there for some years, and enjoy good health ; but, before doing so, are anxious to obtain correct information as to suitability or otherwise of the climate.—Faithfully yours,

Londonderry.

DAVID J. BROWNE, L.R.C.S.I.

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THE RAILWAY WATER-CLOSETS AND URINALS.

SIR,—Allow me to call the attention of medical officers of health to the state of the water-closets at the stations of the various railway companies; for, were an epidemic of fever or cholera to break out, I cannot help thinking they might be productive of very grave mischief. In many places, they will be found to possess no means of ventilation except through the door, and this door simply leads into a covered space containing the urinal. At some of these stations, though the smell from the urinals is disagreeable enough, this is really nothing compared with that arising from the closets. The scent arising from these is simply disgusting, and it is perfectly impossible for anyone with the slightest perception of smell to enter them without retching. As to being shut in one of them, it would be beyond any ordinary individual's power of endurance. One is very ready to complain of the closets and urinals abroad, but really some at home are not very much better.—I am, sir, your obedient servant,

Surbiton. F. P. ATKINSON, M.D.

SMOKE CONSUMING GRATES AND STOVES.

R. J. B. T. should obtain a copy of the illustrated official report of the Smoke Abatement Committee, published by Smith, Elder and Co., 15, Waterloo Place, London, S.W.

RUDIMENTARY CLAVICLES.

SIR,—The following case may be worth recording. On February 7th I was asked by a woman, aged 59, to examine her chest, as she feared that she had heart-disease.

I found that she had a typical "pigeon breast," and there appeared to be flattening under the outer half of both clavicles; placing my finger on the flattened part, I was astonished to find that the outer half of the clavicle was absent on each side. The outer ends of both rudimentary clavicles can be distinctly seen and felt, terminating in a sharp point midway between the sternal and acromial articulations. The first rib can also be distinctly felt. The sternum is much wider than I have noticed it in other individuals. Can anybody inform me whether this peculiarity is common, as I believe the case to be unique.—Yours truly,

Shefford, Beds. Y. M. JONES-HUMPHREYS.

SIR,—Through your kindness, I have received, and beg gratefully to acknowledge one guinea from Dr. R. B. Ruddock, 4, Saville Place, Clifton, and £1 from Matlock Baths (no name), making £3 1s. in all, for my unfortunate father.—I am, sir, yours obliged,

19, Dante Road, Newington Butts, S.E. E. D. BAUER.

FRENCH CHALK (CRETA GALLICA).

SIR,—Can any member of the Association inform me of the exact chemical composition of the above? I have searched Gray's *Supplement* in vain, and the geological and other books I possess do not enlighten me.—Yours truly,

AN OLD M.B., M.A.

MASSAGE FOR A MALE PATIENT.

SIR,—Could you, or any of your readers, inform me whether there is an institution in London where a male patient, highly nervous, and on the borderland of hysteria, could be treated by means of massage and electricity? As the patient is not in affluent circumstances, the charges must be moderate.—I am, sir, yours faithfully,

L. C. W.

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BOOKS, ETC., RECEIVED.

The Prescribers' Pharmacopœia. Revised and Edited by Nestor Tirard, M. Sixth Edition. London: J. and A. Churchill. 1886.

Outlines of Infectious Diseases for the Use of Clinical Students. By James Allan, M.B. London: J. and A. Churchill. 1886.

The Pocket Pharmacopœia for 1885. By Armand Semple, M.B., B.A., etc. London: Baillière, Tindall, and Cox. 1886.

Mind Your Eyes. Translated from the French of Francisque Sarcey by He Dickson Bruns, M.D. New Orleans: Medical Publishing Associati 1886.

Life; Its Laws and Mechanics. By William H. Triplett, M.D. New York: J. Vail and Co. 1886.

Sunshine and Sea; A Yachting Visit to the Channel Islands and Coast Brittany. By a Country Doctor. London: Kegan Paul, Trench, and 1885.

Artificial Limbs, and the Amputations which Afford the Most Appropriate Stu in Civil and Military Surgery. By Heather Bigg, L.R.C.P. and L.R.C London. 1885.

A Guide to the Examination of the Nose. By E. Cresswell Baber, M.B. Lond H. K. Lewis. 1886.

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CLINICAL LECTURE
N CANCER OF THE LUNGS.

Delivered at the Liverpool Royal Infirmary.

By A. T. H. WATERS, M.D., F.R.C.P.,
Physician to the Infirmary.

ENTLEMEN,—I purpose occupying the time at our disposal to-day in nsidering, very briefly, the subject of primary malignant disease of e lungs. There is probably no affection of the chest in which more istakes of diagnosis are made than in cancer of the lungs; and un-ubtedly the affection is often very obscure in its origin, and very sidious in its course. In a large number of cases, accurate diagnosis the early stages is almost impossible; but yet I think that, as a le, by carefully considering the features of any given case, its mode development, and the local and general symptoms which charac-rise it, we shall, even when the disease is not very far advanced, be le to arrive at a well founded conclusion as to its nature.

Cancer of the lungs usually comes on in a very insidious manner, d in its earlier stages may and does simulate, and indeed fre-uently is complicated with, pleurisy, pleuropneumonia, or bronchitis. ne of the first symptoms which calls attention to the disease is often a ight pleuritic attack, or pain resembling that of pleurisy or pleuro-ynia. On making an examination of the chest, you may find a ight dulness at the base of one lung, and possibly a friction-sound. ou think you have to deal with a simple case of pleuritic effusion, d you use the measures which you consider appropriate to such fection. But the symptoms do not yield; the dulness over the lung owly extends, the patient begins to emaciate, he becomes weaker, is pulse rises, but the increase of temperature is slight, only to the xtent of two or three degrees.

Again, instead of finding a friction-sound when you examine the nest, you may hear crepitation or bronchitic *râles*, and you think the se is one of subacute pneumonia or bronchitis. There may even e expectoration of rust-coloured sputa; but for the most part, in ncer, the sputa are whitish, tenacious, very difficult to expectorate, nd occasionally bloody. There is often a cough of a very severe kind, nd paroxysmal in character, which does not yield to ordinary medies.

As the disease progresses, and you find that the constitutional easures to which you have resorted for the supposed pleuritic effu-on or pneumonia do not have the desired effect, you begin to doubt he correctness of your diagnosis; and with the view of satisfying ourself on this point, or possibly thinking that some fluid, serous or urulent, exists in the pleural cavity, which should be removed, you ake an exploratory puncture into the chest, either with an ordinary ypodermic syringe, or with a syringe such as I use in such cases; or ou at once use the aspirator, and you find that no fluid is withdrawn, r, perhaps, only a few drops of blood. You have, in fact, punctured solid lung, and, in a measure, you have cleared up the diagnosis.

Now, you must not imagine that, in making a puncture of this ind, although you have performed an useless operation, you have one anything which seriously injures the lung or jeopardises the atient. If only the hypodermic syringe, or a fine trocar and cannula e used, no harm is done. It is unfortunate not to find fluid, if you ave expressed a strong opinion to the patient or the patient's friends hat you expected to find it; but, if you have been guarded in the pinion you have expressed, and you certainly should be so, your istake or failure will not seriously compromise you. Such mistakes, ndeed, cannot be avoided. The differential diagnosis between a can-erous lung and a lung solid from some other cause, and pleuritic ffusion, is at times so difficult that the most accomplished and most xperienced physician may make a mistake with reference to it; and n all cases of doubt an exploratory puncture should be made.

There is, in addition to pleuritic effusion and consolidated lung, nother condition which may simulate cancer of the lung. I mean iffused thoracic aneurysm. It is occasionally difficult in a case—vhen we have even eliminated the question of pleuritic effusion—to ay whether a dulness which we find in the chest is due to an neurysm which has become diffused, or to a cancerous lung. Some ears ago, I attended a lady who developed symptoms of pleurisy in he left side; and soon after the onset of the symptoms there was dis-inct pulsation in the upper part of the chest, which I at first thought o be due to an aneurysm. As the case progressed, however, the sym-

ptoms became less equivocal, and the patient died with all the indications of malignant disease of the lungs.

Again, I was called, some years ago, to a gentleman in Cheshire, who, after having had a fall, developed symptoms of pleurisy-pain in the side, etc. When I saw him, there was dulness over the lower part of one lung behind, and I expressed the opinion that the case was one of malignant disease; but I did not feel quite sure of my diagnosis, for the conditions which I met with might have been due to an aneurysm produced by, or existing at the time of, the fall, and subsequently becoming diffused. The gentleman died not very long after I saw him; but no *post mortem* examination was allowed.

Cancer of the lungs often exists for a long time, and may go on to a fatal issue without causing much, or indeed any, pain. There may be no marked cancerous aspect, but the gradual emaciation and increasing debility show the serious character of the disease. Dyspnœa, sometimes only slight, but occasionally severe and paroxysmal, is usually complained of; but in many cases this difficulty of breathing does not trouble the patient much, and it may be difficult to persuade him that there is anything seriously wrong with his lungs, so slight are the subjective symptoms as regard these organs.

Let me refer now a little more in detail to the subject of diagnosis. The great difficulty, for the most part, is in distinguishing between malignant disease in the early stages, and pleurisy; and the points of difference are these. In cancer, the dulness, although it may be very decided, simulating that of fluid, does not vary in site with change of position of the patient; it does not, as a rule, even when the whole lung is involved, extend beyond the median line in front, as is the case in extensive pleuritic effusion. Sometimes, however, a cancerous development in the anterior mediastinum does produce a dulness which passes the median line, and even a solid lung may slightly encroach on the opposite side. The heart is not usually displaced to any material extent. There may, however, be but little displacement of it in pleuritic effusion in consequence of it having contracted adhesions. In extensive pleuritic effusion, when the chest is quite full, the dulness is complete in all positions of the patient, but in such cases there is usually cardiac displacement.

But in many cases of malignant disease of the lungs, there is some pleuritic effusion; and the fact that on tapping you draw off fluid may mislead you as to the real nature of the case with which you have to deal. There was a little girl in No. 15 ward some years ago, who was admitted with the following symptoms. There was well marked dulness over nearly the whole of the back of one lung, with some crepitation at the upper part. I thought there was fluid in the pleura, and I tapped the chest, and drew off about fourteen ounces of serum. But the symptoms did not yield; the girl grew gradually worse, and I tapped her a second time, but only a small quantity of bloody fluid was removed. She died, and we found the lung a mass of cancer.

In the progress of a case of cancer of the lungs, symptoms of pressure often show themselves. There may be some dysphagia from pressure on the œsophagus; and one or both arms, and the neck and face, may begin to swell from pressure on one or both of the innominate veins, or the superior vena cava. In one case which was under my care in the Northern Hospital, the œdema was most marked. The patient's arms, face, neck, and thoracic trunk became enormously swollen, whilst the lower limbs and the lower part of the trunk were free from swelling. The appearance of this man was very peculiar. Another symptom which occasionally shows itself, and which helps in the diagnosis, is an enlargement of the lymphatic glands about the root of the neck from cancerous infiltration.

It sometimes happens that cancerous affection of the lungs is confined to one side of the chest, one lung becoming quite a mass of cancerous disease, whilst the other remains free from it. In the case to which I shall shortly refer, one side only was affected.

In the development of the symptoms and signs of cancer, much depends on the site in which the disease originates. If it begin in connection with the pleura, the symptoms of pleurisy predominate; if, on the other hand, it originate in the interior of the lung, the disease may simulate bronchitis or pneumonia, or some other form of consolidation of the lung. There are cases which, in their physical signs, simulate very closely phthisis; but the temperature-ranges in them are not like those of phthisis. The temperature maintains a much more even level than in phthisis, and rarely rises to any great height. The character of the breath-sounds will not help you much in your diagnosis of an obscure case of cancer. They may be altogether absent, as in extensive pleuritic effusion, or in a lung intensely solidified from some non-malignant disease; or they may be feeble. For the most part, there is a certain amount of movement of the affected side; local vibration is usually present, but is not strongly marked.

In regard to treatment, I need not tell you that cases of cancer of the lung are hopelessly incurable. We know of nothing which will beneficially influence the course of the disease. You must treat symptoms as they arise. If the case be complicated with pleurisy, with or without effusion, you may often give relief by such measures as you would adopt in ordinary pleurisy—poultices, etc., or by tapping. For the most part, your attention must be directed to relieving pain and distress, often very prominent features, and to giving such food as the patient can take. The hypodermic injection of morphia, or the administration of opium in some form, is often of great service ; it relieves pain, soothes the patient, and gives him sleep. Cancer of the lung is sometimes rather slow in its progress, and the aid that you can afford will tend to minimise the sufferings which are more or less incidental to the disease.

And now, having made these remarks, let me draw your attention to the following case.

James C., aged 44, was admitted into the infirmary under my care on January 13th last. He complained of tightness in the chest and slight dyspnœa, but no pain. His illness began, he said, about three months before his admission, and he had been gradually wasting since then. He had, however, followed his work in an iron-foundry up to six weeks before coming to us. On examination, we found the whole of the right side of the chest dull on percussion, with very impaired movement. The dulness was very marked, but it did not extend beyond the median line in front. Vocal fremitus was very slight. The breath-sounds were very faint all over the lung. On the left side, the resonance was good, and the breath-sounds loud, but healthy. The heart was not displaced, and the sounds were normal. The aspect of the patient, although somewhat pale and sallow, was not otherwise unhealthy. The pulse was 85. On the day after admission, the right pleura was tapped, and twenty ounces of a dark-coloured fluid were drawn off by the aspirator. The fluid was very fibrinous, and coagulated soon after it was drawn from the chest ; indeed, it coagulated in the cannula during the operation. There was a slight improvement in the physical signs after the tapping ; the breath-sounds were more audible, but the patient did not improve. On January 17th, tapping was again practised, but only two ounces of fluid were withdrawn. The man now became rapidly weaker, and took his food badly. He complained of restlessness and insomnia, but there was no pain. The physical signs in the lungs remained unchanged. There was some expectoration of frothy, tenacious, and rust-coloured sputa, for a few days rather abundant. The symptoms of exhaustion gradually increased. The chest was punctured again on the 25th, but only a very small quantity of blood-stained fluid was withdrawn. About February 1st, the abdomen began to swell, but there was little or no pain. During the whole time the patient was under observation, his motions were very pale, but there was no jaundice. He died on February 7th.

I expressed an opinion, when I first examined the man, that he was suffering from malignant disease of the lung, and the results of the tappings tended to confirm the opinion. At the same time, the case was just one of those in which the differential diagnosis between pleuritic effusion and cancer is very difficult, and the disease was complicated, as it occasionally is, with pleuritic effusion, thus making the diagnosis less easy. From the results of the *post mortem* appearances, I think there can be no doubt that the affection commenced in the pleura, which became infiltrated with malignant deposit, much thickened and inflamed, that extension to the lung took place subsequently, and that the further spread of the disease to the abdominal cavity occurred during the last few weeks of life.

I need say but little about the treatment. In addition to the tapping, which gave relief, I ordered carbonate of ammonia, and subsequently quinine ; and sedatives were used to procure sleep.

The following are the notes of the necropsy, furnished by Dr. Barron. The left lung and pleura were healthy ; the right pleura was occupied by a diffuse malignant growth. Two parts of the pleural cavity still existing contained yellowish glairy fluid. The right lung was infiltrated with malignant growth, running along the course of the fibrous septa from the pleura into the lung-substance. The infiltration of the lung was most marked along the diaphragmatic and lower costal aspect. The lung was somewhat softened and breaking down at the base. The right arch of the diaphragm was infiltrated with growth. There was some pericarditis, with malignant deposit on the parietal portion of the pericardium. The small and large omenta were infiltrated with the malignant growth ; there was recent diffuse peritonitis, with fluid in the abdomen. The liver was healthy ; its peritoneal ligaments were infiltrated by the growth. The cancer was of the carcinomatous kind.

ABSTRACTS OF
ERASMUS WILSON LECTURES
ON
EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

By J. BLAND SUTTON, F.R.C.S.,
Assistant Surgeon to the Middlesex Hospital, and Lecturer on Comparative Anatomy.

Lecture II.—The Inflammatory Process.

Inflammation, when viewed in the broadest possible light, may be defined as the method by which an organism attempts to render inert noxious elements introduced from without, or arising within it.

Noxious elements capable of bringing about the phenomena peculiar to inflammation may be denominated irritants. Some of them are very coarse; others are peculiarly subtile, often eluding detection. The objective signs of the inflammatory process are so well known, that it is needless to repeat them. The redness and swelling, as Galen knew, are the the result of increased afflux of blood and exudation of serum, but the determining cause of the afflux has taxed the ingenuity of pathologists. It remained for the ingenuity of Cohnheim to devise experiments whereby the process could be objectively studied under the microscope.

From direct observation carried out on the tongue and web of the foot of a frog, the tail of a tadpole, fins of fish, and mesentery of a mammal, we have discovered the large part played in the inflammatory process by the white blood-corpuscles. These experiments teach that, in vertebrata, the most important feature in this process is the vascular disturbance, a result, it may for the present be said, of irritation. In the invertebrata, where many of the phenomena of cell-life may be studied with tolerable ease, the important functions played by active motile cells can be observed.

So far as inflammation is concerned, there are three points to which it is necessary to draw attention : firstly, the capacity exhibited by certain cells of effecting a change of place and form; secondly, their power of taking into their interior various substances with which they may come into contact ; and, lastly, the property which they possess of decomposing organic material when in their interior or in contact with their protoplasm ; this is termed intracellular digestion.

The inherent property possessed in many instances by protoplasm, of moving with a rapidity perceptible with the aid of a microscope, is an acknowledged fact in biology. These movements may be produced by stimuli. The discovery by Wharton Jones, in 1846, that the leucocytes of human blood possessed this property, was a most important step. The capacity of the leucocytes to change their position forms one of the commonest of demonstrations in the physiological laboratory.

In 1862, Haeckel showed that when a *Tethys*, a naked (shell-less) mollusk, was injected with indigo, the granules were taken up by the blood-corpuscles, and he further shewed the occurrence of similar phenomena in the blood of various invertebrata. It was then discovered that the cells of the blood of man possess similar properties; and this enabled Cohnheim to demonstrate, beyond question, that the migratory cells, seen in the cornea when inflamed, were directly derived from the blood.

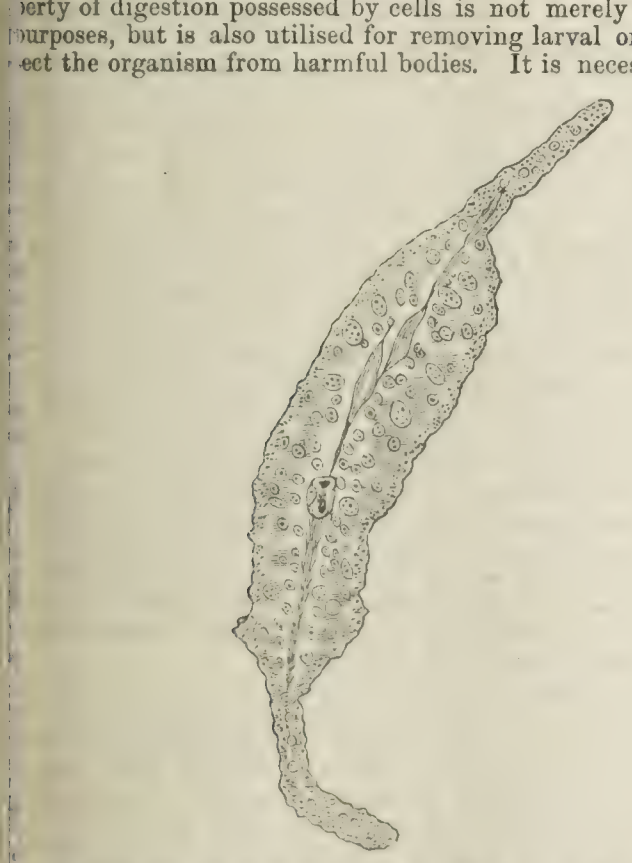
It now becomes very essential in respect to inflammation to inquire concerning the fate of the material thus ingested by cells. When an amœba takes into its interior a green coloured plant, the ingested material gradually breaks up, loses its green colour, and finally disappears. The amœba is thus capable of taking food into its interior, and of making it part of itself, a process conveniently termed nutrition, and the outcome of the process of digestion. When the process is carried on in a cell of this kind, it is spoken of as intracellular digestion.

Metschnikoff, by using powdered carmine, was able to watch the inception of the granules by the endoderm cells. In one case, that of *Mesostomum Ehrenbergii*, that turbellarian refused to take the carmine, but Metschnikoff fed a *Nais* with the same pigment, and induced a *Mesostomum* to eat the *Nais ;* the examination showed the presence of carmine in the digestive cells of the turbellarian. Mr. Jeffrey Parker, in a communication to the Royal Society, on the histology of *Hydra fusca* (1880), showed that the activity of the cells of the endoderm had not been sufficiently noted, for, in some cases, by means of their pseudopodia, the endodermic cells could actually obliterate the

digestive case. The endodermic cells carried on the process of digestion; indeed, he found in their interior the partially disintegrated bodies of entomostraca. Lankester observed intercellular digestion in the very transparent fresh water medusæ discovered in the lily-tanks of the Botanical Gardens in 1880.

Metschnikoff found that human blood-corpuscles, taken up by the mesoderm cells of *Bipinnaria* became completely absorbed. Milk-globules shared the same fate, and, when taken up by the wandering cells, broke up into small granules, and diffused themselves throughout the cell-substance. The following experiment was devised to show that the cells did not ingest everything indiscriminately. On injecting into a naked (shell-less) mollusk, *Phyllirhöe*, some living ova of a sea-urchin, it was found that neither young ovarian cells, nor ripe ova, which had extruded polar globules, were eaten by the mesodermic cells; indeed, they seemed to live much longer than when placed simply in sea-water; whilst in the tissues of *Phyllirhöe* they could be fertilised, segmentation and a normal blastopore being produced. When spermatozoa of the sea-urchin were introduced, they were quickly surrounded and eaten by the mesodermic cells.

Observations on the necrotic organs of several invertebrates have shown that it is the function of mesodermic cells to devour the dying elements of such organs. If fluids containing bacteria be injected beneath the skin of *Bipinnaria* and others, or if they develop spontaneously in the wounds of such animals, they will soon be found within the substance of many amœboid cells. In many cases the bacteria lose their motility, and become so delicate as scarcely to be visible. In *Botryllus*, an ascidian, Metschnikoff has found a spirochæte closely resembling the *S. Obermeyeri* of relapsing fever, and a small micro-organism like the lepra-bacillus. In both cases they were pursued, ingested, and absorbed by the mesodermic cells, some of which perished in the attempt, and were, to all appearance, dead, with long bacterial filaments projecting from them. The same process may be seen in the blood of vertebrates, where, in bacterial affections, such as anthrax, the bacteria are taken up by the leucocytes. This property of digestion possessed by cells is not merely used for nutritive purposes, but is also utilised for removing larval organs, and to protect the organism from harmful bodies. It is necessary to remember



Transverse Section of a Tadpole's Tail, in April, showing Phagocytes at their work.

that two or more amœboid cells may fuse together, so as to form a larger mass of protoplasm by their confluence. Protoplasmic masses formed in this way are termed plasmodia. Metschnikoff has watched their formation, and regards them as equivalent to giant-cells; in all cases in invertebrates they have arisen around foreign bodies, and always by fusion of separate cells. Giant-cells in the higher vertebrata very probably arise from the fusion of leucocytes. In 1870, Dr. Caton published, in the *Journal of Anatomy and Physiology*, "A Contribution to the Theory of Cell-Migration," pointing out that this process might be said to have its probable maximum activity in the tadpole. In the month of April, he observed the process to take place to such an extent that he had some doubts whether it might not be a possible physiological occurrence. Metschnikoff has shown that, in the early stages of absorption of the tails of larval batrachians, a large number of amœboid cells are present, within which are seen remnants of nerve-fibres and fragments of muscle. These fragments of the tail are digested and absorbed by the amœboid cells, which are in reality leucocytes engaged in devouring the tail of the tadpole, and have been named in consequence *phagocytes*. Mr. Sutton has followed the process in considerable detail by means of sections carried through the tails of tadpoles at various stages, and can fully confirm the observations of Metschnikoff with regard to the devouring propensities of the leucocytes. There can be little doubt that not only the tail, but also the gills, are eaten up in this manner. Bacteria are evidently an old source of trouble in the world; they affect animals of all kinds, even water-fleas. Metschnikoff tells us of combats he has witnessed in the *Daphnia* between the white cells of the blood and bacteria, and how, when one cell was not sufficient to attack the invading bacterium, two or more would fuse together, surround, digest, and thus rid the little entomostracan of the intruder.

Can these facts be applied to mammals? If the cornea of a rabbit be irritated by nitrate of silver or a fine silk suture, the tissue becomes in a few hours red and hazy, due to the escape of leucocytes from the vessels, to repel, or, if possible, destroy, the offending material. If a fine thread be drawn across the interior of a vein, leucocytes will soon swarm around it; and, under the microscope, it will look like a cobweb covered with hoar-frost. In tubercle, leprosy, perlsucht, or avian tuberculosis, the characteristic lesions swarm with bacilli. These minute organisms are often taken up by cells, and especially by giant-cells, which in the two last mentioned affections crowd the affected area in great numbers.

The consideration of these facts seems to indicate that in the giant-cell we have the counterpart of the fusion of phagocytes, as in the case of the *Daphnia* and other invertebrates; and it is in reality an effort on the part of the blood-corpuscles to rid the tissues of noxious elements. The large multinuclear cells, osteoclasts, seen in bone undergoing absorption, must also be placed in the same category. These observations place the whole process of inflammation in an entirely new aspect; and, in the place of being a purely pathological process, it will rank as one of normal physiology, which, when in excess, comes within the domain of pathology.

Inflammation may be of two kinds, according to the nature of the irritant. It may be simple or specific. Simple inflammation is the reaction which follows mechanical, thermal, or chemical stimuli or irritation. A specific inflammation results from the introduction into the organism of a particular poison or irritant, such as variola, glanders, tuberculosis, perlsucht, or actinomycosis. The effects of inflammation undoubtedly vary with the irritant. Dirt on a child's hand produces warts; decaying animal matter will in some cases produce verruca necrogenica; and soot may cause the soot-wart to develop. No class of pathological productions illustrates the reaction of the organism to a specific virus so well as the peculiar group now known as the infective granulomata, which comprises tuberculosis, human, bovine, or avian; leprosy; syphilis; glanders; actinomycosis; etc. The histological characters of the morbid formations in each of these diseases are practically identical. A soft tissue, made up almost entirely of round cells, very little intercellular substance, the presence of giant-cells, and in most of them a bacillus or a fungus, are constant features. Their infectiveness is very pronounced, for they may be transferred easily from one organism to another, and the "irritant" may be cultivated in artificial media.

The lecturer's observations, which have extended over the most important groups of the vertebrata, go to show that the mode by which a piece of noxious tissue is encapsuled or cast out of the body is only an illustration, on a large scale, of the process by which bacilli, bacteria, micrococci, etc., are in some cases rendered inert by the activity of cells. If, as in the case of the *Daphnia*, the quantity of micro-organisms invading the body be large, and the vitality of the organism be enfeebled, so that the leucocytes are insufficient to cope with the invasion, disastrous effects result.

Inflammation, as read zoologically, may be likened to a battle. The leucocytes are the defending army; their roads and lines of communication are the blood-vessels. Every composite organism maintains a certain proportion of leucocytes, representing its standing army. When the body is invaded by bacilli, bacteria, micrococci, chemical or other irritants, information of the aggression is telegraphed by means of the vaso-motor nerves, and leucocytes rush to the attack. Reinforcements and recruits are quickly formed to increase the standing army, sometimes twenty, thirty, or more times the normal standard. In the conflict, cells die, and are often eaten up by their companions; frequently, the slaughter is so great, that the

tissues become burdened by the dead bodies of the soldiers in the form of pus, the activity of the cell being testified by the fact that its protoplasm often contains bacilli, etc., in various stages of destruction. These dead cells, like the corpses of soldiers who fall in battle, later become hurtful to the organism which they in their lifetime were anxious to protect from harm, for they serve as breeding-grounds wherein the bacteria may germinate, and, like a pestilence and scourge, devastate the individual.

ABSTRACT OF LECTURE ON THE REMOVAL OF OSSEOUS TUMOURS FROM THE EAR.

Delivered at St. Mary's Hospital.

By GEORGE P. FIELD, M.R.C.S.,
Aural Surgeon to St. Mary's Hospital.

The walls of the osseous auditory meatus are sometimes the seat of a general bony thickening. This species of exostosis is less rare in women than in men. By far the most frequent cases of aural exostosis are those in which the growth proceeds from a defined base or a pedicle.

The commonest form of aural exostosis is usually pedunculate, and of rapid development, and originates in the active inflammatory processes accompanying chronic suppuration of the middle ear, which, by causing periostitis, lead to the formation of new bony tissue. In some instances, the exostosis is seated on the base of a polypus, and in others the growth itself gives rise to polypi. Boils or instrumental interference with the ear would appear to be assignable causes of exostosis in certain cases where suppuration through the membrana tympani cannot be discovered ever to have taken place. There is no satisfactory evidence that aural exostoses of any kind are primarily due to a scrofulous, rheumatic, or gouty diathesis, or to syphilis, though by some authors this has been, with much confidence, surmised. The commoner and rapidly growing exostoses, being, as microscopic examination evidences, simply spongy osteomata, and similar in structure to newly formed bone, are of much less density than the typical ivory-like growths, and are, in consequence, more readily amenable to operative treatment.

The majority of the multiple forms of aural exostosis histologically resemble syphilitic nodes of the cranial flat bones, showing Haversian canals, and bearing blood-vessels from the periosteum, with intervening concentrically placed lamellæ and bone-corpuscles; the vascularity is, however, very slight in the oldest and most slowly formed of these exostoses, which thus approach in density the ivory outgrowths.

Ivory aural exostoses, or hyperostoses, are of more frequent occurrence in men than in women. Almost invariably one finds them originating near the orifice of the external meatus, either as a long ridge, or one or more round, and broad-based tumours. They are usually bilateral, and grow slowly, so that their existence may be unnoticed until, by occluding the meatus, they cause deafness or some inflammatory action. Their production is not traceable to any evident congenital source, and their possible occurrence in members of one family may point simply to the like operation of similar conditions in different individuals, although hereditary tendencies may certainly have some sway in their causation. It is noteworthy that many of my cases have occurred among inhabitants of the same locality. Thus, I have had four cases from Waterford, three from Ipswich, several from the South of Ireland, and one each from Hull and West Hartlepool.

In the greater number of cases, some slight but long-continued irritation of the meatus, such as may result from daily bathing in salt water, seems to be the determining cause. The evil effect of salt water in these cases I first pointed out some years ago, and I have repeatedly since had evidence of the correctness of my original conclusion. In the crania of the semi-aquatic Hawaiian islanders, they have frequently been remarked. Their more numerous occurrence among males than females may, perhaps, be attributed to the greater exposure of the former to irritative influences of the meatus. Structurally, ivory aural exostoses are found to consist of extremely dense, and but slightly vascular, osseous tissue, similar in hardness to dentine, and more compact than their direct source, the temporal bone, with lamellæ not disposed concentrically around vessels, but running parallel to the surface.

Treatment.—Where an exostosis is the result of suppurative inflammation, arrest of the discharge is an indispensable first requisite. In the case of multiple ivory exostoses, which have so obstructed one another's growth as to leave a narrow passage for a sound, the occasional removal of cerumen and epithelial *débris* may be all that is required for the preservation of hearing. When the tumour is of soft bone, the use of an écraseur, or of a dentist's forceps or elevator, preceded or not by a few minutes' drilling, may suffice. For the treatment of ivory exostosis blocking the meatus, and so preventing the escape of purulent secretions, or causing deafness, drilling with the dental engine is the only operation that can be safely recommended. Excision with saw and chisel has, it is true, been resorted to, but the difficulty and danger of the operation are obvious, and constitute decided objections to its practice.

Successfully to employ the dental engine, the patient must be placed on a couch about four feet from the ground, in order to bring him within reach of the drill; his head, furthermore, must be placed on a pillow, with the side to be operated on well exposed to the light. To protect the internal structures of the ear, in case the drill should slip, it is highly desirable to employ a spoon-like steel guard, made after a pattern in thin copper, expressly to pass by the side of and behind the exostosis. A set of drills should also be provided, for experience shows that the gradual enlargement of a very small initial opening is the best mode of procedure. At least three assistants ought to be obtained, one to administer an anæsthetic, another to work the treadle of the dental engine, and another to keep the steel guard steadily in position. Without previously removing the skin, one may proceed at once to the perforation of the tumour, avoiding its base, keeping close to the side of the steel guard, and frequently taking out the drill to allow the sponging away of accumulated blood. The following are a series of cases of the removal of ivory aural exostoses by drilling.

Case I.—Dr. G. M., of Waterford, aged 32, came to me on October 4th, 1877, for treatment, each auditory canal being blocked up by an exceedingly dense tumour, like a boil in shape, proceeding from its posterior wall, and reaching from about a quarter of an inch from the orifice of the meatus to close to the tympanic membrane. The patient had observed deafness in the right ear since taking a sea-bath in the previous September, and in the left ear only since October 1st; and with this there had been, as usual in such cases, troublesome tinnitus and an oppressive sense of fulness in the ears. After a few days, a slight inflammatory action being produced on the anterior wall of the meatus, owing to the growth of the tumours, the deafness became absolute; so that, except on contact, the ticking of a watch was inaudible, a condition precluding the patient's continuance in medical practice, and causing, naturally enough, great depression of spirits. On October 13th, the perforation of the tumour in the right ear was commenced, and, in two more operations, it was accomplished. On November 11th and December 2nd, the drilling of the tumour in the left ear was effected. Subsequent smart inflammation, with perforation of the membrana tympani, was checked by the use of leeches and lotions of carbolic acid; and, on January 13th, it became necessary to remove red granulations which were blocking up the passages of both ears, and to employ astringent solutions for the arrest of a somewhat persistent purulent discharge. The hearing then became normal and it has since remained perfect in both ears.

Case II.—My next case of double exostosis, sent to consult me by Dr. Symes Thompson, was that of a naval gentleman, Mr. A. S. aged 31, who, like the preceding and my two next cases, had been accustomed to regular sea-bathing. He had suffered from earache from time to time, for as long as he could remember. It was in 1866 that he first found himself growing deaf, and, after some years, his hearing became so seriously affected that he found himself necessitated to retire from Her Majesty's service. On examination, December 17th, 1879, I found each meatus to be closed by a large ivory exostosis arising from the posterior wall. Five operations—two for the right ear, in January and February, and three for the left, in March and April—were required for the efficient perforation of the tumours, the total time occupied being 3 hours 40 minutes. In the last operation, the absence of an assistant was, in all probability, the cause of an accident which, although its effects were soon averted might have been serious. The guard, which I was compelled to hold as I worked with the dental engine, slipped, so as to allow a slight swerving of the drill, and the membrana tympani was injured. A little paralysis ensued, indicatory, no doubt, of injury to the facial nerve. The final result in this case, as in the last, was eminently satisfactory, the patient completely recovering his hearing.

Case III.—In April, 1881, Mr. H. was recommended by my first patient, Dr. M., to come to me, as he was suffering from traumatic deafness of the right ear, and the left was useless through complete occlusion of its meatus by a large ivory exostosis. In the earlier of two operations for the removal of the tumour, the steel guard broke in the ear, and could only with difficulty be extracted. An iron guard, which I had by me, was then substituted. It is important, I may here note, to have the guard made of metal that will bend without snapping when subjected to strain. The treatment, after the drilling of the exostosis in this case, resolved itself into the removal of granulations from the opening made, and the patient then recovered his hearing.

Case IV.—In my next case, that of Miss M., aged 19, sent to me by Dr. McMunn in September, 1881, there were two osseous growths in the right ear, which caused complete deafness as regarded air-conducted sounds. Both were pedunculate, and one was attached to the posterior, the other to the anterior, wall of the meatus. They were removed by means of a dentist's stump-forceps, not being of an ivory-like consistency. Cases similar to this are not unfrequent in hospital-practice, in which the ivory-like growths are of comparatively rare occurrence.

Case V.—Miss A. was first seen by me on February 17th, 1882. She had, in consequence of measles at the age of 6, for twelve years been the subject of a constant purulent discharge through the right membrana tympani; and, since Christmas, 1881, she had been increasingly deaf. I discovered an ivory exostosis attached to the posterior wall of the meatus, but, as this had not attained size sufficient to impede free escape of the discharge, I deferred treatment for a while. In the following May, when I next saw my patient, the exostosis had so increased in size that only a slender probe could be passed between it and the anterior wall of the meatus, the flow of the discharge was hindered, and deafness was complete. Removal of the obstruction was now evidently requisite, as retention of pus in the meatus might have been attended with serious risk to the patient's life. The complete drilling of the growth was effected in about half an hour; and, very soon after the operation, the patient's hearing began to return, and, after the lapse of a couple of months, it was fairly restored, notwithstanding the existence of a perforation in the membrana tympani. In this case, the origin of the exostosis was evidently inflammation set up by a perpetual discharge from the middle ear.

Case VI.—J. F., a girl, aged 18, came to me as a hospital patient, March 20th, 1882. After suffering from increasing deafness for eighteen months, she had, four weeks before I saw her, almost completely lost her hearing in the left ear. I found that there was a large, painless, and deeply seated tooth-like excrescence of soft bone on the posterior wall of the meatus. This I found it possible to sever from its attachments with a dentist's elevator, which, for the treatment of a true ivory exostosis, would have been of no avail.

Case VII.—In another somewhat similar case, that of Miss H., aged 24, sent to me by Dr. Gibson, of Hull, and treated by me in June, 1880, the growth, which was very sensitive, and was attached to the anterior wall of the meatus, was cleared away in fifteen minutes, a strong pair of dressing forceps being applied after a small hole had been drilled in the base with the dental engine.

The cases which I have next to describe are instances of the occurrence of true ivory exostosis, satisfactorily removable only by the use of the dental engine.

Case VIII.—Mr. W. G. D. G., aged 46, from near Waterford, thus succinctly describes the origin and treatment of the exostoses for which he was sent to consult me. "I was first troubled by an abscess in my right ear in September, 1883, the effect probably of sea-bathing, and of the frequent use of an old spring-board on Kelly's Rocks. The abscess caused deafness for some three or four weeks, but was eventually cured by the application by Dr. O'Farrell of a solution of caustic. In October, not being satisfied with my ear, I consulted Mr. Fitzgerald, of Dublin, who said the passages in both ears were much contracted, and I might eventually have to get them operated on. He prescribed a lotion, which I used for some time, and hearing came back all right. In 1884, I was yachting from the middle of May till the end of September, and took a header or two off the main boom each morning. At the end of the season, I was again troubled with an abscess, this time in the left ear, causing deafness. At the end of November, I consulted Mr. Field, who diagnosed double ivory exostosis. After the removal of a polypus from the left ear, its hearing returned; but the exostoses had now so increased that, as soon as I could spare time, early in February I had the worse ear, the left, drilled, the operation lasting sixty-five minutes. In consequence of leaving London before the ear was sufficiently healed, it became filled with granulations, which gave much trouble to get rid of, from the beginning till near the end of March. On the 9th of that month, the other, or right ear, was operated on, chloroform being administered for one hour and ten minutes, and in it hearing is now, as in the other, quite restored." The final result in this case, I may add, left nothing to be desired.

[*To be continued.*]

PELVIC HÆMATOCELE.

By FRANCIS IMLACH, M.D.,
Honorary Surgeon to the Liverpool Hospital for Women.

In the British Medical Journal of May 16th, 1885, I published details of five cases of severe and long standing pelvic hæmatocele treated by abdominal section. When a small pelvic aneurysm bursts in an apparently healthy woman, the outflow of blood is sudden, and the patient may die in a few hours; but it is an error to apply the term hæmatocele to such an internal hæmorrhage, and none of my cases were of this cataclysmic character. They had all been invalids for periods varying from one to twelve years, some of them bedridden; and medical treatment, which I am ready to acknowledge as both skilful and patient, had failed to benefit them. I do not pretend that this disease is rapidly fatal. Probably the majority of my patients, though certainly not all, would still be alive if they had never submitted to operation; but they would have remained useless burdens, whereas now they are, without exception, well and free from pain. Having treated ten other cases of pelvic hæmatocele by laparotomy, I propose to state concisely the views as to the pathology of this disease, its diagnosis, and proper mode of treatment, which my experience in these fifteen cases has suggested.

I do not know how experts in review will judge the year's gynæcological work; but, amongst the more important contributions, the series of articles upon uterine hæmatocele, published by Bernutz in the *Archives de Tocologie et des Maladies des Femmes*, for December, 1884, and January, February, March, and May, 1885, ought certainly to be included. It was in 1848 that he began to write upon this subject; and though Tilt, Meadows, Barnes, Duncan, Thorburn, and other English authors, have helped to elucidate its difficulties, no one has given them so much consideration as Bernutz. At first, he took a somewhat narrow view of the etiology of the disease, and certainly an untenable one, ascribing the majority of cases to menstrual retention from such congenital malformation as absence of the vagina or atresia of the cervix uteri. But, though he has quoted cases illustrative of the occurrence of pelvic hæmatocele where the vagina was absent or the cervix preternaturally narrow, it is now admitted by himself and everyone that this association is rare. There was certainly no pelvic hæmatocele in any of the few cases of vaginal malformation that I have seen, and all but one of my patients with pelvic hæmatocele have borne children or had miscarriages. While he has abandoned the theory of menstrual retention, he rightly maintains the importance of the distinction which he long ago pointed out between effusion of blood within the pelvic peritoneum and without it. He restricts the term hæmatocele to the former, and describes effusion of blood into the subperitoneal cellular tissue as thrombus. The frequency with which the term suppurating hæmatocele is employed, shows the confusion which has arisen from neglect of this distinction. Pelvic hæmatoceles do not suppurate until they have been punctured by the surgeon. It is possible that, by their pressure, perforation of intestine, or of a pelvic viscus, may ultimately take place; but when pus pours out, or is withdrawn by tapping, from the vagina of a patient in whom hæmatocele has been diagnosed, my belief is not refuted, for the diagnosis may have been mistaken. When laparotomy has been performed, there can be no such mistake: and I have not yet met with a case of suppurating hæmatocele.

Dieulafoy (*Gazette Hebdomadaire de Médecine*, June 5th, 1885, p. 371), in like manner, has combated the opinion that hæmorrhagic pleurisy ever becomes purulent. "Les pleurésies franchement hémorrhagiques ne deviennent pas des pleurésies purulentes, elles restent hémorrhagiques pendant toute la durée de leur evolution." In pelvic thrombus, on the other hand, the blood is always, according to my experience, mixed with pus; and I have never read a case where pure blood had been aspirated, in which I was satisfied with the diagnosis of cellular thrombus. Between abscess in the pelvic cellular tissue and thrombus, there is no line of demarcation; the pus may contain

only a few shreds of fibrinous clot, the fœtid blood may contain only a trace of pus, or blood and pus may be in about equal quantities.

As regards the gross pathology of pelvic hæmatocele, Bernutz's experience has been gathered chiefly from *post mortem* examinations, a method of study which must be peculiarly liable to mislead, owing to the extensive changes likely to occur in this disease during the throes of death. He refuses to consider uterine or circumuterine hæmatocele as a special malady, though he admits it to be a pathological entity. But if we follow him in excluding hæmorrhages into the pelvis from sudden rupture of organs or blood-vessels, I do not know any disease which has more characteristic marks, or deviates less in its pathology and symptoms. He contends also that, unless the blood in the abdominal or pelvic cavity be encysted, the term hæmatocele should be withheld, there being, strictly speaking, no blood-tumour, and it should be called only an internal hæmorrhage. To this contention, however, I think no surgeon will consent. The peritoneal reaction against blood is feeble; women may have their abdominal cavities half full of blood for years without its becoming encysted; and when there is a cyst-wall, it is of the softest and most yielding consistence, and is probably broken up whenever there is a fresh effusion of blood. A thick-walled cyst, with a new membrane, such as occurs where pus has escaped into the peritoneum without causing general peritonitis, is only found when the blood has become fœtid. Whether encysted or free in the abdominal cavity, if the blood have long accumulated and evidently proceed either from the ovaries or the tubes, there is only one disease with one history; and, as similar treatment is required, the benefit of setting up two names is not apparent. But, when the internal hæmorrhage has been due to the rupture of a tube in extra-uterine pregnancy, there is no advantage in classing this hæmorrhage with pelvic hæmatocele, though in many respects the conditions are similar. A more common mistake, it appears to me, consists in calling all pelvic hæmatoceles cases of tubal pregnancy with rupture; and no case ought to be admitted as tubal pregnancy unless a fœtus be found. It is quite true that the fœtus may have become disintegrated, or may have escaped into the abdominal cavity or uterus; but such disintegration or escape must not be imagined in every case. Judging from my experience in fifteen cases of hæmatocele, I would say that, in general, both Fallopian tubes are greatly distended with thick black blood, and that a large soft clot, which has evidently been discharged from an ovarian hæmatocyst, or an obvious corpus luteum, half an inch or more in diameter, which has become loosened, is grasped by the pavilion. When the tube is cut open, its mucous membrane is black and succulent, and often half an inch thick, and its muscular coat is also hypertrophied. In the ovaries, there are generally one or more large blood-cysts, but sometimes they have ruptured before operation, and only their loose collapsed walls remain. In other cases, the cysts containing fluid blood are small and numerous, and the chief pathological changes are in the tubes, which are invariably distended and diseased. The blood in the abdominal cavity may rise higher than the navel, or may be only in the pelvic cavity. It is exactly like what is found in the tubes; when thick oval gritty masses of black fibrin are felt in the tubes, there are similar thick masses in the pelvis, and the tubal mass may project into the pelvic cavity; when the tubal blood is fluid, it is also fluid as it is baled out of the peritoneum; and when it is fœtid in one locality, it is fœtid in the other.

There can be little doubt, therefore, as to the source of the hæmorrhage, but it is a question whether this includes the whole of the pathology. When normal blood is injected into the peritoneal cavity of a healthy animal, and when it oozes into the abdomen from separated adhesions, after laparotomy, it is gradually absorbed. What remains to be explained is, why the blood in pelvic hæmatocele is not absorbed as fast as it is poured out. Early writers ascribed hæmatocele to sweating of blood from the pelvic peritoneum, the disease being thought a form of purpura hæmorrhagica, and the absence of absorption excited no surprise; but evidence of the purpuric state was never forthcoming, and this theory was finally rejected. Virchow has suggested that the initial stage is pelvi-peritonitis, with formation of a velvety new membrane from the easily ruptured vessels, from which blood escapes during menstrual congestion; and his name and fame have caused this theory to become widely accepted. It may be true that absorption fails because chronic peritonitis is set up; but that the hæmorrhage is due to this so-called pachy-pelvi-peritonitis, as Friedreich, Besnier, and Bernutz maintain, is amply disproved by the fact that, once tubes and ovaries have been removed, internal hæmorrhage never recurs, though menstruation eventually becomes re-established. And, further, this pachy-pelvi-peritonitis is only another name for encystment of the hæmorrhage a condition which is often absent.

I have had only one opportunity of making a *post mortem* examination of the pelvis. It was the case of a patient whose tubes and ovaries I had removed for pelvic hæmatocele, last July. She had made an easy recovery, as they all do, and was sitting up. I was absent from town, but had received a telegram, saying all my patients were well. When I returned, late in the afternoon, the woman was dead. It appeared that, a bee having flown in at the open window of the ward, the nurse in charge gave chase with a towel, over beds and chairs. The peals of laughter from the unfortunate patient, who was very stout and had a dilated heart, were heard all over the hospital, and orders were sent that the noise must cease. Soon afterwards, the patient took her dinner, of soup and rice-pudding; half an hour later, she complained of an agonising pain in her chest, and in an hour she was dead. There was no fresh effusion of blood in the pelvis, and no peritonitis; there was not even a clot in the heart, and her death can only be set down to cardiac failure, consequent upon her titanic laughter.

That some absorption takes place, is shown by the constant elevation of temperature and pulse when the blood is fœtid, and by the fact that the abdominal dulness on percussion varies slightly from week to week. The simplest explanation is, that the lymphatics of the peritoneum gradually become choked; and those who have seen the density and toughness of the fibrinous masses, almost as hard as brickbats, that collect within the abdominal cavity, will not wonder that life is too short for their complete absorption. Whether the disease commences in hyperæmia of the ovaries, as Récamier and Nélaton believed, or whether the discharge of pathological blood-cysts and loosened corpora lutea is secondary to hyperæmia of the tubes, it is not easy to determine; but certainly the changes in the gland and its duct include the whole of the pathology. I have several times, on account of prolonged menstrual trouble, removed tubes that were dilated with blood, and ovaries in which were small blood-cysts, where there was no hæmorrhagic effusion into the peritoneum; and such cases may fairly be described as in the preliminary stage of pelvic hæmatocele; but I have never seen the primary pachy-peritonitis, which has been assumed by Bernutz as a cause of the disease.

It is difficult to estimate the frequency of pelvic hæmatocele. Bernutz says that sometimes he met with not more than two cases, and often with none at all, in the course of a year's service at La Pitié and La Charité. Some years ago, on the other hand, a metropolitan gynæcologist, fired with the importance of the subject, announced to an astonished though learned society, that he had met with fifty cases within a few months; he had verified none of them by abdominal section, and there can be little doubt that he had confused many varieties of pelvic disease. Seeing as I do, in the special hospital of a large seaport town, a very considerable proportion of the poor population who are supposed to have some disease of the womb, I do not find pelvic hæmatocele to be a common ailment. Its chief symptoms are prolonged metrorrhagia, backache, and profound anæmia. When a woman comes with a tale that her courses last from two to nine or ten weeks, and I find an obscurely fluctuating mass, or two such masses, behind the uterus, I suspect pelvic hæmatocele; and if there be dulness as well as pain on percussion above the pubes, the diagnosis is strengthened. If her menstrual period have previously been missed once, twice, or thrice, tubal pregnancy is possible; and if there be a mass distinctly on one side only of the uterus, and the breasts have contained milk, the diagnosis is almost complete. When there is a history of long continued pain, I always advise operation for I do not expect to succeed with medical treatment when others have failed. If the temperature be high, from 100° to 104° Fahr. one may be pretty confident that the blood is fœtid, and that the need of operation is urgent; but in such cases the diagnosis between a small hæmatocele and pyosalpinx is not easy. To mistake hæmatocele for pelvic cellulitis is a common error; but, never having seen retro-uterine cellulitis, I do not believe in its existence. Aspiration *per vaginam* is not only useless but dangerous, owing to the risk of sepsis. If the needle chance to enter one tube, it misses the other, and the abdominal cavity; if it enter the abdominal cavity, it misses both tubes; and, even if all the dense clots could be withdrawn, the cure would be only temporary. Opening the abdominal cavity, and draining the accumulated blood, is open to like objections, and I am surprised to find this method adopted. The only treatment by which a cure of the disease can be insured is laparotomy, with removal of the uterine appendages. In appearance, it is rather a formidable operation; a pint or more of dark treacly blood, with much fibrinous clot, has to be removed from the abdominal cavity by the hands and sponges, and the distended tubes and ovaries have to be drawn out at the site of incision, the base tied, and the organs removed. The Staffordshire knot, which is often so convenient, is un-

these cases, for the silk is apt to cut through the succulent ligaments and cause hæmorrhage. But the operation is safer looks; there is no need to seek out bleeding points and tie packing with sponges, and the subsequent use of a drainage- which may be safely withdrawn in twenty-four hours) being all s necessary. There is very little reaction, and complete tion to health is a matter of two or three weeks.

URE OF THE PERINÆUM: PERINEORRAPHY.

By A. WYNN WILLIAMS, M.D.,
Consulting-Physician to the Samaritan Hospital.

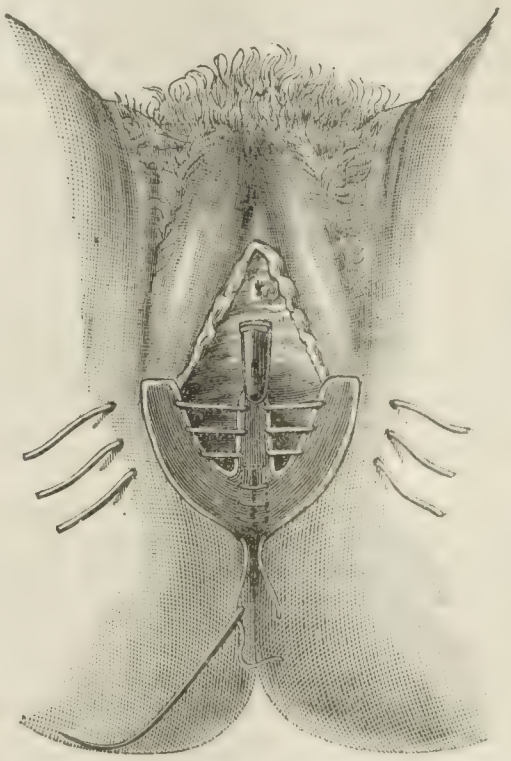
AL communications have appeared on the above subject of late pages of the JOURNAL, which, in my opinion, are somewhat xing. As it was I who introduced the operation as now per- at the Dorset House Branch of the Samaritan Hospital, I may per- e permitted to give a correct description of it. The operation st performed by me in the year 1881, then one of the acting l staff, and proved to be so successful that it was adopted by colleagues; and I believe I am correct in stating that, since o other operation for a like purpose has been performed in that tion. From the perusal of the various letters in the JOURNAL . Percy Boulton and others, it would appear that he (Dr. n) considers the operation introduced by me, and as now per- by him, to be identical with that of Dr. Langenbeck; others, have said that Mr. Pridgin Teale performed a similar operation, he late Sir James Simpson. At the most, these were only d cases. I maintain that there is a marked difference both in mmencement and in the completion of the operation, as per- by Dr. Langenbeck, etc., and myself. One gentlemen stated e had actually seen Dr. Emmet, of New York, perform a operation. When Dr. Emmet was in London, he very kindly to my house with a friend; and, after hearing my description xamining a drawing which I had had taken by the late Dr. acott, who assisted me in several private cases, Dr. Emmet e said that the operation was entirely different from his, and e had never seen a description of it. He explained his opera- s consisting in the removal of a semilunar portion of the floor vagina, and stitching the cut edges together. He, or his whose name I forget, made the remark, "How singular it is here should be so much jealousy amongst the members of the l profession in London!"

operation, as performed by myself (a description of which will nd in the JOURNAL, under the head of Displacements of the s, a paper read by me at the annual meeting of the British al Association at Liverpool), I will again attempt to describe; ill probably, with the aid of the woodcut, succeed in doing so.

patient is placed on her back, the knees and thighs flexed and eparate by means of an iron bar with knee-straps, and another the neck and buckled at both ends to the bar—I believe the ion of Dr. Routh. By this means, the patient is kept per- immovable. An anæsthetic having been administered, the being held aside by an assistant, a horizontal incision is on one side of the vulva, where the original fourchette com- d, nearly an inch in length. Thence a longitudinal incision the edge of the vulva is made, and the mucous membrane is care- lissected off to the full extent of the rupture. The same process n gone through on the opposite side, and the mucous membrane ected back and removed with a pair of scissors. The edges of the in the rectum are then vivified, care being taken at the same o lay bare the ends of the ruptured sphincter ani, if ruptured; l, it is often advisable to cut through the sphincter ani.

next step is to make two linear incisions on each side of the of the perinæum to the extent of an inch or more, as required. with much care, the fingers being in the rectum, a slight incision de in the ruptured and puckered end of the perineal body (ably bed by Dr. Savage). This body is then seized with a pair of s by the assistant, and put on the stretch; while its separation the floor of the perinæum is continued to the extent of the two l incisions. This is most easily done either by the handle of alpel, or even with the fingers.

cutting portion of the operation being now completed, the ite number of silkworm-gut sutures are inserted, and the fissure rectum closed; the ends of the sutures, cut short, being left in the rectum. The perineal body or flap is then put on the stretch, and, if possible, brought up as high as the first horizontal incisions in the vulva. A long curved needle, with handle, is then passed through the external integument, care being taken to bring the point of the needle through the vivified portion internally, then through and across the vivified portion of the extended perineal body, and out again in like manner on the opposite side; care being taken that the point of the needle should at no time pierce the mucous membrane. The first suture of strong silver wire is inserted a little above the anus. Two more will generally be found sufficient. The last suture is one of silkworm-gut, and is introduced by means of a long slightly curved needle. The point is first inserted through the vivified end of the sphincter ani on the left side; then through the perineal body, and back again through the sphincter ani on the right side, and for the present left loose. The silver wire sutures are then tightened and twisted; and, lastly, the assistant introduces his finger into the vagina, and presses the perineal body firmly against the rectum, whilst the ligature passed through the ends of the sphincter ani is tied. If necessary, one or more superficial gut sutures may be inserted between or above the wires. A pad of lint, dipped in a weak solution of iodine, is then applied, and retained in position by a T-bandage.



In what does this operation differ from that of Dr. Langenbeck? In the first place, Dr. Langenbeck commenced his operation by the vivisection of the "spur" to the extent of five lines, intended to form a flap to lie on or over the rupture in the perinæum, and fixed down by two or three sutures on each side; then sutures are inserted into the fissured rectum, and drawn tight.

In the operation as performed by myself, I commence at the anterior and upper portion of the vagina, carry the vivisection right down to the end of the fissure, separate the perineal body from the floor of the vagina, put it on the stretch until it reaches the whole length of the vivisected parts; pass the sutures through the labiæ and it, as also the sphincter ani. Thus the perineal body is fixed on the ruptured perinæum, and between the vivisected labia; thus not only "preventing the fluids from coming into contact with the newly united parts," but giving a solid and firm support to the whole vagina, and also, by shortening the floor of the vagina, tending to draw the uterus upwards.

In cases of prolapsus with or without rupture, this operation, or, rather, the stitching the perineal body between the labia, gives such a firm support, that I have never failed to retain the uterus within the vagina, either without or with some kind of pessary. An India rubber ring, made with a watch-spring, I prefer.

The late Dr. Marion Sims witnessed me operate on a patient for complete prolapsus, who had been unsuccessfully operated on twenty-four years previously. Dr. Sims appeared rather sceptical as to the utility of the operation, stating he had never seen a similar operation performed, and would like to know the result. With the assistance of a ring, she lives in comfort. As to Mr. Tait's operation, not

having witnessed it, I can say nothing, except that it appears to me that it does not replace the various parts in their original position, or give a sufficient support to the perinæum.

THE TREATMENT OF CHRONIC ULCERS.

By WILLIAM STUART LOW, L.R.C.P.(Edin.), etc., Yealand Conyers.

So much doubt has been expressed, diffidence entertained, and practitioners so frequently stigmatised as rash or timorous, according as they attempt or not to heal chronic ulcers, that a clearer understanding of their treatment and its effects is much to be desired. That there is no danger in the perfect cure of long standing and much discharging ulcerated surfaces, I maintain ; and I cite the following case in evidence.

R. S., male, aged 48, had suffered for twelve years from a very extensive ulceration of the right leg. During this time, a great variety of treatment had been tried—rest, bandaging, baths, and numerous internal medicines. I found the case one of extensive serpiginous ulcer, almost one mass of broken surface on each side of the knee, back of the calf, and popliteal surface, and even extending to the posterior surface of the thigh, at some points granulating, and at others sloughing, bleeding on the slightest injury. The surfaces were deep, and the edges raised and hard, with much surrounding induration. The discharge was very offensive, and this especially so from the grumous pus expressed from numerous sinuous channels ramifying about the limb.

My patient being in easy circumstances, I had full liberty as regards any expense I might incur, and determined to make one last endeavour. I attacked the whole surface by means of a thorough ablution with a lotion of the solution of bichloride of mercury, of the strength of one drachm to eight ounces of water ; this was practised daily, syringing most carefully every part of the wound, and with speedy benefit. The discharge rapidly lessened, the fœtor diminished, and the sloughing ceased. New granulations sprang up all over, although not without considerable loss of blood from recurrent attacks of hæmorrhage as the dead tissues separated and the feeble granulations gave way. The dressing consisted simply of lint wrung out in the bichloride lotion of similar strength, and applied directly to the wounds.

The second feature in the treatment that I am anxious to emphasise, is the utility of iodoform as a local anæsthetic. This was very marked, relieving the pain sorely complained of in many irritable spots, contributing greatly to the comfort of the patient, and facilitating exceedingly the daily dressing. The iodoform was used freely in the form of a fine powder, dusted upon the painful spots. It proved valuable also in quickly inducing healthy action in the indolent portions of the ulcer, and, as an antiseptic and deodorant, maintained a perfect sweetness of the discharges.

I observed, in the local employment of powdered iodoform, however, that its use must not be persisted in too long, or the healthy action obtained is soon undone, the granulations breaking down under its continued action, and much bloody discharge staining the dressings ; indeed, a blood-stained dressing, where iodoform had been applied, became the indication to cease its employment there. While preparing the wound for cicatrisation, by stimulating the surface, it rather retarded the growth of the cuticle, and simple dressing with bichloride lotion proved more efficacious. Lastly, its application to an inflamed surface should be studiously avoided, as it tends greatly to aggravate it.

The beneficial effect of these remedies is more remarkable, when I state that this patient rested his leg but little. Rest was a part of my prescription that he stoutly resisted, daily walking short distances, driving out, and going up-stairs. It was here that the third important point in the treatment proved invaluable ; the use of resilient pressure, in the form of a Martin's elastic bandage ; this was daily applied over the other dressings, from toes to thigh.

During the interval of six weeks since commencing these measures, the progress has been uninterrupted, and the cure is now complete ; and I trust such encouraging results will animate many to essay the successful therapeutics of chronic ulceration.

CHARBON IN FRENCH PORK.—Charbon has never been experimentally communicated to pigs. M. Villain, principal inspector of the Paris butcher-shops, seized some doubtful looking pork offered for sale at the Halles (Central Market). M. Nocard examined it, and detected bacteria of charbon in the blood. A rabbit and guinea-pig were injected with the blood, and both died.

PATHOLOGICAL MEMORANDA.

CAUSATION OF CARDIAC POLYPI OR THROMBI.

IN the epitomised version of my remarks upon a case of thrombus in left ventricle, at the January meeting of the Leeds and West Ri Medico-Chirurgical Society, there are two inaccuracies for whi hope I may disclaim responsibility. The chief mass of the thro was not "laid flat on the surface" of the apex of the ventricle was interlaced, as well as adherent, in the usual way. Certain tached masses were, however, adherent to even surfaces, and clearly not at all dependent for their position upon any interla "The interior of the chief (?) cardiac cavities" did not "co puriform fluid," but only the interior of the cyst-like softe thrombus in the left ventricle contained it.

I ventured to doubt the sufficiency of the ordinary theory of formation of cardiac polypi, inasmuch as while they are very their supposed cause (feeble or dilated ventricle) is very common. four cases examined by myself, obvious endo-myocarditis ex in three, with formation of cardiac aneurysm in two of them. another case (fifth), a mass nearly an inch in length, three-fourt an inch in breadth, and a quarter of an inch thick, had grown the auricular surface of the mitral valve, and projected into auricular cavity. This was of course merely an overgrown "ve tion." Apex-polypi or thrombi appear to me to originate in a si manner ; and their rarity seems due to the rarity of endocardi this position.

T. CHURTON, M.D.,
Physician to the Leeds Infirma

CLINICAL MEMORANDA.

MORBID SOMNOLENCE.

ON January 6th, 1886, about 1 P.M., a gentleman called upo asking me to go and see his "domestic," who, he said, had fail waken that morning, and was now fast asleep. All ordinary m had failed to rouse her. On going to the house I found a stout, f healthy girl, apparently about 18 years of age, sleeping, or appar sleeping, quite calmly. Her mistress told me that the evening l she had suffered from toothache, and that she might have take overdose of laudanum. She presented none of the symptoms of cotic poisoning. I examined the pupils, and found them markedly dilated. I then shook her, but with no effect. Upo slapping her cheeks, she put up her hands to cover her face began to weep, but other than that she showed no signs o coming awake. I, with some assistance, got her out of bed walked her up and down the floor, when, after a few turns back and forwards, she gradually opened her eyes, looked dazed, butsh came to herself. I ordered her a strong cup of coffee, and after a cold bath. I asked her to come to me in the evening, when sh me the following story. She is aged 15, a strong full-blooded co girl. Her family history is good. She herself had gone throug usual infantile ailments, but never had any illness of long dur She had not yet menstruated, and had never felt any indication She had always lived in the country, and had only come to town a couple of weeks ago. She complained of nothing ; indeed, a time she was speaking to me, she was not conscious of any ail and was quite at a loss to account for her excessive somno About a month ago she felt this extreme drowsiness coming ov but then thought nothing of it. I found that she had distinct thesia of the right side, and pain under the right breast, and ache ; she never had "fits" of any kind. She had never fel pain so severe as to complain of it, but she had noticed that sh not quite so handy with the right hand as with the left. There v ovarian pain.

On the morning of January 13th, I was again called to see h account of sound sleep. Her mistress had tried the somewhat and ready remedies of my former visit, but with no effect. Th remarkable feature of this second attack was that, though seen sound asleep, as soon as I spoke to her she cowered ; and, on ordered, in a peremptory tone, to walk about the room, she got bed, walked across the floor backwards and forwards, avoiding and tables, turning when I told her, and all the while in an ap sleep. I washed her face well with cold water, which gra wakened her. She told me afterwards that she heard my voice distinctly, but could not speak or open her eyes, and, when orde walk about, she felt compelled to obey me.

J. HUTCHISON, M.D., Shawlands, Glasg

THERAPEUTIC MEMORANDA.

URETHAN.

October, I have been using urethan in a variety of cases with factory results. I have used it in over fifty cases as a ive and hypnotic, and my experience of its action encourages me commend the drug to the readers of the BRITISH MEDICAL JOURNAL, ving that, in certain cases, it will prove of great value. The in which I have prescribed it were of the usual run of every day prac- where a sedative or hypnotic was required: general restlessness, lessness, neuralgia, catarrh, certain forms of skin-affections with irritation, also rheumatism and gout. Many of my patients some peculiarity of constitution which prevented the use of opiates e usual type; and it is in this special class that I think urethan prove of great value. One gentleman, who had suffered from nnia for weeks, and who cannot tolerate opium or chloral, took ains at bedtime with the most perfect result. He wrote to me and "The sleep caused was most pleasant and refreshing. I awoke out a headache, with appetite for breakfast, and what was equally able, there was no interruption to any of my functions." Similar mony has been given by the majority of patients, who have taken doses to produce sleep. In smaller doses, its action is less marked, it is decidedly calmative and agreeable, causing no unpleasant t, such as nausea, flatulence, constipation, or headache. It does affect the nerve-centres of circulation or respiration, but spends f on the cerebrum. It possesses, therefore, great advantages over older and valuable sedatives, which have certain evil influences, cially in exceptional cases. Given in gout and rheumatism in doses, alone or in combination, it has the great advantage over ohia of not interfering with the action of the bowels or kidneys; les, it is not unpleasant to the taste; the only objection to it is rice, although that has been reduced 50 per cent. since I gave my dose three months ago. A. S. MYRTLE, M.D., Harrogate.

SURGICAL MEMORANDA.

THE SKIN-INCISION IN HERNIOTOMY.

as often happened to me to be obliged to prolong the stay in bed of a iotomy case, for no other reason than that the cutaneous cicatrix been too tender to bear the pressure of a truss. Accordingly, I latterly incised the superficial structures at some distance ex- al to the ring (whether femoral or inguinal). A retractor easily s the skin-wound inwards. Another advantage of this is, that the nd is removed further away from the pubic region, and therefore e readily kept aseptic. To this end, I have also carried a drain- tube from the depth of the wound outwards through a special cture a couple of inches towards the iliac spine, away from the nd. The wound itself can then be completely closed with both ed and cutaneous sutures. Another object to be attained by this , is that of avoiding the fold of the groin. This, in fat people, is ply a kind of transverse gutter, which conducts freely from the ic region outwards, under the antiseptic dressings, towards the t site of the ordinary incision for femoral hernia. Moreover, a endicular incision in this place always tends to gape, and opens ely if the sutures yield before union has taken place. In such ents, the incision should be an oblique one, almost parallel with fold, at all events only approaching it towards its outer end.

ince writing the above, I have received the *Liverpool Medico-Chi- ical Journal* for January (1886). At p. 140, Mr. Rushton Parker eported to have said "that he made the incision in operations for ia as far away as possible from the penis and rectum. In in- al hernia, he made the opening directly over the abdominal ring."

C. B. KEETLEY, F.R.C.S.

OBSTETRIC MEMORANDA.

CHILDBIRTH DURING AN ATTACK OF SMALL-POX: INFANT NOT INFECTED.

. QUIRKE, writing in the JOURNAL of January 30th, is wrong thinking that a child born during a developed attack of small-pox the mother must necessarily be infected. I attended many years , in Gateshead, a woman who, during the height of a tolerably ere attack of confluent small-pox, gave birth to an infant perfectly nfected. The baby I vaccinated within a few hours successfully; both mother and child did well. The labour was difficult, and I believe instrumental, and the case certainly one of the most unpleasant that I was ever "privileged" to attend.

ROBERT J. BANNING, M.D., The Hall, Bushey.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ST. THOMAS'S HOSPITAL.

FIVE CASES OF AMPUTATION OF THE PENIS FOR EPITHELIOMA.

(Under the care of Sir WILLIAM MAC CORMAC.)

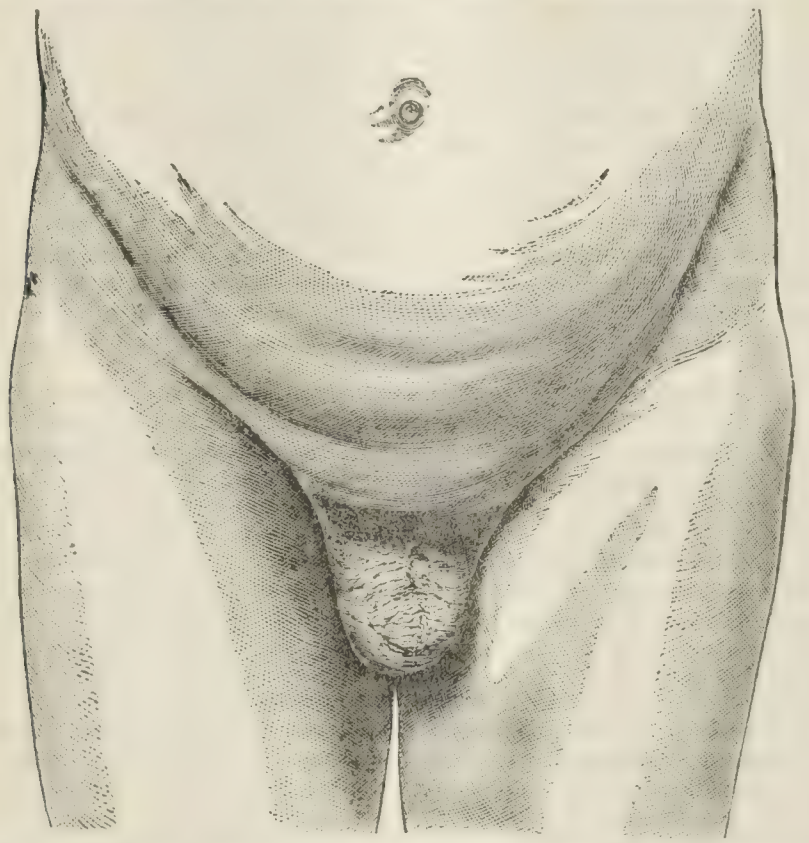
CASE I. (For the report of this case, we are indebted to Mr. R. R. WHISHAW.)—A labourer, aged 50, was admitted on December 27th, 1884. His family history was good, and he had not suffered from any previous illness. About a year before admission, a "blind boil" was noticed on the left side of the prepuce, near its attachment to the corona glandis. The prepuce could never be properly retracted. The growth increased in size for eight months, until it had invaded most of the organ between the glans and scrotum. It was attended with very severe pain, at times of a "maddening" character. The growth first broke down and ulcerated at a point near the base of the glans, and the corpora cavernosa were gradually, to a large extent, destroyed. Micturition was now performed, with pain and difficulty, at the root of the penis. On admission, he appeared a fairly nourished but rather spare man. A large, irregular, foul smelling sore occupied what was formerly the penis. The glans appeared healthy. The body of the penis was invaded up to half an inch from the scrotum, and more extensively on the dorsum than elsewhere; while, surrounding the root of the penis, the growth formed a thick border of infiltrated indurated tissue. The glands in the groin were matted together, much larger than normal, and surrounded by thickened tissue. There was a very offensive smell from the sore, to counteract which iodoform was ordered.

December 31st. Ether having been given, Sir William Mac Cormac performed the following operation. A circular incision was made round the root of the penis, going wide of the diseased tissues, and the skin was dissected up. It then became apparent that the disease extended throughout the penis towards the perinæum. A straight incision was therefore made through the septum of the scrotum, extending downwards in the middle line. The corpus spongiosum here was found unaffected by the growth. It was separated from the penis by dissection. The penis, having been now freed from its attachments as far back as possible, was removed by the knife close to its origin from the rami of the pubes and ischium. The urethra was cut fully three-quarters of an inch longer, and dissected freely away from its connections. It was now easy to bring the end of the urethra through a button-hole wound made in the perinæum, and attach its edges by numerous sutures to the skin. In order that the opening might be large, and without tendency to subsequent atresia, the anterior wall of the urethra was divided longitudinally for half an inch. The outlet was thus made very free, and has remained so in all the cases upon which Sir William Mac Cormac has thus operated. There was some hæmorrhage from small vessels, but, on the whole, very little bleeding. A large drainage-tube was introduced, and the scrotal wound brought together with sutures; the enlarged inguinal glands were also removed. Iodoform-powder, iodoform-gauze, and salicylic wool were used as a dressing. The patient bore the prolonged operation well. The following day, he felt fairly comfortable, had passed a good night, and the urine escaped through the perinæum without pain or discomfort. The temperature once rose to 100.4° Fahr., but soon afterwards became and continued normal.

February 17th. The wounds had entirely healed, with the exception of a small place over the pubes. The patient passed urine quite freely, and was in no pain. When going about, however, he was troubled by the descent of an old hernia on the left side, for which he had worn a truss for many years. He slept and ate well, felt very comfortable, and expressed complete satisfaction with the result of the operation. He was discharged on February 20th, 1885.

CASE II. (For the notes of this case we are indebted to Mr. GODFREY.)—T. B., aged 50, a clerk, was admitted on February 18th. Two of his brothers had died at the ages of 36 and 40, from phthisis,

but there was no history of cancer. When 19 years of age, he had gonorrhœa, and a sore on the penis, which was followed by symptoms of syphilis. He had had occasional difficulty in micturition, and had never been able to retract the prepuce. Eighteen months before admission, he was treated at Camberwell Infirmary for scrotal abscess, which was incised. Seven months before admission the prepuce became swollen and red; soon afterwards ulceration commenced, extending rapidly along the penis to the scrotum, where several separate points of ulceration formed. There had been considerable thin offensive discharge. Three weeks before admission, the glands in the groins were noticed to be enlarged. He thought that he had lost 2½ stones in weight, since the commencement of the ulceration. On admission, he looked fairly well. There was a brownish red mottling of the skin over his forehead. His hands were tremulous, but he said that he had not been drinking recently. Only about half of the body of the penis remained; the rest of the organ was occupied by a large cauliflower growth, and the glans was quite replaced by it. It extended on the left side to the scrotum, which was here involved, and, at the junction of the penis with the scrotum, the urine passed out through a deep sulcus; the scrotum below was invaded for an extent of 1½ inches, separate nodules could be felt in it, and the skin was thickened. The smell of the discharge was very offensive. In the right groin there was a scar from an old bubo, but the glands did not appear to be involved. In the left groin, however, the glands were enlarged and hard, and the skin over them was inflamed. He had not seen a medical man, because he was afraid of losing his situation. He had applied warm water, bathing the parts frequently.



February 21st. The pubes having been shaved, and ether administered, Sir William Mac Cormac made an elliptical incision around the base of the new growth, but well away from it; commencing about an inch above the root of the penis and ending below, in the mid line of the scrotum, nearly two inches below the lower limit of the growth. The tumour was then dissected out, and the corpora cavernosa followed up, separated from the corpus spongiosum and urethra, and then removed close to their attachments. The knife was then passed through the tissues in the middle line of the perinæum at the lower part of the scrotum. A button-hole was made, and to the opening thus formed the urethra was accurately sutured. A small outlying nodule of new growth was removed from the flap on the right side. The wound was washed out with solution of carbolic acid (1 in 20), dusted with iodoform, and sutured, drainage being provided for. A curved incision was then made over the glandular mass in the left groin, and it was removed; this was found deeply attached and adherent to the muscle. Very little blood was lost during the operation. The wound in the groin was closed in a similar manner to that in the scrotum, and both were dressed with pine-wool bags.

February 23rd. He had complained, on the previous day, of thirst, and the evening temperature rose to 102.4° Fahr. The wound was dressed, and was looking well; some pent up serum escaped from Since then he had felt quite easy, and had slept better than he done for some time. The urine had passed easily, with only sl scalding.

The wound subsequently gradually healed, but his recovery wa layed by an attack of erysipelas about the wound on April 7th. lasted three weeks, the evening temperature rising to 103° Fahr two occasions.

On May 5th, eleven days after the subsidence of the disease, he the hospital, much relieved. There were, however, some signs of currence of the growth near the operation-wound, but the pat declined further treatment. He passed urine, however, with ease comfort.

Case III. (For the following notes we are indebted to Mr. C man.)—James B., aged 38, a labourer, was admitted on February 2 1885. His family and personal history were good.

In April, 1884, in getting out of a wine-vat, he crushed the en the penis between the edge of the vat and his thigh; a slight quan of blood came from the urethra, and a small "blood-blister" appe on the upper surface of the prepuce. He has never been able to cover the glans. This condition of phimosis did not, however, in fere with micturition. The "blister" soon began to ulcerate; patient applied linseed-poultices, and later, by the advice of medical man, warm water dressings. There had been no pain.

On admission, he was a healthy looking man. Examination of penis showed an extensive ulcer involving almost the whole of glans as well as the body of the organ; the remains of the glans a portion of the prepuce covering it being attached by a narrow s at the base. The scrotum was not involved. The inguinal gla were swollen. The ulceration was of a cauliflower character; central portion being larger than the penis.

February 28th. The patient having been placed under ether, William Mac Cormac removed the growth, and the corpora caver down to their attachments, bringing the urethra out in the perina as in the previous cases. He then dissected out the diseased gla from each groin. There was but little hæmorrhage, the vessels b quickly secured with clamp forceps when divided. The wounds w washed with carbolic solution, sutured, drainage-tubes inserted, dressed with pine-wool bags under the spray. The temperatur the evening was 100° Fahr.

On March 3rd, the drainage-tubes were removed, but replaced March 4th. Some pus retained in the wound caused the tempera to rise to 103° Fahr. After the re-insertion of the drainage-tubes, temperature became normal, and continued so. The drainage-t were finally withdrawn on March 8th, the patient making a ra recovery.

March 18th. The wounds had perfectly healed, and all dressing given up. During the previous seven days, the dressing had b chlorinated soda lotion. The man said he enjoyed the greatest rel and passed urine with a degree of comfort for a long time unkn to him. He was discharged on March 21st, 1885.

Case IV. (Reported by Mr. Rawlinson.)—J. H., aged 46, a labou was admitted on April 30th. There was no family history of ma nant disease. He had suffered from gonorrhœa and sores five mon previous to admission. He was first treated by a private practitio and for the last month had been under treatment as an out-patien the hospital. When first seen in the out-patient department, he a slight gonorrhœal (?) discharge. The prepuce was phimosed, and condition had been always present as long as the patient recollect He stated that an abscess formed, which healed in three weeks, then the discharge practically ceased, but the phimosis continued. second abscess formed a little later. The body of the penis felt ceedingly hard, with slight irregularity of the surface beneath the teguments, chiefly towards the glans. Beneath the glans was a sin from which thin, whitish, semi-purulent discharge exuded. glands in the groin were enlarged. The man was thin and sallow, had recently lost much weight.

On May 2nd, the prepuce was divided, and the glans penis expos This was found to have two or three whitish, hard, cancerous nod on its dorsum, the largest about the size of a pea. Incision into of these proved it to be continuous with a dense whitish grow which extended into and infiltrated the glans, resembling epithelio on section. The hard, somewhat nodulated, condition of the pe was also more evident, and Sir William Mac Cormac amputated organ, separating the urethra, and attaching it below as in the ot cases. A similar dressing was also employed.

With the exception that on the night of May 16th the patien an attack of shivering, the temperature going up to 102° Fahr., swelling of the left testicle (which soon subsided), the case

ressed satisfactorily, the patient sleeping and taking food well. He was able to pass urine freely from the first, and the wounds healed rapidly by granulation. He expressed much thankfulness for the great improvement in his condition.

He was discharged on May 27th.

Case v. (Reported by Mr. Gooddy.)—W. F., aged 58, a labourer, was admitted on April 27th, 1885. There was no history of malignant disease in the family. He had had syphilis and gonorrhœa, and had been treated for stricture by gradual dilatation. He had been a heavy drinker. He had no phimosis. About three years before admission, he fell down the hold of a ship, and ruptured the frænum; this resulted in the formation of an ulcer, which never healed, and, about five months before admission, it began to spread rapidly. Soon afterwards, abscesses formed in the body of the penis, leaving fistulous tracks, through some of which urine was discharged. For five months, the parts were dressed with *lotio nigra*. He was first admitted suffering from erysipelas of the scrotum, thighs, and lower part of the abdomen, of a week's duration. The attack was not severe, and the patient was transferred to the general ward on May 18th. The penis was dusky red, swollen, and brawny. There were several sinuses in various parts of the organ. The lower part of the glans was destroyed by the ulceration, and the urethra laid open for three-quarters of an inch from the meatus. The skin of the scrotum and pubes was infiltrated. The glands in both groins were hard, enlarged, and fixed; there were scars of buboes in both groins.

May 23rd. Sir William Mac Cormac removed the remains of the infiltrated penis as far back as the triangular ligament, and completed the operation, as in the other cases, by transferring the urinary meatus to the perinæum. Numerous vessels required ligature.

May 26th. The patient had been delirious in the night, and complained of a good deal of pain. The wound was red, but not otherwise unsatisfactory; it had united to a considerable extent. Antiseptics were discontinued.

May 29th. The patient was weak. The wound was dressed with hot chlorinated soda lotion. Only the extremities of the wound had remained united, and there was a good deal of fœtid discharge.

June 6th. For the last few days, a slough had been separating from the deeper part of the wound. There was an abundant discharge.

On June 7th, the wound was granulating healthily, and on July 1st the wound was almost quite healed, the patient felt well, and insisted on leaving the hospital. He passed urine quite comfortably.

Remarks by Sir William Mac Cormac.—There was not the least doubt, as subsequent examination proved, that all these patients were suffering from severe and extensive epithelioma of the penis, which in some had almost wholly destroyed the organ. In four of them, persistent, probably congenital, phimosis was a marked condition; and in the fifth a chronic ulceration had existed near the frænum for nearly three years, showing, I think, the influence of local irritation on the causation of the disease. Three of the patients had suffered from syphilis. In none was there a family history of malignant disease.

These cases were all too far advanced for a satisfactory removal to take place after the ordinary method, in which the urethra is left in the usual situation, when, of course, on each occasion the patient urinates, the urine must flow over his scrotum and thighs. The transference of the meatus to the most dependent point in the perinæum proved an immense comfort. One of these men writes to say he was previously scarcely able to move about, had to give up work, and had rest neither night nor day. Now he says: "I am quite well, and at work again." Another wrote to me in much gratitude, and made a suggestion which obviates one great inconvenience attaching to the operation, that the trousers must be loosened, and urination performed in the sitting posture. He says: "I got a tin pipe like the spout of a teapot, that is to say, wide, and obliquely bevelled off at one end. This fits comfortably underneath between the legs, and there is not the slightest trouble to pass urine in the ordinary way in any of those places commonly used." He complained of having had to pay a penny previously for the convenience. A simple apparatus of vulcanite of a similar form could readily be made, which would allow the patient to urinate in the ordinary manner.

In all the cases, the spongy urethra was found involved to a much less extent than the cavernous bodies, and there was never any difficulty to obtain an ample length of the tube to turn downwards to the perinæum.

I believe Professor Thiersch, of Leipzig, first drew attention to this manner of dealing with extensive epithelioma of the penis. He presented a case of the kind to the Association of German Surgeons, at their meeting at Berlin in 1875.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

Friday, February 12th, 1886.

Thomas Bryant, F.R.C.S., President, in the Chair.

Three Cases of Universal Alopecia, with Remarks.—Dr. W. J. Tyson (Folkestone) described the cases. Case i.—P. G., aged 40, a labourer. The family and personal history were negative in their character. The cause of his trouble seemed to have been a money difficulty: he incurred a debt which he was unable to pay; for three and a-half months this preyed upon his mind, and at the end of this time the hair on his head began to come out, and was all gone in four days. In a day or so later the rest of his hair began to be shed, and in four days—or in ten days from the commencement of the first shedding—the whole of the hair of head, face, chest, body and limbs had entirely disappeared. At the present time, there was not a single hair to be seen anywhere. The hair was particularly thick and strong before the calamity; the colour was chestnut. He was a strong and active man. Case ii.—W. H., aged 44, a shoemaker. Seven years ago his hair began to come out, and in one fortnight had all completely disappeared. He had never had, he said, a hair appear since. There was no syphilitic history. The cause, he alleged, was that two or three days previous to the loss of hair he was sleeping at the top of the house when, in a sound sleep, he was suddenly awakened in a great fright by a tremendous clap of thunder. Simultaneously with the fall of his hair he lost the nails of his great toes and thumbs. The colour of his hair was lightest brown. He was a healthy and strong man. Case iii.—L. L., aged 21, a billiard-marker. In April, 1884, the hair began to come out in spots over the head, and in one month he had lost his hair over the whole of the body, except a few downy ones over the top of the scalp. To-day there were seen a few hairs at the back and side of the head. The colour of the hair was dark brown and very thick. There was no history of syphilis. He was a well built man. One month before his loss, he was thrown violently from his horse upon his head. Since the accident his memory had been defective at times. *Remarks.*—These cases were brought forward by Dr. Tyson as supporting the neurotic origin of the universal form of alopecia areata, and also to uphold the view that clinically there were two distinct classes of the disease commonly called alopecia areata. The report already given of the cases spoke for itself as regarded the origin. The characteristics of the class of case read this evening seemed to be the following. The affection began in the scalp, not necessarily in spots, and spread rapidly until the whole of the hair of the body was lost. It occurred in adults, but not always in young adults, as had been stated. Prognosis was not good, and seemed to become worse as age advanced. The starting point of the disease could often be traced to a neurotic cause. The above class of alopecia areata contrasted strongly with the class ordinarily met with. Here the characteristics were that the disease began in youth in scattered bald patches on the scalp, and was confined to this portion of the body. The prognosis was good, the complaint lasting seldom longer than a twelvemonth. No cause was discoverable.—The President remarked on the singular fact that three such cases should have occurred in the practice of a medical man in a small provincial town. He remembered, himself, to have seen, years ago, two sisters who received a sudden fright through witnessing the removal of a dead body from a canal; and, as a result, one was attacked by acute jaundice, recovery ensuing, while the other became the subject of universal alopecia, no improvement having taken place at the time of her death, four years later.—Dr. Stephen Mackenzie considered that the local and universal varieties of alopecia were of the same nature, and remarked on the failure of observers to verify the presence of a parasite as its producing cause, and which the late Dr. Tilbury Fox thought he had discovered. In Dr. Tyson's cases, parasitism was clearly negatived by the sudden appearance of the effect observed, for which an obvious cause was apparent. He (Dr. Mackenzie) had, the day preceding, met with three cases of alopecia occurring in a single family, which were exhibited at the commencement of the meeting to the Society. A short time since he met with an example of symmetrical morphœa in a young girl, in whom also alopecia existed. He thought it possible that there might be two forms of alopecia, one of parasitic origin, the other neurotic.—Dr. Tyson differed from Dr. Mackenzie's opinion that his cases were allied to ordinary local alopecia, which in adults was but rarely curable, and the gravity of the prognosis increased as age advanced. In young persons, recovery from partial alopecia often took place.

Hysterical Pyrexia.—Dr. Hale White began his account of this

affection by the history of a case that had been under his care. A girl, aged 18, was admitted into Guy's Hospital with pyrexia, pain in the abdomen, and diarrhœa, but the latter symptom was due to the abundant purgatives which had been given. Previously to admission, the pain had been referred to the right iliac region. On admission, on August 10th, it was referred to the left. Temperature, 104.6°. There were no physical signs, nor spots. August 11th: Morning temperature, 104.6°; evening, 105°. Headache and pain in the right iliac region. August 12th: Morning temperature, 102°; evening, 103.6°. August 13th: Morning temperature, 99.2°; evening, 102°. August 14th: Morning temperature, 98°; evening, 99.2°. From this time onwards, she continued to do well, and went out of the hospital. She was readmitted on September 9th. Her mother said she had returned to her work, but on the 8th was suddenly seized with pain in the left side. On admission, the face was flushed, skin hot and dry; there was frontal headache, but no physical signs anywhere, nor evidence of zymotic disease. She complained of pain and tenderness on the left side, midway between the left ribs and the crest of the ilium, but she never twice located the pain in the same place; thus, during the first day of admission, it was placed in the epigastrium, in the ileum, and in the renal region; in the splenic region, although she complained of great tenderness there, if her attention was engaged, she allowed the freest manipulation without wincing. At first, she protested that she could not sit up, and could not lie on the left side, but, in a few minutes, when her attention was distracted, she did both these. There were a few vaginal cells in the urine, and a trace of albumen, but not more than the pyrexia would explain. The abdomen was so retracted that it was impossible for there to have been any enlargement of any viscus and for it not to have been felt; peritonitis was also out of the question. Temperature, 103. September 10th, 2.45 P.M., she had a rigor; temperature, 105; at 10 P.M., 99. September 11th, 6 A.M., temperature, 98.6; 6 P.M., 104; September 12th, 6 P.M., temperature, 102; 10 P.M., 98.8. September 13th, the temperature was normal, at which point it remained till the patient's discharge. The author pointed out that the patient was undoubtedly hysterical, for the whole characteristics of the pain showed it to be subjective. The most careful examination quite failed to discover any physical cause for the pyrexia; nor, again, was there any evidence to show that it was due to a zymotic disease; not even typhoid fever would explain two such short, erratic, but severe attacks. If the temperature was due neither to inflammation nor a zymotic disease, it must have been due to direct affection of the nervous system; but there was no evidence that injury, growth, or inflammatory action affected the nervous system, therefore the affection of it must have been functional. Not only could the diagnosis be arrived at in this exclusive method, but the following features in the case were characteristic of hysteria: the erratic nature of the temperature, both diurnally and generally, the other hysterical symptoms, and the age and sex of the patient. It was pointed out that none of the patient's symptoms militated against the view that the pyrexia was hysterical. The cells in the urine were vaginal, the albumen and delirium were pyrexial, and rigors had been described in other cases of hysterical pyrexia. The reason why hysterical pyrexia was not more recognised was, because it was not sufficiently realised that functions over which the will had no control might be hysterically affected, and also that the temperature of the body was directly under the control of calorific nerves which proceeded from the cortex of the brain to the muscles, these nerves perpetually inhibiting the temperature of the body. Bearing these two facts in mind, there was no reason whatever that the thermogenetic actions of the body should not be perverted, nor was it more extraordinary than hysterical ischuria, vaso-motor paralysis, etc. A brief abstract was given of all the cases of hysterical pyrexia hitherto recorded, and from these it was found that the chief symptoms of this disease were (1) it always occurred in girls; (2) they were often otherwise hysterical; (3) they were always of an age at which hysteria was common; (4) ovarian pain and tenderness were often present; (5) rigors might be present; (6) other symptoms more or less connected with the temperature were often accompaniments of it—namely, delirium, rapid pulse, flushings, trace of albumen; but any one or all might be absent; (7) the characteristics of the temperature were its erratic behaviour, both diurnally and generally, and often in different parts of the body, quite unlike any known inflammation or fever, and also the occasional great height which it might attain.—Dr. W. H. DAY instanced the case of a hypochondriac woman, with temperature often rising to 104°, and pulse of 100, in whom pain over the left ovary and flatulent distension of abdomen, and a few slight flying pains in different parts, were the only symptoms observed to account for the pyrexia. After remaining in bed four weeks, she made a good recovery. There was no acute disease.—Dr. SAVAGE observed that in asylum practice it was exceptional to encounter any considerable increase of temperature in the patients under treatment; but he had often, within his own experience, noticed among hysterical women that, together with the typical retracted abdomen and the existence of morbid fancies and tastes, high temperature also coexisted. Recently he had seen a girl in whom the onset of mania was preceded by variable degrees of fever, the temperature being very irregular, high at night, low in the morning, etc. In some cases, the increased temperature, instead of falling on the development of maniacal symptoms, progressed to actual fever. He urged the necessity of carefully excluding lung-changes in accounting for the increased temperature present in neurotic patients.—Dr. GOODHART suggested that the term "neurotic pyrexia" would be preferable for application to those cases described by Dr. White as instances of hysterical pyrexia.—Dr. B. O'CONNOR instanced the case of a girl, aged 24, whose temperature rose at night to 101° or 102°, and in whom general dulness was revealed on percussion over the lungs. This disappeared in four days, and the girl quite recovered.—Dr. BRISTOWE referred to two cases published by him in *Brain*, in which symptoms pointing to probable extensive disease of the nervous system existed. *Post mortem* examination of the one which terminated fatally, however, gave only a negative result, nothing capable of accounting for the clinical history being discoverable at the necropsy. This patient had occasionally a temperature as high as 103°, daily variations from 97° to the higher figure having been noted in her case. In the second case, also, elevations of temperature occurred, but always as a precursor to a fit of an epileptic character, on the cessation of which the body-heat fell again. In this instance as well, Dr. Bristowe thought no structural changes would be found, *post mortem*, sufficient to explain the phenomena observed. He did not think that they could be explained on the ground that they were examples of hysteria.—Dr. WHITE explained that he had not employed the term "neurotic" rather than "hysterical" because the former word possessed too wide a meaning for his purpose. He was fully of opinion that many deaths occurred from functional disease in which no structural changes were discoverable, *post mortem*, to account for the fatal result.

Cases of Meningitis of Obscure Origin.—Dr. GOODHART read notes of these cases. A young lady, aged 18, of exceptionally good health, was much affected by an offensive smell in a house which she visited, and from that time became ill; the symptoms ultimately developed into well-marked cerebro-spinal meningitis with vomiting, paralysis of the recti muscles of the eyeballs, severe headache and stiffness of the neck, tremulousness of the muscle, and death on the nineteenth day. There was no necropsy. Two children, one of four years, the other one and a-half years, under the care of Mr. Atkins, of Plumstead, had measles, and on convalescing suffered a relapse, on which the temperature rose, the head became retracted, the mental condition apathetic or comatose, and rigid spasm affected the extremities at intervals; in the elder child there was often neuritis. Both cases recovered, the infant rapidly, the elder child after an illness of five or six weeks, and she remained permanently deaf. The next case was that of an infant, four months old, brought to the Evelina Hospital, for rapidly recurring convulsions and high temperature. It was admitted, and two ten-grain doses of bromide of potassium administered by enema. The convulsions ceased within twenty-four hours, but the child remained with retracted, oscillating temperature, double optic neuritis, and momentary left-sided spasm when touched. There was no evidence of any disease of the ear during life, but after death the middle ear contained pus on both sides; there was suppurative meningitis of the right half of the brain and thrombosis of the right lateral sinus. A widow lady, aged about 50, under the care of Dr. Herbert Evans, of Hampstead, after a time of much anxiety and fatigue in nursing a relation, began to feel cold and ill; intense headache and pain in the back and paralysis of the external recti of the eyeball supervened, and a moderate amount of optic neuritis. She was treated at first with free nourishment and tonics, but without relief, but she decidedly improved upon the iodide of potassium and perchloride of mercury, although only slowly; the illness lasted three or four months in all. Each of these cases raised several issues as regarded its origin. In the first, although it was impossible, in the absence of a necropsy, to exclude with certainty either tubercle or internal otitis, yet, on the whole, the fact seemed to favour a septic origin. The three children, although two recovered, might all of them have had internal otitis; but cerebro-spinal fever after measles, the view favoured by Mr. Atkins, was equally possible in the case of the two. The fatal case was advanced particularly to enforce the obscurity that existed during life in many

ases of otitis interna, and Dr. Goodhart wished particularly to gain he experience of aural surgeons in this matter; his own experience id not allow him to think that the disease was to be diagnosed uring life by the mere alterations in the appearance of the membrana ympani, nor yet that the *post mortem* appearance justified the belief hat incision of the membrane would be of any real service, but he ould be thankful to have any guidance which special experience could pply. It was also contended that these cases supported the opinion aintained for the first case, namely, that meningitis, idiopathic in a ense, was probably less grave than modern doctrines might seem to each, inasmuch as there was evidence to show that the risks of ear- ouble were chiefly dependent upon superadded external con- itions, and that, in all probability, the chronic ear-disease as the open door rather than the actual weapon by which the eningitis was inflicted. The last case still remained obscure.—r. BENHAM instanced the case of a child in whom, after a slight ttack of measles, tubercular meningitis apparently supervened, the ymptoms, however, passing off, and leaving the patient irritable for ome weeks, while health was slowly recovered.—Dr. DAY quoted the ase of a child seen by him fifteen years ago, in conjunction with Dr. . West. It was an example of meningitis in an infant two years old, which the temperature never exceeded 99°. Recovery ensued, but, s had been prophesied by Dr. West, the child was ill-developed, both hysically and mentally. During the attack of meningeal inflamma- ion, the use of one side was lost, and the head became enlarged.—Dr. RISTOWE considered that instances of recovery after simple mening- is were by no means rare, and he instanced cases in point from both ospital and private practice. He doubted whether, as Dr. Day in- sted, otitis caused meningitis. He rather would prefer to attribute he two diseases to the same common cause, acting simultaneously n ear and brain. Dr. Bristowe referred to a case of recovery rom tubercular meningitis occurring in a girl, suffering from tuber- ular peritonitis; on development of the head-symptoms, those asso- iated with the peritoneal disease disappeared. After recovery, the irl always remained subject to forgetfulness.—Dr. C. WEST regarded r. Goodhart's cases as most probably examples of cerebro-spinal eningitis; and he (Dr. West) was almost certain he had seen such ases develop amidst unhygienic surroundings, as well as following uptive fevers. He was quite of opinion that now and then tuber- ular cases might end in recovery. It was necessary to distinguish etween cases of simple meningitis and those examples of the tuber- ular variety, in which it was only towards the end of the case that he temperature rose above 99°. He agreed with Dr. Bristowe's marks as to the influence of otitis, and its significance.—Dr. SID- EY PHILLIPS mentioned that spinal meningitis following measles had een observed in the case of a policeman, a patient in the London ever Hospital.—Mr. GODLEE said that, as a result of large *post ortem* experience, he found that the middle ear in children was lmost constantly filled with muco-pus. What was the physiological ondition in such subjects?—Dr. GOODHART replied that he was horoughly familiar with the condition mentioned by Mr. Godlee; but he state of the ear in his case was very different; it was full of thick us. He was convinced that in some cases pus spread from ear to rain; but he endorsed the general statements made as to this con- ection. He hesitated to believe that, simply because a disease dis- ppeared, therefore it was not meningitis.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 16TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Exhibition of Cerebral Tumours.—In continuance of the exhibition f cerebral tumours, commenced at the previous meeting, Dr. C. E. EEVOR showed the following specimens. 1. A psammoma growing om the upper surface of the cerebellum, in the middle line; it grew orward, flattening the corpora quadrigemina, and compressing the ight optic thalamus, the right crus cerebri, and the right superior erebellar peduncle. The patient was a boy, aged 2 years. The sym- toms were left hemiplegia, staggering gait, fixation of the eyes, ex- ept for inward movements, immovable pupils, double optic neuritis, eadache, vomiting, and priapism. 2. Two tumours, one on each side f the medulla; that on the left side was of the size of an hen's egg; it ompressed and absorbed the under surface of the left lobe of the cere- ellum, pressed on the left side of the pons Varolii, and the fifth, seventh, ighth, and ninth nerves; that on the right side occupied the angle ormed by the medulla, pons, and flocculus; it was of the size of a hazel ut, and pressed on the seventh and eighth nerves on that side. The atient, a man, aged 40, was unable to stand or walk alone he was stone-deaf, and quite blind, having had double optic neuritis. 3. A large glioma of the right side of the pons and medulla, producing conjugate deviation of the eyes to the left and right facial paralysis; the patient was a boy, aged about 12 years. 4. A tubercular growth of the right half of the pons and medulla, producing left hemiplegia, complete facial paralysis on the right side, and conjugate deviation of the eyes to the left.—In reply to Dr. DAY, Dr. BEEVOR said that, in the case where a tumour was found occupying both sides of the medulla, symptoms had been present for three or four years.—Dr. GEORGE OGILVIE showed a tumour of the right hemisphere of the cerebellum, taken from a woman aged 21. The case has been published in *Brain*, part xxxi. The principal symptoms were blindness, deafness on the right side, vertigo, staggering to the right, vomiting preceded by occipital headache, and followed by unconsciousness, very feeble pulse, coldness of the legs, and atrophy of both optic discs; there was no inco-ordination. The tumour, which was tubercular, had a cartilaginous appearance, and was of the size of a hen's egg; it had grown from the dura mater of the right side of the posterior fossa. He also showed a large tumour of the left optic thalamus, which occupied the posterior half of the left lateral ventricle. The patient was a married woman, aged 39. The symptoms were severe persistent frontal headache, noises in the ear, blindness, vomiting, giddiness, and a tendency to fall backwards and to the left. She was partially demented, and sank into a state of complete mental hebetude, varied by occasional maniacal attacks. Atrophy of the optic discs, loss of knee-jerks, and further maniacal attacks preceded death, which was due to double pneumonia. The tumour involved the posterior two-thirds of the left optic thalamus; the consistence was soft, and hæmorrhages were present in the substance of the growth.—Dr. HALE WHITE showed a series of specimens to illustrate the condition of skull met with in certain cases of tumour of the brain. The bones became soft and light, very thin, transparent, and, when held up to the light, showing in the recent condition the vessels a beautiful arborescent network. Any bone in the skull might be altered in this manner, but the change, if it existed, was always found in the bones of the vertex, and, in extreme cases, in those of the base also; thus, in one of the cases shown, the petrous bone was affected, and the tympanum laid open. However thin the bone might be, it remained quite hard. Sometimes the thinning was local, so that here and there small holes were produced. The interior of the skull was roughened like sand-paper. He attributed this condition of bone to the increased pressure within the cranial cavity, due either to the growth of the tumour, or to the increase of pressure from ventricular distension. As a rule, when there was much thinning of the bones, the tumour was either very large, or the ventricular distension was very great. This condition was rare in young children, in whom separation of the bones readily occurred. There was never any thinning or absorption of the membranes. Occasionally the pressure seemed to set up some inflammatory action in the dura mater, which might be seen to be covered with fine granulations.—The PRESIDENT asked how long the patients in these cases had been suffering from symptoms of tumour; whether the thinning was due to the direct pressure of the tumours, or to the general rise of tension within the cranium; and whether the bones of the skulls were without doubt thinner than natural.—Dr. HALE WHITE replied that, in the case where the skull was thinnest, the history showed that the patient had been under treatment for considerable periods at three different London hospitals. In reply to the third question, he said that the skulls referred to were preserved by Dr. Wilks and Dr. Moxon as illustrating the early stage of this thinning. In no one of the cases had the tumour implicated the skull directly, and the thinning must therefore have been due to general rise of pressure within the skull.—Dr. NORMAN DALTON showed a specimen of tumour of the floor of the fourth ventricle.—The PRESIDENT announced that a committee, consisting of Drs. Beevor, Hadden, and Ormerod, and Mr. Shattock, had been appointed to report upon the specimens of cerebral tumour exhibited, and to tabulate the facts with regard to their nature and seat, and the symptoms to which they had given rise.

Cancer of Body of Stomach.—Dr. R. E. CARRINGTON showed an interesting specimen of infiltrating carcinoma of the stomach, observed in a man aged 57. There was no family history of cancer. The first symptom was a profuse attack of hæmatemesis, which occurred ten months before death. Soon after the hæmatemesis, vomiting after food became a marked symptom. When admitted to Guy's Hospital, he was extremely emaciated, and very feeble, and there was marked ascites; the fluid drawn off was clear, of a greenish tinge, and not blood-stained. At the necropsy, it was seen that the walls of the œsophagus were hypertrophied, but the œsophageal and the pyloric

orifices were quite healthy. The walls of the stomach were greatly thickened over an area measuring six inches in one direction by three inches in the other. The mucous surface was not ulcerated. The liver was of about two-thirds of the normal size, soft and flabby, with wrinkled capsule; the lobules were well marked, and the organ contained no secondary growths; a few nodules in the mesentery were the only secondary growths found. There was no ulceration of the growth in the stomach. The liver was infiltrated by a small-celled growth. In the stomach, at one point on the surface, the growth was distinctly alveolar, but an universal infiltration of the walls was the most striking feature. The condition of the stomach, which did not collapse on removal, was very remarkable. No obvious cause could be suggested for the copious ascites.—Dr. H. SAINSBURY inquired whether vomiting continued to the end of the case, as it seemed difficult to understand how a stomach in such a condition could contract.—Mr. BUTLIN said that, in a specimen in the Museum of the Royal College of Surgeons, a very similar general infiltration of the walls of the stomach without ulceration was shown; the infiltration was stated to be due to scirrhous carcinoma. In the same Museum was an example of scirrhous disease of the œsophagus; there was the same uniform infiltration without ulceration. Some years ago, he had shown to the Society a specimen of scirrhous carcinoma of the bladder without ulceration, remarkable for this same uniform infiltration. He suggested that carcinoma beginning in a hollow viscus commonly had this character.—The PRESIDENT recalled a similar condition of the stomach which had come under his notice.—Dr. CARRINGTON said that vomiting continued to the end of the case.

Cylindrical Cancer of the Humerus.—Mr. J. HUTCHINSON, jun., showed a specimen of cylindrical cancer of the humerus, observed in a woman, aged 50, upon whom Dr. Tyler Smith had performed ovariotomy eighteen years earlier. The humerus was amputated at the shoulder-joint. The patient subsequently suffered from attacks of abdominal pain, and died six months after the operation, with, as was believed, though no necropsy could be held, an abdominal tumour. The tumour of the humerus had started from the medulla. It was a hard white growth, and had probably existed for five months. In the central parts the tumour consisted of regular cylinders, lined by one or more layers of cubical or cylindrical cells. The structure was not cylindroma, and the tumour was probably secondary to a primary tumour, possibly of the alimentary tract, though there were symptoms of intestinal obstruction. He referred, in illustration, to a peculiar case of hepatic tumour, under the care of Dr. Sutton. The liver contained, in various parts, tubules and cysts, which were probably secondary growths, developed from a small primary nodule in the pylorus; the lungs contained many small growths. In conclusion, he expressed the opinion that the case of cylindrical cancer of the bone might be best classed with the case described by Mr. Henry Morris, in the *Transactions*, vol. xxxi, in which the primary growth was in the thyroid gland, and numerous secondary growths occurred in the bones.—Mr. BUTLIN, referring to the occurrence of cylindrical-celled carcinoma in the long bones, observed that it was often assumed that a primary tumour must have existed somewhere, and had been overlooked; but the comparative frequency with which such tumours occurred in the bone, suggested that there might be some other explanation.—Mr. R. W. PARKER said that he had been much struck by the close resemblance the microscopic appearance in Mr. Hutchinson's case bore to those seen in a tumour he had recently examined, a cylindrical-celled carcinoma, removed by ovariotomy, by Mr. Knowsley Thornton, and was inclined to believe that the growths in the bone were, perhaps, secondary to a similar tumour removed at the operation performed by Dr. Tyler Smith.—Mr. J. B. SUTTON thought an epithelial tumour of the middle of the bone was practically incomprehensible.

Syphilitic Hepatitis and Pneumonia.—Specimens of syphilitic hepatitis and pneumonia from an infant, the subject of congenital syphilis, were shown by Mr. SYMONDS. The liver was enlarged, firm, and of an uniform pinkish-grey colour. The whole organ was uniformly infiltrated with a fibro-cellular growth compressing the liver-cells. The resemblance to hypertrophic cirrhosis was pointed out, though the absence of duct-formations was a point of difference. The lung contained a solid grey mass of interstitial pneumonia. The alveoli were compressed and full of catarrhal products, and the epithelial cells were large and prominent.—Mr. VICTOR HORSLEY had met with three examples of this condition, which he did not consider rare.—Dr. ANGEL MONEY had seen a similar condition in four cases he had examined after death.

Dermoid Cyst of Tongue.—Mr. STEPHEN PAGET showed microscopic specimens of a dermoid cyst which Mr. Butlin had dissected out from under the tongue of a girl aged 5. He referred to Mr. Sutton's observations with regard to the connection of dermoid cysts with obsolete ducts. In the tongue of the embryo, such a channel existed between and beneath the two halves of the tongue. This duct might persist. If its upper part be not completely obliterated, it might in some cases become the starting-point of a dermoid cyst under the tongue. He referred to the cases of sublingual dermoid cysts, collected by Mr. A. E. Barker, in the *Transactions of the Clinical Society*, and stated that the specimen now shown was remarkable on account of the presence of granular black pigment in the rete Malpighii, and some hypertrophy of the epithelium forming warty growths in places.—Mr. J. BLAND SUTTON referred again to the connection between teratoid tumours and obsolete ducts, and pointed out that the tendency of dermoid cysts to occur under the tongue was a confirmation of the theory he advanced.—The PRESIDENT inquired whether the tumour occurred exactly in the situation required by the hypothesis.—Mr. PAGET replied in the affirmative.—Mr. HORSLEY said that in Mr. Barker's case the tumour was situated in the middle line, between and beneath the genio-hyoid muscles.—Mr. BUTLIN said that the cysts occurred in two situations, in front of and beneath the genio-hyoid muscles, and always in the middle line.

Epithelial Tumour of Skin.—Mr. CLUTTON exhibited a specimen of epithelial tumour which he had removed from a woman, aged 60. She had noticed a tumour near the anus for two or three years; it had only been painful for a short time. The tumour was incised under the impression that it was an abscess; fluid resembling pus escaped, but the tumour subsequently increased. The tumour, which was not connected with the mucous membrane, was excised. To the naked eye, it appeared as though there had been a central cystic cavity, which had been subsequently filled with new growth. The cut surface, examined with a lens, showed a number of small globular cysts scattered all over the solid parts of the tumour. Microscopic sections showed that the solid masses were epithelial, and that the small globular cysts had resulted from their mucoid degeneration. The suggestion that the tumour had originated from epithelial ingrowth from the skin was illustrated by drawings. Each column was covered externally by a layer of columnar epithelial cells, and contained, internally, spheroidal cells, but no lumen. In the more advanced part of the growth, a little below the skin, it had undergone mucoid degeneration, a condition which might possibly be explained by its proximity to the mucous membrane of the rectum. The budlike processes from the rete Malpighii were not unlike those seen in the early stage of rodent ulcer.

Aneurysm of Aorta and Aortic Valves.—Dr. S. WEST showed a series of specimens of aneurysms of the aortic valves, and of the sinus of Valsalva. The rupture of aneurysms of the aortic valve had not, in any of the cases, given rise to any marked symptoms. In one of the cases of aneurysms of the sinus of Valsalva, the cavity had extended into the substance of the heart, and the aneurysm had ruptured into the right ventricle. The patient, a man, aged 30, had been in bad health for several years, but had only been taken ill five days before his death.

Intussusception.—Mr. D'ARCY POWER showed a specimen from the practice of Dr. Emmerson, of Biggleswade, in which the intestine was intussuscepted at two points. The one intussusception had occurred at the ileo-cæcal valve, the second in the transverse colon in the reverse direction, the upper part ensheathing the lower or rectal portion. In both cases the intestines were glued together by recent lymph, but in the upper only was the invaginated intestine deeply congested, and almost gangrenous. The occurrence of intussusception in the reverse direction appeared to be an extremely rare event; but in two other recorded cases of multiple intussusception the second intussusception was in both instances in the reverse direction.—The PRESIDENT observed that the existence of intussusception in the retrograde direction appeared to prove that reverse peristalsis (denied by many writers) did occur.

Card-Specimens.—Dr. S. WEST: Abscess in Gall-Bladder, with Pus in Portal Veins.—Dr. HADDEN: 1. Intestine in Lymphadenoma. 2. Malignant Disease of both Suprarenal Bodies, secondary to Carcinoma of Stomach.—Dr. TURNER: 1. Syphilitic Ulceration of Trachea opening into Superior Vena Cava. 2. Conjoined Kidneys and Unicornate Uterus.—Mr. G. POLAND: 1. Stump after Amputation at Knee-joint. 2. Dislocation of Knee-joint.—Mr. E. H. FENWICK: Atresia (? congenital) of Orifice of Ureter; Cystic Kidney.—Dr. HAIG: 1. Large Intrapericardial Aneurysm of Aorta. 2. Intussusception in a Child aged 4 months.

MEDICAL MAGISTRATE.—Dr. David H. Charles, of Cookstown, co. Tyrone, Ireland, has been placed on the magistracy for co. Tyrone.

MEDICAL SOCIETY OF LONDON.

CLINICAL EVENING: MONDAY, FEBRUARY 15TH, 1886.

W. M. ORD, M.D., F.R.C.P., President, in the Chair.

Case of Dystrophy of the Thumb-Joints.—Dr. MAGUIRE showed a patient, a young woman, who had lost the use to a great extent of the muscles of the thumbs in both hands, accompanied by grating, etc., in the metacarpo-phalangeal joints of those digits. She had never suffered from acute or chronic rheumatism, and the only other symptoms complained of were occasional headache, and pains of a vague character in the lower limbs. There had been no uterine troubles. All varieties of treatment had been tried, including the use of splints, without any manifest improvement.—Mr. ADAMS thought that the affection was probably not neurotic, inasmuch as there was little or no wasting; and advocated treatment by rest.—The PRESIDENT (Dr. Ord) said that this class of cases had interested him very much. His own opinion had been that this peculiar condition was caused, not so much by direct nervous trouble as by irritation reflected from some part, such as the genital system.

Cases of Pityriasis Circinata and Tuberculated Leprosy.—Dr. RADCLIFFE CROCKER presented these two cases. The former occurred in a middle-aged man, and was particularly well marked on the lower part of the chest and abdomen. Dr. Vidal had described it as due to a bacterium; but in reality the organism found was a micrococcus, and was probably only incidentally present. Dr. Stephen Mackenzie and Dr. Colcott Fox thought it was a form of psoriasis. The case of leprosy was in a boy aged 15, born on the sea-coast in the West Indies, of English parents. The lad came to England to school (in Devonshire) in 1882, and it was only a year later that the first definite symptoms followed the supervention of a febrile attack. The disease was well marked on the face, hands, and feet; and the nails were much damaged. Now and then a fresh crop of tubercles was ushered in by a febrile attack.—Mr. SPENCER WATSON quoted a similar case which had come under his notice, and where treatment had been of no use.

Case of Excision of the Elbow after Operation, followed by Tubercular Testis.—Mr. FRANCIS MASON and Mr. HURRY FENWICK showed a young man, on whom excision of the elbow had been performed two years ago, for strumous disease of the joint. The operation had been very successful, free movement remaining. The necessity of removing the periosteum, as well as the bone, was insisted on. Some time after the operation, a hard mass formed in one testicle, and it was suggested that this resulted from the absorption of some of the caseous matter at the time of the operation. To this view, however, exception was taken.

Constriction of Leg by Cicatricial Tissue.—Mr. JOHN H. MORGAN showed a man, aged 38, whose left leg was constricted just above the knee, by a band of cicatricial tissue of congenital origin. As a result, the limb below that point had suffered in its nutrition, and a perforating ulcer had formed on the ball of the great toe.

New Instruments for the Removal of Nasal Polypi.—Mr. SPENCER WATSON showed a variety of instruments which he had designed, or modified, to facilitate the removal of nasal polypi.

OBSTETRICAL SOCIETY OF LONDON.

ANNUAL MEETING: WEDNESDAY, FEBRUARY 3RD, 1886.

J. B. POTTER, M.D., F.R.C.P., President, in the Chair.

Specimens.—The following specimens were shown: 1. Uterus showing a dilated cavity: Dr. W. GRIFFITH.—2. Sarcoma of Uterus: Dr. W. GRIFFITH.—3. Papilloma of Ovary: Mr. THORNTON.

Removal of both Ovaries during Pregnancy.—Mr. KNOWSLEY THORNTON described this case. M. W., married, aged 22, in the third month of pregnancy, was known to be large twelve months before marriage. She was now large beyond the size of pregnancy, and had a large fluctuating tumour in the abdomen, which was growing fast. She had had several attacks of pain in the abdomen, with rise of temperature, sickness, and faintness. The diagnosis was ovarian tumour, complicated by pregnancy. Ovariotomy was performed on February 4th, 1885. Dermoid tumours of both ovaries were removed. Rapid and uninterrupted recovery followed. Premature delivery took place at the eighth month. The labour was uncomplicated. The lochia were normal. The child was healthy, and there was plenty of milk to nurse it. On examination, the uterus was found to be atrophic. The patient suffered from flushes, chills, etc., just as in an artificial menopause brought on by operation. The author made remarks on the physiological and pathological problems which this case suggested.—Dr. JOHN WILLIAMS said that, in a note read before the Society in 1884, he described a case of involution of the puerperal uterus in the absence of the ovaries. In that case the left ovary had been removed some years previously, and the right was removed soon after labour set in. The course of the process of involution might have been affected directly by the interference of the operation in his case; but in Mr. Thornton's such could not have occurred, for the operation was performed months before labour set in.—Dr. ROUTH remarked that the atrophy of the uterus could not impede lactation, and quoted Dr. Livingstone, who stated that the wives of African kings were not allowed to suckle their own children, as it was thought derogatory. The child was given to the grandmother, generally an old woman, to whose mammæ and pudenda certain plants were applied, and the child was put to her breast, with the result that she was able to suckle the child. He also alluded to well authenticated cases in which men had suckled. He objected to the conclusion that menstruation always depended upon ovulation; this question he considered undecided, and facts were accumulating to show that menstruation had really very little to do with ovulation.—Dr. MATTHEWS DUNCAN regarded tapping as the best treatment in cases of simple parovarian cyst. It involved less danger than extirpation, and was often successful. The extirpation of small papillomatous ovaries involved many difficulties. He did not believe any operation could cure, where malignant disease had extended to several different parts of the peritoneum. He also reminded the Society that Dr. Tyler Smith had supported the view that the commencement of labour was a function of the ovaries. This view was now rendered almost untenable by Mr. Thornton's case. He had no doubt whatever that the ovaries were indissolubly connected with menstruation.

ANNUAL MEETING.—The Treasurer's report was adopted, on the motion of Dr. PLAYFAIR, seconded by Dr. CARTER; as were also the report of the Honorary Librarian, on the motion of Dr. GODSON, seconded by Dr. HORROCKS, and the report of the Chairman of the Midwifery Board, with a vote of thanks, on the motion of Dr. MATTHEWS DUNCAN, seconded by Dr. MALINS, and supported by Dr. GRAILY HEWITT. The scrutineers (Drs. THOMAS and LEWERS) declared the list of officers and council, proposed by the Council, adopted. The PRESIDENT delivered the annual address, for which a vote of thanks was proposed by Dr. GRAILY HEWITT, seconded by Dr. WEST. A vote of thanks to the retiring officers (Dr. HERMAN and Mr. THORNTON) was proposed by Dr. GERVIS, seconded by Dr. WATT BLACK, and one to the retiring Vice-Presidents and other retiring members of council, by Dr. ROUTH, seconded by Dr. M. DUNCAN.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 4TH, 1886.

T. S. BYASS, M.D., President, in the Chair.

Excision of the Elbow-Joint.—Dr. UHTHOFF showed, for Mr. Willoughby Furner, a youth aged 16, in whom the latter had resected the elbow six years before, removing about an inch and a half of the three bones. There was free motion in every direction, and a large bony process resembling the olecranon had formed at the end of the ulna. The arm was only shorter and thinner than the normal one.

Heart from a Case of Cyanosis.—Dr. MACKEY showed the heart from a cyanotic boy who had been brought for examination at a previous meeting (BRITISH MEDICAL JOURNAL, October 11th, 1884). It was then presumed that the loud systolic murmur depended on stenosed pulmonary artery; and the valves of that vessel were now found agglutinated, forming a cone-shaped membrane, with a central orifice just admitting a probe. The right ventricle and auricle were much hypertrophied, and the foramen ovale was patent. The heart weighed eight ounces.

Alopecia Areata.—Dr. MACKEY brought forward a girl with alopecia areata in eight separate patches. The interest of the case lay in the fact that the child's father and aunt were hairless, having been attacked years before in the same way; and also in the treatment by jaborandi both locally and internally. Down was growing on the patches, but very slowly; and no remarkable benefit could be traced to the drug, though it was credited with a tonic action.

Masked Heart-Disease.—Dr. W. A. HOLLIS read a paper on this subject, referring to, 1, cases in which the conventional signs were absent; 2, cases where the murmurs, etc., pointed to lesions other than those really present; 3, cases when the signs were more or less masked by urgent symptoms elsewhere. Two or more of such conditions might concur to mislead. Hypertrophy of the heart was sometimes not evident, the organ burying itself in the hollow of the lung, especially in cases with cerebral hæmorrhage (Fagge). Fibroma and aneurysm of the heart, fatty degeneration, and adherent pericardium,

were also often obscure in symptoms. A case of the last named was described, with orthopnœa, enlarged area of dulness, systolic apex-*bruit*, and clanging sound over the aortic valves. After death, the pericardium was found firmly adherent at the front and side. The heart weighed 30 ounces; it was dilated and hypertrophied, but the valves, though thickened, were apparently competent. Dr. Hollis thought (contrary to Dr. Balfour's opinion) that hypertrophy in this case resulted from adhesion of the pericardium, rather than from valve-disease, though myocarditis might have had some share in its first stage. In another case, after a few days of increased area of cardiac dulness, and one or two days of friction-sound, the only remaining sign was a systolic murmur; but, after death, the inner surface of the pericardium was found coated with soft lymph forming adhesions, and there were only a few small vegetations on the edges of the valves. Two cases of "button-hole" mitral valve were also described, in which there was no *bruit*, only rapid irregular action, with signs of dilatation. Extreme weakness possibly modified the physical signs. Death occurred from other causes. Dyspnœa was the only symptom common to all three cases, and was not to be traced to engorgement of the lung only. Reasoning from the fact that "the capacities of hollow spheres vary directly on the cubes of their inner radii," Dr. Hollis pointed out that the amount of blood contained in a dilated ventricle was very much more than in a normal one, and was probably not all ejected at each systole; hence the organ itself would be engorged, and the lungs might be anæmic, as found, in fact, in two of the above cases.—Dr. WHITTLE referred to the difficulty of diagnosis between pericarditic sounds and those of mitral disease, and related a case mainly of alcoholism in which no murmurs were detected, but, on sudden death six months later, mitral stenosis was found.—Dr. UHTHOFF also referred to a case of "button-hole mitral valve" under observation at Guy's Hospital, without definite signs before death; and remarked that hypertrophy after inflammation was more probably sequential to myocarditis than to adherent pericardium.

Dyspnœa as a Diagnostic Fact.—Dr. CORFE read a paper on this subject. After remarking on the different facial expression in nervous and febrile and true thoracic forms, he distinguished the latter into cardiac and pulmonary, and considered that for diagnosis more attention should be given to the expression of face and movements of respiration rather than only to auscultation and percussion. He also pointed out that pulmonary dyspnœa (that is, from lung-disorder) was always aggravated by exertion, whilst cardiac dyspnœa might occur when the subject of it was quiet, or even asleep. The latter orm was connected, in the writer's opinion, generally with a damaged mitral valve, "obstructing the inlet to the systemic heart, and supplying it only in a penurious manner." Dr. Corfe explained the more frequent occurrence of paroxysms of cardiac dyspnœa between 12 and 3 A.M., partly by alterations in atmospheric pressure caused by "aerial tides."

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

PATHOLOGICAL AND CLINICAL SECTION.

JANUARY 29TH, 1886.

H. R. KER, F.R.C.S.Ed., Chairman of the Section, in the Chair.

Bacillus Anthracis and Splenic Fever.—Dr. T. STACEY WILSON showed some microscopic specimens of the bacillus anthracis, taken from the heart and kidney of a man who died of splenic fever some time ago at Edinburgh. The illness proved fatal in forty-eight hours, owing to rupture of the heart from the growth of the micro-organism in its walls.

Primary Sarcoma of the Left Pleura.—Dr. STACEY WILSON showed this specimen. The growth involved both parietal and visceral layers of the pleura, and spread through to the pericardium and peritoneum. It also infiltrated the lung to a great extent, but the new growth seemed to be confined to the peribronchial tissue, and extended even to the finer ramifications of the bronchi. The patient was admitted to the General Hospital for pleurisy with effusion, and died in two months with signs and symptoms of malignant disease of the left pleura or lung. Microscopic sections of the tumour showed it to be an alveolar sarcoma.

Calculi.—Mr. HASLAM showed eight vesical calculi which he had removed by lateral lithotomy. The largest weighed 1,230 grains, and was taken from a man aged 64; he died on the eighth day after the operation, and at the necropsy his kidneys were found to be extensively diseased. The other seven patients had all made rapid recoveries.

Sarcoma of the Upper Jaw.—Mr. HASLAM exhibited a woman, aged 46, with a rapidly growing sarcoma of the superior maxilla. In the opinion of the meeting, this was considered a suitable case for operation.

Avulsion of the Thumb.—Mr. HASLAM exhibited the terminal phalanx of a thumb with the tendon of the flexor longus policis attached. This had been torn off by machinery, and was firmly fixed between an iron drill and a fenestrated piece of metal that was wound round it.

Ulceration of Ileum.—Dr. FOXWELL showed two specimens of ulcerated ileum from cases of enteric fever. The ulcers, when of any size, were, in every instance, elongated transversely. Around none of them could traces of Peyer's patches be observed, and microscopic sections of uninvolved patches showed no evidence of cicatricial or other inflammatory change.

Insular Sclerosis.—Dr. SUCKLING showed a man, aged 30, suffering from this disease. The illness commenced two years ago, with gradual weakness and rigidity of the legs. There was no hereditary history, and no lead or mercurial poisoning. The man suffered from vertigo, nystagmus, clonic spasm of the iris, and inequality of the pupils. The gait was very characteristic, being ataxic; the neck was held stiffly, and the body was violently lurched at times to one side. Coarse tremor of the head and trunk was marked in the act of walking, and tremor of the left upper extremity supervened when the muscles were put in action. Speech was unaffected, and the only psychical disturbance was irritability and intolerance of noise. The fundus oculi was normal.

Melanotic Sarcoma of Globe.—Mr. WOOD-WHITE exhibited this specimen. The patient, a man aged 72, had noticed only a few weeks that his eye was affected. The tumour was springing from the upper and inner part of the ciliary region, had pushed aside the iris at the angle of the chamber, and occupied quite one-third of that cavity. It was vascular and highly pigmented, and was growing rapidly, the portion in view having doubled in size in a few days. It had not come through the coats of the eye at any place; but there were two suspicious-looking dots of pigment in the substance of the sclerotic near the corneal margin.

White Sarcoma of the Choroid.—Mr. LLOYD OWEN showed a white sarcoma of the choroid, about the size of a horsebean, situated in the lower and inner part of the globe, about midway between the ciliary processes and the papilla. It occurred in a woman aged 26, and was not easily diagnosed, on account of a large detachment of the retina, and also because of its non-pigmented transparent character. Its growth had been slow. On minute examination, it was found to spring distinctly from the non-pigmented layer of the choroid, and to consist of fair-sized round and many fusiform cells, with a firm matrix. As the tumour was wholly intra-ocular, had created no irritation, and was of slow growth, the prognosis was fairly favourable.

Specimens.—Mr. BARLING exhibited micro-organisms of various kinds, and the arteries of the leg from a case of senile gangrene.

Mr. BENNETT MAY exhibited a specimen of multiple enchondromata of metacarpal bones and phalanges, which he had recently removed by amputation from a youth aged 18.

Mr. KER showed an ovarian cyst in an early stage of development which he had successfully removed by abdominal section.

Mr. J. W. TAYLOR showed a specimen of double hydrosalpinx, successfully removed from a patient who had suffered for twelve years from profuse menorrhagia, pain, and sterility.

Mr. JORDAN LLOYD showed several hernial sacs, which he had removed by operations for radical cure. They illustrated various methods of preparation.

Aneurysm of Aorta.—Dr. F. L. PHILLIPS showed an aneurysm of the transverse part of the arch of the aorta, taken from a man who had presented a typical example of the breathing of tracheal stenosis. There was great difficulty with respiration; the head was bent forwards; and there were no movements of the larynx even when the dyspnœa was extreme. There was a history of complete recovery after a similar very severe attack three years previously, and the appearance of the clot was consistent with a temporary natural cure.

DONATIONS.—The workpeople of Halifax have contributed £1,510 to the Infirmary, being their first year's answer to the appeal to them for assistance.—Miss Talbot, of Bournemouth, has given £1,000 to the Dorset County Hospital.—Mr. George Sturge has given £200, additional, to the Charing Cross Hospital, and £100, additional, to the Metropolitan Convalescent Institution.—"Mrs. P." has, in addition to previous liberal donations, given fifty guineas to St. John's Hospital for Skin Diseases.—"A Well Wisher" has given £50 to the Brompton Hospital for Consumption and Diseases of the Chest.—The Middlesex Hospital has received a Bank of England Note for £50 anonymously.

REVIEWS AND NOTICES.

THE OPTICAL MANUAL; OR HANDBOOK OF INSTRUCTIONS FOR THE GUIDANCE OF SURGEONS IN TESTING THE RANGE AND QUALITY OF VISION OF RECRUITS AND OTHERS SEEKING EMPLOYMENT IN THE MILITARY SERVICES OF GREAT BRITAIN. By Surgeon-General LONGMORE, C.B., Honorary Surgeon to the Queen, Professor of Military Surgery at the Army Medical School. Third edition. 1885.

THE nature of Surgeon-General LONGMORE'S work is indicated in its title, and its importance can hardly be overestimated, for the efficiency of our Army largely depends upon our soldiers being experts in the use of fire-arms of all descriptions at very long ranges; and this is impossible unless they have good eyesight. In these circumstances, there can be no difficulty in determining the question whether a man is optically fit to perform the duties of a soldier in the line, for all that the medical officer has to decide is if the man's vision, first of one eye and then of the other, equal $\frac{2}{3}\frac{0}{0}$; and further, if he be free from all suspicion of colour-blindness. But it is frequently necessary to answer questions such as the following. Supposing a man's eyes are not perfectly emmetropic, is he fit for duty in the ranks of the militia or volunteer force? Is he qualified for service in the Commissariat and Transport, or any other corps or department of the Army? Lastly, with reference to officers, are the same rules to apply to them as to the men in the ranks? and is a slight defect of refraction to bar a young man from entering the Army in any of its branches?

But military surgeons have frequently to deal with another class of cases, and to decide if a soldier's sight has become so far damaged from the effects of injury or disease as to render him unfit for further service. Surgeon-General Longmore's work thoroughly covers the whole of this ground, and is, without exception, one of the most complete and practical works on the diagnosis of affections of the eye which has ever been published. He commences this *Manual* with a remarkably clearly written chapter on optics, and then proceeds to discuss affections of sight depending upon errors of refraction; the uses of the ophthalmoscope and of keratoscopy are explained. In the fourth and fifth chapters, the accommodation of the eye, strabismus, and defects of colour-sense, are treated fully and most ably. In subsequent chapters, the diagnosis of various diseases of the eyes are described; and lastly, the rules of our own and those of foreign nations, as to deficiency of visual acuteness, or that which excludes from military service, are laid down with precision where it is possible to be exact. Unfortunately, with reference to our officers and various branches of the public services, definite rules are still much required as to the limit of defective sight which disqualifies a young man from entering the Army.

Not only military surgeons, but those in civil practice, would do well to procure a copy, and to master the contents of Professor Longmore's work; and we have no hesitation in saying that every candidate for the Membership of the Royal College of Surgeons should be able to satisfy the examiners that he possesses a thorough practical knowledge of the matters referred to in this volume.

While it is impossible to praise too highly the contents of Surgeon-General Longmore's work, the way in which it has been printed and brought out by the Superintendent of Her Majesty's Stationery Office is simply execrable; the crowded minute typing, the thin paper, through which the print of the opposite side of the page shows itself, are disgraceful. Small type and bad printing, and inferior paper of this kind, are doing a good deal to injure the eyes of many readers.

CLINICAL LECTURES ON THE PRACTICE OF MEDICINE. By the late ROBERT J. GRAVES, M.D., F.R.S., Professor of the Institutes of Medicine in the School of Physic in Ireland. To which is prefixed a Criticism by Professor TROUSSEAU. In two volumes. Reprinted from the Second Edition, edited by the late Dr. NELIGAN. London: The New Sydenham Society.

THIS reprint of GRAVES'S *Practice of Medicine* once more places within the reach of every member of the profession a classical work by one of the greatest of clinical teachers. The task of the critic, disarmed beforehand by the general acknowledgment of the supreme excellencies of certain parts of the work, is rendered still lighter by Professor Trousseau's criticism, which is prefixed to the first volume. "I have constantly read and re-read the work of Graves; I have become inspired with it in my teaching; I have endeavoured to imitate it in the book I have myself published;.....and even now, although I know almost by heart all that the Dublin professor has written, I cannot refrain from perusing a book which never leaves my study." Such praise from so great a master sounds almost extravagant in these days, when Graves's reputation has fallen somewhat into the background, owing, it may be at once stated, to the complete acceptance of many of the tenets for which he struggled most vigorously. In the treatment of fever and in the study of paralysis especially, Graves was a pioneer; we have got beyond the point at which he left off, and he is neglected, not because his work was unsound, but because it now forms part of the foundations of a great superstructure, and is, as it were, hidden underground.

In the lectures on Fever, which form a large part of the bulk of the first volume, a great deal of space is given to a discussion of the use of tartar emetic and opium in the advanced stages of fever. The chief indications for the administration of this combination seem to have been the combination of insomnia with low muttering delirium and subsultus tendinum. The prescription he recommended was: ℞ Antimonii tartaratis gr. iv; tinct. opii ℥j; misturæ camphoræ ℥viij. Of this mixture, a tablespoonful was given every second hour. This was, of course, to be varied in individual cases.

A detailed criticism of this work is not called for; and, if we were to attempt to select from its pages clinical observations of great practical moment, it would be easy to compile a series of notes among which every man engaged in the active practice of the medical profession would find some points which would probably be novel to him, and more which would be valuable. It is, however, a work which ought to be studied in the original form, as presented in this issue; for, to quote again from Professor Trousseau, "Graves is, in my acceptation of the term, a perfect clinical teacher."

HANDBOOK OF GEOGRAPHICAL AND HISTORICAL PATHOLOGY. By Dr. AUGUST HIRSCH, Professor of Medicine in the University of Berlin. Vol II: CHRONIC INFECTIVE, TOXIC, PARASITIC, SEPTIC, AND CONSTITUTIONAL DISEASES. Translated from the Second German Edition by CHARLES CREIGHTON, M.D. London: The New Sydenham Society. 1885.

THE second volume of Professor HIRSCH'S great work is, from the nature of the subjects dealt with, less interesting than the first, which was reviewed in the BRITISH MEDICAL JOURNAL eighteen months ago. It is, however, marked by the same learning and industry, and the same judicial marshalling of facts on both sides of a question, which were the conspicuous excellencies of the first volume.

One of the most readable articles is that on Syphilis. Dr. Hirsch includes both the soft and hard sores under this term, being "of opinion that the dualist standpoint in the doctrine of syphilis is fundamentally wrong." The history of the prevalence of the disease is sketched in a masterly way. Dr. Hirsch holds the opinion that syphilis was prevalent in ancient Greece and Rome to somewhat the same extent as in Europe of to-day, but that it was little studied by the ancient physicians, who failed to grasp the idea of constitutional infection. That it was also prevalent in India and China from very early time, perhaps for several centuries before the Christian era, is extremely probable. An attempt is made to account for the outbreak of syphilis in Europe in the fifteenth century, by comparing it with somewhat parallel endemics in Servia, Greece, and Bohemia, where the disease appears to have been frequently transmitted, not only through promiscuous sexual intercourse, but by other channels also. In every case, the dispersion of a lawless and brutalised soldiery among poverty-stricken populations living under most unhygienic conditions, has been the determining cause of these epidemics or endemics. After the subsidence of the great epidemic of the fifteenth century, which lasted thirty years, "the disease," says Dr. Hirsch, "fell again to its former level;" and he believes that it was imported from Europe to other parts of the globe—America, for instance—as a consequence of commerce between countries. Even at the present day, the inhabitants of a few regions suffer little, if at all, from the disease. In Greenland, where it is said that "prostitution is carried on, both on board ship and on shore, with an absence of restraint which baffles all belief," syphilis is unknown. In Iceland it is rare, and it dies out in Central Africa without treatment. This immunity cannot be due to racial peculiarities, for the Eskimo, Scandinavians, and Negro races each and all show in other countries large proportions of infected persons.

Classed along with syphilis, yaws (frambœsia), button-scurvy, and leprosy, as chronic infective diseases, it is rather surprising to find

goître and cretinism. Dr. Hirsch warmly embraces the view first put forward by Humboldt, and since maintained by Virchow and many other German and French writers, that goître and cretinism are both due to a true morbid poison, and ought to be reckoned among the infective diseases. We must confess, however, that a reperusal of the evidence ably marshalled in these pages fails to carry conviction, and leaves the impression that Dr. Hirsch might, with at least equal justice, have put these two diseases, or two forms of the same disease, with equal justice in his next group, "Toxic Diseases." In this group are included ergotism, pellagra, lead-colic, and milk-sickness ("the trembles" of cattle).

The next section, on Parasitic Diseases, including both parasitic animals and fungi, is rather disappointing; but the articles on erysipelas, on puerperal fever, and on scurvy, make amends; here Dr. Hirsch is in his element, and manipulates the enormous mass of detail which he has accumulated, with an ease which can only come from long experience and practice. Articles on scrofula, gout, and diabetes call for no special remark; but, in taking farewell of this valuable work, we may again point out how well suited it is to the wants of medical practitioners resident abroad. It is a library in itself, and, by the copious bibliographical references carefully transcribed by Dr. Creighton, who has throughout made his translation clear and readable, affords a key to the whole literature of epidemic and endemic disease.

NOTES ON BOOKS.

Epitome of Diseases of the Skin. By LOUIS A. DUHRING, M.D. (Philadelphia: Lippincott Company. 1886.)—Dr. Duhring is favourably known as the author of a standard text-book on skin-diseases, and of one of the best atlases which we possess. In this little book we have an epitome of diseases of the skin, of the size and style of the epitomes with which we are familiar in this country. It is characterised by Dr. Duhring's usual clearness, and is very good of its kind.

The Sabbath for Man. By the Rev. WILBUR F. CRAFTS. (New York and London: Funk and Wagnalls. 1885.)—In this substantial volume are collected reports from all quarters of the globe, with a view to a world-wide survey of Sabbath observance. They are furnished almost entirely by ministers or members of the smaller Protestant sects, and are inspired by an eager Sabbatarianism in its most Puritanical form. The results are embodied in a curious map, in which the various countries are shaded differently, according to the Sunday habits which are favoured by their governments. This method brings together strange companions. Palestine and New Guinea are equally "Sabbathless;" Rome and Kamschatka, Iceland and Constantinople, favour "the continental Sunday;" so also do Nova Zembla, Abyssinia, and the Society Islands. Norway and Borneo gain some credit by stopping short at "the semi-continental Sunday." The opinions of all who have expressed themselves as friendly to a day of rest are collected at the end to furnish an encyclopædia of authorities. It is incidentally observed that rest on the seventh day is "a law of health." "Such world-wide scientists as Humboldt and Dr. Farr," says Mr. Crafts, "say that to rest one day in seven is as much required by the laws of Nature as the rest of night." And on such grounds, if they may be taken to be proved, the subject merits medical attention.

Hunterian Lectures, 1885: The Anatomy of the Intestinal Canal and Peritoneum in Man. By FREDERICK TREVES, F.R.C.S., Hunterian Professor at the Royal College of Surgeons of England; Surgeon to, and Lecturer on Anatomy at, the London Hospital. (London: H. K. Lewis.)—These lectures have appeared in the JOURNAL; and from our verbatim report, the author informs us in the preface, the present volume has been printed, with a few additions and corrections. There is a good table of contents, but no index. The text of these important lectures need not be criticised; we have already made comments upon Mr. Treves's researches, both at the time when the lectures were being delivered and in the Retrospect for 1885 in the JOURNAL of December 26th, page 1202. The present work is a sample of artistic bookbinding of a class becoming familiar in these æsthetic days; it forms a thin quarto volume, printed on rough paper with rough edges, and bound in vellum. The cross headings of the subjects are in black letter. It cannot be doubted that this particular work forms a handsome publication, pleasant to read on account of its large type and wide margins. Whether it be advisable for publishers to revert more generally to this old type of book is more than questionable. The quarto has been given up because of its bulkiness, whilst thin vellum-bound books have not good backs, so that they become unsightly when grouped on the shelves of a library, and the backs are seldom lettered, so that a volume may be hard to find when wanted. An octavo volume bound in good strong law-calf, with a well-lettered back, is the best form for a medical work. Once more, we must repeat that the text of Mr. Treves's *Hunterian Lectures* deserves the highest praise for the importance of the observations which they record.

Der Vegetarianismus: ein Vortrag, von Dr. G. BUNGE, Docent der Physiologie an der Universität Dorpat. (Berlin: Hirschwald, 1885.)—The arguments used by the vegetarians in their campaign in Germany, occasionally call forth a learned and theoretical reply, such as is contained in this essay of Dr. Bunge. They sometimes assert that man is "by nature" a vegetable-feeder, and consider that the assertion, if proved, is enough to establish what ought to be his present habits, and that it is, in fact, adequately supported by the arguments that certain anthropoid apes are vegetable-feeders; that the proportion of the digestive mucous membrane in man is much more nearly analogous to that in herbivorous than in carnivorous or omnivorous animals, and that the analysis of human milk shows it to contain proportions of casein, fat, and potash, most nearly resembling the herbivora. That such arguments should be thought worth answering, is rather characteristic of a German controversy. Dr. Bunge readily sets himself to the task, and has little difficulty in showing that many of the larger anthropoid apes are not vegetarians, but omnivorous; that the ratio of the surface of the stomach to the weight of the body in man is just as near to that in the carnivora as to that in the herbivora; and that our knowledge of the exact composition of the milk of the carnivora, so far as it goes, shows it to be singularly similar to that of man. After these preliminaries, an appeal is made to instinct; and Dr. Bunge rather naïvely urges that, when men are hungry, their mouths water more on seeing chickens than on seeing cornfields, so that instinct may be claimed as against vegetarianism; and, as to any decision by means of experiment, it is pointed out that, to be satisfactory, this must be on such a large scale, so careful and so prolonged, lasting in fact through several generations, that it is dismissed as probably impossible, and certainly unaccomplished. But, after all, Dr. Bunge comes to explain the regard for the vegetarians which has led him to make this careful answer to such vain arguments, and he confesses that vegetarianism seems to him associated with what he most desires, namely, temperance. He considers over-indulgence in animal food not merely as the accompaniment, but even as the cause, of over-indulgence in alcohol; and the misery brought about by alcohol rouses him to very strong indignation. He appreciates the intensive prefix to the English total that turned it, fifty years ago, to tee-total; he honours the English abstainers; he would enthusiastically support Sir Wilfrid Lawson. He does not hesitate to put down 70 or 80 per cent. of the crime in London and Paris to alcohol; for Berlin he makes no estimate. Hence, though he feels that, unfortunately, the vegetarian arguments with which he has had to deal are not so strong as the vegetarians think them, he wishes them good success, with a view to teetotalism, and ends his essay in a spirit of less chilling criticism than he had expressed at the outset.

Burdett's Official Intelligence for 1886 (Vol. iv of the Series). By HENRY C. BURDETT, Secretary, Share and Loan Department, Stock Exchange. 1,140 pp. demy quarto. (Spottiswoode and Co., 54, Gracechurch Street, E.C.)—A new feature has this year been introduced into this well known financial publication, which has now increased in size to 1,140 pages, and, in number of separate undertakings, dealt with to upwards of 6,000. By way of preface to the detailed particulars as to individual securities, certain preliminary chapters are given on general subjects of immediate interest. Most of these chapters concern only financiers and City men; but there are three which indirectly come within the cognizance of public medicine. The first article of the series is on Imperial and Local Taxation, and brings together a quantity of hitherto scattered information on this now pressing question. We notice that no references are given to the authorities from which the figures are derived, though this would no doubt be valuable to those who wish to examine the subject for themselves. A second article examines with great minuteness the annual accounts of our leading boroughs, a much neglected sphere of inquiry. A third attempts to show that, by Sir William Harcourt's overthrow of Mr. E. J. Smith's agreements with the water-companies in 1880, the ratepayers have already lost £400,000.

A FOOTBALL player, a member of the Eckington Works (Sheffield) Football Club, died on Sunday, January 24th, from the effects, it was supposed, of a kick in the abdomen, received in the course of a game played on the previous day.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 20th, 1886.

CLINICAL TEACHING AND CLINICAL TEACHERS.

A REFINED kind of common sense in the application of the principles of medicine and surgery, and a practical wisdom in the management of patients, have been the most striking qualities of the English school of clinical teaching. In the organisation for teaching in special departments, we have lagged behind the Continental schools, and in our arrangements for the study and teaching of pathology, we have allowed ourselves to be disgracefully beaten; but, in the teaching of practical medicine and surgery by the bedside, we have nothing to fear from comparison with foreign schools. While there is—to our shame, be it said—no properly appointed pathological institution in the whole of England, there is not a medical school which does not possess one or more clinical teachers of striking ability. Their methods are various, and no two men follow exactly the same plan; still, it may be seen that the teachers fall generally into one or other of several distinct classes, and aim at attaining their ideal by different roads.

The Socratic method has been pursued with brilliant success by some of the greatest clinical teachers who have ever lived. It has received its highest development at the hands of physicians, and is capable of being made a most efficient instrument for conveying lessons which sink deep into the mind, though, in inexperienced or unskilful hands, it may lead to unexpected, and by no means gratifying, results. It is capable of many modifications; one student may be dangled out and plied with a string of questions until he has pledged himself to some diagnosis, or to some theory as to the nature of disease; if the student be dull, or careless, or ignorant, he none the less serves the purpose of the teacher, who can point out the error of his diagnosis, or the weakness of his logic, with a merciless hand. The discomfited student perhaps inwardly vows never again to expose himself to like ignominy; and now comes for the teacher the most delicate part of his task. Having exposed the ignorance of the student, he must indicate the sources of uncertainty in his own diagnosis, and define the limits of his own knowledge. If he omit to do so much, he will merely have inflicted an useless snubbing, and created for himself a factitious reputation for infallibility, sooner or later to be demolished by observations made in the *post mortem* room. If he go too far, and insist too much on difficulties and doubts, he will be liable to send his class away in a sceptical frame of mind, disbelieving equally in themselves, in their teacher, and in their art. The method, therefore, is a dangerous one to adopt; it demands a clear head, extensive knowledge, and no little tact. But, if successful, the success is complete; students of all ranks and practitioners of every nation will throng the class, and the teacher's name will be spread far and wide as a man to be called upon for help in obscure or anxious cases.

The method is capable of modification in many directions; the most nearly allied is the system of clinical teaching by thinking aloud. It is a most valuable and popular method, but only less difficult than that last indicated; the teacher makes a systematic examination of a patient, stating his observations to the class, and drawing his deductions before it, indicating collateral facts, previous observations, and the whole train of reasoning by which diagnosis and prognosis are arrived at, and a line of treatment suggested. The method is extremely popular with some of the best teachers in London at the present time, and lectures of this kind may occasionally be heard which are models of scientific reasoning and practical wisdom; they are useful to the attentive listener, not only for the matter which they contain, but for the lesson in orderly thinking which they convey; they afford a real intellectual treat, and grey hairs and the owners of well known names may not unfrequently be found among the audience.

There are teachers also who imitate the Socratic method, but at a greater distance. Impressed by the obvious advantages and facilities which it affords, but impatient of the slow working or shifty expedients of the average student-mind, they do not wait for their questions to be answered. They always argue with an imaginary adversary, who is apt to start the most improbable theories, which the teacher very valiantly demolishes. The method, though it does not call for as high powers of mind as either of the former two, has distinct advantages of its own, and often attracts the more industrious of the senior students of a large school. Such teaching is particularly useful to men who have read widely, and possess some logical ability, but are not gifted with much imagination. A teacher of this class is generally successful in preparing students for the higher examinations; he earns the respect, if not the admiration, of his pupils, and is likely to be much sought after by them in their future difficulties in private practice. There is a final degradation of the Socratic method, where the teacher poses as a kind of medical Mangnall, who puts simple questions to his young charges, and helps them to answer in the proper phraseology. He loves the plural pronoun, and glories in the stock commonplace of the text-books. Still perhaps, like Mrs. Mangnall, he has his uses, preparing the youthful mind for the stronger food which more virile teachers will supply.

"There are a sort of men," says Gratiano in the *Merchant of Venice*, "whose visages do cream and mantle like a standing pond," and truly there are clinical teachers of this sort. Their clinical lectures are set orations, in which a small nucleus of fact is enveloped in a great cloud of words; they make much use of circumlocutory phrases; they would greatly prefer, for instance, to say that the patient met with his accident while in a condition of inebriety, than bluntly state that he was drunk. They will relate the early history of the patient in the most carefully chosen words, and will dilate upon the most trivial details of the case in neatly pointed sentences; then they will announce their diagnosis with the air of a Prime Minister unfolding his policy, and order a purge with the solemnity of a judge awarding a sentence of penal servitude. They often, however, succeed in presenting a clinical picture which remains in the memory to give their auditors

confidence in the hour of need. Moreover, they are often excellent operators, or very successful physicians; their sense of artistic proportion, evidenced by the elegance and elaboration of their diction, finding a congenial field in ordering those minute details of manipulation which contribute so largely to a patient's comfort.

In broad contrast to this class, there is the man, generally to be found among the surgeons, whose boast it is that he is a "practical man." Commonly he has a loud voice, and a hearty almost boisterous manner, a considerable command of the more forcible part of the vocabulary, and is always in a hurry. He has generally seen several cases of the kind before, and never fails to tell his class just what to do in all these cases, his great secret being always to do something, expectant treatment finding little favour in his eyes. He is very dogmatic, full of "dodges" and "tips," is generally a "brilliant" operator, has hazy notions about pathology, being particularly careful not to commit himself with regard to the exact nature of any tumour about to be removed, is rather feared than admired by his colleagues, and is always very popular with the students, especially the younger students.

Then there are the teachers who have favourite subjects; the physician who gives elaborate clinical lectures on incurable diseases of the nervous system, the surgeon who has a pet operation which nobody else will take up, or a favourite dressing which other surgeons fail to appreciate. There is, too, the physician who makes a special study of common diseases, and is never so much at home as when demonstrating a case of emphysema or ascites, and, at the opposite pole, the pure specialist who seeks to convince an unwilling audience of the absolute necessity of the routine use of some particular instrument which the average student, and, perhaps too, his senior teachers, imagine to be altogether too complex to understand or to manipulate.

Clinical teaching in England has now been brought at most schools into a high state of efficiency; is it not high time to devote more energy and money to the due development of pathology?

TWO NEW HYPNOTICS.

THE discovery of two new hypnotics is indeed a subject of congratulation. For the introduction of the first of these, urethan, of which we gave some account in the JOURNAL of September 26th, 1885 (p. 611), we are indebted to the experimental investigations of the well-known pharmacologist, Schmiedeberg, who, in his laboratory at Strassburg, fully investigated its action on the lower animals. Urethan is the æthylic ether of carbaminic acid, and its chemical composition may be represented by the formula $C_3H_7NO_2$. Fortunately, it has no odour and no disagreeable taste. It may be obtained in beautiful white crystals, which are freely soluble in water. Its action on man has been investigated by Jolly, Kobert, and von Jaksch, of Vienna. Von Jaksch's observations were made on twenty patients suffering from various forms of insomnia. His first experiments were with doses of a quarter of a gramme, or about four grains, but this was insufficient to produce any distinct hypnotic action. He then increased the dose to nearly eight grains, and found that this usually sufficed to produce several hours' good sound sleep. In a patient suffering from hemiplegia associated with disease of the mitral valve, whose general condition contra-indicated the employment of morphine or chloral, it answered admirably, giving a good night's rest without any diagreeable after-effects. Another patient, suffering from a painful aortic aneurysm with persistent insomnia, was given a dose at 6 P.M. with little or no effect, whilst another dose administered at 11 P.M. gave calm refreshing sleep until three the next morning. Dr. von Jaksch made over a hundred observations with the drug, and is enthusiastic in its praise. It proved most successful in simple uncomplicated cases, and was of comparatively little value when the patient suffered from acute pain. He states that it is particularly suitable for administration to children, the absence of disagreeable taste being a very great advantage. A short time since, Dr. Saundby, of Birmingham, recorded two cases of cardiac insomnia treated successfully by two-grain doses of urethan, given at bedtime in solution in water. One of these was a case of aortic and mitral incompetence, with congestion of the lungs, hæmoptysis, pleural effusion, and œdema of the legs. The patient, as soon as he fell asleep, awoke with a dreadful feeling of suffocation, and for three nights had little or no rest, but subsequently, with the aid of urethan, he slept well and his condition greatly improved. The other case was one of cardiac dilatation, with mitral incompetence, the heart's action being very feeble and irregular. The patient had not slept for many nights, but urethan produced the desired effect, and she soon slept soundly. Dr. Myrtle, of Harrogate, speaks equally enthusiastically in its praise, and considers that it is superior, not only to chloral, but to all the hypnotics in common use. It gives rise to no unpleasant effects, such as nausea, flatulence, headache, or constipation. It may be given simply dissolved in water, or with some flavouring agent.

For the other new hypnotic, we have to thank Dr. Dujardin-Beaumetz, who recently submitted to the Académie de Médicine of Paris the results of a series of observations on aceto-phenone, or, as it is more commonly called, hypnone. This compound is prepared by the action of chloride of benzoyl on zinc-methyl, or by distilling together a mixture of benzoate and acetate of calcium. It is a colourless mobile liquid, having an odour not unlike oil of bitter almonds or cherry-laurel water. It has a very decided physiological action, for a cubic centimètre injected under the skin of a guinea-pig produced a torpid comatose condition, from which the animal did not recover. The respiration was quickened, the heart-beats became fewer in number, the animal started convulsively, gradually grew colder, and died. To produce sleep, it should be given in doses of from two to sixteen minims; and, if administered at bedtime, it uniformly produces a well-marked hypnotic action. It may be diluted with alcohol, ether, or glycerine, but the best way to give it is in capsule. It communicates to the breath a somewhat disagreeable odour, but its taste may be masked by syrup of orange-flower or oil of sweet almonds. Dr. Dujardin-Beaumetz's observations have been fully confirmed both by Dr. Constantine Paul and by Dr. Huchard.

THE ERASMUS WILSON LECTURES.

MR. J. BLAND SUTTON could not be accused of exaggeration, when in the second of the lectures which he recently delivered at the Royal College of Surgeons, he advanced a statement in connection with certain important observations recently made by Jeffrey Parker, Metschnikoff, Caton, and himself. These observations, the lecturer remarked, place the whole process of inflammation in an entirely new aspect, and, instead of being a purely pathological process, it will hence forth rank as one of normal physiology, which, when in excess, come

within the domain of pathology. Mr. Sutton showed that the leucocytes are not only the chief agents in building up the tissues, but also play an active part in taking them down; for tissue-waste is not mechanical, but as much an organic process as tissue-repair. The well known osteoclasts represent a principle not confined to the histology of bone ; they are but the phagocytes or destructive leucocytes of the soft tissues. The gradual discovery of the properties of leucocytes, and other amœboid cells, is highly instructive. They can change their form and position, they can absorb substances with which they come into contact, and they can decompose organic material which they absorb or touch ; in fact, they digest it. The mobility of leucocytes and their changes of shape, have long been known. The absorption of indigo granules by the blood-corpuscles of a mollusk was observed by Haeckel, and Cohnheim proved that the corpuscles of human blood possess similar properties. Further experiments have demonstrated the process of intracellular digestion. The *Amœba* can be made to take up green vegetable matter into the interior of the one cell, which, in exalted speech, comprises its entity. The green material soon disappears.

Some low forms of life fail to digest coloured materials directly applied to the cells forming their digestive apparatus ; yet, when they are made to devour another lowly organised animal fed with pigments, the coloured granules soon appear in their digestive cells, which refuse them when not previously taken up by the cells of a live victim. Direct digestive election, a most important process to observe accurately, has been seen in a mollusk, the mesoderm cells of which digested the sperm-cells of a sea-urchin, but steadily rejected, without even killing, the ovarian cells and ripe ova of the same animal. These mesoderm cells of invertebrates have also been found to absorb and destroy bacteria, just as leucocytes are known to do in the mammalia. A very remarkable discovery has been made by Metschnikoff, who has shown that the digestive property of cells is not merely confined to nutritive purposes, but also plays a share in removing larval organs and fœtal relics, and protects the organism from deleterious substances. Leucocytes fuse to form plasmodia or large protoplasmic masses, of which the giant-cells in our species are probably varieties. Fragments of fibres of nerve and muscle are to be found in the plasmodia in the tadpole's tail during the process of its absorption. In the minute *Daphnia*, abundant in our ponds, the white blood-cells have been seen to rally round collections of bacteria, and to fuse together, if necessary, so as to be able to surround and digest those deleterious organisms. Not only do leucocytes absorb bacteria in mammals, but they also swarm round any foreign body introduced into a blood-vessel, as though eager to digest it. Mr. Sutton, reasoning from the above facts, looks upon inflammation as the method by which an organism attempts to render inert noxious elements, whether native or foreign. It is the leucocytes which attack the morbid substances, multiplying if the latter be in great force, surrounding and digesting them. If the morbid material be in too great proportion for complete digestion, so much the worse for the leucocytes and the entire patient.

CORONERS AND POST MORTEM EXAMINATIONS.

THE reluctance with which coroners accede to the demand for *post mortem* examinations is well known, and has been the subject of a good deal of criticism. Even in cases where the cause of death is shrouded in the greatest obscurity, they do not hesitate, unless circumstances point plainly to poisoning, or to some form of violent death, to content themselves with a vaguely worded verdict, which, to all intents and purposes, might as well have been left unsaid. The assumption would seem to exist that a person found dead died a natural death, in the absence of outward and visible signs to the contrary. It may, however, be argued with a great show of reason that exactly the opposite rule ought to hold ; that any death, not duly certified by a qualified person, should be held as the result of other than natural causes until the contrary was proved by scientific witnesses to be the case. Were this the golden rule, the slipshod and desultory opinion of a friend, or, it may even be, of a medical man who has casually examined the body, as to the cause of death being "probably" heart-disease or apoplexy, would no longer be accepted, and one more loophole of escape would be closed to possible malpractices. The non-medical coroners are, as a rule, far more answerable for this state of things than the jury, who, inexperienced and ignorant of their rights and privileges, are unable to do more than protest against the peremptory and dictatorial tone of the crown-officer. The attitude of coroners in the matter is possibly not unconnected with their pecuniary dependence on local authorities, who are not, as a rule, remarkable for their perspicacity in matters scientific. The constantly recurring and undignified struggles between the late Dr. Edwin Lankester and the Middlesex magistrates showed what was likely to befal a man who really carried out his mission in an exhaustive manner.

An excellent precedent was created this week at an inquest, of which we give a full notice, held before Mr. William Carter, Coroner for East Surrey. The body of a newly born male child had been found under a railway arch by some children, and was at once taken to a neighbouring medical man for examination, and he pronounced death to have taken place quite recently. The coroner, however, did not think proper to summon this gentleman to give evidence, "as there was no legal proof of the child having had a separate existence from its mother." A juror very pertinently asked where the coroner expected to get such evidence in the absence of the medical man ; but he was promptly told to sit down and be silent, under penalty of being sent to prison for contempt of court. This extraordinary threat only called forth expression of unanimous dissatisfaction from the jury, who, through their foreman, declined to conduct themselves as "dummies," and insisted on the *post mortem* examination being made. The coroner, of course, had no option but to order this to be done, and the inquiry was adjourned for the purpose, and to allow the attendance of Mr. Farr, the medical man who saw the body in the first instance.

We must congratulate the jury on its courage and pertinacity ; and we trust that examples will not be wanting, to show that the citizens who are called upon to act in this responsible and thankless capacity are awakening to a sense of their duties to the public, in a matter of such import as the determining the exact cause of death. It should be remembered that the slightest omission or neglect of, it may be, an apparently insignificant detail of evidence, may be the cause of a murder remaining undetected.

A MEASURE has been presented to the Prussian Diet relating to the appointment and remuneration of vaccination-officers in the Polish provinces of Germany, who will henceforth be the nominees of the State. It is alleged that, under the present system of appointment, the re-

muneration offered to German medical men by the Polish patrons of their office is invariably and purposely so small as to deter the former from accepting it, while the services of any Polish physicians who can be found are secured by very much higher salaries.

LARGE FATTY TUMOUR OF THE OMENTUM.

On Friday week last, February 5th, at the Samaritan Free Hospital, Mr. Meredith removed, by abdominal section, from a woman 63 years of age, a solid tumour of the omentum weighing 15½ lbs. The growth, consisting of pure fat, was enucleated with some difficulty from its omental capsule. We learn that the patient, who has progressed satisfactorily since the operation, is now convalescent.

HOSPITAL SATURDAY AND SUNDAY IN NEW YORK.

At the recent annual meeting of the Hospital Saturday and Sunday Association of New York, it was announced that 40,407 dollars had been received during the year. Other contributions remained to be sent in, which would increase the amount to 46,000 dollars; and it was hoped that the effect of an appeal recently made would be to make up a total of 50,000 dollars. The increased amount in 1885 was mainly due to larger collections in the churches. In 1884, the hospitals received 29,917 dollars, after the expenses of collection had been deducted.

THE ST. PANCRAS VESTRY AND MR. SHIRLEY MURPHY.

We are glad to find the Vestry of St. Pancras attempting to make the *amende honorable* to Mr. Shirley Murphy, whom they virtually drove from their service a year ago. Mr. Murphy, though under no legal obligation to make an annual report for the year 1884, expressed his willingness to prepare one, if so desired, by his former masters; and the vestry, having now received the report in question, unanimously resolved, on Wednesday, "that the best thanks of the vestry be engrossed on vellum, and with the corporate seal of the vestry attached, be presented to Mr. Murphy." Evidently, therefore, the vestry have come to see the error of their ways in allowing their connection with so able and useful an officer to be severed.

THE GRÄFE MEDAL FOR OPHTHALMOLOGY.

A correspondent has called our attention to the fact that the statement at page 260 of the Journal for February 6th, is not strictly accurate. The real facts are these. The German Ophthalmological Society, which holds its annual meeting at Heidelberg, some years ago founded a gold medal in honour of its founder, the eminent ophthalmic surgeon, Albrecht von Gräfe, to be awarded every ten years to the person who shall have done most for the advancement of ophthalmology. The medal has, as already stated, been awarded to Professor Helmholtz, of Berlin; and the presentation will take place at the annual meeting of the Ophthalmological Society, which will be held in Heidelberg at the time of the tercentenary festival of the University.

NEW MATERNITY HOSPITAL IN NEW YORK.

A daughter of the late Mr. Vanderbilt, Mrs. W. D. Sloane, has announced her intention of erecting and endowing, in conjunction with her husband, a maternity hospital in connection with the College of Physicians and Surgeons of New York. It is to be built on a portion of some land generously presented to the College by Mr. Vanderbilt for building purposes, and is to be three storeys in height, 100 feet long by 75 feet wide, and capable of receiving twenty-five patients. It is to be called the "Sloane Maternity Hospital." With the building, will be presented a sum of money sufficient for its complete support as a free institution. The hospital is to be under the control of the College of Physicians and Surgeons; but the business-management is to be in charge of a separate board of five managers, of whom the President of the College is to be chairman *ex officio*.

DR. MAC-CARTHY, OF PARIS.

We regret to learn the death, at the age of 69, of Dr. Daniel Mac-Carthy, one of the oldest and most respected British residents at Paris. Daniel Mac-Carthy was brought up to the medical profession, and practised in Paris for nearly half a century. He was thoroughly trusted and esteemed by his patients. As honorary secretary to the British Charitable Society, he rendered long, valuable, and unstinted service. Keen in the detection of imposture, nobody could have a kinder heart for real distress. Though his father and brother had virtually become French, and though he himself spent nearly all his life in Paris, he thoroughly identified himself with the British colony, and heartily co-operated in all their undertakings. A fund of reminiscences of Anglo-Parisian life will perish with him. The funeral service was held on February 12th, at the Madeleine. Dr. Mac-Carthy leaves a widow, a Spanish-American lady, but no children.

HYDROPHOBIA IN PARIS.

There were, according to Dr. Dujardin-Beaumetz, nineteen deaths from hydrophobia in Paris last year, a number higher than in previous years; and the number of stray dogs destroyed was also higher, namely, 5,060. Of the 19 persons who died, 15 were males and 4 females. The youngest was a little girl aged 5½ years, the oldest a man aged 63. The time of incubation varied from 19 months (in the case of a young man aged 26) to 29 days (a child aged 11). In only one case was the time of the bite unknown. Excluding that, and the exceptional case of 19 months, an average of about two months is arrived at for the time of incubation. As to duration of the disease, the extreme limits were 1 day and 8 days, average 3½ days. In no case were the lower limbs bitten. In 12 cases out of 18, the upper members were bitten, especially the hand (9 times out of 12), the wrist 2. In the 6 other cases, it was the face (5 times) and the skull (1) that were attacked. Lastly, in 17 cases out of the 18, the bite was that of a dog; in the remaining 1, it was that of a cat.

THE METROPOLITAN SMALL-POX HOSPITALS.

At the recent meeting of the Metropolitan Asylums Board, Sir Edmund Currie moved that the necessary steps should at once be taken for the erection at Darenth, at a cost of £115,000, of a convalescent hospital to accommodate 600 patients, on the basis already approved by the managers of the Local Government Board. The object of the proposal was to do away with the keeping of patients in London. Unless the Board at once began to make provision—a work which would take two years to accomplish—they would, he supposed, have an epidemic upon them. These epidemics occurred regularly, and unless they were ready to meet the next one, they would be obliged to take from the pockets of the ratepayers a million of money to provide for the patients in the next calamity. It would certainly come, without the shadow of a doubt; and surely it was better to begin the work now, and have the payment extended over fifty or sixty years, than have to pay in an extraordinary way, and then have nothing to show for the money. It was very doubtful whether they would yet be in time to be adequately prepared for the next epidemic, and therefore every despatch was necessary. Dr. Fowler seconded the motion. The resolution was eventually carried by an overwhelming majority. In Berlin, it may be noted that the recurrence of small-pox epidemics, and the frightful mortality and expenditure incidental thereto, have been prevented by the introduction of compulsory revaccination.

DEATH UNDER CHLOROFORM.

The *Sussex Daily News* of February 8th contains a report of a death under chloroform, in the course of an operation for empyema. The following is the summary of the medical evidence reported. The patient was a man, aged 30. Mr. Robert Black, house-surgeon at the Sussex County Hospital, said the deceased was admitted on February 3rd, suffering from empyema in the left side of the chest. An operation

was to have taken place on February 5th, when there were present, besides witness, Dr. Rutter, Mr. Humphry, and most of the pupils at the hospital. Witness administered chloroform, but the deceased succumbed before the operation was commenced. In witness's opinion, death took place from sudden failure of the heart's action. Every precaution was taken in administering the chloroform. Mr. Humphry would have performed the operation, had not the deceased died before it commenced. Witness made a *post mortem* examination. Dr. Rutter, one of the physicians at the hospital, said a piece of one rib was to have been removed. In witness's opinion, it was an operation that could not have been performed unless chloroform were used, and that drug was carefully and properly administered. Deceased died before the operation was commenced. He was in very bad health previously to this, and knew what was intended to be done. Mr. J. Macklin, a surgeon practising at Newhaven, said he had attended the deceased for a short time. He was suffering from congestion and inflammation of the lungs. He came into the hospital by witness's advice. The jury, after a short consultation, returned a verdict to the effect "That the deceased died whilst under chloroform, owing to the failure of the heart's action, the chloroform having been properly and carefully administered."

THE OXFORD MEDICAL SCHOOL.

We understand that the Act comprising the new regulations for the Medical Faculty of Oxford University has been advanced another stage, and that the series of formalities which have to be observed are drawing towards a conclusion. To forecast the effect of the new regulations is impossible at the present time, for the success or failure of the new school will depend in a great measure upon circumstances which are outside the influence of legal enactments. The alterations in the curriculum are in the right direction, but we cannot shut our eyes to the dangers that may arise, if it be assumed that the new regulations will work themselves. It is imperative, not only that the subjects selected, but the method of teaching and study, should be directed to preparing the medical students for their future career as practitioners of medicine. The experience of Cambridge has taught us that there is great liability that young students may be induced, by the injudicious zeal of teachers of the preliminary sciences, to devote too much time to subjects which have, at least in their more elaborate details, only a remote bearing on the medical art. An acquaintance with the fundamental conceptions of chemistry is a necessary preliminary to the intelligent study of physiology and medicine; but botany and comparative anatomy, for instance, are only of advantage so far as they are made to serve the purpose of introducing the student to the study of physiology and anatomy. The old stumbling-blocks have been removed, but there is real cause for fear that fresh obstructions may be thrown in the way, if the teaching of the preliminary sciences of chemistry, botany, and comparative anatomy, be allowed to become an end in itself. Adequate provision must be made for the systematic study of human anatomy and physiology; and in facilities for dissection, Oxford is, at the present time, woefully deficient.

THE RECENT CASE OF POISONING BY LIQUID CHLOROFORM.

CASES of poisoning by chloroform are, happily, so rare, that it will probably be of interest to our readers if we place before them a brief account of the instance lately brought to the notice of the public. The deceased, a man aged 40, had been under medical attendance for two or three weeks, with gastric symptoms and stomatitis; the latter being due, in the opinion of his medical adviser, to mercurial poisoning, the source of which was quite unknown. On December 31st he was pronounced convalescent, and plans for his going for change of air were under discussion. At 4 A.M., next morning, his wife called the landlord into the bed-room, saying she feared her husband was dead. He had then evidently been dead for some hours. A *post mortem* examination was made thirty-six hours later, when it was observed that the body was that of a well-built man in the prime of life, and apparently of robust health. On opening the heart, the blood was found to be fluid, and it was thought that the *post mortem* staining of the valves and endocardium was unusually marked. Nothing further worthy of note was found until the stomach was opened, when the contents, which were fluid, and measured about an ounce, evolved a strong and unmistakable odour of chloroform. There was distinct redness of the mucous membrane of the stomach around the cardiac orifice, and at a spot on the opposite wall, just beyond the greater curvature, there was a slight erosion of a doubtful nature (that is, whether *ante* or *post mortem*). The rest of the viscera seemed healthy, and no cause of death was found except in the condition of the stomach and its contents. These, with portions of the viscera, were handed over to Dr. Stevenson for analysis. The result of this analysis was, that traces of chloroform were found in the intestines, and a considerable quantity in the stomach; in Dr. Stevenson's opinion, an ounce of liquid chloroform must have been swallowed. The legal aspects of the case must, for the present, be left untouched, though the coroner's jury had very little hesitation in giving effect to their opinion at a comparative early stage of their proceedings. As in the case of other poisons, so with chloroform, the fatal dose varies much; half an ounce has killed an adult, and, on the other hand, recovery has been recorded in one case after three ounces, and in another after four ounces, had been taken. In this case, probably, the emptiness of the stomach, at the time of taking it, conduced to a fatal result after a relatively small dose.

CHOLERA AND THE AUSTRALIAN GOVERNMENTS.

THE immunity from cholera hitherto enjoyed by the Australian colonies furnishes the strongest evidence of the transportability of that disease, and of the efficacy of a rational system of quarantine and inspection in excluding it from countries in which it has not permanently established itself. Were cholera a disease which could arise *de novo* from local and climatic conditions, or did it travel, as some maintain, like cyclones, over sea and land, that vast country could not have been so long exempt. The sanitary condition of the colonial towns is very far from what it should be; and, as might naturally be expected, Melbourne, for example, is never free from enteric fever and severe forms of diarrhœa. The climate in the south is not unlike that of Italy and Spain, while Queensland is in great part within the tropics. Constant intercourse is maintained with India, China, Java, and other countries where cholera is endemic, and the distance between the East Indian archipelago and Australia is not great. On the other hand, there is no direct overland communication, as there is between India and Russia *viâ* Persia, nor such constant movements of small craft and coasting trade as is kept up in inland seas like the Mediterranean. The dangers to which Australia is exposed are great, but they are more easily obviated than elsewhere. In other words, quarantine has been successful because it is practicable, and so it might be in preventing another invasion of America from Europe. We have before us copies of several Queensland papers of December 15th and 16th last, giving an account of the measures adopted to avert an importation of cholera into that colony. The *Dorunda* reached Moreton Bay on the previous day, with 356 passengers and a crew of 105 officers and men. Of the immigrants, 161 were English, 86 Irish, and 109 of other nationalities, chiefly, as appears from the names given, German and Scandinavians. She had sailed from London, but we are not told where she had touched, nor where the disease had been contracted; though, as her crew is said to have been partly composed of Lascars, unacquainted with the English language, they may have been taken up in India, or some port in the Eastern Archipelago. Twelve deaths from cholera had occurred, two of them on the day of arrival, and one case was still in a precarious condition. She was immediately ordered to Peel Island, the quarantine station, no communication whatever being allowed with the mainland; not even the health-officer, Dr. Wray, going on board. Dr. Usher, Superintendent

of the Quarantine Station, having made all necessary arrangements for the reception of the crew and passengers on the island, withdrew with all his workpeople, except a few officials and nurses who volunteered to remain, before the crew and passengers began to land. He was willing to stay, had not Dr. Hickling, the surgeon in charge of the ship, assured him that in a Dr. Paoli he had all the help he needed. From this we infer that Dr. Usher would, had he determined to stay, have been as strictly shut out from communication with the mainland as were the crew and passengers of the infected ship, who, even if no fresh cases occurred, would be detained for twenty-one days. Batavia, the probable source of this infection, has been proclaimed, and all vessels from that port, or with Javanese, etc., on board, will be strictly inspected, the passengers, etc., being forbidden to land until a free *pratique* have been granted by the health-officer; and should any suspicious cases be found to have occurred, the same course will be pursued with them as with the *Dorunda*. Meanwhile, orders and regulations for the removal of nuisances, etc., are being issued, notice of the danger is given to all ports on the coast, and the public are being acquainted, by the press and authorities, with the symptoms, prevention, and treatment of diarrhœa and cholera, as if the latter were already present. Cholera and rabies are the two diseases against which our Australian cousins practise quarantine, and in both their efforts have, as yet, been completely successful.

CAUSATION OF TYPHOID AND DYSENTERY IN CAIRO.

PUBLIC bodies in Europe and the colonies have usually so much sense of responsibility, that we are accustomed to assume that a public water-supply will be, if not irreproachable, at any rate superior in purity to the haphazard sources, whether of shallow wells or natural rivers, to which the people previously had recourse. A public water-supply above suspicion is indeed (as we have recently seen in the cases of Rome and Seville) the very best safeguard against epidemics of cholera, and tends to minimise endemics of enteric fever, dysentery, and diphtheria. But when the water is laid on from polluted sources, as has occasionally been done on a small scale, or by accident, in this country, the fourteenth century fictions of poisoned wells become realities of the nineteenth. Such seems to be the literal fact in Cairo at present. From the sparseness of the population, and the vastness of the volume of water, the Nile above Cairo provides a perfectly potable water; but about a dozen years ago a water-company was established with a monopoly of supply for ninety years, unfettered by any condition as to quality. With a noble river close at hand, a river which our London companies might well covet, the Egyptian authorities, from sheer perversity, have chosen to establish their pumping-station on the Abassiyeh Canal, and to conduct the water through a pervious brick culvert, through a sewage-sodden soil, the same culvert being, if reports be true, pierced in places by unscrupulous householders, for the relief of their overflowing cesspools. Chemical analysis is quite superfluous to demonstrate the unfitness of the water. In the canal itself it has a decided green tint; and, though this is removed by filtration, the sand employed for filtration has been hitherto obtained from an old disused burial-ground, human bones being constantly dug up. This has now just been altered. The "filtered" water on standing soon becomes putrid, and offensive to the smell and taste, and the effect on the death-rate of Cairo has been unmistakable. The mortality has risen from 44 to over 60 per 1,000, and, last summer, was not less than 84; while various forms of diarrhœa, dysentery, and enteric fever are constantly prevalent. Indeed, a new form of fever seems to be in process of evolution, combining the characters of a sapric and a malarial disease. The European families are endeavouring to mitigate the evil by boiling, filtering, and aërating the water; and, thanks in no small measure to the agitation raised by our countryman, Dr. Grant, and to the energy of Surgeon-Major Green, the head of the Sanitary Department, the Government has at length been, to some extent, aroused. It is said (and we hope that the advice will be at once acted on) that the Council of Ministers has decided to authorise (why not to compel?) the company to establish a new intake above the bridge of the Kasr-el-Nil. It might have been higher still, though this is a step in the right direction; but complaints are loud as to the condition of the entire service of pipes, etc., which are said to be defective, foul, and offensive.

SANITARY CONDITION OF CAIRO.

SCANDALOUS as may be the administration of the Cairo Water Company, the disposal of the sewage is no better. The introduction of the luxury of water-closets, which always follows that of a public water-supply, has here as elsewhere greatly aggravated the evils of cesspools in a loose sandy soil and in the midst of a crowded population. For those who more wisely adhere to a sort of pail system, there is supposed to be a regular service of scavengers; but the sili set apart for the reception of the excreta and their conversion into pondretti, is so difficult of access that the men employed by the sanitary authorities prefer to shoot the contents of the pails on an open piece of ground more conveniently situated within the city, or refuse to remove them at all, in which case the householders are driven to empty them into the roadway, where an absurd system of sweeping and watering carried on all day, instead of in the night, renders the streets almost unendurable, and the pedestrians are alternately blinded with dust or ankle-deep in mud. Ignorance and mismanagement characterise the present state of the medical and sanitary administration of Egypt; and we fear that nothing short of a dictatorship wielded by a man with the will and administrative power of a Bismarck would suffice to cleanse the Augean stable.

MEDICAL ARCHÆOLOGY.

DR. SIEVEKING writes: The *Times* of January 19th contained a very interesting account of a tomb recently discovered in making excavations, on the Monte Testaccio, necessary for the construction of a large sewer, destined to discharge the contents of the drains and sewers of Rome into the Tiber, at a spot beyond the basilica of St. Paul's, outside the walls. The inscription on the tomb shows that it was the last resting-place of Sergius Sulpicius Galba, who is stated to have been consul in the year 144 B.C. The article in question concludes with the statement that "among other remains of the building of twenty centuries ago laid bare, the site of the college or guild of the faculty of medicine of that date, with an inscription bearing the names of thirty physicians, arranged in three columns, has been found." As a physician, I was naturally anxious to verify and investigate the matter, as we have not hitherto been acquainted with any institution in antiquity destined to promote the education or attend to the interests of the medical profession, analogous to our Colleges. By the aid of friends at the British Museum, and especially of Mr. Cecil Smith, I have been enabled to see the *Bullettino dell' Istituto Archeologico* of last June, which contains, in a paper by M. Henzen, a copy of the inscription referred to, with his interpretation of its meaning. It would appear, from his observations, that we have not to deal with a college or guild of medicine, but simply with a burial club. Moreover, he puts the date of this institution in the time of Hadrian, which would considerably reduce its antiquity. He says: "Collegia Salutaria in tempo dell' impero chiamavansi le corporazioni formate collo scopo di provvedere alla comune sepoltura di loro membri." The inscription runs as follows (all in capitals): "Numini. Domus. Aug. Sacrum. Æsculapio. et. Saluti. Aug. Collegium. Salutar. Loco. Assignato. ab. proc. patr. cæ. N. asolo. fecerunt. Felix. ver. Aspergus. Regianus. vindex. ver. Vilici. Prediorum. Galbanorum. et. pleps. Imm. Actatius. Januarius. Ulpius. Sextianus. Cluturius. Secundus." After this follow, in three columns, alphabetically arranged, fifty-three more names, among which are those of four women. Written out in full, I have Mr. Cecil Smith's sanction

or saying that the inscription would run as follows: "Numini Domus Augustæ sacrum, Æscalapio et Saluti augustum Collegium alutare, loco assignato ab procuratore patrimonii Cæsaris nostri, a olo fecerunt, Felix verna, Aspergus Regianus, Vindex verna, Vilici rediorum Galbanorum et plebs, immunes." The word "immunes," ccording to Mr. Cecil Smith's view as here applied to the three ames which follow, means "without charge." They would there-ore have been honorary members, while the remaining fifty-three ames, arranged in columns, would together make up the "plebs," r rank and file of the society.

THE TREATMENT OF OLD CORNEAL OPACITIES.

N the last number of Graefe's *Archiv für Ophthalmologie*, Dr. Dantziger dvocates the treatment of old opacities of the cornea by friction per-ormed daily, and continued for two or three months if necessary. When the opacity is of moderate size, but of considerable density, is recommended that it should first be scraped away, and the fric-ion, or "massage," commenced as soon as the epithelium has been eformed. The scraping is performed with a Graefe's knife, used in he manner in which one scrapes away a blot with a penknife. Anti-eptic precautions are used, and iodoform is applied as a dressing; ucaine produces sufficient anæsthesia. Atropine and warm fomen-ations are used if the reaction be very great; by the fifth to the eighth ay the epithelium has generally been reproduced, and the "massage" s then commenced. A minute piece of Pagenstecher's ointment is ntroduced, and the upper lid is then moved from side to side over he cornea with the forefinger, with a rapid to-and-fro movement, for bout half a minute. Some hyperæmia is produced, which should ot last more than a few minutes; if it last as long as half an hour, he treatment must be used cautiously, and may have to be aban-oned. The author gives a detailed account of ten cases, in four f which the friction was preceded by scraping. With the ex-eption of three, all were opacities which had existed in a stationary ondition for more than three years, and in all except one (in which he whole cornea presented a greyish opacity) there was a very great nprovement in vision, sometimes without any obvious clearing of he cornea. An improvement from $\frac{2}{200}$ to $\frac{2}{5}$ in three months ould, perhaps, about represent the average result of the ases, but in some it was much better. Those who know how very ntractable these cases are under ordinary treatment, will welcome any ethod which offers a reasonable prospect of ameliorating their con-ition; and should these results be borne out by wider experience, very valuable addition will have been made to the resources of phthalmic surgery.

SUICIDES IN ENGLAND.

T the fourth meeting of the Statistical Society, a paper was read on Suicides in England and Wales in Relation to Age, Sex, Season, and ccupation," by Dr. Ogle. The following is an abstract of the paper question. The deaths registered in the twenty-six years 1858-83 England and Wales as due to suicide were 42,630, and in the pro-ortion of 72 annually per million persons living. The suicide-rate ncreases rapidly with age until after middle life, but in the more dvanced age-periods again diminishes. The maximum rate is in the 5-65 years period, when it reaches 251 per million persons living. t all age-periods, with one exception, the male rate is far igher than the female, and the difference between them increases ith age. The one exceptional period is the 15-20 years period, hen the female rate is slightly the higher. At this same period, e female death-rate and lunacy-rate are also exceptionally above the ale rates. Taking all ages together, out of equal numbers living d in the same age-distribution, the male suicides are to the female icides as 267 to 100. The occupations in which the suicide-rates e lowest are those which imply rough manual labour, carried on ostly out of doors, and by men who are comparatively uneducated, ch as miners, quarrymen, shipwrights, fishermen, gardeners, bourers of all kinds, bricklayers, and masons. The occupations with the highest suicide-rates are those which are sedentary, and carried on by highly educated men, as the learned professions, and also such as notoriously lead to intemperance, as those of innkeepers, publicans, soldiers, butchers, butlers, commercial travellers, etc. Between the two extremes come farmers, shopkeepers, and town artisans. Tables are given of the rates in a number of selected occupations; and some of these—for example, those of soldiers and farmers—are subjected to special examination. As regards farmers, it is shown that their suicides were nearly doubled in the two years 1879-80, when agricultural distress was most acute; and that, simultaneously with this rise in their suicide-rate, there was a corresponding rise in their registered bankruptcies. It is shown that the amount of suicides of men in different occupations, varies to a considerable extent with the lunacy-rates, and with the general death-rates, the same causes that conduce to insanity and to general unhealthiness alo conducing to self-destruction. It is also shown that the amount of suicide varies very definitely with the seasons, forming a regular annual curve, of which the minimum is in December, and the maximum in June. The commonest method of suicide is hanging; then follow in order, drowning, cut or stab, poison, gunshot. Women, however, select drowning before hanging, and poison before cut or stab. Women also differ from men in selection of poisons, men choosing painless and sure preparations, while women take any poison that is at hand, indifferently. The choice of method is also affected by age, the young showing a comparative preference for drowning, poison, and gunshot; and by occupation, men using preferentially the instruments of their crafts; and by season, drowning being avoided in the cold months.

THE REFRACTION OF CHILDREN BEFORE THE COMMENCEMENT OF SCHOOL-LIFE.

MUCH has of late years been written on the influence of school-life in producing myopia, but not much attention has been given to the changes which take place in the refraction of the eyes in children who have not yet been subjected to school influences. A few years ago, it was a prevailing impression that the majority (or, at any rate, a large proportion) of children were myopic at birth; a view which was derived from a report made by Jäger, in 1861, of the results of an examination of the eyes of 100 new-born infants. Among these he found 78 per cent. myopic, 5 per cent. emmetropic, and 17 per cent. hypermetropic. These examinations were, however, made in the early days of the ophthalmoscope, and the accommodation was not paralysed. In seventy eyes of new-born infants, examined *post mortem*, Jäger found no instance of axial myopia (Dr. Randall, *Amer. Jour of Med. Sc.*, 1885), and no subsequent observer has found any but a very inconsiderable proportion of myopia in new-born infants; indeed, in proportion as the methods of investigation have improved, so has the amount of myopia discovered diminished, and the hypermetropia increased; and the most recent writer on the subject (Germann, *Archiv für Ophthalmologie*, Band xxxi, Heft 2, p. 122), examining the eyes of 110 children within 80 days of birth, found that all were hypermetropic. The growth of the eye, however, progressed rapidly during the first two months after birth, for, while in the first month the average degree of hypermetropia was 5.37 dioptres, in the second it was only 3.3 dioptres. As older children are examined, we find the refraction continuing to increase, the hypermetropia becoming less in degree, and a small percentage of emmetropia and myopia appearing. Thus, Germann, examining the eyes of children of ages ranging from a year and a half to ten years, and taking only those who had not learned to read, found hypermetropia in 89 per cent., emmetropia in 7 per cent., and myopia in 3 per cent., while the average degree of the hypermetropia was 2.27 dioptres. These figures show that hypermetropia at birth is the almost universal condition; that, as life goes on, the refraction of the eye steadily increases, the increase being very rapid during the first two months, and more gradual afterwards; that, although this in-

crease in the refracting power of the eye diminishes the average degree of hypermetropia, yet, before the commencement of school-life, a very small percentage of eyes attain the emmetropic condition, and still fewer pass beyond it into myopia. We have no certain data to show at what period of life the majority of healthy eyes cease to undergo this progressive increase in their refraction, but it is certain that a very large proportion do so before they have attained to the condition of emmetropia. Of those that reach that condition, only a certain proportion maintain it; the remainder pass on to the morbid condition of myopia. It would have an important bearing on the pathology of myopia if we could ascertain whether these latter, as seems not improbable, reached their full development at an earlier date than other eyes; whether they were, in fact, organs which had undergone a precocious development, and whose tissues were consequently not well consolidated.

POPULAR LECTURES ON HYGIENE.

HOME missions have grown to be undertakings of great magnitude in these days, and the catholicity of the taste for thus acquiring knowledge and stirring up interest is evidenced by the extraordinary success of the courses of lectures on Hygiene now in course of delivery in Bayswater under the auspices of the National Health Society. A few years ago, it would have been thought impossible so to awaken the interest of such a district as to bring together audiences of seven or eight hundred to listen to lectures on the elements of hygiene; yet thanks, no doubt, in part to the energetic action of Miss Lankester, the Secretary of the Society, this has been accomplished. With the lectures were combined demonstrations of ambulance-drill for men, and of nursing for women; and these demonstrations, given after the lectures, have no doubt been one secret of the great popularity of the courses. As an introduction to the regular course of lectures, which are given by Dr. A. T. Schofield, a public meeting was held under the presidency of Sir Andrew Clark, Bart., who gave an eloquent address full of practical wisdom, couched in characteristically energetic and striking phraseology. That nature was implacable, and never forgave or forgot infractions of her laws, and that ignorance of these laws could not be pleaded as a valid reason for failing to obey them, was the text of his discourse. Its applicability to the circumstances of the meeting was worked out with great force, and the effect of the address has been shown in the great interest excited, and the large numbers attending the first course of lectures and demonstrations.

THE RATING OF CHARITABLE INSTITUTIONS.

A MOVEMENT is being carried forward, with the view of obtaining from Parliament an express exemption of charitable institutions from the payment of rates and taxes, a principle which, after having been tacitly acknowledged for 250 years, was declared not to hold in the well known case of St. Thomas's Hospital. While the object in view is highly commendable, the matter is not of so simple or uncomplicated a nature as might, at first sight, appear. It might not entail any inconvenience to declare these institutions formally exempt from the imperial taxes which apply equally to all parts of England but the same does not hold good as regards the local rates. These being incidental to a particular area, whatever exceptions are made in favour of one portion must be at the expense of the remainder; and it is obviously unjust to saddle any particular district or districts with heavy expenses in connection with institutions which are thoroughly cosmopolitan in the distribution of their benefits. We repeat that we highly approve of exonerating charities from taxation, but, at the same time, maintain that the burden should be so distributed as not to weigh unduly on people whose only fault is that of living in a district liberally provided with hospitals, etc. Under a central municipal government, no doubt, it will be easier to apportion the cost of the exemptions, which ought to be paid out of a fund in which the metropolis, as a whole, should participate. The question is one which merits—and, under happier circumstances, would doubtless obtain—a thorough reconsideration; and, in the meantime, the gentlemen who have taken the matter in hand are doing good work in calling public attention to the present anomalous condition of matters in this respect.

HEALTH OF BIRMINGHAM.

THE mortality at Birmingham during the last quarter of 1885 from the seven principal zymotic diseases shows a remarkable reduction on that of the autumn quarter of 1884, the deaths from these diseases amounting to only 168, against 302—also a comparatively small number—in the fourth quarter of 1884. The death-rate from these diseases for the past quarter was only 1.6, which compares as follows with the zymotic death-rates of the four preceding autumn quarters: 1881, 3.1; 1882, 3.2; 1883, 2.8; and 1884, 2.7; or an average rate of 2.95.

SCOTLAND.

APPOINTMENT OF DR. SIMPSON, OF ABERDEEN, TO CALCUTTA.

DR. W. J. SIMPSON, medical officer of health for Aberdeen, has been appointed medical officer of health for the city of Calcutta. Dr. Simpson has been appointed on the nomination of the medical adviser of the Local Government Board. Dr. Simpson has done excellent service in Aberdeen, and he goes to his new sphere of labour with the best wishes of all who have come into contact with him; while the city of Aberdeen and the community generally lose in him one who has most faithfully discharged the onerous duties devolving upon him.

IRELAND.

THE LABOURERS' ACT.

THE medical officers of Killarney Union having refused to inspect labourers' cottages at a remuneration of half-a-crown for each cottage, the board of guardians have informed them that they will be called upon to resign, should they decline to carry out the orders of the board.

HEALTH OF BELFAST.

DURING the four weeks ending January 23rd, the births registered numbered 531, and the deaths 443. The general death-rate from all causes was 25.6; from affections of the lungs, 11.5; and from zymotic diseases, 2.8 per 1,000. This high death-rate was principally caused by the great mortality from diseases of the lungs, due, in a great measure, to the very inclement state of the weather, the severity of which was greater for some days than during any period of the past seven years.

ADULTERATION IN BELFAST.

THE returns for the past few years, of articles analysed by the borough analyst, Dr. Hodges, show, in a marked manner, the beneficial results in improving the quality of the articles of food offered for sale in the borough, of the working of the Food and Drugs Act. A couple of years since, it was almost impossible to purchase unadulterated mustard in Belfast. Both sweet milk and buttermilk were found largely diluted with water, and the pepper was exceedingly impure. Much of the aërated water was rendered unwholesome, and, in some cases, produced poisonous effects, by being contaminated by lead and copper; but Dr. Hodges's recent quarterly reports show that adulteration has become very rare, and that the manufacturers of aërated water, by the adoption of improved machinery avoid all risk of the introduction of metallic or other impurities.

THE METROPOLITAN SMALL-POX HOSPITALS.

IT is really time that some definite plan were settled, of isolation accommodation for cases of small-pox occurring in the metropolitan district. The question has undergone many phases, each more perplexing than the last; and it is by no means certain that a solution has now been found in the determination of the Metropolitan Asylums Board, to build at Darenth a huge small-pox hospital of six hundred beds.

On Saturday, February 13th, Sir Edmund Currie, as chairman of the special committee, appointed in November last to consider the general question of the future accommodation for small-pox patients, brought up a report, subsequently adopted, with three dissentients, which detailed the steps suggested for coping with future epidemics. As Sir E. Currie truly enough observed, the late epidemic had cost, in the erection of temporary buildings alone at Darenth, and the creation of the camp, the sum of £40,000; and there was nothing to show for the expenditure, for the material could not be used for any other purpose, and this sum, if the managers had had time at their disposal, would have gone far to provide permanent buildings. On the question of economy, to make permanent provision was the cheapest and most economical. It was of advantage to the ratepayers to have permanent buildings erected, as was proposed three years ago, and thus to relieve the metropolis of small-pox.

The committee recommended that there should be formed, at Darenth, the administrative block for 1,000 patients, and that plans should be prepared for the erection of a hospital for 600 patients, on the same site. As the authorities were agreed, and experience showed that the managers must be prepared to deal with about 1,400 cases at one time, having had between 1,400 and 1,500 at one time during the late epidemic, with this view they could be prepared with 300 places on the hospital ships, and 40 in each of the five London Asylums, making 1,100 in all. Sir E. Currie added that, the managers would endeavour to relieve London, as much as possible, of dealing with small-pox cases in the midst of the population; and he believed that it was owing to the excellent ambulance arrangements, by which the retention of patients in their homes had been but a question of minutes, instead of, as in the olden time, when the parishes had the ambulance arrangements, a matter of days, that the epidemic had been cut short.

Before these suggestions can be carried into effect, however, they must first receive the approval of the Local Government Board; and it is plain that that body is not likely, without careful consideration, to sanction the erection of a huge barrack for 600 small-pox patients, so far away from the populous parts of the metropolis as Darenth. The view of the Board, or at least of its Poor-law Department, is apparently in favour of maintaining wards at each of the five metropolitan hospitals, on the ground that cases of exceptional severity occur which cannot be safely removed to any great distance. On the other hand, the managers have, at all events since Mr. Power's inquiries at Fulham, been anxious to restrict the use of the urban hospitals as much as possible; and Mr. Power's declaration in his report of last year, "that the excess of small-pox in the neighbourhood of the Fulham Hospital was quite and specially remarkable, at a time when the total admissions to hospital had not exceeded nine," has been greatly quoted in support of this view. A right decision in the matter is of enormous importance to the health and well-being of the dwellers in the vicinity of the existing hospitals; and we trust, therefore, that the report of the managers will be considered by the Local Government Board with the utmost care, and the gravity of the step to be taken well weighed, before the final order is promulgated.

In this connection, it is worth remarking that Dr. Buchanan, when commenting upon Mr. Power's later experiences at Fulham in his recent Blue-book, addressed to his chief the following aspiration. "I trust the time is not far distant when your Medical Department may be entrusted with the study of the difficult problem of infection-diffusion in its relation to the metropolis generally. There are not a few indications, subsequent to the report of the Commission of 1881, tending to the conclusion that the asylum hospitals, in their present shape, continue to cause an increase of small-pox in their several neighbourhoods." The interpretation of these remarks is to be found in the fact that Dr. Bridges, who, as Medical Poor-law Inspector for the Metropolis, has the immediate supervision of Asylum Board matters, is not a convert to Mr. Power's ideas, and is believed to dominate the opinions of the Board on the matter. It is obvious from Sir Edmund Currie's statement that the Asylums Managers only contemplate the use of the urban hospitals when the greatest strain is laid on their resources—that is, at the height of an epidemic. In this event, "they could be prepared with 300 beds on the hospital-ships, and forty in each of the five London asylums." Forty beds was, it will be remembered, the extreme limit regarded as permissible by Lord Blachford's Commission; and the Asylums Managers, who appear to be much more ready converts to Dr. Buchanan's teaching than his own Board, may be trusted not to make any greater use of the urban hospitals than they are obliged. If, therefore, the Local Government Board should adhere to their views as to the maintenance of these hospitals, they will be running counter to the views of the Managers, who, after all, have the practical responsibility in the matter; and they will be incurring the risk of diffusions of the disease similar to those which have now been proved by more than one observer to follow the use of the hospitals for small-pox cases.

Mr. Power's deductions are unhappily not left unsupported by the evidence of independent investigators. In his final report on the health of St. Pancras, Mr. Shirley Murphy discusses the influence of the neighbouring small-pox hospitals (Hampstead and Highgate) in the production of small-pox in that parish. As regards the Hampstead Hospital, which, during the period 1880 to 1883, received no case of small-pox, but was opened in May, 1884, for the reception of such cases, Mr. Murphy reports: (1) That in the four years when the Hampstead Hospital was closed, the houses in the special area of one mile round the hospital were attacked less than those in the rest of the parish, but that in the year 1884, when the hospital was reopened, the special area suffered three times as much as the rest of the parish; (2) That whereas in the first four years, when the hospital was closed against small-pox, the houses in the radius nearest to the hospital were not invaded in greater proportion than those farther away; in the year 1884, when the hospital was open, there was a marked gradation of incidence, the houses in the half-mile radius nearest to the hospital suffering more than twice as much as those in a radius of three-quarter mile, and more than five times as much as those in the one-mile radius. Similarly, at Highgate Hospitals in the years 1881, 1883, and 1884, the distribution of small-pox in the special area, as related to the rest of the parish, and also in the different rings of the special area, resembled in its incidence the distribution of small-pox around the Hampstead Hospital during the year 1884, when it received patients, except that in the one-mile ring, during the year 1884, the incidence of disease was greater than in the three-quarter mile ring; a fact that becomes especially important when the proximity of houses in the one-mile ring to the Hampstead Hospital is considered, and when it is recollected that in this particular year only the Hampstead Hospital received cases of small-pox. Mr. Murphy regards, therefore, the St. Pancras evidence on the subject as tending to show that these small-pox hospitals, as at present constructed and managed, are a source of disease to the neighbourhood in which they are placed.

As accounting for the fact that the hospitals still undeniably disseminate disease, though restricted as to the number of patients treated in accordance with the views of the Royal Commissioners, it has been argued that the Commissioners' recommendations have not been fully adopted by those who have the management of such institutions. An essential part of those recommendations was that small-pox hospitals should be so constructed as to permit the destruction of all air which the wards have contained. If, says Mr. Murphy, the special incidence of disease in the hospitals' neighbourhood has been the result of air-borne infection, there is hope that the aggregation of small-pox cases may still be practised in institutions constructed so as to ensure this object. But Dr. Verdon, the health-officer for Lambeth, gives by anticipation, in his last published report, some reasons for doubting even this.

There was a good deal of small-pox in Lambeth during 1884, but Stockwell was the only district in which a large number of cases were found in a small area. The drainage in this locality compares favourably with other parts of the parish, the houses in most parts have been built within the last few years. Diphtheria and typhoid are not frequent; the dwellings are not overcrowded, and are occupied by a respectable middle class. But the area is in the immediate proximity of the Stockwell Hospital of the Asylums Board. Dr. Verdon shows, in the same way as Mr. Power and Mr. Murphy have done, that there was a quite disproportionate incidence of the disease in the houses within a quarter-mile radius of the hospital. He does not, however, agree in Mr. Power's theory as to the dissemination of small-pox material from the hospital through the atmosphere. He rather regards the Stockwell prevalence as "in some way due to the traffic to and from the hospital, or to dissemination by continuity of drainage." If, he says, the outbreak was due to aërial dissemination, the disease might be expected to be evenly distributed in the quarter-mile area. But this was not the case. The houses attacked were for the

most part on the north side, and near the lines of communication with the hospital. The south side of the hospital is bounded by the London, Chatham, and Dover Railway, which bisects both the quarter and half-mile areas round the hospital. There is no direct means of transit between the north and south sides of this line between the two points where it bisects the quarter-mile area, and a greater part of the south section of the half-mile area is also cut off from any direct communication with the hospital approaches by this line of railway. The lines of sewage are divided, as well as the roads. In this area, so cut off from the hospital, during the whole of the epidemic only three cases occurred, one in the quarter-mile area and two in the half-mile area. On one side of the railway, fifty-two cases, and on the other side only one case, occurred within the quarter-mile area.

Dr. Verdon regards it as a fair inference that the want of continuity of road and sewer-communication may have had some part in the unequal distribution of the disease, as the railway-barrier, not many feet above the level of the ground, could scarcely interfere with the dissemination of the disease through the air. Moreover, on the east side, the hospital is bounded by houses, the windows in the backs of which look out upon the hospital buildings and grounds. There are forty houses in this row, which are mostly occupied by two or three families. Surely, he argues, if the disease spreads by aërial dissemination, we should have found some people in these houses affected. Assuming an average of eight people in each house, there would be a population of 320 of all ages within a few yards of the hospital, and yet there was not one single case of small-pox in these houses.

We quote Dr. Verdon's views, not as either endorsing or questioning them, but as showing the divergence of opinion on the subject even by skilled observers, and as revealing the urgent necessity for some further independent and continuous inquiry into a matter of very real importance to every inhabitant of the metropolis.

CHILD-MURDER.

When the dead body of a newly born child is found on some doorstep or in a back area, in an underground railway-tunnel, or deposited inside the railings of the garden of a square, wrapped up, as it very often is, in a few rags and a piece of brown paper, or in a portion of a skirt or petticoat, with some sheets of newspaper around, it may reasonably be supposed that the infant did not place itself in the position found, or that it contributed in any shape or form to its untimely end. The natural presumption is, that some person or persons have thus disposed of the body either to conceal the fact of birth and the identity of the child, or more probably even to conceal a crime, which, after careful investigation, is frequently found to be no less a crime than that of wilful murder. Suffocation is one of the commonest causes of such a death, and often the external appearances of the body are suggestive of this, especially if there be constriction and pressure round the neck, mouth, etc. Blows on the head, and other injuries, have been known occasionally to cause the death in these cases. Neglect also at the birth is frequently contributory to the death.

An infant found under such circumstances should constitute the subject of a most careful inquiry, in order to ascertain how, when, where, and by what means the said child came to its death; and the medical witness, who is the most important witness of all, should hesitate to give evidence as to the cause of death until he has made a very exhaustive and complete *post mortem* examination of the body.

One of our daily contemporaries reports an inquiry held by Mr. William Carter, coroner for the Lambeth division of Surrey, into the circumstances attending the death of a newly born male child, at which an extraordinary scene is said to have taken place. It appears that on Friday night last, while several boys were playing at "hide and seek" beneath the railway-arch of the London and South-Western Railway leading from William Street, Lambeth, one of the boys stumbled over a large brown paper parcel. The lad drew the attention of his playmates to the package, and after kicking it under a railway-van, opened it and discovered that it contained the body of a child. They gave information to Police-constable David Cox, 128 L, who found that the child was wrapped up in a towel, a piece of black shawl, and some brown paper. No marks were on the materials, and he conveyed the body to the police-station, where it was examined by Mr. Frederick Farr, the police divisional surgeon, who stated that the child had not been long dead.

After the above evidence had been given at the inquest, one of the ury inquired of the coroner whether Mr. Farr was present to give evidence. The coroner remarked that, in a case like the present, it was not necessary to call a medical man From this expression of opinion the jury differed, and stated that they considered it highly necessary that Mr. Farr should be called in order that he should point out to them, as far as he possibly could, the cause of death. According to the account, the coroner stated, in reply, that the proper course was for the jury to return a verdict of "found dead," and leave the matter in the hands of the police. Mr. Jordan, the juryman above referred to, then addressed the court, and informed the coroner that, in his opinion, child-murder was greatly on the increase in the metropolis, and in order to put down vice of such a character, he, as a juryman, would not sign the inquisition in the form suggested, nor would he be dictated to as to what verdict he should give, more especially as they had no evidence before them as to the cause of death. Such evidence was obtainable, and he expected it to be forthcoming, and he came there to do his duty. ["*Hear, hear*," from the rest of the jury.] Upon this, the coroner requested the juryman to resume his seat and hold his tongue, and threatened that, unless he did so, he would commit him to prison. Mr. Jordan replied that he would willingly go to prison, and then lay the case before the magistrates of the county; he was there for the express purpose of doing his duty, and would not return a verdict of "found dead" when probably a murder had been committed.

The foreman of the jury (Mr. Drake) then addressed the coroner, saying he endorsed all that had been said by his fellow juryman, and should decline to return a verdict till he had heard the medical evidence, inasmuch as the case, if left as it now stood, would be an inducement to vice, and an incentive to child-murder. There was no proof that the child had not had a separate existence from the mother, and hence it was important that Mr. Farr should be called to give evidence; for, in the absence of medical testimony, he was not in a position to form an opinion as to whether the child had met with its death by foul means, or otherwise.

After this, the Coroner then informed the jury that it was simply waste of time, and an unnecessary expense to the county, to adjourn the inquiry for a *post mortem* examination and medical evidence, as it had been definitely decided in the Superior Courts that, unless there were independent legal proof of identity, and of the child having had a separate existence, no criminal charge could be sustained. At this point, so great was the confusion in the court, the coroner ordered it to be cleared, and, after a short consultation with the jury, the inquiry was adjourned for a *post mortem* examination to be made.

We congratulate Mr. Drake and Mr. Jordan upon the firm and decided stand they made in the interests of justice and morality, and, at the same time, we cannot help expressing our surprise that Mr. Coroner Carter should have hesitated for a moment to comply with the most reasonable wish of the jury, that a medical witness should be called to give evidence as to the cause of death.

In all such cases, a *post mortem* examination is absolutely necessary, not only for the purpose of ascertaining if the deceased child was born alive, or had a separate existence from its mother, but also to ascertain whether it died from natural causes, or otherwise.

If, in these cases, verdicts of "found dead" be returned by juries, as suggested by the coroner, the investigation becomes a farce; and, as one of the jury observed, vice and crime are encouraged, and further attempts at investigation are rendered abortive.

It is the duty of the coroner and jury to ascertain, if possible, the exact cause of death; and scientific medical evidence is necessary for this purpose. Should it be found, independent of the identity of the child, that the death has arisen from the wilful act or neglect of some other person, the jury would be in a position to return a verdict of wilful murder against some person or persons unknown; and, although legal technicalities and difficulties occur in connection with these cases at the criminal courts, the jury at the inquest have the satisfaction of knowing that they have done their duty to the public in returning a verdict in accordance with the evidence, and with the oath that was administered to them at the commencement of the proceedings.

HUNTER'S HOUSE.

The suburban residence of John Hunter has at length come under the auctioneer's hammer, and the site will soon be covered with new buildings. For several weeks before the sale, a large number of members of our profession, antiquarians, and other lovers of old institutions, have visited the premises. Many enthusiasts admit that they feel actually grieved at the impending destruction of the house and grounds; still, it is not necessary to remind anybody as to what are the true memorials of John Hunter. They are to be found in the museum of the Royal College of Surgeons, and, in an abstract sense, in the high social regard which, through his influence, has been paid to surgery and biology as professions, even since his lifetime. It is

rue, that certain relics at Earl's Court were highly interesting; but heir intrinsic value depended upon their situation, or at least they were physically irremovable. The removal of Stonehenge to Hyde Park would be feasible, and the transference of the brickwork of the ions' dens in Hunter's garden to Lincoln's Inn Fields would be no mpossibility; indeed, the turf covering the dens might also be taken way from Kensington and replaced over the dens in London; but it s self-evident that both Stonehenge and the dens would be quite out f place under such circumstances. In their place, however, the relics f John Hunter's work were interesting enough. Behind a large rown brick house stood a fine lawn, at the right hand extremity of which was a grassy mound, in form like a small brick-kiln. This mound was surmounted by a low machicolated brickwork turret, for which various explanations have been advanced. Indeed, this tower as been made the basis of Hunterian legends; but it was most probbly erected before Hunter's time, and meant for "ornament," after deas due to influences derived from Versailles and Holland.

Three dens were excavated in the mound, the central den being airly capacious; but, according to modern ideas, they were all illdapted for the reception of live carnivora. The story of the escape of wo leopards from the dens is probably well known to our readers. lose to the dens grew some trees, including a fine mulberry, in the ark of which the late Mr. Frank Buckland believed that he could race old incisions, made by Hunter, for the introduction of a therometer, in his experiments on the physiology of the circulation of ap. At the left hand corner of the grounds, beyond the lawn, was a mall workshop, with a loft, evidently as old, or older, than Hunter, ut what use he made of it remains unknown. Turning back to the ouse, a long, low, subterranean passage led from the grounds, under he building, to the yard in the front part of the premises. It was ardly six feet in height, and, midway, it led to two small chambers ell bricked, the one was used for the famous madder-refuse experiments on swine, the opposite chamber contained two copper furnaces. t was in the larger copper, concealed in this little apartment, that the keleton of the Irish giant, and many other specimens, were prepared. oubtful as may be the original meaning of the passage under the ouse, it cannot be doubted that Hunter found it very useful for the ntroduction of "subjects," and the prosecution of work away from e dangers of popular prejudices and conjugal inquisitiveness. The terior of the house contained nothing of intrinsic interest. We made me note of the good company that once assembled under its roof the JOURNAL of February 13th.

It will be seen, from the above description, that, as we have already bserved, Hunter's house and its grounds contained little, if anything at could have proved of any interest, if removed from its original te.

The sale took place on Tuesday and Wednesday last. On the first ay, an ilex, said to have been planted by Hunter, was sold to a aler for £2 12s. 6d., and a timber buyer bought up three large hesnut trees for £12 12s. The mound and turret, as might have been pected, found no bidder. To Mr. Hunter Baillie, the surviving desndent of John Hunter, a statuary marble mantlepiece and hearth, ith register stove, was knocked down for £5. Mrs. Spartelli quired the decorated door, panels, and pilasters, with the architrave, r £16 4s. On the second day, February 17th, Professor Chiene, of dinburgh, purchased some timber from the house, for the purpose, doubt, of fashioning the wood into relics. O'Brian's copper was ught by a solder-merchant for £1 16s. We understand that a ember of the profession is endeavouring to pursuade the local authoris to give the name of Hunter to the new street or square to be ected on the site of his house.

THE FRENCH HOSPITAL.—The report of the French Hospital d Dispensary, presented at the eighteenth annual dinner, ven on February 13th, presided over by the French Ambassador (M. Waddington), states that the work of the hospal was yearly and steadily progressing. The receipts for the ar 1885 had amounted to £3,482 7s., the largest amount collected one year since the foundation of the hospital. The number of intients during the year was 351, the days of stay being 9,349. The t-patients treated were 7,370, and the total cost was £2,280 4s. 4d. may be mentioned that, though naturally the larger proportion of e patients are French, yet the hospital opens its doors to all nationties, and last year treated 17 in- and 583 out-patients belonging to e United Kingdom. A list of subscriptions amounting to £2,400 s announced during the evening. It was stated that there s enough money to buy a site for the new hospital, but hardly ough to build the edifice, for which £10,000 or £12,000 would be uired.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.
ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA,	ACUTE RHEUMATISM,
OLD AGE,	CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above districts will be held at the Grand Hotel, Brighton, on Wednesday, March 24th. Mr. Hodgson will preside. Communications with respect to papers should be sent to the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting will be held in the Boardroom of the Great Northern Central Hospital, on Thursday, February 25th, 1886, at 8.30 P.M. The chair will be taken by Dr. Dickson, President of the Branch. Mr. W. Spencer Watson will read a paper on Recent Improvements in the Treatment of Nasal Polypi and Chronic Rhinitis, and will exhibit an instrument for applying dry antiseptic vapour to wounds, and during

operations. Dr. Fancourt Barnes: Case of Uterine Myoma, treated by oöphorectomy. Dr. R. W. Burnet: Case of Cerebral Syphilis; Fits and Recovery. Mr. Macready: Case of Pott's Disease; Compression of Lung; Hypertrophy of Right Heart. All qualified medical men are invited to attend.—GEORGE HENTY, M.D., Honorary Secretary, 302, Camden Road, N.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North-Western Railway Hotel, Stafford, on Thursday, February 25th. The President (Mr. J. H. Hartill) will take the chair at half-past three o'clock. Papers.—Mr. F. Marsh: On the Use of Kocher's Method of Reduction of Subcoracoid Dislocations of Humerus. Dr. McAldowie: Paralysis of the Arm from Lesions of the Nerve-Trunks. Mr. Vincent Jackson: The Removal of Vesical Calculi from Boys and Male Infants. Dr. Gibson: Notes on a Case of Supposed Perforating Ulcer of Foot, with Specimen.—VINCENT JACKSON, General Secretary, Wolverhampton, January 27th, 1886.

SHROPSHIRE AND MID-WALES BRANCH.—The half-yearly meeting of the Branch will be held at the Salop Infirmary, Shrewsbury, on Tuesday, February 23rd, at 3 P.M., J. D. Harris, Esq., President, in the Chair. Gentlemen desirous of introducing patients, exhibiting specimens, or making communications, are requested to signify their intention at once to EDWARD CURETON, Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above district will be held at The Infirmary, Gravesend, on Friday, February 26th, at 4 P.M., O. R. Richmond, Esq., in the Chair. Dinner at the New Falcon Hotel, 6 P.M.; charge, 6s., exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, O. R. Richmond, Esq., Lodgewood, Gravesend, not later than February 24th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers.—1. Dr. Curnow: Typhoid Fever and its complications; their treatment. 2. Mr. W. Rose: Some points connected with the operative treatment of Inguinal Hernia. 3. Dr. Firth: Three cases of Puerperal Convulsions. 4. Mr. Bryden: Cases of Foreign Bodies in the Ear. Several interesting cases will be exhibited by the medical staff of the infirmary.—A. W. NANKIVELL, Honorary Secretary of the District, St. Bartholomew's Hospital, Chatham.

SOUTH INDIAN BRANCH: ANNUAL MEETING.

THE annual meeting of the South Indian Branch was held in the Central Museum, Madras, on January 8th. A large number of members were present.

President's Address.—Surgeon-General M. C. FURNELL, President of the Branch, read an address on cholera in its relation to water-supply.

Report.—During the past year, eleven new members joined the Branch, which now numbers seventy-one. Monthly meetings were held throughout the year.

Office-bearers.—The following office-bearers were elected for 1886:—*President:* Surgeon-General M. C. Furnell, M.D. *Vice-President:* Surgeon-Major E. F. Drake-Brockman. *Honorary Secretary:* Surgeon J. Maitland, M.B. *Treasurer:* Surgeon-Major C. J. McNally, M.D. *Committee:* Surgeon-Major S. B. Hunt; Surgeon-Major A. M. Branfoot, M.B.; Surgeon-Major H. Allison, M.D.; Surgeon D. F. Dymott, M.B.; Surgeon C. M. Thompson, M.B.; Surgeon J. Smyth, M.D.; H. L. Ansted, Esq.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Traction-Treatment of Morbus Coxarius.—Chloroform Replaced by Methylene Bichloride.—Constipation cured by "Hypnotic Suggestion."—Albuminuria in Growing Children.—Remarkable Vitality of an Infectious Principle.—The Recent Cholera Epidemic in Brittany.—General News.

M. LANNELONGUE, surgeon at the Trousseau Hospital, recently read notes before the Paris Surgical Society on the method of traction by the application of weight and constant extension in treating articular affections, especially strumous hip-joint disease. Le Sauvage, of Caen, invented in 1830 this means of treatment, but the American surgeons were the first to realise its importance, and sought, by the aid of different apparatus, to keep the head of the femur from contact with the acetabulum. A child, aged 4 years, recently died in the early stage of hip-joint disease; its limb had been under the influence of extension since October 22nd, 1885; a weight of two kilogrammes, increased to three, had been employed. The apparatus was removed, four days before the child's death from croup. The experiment on the dead body was made during a severe frost, and the body was perfectly preserved. The pelvis was separated from the trunk, and fixed on to a plank by nails, the vertebræ and the ilia being firmly secured. The hip-joint was left thoroughly free, so that flexion, extension, and rotation outwards could be effected without hindrance. Extension was practised, as on the living body; the weight attached was four kilogrammes. The experiment commenced at 10.30 A.M., and was continued until seven o'clock in the evening. Rigor mortis was absent. The operating-room was heated to about 77° Fahr. The limb was frozen with salt and ice, and afterwards with salt and hydrochloric acid. At nine o'clock the next morning, the limb was as hard as wood. A section was made with a saw in the direction of the neck of the femur; the relations of the contiguous parts were not disturbed. It was evident that the articular surfaces were not in contact with each other; there was an interval of half a centimètre between them at the highest point, and in the centre of the joint. The cartilage of the head and the lower part of the articulation were in contact. The capsular ligament was strained over the head of the femur, and lay close against it; but, in the upper part of the articulation, the space existing between the articular surfaces was filled with soft fungoid growth. The head of the femur had slipped downwards; one half, which was not flattened, like the upper part of the head, but rounded, lay beyond the cotyloid cartilage. This experiment showed that the separation of the articular surfaces was an actual fact. It must be remembered that this result was due to the application of extension forty-five days before death, not to that practised on the dead body. Nearly the entire capsular ligament had degenerated into fungoid growth, and was unable to resist the influence of traction. M. Verneuil stated that M. Lannelongue's experiment explained a fact that had recently come under his notice. On examining a patient with a very bad form of hip-joint disease, he observed that the limb was shortened, and that the great trochanter was displaced upwards. He supposed that there was incomplete dislocation, and decided on practising resection. He then found the head of the femur lying naturally in the acetabulum. It must therefore be concluded that at a certain period of this disease the femur becomes misshapen, and presents the characteristics of partial dislocation. In future, an apparent shortening, even of three centimètres, accompanied with a moving upwards of the great trochanter, should not warrant the conclusion that the head of the femur is really dislocated.

M. Le Fort stated, at a recent meeting of the Paris Academy of Medicine, that he used methylene bichloride in preference to chloroform, because the latter anæsthetic caused vomiting. M. Gauthier observed that the compound which M. Le Fort obtained from England, and employed for his patients, after the practice of Sir Spencer Wells, was either methylene bichloride, which M. Regnault had shown to be a violent poison, or it was a mixture of methylic alcohol and chloroform. If the latter were the case, the compound should not be sold as methylene bichloride. M. Regnault examined the substance used by M. Le Fort, and pronounced it to be composed of three parts of chloroform and one part of methylic alcohol.

Dr. Benoit du Martouret cures constipation in nervous women by what he terms hypnotic suggestion. The patient is sent to sleep, and then it is suggested to her that she is not constipated, but will have a motion on awaking.

M. Echhorst has observed several instances of albuminuria at the onset of puberty, quite unexplained by any concomitant pathological condition. The urine contained albumen; sometimes its presence preceded general disturbance, and disappeared with the other symptoms. It was yellow and limpid in the cases which he examined. M. Echhorst found hyaline casts and fatty granules in one instance only. The attacks of albuminuria reappeared after an interval of several weeks or months; they might last a day or a week; the prognosis was not serious; country air and tonics appeared to be the best remedies. The symptoms were lassitude, fatigue, inaptitude to work, loss of memory and irritability, occasionally accompanied by headache, vomiting, muscular contractions, and transient epileptiform convulsions.

M. Prevost, in the *France Médicale* of January 28th, 1886, describes an epidemic of scarlet fever, which broke out under the following circumstances. On November 10th, 1885, he was called in to treat a little girl. She was suffering from sore-throat, fever, and vomiting. On November 1st, the family had taken into use beds and bedding which they had inherited, and which had been a year out of use; the mouldy, musty smell which emanated from them was so powerful that the door of the cupboard in which they were kept was left open in order to dissipate it. M. Prevost recommended that the bedding, etc., should be sent to be disinfected by superheated steam. This was done, but they had been in use ten days previously to this measure. A younger sister, who had not used any of the articles in question, was seized with scarlet fever; a third had whooping-cough on November 25th, and on December 12th exhibited symptoms of scarlet fever; a infant brother had whooping-cough, followed by scarlet fever the mother exhibited all the symptoms of scarlet fever, ex

ɔt the eruption. There had not been any known con- ɛt between the beds and bedding and the scarlet fever ɛients. Dr. Prevost had previously observed similar phenomena ulting from using beds and sheets which had been laid by, and re impregnated with damp and mould. M. Léon Blondeau states, the *France Médicale* of January 30th, that in 1882 he was called to at a family attacked by scarlet fever. The father only escaped, t in the spring of the following year he was seized with the same ness, the only discoverable source of infection being the contact of the ghtgown of the patient, which had been inadvertently put in the wer amongst his wife's linen, lying under a jacket which she had rn during convalescence.

The Minister of Commerce sent MM. Charrin and Proust, to in- re into the cholera epidemic at Concarneau. They have made following report to the Academy of Medicine. Cholera ap- red at Concarneau on September 18th, and disappeared on February 1; there were 35 deaths from cholera, among 5,191 inhabitants. It ead along the sea-coast. Concarneau, Quimper, Guilvinec, An- rne, and Donarnenez, were attacked. The epidemic was not pre- ed by premonitory symptoms, much insisted on by the late Jules érin. The local medical men affirm that the general health was un- ally good; but later on, when cholera had gained a footing, cho- ne and diarrhœa appeared. The epidemic was limited to the ns and villages on the sea-coast, probably due to the habits of the ple, who remain on the coast, and do not go into the interior of country; nevertheless, a few cases occurred from visits from in- bitants of the infected localities to the interior. Quimper, the ital of the department, and therefore in relation with the other alities, is the only village of the interior which was attacked. arly all the sufferers were of the poorer classes, and a considerable mber indulged in strong drinks. The soldiers in barracks escaped; gienic precautions being observed with military precision. At ilvinec, and a few other places, water was undoubtedly a medium contagion. The hygienic condition exercised an undoubted influ- e on the epidemic. In those localities where it was the most faulty, epidemic was the most severe. At Guilvinec, where water-closets unknown, and where, during the fishing season, the town was little ter than a repulsive sewer, there were several violent intermittent breaks. The commission has, as usual, pointed out the sanitary asures that ought to be adopted; it remains to be seen if their wise nsel will take more effect than that given by preceding commis- ers.

I. Villain, the chief of the Paris meat-inspectors, has presented he Prefect of Police a manual of meat-inspection (*Manuel de l'In- tion des Viandes*). Several of the most eminent veterinary sur- ns have helped M. Villain in the preparation of the volume, which tains useful sanitary data not to be met with elsewhere. All the ateral branches of the subject, such as the leather trade, the nufacture of brushes and of wool mattresses, oleomargarine, etc., fully and scientifically dealt with. It appears that the skin of l-born fœtal calves makes excellent shoes for children.

Professor Ranvier, of the Collège de France, is a candidate for a in the Académie des Sciences.

M. Paul Bert, before starting to fill the post of Governor-General Tonquin, expressed a hope that he might shortly summon to his young French *savants*, in order to introduce European science, thus to help on the work of civilisation inaugurated by the nt French conquest.

MM. Clasen and Gudendag, Paris instrument-makers, submit to the bation of the Paris Academy of Medicine a new form of syringe ypodermic injections, which was suggested to them by the con- ction of Delstanche's aspirator. In this instrument, the piston is in contact with the injection-fluid, so that both are protected the changes which damage instruments of this kind. A small rvoir for holding the fluid is placed at right angles to the body of cylinder.

OLLEGIATE HALLS IN LONDON.—The Board of Trade is about to sked to grant a licence to College Hall, which is to be a place of lence for female students in London, especially for female students niversity College and the Women's School of Medicine. It will ide supplementary instruction, and will take over the institution ady known as College Hall, Byng Place.

was stated at the annual meeting of the Folkestone Hospital and ensary, held on Wednesday, that the balance-sheet showed a ng off in the subscriptions, and that the expenses had exceeded incor e by £78.

UNITED STATES.

[FROM A CORRESPONDENT.]

Angioma and Carbolic Acid.—The Toxic Properties of Sassafras.—Intubation of the Larynx.—Rheumatic Glossitis.—Obstinate Endocervicitis.—Peculiar Condition of the Gums.—The Skin and Kidneys in Endocarditis.—Defects of Smell.—Peculiar Xanthoma.—Congenital Purpura.—Atropine in Acute Coryza.—Renal Asthma.—Seventy Years Insane.

DR. MOSES GUNN, of Chicago, reports very successful results in angioma from the injection of carbolic acid. A solution of pure glycerine and carbolic acid (95 per cent.), equal parts of each, is made; and, at first, but five minims are injected by the hypodermic syringe into the nævus. This injection is made once every four days, increasing the injection gradually until fifteen minims are thrown into the tumour. When this larger amount is injected, the needle should be inserted near or at the margin of the tumour, and then the handle of the syringe should be depressed until the point of the needle is near the surface of the angioma. Now inject five minims; then partially withdraw the needle, and, changing the direction, inject another five minims, and repeat in a third place. Shortly, a shrinking and lessening of the tumour takes place.

Dr. John Bartlett, of Chicago, has made a study of the toxic properties of sassafras, from which he concludes that, in its action as a narcotic and sudorific, it resembles opium. In its property of inducing tetanic and clonic spasms, followed by paralysis, it is similar to strychnine. In its power of exciting the uterus, it may be likened to ergot.

Intubation of the larynx, in place of tracheotomy, has been recently receiving considerable attention in this country; and we learn that Dr. F. E. Wahnam, of Chicago, reports eleven cases of true croup, in which 36 per cent. were cured by intubation of the larynx, a result far better than he was accustomed to get from tracheotomy.

Dr. N. D. Gaddy, of Indiana, reports a case of rheumatic glossitis, where rapid relief followed the envelopment of the tongue in a rag wrung out of tincture of guaiacum.

For that obstinate form of endocervicitis where a discharge like the white of egg is poured out in great abundance, Dr. J. C. Shirk highly lauds an aqueous solution of chromic acid (one drachm to one ounce). Four or five applications of this remedy, at intervals of a week, usually suffice.

A peculiar condition of the gums, in a child in whom there was no reason to suspect mercurial toxæmia or scurvy, is reported by Dr. D. S. Roseberry, of Maryland. The gums were swollen, dark in colour, and spongy. The teeth which remained in place were loose, and several had dropped out. Dr. Wm. H. Norris, who said that he had seen several such cases, always found relief to follow the local application of a solution of carbonate of soda.

Dr. Isham Cottingham, of Kentucky, calls our attention to the importance of not overlooking the function of the skin and kidneys in the treatment of endocarditis. If deficient, he has had good results from jaborandi and spirits of nitre.

According to Dr. Carl Seiler, of Philadelphia, some persons have a defect of smell analogous to colour-blindness. One person finds that to him violets smell like garlic, everything else smelling normally.

Dr. Robinson, of New York, reports a case of xanthoma which is peculiar, in so far that there was a large patch on each elbow, and nowhere else on the body.

Dr. E. S. Brown reports a case of congenital purpura in a new-born child. The child was born with petechiæ on the chin and abdomen, and an ecchymotic spot in the right hypochondrium. The spots developed from day to day. At the same time, there was hæmorrhage from the stomach, bowels, and umbilical vessels; none from the mouth or nose. The child died on the third day.

Dr. John Gray, of Florida, highly lauds atropine for acute coryza. He uses the sulphate in doses of $\frac{1}{120}$ of a grain, repeated after four hours.

Dr. Austin Flint, of New York, considers renal asthma as generally, if not always, among the fatal prognostics of Bright's disease. He believes the asthma to be due to the poison of certain excrementitious materials irritating the nerve-centres.

A woman recently died in the Bloomingdale (New York) Asylum, at the age of 85 years, from chronic mania. According to the death-certificate, the woman had been insane for seventy years.

MARRIAGE AND LUNACY.—A law under which the husbands or wives of incurably insane persons may remarry is provided in a Bill now before the Iowa Senate.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications chiefly by reason of their unnecessary length.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Sir,—Permit me to inquire whether, if it be "open to any Member of the College to pass the examination for the Fellowship," is it not equally open to any Member of the College to become a Fellow without examination on payment of fifty guineas or more. What then becomes of "in order more effectually to promote and encourage the study and practice of surgery that the class of Fellows by examination was instituted"?

I fear that Mr. Macnamara's generous assertion that "the fact of a man being a Fellow of the College in no way lessens his power to appreciate the feelings of general practitioners" is the severest satire he could have penned, since by your article of Jan. 23, "a small majority of the Council are still disposed to keep the Members at arm's length."

A round peg cannot fit a square hole, yet a square peg can obliterate a round hole. The round peg can move only in his magic circle, he cannot get beyond into the crannies of the square hole, and is, therefore, incapable of appreciating the feelings of general practitioners; whereas the square peg has an enlarging and progressive influence, he breaks the magic circle, and tightly embraces the demon "routine."—Yours, etc., Charles Moore Jessop.

*** Our correspondent appears to have an erroneous impression. There is no provision in the charters or by-laws of the College by which any Member can become a Fellow without examination, on payment of fifty guineas or more. Members of twenty years' standing may be admitted by the Council, under certain conditions, as Fellows; and for this the fee is ten guineas.

PAYMENTS BY OUT-PATIENTS AT HOSPITALS.

Sir,—My attention has been called to a report of a meeting of the Hospitals Association, which appeared in the Journal of January 30th, in which, on page 224, I am reported to have said: "Alluding to Dr. Heslop, of Birmingham, as the originator of the payment system, he (Mr. Burdett) had had reason to see that it was a failure, inasmuch as, so far from decreasing the number of patients, it only increased it." A speech of ten minutes' duration, condensed into one sentence, must necessarily be misleading; and, as I rose at the request of the chairman at the end of a prolonged sitting, I cannot blame the reporter for entirely misunderstanding the drift of my remarks. As, however, some importance has been attached to this report, may I be permitted to briefly repeat what I really said as the result of twenty years' experience of hospital management?

The London Hospital has certainly set an example to all similar institutions, by establishing a system of investigation and inquiry, combined with the utmost facilities for affording deserving cases the free medical relief which they may need. To say that this system is perfect would be ridiculous, but it is, on the whole, by far the best system to be found in connection with a general hospital in this country, with the sole exception of the Royal Albert Hospital, Devonport. Dr. Heslop, at Birmingham, originated the system of charging out-patients a registration-fee on their first application, varying in amount from sixpence to one shilling; and at Guy's and other hospitals the same method has been resorted to. A registration-fee had, however, proved in practice to be everywhere a failure, because it not only resulted in an increase in the number of applicants, but it at the same time often excluded cases the most deserving, whilst admitting others which ought not, under any circumstances, to receive free relief at a charity. I could not, however, agree with those who declare that the London Hospital system left nothing to be desired.

It was true that a system of inquiry had been instituted there with the best results, but inquiry cost money; and what the hospitals needed was more cash, not new sources of expenditure. For these reasons, I believed that the best system for regulating out-patient relief would ultimately prove to be one which combined inquiry with free relief, and a plan which permitted a voluntary assessment, according to means, by the patients themselves. Every poor person who needed hospital relief, and could not afford to procure it elsewhere, ought to be able to obtain it at the hospital without delay or difficulty. At the same time, the hospitals ought to avail themselves of every feeling of gratitude and independence which might anima individual patients, and every opportunity should be afforded to all pay something, however small, towards the expense of the reli which they might have received. Whether this system of volunta assessment should be confined to payment for medicine, or to a volu tary weekly payment of a certain amount, was a matter which in vidual hospitals must decide for themselves. The income deriv from these patients' contributions would be more than enough to p the salary of the inquiry officer, and the expense attending a prop investigation into the circumstances of applicants in the out-patie department, whilst it would secure that all who required aid shou receive it without delay or difficulty. The registration-fee was failure, because it prevented the admission ofttimes of the real deserving, whilst the numbers of patients increased considerably und this system. It was therefore twice condemned by experience; b a modification of the American plan, and the introduction of volu tary assessment and free relief, had proved successful wherever it h been tried.—I am, etc., Henry C. Burdett.

The Lodge, Porchester Square, W.

A SPECIAL DECORATION FOR MEDICAL MERIT.

Sir,—I beg to remark that everyone will not agree with your o jection to a special decoration for medical merit.

There seems to be no reason why the Red Cross Order, now existin should not be expanded into a graded order of knighthood. T members of the existing grade of the Red Cross could remain as Ass ciates; and Companions, Knight Commanders, and Grand Crosse could be developed as in the order of the Bath, or in that of St. Mich and St. George. The order could have a civil and a military divisi and be extended to cover services of every kind to humanity wh sick or wounded.

Such an order would be certain to rise in value, and to be high appreciated by the world. It is want of confidence in ourselves a in our future that makes us cling to the order of the Bath, an or doomed to lose its value. Our right to the Victoria Cross h never been questioned.

When Sir William Mac Cormac was knighted, as was Sir Willia Dalby the other day, and Sir Oscar Clayton some time since, all th gentlemen could have been decorated with knighthood in a Civil Di sion of the Red Cross, for special services to humanity.

I hope Dr. Quain will be able to urge on the development of t Red Cross Order in this direction, making it open to men and wome and extending it downwards to the ordinary nurse, and upwards to i clude in the Grand Crosses, Lister, Paget, Jenner, etc., amongst o great men.

I think a baronetcy is a trouble to a number of people, but a regu Order of Knighthood would suit many poor men.

Referring to Dr. Parkes, I beg to say that Sir Galbraith Logan wou have gotten him the honour of K.C.B., but Dr. Parkes distinct refused it. I have before me now the printed letter of Sir Galbrai Logan, written to the *Times*, when Dr. Parkes died, making t statement.—Yours, I. V. R. C.

TEREBENE AND MANGO.

Sir,—It may interest Dr. Wallich to know that, in Venezuela, decoction of the rind of the mango fruit is employed in cases wh terebene is indicated.

In *Coleccion de Medicamentos Indijenas*, por Gerónimo Pompa (Ro Hermanos, Carácas. 1881), the author says:—*Mango.*—The dec tion of the dried skin of the fruit is taken as an excellent pectoral; the same end is also applied the resin which the trunk of the t produces.—I am, yours faithfully, Alexander Macindoe, M.D.

Willoughbridge, Market Drayton.

Accidental Poisoning.—An inquest was recently held at Ely the body of Edward Gray Jarvis, aged fifteen years, a pupil of t Cathedral Grammar School. The deceased was in the school hospit suffering from ulcerative tonsillitis. He was attended by a train nurse, who had used carbolic acid as a disinfectant, and placed so in an empty medicine bottle. She gave the deceased a dose mistake, and death resulted in about two hours, notwithstanding th medical aid was at once rendered. The jury returned a verdict "Death by misadventure."

St. Mary's Hospital.—The Annual Sports Dinner will be h on Thursday, February 25th, in the Venetian Room of the Holbo Restaurant, at 7.30 p.m. The Dean of the Medical School (Mr. Geo P. Field) will be in the chair.

NAVAL AND MILITARY MEDICAL SERVICES.

CHANGES OF STATION.

The following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month :—

	From	To
Surg.-General R. Wolseley, M.D.	Edinburgh	Bengal.
,, ,, G. L. Hinde, C.B.	Curragh	Bombay.
Brigade-Surgeon H Knaggs	Winchester	Jamaica.
Surgeon-Major C. A. Maunsell, M.D.	C. of Good Hope	Aldershot.
,, R. W. Davies	Bengal	Aldershot.
,, W. E. Riordan	Suakin	Egypt.
,, R. C. Eaton	Bengal	Colchester.
,, E. F. Boult	—	Portsmouth.
,, J. F. Supple	Devonport	Bengal.
,, J. A. Anderson, M.D.	Preston	York.
,, J. Riddick	Shorncliffe	Winchester.
,, J. Leader	—	Cahir.
,, J. Scanlan, M.B.	Devonport	Pembroke Dock.
,, W. H. Garde	—	Egypt.
,, J. Coats, M.B.	York	Fleetwood.
Surgeon B. W. Wellings	Chatham	Sheerness.
,, H. A. Fogarty, M.D.	Aldershot	C. of Good Hope.
,, H. G. Gardner, M.B.	Plymouth	Devonport.
,, G. H. Le Mottée	—	Chatham.
,, E. O. Reynolds	Devonport	Trowbridge.
,, J. J. Morris, M.D.	Devonport	Pembroke Dock.
,, P. H. Johnston, M.D.	Cahir	Cork.
,, I. B. Emerson	C. of Good Hope	Berwick.
,, W. T. Johnston, M.D.	York	Sheffield.
,, W. W. Kenny, M.B.	Mullingar	Malta.
,, W. Keays	—	Dublin.
,, J. Pedlow, M.D.	Dorchester	Portsmouth.
,, H. L. Donovan, M.D.	Curragh	Bengal.
,, K. S. Wallis	Colchester	Ceylon.
,, J. J. Falvey	Hounslow	Aldershot.
,, H. Martin, M.B.	Bombay	York.
,, G. W. Robinson	Bengal	York.
,, J. Watson, M.D.	Dublin	Curragh.
,, A. O. Geoghegan, M.D.	Portsmouth	Gosport.
,, C. R. Egan, M.B.	Curragh	Newbridge.
,, J. G. Harwood	Bengal	Aldershot.
,, H. L. E. White	Bengal	Hounslow.
,, G. F. Poynder	Chatham	Gravesend.
,, A. Asbury	Bengal	Dublin.
,, C. R. Woods, M.D.	York	Preston.
,, A. Peterkin, M.B.	Netley	Dover.
,, J. Harran	Bengal	Woolwich.
,, D. L. Irvine	Sheffield	York.
,, J. H. Nicholas	West Coast, Africa	Devonport.
,, S. A. Crick, M.B.	Fleetwood	Salford.
,, G. E. Twiss	Curragh	Dublin.
,, E. Butt	Bengal	Belfast.
,, J. H. A. Rhodes	Berwick	Newcastle.
,, R. Haselden	Portsmouth	Gosport.
,, R. E. R. Morse	West Coast, Africa	Netley.
,, G. J. Coates, M.D.	Tipperary	Buttevant.
,, T. B. A. Tuckey	Cork	Templemore.
,, A. H. Morgan	Cahir	Fermoy.
,, R. P. Hetherington, M.B.	Templemore	Egypt.
,, H. H. Johnston, M.B.	Fort George	Egypt.
,, W. G. Birrell, M.B.	Salford	Leeds.
,, C. E. Faunce	Portsmouth	Bengal.
,, H. H. Sloggett	Woolwich	Bengal.
,, R. H. Clement	—	York.
,, N. Manders	Gravesend	Chatham.
,, J. Maher	Netley	Bengal.
,, W. Turner	York	Egypt.
,, F. D. Elderton	Curragh	Bengal.
,, D. R. Hamilton, M.B.	Bombay	Madras.
,, S. C. Philson	Aldershot	Bengal.
,, F. W. H. D. Harris	Devonport	Madras.
,, J. M. Nicolls, M.B.	Aldershot	Bengal.
,, J. F. M'Millan	Aldershot	Bengal.
,, L. T. M. Nash	Dublin	Bengal.
,, C. S. Sparkes	Aldershot	Bengal.
,, H. F. Horne	Aldershot	Bengal.
,, P. B. Skerrett	Dublin	Bengal.
,, H. D. Rowan, M.B.	Canterbury	Bengal.
,, A. L. H. Dixon	Colchester	Madras.
,, P. J. R. Nunnerly	Burnley	Madras.
,, M. J. Sexton, M.D.	Colchester	Madras.
,, H. E. Cree	Portsmouth	Egypt.
,, F. L. Carte	Dublin	Egypt.
,, W. H. Starr	Portsmouth	Egypt.
,, A. P. H. Griffiths	Devonport	Egypt.
,, W. S. Boles, M.B.	Devonport	Egypt.
,, H. L. G. Chevers	Portsmouth	Egypt.
,, F. J. W. Stoney	Curragh	Egypt.
,, H. N. Kenny, M.B.	Curragh	Egypt.
,, W. R. Henderson, M.D.	Sierra Leone	CapeCoastCastle
Quarter-Master R. Howell	C. of Good Hope	Cork.
,, H. S. Webb	Natal	Aldershot.

THE NAVY.

W. F. C. Bartlett, Fleet-Surgeon, has been appointed to the *Castor*, and R. H. More, M.D., Fleet-Surgeon, to the *Impregnable*.

Mr. W. Clibborn has been appointed Surgeon and Agent at Bridport; and Mr. John Craven has been appointed Surgeon and Agent (Assistant) at Thurso, for Sorabster Station.

ARMY MEDICAL SERVICE.

Surgeon and Honorary Surgeon-Major J. H. Paul, M.D., of the 1st Tower Hamlets Rifle Volunteer Brigade, has resigned his commission, which dates from September 25th, 1860. He is permitted to retain his rank and uniform. Acting-Surgeon O. M. White has been appointed Surgeon to the corps.

Surgeon George Butler died at Brighton on January 13th, at the age of 68. He entered the Army as Assistant-Surgeon October 7th, 1842, and retired on half-pay October 20th, 1848.

Surgeon George Waylen has resigned his commission in the 2nd Wiltshire Volunteers, which he joined October 1st, 1877, although his Surgeoncy dates from October 26th, 1872; he is granted the honorary rank of Surgeon-Major, with permission to retain his uniform.

The *London Gazette*, of Tuesday last, contains a dispatch from Sir Frederick Stephenson, giving particulars of the engagement fought with the Arabs of the Soudan, on December 30th, last. "The hospital arrangements, both ambulance and field, were made," he says, "in a most satisfactory manner, by Deputy Surgeon-General Lithgow, and carried out by him until the arrival of Surgeon-General O'Nial, at Halfa, on December 26th. . . . . Deputy Surgeon-General Lithgow, Medical Staff, made all the preliminary medical arrangements for the assembly of the troops at the front, and for the advance against the enemy, to my entire satisfaction, fully justifying confidence in him as a principal medical officer."

Surgeon-Major G. R. Oxley, M.D., of the 2nd Lancashire Artillery Volunteers, has been granted the honorary rank of Surgeon-Major.

The military authorities at Canterbury have adopted an innovation in the nursing of the garrison-hospital there. Hitherto only soldiers have been employed to attend on the sick; but in consequence, as alleged, of two patients having died recently from improper nursing, it has been decided, with the approval of the War Office, to employ trained female nurses in future.

INDIAN MEDICAL SERVICE.

Surgeon-Major A. J. Willcocks, Bengal Establishment, has returned from deputation duty, and resumed charge of the civil medical duties of Nynee Tal.

Surgeon R. J. Geddes, doing general duty, British Burmah Division, is directed to do duty at the station hospital, Secunderabad.

Surgeon W. J. Macnamara, M.D., will, on arrival at Belgaum with Royal Artillery, do duty at the station hospital there.

Surgeon D. R. Hamilton has been transferred from Bombay to do duty at the station hospital at Bellary, in the Madras command.

Brigade-Surgeon A. Allan, M.D., is placed on duty in the Mhow Circle, Bombay Establishment.

Surgeon-Major William Taylor, M.D., who has been serving in the Bombay Presidency for the last four years, has been appointed Surgeon to Sir Frederick Roberts, Commander-in-Chief in India.

Surgeon P. M. Carleton, M.D., and F. M. Baker, M.B., having completed their tour of foreign service, have been directed to return to England, leaving India on February 3rd.

Surgeon-General Grahame Auchinleck, M.D., will, on being relieved by Deputy Surgeon-General W. A. Thomson, return to England, from Bombay, in which command he has been stationed since 1878.

Surgeon-Major C. A. Atkins, serving in the Bengal command, in medical charge of the station-hospital at Jhansi, has been appointed to the civil medical charge of that station during the absence on privilege-leave of Surgeon-Major W. E. B. Moynan, M.D.

Surgeon F. W. C. Jones, serving in Bengal, has been appointed to the civil medical charge of Chuckrata, *vice* Surgeon D. Wardrop.

Surgeon A. J. Struthers, who is serving in Bengal, has received leave of absence for six months on medical certificate.

Surgeon J. Prendergast has been brought on the strength of Her Majesty's forces in the Bombay command from January 10th, the date of his arrival at Bombay, and placed on general duty, Sind Circle.

Surgeon J. D. T. Reckitt, who is serving in the Madras command, has passed the lower standard in Hindustani.

Surgeon E. P. Frenchman, Madras Establishment, has been transferred from Prome, to the medical charge of the Thayetmyo District, Burmah.

Surgeon H. P. Dimmock, M.R.C.S., L.R.C.P.(Lond.), Bombay Establishment, is, on the return to duty of Brigade-Surgeon H. R. L. M'Dougall, M.D., appointed to act as Civil Surgeon of Nassick, during the absence of Surgeon-Major H. De Tatham, M.D.

Surgeon-Major E. Lawrie, M.B., Bengal Establishment, officiating Residency Surgeon at Hyderabad, is confirmed in that appointment, *vice* Brigade-Surgeon T. Beaumont, M.D., retired.

The services of Surgeon S. F. Bigger, Bengal establishment, are replaced at the disposal of the Military Department.

Surgeon P. D. Pank, Bengal Establishment, officiating Civil Surgeon of Bucaneer, is confirmed in that appointment.

The Madras Medical Fund Annuities of January, 1886, are granted as follows. To retired Brigade-Surgeon C. Robertson, M.D., a small annuity; to retired Brigade-Surgeon J. Ross, M.B., the small annuity liberated by Dr. G. W. S. Ogg, M.B., from the date of payment of the balance of minimum, provided it takes place on March 1st; to retired Surgeon-General G. S. W. Ogg, M.B. (a member on small annuity); to retired Deputy Surgeon-General E. E. Lloyd, large annuities, from January 1st.

Surgeon-Major B. T. Suffrein, Madras Establishment, has been appointed Brigade-Surgeon from December 31st last.

The services of Surgeon H. Greany, M.D., Madras Establishment, are replaced at the disposal of the Government of India, and he is directed to return forthwith to Hyderabad.

Surgeon J. K. Kanga, Madras Establishment, doing duty British Burmah Division, is to do general duty in the Eastern District, Madras.

Surgeon S. T. Avetoom, Bombay Establishment, is appointed to the medical charge of the 24th Native Infantry at Bombay.

Surgeon-Major W. Gray, M.B., Bombay Establishment, has been granted an extension of leave for three months.

Surgeon J. L. Poynder, Madras Establishment, civil surgeon of Sumbulpore, has returned from privilege-leave, and assumed medical charge of the district from Surgeon F. H. Pedroza.

Surgeon H. P. DIMMOCK, Bombay Establishment, Acting Civil Surgeon at Nassick, has been appointed Medical Officer to the 20th Native Infantry, at Thull Chotiali, *vice* Surgeon-Major H. Atkins, who has retired.

The services of Surgeon R. J. POLDEN, M.B., Bengal Establishment, Acting Medical Officer, Punjab Northern State Railway, are temporarily placed at the disposal of the Government of Bengal.

Brigade-Surgeon H. R. L. MCDOUGALL, M.D., Bombay Establishment, has been granted an extension for one year of his tour of service as Superintendent of Matheran.

Surgeon E. K. CAMPBELL, Bengal Establishment, has resigned his commission, which is dated so recently as the 1st of April last.

Surgeon J. F. TUOHY, M.D., Bengal Establishment, Second-class Civil Surgeon, has been transferred from Mirzapore to Bijnore.

The services of Surgeon J. ARMSTRONG, Bengal Establishment, are permanently placed at the disposal of the Government of the North-West Provinces and Oude.

Surgeon F. F. PERRY, Bengal Establishment, is confirmed in the appointment of Professor of Surgery and Anatomy in the Lahore Medical School, *vice* Surgeon-Major E. Lawrie, M.B.

The services of Surgeon C. ADAMS, M.B., Madras Establishment, are replaced at the disposal of the provincial Commander-in-Chief from the date of his return from furlough.

The undermentioned gentlemen, who are all of the Bengal Establishment, have been granted leave of absence for the periods specified: Surgeon-Major J. W. JOHNSTON, M.D., in medical charge of the 19th Native Infantry, for one year on medical certificate; Surgeon-Major C. F. OLDHAM, 1st Goorkha Regiment, for 121 days; Surgeon-Major A. G. GRANT, M.B., 16th Bengal Infantry, for 182 days; Surgeon-Major F. A. SMYTH, 27th Bengal Infantry, for one year and 243 days; Surgeon-Major W. DUNCAN, M.B., 10th Bengal Infantry, for one year and 215 days; Surgeon W. MAWSON, 14th Lancers, for one year; Surgeon G. S. GRIFFITHS, 32nd Bengal Infantry, for one year; Surgeon A. W. MACKENZIE, 5th Punjab Infantry, for one year; Surgeon G. SHEWAN, M.B., for one year; Surgeon F. D. C. HAWKINS, to Australia for three months.

Surgeon-Major G. D. RIDDELL, Madras Establishment, Medical Officer to the 1st Cavalry of the Hyderabad Contingent, has been promoted to be Brigade-Surgeon. He entered the service as Assistant-Surgeon, February 10th, 1859.

Surgeon-Major J. Y. HUNTER, Bombay Establishment, Presidency Surgeon of the 3rd District, is also gazetted Brigade-Surgeon. His commission as Assistant-Surgeon dates from July 23rd, 1858.

THE MEDICAL STAFF ROSTER.

SIR,—I am confident, from your well known sympathy with us—the medical staff of the army—that you will allow me space to ask for information on a subject which has been a constant source of perplexity and dissatisfaction, not only to myself, but I verily believe to nine-tenths of the department. In these levelling days, which have abolished patronage and favouritism, why is it that there can be a want of confidence in regard to the fairness of our position on the roster for foreign service? Now, especially when our proper complement of home-service is so limited, it ought to be above suspicion. Why could not the roster be kept open so that all might see it, instead of having to resort to bribery and corruption through an agent? I know it may be said that I have only to write to the Director-General, and I will be told my position. Well, if everyone did that every month or so, and compared notes, one might get a tolerably accurate idea of the matter; but it certainly would be much easier to have the roster hanging up in a conspicuous place in the office, for the information of all concerned. This reminds me that ascertaining one's position from the Director-General is not always entirely satisfactory, as I once found out to my cost. I was informed by the Director-General in May that my position on the roster was ———. In September of the same year, I told a man who wanted to exchange with me, that I was about ——— (about a dozen having gone abroad since May). The exchange was agreed on; but in a few days, he said he had been told at the office that my position on the roster was about thirty higher. Fortunately, I had preserved the Director-General's letter. In answer to my demand for explanations, all the satisfactian I got was "that they could not understand how it was; and that, according to the roster, I was then ———." So it has remained one of the conundrums of the service until this day. I may say that this happened before our present Director-General's rule; not that the late Sir William Muir, or indeed any medical officer, would have connived at any such irregularities. I have heard similar experiences attributed to clerical errors; but, whatever the cause, there is no doubt that the result is anything but satisfactory, and the remedy seems apparent to

A VICTIM.

CONDEMNED BARRACKS.

A CORRESPONDENT writes:—That English barracks, condemned a quarter of a century ago, should still be occupied by soldiers, does not show that care generally supposed to be taken of the army at home. Yet such is the case, and the regiment in question is one from India. Those who have been quartered in Portsmouth, will well remember the Clarence Barracks, which were condemned by a committee, shortly after the Crimea war, and to replace which the Cambridge Barracks were built. They are now occupied by the head-quarters and officers of the 2nd Battalion Royal Irish Fusiliers (89th), the majority of the men being quartered in the completed portion of the new Clarence Barracks. It has been said that these barracks are completed; such, however, is not the case, only half of them being ready, and it will be some time before the whole can be finished. The officers live in the old Clarence Barrack Square, from which, a few years ago, a regiment was obliged to go under canvas, to shake off typhoid fever contracted therein. It certainly shows little regard for the health of the men, when a regiment coming home from India is sent to such quarters.

VOLUNTEER MEDICAL STAFF CORPS.

THE second regimental smoking-concert of the above corps took place on February 10th at St. Stephen's Restaurant, Westminster, and was a greater success even than the first of the series. We are extremely glad to see that the efforts of the committee are meeting with encouragement, as it is only by entertainments of this description that the men are brought together during the winter season, and that the *esprit de corps* at which all regiments aim, and of which they are justly so proud, is properly maintained. The concert was given by members of No. 2 Company, which is formed of students from St. Mary's, London, and Guy's Hospitals, and they fully kept up the reputation of their various schools. The chair was taken by Surgeon Norton, who commands the company, supported by Surgeon-Commandant Cantlie, Surgeon Casson, Surgeon-Major Pearce (Artists), Surgeon Raw, Surgeon Lane (18th Middlesex), and other officers who take a keen interest in the welfare of this corps. The third concert of the series will take place early in March, and will be given by members of No. 1 Company, which is formed by students of Charing Cross, University, Middlesex, and King's College Hospitals.

ARMY MEDICAL SCHOOL, NETLEY.

SIR,—With reference to the report of the late examination at the Army Medical School, Netley, I beg to state that my name was "honourably mentioned" to the Secretary of State for War in the subject of Military Medicine; also Mr. H. Cocks—not Cox, as stated in your report.—I am, sir, yours obediently,

Medical Staff, Aldershot. JAMES ROSE.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE LAW AS TO UNQUALIFIED ASSISTANTS.

SIR,—Allow me to make a few remarks on the case which was tried in the Leeds County Court, and in which I was the plaintiff. My solicitor, Mr. Dunn, is of opinion that, in all probability, an appeal to a higher court would have the effect of reversing the decision given by his Honour in the County Court. He also thinks that, as the judgment given affects most of the medical men in Leeds and, in fact, throughout the country, the medical profession of the town ought to combine, and have a test case tried, not only in the County Court, but also in a higher court, in order to obtain a decision from the highest legal authorities, as to whether medical men can recover for services rendered by unqualified assistants. As the case now stands, nearly every medical man in the town is liable to have his fees disallowed in cases where his unqualified assistant has attended; and not only are there medical men of good standing, but even hospital surgeons, who employ gentlemen of one or two years' standing from the medical schools, most of whom have rarely seen a case of midwifery, to attend to their patients. I could point out several first-class practices conducted mainly by unqualified students, who receive in pay board and lodging, and time to attend lectures.

Again, the Royal College of Surgeons requires every candidate for its diploma to produce a certificate from a medical man, showing that he has attended at least twenty cases of midwifery entirely under his own control. Now, where is he to attend such cases? Only by going as an unqualified assistant to a medical man. Can anyone imagine that a medical man will be so generous as to let him attend all those twenty cases and yet lose his fees, because he cannot legally claim them, as they have been attended by an unqualified man? What are needy but clever students to do in future, if the law forbid a medical man to claim for their services? Are they to renounce all ambition to become medical practitioners, because no medical man will employ them? Where are medical men to get qualified assistants, if all must employ them? Will the patients consent to pay higher fees in order that medical men may pay large salaries to qualified gentlemen? The above are important questions, and worthy of consideration, not only by medical men, but by students.

Coming now to Mr. Bowell, of Hunslet, allow me to mention that he carried on all the practice for twenty-seven years conducted by both the Drs. Gisburn. His cousin, the late Dr. Gisburn, on account of ill-health and other reasons was barely able to attend to his patients himself, and Mr. Bowell carried on the practice almost entirely. Now, I may ask, can Dr. Gisburn's executors claim for his services? The point is the same as in my case. When Dr. Gisburn died, Mr. Bowell would have been thrown on the world, out of employment; in fact, his quarter's salary was not paid him. He consulted one of the leading hospital-surgeons in Leeds, who advised him to offer himself as assistant to some medical man, and let that medical man have a branch in Hunslet. He agreed to do so, and I can assure you there was a regular rush of medical gentlemen to obtain his services. Mr. Nicholson, of Hunslet, was particularly anxious to obtain both Dr. Gisburn's practice and Mr. Bowell's services. Mr. Bowell, however, arranged with me, and I opened a branch-practice in Hunslet. Mr. Bowell is universally beloved in Hunslet, and many people would have no one but himself. I may say that, during the twenty-seven years he has resided there, he has attended himself 10,000 cases of midwifery. Surely an assistant like Mr. Bowell is better qualified to attend difficult cases than a raw young student from the country. What can we think, too, of people who, after being kindly and skilfully treated, try to evade payment on the plea that they have been attended by an unqualified assistant? And what can we think of those whoever they may be, who have induced them to evade payment on the above plea? Certainly, the "cloven hoof" appears here.

His Honour (who, I must say, gave every consideration to the cases tried) laid down a curious point of law, which must certainly have struck dismay into the minds of druggists. He said, "an apprentice carrying on the business of his master, who was an apothecary, was not qualified to do so." If this point of law is true, every druggist throughout the land is acting more or less illegally. With all the respect to his Honour, I think he cannot be right in his version of the law.

In conclusion, allow me to correct one or two mistakes which appear in the newspaper report, as copied into the JOURNAL. The branch practice I have in Hunslet is not a dispensary, but regular fees are charged the patients. At the house I have in Park Square, I carry on the consulting practice which I bought of the late Dr. Horton, and where I charge and can get regular consultation fees, and where I do no dispensing. The practice at Sheepscar is the one I have worked since 1868, and have built up by my own industry. I may truly say that none of the success which I have obtained in practice has been got in a dishonourable manner. My fees are higher than those of the run of ordinary practitioners, and I have never descended to dirty practices of touting for patients, nor have I ever acted as assistant, for the sole purpose of obtaining my master's practice by underhand and dishonourable tricks. If I am attacked by various individuals, I know how to defend myself with merit, and leave them to the contempt of all right-minded persons.—I am, sir, yours, etc.,

24, Park Square, Leeds. H. ARTHUR ALLBUTT, M.R.C.P.E., etc.

DRUGGISTS PRESCRIBING.

SIR,—What steps may I take (if any) to protect myself against druggists prescribing to all sorts of patients in all sorts of cases—a practice which is carried on to an extraordinary extent in the town where I am practising?—I am, etc.,

A YOUNG PRACTITIONER.

OBITUARY.

ANGUS MACDONALD, M.D., F.R.C.P.Ed., F.R.C.S.E.,

Physician to the Royal Infirmary, Edinburgh.

THE announcement will be heard with deep regret by the public, and by the members of the medical profession, that this distinguished physician died on February 10th, at his residence in Edinburgh. Immediately after Christmas last, he caught a severe cold, which lit up a slumbering pulmonary disease from which he had suffered four years ago, and to this he succumbed.

From a full and appreciative notice in the *Scotsman*, we learn that, like many other Scotsmen who have risen to eminence, Dr. Angus Macdonald sprang from the people. His father, Mr. James Macdonald, was a road-contractor in Aberdeen, where Dr. Macdonald was born in 1836. In 1855, when he was 19 years of age, Macdonald went to King's College, Aberdeen, and obtained a bursary by public competition. His career in the curriculum of Arts was very distinguished; he obtained prizes in Latin, Greek, mathematics, and natural philosophy; and when he took his M.A. in 1859, he was awarded the Hutton Prize for general excellence in all the branches of the curriculum. This was the more creditable as, during the session, he taught in the gymnasium and elsewhere at least four hours daily.

Having the intention of becoming a minister of the United Presbyterian Church, he attended the theological classes in the Divinity Hall of that body in Edinburgh for one session; but he soon found that this was not his vocation, and he began the study of medicine at the University of Edinburgh in 1860. Here again he took a distinguished position in his classes, and acquired the esteem both of his teachers and of his fellow-students. In addition to university work, he was constantly engaged in teaching, in the first years of his curriculum, the ordinary branches of general education, and, latterly, various departments of medical study. His personality, as well as his superior knowledge, gave him immense influence over his pupils, and it was characteristic of the relationship between them that many became his life-long friends. He graduated in 1864, and immediately settled in practice in Edinburgh. Soon he became a lecturer in the Extra-academical Medical School, first on Materia Medica and afterwards on Midwifery, whilst his professional position was strengthened by obtaining the Fellowships of the Royal College of Surgeons, of the Royal College of Physicians, and of the Royal Society of Edinburgh. Practice flowed in upon him; but in the midst of it all, he contrived to find time for the study of German, and for making valuable contributions to medical literature, especially in the obstetric department. His life—short, too short, as it has been—is a splendid example of what can be accomplished by talent, combined with perseverance and energy. It is not too much to say that by the death of Dr. Angus Macdonald, Edinburgh has lost one of her most distinguished citizens, Scotland a man of whom she may be proud, and the medical profession one of its most active and successful workers.

Dr. Macdonald was married in 1866 to a daughter of the late Rev. Mr. Finlayson, and he leaves a widow, two daughters, and five sons to mourn his early loss. At the time of his death, he held the appointments of Physician and Clinical Lecturer on Diseases of Women in the Royal Infirmary of Edinburgh, Physician to the Royal Maternity Hospital, and Lecturer on Midwifery and Diseases of Women at Surgeons' Hall.

E. D. L. GILLOTT, M.R.C.S., L.S.A., Sheffield.

On February 6th, Sheffield lost one of its oldest medical men, in the person of Mr. E. D. L. Gillott, who had been a member of the medical profession for a good deal more than half a century. His early life, his industry, and his devotion to his profession, are thus spoken to, by one who enjoyed his intimacy for fifty-seven years: "We were fellow-pupils in Dublin in 1829-30, where he distinguished himself by his marked indefatigable minute anatomical research. During his long career in Sheffield, commencing with his becoming Lecturer on Anatomy at the Medical School, from first to last he endeavoured to the utmost of his ability to keep pace with the times. Oft, in the hour of need, have I had an opportunity of testing the inestimable professional qualities of my departed friend, ever willing and ready to lend a helping hand in the hour of peril; even in the dead hours of the night, nothing daunted, sallying forth to the rescue, cheerfully, independent of all emolument, save that of acting the part of the good Samaritan."

He was connected with the Eye Dispensary until 1877, when, owing to the formation of a special department at the General Infirmary, the necessity for such a dispensary had ceased, and he willingly consented to its being closed. For many years, however, he had practised purely as a specialist; and, both as an oculist and an aurist, obtained a wide repute. He visited and studied much in foreign and metropolitan hospitals. He attended, also, meetings of the International Ophthalmological Congress. When the ophthalmoscope was introduced, he studied its use in Vienna. As a student, he had attended the Ophthalmic Hospital, at Moorfields, when Tyrrell was a leader there. He gradually declined practice, and for some years had retired altogether. His literary inclinations found him amusement and occupation, at the library and at his home. He was always ready with a classical or poetic quotation. Until recently, he had been active and strong. Bright's disease, with heart-trouble, bronchitis, and asthma, was the cause of his decease, and he bore his sufferings with much patience.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE quarterly return of the Registrar-General, which has just been issued, relates to the births and deaths registered in England and Wales during the fourth or autumn quarter of 1885, and to the marriages in the three months ending September last. The marriage-rate showed a decline from that recorded in the third quarter of 1884, and was considerably below the average rate in the corresponding quarters of the ten years 1875-84. With three exceptions, the marriage-rate during the quarter under notice was lower than any on record for the third quarter of the year. The birth-rate and the death-rate were also below their respective averages. The mean temperature during the quarter was below the average, and the weather was, on the whole, favourable to the public health.

The births of 221,195 children were registered in England and Wales during the three months ending December last, equal to an annual rate of 31.9 per 1000 of the population, estimated by the Registrar-General to be nearly twenty-seven and a half millions of persons. This birth-rate was the lowest recorded in the corresponding quarter of any year since 1855, and was considerably below the average rate in the last quarter of the ten preceding years 1875-84. The birth-rate during the quarter under notice in the several counties ranged from 25.6 in Rutlandshire and 27.0 in Huntingdonshire and Shropshire, to 35.5 in Staffordshire, 35.8 in Essex, and 36.6 in Nottinghamshire. In the thirty-eight large towns for which the Registrar-General publishes weekly returns, the birth-rate last quarter averaged 33.3 per 1,000, ranging from 25.8 in Brighton to 42.3 in Cardiff. The births registered in England and Wales during the quarter under notice exceeded the deaths by 92,833; this represents the natural increase of the population during that period. From the Board of Trade returns it appears that 49,598 emigrants sailed from the various ports of the United Kingdom at which emigration officers are stationed; of these, 27,961 were English, 4,471 Scotch, and 8,058 Irish. The proportion of British emigrants to a million of the respective populations of the three divisions of the United Kingdom were 1,017 from England, 1,144 from Scotland, and 1,638 from Ireland.

During the last quarter of 1885 the deaths of 128,362 persons were registered in England and Wales, equal to an annual rate of 18.5 per 1,000 of the estimated population; this death-rate was considerably below the average rate in the corresponding quarter of the preceding ten years, and was lower than that recorded in any December quarter since civil registration was established in 1837. Nearly 21,000 persons survived the three months who would have died had the death-rate corresponded with the average of the recorded rates in the last quarters of the forty-seven years, 1837-84. Among the urban population of the country, estimated at more than sixteen millions of persons, the rate of mortality during the quarter under notice was equal to 19.7 per 1,000; in the remaining and chiefly rural population of nearly eleven millions of persons, the rate did not exceed 16.7. These urban and rural rates were below their respective averages for the ten preceding corresponding quarters. The rate of mortality last quarter among infants under one year of age was 4.9 per cent. below the average; that of children and adults aged 1 and 60 years, 12.4 per cent., and that among persons aged upwards of 60 years, 0.1 per cent. below the average.

The 128,362 deaths registered in England and Wales during the three months ending December last, included 3,950 which were re-

ferred to measles, 2,713 to whooping-cough, 1,893 to scarlet fever, 1,850 to diarrhœa, 1,392 to fever (principally enteric), 1,164 to diphtheria, and 157 to small-pox; in all, 13,119 resulted from these principal zymotic diseases, equal to an annual rate of 1.89 per 1,000, which was considerably below the average rate in the ten preceding corresponding quarters. The chief decline in the zymotic death-rate was due to the low rates of mortality from scarlet fever, fever, and small-pox. The 157 deaths from the last-mentioned disease were fewer than in any quarter during the last five years, and included 70 in London and its adjoining counties, 28 in Lancashire, and 49 in other parts of the country.

PUERPERAL MALADIES AND EXTRA FEES.

SIR,—About twenty years ago I was called to a mild case of puerperal fever, in a poor woman of my union district, that resembled in many points the case that is now brought forward by Mr. Haynes. I did not attend this woman in her confinement, but was called to her about ten days afterwards, and had to continue my treatment for many weeks. The Board of Guardians disputed my claim for the fee of £2, courteously, but on much the same grounds as the Evesham Board now contend with Mr. Haynes. As I considered my claim to be just, and the Board of Guardians declined to pay me, I laid the matter before the Local Government Board, with the result that, after due inquiry of our Board of Guardians as to the truth of the facts I had adduced, they recommended payment of my claim.

I trust Mr. Haynes will be equally successful should he appeal to the Local Government Board.—Believe me, sir, yours obediently,

Lynton House, Bideford. JOHN THOMPSON, M.D., F.R.C.S.

*** An appeal has been made to the Local Government Board, and the precedent is an useful one.

SCARLET FEVER FROM THE COW.

SIR,—With reference to your annotation upon this subject, I beg to say that a farmer friend of mine, Mr. J. Burns, of Springfield, Ulverstone, whose interest in our profession induced him to take the diploma in midwifery of the Rotunda Hospital, observed upon the udder of a cow that had recently calved, a circumscribed swelling, pressure upon which elicited a stream of thin ichorous pus mixed with discoloured milk. His children suffered from occasional attacks of urticaria, and it is probable that some of this fluid was inadvertently injected into the common milk-pail. The abscess seemed to us to be of a simple lacteal nature, but it is conceivable that a more serious disease, for example, scarlatina, might be engendered, were it to assume a septicæmic or erysipelatous condition.—I am, sir, yours, etc., R. W. COLLETT.

Bradford-on-Avon.

MR. FREDERICK KEEN.—The legal duty of our correspondent to give advice to the sanitary authority is entirely dependent upon the question, whether there is a local Act in force in the district requiring the notification of cases of infectious disease, and we are not aware that this is the case. The patient appears to be suffering from modified small-pox.

STATISTICIAN asks for a list, however incomplete, of cities and towns in the United Kingdom, in which the medical officers of health are prohibited from engaging in private practice, and the salaries given by and to such. He also asks whether the interests of sanitary science and the public welfare would be more facilitated by medical officers of health being paid such salaries as would enable them to live exclusively upon such; or by giving smaller salaries, and allowing them to engage in private practice.

THE BOARD OF GUARDIANS OF THE ROYSTON UNION AND THEIR OFFICERS.

AT the last meeting of the Board of Guardians of the Royston Union, Herts, Mr. J. G. Flitton gave notice, that he should, at the next meeting of the Board, to be held on February 17th, propose: "That, taking into consideration the depression of trade, etc., throughout the country, and the heavy burdens which thereby fall upon the ratepayers, the necessary steps be taken for reducing the salaries of the whole of the union officials." The clerk, Mr. Thomas Shell, was also instructed to forward a copy of the proposed resolution to all the officers of the union.

This is a new departure; but we do not consider that the officials of this union need be under any apprehension that this proposition, even if adopted, will affect their interests; for, before it can be carried out, the sanction of the Local Government Board must be obtained, and that this will be given we do not for a moment believe. If, however, the principle is to be established that, in times of trade depression, the stipends of poor-law officials are to be reduced, it will have to be carried further, even to the curtailment of the salaries of the staff of the central department of the Government in this and other of the offices of the State.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 5,813 births and 3,906 deaths were registered during the week ending Saturday, January 23rd. The annual rate of mortality, which had been 22.5 and 23.8 per 1,000 in the two preceding weeks, declined again during the week under notice to 22.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 10.4; Leicester, 16.1; Oldham, 17.2; Halifax, 17.2; Derby, 18.2; Birmingham, 19.1; Brighton, 19.3; Norwich, 19.8; Portsmouth, 20.7; Bristol, 21.3; Hull, 21.8; London, 21.9; Bradford, 22.1; Huddersfield, 22.4; Leeds, 22.9; Sheffield, 23.0; Wolverhampton, 24.1; Manchester, 24.9; Cardiff, 24.9; Sunderland, 25.0; Newcastle-upon-Tyne, 25.2; Bolton, 25.3; Salford, 25.9; Nottingham, 26.1; Liverpool, 26.3; Plymouth, 26.9; Blackburn, 30.0; and the highest rate during the week, 30.4 in Preston. The death-rate in the twenty-seven provincial towns during the week averaged 22.9 per 1,000, and exceeded by 1.0 the rate recorded in London, which, as before stated, was 21.9 per 1,000. The 3,906 deaths registered in the twenty-eight towns during the week under notice included 163 which were referred to whooping-cough, 100 to measles, 38 to "fever" (principally enteric), 38 to diphtheria, 3 to scarlet fever, 31 to diarrhœa, and 3 to small-pox; thus, 407 deaths resulted from these principal zymotic diseases, against 448 and 435 in the two preceding weeks. The zymotic death-rate was equal to 2.3 per 1,000. In London the zymotic rate was 2.7, whereas it did not exceed 2.2 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Halifax and Bristol, to 4.1 in Blackburn, 4.5 in Bolton, and 4.8 in Nottingham. The fatal cases of whooping-cough, which had been 174 and 156 in the two preceding weeks, were 159 during the week, and caused the highest death-rates in Cardiff, Newcastle-upon-Tyne and Nottingham. The deaths referred to measles, which had been 113 and 11 in the two previous weeks, further declined during the week under notice to 10 and showed the largest proportional fatality in Oldham, Plymouth, and Nottingham. The 38 fatal cases of "fever" showed a decline of 3 from the number in the preceding week; this disease was somewhat prevalent in Portsmouth, Sunderland, and Birkenhead. The fatal cases of scarlet fever, which had been 38 and 46 in the two preceding weeks, declined during the week to 38, and caused the highest death-rates in Leeds and Sunderland. The 38 deaths referred to diphtheria were within one of the number in the previous week, and included 20 in London, 5 in Liverpool, 2 in Wolverhampton, 2 in Birmingham, 2 in Hull, and 2 in Sunderland. The 3 fatal cases of small-pox during the week were all recorded in Liverpool. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the ten preceding weeks from 90 to 35, had further fallen to 26 on Saturday, January 23rd; 2 patients were admitted to these hospitals during the week, against 11 in the preceding week. The death-rate from diseases of the respiratory organs in London during the week was equal to 6.0 per 1,000, and was below the average. The causes of 95, or 2.4 per cent., of the 3,906 deaths registered during the week under notice in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

During the week ending Saturday, January 30th, 6,169 births and 3,850 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 23.8 and 22.4 per 1,000 in the two preceding weeks, further declined during the week to 22.1. The rates in the several towns, ranged in order from the lowest, were as follow:—Hull, 14.4; Leicester, 15.3; Derby, 15.9; Brighton, 17.5; Leeds, 17.7; Huddersfield, 18.8; Bristol, 19.8; Salford, 19.8; Bradford, 20.0; Sunderland, 20.1; Nottingham, 21.1; Cardiff, 21.2; Birmingham, 21.4; Birkenhead, 21.9; London, 22.3; Newcastle-upon-Tyne, 22.9; Halifax, 23.3; Manchester, 23.5; Oldham, 23.6; Liverpool, 24.6; Sheffield, 24.8; Wolverhampton, 24.8; Portsmouth, 25.7; Bolton, 26.3; Norwich, 26.6; Plymouth, 26.6; Blackburn, 29.6; and the highest rate during the week, 33.0 in Preston. The death-rate in the twenty-seven provincial towns averaged 22.0 per 1,000, and was 0.3 below the rate recorded in London, which, as before stated, was 22.3 per 1,000. The 3,850 deaths registered in the twenty-eight towns included 360 which were referred to the principal zymotic diseases, against numbers declining from 448 to 407 in the three preceding weeks; of these, 168 resulted from whooping-cough, 75 from measles, 31 from diarrhœa, 29 from scarlet fever, 28 from "fever" (principally enteric), 23 from diphtheria, and 6 from small-pox. These 360 deaths were equal to an annual rate of 2.1 per 1,000. The zymotic death-rate in London was equal to 2.5, while in the twenty-seven provincial towns it did not exceed 1.7 per 1,000, and ranged from 0.0 in Wolverhampton, Derby, and Huddersfield, to 3.4 in Portsmouth and in Nottingham, and 4.5 in Blackburn. The deaths referred to whooping-cough, which had been 156 and 159 in the two preceding weeks, further rose to 168 during the week under notice, and showed the largest proportional fatality in Sheffield, Portsmouth, and Bolton. The fatal cases of measles, which had declined from 113 to 100 in the three previous weeks, further fell during the week to 75, and caused the highest death-rates in Nottingham, Blackburn, and Plymouth. The 31 deaths from diarrhœa corresponded with the number in the preceding week. The fatal cases of "fever," which had been 41 and 38 in the two previous weeks, further declined to 28 during the week, a lower number than in any week since the end of August last; this disease was, however, fatally prevalent in Preston. The 23 deaths from diphtheria also showed a further decline from recent weekly numbers, and included 13 in London, 3 in Liverpool, and 2 in Portsmouth. Of the 6 deaths from small-pox recorded in the twenty-eight towns 5 occurred in Liverpool, and 1 in Nottingham. The death of a London resident from small-pox was recorded in the Metropolitan Asylum Hospital ship *Atlas* situated outside Registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the eleven preceding weeks from 90 to 26, further fell to 22 on Saturday, the 30th ult.; 4 patients were admitted to these hospitals during the week, against 11 and 2 in the two previous weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 6.0 per 1,000, and was considerably below the average. The causes of 105, or 2.7 per cent., of the 3,850 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, 6,239 births and 3,872 deaths were registered during the week ending Saturday, February 6th. The annual rate of mortality, which had declined in the three preceding weeks from 23.8 to 22.1 per 1,000, rose again during the week under notice to 22.2. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 13.4; Halifax, 16.0; Bristol, 17.7; Hull, 18.3; Bradford, 18.8; Huddersfield, 18.8; Leicester, 19.1; Salford, 19.3; Birmingham, 19.9; Oldham, 20.4; Newcastle-upon-Tyne, 20.5; Birkenhead, 20.8; Sheffield, 21.3; Leeds, 21.9; Wolverhampton, 22.2; London, 22.3; Plymouth, 23.2; Norwich, 23.8; Bolton, 24.3; Sunderland, 24.6; Liverpool, 24.7; Preston, 24.7; Nottingham, 24.9; Cardiff, 24.9; Derby, 25.0; Blackburn, 26.8; Manchester, 27.1; and the highest rate during the week, 27.9 in Portsmouth. The death-rate in the twenty-seven provincial towns averaged 22.0 per 1,000, and was 0.3 below the rate recorded in London, which, as before stated, was 22.3 per 1,000. The 3,872 deaths registered in the twenty-eight towns during the week under notice included 175 which were referred to whooping-cough, 76 to measles, 35 to scarlet fever, 35 to diarrhœa, 30 to "fever" (principally enteric), 23 to diphtheria, and 2 to small-pox; in all, 376 deaths resulted from these principal zymotic diseases, against numbers declining from 448 to 360 in the four preceding weeks. The zymotic death-rate was equal to 2.2 per 1,000. In London the zymotic rate was 2.6, whereas it did not average more than 1.8 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Wolver-

umpton and Halifax, to 3.1 in Portsmouth, 3.6 in Nottingham, and 4.5 in Bolton. ae fatal cases of whooping-cough, which had risen from 156 to 168 in the three evious weeks, further rose during the week to 175, and caused the highest eath-rates in Brighton, Portsmouth, and Bolton. The deaths referred to easles, which in the four preceding weeks had declined from 113 to 75, were 76 aring the week under notice, and showed the highest proportional fatality in lackburn, Nottingham, and Plymouth. The 35 fatal cases of scarlet fever exeeded by 6 the number in the preceding week; this disease was somewhat prelent in Preston, Leicester, and Birkenhead. The deaths from diarrhœa differed at slightly from recent weekly numbers. The fatal cases of fever, which had eclined in the four preceding weeks from 42 to 28, rose to 30 during the week nder notice. The 23 deaths referred to diphtheria corresponded with the umber in the previous week, and included 14 in London, 2 in Liverpool, and 2 Sheffield. Of the 2 fatal cases of small-pox recorded in the twenty-eight wns during the week, 1 occurred in Liverpool, and 1 in Birkenhead. No eath from small-pox was recorded in London or in the Metropolitan Asylum ospital situated outside Registration-London. The number of small-pox patients the Metropolitan Asylum Hospitals, which had declined in the twelve preding weeks from 90 to 22, further fell to 18 on Saturday, February 6th; only he new case was admitted to these hospitals during the week, against 2 and 4 the two previous weeks. The death-rate from diseases of the respiratory rgans in London during the week under notice was equal to 6.0 per 1,000, and as considerably below the average. The causes of 85, or 2.2 per cent., of the 872 deaths registered during the week in the twenty-eight towns were not rtified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

r the eight principal Scotch towns, having an estimated population of 283,977 persons, 891 births and 589 deaths were registered during the week endg January 16th. The annual rate of mortality, which had been 21.6 and 22.9 r 1,000 in the two preceding weeks, further rose last week to 23.9, and ightly exceeded the average rate for the same period in the twenty-eight large nglish towns. Among these Scotch towns, the rate was equal to 18.1 in reenock, 19.7 in Perth, 21.2 in Aberdeen, 22.1 in Edinburgh, 22.8 in Dundee, .7 in Leith, 26.0 in Paisley, and 26.5 in Glasgow. The 589 deaths registered uring the week under notice in these Scotch towns included 12 which were ferred to diarrhœa, 9 to whooping-cough, 8 to diphtheria, 6 to "fever," (prinpally enteric), 5 to scarlet fever, 2 to measles, and not one to small-pox; in l, 42 deaths resulted from these principal zymotic diseases, against 32 and 45 the two preceding weeks. These 42 deaths were equal to an annual rate of 7 per 1,000, which was 0.8 below the average zymotic death-rate during the me period in the twenty-eight English towns. The highest zymotic rates the Scotch towns during the week under notice were recorded in Paisley, lasgow, and Perth. The death-rate from whooping-cough, which had risen in e four preceding weeks from 7 to 15, declined during the week to 9, of which occurred in Glasgow. The fatal cases of diphtheria, which had been 2 and 6 the two previous weeks, further rose to 8 during the week under notice, and cluded 7 in Glasgow. The 5 deaths referred to fever slightly exceeded the umber in the preceding week; 3 occurred in Glasgow. The fatal cases of scarlet ver, which had been 3 and 8 in the two previous weeks, declined during the eek to 5, and included 4 in Glasgow, and 1 in Leith. The death-rate from disses of the respiratory organs in these Scotch towns was equal to 6.1 per 1,000, ainst 6.7 in London. As many as 82, or 13.9 per cent., of the 589 deaths gistered during the week in these Scotch towns, were uncertified.

During the week ending Saturday, January 23rd, 945 births and 570 deaths ere registered in the eight principal Scotch towns, having an estimated popula-on of 1,283,977 persons. The annual rate of mortality, which in the three preding weeks had increased from 21.6 to 23.9 per 1,000, declined during the week 23.1, but exceeded by 0.7 per 1,000 the average rate for the same period the twenty-eight large English towns. Among these Scotch towns, the rate as equal to 11.8 in Leith, 13.0 in Paisley, 17.1 in Aberdeen, 18.0 in Perth, .2 in Edinburgh, 21.6 in Greenock, 25.4 in Dundee, and 28.8 in Glasgow. he 570 deaths registered in these towns during the week included 36 which ere referred to the principal zymotic diseases, against 45 and 42 in the two eceding weeks; of these, 14 resulted from diphtheria, 7 from diarrhœa, 6 from ooping-cough, 6 from "fever," 1 from small-pox, 1 from measles, and 1 from arlet fever. These 36 deaths were equal to an annual rate of 1.5 per 1,000, hich was considerably below the average zymotic rate during the same period the large English towns. The highest zymotic death-rates during the week ere recorded in Glasgow, Dundee, and Aberdeen. The fatal cases of diphtheria, hich had risen from 2 to 8 in the three preceding weeks, further rose to 14 aring the week, and included 7 in Glasgow, and 4 in Aberdeen. The 7 deaths om diarrhœa were below the average. The 6 fatal cases of fever corresponded ith the number in the preceding week, and included 4 in Glasgow. The deaths ferred to whooping-cough, which had been 15 and 9 in the two preceding weeks, rther fell during the week to 6, of which 5 occurred in Glasgow. The fatal se of measles was recorded in Paisley, and the death from small-pox occurred Glasgow. The mortality from diseases of the respiratory organs in these otch towns during the week under notice was equal to 6.6 per 1,000, against) in London. The causes of 77, or 13.5 per cent. of the 570 deaths registered ring the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 269,170 persons, 945 births and 553 deaths were registered during the week ding January 30th. The annual rate of mortality, which had been 23.9 and 23.1 r 1,000 in the two preceding weeks, further declined to 22.4, and slightly exeded the average rate for the same period in the twenty-eight large English wns. Among these Scotch towns, the rate was equal to 13.1 in Perth, 14.0 Leith, 16.5 in Edinburgh, 19.4 in Aberdeen, 23.6 in Greenock, 23.8 in ndee, 26.5 in Glasgow, and 26.9 in Paisley. The 553 deaths registered during e week under notice in these Scotch towns included 13 which were referred to ooping-cough, 9 to scarlet fever, 7 to diarrhœa, 4 to "fever" (principally teric), 3 to diphtheria, 1 to small-pox, and not one to measles; in all, 37 deaths sulted from these principal zymotic diseases, against 42 and 36 in the two eceding weeks. These 37 deaths were equal to an annual rate of 1.5 per 1,000, hich was 0.6 below the average zymotic death-rate during the same period the twenty-eight large English towns. The highest zymotic rates in the Scotch wns during the week under notice were recorded in Perth and Glasgow. The aths from whooping-cough, which had declined from 11 to 6 in the three preding weeks, rose again to 13, and included 10 in Glasgow, and 2 in Edinburgh. e 9 fatal cases of scarlet fever showed a marked increase upon recent weekly mbers; 6 occurred in Glasgow. The 7 deaths referred to diarrhœa were considerably below the number returned in the corresponding period of the previous year. The fatal cases of fever, which had been 6 in each of the two preceding weeks, declined to 4 during the week, of which 2 occurred in Glasgow. The 3 deaths from diphtheria were all returned in Glasgow, where the fatal case of small-pox was also recorded. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.5 per 1,000, against 6.0 in London. As many as 80, or 14.5 per cent., of the 553 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending January 2nd, 1886, the number of deaths registered in the sixteen principal town-districts of Ireland was 544. The average annual death-rate represented by the deaths registered was 32.8 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 41.3; Belfast, 23.8; Cork, 33.1; Drogheda, 16.9; Dublin, 35.7; Dundalk, 17.5; Galway, 37.0; Kilkenny, 12.7; Limerick, 48.5; Lisburn, 53.2; Londonderry, 49.9; Lurgan, 20.5; Newry, 31.6; Sligo, 38.5; Waterford, 39.4; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.6 per 1,000, the rates varying from 0.0 in Limerick, Newry, Drogheda, Wexford, Dundalk, Lurgan, and Armagh, to 5.8 in Cork; the 51 deaths from all causes registered in the last-named district comprising 2 from measles, 4 from scarlatina, 1 from enteric fever, and 2 from diarrhœa. Among the 100 deaths from all causes registered in Belfast were 1 from measles, 1 from scarlatina, 3 from typhus, 2 from whooping-cough, 1 from enteric fever, and 3 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 251. Thirty-nine deaths from zymotic diseases were registered in Dublin; they comprised 17 from whooping-cough, 1 from diphtheria, 5 from enteric fever, 4 from diarrhœa, 2 from dysentery, etc. Fifty-one deaths from diseases of the respiratory system (including 32 from bronchitis and 11 from pneumonia) were registered The deaths of 26 children under five years of age (including 23 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 2 by epilepsy, 10 by other diseases of the brain and nervous system (exclusive of convulsions), and 15 by diseases of the circulatory system. Phthisis caused 16 deaths, mesenteric disease 4, and cancer 3. Six accidental deaths were registered. In thirty-seven instances there was "no medical attendant" during the last illness.

During the week ending January 9th, the average annual death-rate represented by the deaths registered was 25.7 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 15.5; Belfast, 25.6; Cork, 18.8; Drogheda, 12.7; Dublin, 27.6; Dundalk, 17.5; Galway, 26.9; Kilkenny, 16.9; Limerick, 33.7; Lisburn, 19.3; Londonderry, 28.5; Lurgan, 25.7; Newry, 10.5; Sligo, 9.6; Waterford, 37.0; Wexford, 38.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.0 per 1,000, the rates varying from 0.0 in Limerick, Newry, Kilkenny, Drogheda, Wexford, Dundalk, Lisburn, and Armagh, to 5.1 in Lurgan; the 5 deaths from all causes registered in the last named district comprising 1 from measles. Among the 109 deaths from all causes registered in Belfast, were 1 from measles, 3 from scarlatina, 2 from whooping-cough, 1 from diphtheria, 1 from simple continued fever, and 1 from diarrhœa; and the 29 deaths in Cork comprised 1 from measles, 4 from scarlatina, and 1 from typhus. One of the two deaths registered in Sligo was caused by typhus. In the Dublin registration-district, the births registered during the week amounted to 195, 109 boys and 86 girls; and the deaths to 195, 91 males and 104 females. Nineteen deaths from zymotic diseases were registered in Dublin; they comprised 1 from typhus, 8 from whooping-cough, 1 from enteric fever, 1 from diarrhœa, etc. Thirty-nine deaths from diseases of the respiratory system were registered; they comprise 26 from bronchitis, and 7 from pneumonia or inflammation of the lungs. The deaths of 12 children under 5 years of age (including 9 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 15 by other diseases of the brain and nervous system (exclusive of convulsions), and 18 by diseases of the circulatory system. Phthisis caused 27 deaths, mesenteric disease 4, and cancer 2. Six accidental deaths were registered. In 21 instances there was "no medical attendant" during the last illness.

In the week ending January 16th, the total number of deaths registered in the sixteen principal town-districts of Ireland was 500. The average annual death-rate represented by the deaths registered was 30.1 per 1,000 of the population. The deaths registered in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 5.2; Belfast, 29.4; Cork, 31.2; Drogheda, 29.6; Dublin, 32.3; Dundalk, 17.5; Galway, 23.5; Kilkenny, 12.7; Limerick, 29.7; Lisburn, 29.0; Londonderry, 23.2; Lurgan, 41.0; Newry, 38.6; Sligo, 24.1; Waterford, 25.5; Wexford, 42.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.4 per 1,000, the rates varying from 0.0 in ten of the districts to 10.5 in Newry; the 11 deaths from all causes registered in that district comprising 2 from whooping-cough and 1 from diarrhœa. Among the 125 deaths from all causes registered in Belfast were 3 from measles, 3 from scarlatina, 3 from whooping-cough, 2 from diphtheria, 3 from enteric fever, and 1 from diarrhœa; and the 48 deaths in Cork comprised 1 from measles, 1 from scarlatina, 3 from whooping-cough, and 1 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 225. Thirty-two deaths from zymotic diseases were registered; they comprised 4 from scarlet fever, 19 from whooping-cough, 4 from enteric fever, and 3 from diarrhœa. Forty deaths from diseases of the respiratory system were registered; they comprised 21 from bronchitis, 10 from pneumonia, and 3 from croup. The deaths of 13 children under 5 years of age (including 11 of infants under 1 year old) were ascribed to convulsions. Six deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis caused 33 deaths, mesenteric disease 5, and cancer 2. Nine accidental deaths and 2 cases of suicide were registered. In 22 instances the cause of death was "uncertified," there having been "no medical attendant" during the last illness.

HEALTH OF FOREIGN CITIES.

It appears from the statistics published in the Registrar-General's return for the week ending February 6th, that the death-rate recently averaged 30.7 per 1,000 in the three principal Indian cities; it was 24.6 in Bombay, 32.6 in Calcutta, and 35.5 in Madras. Cholera caused 35 deaths in Calcutta, and diarrhœal diseases 52 in Calcutta, 22 in Bombay, and 47 in Madras; "fever" mortality caused the most excessive mortality in Calcutta. According to the most recently received

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, and Wednesday, February 8th, 9th, and 10th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—Simon Addis, Hightown, near Liverpool; Louis Demetriadi, Huddersfield; William George Kennedy, Derry; John William Power, Killenaule, co. Tipperary; George Woods, Parsonstown.

For the Licence to practise Medicine only.—Michael Joseph Boyan, Edenderry, King's County; Vesey Henry William Davoren, Donnybrook, Dublin; William Hartford, Dublin; Geo. Okell, Winsford, Cheshire; R. O'Callaghan, Ireland; Robert Dudley Algeo Stone, Rathgar, Dublin; Charles Augustus Young, Portarlington.

The undermentioned Licentiate in Medicine of the College, having complied with the by-laws relating to membership, pursuant to the Supplemental Charter of December 12th, 1878, has been duly admitted a Member.

Henry Plunket Esmonde-White, Lic. Med. 1872, Surgeon, A.M.S., Dublin.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, February 11th, 1886.

Castle, Charles Wigram Marshall, 4, The Avenue, Blackheath.
Scatliff, Philip Melancthon, M.R.C.S., 30, Macaulay Road, Clapham Common, S.W.

The following gentleman passed in the Science and Practice of Medicine, and received a certificate to practise.

Brooks, William Harrison, 1, King David Lane, Shadwell.

MEDICAL VACANCIES.

The following vacancies are announced.

BELGRAVE HOSPITAL FOR CHILDREN, 78, Gloucester Street, Warwick Square, S.W.—House-Surgeon. Applications by February 27th.

DEVON AND EXETER HOSPITAL.—Surgeon. Applications by March 4th.

DISTRICT INFIRMARY, Ashton-under-Lyne.—House-Surgeon. Salary, £80. Applications by February 23rd.

DROGHEDA UNION.—Medical Officer. Monasterboice Dispensary. Salary, £130 per annum and fees. Applications to B. R. Balfour, Honorary Secretary, Townley Hall, Drogheda. Election on March 2nd.

FRIENDLY SOCIETY'S MEDICAL INSTITUTE, Northampton. — Assistant Medical Officer. Salary, £150. Application to Mr. G. Knight, 22, Cromwell Street, Northampton.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road.—Two Clinical Assistants.

GREAT YARMOUTH HOSPITAL.—Resident Surgeon and Dispenser. Salary, £90 per annum.

LEITH HOSPITAL.—House-Surgeon. Salary, £70. Applications to the Secretary.

LIVERPOOL NORTHERN HOSPITAL.—Resident House-Surgeon's Assistant. No salary. Applications by March 3rd.

LONDON SCHOOL OF GYNÆCOLOGY, Hospital for Women, Soho Square, W. —Two Clinical Assistants.

LONDON TEMPERANCE HOSPITAL, Hampstead Road.—Clinical Clerks. Applications to the Secretary.

LONDON TEMPERANCE HOSPITAL, Hampstead Road.—Surgical Dressers. Applications to the Secretary.

MERCER'S HOSPITAL, DUBLIN.—Apothecary and Resident Medical Officer. Applications to the Registrar.

NATIONAL HOSPITAL FOR CONSUMPTION, Ventnor.—Clinical Assistant.

PARISH OF FULHAM.—Medical Officer of Health. Salary, £150 per annum. Applications by February 20th.

PENZANCE UNION, Cornwall.—Medical Officer and Public Vaccinator. Salary, £36 per annum and extras.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by March 10th.

SEAMEN'S HOSPITAL SOCIETY, Greenwich.—Visiting Physician. Applications before March 5th to W. T. Evans.

ST. HELEN'S FRIENDLY SOCIETY MEDICAL AID ASSOCIATION.—Medical Practitioner. Applications by March 1st.

VICTORIA UNIVERSITY, University College, Liverpool.—Lecturer on Hygiene. Applications to the Registrar.

WESTERN GENERAL DISPENSARY, Marylebone Road, N.W.—Junior House-Surgeon. Salary, £63. Applications by February 22nd.

WESTERN OPHTHALMIC HOSPITAL, 153, Marylebone Road, W.—Assistant Surgeon. Applications by March 1st.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Physician. Applications by March 1st.

LORD HALDON has been elected President of the Torbay Hospital and Provident Dispensary, Torquay, in succession to his father, now deceased.

MEDICAL APPOINTMENTS.

ABBOTT, C. E., M.R.C.S.E., L.K.Q.C.P.I., re-appointed Medical Officer of Heal for the Braintree Rural Sanitary District for one year.

BROCKATT, A. A., L.R.C.P., M.R.C.S., appointed Resident Accoucheur to Thomas's Hospital.

CAMPBELL, W. Macfie, M.D.Ed., M.R.C.S., appointed Consulting Surgeon to Liverpool Northern Hospital.

CLIBBORN, William, B.A., M.D.Dub.Univ., appointed Admiralty Surgeon a Agent at Bridport.

COOPER, Charles B., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., late Assistant Hou Surgeon, appointed House-Physician, Liverpool Northern Hospital, *vice* T. Bradshaw, B.A., M.D., resigned.

CROWDY, F. D., M.B.Oxon., M.R.C.S., L.S.A., appointed House-Surgeon to Thomas's Hospital.

FISHER, Alfred, M.R.C.S.Eng., L.R.C.P.Ed., late Ambulance-Surgeon, appoint Assistant House-Surgeon, Liverpool Northern Hospital, *vice* Charles B. Coop L.R.C.P.Lond., M.R.C.S.Eng., promoted.

GEMMEL, James Francis, M.B., C.M.Glas., appointed Assistant Medical Officer the County Asylum, Lancaster, *vice* Dr. Dalzell, resigned.

GODFREY, A. E., L.R.C.P., M.R.C.S., appointed Assistant House-Physician to Thomas's Hospital.

GOODDY, E. S., M.R.C.S., L.S.A., appointed Assistant House-Surgeon to Thomas's Hospital.

HAIG, F. M., M.R.C.S., L.S.A., appointed Non-resident House-Physician to Thomas's Hospital.

HAMILTON, George, F.R.C.S.Ed., L.R.C.P., appointed Honorary Surgeon to t Liverpool Northern Hospital, *vice* W. Macfie Campbell, M.D., resigned.

HUTTON, J. S., L.R.C.P., M.R.C.S., L.S.A., appointed Resident House-Physici to St. Thomas's Hospital.

KIDD, Cameron, L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas Hospital.

MARTIN, Albert, M.D., appointed House-Surgeon and Surgeon to the Evelin Hospital, *vice* W. H. C. Newnham, M.D., resigned.

MCMILLAN, H., M.D., appointed Consulting Medical Officer to the Devonport Di trict of Three Towns Friendly Society.

NEWNHAM, W. H. C., M.D., appointed House-Surgeon to the Bristol General Ho pital.

NICHOL, F. E., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Skin D partment at St. Thomas's Hospital.

ORCHARD, Alfred, M.R.C.S. and L.R.C.P.L., appointed Medical Officer and Publ Vaccinator for the Workhouse and Parish of Ashby-de-la-Zouch.

PARSONS, F. G., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Throa Department at St. Thomas's Hospital.

PEDLER, William F., M.R.C.S., L.S.A., appointed Junior Assistant House-Surgeo to the Hull Royal Infirmary, *vice* W. Freshney, deceased.

PLOWMAN, S., F.R.C.S., L.R.C.P., appointed Clinical Assistant to the Throa Department at St. Thomas's Hospital.

PRITCHARD, J. J. G., M.R.C.S., L.R.C.P.Lond., late Assistant Medical Office Wonford House, Exeter, appointed Assistant Medical Officer of the Count Asylum at Lancaster.

RITCHIE, E. D., B.C.Cantab., M.R.C.S., L.S.A., appointed Resident House-Phy sician to St. Thomas's Hospital.

SALTER, John R., M.B.Lond., M.R.C.S.Eng., and L.S.A.Lond., appointed Medica Officer to the Tonbridge Union, *vice* Mr. Caleb Gargory, resigned.

SHIELL, W. J., L.R.C.S.E., L.R.C.P.E., L.M.Dub., appointed Resident Medica Officer to the French Hospital and Dispensary.

SMITH, F. Hugh, F.R.C.S., L.S.A., appointed Poor-Law Medical Officer, an Medical Officer of Health of the 3rd District, Dartford Union, *vice* W. R Ashurst, M.D., resigned.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., appointed Clinical Assistant in th Ear Department at St. Thomas's Hospital.

SUNDERLAND, Septimus D. M., M.R.C.S., appointed Resident Medical Officer to th Chelsea Hospital for Women, *vice* Fourness Simmons, M.B., resigned.

SUTTON, Alfred M., M.B.Lond., M.R.C.S., appointed House-Physician to Guy' Hospital.

THOMAS, William James, M.B. and C.M.Edin.Univ., appointed Junior House Surgeon to the Halifax Infirmary, *vice* E. B. Jastrebski, M.B. an C.M.Edin.Univ., resigned.

TYRRELL, W. Guy Beauchamp, M.R.C.S., L.R.C.P.Lond., appointed Senio House-Surgeon to the Torbay Hospital, Torquay, *vice* James Heath, M.B. resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcements.

BIRTH.

ASHWORTH.—At Halstead, Essex, on February 17th, the wife of J. Henry Ash worth, M.R.C.P.Ed., of a son.

DEATH.

WHITELEY.—February 13th, at his residence, Outwood House, Wakefield, aged 4 years, John Whiteley, M.R.C.S.Eng.

MEDICAL MAGISTRATES.—The Lord-Chancellor has been pleased t appoint to the Commission of the Peace for the borough of Tenby, Douglas A. Reid, M.D., etc., and John Griffith Lock, M.R.C.S.

THE RATING OF PUBLIC CHARITIES.—At the fourth general eeting of the Hospitals' Association, held at Adam Street, delphi, on Wednesday, February 17th, Dr. Wood read a paper "Should Public Charities pay Local Rates?" Dr. Wood called tention to the uncertain legality, the unfair existing exemp-ns, and the unjust anomalies which characterise the parish rating voluntarily supported benevolent institutions, most charitable in-tutions being heavily rated by the parish, while others enjoy ab-lute exemption, or are assessed at next to *nil*. Dr. Wood recapitu-ed the history of rating, and the creation of the exemptions. He ged that inasmuch as the payment of poor-rates was obligatory, the tation of the objects of voluntary benevolence amounted to taxing donors twice over. Moreover, he considered that if it was desir-le to favour Sunday schools for the young people, it was not less so aid, or, at any rate, not to discourage, the carrying on of institu-ns where a broken leg could be attended to, or an orphan provided h a home. In view of the fact that Parliament has invariably nted exemptions when applied for, in favour of suitable objects, it now proposed to apply to Parliament, not to create any further mptions, but to restore to the charities the right they so long sessed. Representatives were present from the principal hospitals l other charitable institutions, and in the discussion which fol-ed, Dr. Wood's arguments were emphasised, and the desirability taking action in the matter insisted upon.

LEAD-POISONING THROUGH TEA.—A case of lead-poisoning of a ole family is reported by the *St. Petersburg. Med. Wochenschr.* to e recently occurred, and to have been traced by Dr. Bernstell, who ended the patients, to the use of tea. An analysis of the tea by ofessor Werigo detected the presence of a considerable quantity of de of lead, large particles of which could be seen by the naked eye. e tea had been bought at a shop in Odessa, and Dr. Werigo found de of lead in two packets of tea which he obtained from the same ce. He believes the occurrence to be explained by the fact that tea is packed in lead in China; and that occasionally, from causes ich appear to lie in the tea itself, oxidation of the metal takes ce.

A BURIAL-GROUND FOR BUILDING.—The trustees of St. Saviour's tory, Southwark, last year sold by auction, for building purposes, t of the disused burial-ground in Union Street, Borough. The chasers, Messrs. Oyler, objected that, under the Disused Burial unds Act of the previous year, the trustees were prohibited from ing the land for building. The vendors applied to the Chancery ision for a declaration that they had a good title; but Vice-ncellor Bacon decided that they were precluded by the Act from ing the burial-ground for building purposes.

IRE AT A SCHOOL OF ANATOMY.—A fire has recently, we regret ear, done much damage at the premises devoted by Mr. T. Cooke the purposes of his practical surgical and anatomical teaching. y valuable preparations have been destroyed. All the most spacious recent part of the buildings are, however, uninjured, and the k of the school has not been interrupted.

ANITARY ASSURANCE ASSOCIATION.—Mr. F. B. Jessett lectured "Preventable Diseases," at the Parkes Museum, on Wednesday ning. Mr. Thomas Chatfield presided.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

DAY.—Medical Society of London, 8.30 P.M. Mr. R. Brudenell Carter: On the Combined Action of Cucaine and Nitrate of Silver in certain Superficial Affections of the Eyes. Dr. A. E. Sansom: Notes on Severe Endocarditis, with special reference to Cause and Effect. Dr. W. H. White: A Case of Aneurysm of the Aorta.

SDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Cayley: A Case of Thoracic Aneurysm treated by the Introduction of Steel Wire into the Sac. Mr. George Pollock: On the Changes which occur in Bone and Soft Tissues after Amputation of a Limb, and from certain other Conditions. Mr. J. Bland Sutton: A Case of General Seborrhœa, or "Harlequin" Fœtus.

DNESDAY.—British Gynæcological Society, 8.30 P.M. Specimens will be shown by Dr. Mansell-Moullin, Dr. Grigg, Dr. Fancourt Barnes, and others. Adjourned Discussion on Dr. Chalmers's paper on Puerperal Septicæmia.—Hunterian Society. Dr. Stowers: Rodent Ulcer.

DAY.—Clinical Society of London, 8.30 P.M. Dr. C. Mansell-Moullin: Traumatic Inguinal Aneurysm; Rupture of Sac; Ligature of the Common Femoral and External Iliac Arteries. Mr. Charters Symonds: A Case of Aneurysm occurring in Stump. Dr. Goodhart: Intussusception of the Upper Part of the Jejunum. Mr. Barker: Acute Intestinal Obstruction, followed by Acute General Peritonitis; Abdominal Section: Release of the Implicated Bowel; Peritoneum thoroughly sponged out; Rapid Recovery. Mr. Godlee: Case illustrating the Effects upon the Eye of Injury to the Sympathetic in the Neck (living specimen).

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

Numbness and Coldness of Fingers and Feet.

M.D. asks for an efficient remedy for the above. X. Y., a young lady, aged 25, the subject of mitral disease of ten years' standing, has for the last two years suffered very much from coldness and numbness of the fingers and feet, greatly aggravated by the use of water, unless very hot. Under treatment, the cardiac condition has greatly improved, but nothing seems to benefit the extremities. The temperament is neurotic; the catamenia are regular; her general health is good. Her spirits are slightly depressed, but much better than they have been. "M.D." has tried iron and digitalis, bromide of iron, and other cardiac tonics. Fellows' compound syrup has done most good, but still the distressing condition of the fingers and feet continues.

Suppositories.

Sir,—I have been treating a case of severe constipation in a child aged one year, caused by atonicity of the rectum, with small suppositories of Castile soap moulded with a penknife, and with fair results so far. I am now anxious to get a suppository of good shape and firm consistency containing one-sixth of a grain of extractum nucis vomicæ in a base of soap alone, and have endeavoured to do so by dissolving the soap in rectified spirit, and adding the extract of nux vomica, and evaporating the spirit. I cannot get a satisfactory product, however; and shall be glad if some of your readers can instruct me how best to manage it, as I think my past experience with soap alone is encouraging, and would commend it to your readers.—I am, etc., A Country Surgeon.

Salicylates in Gonorrhœa.

Sir,—Seven weeks before my attendance, "A. B." contracted gonorrhœa; the discharge was still thick and profuse. After exposure, he had a shiver, with general muscular pains and painful joints. The temperature rose to about 105°. These rheumatic symptoms rapidly subsided under fifteen-grain doses of salicylate of soda.

Nineteen days after my attendance ceased, I met "A. B.," who told me that, during the time he was in bed, and taking the mixture, his gonorrhœa ceased, and he has had no return of the discharge.

Has this apparent effect of salicylate of soda been noticed before?—Faithfully yours, D. Hoadley Gabb.

Hastings.

An Occasional Drawback to Vaccination.

Sir,—I would like to know whether others have an occasional experience such as I have met with recently, and also once before. After vaccinating a thoroughly healthy child, to all appearances, from a tube a very little while before charged from another healthy child, with unexceptionable history in both families, ten days after inspection, the child has eczema capitis very pronounced. How comes this about? Other two children vaccinated from the same lymph within the same week, show no such symptoms. As far as I can learn, in neither family is there any skin-disease hereditary. The only solution I have at hand is a very makeshift one. The vaccinated child, namely, the one with the cutaneous affection, had had a slight attack of bronchitis a month before, and perhaps on that account was below par, and not in the best condition, though lively and sturdy to look at. But I have, like others I daresay, vaccinated puny ill-conditioned infants, without any untoward consequences such as I have given in this case; I have even vaccinated to get rid of eczema, and with success; so I am on the horns of a dilemma to account for this opprobrium. In a similar instance some years ago, I blamed a scrofulous or rather lymphatic tendency in the family where the child was vaccinated.

Perhaps some diligent student in this domain will help me and others to an explanation. In the past I have been extremely careful as to lancets and tubes; in the future, I shall allow a longer period between any illness, however slight, and the operation. It is in my recollection that I once deferred vaccination in the case of a child for years, because the father, rightly or wrongly, insisted that a train of symptoms similar to those I have mentioned above led to the stunting of one child and the death of another, while yet another, that also remained unvaccinated, was a perfect picture of health and good condition.

I yield to no one in firmness of belief as to the value of vaccination (have been twice revaccinated myself), but I wish to be reasonable in dealing with anything objectionable that may arise in carrying it out; and, therefore, while waiting for fresh light, I am open to give due weight to any evidence which may tell against it.—I am, etc., Tertium Quid.

Arsenic in Scarlet Fever.

Sir,—I shall be glad to know if any reader can give information as to the prophylactic powers of liquor arsenicalis in scarlet fever.—I am, etc.,

Borough Asylum, Ipswich. B. Chevallier, M.D.

ANSWERS.

Principal.—The question asked respecting a transaction with a medical agent is a legal one, on which we feel scarcely competent to express an opinion.

Dr. M. Wyckoff (New York) is thanked for his interesting communication.

Mr. W. W. Morris (Clun, Salop).—The full formula and mode of preparation should be stated.

C. E. G. (St. Helena).—The remittance of £2 has been handed to Dr. Broadbent as a donation to the Medical Benevolent Fund.

M.B.—Communicate with author and publisher, and obtain permission. No doubt the author would be glad to give it, and would influence his publisher. You will then have to arrange with an English publisher.

Stammering.

In reply to "Demosthenes," Mr. M. J. Bernstein writes to warn him against going to anybody who pretends to cure it by any particular set of rules. The causes and ways of stammering are as diverse as those of any other illness. A man must not only know how to cure it, but be able to get a sort of moral control over his patient. Mr. Bernstein knows only of one man who treats such cases with perfect success; namely, Mr. R. Bernard Bell, 23, Normanby Street, Liverpool.

San Remo.—We cannot see that the matter has any professional bearing.

Rudimentary Clavicles.

In answer to Mr. Y. M. Jones Humphreys, of Shefford, Dr. T. S. Dowse writes that, on February 16th, 1875, he showed, at the Pathological Society of London, a young girl, aged 15, with absence of the acromial ends of the clavicles. The case is duly reported in the *Transactions* of the Society, with a woodcut. "Upon examining the clavicle, it will be seen that only the sternal ends are clearly to be made out, and one would be led to conclude that the acromial ends had never been developed. But when it is considered that the acromial ends of the clavicles, which certainly seem absent, give attachment to important muscles, namely, the trapezius and deltoid, one would imagine that certain movements must be impeded. This is not the case. On the contrary, movements can be effected which, with a naturally developed clavicle, would be impossible. It is curious to note with what care she brings the arms to meet in front of the chest in a vertical line, so that the heads of the humeri touch each other.

Whooping-cough.

Dr. W. H. Barlow (Manchester) recommends the use of an aqueous solution of 1 or 2 per cent. of resorcine, to be applied to the parts immediately surrounding the glottis, with a large camel-hair pencil, or a swab, every two hours, night and day. This mode of treatment is the introduction of Dr. Moncorvo of Rio de Janeiro, and Dr. Barlow has submitted it to the test of actual experience at the dispensary of the Children's Hospital and in private practice, with very favourable results. The principle of the treatment is, of course, germicidal.

An examination of the sputa, in a case of fully developed whooping-cough, will show two distinct parts, a clear mucus, and roundish yellow spots of the size of a millet-seed, or somewhat larger; and these latter, when examined by the higher powers of the microscope (one-twelfth imm.), are seen to consist largely of epithelial cells and pus-cells infiltrated with numerous micrococci in active movement, which is stopped by the application of the solution.

The Examinations of the University of Durham.

Da Capo.—As far as we know, the examination in all the subjects must be passed at once; but our correspondent had better inquire of the Registrar of the University, Dr. Luke Armstrong, Clayton Street West, Newcastle-on-Tyne.

Sugar in Urine.

Dr. F. Simms writes: In your issue of the 13th instant, "A Learner Still" should have written "blood-charcoal," instead of "wood-charcoal;" and I am sure you will permit me this correction. Neither animal nor any other kind of charcoal will, acting as a filter, separate uric acid from saccharine urine, though some text-books say it will. I do not think that even "blood-charcoal will do this perfectly; but it is hard to procure, and I could not get it when trying a short time since."

Darville should investigate the dates, which would, we believe, lead to a very different conclusion. The Swedish invention was, we believe, of much later date than the first introduction here.

Mr. J. Court (Staveley).—We hope to be able to do so, but fear some time must elapse.

French Chalk.

Mr. T. Charters White writes, in reply to "an old M.B., M.A.," who requires the exact chemical composition of French chalk, that he probably refers to steatite, or so-called soapstone, which, although called French chalk, is not calcareous at all, but a silicate of magnesia whose chemical formula is thus expressed: MgO, SiO_3.—Other correspondents have written to the same effect.

Verrugas.

Sir,—In answer to your correspondent Staff-Surgeon Corrie, I am sorry to say that verrugas is still more or less prevalent in Peru. Its cause is not known, but an overzealous student lately inoculated himself with the blood of a verruga patient, took the disease, and died. The whole subject is attracting the attention of the profession in Peru at present; and if your correspondent will order *La Cronica Medica* from Lima monthly, he will probably obtain all the information that is to be had on the subject. I have just posted him one number containing a history of the disease.—Yours truly, Theodore Maxwell, M.D.

Woolwich.

Massage for a Male Patient.

Sir,—In answer to L. C. W., I beg to inform him that the Bolingbroke Hospital, situated on Wandsworth Common, undertakes cases of massage treatment at moderate terms.—I remain, yours faithfully,

Cecil R. C. Lyster, M.R.C.S., Resident Medical Officer.

Bolingbroke House, Wandsworth Common.

NOTES, LETTERS, ETC.

Errata.—In the British Medical Journal for January 23rd, page 157, column 1, line 10 from bottom, for "eighth," read "tenth;" line 7 from bottom, for "seventh," read "ninth." On page 158, column 1, line 5, for "eight," read "ten."—In the Journal for February 13th, page 282, column 2, line 15 from bottom, for "No. 11," read "No. 12."

Maternal Impressions.

Sir,—As regards the influence of maternal impressions, and particularly the class of cases referred to by Mr. E. Garraway, I find an instance among my notes. A married woman, the mother of several children, while suspecting pregnancy, or perhaps because of it, yielded to the whim of having her ears re-pierced, and taking to her long neglected earrings. The trifling operation sensibly affected her, and fears for the safety of the child troubled her until delivery. At birth the child seemed all right, until it was discovered to have both ears pierced, and ready for the ring or pendant. Through the right lobe the usual provision thread-loop was forthwith passed; the left, however, proved a failure, the closing process having set in.

The speculative might naturally ask themselves whether, if the nose ring had been in fashion, the result would have been similar. It is impossible to say; but a perforated nasal cartilage ought not to surprise us more than a fleshy aural lobe.—I am, etc., A. M. Brown, M.D.

29, Keppel Street, Russell Square.

Science and Subscription.

M. Verneuil, Clinical Professor in Surgery to the Paris Medical Faculty, proposes, in a letter to the *Gazette Hebdomadaire*, that a subscription should be opened for the purpose of paying the expenses of a commission of experimen-

research for ascertaining the best method of curing tuberculosis. MM. Potain, Graucher, Cornil, and Brouardel are to be the directors of the undertaking. M. Verneuil's plan is drawn up on a large scale; he wishes to have organised centres of research in cities, in the country, at the seaside, and in mountainous and other districts. At first sight, this idea seems excellent, but on closer examination, its defects are evident. M. Verneuil clearly indicates in his letter that the experiments would not be made by the committee of research, but by their assistants, who would have all the work, and, as often occurs, the non-working directors all the honour. It is clear that these conditions would be most unfavourable to success. Besides, experiments of this kind cannot be fruitful if attempts be made to work out every desultory idea. As M. Verneuil counsels, the only possible means of success is to have one guiding idea which should direct. It would be best if the commission were simply intrusted with the funds, so that they might distribute them to the best working scientists. The sum subscribed to establish the commission, which M. Verneuil wishes to see formed, amounts to 4,000 francs (£160).

What is the proper time to take Medicines?

'HE question whether a prescribed medicine should be taken before or after a meal is often put to the physician, and occasionally requires some special consideration. The medicines which act as local irritants, such as the salts of copper, iron, zinc, and arsenic, in large doses, are to be taken after a meal when the stomach is full, while small doses of medicines acting on the gastric terminations of the vagus ought to be taken before a meal. In some instances, we have to consider chemical changes. Oxide and nitrate of silver, if intended to act locally on the gastric mucous membrane, must likewise be administered when the stomach is empty. It is not generally known, or at least observed, that iodine and its salts are to be administered on an empty stomach, as the presence of starch and acids, modifying or decomposing the preparations of iodine, would reduce or prevent their effect. The acids intended to affect the gastric juices are to be taken before a meal, in order to provoke an ample secretion of the gastric glands. If alkalies are to modify the gastric juices, they must be given during the meal; but, if their absorption into the blood is desired, they ought to be ingested on an empty stomach, in order not to hinder the process of chymification by weakening the acids. Metallic salts, especially corrosive sublimate, likewise tannic acid, alcohol, and other drugs, modify or destroy the digestive power of pepsine, and are hence to be administered solely before meals. Small quantities of alcohol, as contained in the ordinary and medicinal wines, do not injuriously affect pepsine like the liquors rich in alcohol. Iron, phosphates, cod-liver oil, and similar medicines, may be taken during meal-time (*Bull. Gén. de Thérap.*).—*Therapeutic Gazette* (Detroit, U.S.A.), June 15th, 1885.

The Explosive Nature of Turpentine and Sulphuric Acid.

R,—After perusing Dr. Murrell's interesting article on "Pure Terebene in the Treatment of Winter Cough" in the JOURNAL of December 12th, 1885, I made an attempt to produce that valuable drug by mixing one part of pure sulphuric acid with five parts of spirits of turpentine, in a perfectly clean and unused two-ounce bottle. I closed the phial with a cork, and began to shake up the contents, when suddenly a loud report took place, and the whole room became filled with vapour to a suffocating extent. Fortunately, I had previously taken the precaution of covering the bottle with a thick cloth, which is my invariable custom when either drawing a cork or agitating a mixture; otherwise, it would certainly have caused me more personal injury than it did; as it was, it cost me an entire suit of wearing apparel. I thought that possibly, by publishing my experience of this compound, it might save some untoward result at the hands of any other brother practitioner, or might call for some further remarks on the subject.—I am, sir, yours obediently,

Sirhowy, Monmouthshire. WALTER H. DODD, L.R.C.P.

*** We sympathise with our correspondent, but we are not surprised. There is nothing in Dr. Murrell's paper to indicate that pure terebene can be prepared by the method adopted. The process is much more complex, and will be found fully described by Riban in the *Journal de Pharmacie et de Chimie*, vol. xviii, p. 187. An abstract of this paper will be found in the JOURNAL for February 6th, p. 259.

Cauterisation in Hydrophobia.

R,—In the JOURNAL of January 30th, you refer, in an article bearing the above heading, to the frequency with which it is observed in reports of fatal cases of hydrophobia, that the wound had been cauterised. Nitrate of silver is almost always the agent employed; and it is clear that there must be considerable delay before the cauterisation can be accomplished. I ask your permission to renew a suggestion which I offered in a paper which I had the honour to contribute to the *Practitioner* ("A Contribution to the Study of Disinfectants, September and October, 1884). My suggestion was founded on the power which acetic acid has to destroy the infectivity of vaccine-lymph; and it occurred to me that it was not a far-fetched assumption to suppose that it might also be antagonistic to the germ of the hydrophobic poison.

The proof of such power can only be established by a skilled investigator, with ample means for research at his command. It is obvious that, if this agent stood the test of such an examination, it would furnish a much more readily accessible resource in cases of dog-bite, than nitrate of silver. Vinegar is almost always to be had in most houses, and any unskilled person could fearlessly apply it with all freedom. I confess, however, that I doubt much whether the germicide can be applied sufficiently early to destroy the virus before any is absorbed.—I am, sir, your obedient servant, J. W. MILLER, M.D.

A Note on the Treatment of Phthisis.

R,—The perusal of your admirable article on "Cold and Phthisis" which appeared in the issue of January 30th, has prompted me to make a few remarks thereon. The fact is, that a large number of phthisical patients "take too much care of themselves." They have, as you aptly put it, "a constant dread of chill," and for that reason studiously avoid any open-air exercise, which would be necessary for the alleviation or cure of the disease. Nervous exhaustion, too, seems to deter them from any physical or mental exertion, and they soon become, from want of proper exercise, emaciated and dyspeptic; and, from having their mind solely directed to their malady, depressed and hypochondriacal. In your own words, "in the warmth of his invalid-chamber, and in the luxurious ease of subtropical climates, the consumptive reduces respiratory exercise to a minimum. He succeeds, perhaps, in relieving his bronchial catarrh, but at the tremendous expense of favouring the further development of tubercle, or the softening of the deposit already existing in the lungs."

Mountain-air gives an undoubted stimulus to muscular activity, and residence in such elevated regions, if circumstances permit, is thus essential. The Upper Engadine is undoubtedly the finest health-resort of this kind in Europe, and, if possible, there the patient should go. The air over the glaciers is very beneficial, inasmuch as it promotes free and easy respiration, combats nervous exhaustion, and stimulates the digestive functions. The grand and varied scenery of the Alps influences in no small way even the most unpoetical of minds, and the patient is beguiled from brooding over his own malady and its probable consequences, to a pleasure and interest in the glorious works of Nature around him. As Byron says—

> "There is a freshness in the mountain-air
> And life, which bloated ease can never hope to share."

I have referred in this note only to persons in the early stages of phthisis; far advanced cases are seldom, if ever, cured by any treatment.—I am, sir, yours, etc., R. J. REILY.

Boyle.

Exhibition of Cerebral Tumours.

An esteemed correspondent has sent us the following lines, anent the recent exhibition of tumours of the brain at the Pathological Society.

Ad Concilium Societatis Pathologicæ Londinensis.

Of tumours old, of tumours new,
Of tumours many, tumours few,
Or in the pons, or in the crura,
Or in the pia, or the dura,
Or in the left, or in the right,
Or in the cleft, Rolando's hight,
Or in the nucleus caudatus,
Or in the gyrus fornicatus;
Of tumours some would call glioma,
While others, dubious, hint sarcoma,
Or, still more learnedly, psammoma;
Of tumours where the patients show
No symptoms while those tumours grow;
Of others where they're almost crazy,
And one or both their discs are hazy;
Of tumours smooth, of tumours rough,
Of tumours soft, of tumours tough,
I rather think we've had enough.

Helen Prideaux Memorial Fund.

The following additional contributions to the fund have been received from members of the medical profession.

	£	s.	d.		£	s.	d.
Sir Spencer Wells, Bart.	2	2	0	W. A. Meredith, Esq.	2	2	0
Mrs. Scharlieb, M.B.	5	5	0	Dr. Blanc	2	2	0
Mrs. Rushbrook	0	10	6	Miss Hitchcock	3	0	0

Subscriptions may be sent to the treasurer, the Dowager Lady Stanley of Alderley, 40, Dover Street, W., or to the honorary secretary, Mrs. Garrett Anderson, M.D., 4, Upper Berkeley Street, W.

A meeting of subscribers and friends will be held on Saturday, February 20th, at 4 P.M., at the Medical Society's rooms, 11, Chandos Street, Cavendish Square, W.; Sir William W. Gull, Bart., M.D., Chairman.

Inadequate Fees.

SIR,—My attention has been called to a communication in the BRITISH MEDICAL JOURNAL of January 23rd, concerning a circular issued by this Association to one leading medical man in every populous place in England and Scotland. To that communication you will perhaps kindly permit me to make a reply.

Our circular (which you reproduced in your columns) described the fees as utterly inadequate, mentioned the circumstances under which they were offered, and at the same time asked the opinion of the medical men to whom it was sent regarding them.

It may interest your readers to know how the circular was received by the profession. Putting out of count those who from death, removal or retiral, were unable to act, the number who write approving can only be expressed by four figures. The number who disapprove is under twenty; the proportion thus being as over fifty to one.

Upon the circumstances themselves I will not dilate—such as the fact of this not being a life office, and therefore not to be compared with such an institution, the smallness of our quarterly premiums (many of them under ten shillings, the inadequacy of the remuneration of all the officials during the first twelve months, the promised increase in a few months, and the fact that in connection with claims our appointment will bring work which in the case of a life office, ceases with the examination.

Without entering upon these, I may be permitted to say that the good will thus expressed towards the Association by (what I think I am fairly entitled to call) the entire medical profession has been to the directors gratifying in the extreme. I may also be allowed to express the hope that those who have borne the burden and heat of the day, and have for a few months acted for remuneration so inadequate, will, ere long, reap the reward by the appointment turning out, with increasing business and increasing fees, all that their, and my own, best hopes can wish.—Yours, etc., J. B. BLACK, Manager.

The Sickness and Accident Assurance Association, Limited,
1, St. Andrew Square, Edinburgh.

The True Adventures of a Door-Plate.

A CORRESPONDENT writes: A medical man, who had recently settled in one of the suburbs of London, was immensely surprised, on coming down one morning, to find that his first new brass plate had been removed, leaving nothing but the wooden plugs in the wall to remind him of his loss. His irritation was extreme; but, as the police were unable to afford him any information or assistance beyond the expression of their sympathy, the exasperated doctor was fain to invest in another, this time taking additional and special precautions, suggested by several nights of anxious thought, to render the enterprise at any rate a trifle more difficult. Further, he and different members of his family willingly did sentinel's duty at odd times, hoping to catch somebody looking rather harder at the plate than there was any occasion for. Security begat confidence, and his anger had almost given place to indifference, when he was awoke one morning with the astounding intelligence that plate No. 2 had likewise

disappeared. Although it was not yet his usual hour for rising, he dressed himself forthwith, and after an examination of the scene of the crime, too largely associated with elocutionary efforts to be exhaustive, he conveyed himself to the nearest police-station, and vented his ire, or would have vented it, if the inspector on duty had not checked him somewhat. Although the proceeding had become a trifle monotonous, all that the police could suggest was that he should fix his plate on in such wise that its removal would involve the removal of a corner, at least, of the house. It was further promised that the policeman on the beat should have special instructions to look after any subsequent plate.

After a day or two, another plate was forthcoming, and, with scientific cunning, the medical man, who was a bit of an electrician in his way, devised an ingenious spring which should ring his night-bell on any attempt being made to tamper with the new, that is to say, the last new, plate. He took a further precaution, in view of his not being in a condition to make immediate chase after the miscreant plate-stealer, in the shape of taking up into his bedroom a liberal allowance of bricks to be used as missiles. Matters went on smoothly now for some time, and the medical man began to think his precautions superfluous. Nevertheless, with the diffidence begotten of the loss of two new plates, he assured himself of the "contacts" and kept the brickbats in his bedroom. And events proved his caution to have been opportune, for one night, just as he was dozing off, dreaming that he was attending a confinement, the night-bell commenced ringing, and continued to ring. After a moment's hesitation, he cautiously opened the window of his bedroom which looked out on the deserted street, and saw in the darkness of the night a still darker form, which obscured the plate from his infuriated vision. To seize several bricks, and to shower them on that darker form, was not only the work of a moment, but of a quasi-maniac, to such an extent did his passion blind him; and it was only when the form fell to the ground with a groan that he reflected that, after all, he would scarcely be justified in awarding capital punishment for even so abominable an offence. After discussing the matter with his wife, he decided to go down and see how matters stood, and great was his horror to find that it was the policeman on the beat, who, in his anxiety to ascertain the actual condition of the plate, had given rise to the alarm, and had fallen a victim to his sense of duty. Gently and sadly they took him up, and, after a prolonged course of brandy and water, our policeman came round, but was very badly hurt, and as soon as he recovered his speech, he threatened mischief. It was explained to him that several bricks had become detached, and, unfortunately, fallen just where he was standing; and at the present moment he is reported to be considering, in his bed at the infirmary, whether that version of the fray will or will not hold water.

Sewage-Farm Throats.

A CORRESPONDENT, signing himself S. F., writes to protest against the proposal of the Croydon Town Council to increase the area of the South Norwood Elmers End Sewage Farm. He says that the land is a stiff clay, allowing little or no percolation, and in the summer months the odours arising are most unpleasant. Though it is difficult to prove that the sewage-farm is a cause of disease, yet he has such a number of throat-cases, with spotted tongues, of a bad drainage type (the neighbourhood itself being well drained), and which, from examinations, do not depend upon bad house-drainage, or impure water, or milk, that he attributes these throat-cases to the fact that the Elmers End Road, bordering the farm, is the way into the country, much frequented, and that children loiter and play near the brook draining the farm, the cases principally occurring in children. He suggests that as good a name as any for these throats would be sewage-farm throats. As a proof of his argument, he states that, at the South Norwood end of the farm, about three years since, he had a family with these throats. All the drains had been put in order before taking possession, but he was not satisfied, had all the drains reinspected, and found all the sanitary arrangements perfect. The milk was derived from the occupier's own cow. This family did not regain strength till they were sent away for a long change. In the following year, notwithstanding all that had been done, the same symptoms appeared again, and one child was attacked with severe diphtheria, and died.

Without going fully into the question of the exhalations from a sewage-farm lowering vitality, setting up a ferment in the system which would cause any contagious germ to be rapidly developed, and the ill effects produced by the large damp area, our correspondent considers there is sufficient probable cause of mischief to warn the Local Government Board of the danger of perpetuating and increasing the area of a sewage-farm on any soil within eight miles of London, and in the centre of a populous district.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. T. S. Dowse, London; Dr. A. M. Edge, Manchester; Mr. R. Cobb, London; Mr. W. F. Haslam, Birmingham; Mr. R. S. Anderson, Spennymoor; Dr. Waters, Liverpool; Dr. C. A. Ducket, Great Yarmouth; Mr. S. D. Adams, Belfast; Dr. P. H. Mules, Manchester; Mr. T. C. White, London; Mr. Sidney A. Bourton, London; Our Egyptian Correspondent; Mr. G. F. Masterman, Stourport; Dr. F. Simms, London; Mr. W. H. Hughes, Ashton-under-Lyne; The Secretary of the South Indian Branch, Madras; Dr. Fleming, Padiham; Mr. A. H. W. Ayling, London; Mr. William Prowse, Clifton; Dr. M. C. Collins, Nottingham; Dr. H. Barnes, Carlisle; Dr. H. Macindoe, Market Drayton; Mr. W. M. Tollit, Totnes; Dr. Mackey, Brighton; Dr. William Curran, London; Mr. H. A. Allbutt, Leeds; Mr. Y. M. Jones Humphreys, Shefford, Bedfordshire; Mr. C. J. B. Johnson, Wetherby; Mr. A. Cutfield, Mackay, Queensland; Mr. G. Rendle, London; Our Birmingham Correspondent; Dr. Tatham, Salford; Mr. J. Howell Thomas, Wellingborough; Mr. F. H. V. Grosholz, Towyn; Dr. Seaton, London; Dr. J. G. Parsons, Bristol; Dr. J. Sinclair Holden, Sudbury; Dr. N. Kerr, London; Dr. Joseph Rogers, London; Mr. T. Pridgin Teale, Leeds; J. V. H.; Surgeon-General Evatt, Woolwich; Mr. Surtees Sumner, London; Mr. W. J. Lawrie, Ayr; Dr. Martin, Blackburn; Dr. Myrtle, Harrogate; Mr. J. T. Gawthorp, London; Dr. Sieveking, London; Dr. Noel Paton, Edinburgh; Dr. Christie, Glasgow; Mr. George St. George, Lisburn, co. Antrim; Mr. Cresswell Baber, Brighton; Dr. Maxwell, Woolwich; Dr. Kinkead, Galway; Dr. T. Churton, Leeds; Mr. J. Quirke, Birmingham; Mr. J. S. Wood, London; Mr. J. Deans, Bournemouth; Dr. G. H. R. Dabbs, Shanklin; Dr. J. W. Hamill, Manchester; Dr. V. Poulain, London; Mr. John Tanner, London; Dr. Carter, Liverpool; Mr. W. John, Haverfordwest; Mr. Cecil Lyster, London; Mr. Simeon Snell, Sheffield; Mr. Thomas Roberts, London; Mr. C. M. Jessop, London; Mr. C. E. Geoghegan, St. Helena; Mr. T. Jenner Verrall, Brighton; Messrs. Ward and Lock, London; Dr. J. W. Miller, London; Mr. W. W. Morris, Clun, Salop; Mr. W. T. Jackman, Coggeshall; Dr. H. Talbot Higginson, Bangor, co. Down; The Secretary of the Parkes Museum, London; Dr. Bourneville, Paris; Mr. J. Dalglish, Trowbridge; Our Paris Correspondent; Dr. J. H. Keeling, Sheffield; Mr. H. Welch, Blackpool; Mr. T. M. Pierce, Manchester; Dr. Thomas Smith, Stockport; Mr. R. Roberts, Blaenau Festiniog; Mr. H. Addison, London; Mr. Symonds, London; Mr. C. B. Cooper, Liverpool; Dr. B. Chevallier, Ipswich; Mr. H. Peck, Southport; Dr. J. A. Sewell, Folkestone; Mr. T. F. Tannahill, Borstal; Mr. C. D. Palmer, Buxton; Dr. Steven, London; Mr. H. C. Burdett, London; Mr. E. Crockett, Wolverhampton; Mr. L. W. Browne, London; Dr. C. B. Gunn, Peebles; Mr. C. E. Abbott, Braintree; Dr. C. B. Voisey, Chatham; Dr. J. Constable, Leuchars, Fife; Mr. J. Hall, London; Dr. J. W. Moore, Dublin; Mr. J. Bland Sutton, London; Mr. A. H. Boys, Pill, Somerset; Our Aberdeen Correspondent; Mr. E. S. Angove, Rugby; Dr. Mackay, Greenock; Mr. G. P. Francis, Bath; Mr. Cameron, Liverpool; Dr. Saundby, Birmingham; Mr. J. W. Smith, Doncaster; Our Liverpool Correspondent; Our Edinburgh Correspondent; Our Glasgow Correspondent; Dr. R. Scott Orr, Glasgow; Mr. A. Kirk, Nottingham; Mr. J. Unsworth, Liverpool; Dr. F. Barnes, London; Mr. T. Graham, London; Dr. R. Rentoul, Liverpool; Mr. D. Nicholson, Crowthorne; The Secretary of the Medical Society, London; The Secretary of the Clinical Society, London; Mr. G. F. Broatch, Beverley; Mr. J. H. Gray, London; Mr. A. Hill Griffith, Manchester; Dr. W. Saul, Lancaster; Mr. R. J. H. Scott, Bath; Mr. E. M. Hoops, Wrexham; Our Dublin Correspondent; Mr. George Eastes, London; Mr. T. Henry Ashworth, Halstead, Essex; Mr. T. F. Raven, Broadstairs; The Secretary of the Statistical Society, London; Mr. St. Vincent Mercier, London; Mr. William C. Grant, London; Dr. W. Mactie Campbell, Liverpool; Mr. F. C. Bury Rusholme, Manchester; Dr. John Shea, Reading; Mr. C. H. D. Scott, Anerley; Mr. T. Graham, London; Dr. John Lowe, London; The Editor of *The Christian Million*, London; Dr. A. T. Brett, Watford; Dr. Stirling, Aberdeen; Mr. J. J. Merriman, London, etc.

BOOKS, ETC., RECEIVED.

Treatise on Gout and Rheumatic Gout. By A. Meldon. Tenth Edition. London: Baillière, Tindall, and Cox. Dublin: Fannin and Co. 1886.

Remarks upon the Epidemic of Measles Prevalent in Sunderland, with Notes upon 31 Cases from the middle of January to the middle of March. By Harry Drinkwater, M.D. Edinburgh: James Thin. 1885.

The Optical Manual; or, Handbook of Instruction. By Surgeon-General Lonmore. Third Edition. London: Clowes and Co. 1886.

Insomnia, and other Disorders of Sleep. By H. M. Lyman, A.M., M.D. London: Trübner and Co. 1886.

Puerperal Convalescence, and the Diseases of the Puerperal Period. By Josef Kucher, M.D. London: Trübner and Co. 1886.

Hospital Sisters and their Duties. By Eva C. E. Lückes. London: J. and A. Churchill. 1886.

Seventh Annual Report of the State Board of Health of Illinois. 1885.

Clinical Lectures on the Diseases of Women. By Dr. J. Matthews Duncan, M.D. Third Edition. London: J. and A. Churchill. 1886.

St. Bartholomew's Hospital Reports. Vol. XXI. 1885. London: Smith, Elder and Co. 1886.

The Two Foundations of St. Bartholomew's Hospital. By W. Morrant Baker, F.R.C.S. London: Smith, Elder, and Co. 1886.

Book-keeping, with Charts, etc. By Joseph Hall, A.C.A. London: Good and Sons. 1886.

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REPORT
TO THE
SCIENTIFIC GRANTS COMMITTEE
OF THE
BRITISH MEDICAL ASSOCIATION.

REPORT ON THE RELATIONSHIP OF THE FORMATION OF UREA AND URIC ACID TO THE SECRETION OF BILE.

By D. NOEL PATON, M.D., B.Sc., F.R.S.E.,
siological Fellow of the University of Edinburgh; late Senior President Royal Medical Society of Edinburgh.
[From the Physiological Laboratory of the University of Edinburgh.]

[Abstract of Report.[1]]

IE relationship of the liver to the elimination of the effete nitrogenous matters of the animal body is a subject of the greatest physiogical interest, and of prime practical importance. It has arrested e attention of many of the ablest physiologists, each one of whom s added something to our knowledge of the subject, but none of iom can be said finally to have settled the question of the precise lationship of the liver to the production of urea.

Reviewing the work of past observers, we are forced to admit that e liver is undoubtedly the great source—the great "Bildungsort" of urea in the animal economy. It is impossible here to discuss in tail the great mass of evidence which has been accumulated on this sub-t. For such a discussion, I must refer to my extended report in e *Journal of Anatomy and Physiology*, vol. xx, pages 114 and 267.

The researches of Cyon, of Gscheidlen (who endeavours to disprove e hepatic origin of urea), of Von Schroeder, and of Salomon, all arly demonstrate that the blood, in passing through the liver, gains ea; while the clinical observations of Frerichs and of Brouardel o show the close connection of the liver with the production of this ete nitrogenous substance.

A very striking contribution to this subject has recently been made Minkowski. It is well known to all that in birds uric acid takes e place of urea; and, by taking advantage of a peculiarity in the rtal circulation of birds, specially well developed in the goose, Minwski has been able to exclude the liver from the circulation, and to ow that under these circumstances lactic acid takes the place of uric d in the urine.

But, besides this direct evidence in regard to the production of urea thin the liver, we have also ample proof that it is not produced ewhere. Till lately, the muscular system and the kidneys have been ld to be seats of formation of urea. But in opposition to the latter pothesis must be set the whole weight of experimental evidence ce the time of Prévost and Dumas; against which the isolated servations of Oppler, of Petroff, and of Zalesky cannot be accepted. leed, the observations of the two former experimenters may be pertly reconciled with the conclusions of Prévost and Dumas, of rchand, of Voit, and of the vast majority of those who have worked on this subject. Again, the researches of Von Schroeder and of omon tend to show that blood, in passing through the excised ney, does not gain urea; while Gréhant and Quinquand, from periments on the living animal, have come to the same conclun.

Few are now inclined to maintain that the muscular system can in y sense be considered the seat of formation of urea. The amount of a in muscle is very small; and neither do the muscles themselves, the blood passing through them, gain urea when the muscles are a state of active contraction. The small and uncertain rise in the a which follows muscular exertion cannot be considered as indicatthat the nitrogen so excreted is formed in the muscles; for, conitantly with all muscular effort, we have changes occurring in the er organs of the body.

We may therefore conclude that, although the evidence of the urrence of urea in liver-tissue is by no means conclusive, the blood, in passing through this gland, undoubtedly does gain urea. In a future paper, I hope to give the results of an investigation upon how this increase is brought about. At present, I shall confine myself to the relationship of the production of urea with the secretion of bile. No direct series of experiments upon this subject has been made, but many well-known physiological facts strongly indicate the existence of such a relationship. In the first place, in the starving animal, the excretion of urea and of bile falls, and to the last days of life persists in small amounts. In the second place, after a meal, both urea-excretion and bile-secretion rise, and reach their maximum some hours after food is taken. Lastly, the influence of different diets on the excretion of urea on the one hand, and the formation of bile on the other, is of interest. While proteids cause a marked increase in both, fats have no stimulating effect upon either process.

Instead of following the lines suggested by these past observations, I have employed another, and I believe more satisfactory method; that of studying the influence on the excretion of urea in dogs in a state of nitrogenous balance (*Stickstoffgleichgewicht*) of certain drugs, which powerfully stimulate the secretion of bile.

For this purpose, I have selected some of the more active of these substances, which Professor Rutherford has shown to have a special stimulating action in the biliary function of the liver. The action of salicylate of soda, of benzoate of soda, of colchicum, of perchloride of mercury, and of euonymin, drugs representing different pharmacological groups, and differing widely from one another in their general physiological effects, has been studied.

The practical importance of such a research is considerable, for the somewhat empiric use of certain of these drugs in gout, rheumatism, and diabetes, and in other diseases in which the tissue-metabolism is gravely affected, should, by such an investigation, be rendered more rational and scientific. For this reason, I have also studied the changes produced on the excretion of uric acid, under their administration.

My earlier experiments were made upon men; but the results obtained, owing to the many disturbing causes which could not be excluded, were so unsatisfactory, that, after two months' work, this mode of experiment was abandoned, and the observations were repeated on dogs. For all the experiments here recorded, with the exception of two, dogs were employed. And I believe that the use of these animals renders my results of more value, as it was upon dogs that Professor Rutherford conducted his series of experiments upon the secretion of bile; so that we may in every case safely conclude that under the administration of the drug the secretion of bile really was stimulated.

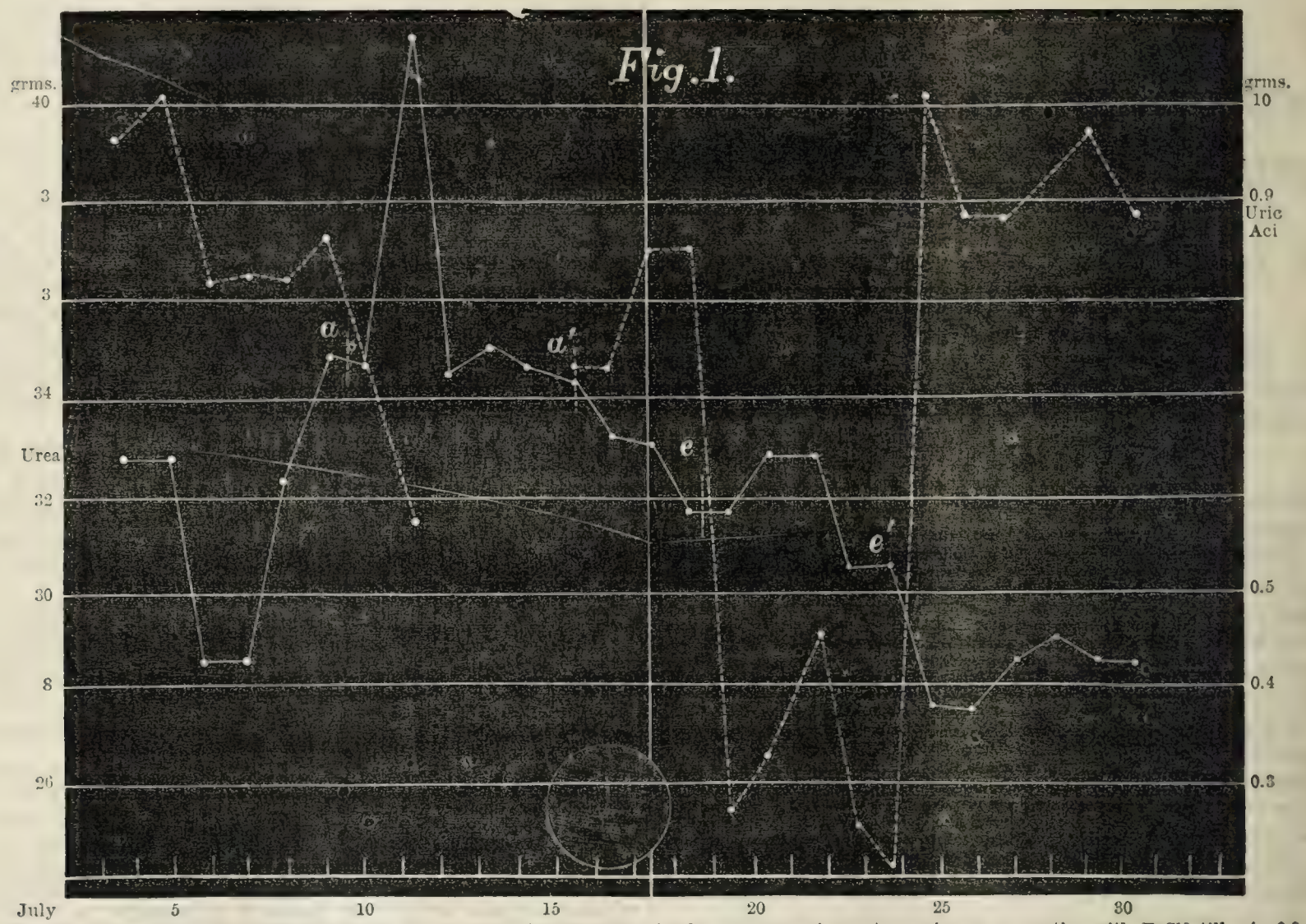
Mode of Experiment.—Large female dogs were selected, weighing about 13 kilogrammes (26½ lbs.). Female dogs were chosen, because, from their mode of micturition, there is a less chance of a loss of urine occurring; and, when catheterisation is required, it is more easily and safely performed than upon the male.

The dog was kept in a cage, the floor of which was of smooth zinc, and sloped from all sides to a hole in the centre, under which was placed the vessel in which the urine was collected. Across one side of the cage was stretched a narrow board, on which the dog slept and fed, but upon which it rarely micturated. The floor of the cage was kept scrupulously clean, and was frequently washed with a solution of permanganate of potash. The fæces were always cleared away as soon after they were passed as possible. I am well aware that my method of collecting the urine allows a certain loss, but that this is a fixed percentage quantity, is shown by the very uniform daily excretion of urea which my analyses indicate. Using this method, I have been able to approach almost as near to a daily uniform excretion of urea as Salkowski, Virchow, Wolfsohn, or other observers who have employed catheterisation, or who have educated their dogs to micturate into a vessel held beneath them (Wolfsohn). The urine was collected at ten o'clock each morning; the cage was then cleaned, and the dog fed.

The diet consisted of oatmeal-porridge with milk. On this food, the dogs remained healthy for long periods, while a firm well-formed fæcal dejection occurred daily, a matter of no small importance, as the urine was thus kept free from admixture with fæces. The urine, too, was large in amount, and of low specific gravity, so that the dilution usually required in observations on dogs' urine was rendered unnecessary.

Methods of Analysis: 1. Urea.—For the quantitative estimation of the urea, I have employed the hypobromite method of Hüfner (*Journal für Prakt. Chemie*, N. F. Band iii, 11). In preferring this process to the more commonly adopted method of Liebig, I feel that I have exposed myself to adverse criticism. But a careful perusal of the very extensive and scattered literature upon the subject, and a

[1] The full report is published, with details, in the *Journal of Anatomy and siology*, vol. xx, pages 114 and 267.



Experiment I and II.—Excretion of urea and of uric acid under salicylate of soda: 6.6 grms. given at *a*, urine gave reaction with $FeCl^3$ till *a'*; 6.0 grms. given at *e*, urine gave reaction with $FeCl^3$ till *e'*.

series of experiments undertaken by myself, have fully convinced me that, for such a research, this method has advantages over all others. It may be rendered more accurate than Liebig's method, and it has this great advantage, that the presence in the urine of the drugs administered does not interfere with the results.

2. Uric Acid.—For the estimation of the uric acid, I have selected the method recently devised by Professor Haycraft, because it appears to me to combine, more than any other, the two qualities of accuracy and rapidity. I have tried Heintz's, Cook's, and Pavy's methods, and have failed to get results so nearly accurate; while Salkowski's very admirable method is much too tedious for every-day analysis. Through the kindness of Professor Haycraft, I have been enabled to use his process throughout all my experiments, although his paper on the subject has only recently appeared (BRITISH MEDICAL JOURNAL, vol. ii, 1885, p. 1100).

I.—SALICYLATE OF SODA.

According to Professor Rutherford's experiments, 62, 66, 67, 69, 70*a*, and 73*a* and 74*a*, salicylate of soda occupies perhaps the first position among the cholagogues in its influence on the secretion of bile. Professor Rutherford says of it: "Indeed, this substance is a certain hepatic stimulant, never failing, when placed in the duodenum, to excite the liver within half an hour."

Only a few observations on the influence of salicylate of soda on the urinary constituents have as yet been recorded.

In 1876, two papers on the subject appeared, one by Chr. Bohr (*Hospitals Tidende*, Series 2, Band iii, p. 129), and the other by Solomon Wolfshon (*Ueber die Wirkung der Salicylsäure und des Salicylsauren Natron auf den Stoffwechsel*). Bohr connects the rise in the urea obtained with the increased imbibition of water, which is supposed to have increased the tissue-metabolism. His results cannot be considered of any value. Wolfsohn demonstrated a well-marked increase in the total nitrogen and in the urea excreted; and this increase in his experiments was best marked on the days following the administration of the drug.

Although the action of the benzoates upon the excretion of uric acid has on account of their connection with the production of hippuric acid, attracted considerable attention, I am not aware of any observations upon the influence of their allies, the salicylates, upon the urinary constituents. Sée, indeed, in a paper published in the *Bull. de l'Acad. de Méd.*, 1877, p. 704, states that, in gravel and gout, the uric acid excreted is increased under the administration of salicylate of soda; while, in health, these drugs have no influence whatever either upon the urea or the uric acid. He states that, in acute gout, he has seen the uric acid rise from 0.30 gramme to 3.10 grammes per 1,000 cubic centimètres. But, as Garrod has shown, a similar rise occurs in all cases of acute gout towards the termination of the attack; hence little value can be placed on Sée's observations. All the more are they unworthy of attention, as he does not record the experiments upon which they are founded.

Experiments I and II.—For these two experiments a man, aged 56, was employed; his daily exercise was fixed, and his diet was daily without any variation, the following:—Breakfast: bread, 4 ounces; tea, 1 pint: Dinner: broth, 1½ pints; beef, 4 ounces: Supper: porridge, 1½ pints; milk, ½ pint. He took little or no water—never more than a teacupful in the twenty-four hours. The daily excretion of nitrogen never became very constant, but the influence of salicylate of soda is seen in the accompanying table, abstract, and in Fig. 1.

Haycraft's method was used in these, as in all future experiments, for the determination of the uric acid; and, as the presence of the drug in the urine might have interfered with the accuracy of the process, this possible source of error was excluded by the following experiment.

Experiment I a.—The uric acid in a specimen of urine by the method was found to be 0.0221 per cent. A large quantity of salicylate of soda was then added to another portion of the same urine, and upon testing, the percentage of uric acid was found to be 0.0228 per cent.

Therefore, salicylate of soda has no effect on the accuracy of the process.

Experiment IV.—During this experiment, the amount of urine daily passed varied considerably; but, on taking two days together

ad striking an average, an almost constant daily excretion of urea as obtained. This bidiurnal habit in regard to micturition was frequently well marked in this dog, but in no way interfered with the esults of the experiments.

Results with Salicylate of Soda.—The urea was very markedly ncreased, in spite of the diminution in the water.

The uric acid was very much diminished. This last is a point of great practical interest and importance, as it throws very direct light on the benefit derived from the use of the drug in gout. In the practice of M. Germain Sée, it has entirely replaced the use of colchicum (*Year-Book of Treatment for* 1884, p. 81).

Relationship of Formation of Urea to Secretion of Bile. Experiments I and II.[1]

Date.	Urine in ccs.	Specific Gravity.	Urea in Grms.	Uric Acid in Grms.	Remarks.
7.84	2215.2	1014	33.671	0.968	Weight of man=62.1 kilos., about 9 st. 11 lbs. Diet—(as above).
	1913.2	1015	32.058	1.037	
	2158.4	1013	29.344	0.811	
	1618.8	1015	27.681	0.837	
	2556.0	1012	32.205	0.823	6.6 grms. of salicylate of soda in 24 hours =0.106 grm. per kilo. of body weight.
	1646.3	1018	34.901	0.874	Reaction with $FeCl_3$
	1646.3	1016	34.572	0.663	,, ,,
	2414.0	1018	41.521	0.567	,, ,,
	1760.8	1019	34.335	..	,, ,,
	2101.6	1016	35.096	..	,, ,,
	1959.6	1016	34.489	..	,, ,,
	1618.8	1017	34.156	0.720	Faint ,, ,,
	2385.6	1013	33.398	0.701	,, ,, ,,
	2272.0	1013	33.171	0.800	
	2158.4	1014	31.982	0.850	
	2101.6	1013	31.982	0.281	6.6 grms. of salicylafe of soda in 24 hours= 0.106 grm. per kilo. of body-weight.
	2442.4	1016	32.349	0.321	Reaction with $FeCl_3$
	1988.0	1014	32.349	0.441	,, ,,
	1533.6	1013	30.590	0.257	,, ,,
	2044.8	1015	30.590	0.206	,, ,,
	1817.6	1016	27.860	1.001	,, ,,
	2585.6	1013	27.860	1.119	
	1902.8	1015	28.351	0.679	
	2158.4	1013	28.922	..	
	1931.2	1014	28.870	0.984	
	1902.8	1013	28.870	0.894	
	1874.4	1012	24.742	..	

In this and all subsequent tables, the date refers to the day upon which the ıter part of the urine was passed—not to the day on which it was collected. s the urine of 3.7.84, is the urine collected at 10 A.M. on the 4th July.

Experiment IV.

Date.	Urine in ccs.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
14.3.85	563	8.150	0.136	moved	Weight of dog=12.7 kilos.
15	563	8.150	0.136	,,	Diet—Porridge of 113 grms. oat-meal: milk, 320 ccms.
16	568	8.150	0.136	not moved	
17	735	8.540	0.196	moved	
18	735	8.540	0.196	not moved	
19	830	8.200	0.166	,,	
20	595	8.538	0.129	,,	
21	595	8.538	0.129	moved	2 grms. salicylate of soda=0.16 grm. per kilo.
22	440	12.320	0.075	not moved	2 grms. ,, ,, 0.16 grm. per kilo.
23	500	11.400	0.085	,,	3 grms. ,, ,, 0.23
24	725	10.927	0.145	moved	grm. Reaction with $FeCl_3$.
25	725	10.927	0.145	,,	,, ,,
26	830	8.300	0.107	not moved	Slight ,, ,,
27					
28	570	6.945			Average daily excretion of urea=8.247 grms.
29	570	6.945	0.153		
30	645	9.550			
31	645	9.550			

The brackets indicate that the figures given represent the average for the period indicated.

Average daily Excretion of various Constituents under Salicylate of Soda.

	Before Drug.	With Drug.	After Drug.	Before and After.	With.	Percentage Change.
Water, in ccs.	691	482	695	693	482	—30.4
Urea, in grms.	8.353	11.393	8.258	8.305	11.390	+37.1
Uric Acid ,,	0.161	0.082	0.137	0.149	0.082	—44.9

erage daily Excretion of Water and Urea under Salicylate of Soda. (See Fig. 1.)

	Water.	Urea.
	ccs.	grms.
ore Experiment I.	1980	30.62
ing administration of drug	2012	34.72
ween Experiments I and II.	2108	33.77
ing second administration of drug	2016	31.30
r Experiment II.	2027	28.40
ore and after Experiments I and II.	2003	29.51
ng administration of drug in Experiments I and II.	2014	33.01

entage change in Water . . . . . practically unaltered.
,, ,, Urea . . . . . +11.89 c.

verage daily Excretion of Uric Acid in grammes under Salicylate of Soda.

Experiment I.

Before.	With.	After.	Before and After.	With.
0.895	0.732	0.842	0.868	0.732

Percentage change = — 15.

Experiment II.

efore.	With.	After.	Before and After.	With.
0.767	0.303	0.931	0.849	0.303

Percentage change = — 64.3.

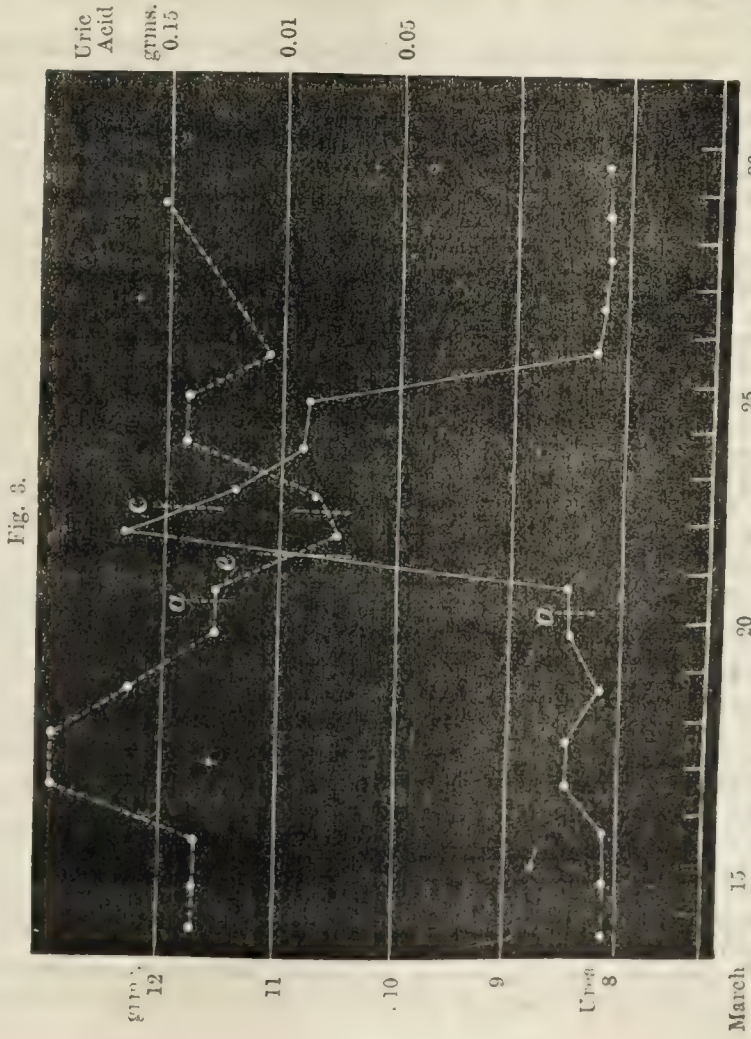


Fig. 3.—Experiment IV.—Excretion of urea and uric acid under salicylate of soda: 2 grms. given at *a*, 2 grms. at *e*, and 3 grms. at *c*.

How this diminution in the excretion of uric acid is brought about, it is difficult to understand. Obviously, it is a diminished production, and not merely a diminished excretion; for there is no great rise in the excretion upon discontinuing the drug. In all probability, the production of salicyluric acid interferes with the formation of uric acid.

Bertagnini (*Annal. der Chem. und Pharmacie*, February, 1856) has shown that salicyluric acid is produced by the synthesis of salicylic acid with glycocol; while Horbaczewski states (*Wiener Akad. Sitzb.*, II Abth., 1885, Mai) that he has prepared uric acid synthetically from glycocol and urea. It is, therefore, highly probable that salicylic acid, by uniting with glycocol to form salicyluric acid, prevents the production of uric acid. Dr. Latham, of Cambridge, has already developed this view of the formation of uric acid in relationship to the treatment of gout by benzoates.

II.—Benzoate of Soda.

Dr. Rutherford in Experiments 68 and 72A of his series, has demonstrated that benzoate of soda is a powerful hepatic stimulant.

From the connection of benzoic acid and the benzoates with the production of hippuric acid, the influence of these drugs upon the urine has received a considerable amount of attention, though only two really careful scientific experiments have hitherto been made upon their action upon the nitrogen of the urine.

Salkowski (*Zeitschr. für Physiol. Chem.*, Band i, p. 45, 1877) has recorded two. The diet of the dog upon which these observations were conducted was carefully regulated, and a nitrogenous balance (*Stickstoffgleichgewicht*) established; and he was able to demonstrate a very marked increase in the nitrogenous excretion under benzoate of soda.

C. Virchow (*loc. cit.*) has made two experiments, under Salkowski's direction, and finds a well-marked rise in the daily excretion of nitrogen under the influence of benzoic acid given as the soda salt.

In regard to the action of benzoates upon the uric acid, it was long ago stated by Wöhler and Keller (*Ann. der Chem. und Pharmac.*, Band xliii, p. 108) that no decrease in the uric acid occurred.

More recently, Garrod has investigated the subject, and has come to the conclusion that benzoates do very decidedly diminish the amount of uric acid excreted (Lettsomian Lecture, Brit. Med. Jour., 1883, vol. i). His method of experiment was not altogether satisfactory, as the urine of the twenty-four hours was not dealt with.

Cook (Brit. Med. Journal, 1883, vol. ii, p. 9) opposes his results, and contends that the diminution observed by Garrod was due to the presence of benzoic acid in the urine preventing the crystallisation of the uric acid.

The question of the influence of benzoates upon the uric acid must, therefore, be regarded as undecided, and as requiring further elucidation.

Experiment V.—The influence of benzoate of soda on the water, urea, and uric acid, is shown in the accompanying table and abstract, and in Fig. 4.

Its disturbing influence on the accuracy of the hypobromite method for the estimation of urea need not be considered, since Knop (*Ber. der königl. Sächs. Gesell. der Wissensch.*, 1870, p. 17) and Hüfner (*Jour. für pract. Chemie*, N. F., Band iii, 1871, p. 18) have shown that none of the nitrogen of hippuric acid is evolved.

The possible disturbing influence of hippuric and benzoic acid in the urine upon Haycraft's method for uric acid had, however, to be investigated.

Experiment Va.—Using Haycraft's process, the urine of February 15th yielded 0.04 per cent. of uric acid. To 25 centimètres of this urine 0.2 gramme of benzoate of soda was added. The uric acid was again determined by the same method, and was found to amount to 0.039 per cent.

Experiment Vb.—To 25 cubic centimètres of the same urine, 0.2 gramme of hippuric acid was added, and the uric acid, determined as before, was found to be 0.041 per cent. Therefore, the presence of benzoates and of hippuric acid does not interfere with the accuracy of this process.

On the 16th, the urine contained a faint trace of albumen, and reduced Fehling's solution very remarkably, giving on boiling a copious orange-coloured precipitate.

The fermentation-test for sugar was tried, and after several days gave no evolution of gas, although a check experiment with the same yeast yielded an abundance of carbonic acid.

The reduction is due to the presence of a substance described by Salkowski in a short note in the *Zeitsch. für Physiol. Chem.*, Band iv, p. 135. Its exact composition has not been determined.

The urine of the 17th gave a still more marked reduction of the cupric salt, but no evolution of carbonic acid occurred on the addition of yeast.

Experiment V.

Date.	Urine in c.cs.	Specific Gravity.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
11.2.85	745	1009	6.910	0.230	not moved	Weight of dog=13.6 kilos.
12	745	1009	6.910	0.230	moved	Diet—oatmeal 113 grms.; milk, 320 cc.
13	625	1011	6.700	0.247	not moved	
14	625	1010	6.700	0.268	moved	
15	530	1013	6.095	0.212	not moved	
16	650	1017	7.540	0.130	moved	7.0 grms. benzoate of sod 0.51 grm. per kilo.
17	800	1023	11.680	0.216	not moved	7.5 grms. benzoate of sod 0.55 grm. per kilo.
18	710	1011	8.236	0.232	,, ,,	
19	700	1010	7.140	0.210	,, ,,	
20	Urine lost				moved	
21	500	1012	5.600	0.253	not moved	
22	760	1010	6.080	0.253	,, ,,	

Average Daily Excretion of various Constituents under Benzoate of Soda. (See Fig. 4.)

	Before.	With.	After.	Before and After.	With.	Percentage Change
Water, in ccs.	654	720	653	653.5	720	+10.00
Urea, in grms.	6.663	9.152	5.840	6.251	9.152	+46.4
Uric Acid ,,	0.236	0.195	0.236	0.236	0.195	—17.8

On the 18th, the reduction was decidedly less.

Experiment VI.—During the administration of the drug, wh was given in the form of a pill made up with a little mucilage, reducing power of the urine on Fehling's solution was well marke

Experiment VI.

Date.	Urine in c.cs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Remarks.
23.2.85	900	1009	8.550		Weight of dog=13.154 kilos.
24	800	1010	8.550		Diet as in previous experiments.
25	800	1011	8.335		
26	675	1010	8.482	0.218	
27	675	1011	8.482	0.218	
28	650	1022	11.700	0.136	7 grms. benzoate of soda=0.53 g per kilo.
1.3	700	1015	6.160	0.132	8 grms. benzoate of soda=0.6 g per kilo.
2	700	1024	13.020	0.132	7.5 grms. benzoate of soda=0.57 g per kilo.
3	590	1010	6.303	0.142	
4	590	1013	6.303	0.142	
5	675	1012	8.140	0.152	
6	675	1012	8.140	0.164	
7	710	1010	7.550	0.164	
8	710	1011	7.550	0.164	
9	742	1010	7.717	0.190	
10	742	1011	7.717	0.190	

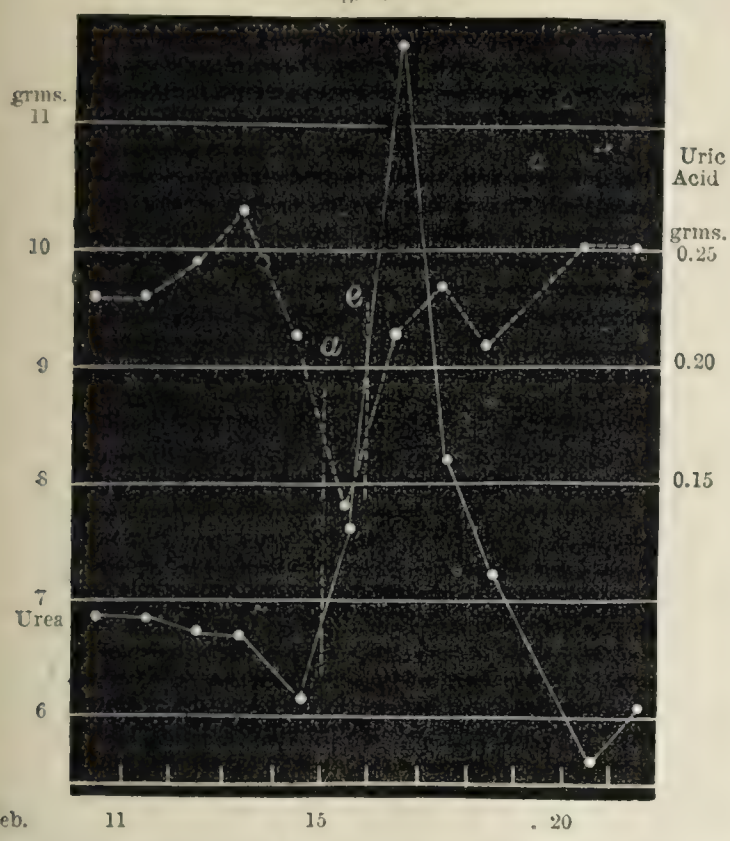
Average Daily Excretion of various Constituents under Benzoate of Soda. (See Fig. 5.)

	Before.	With.	After.	Before and After.	With.	Percentage Change
Water, in c.cs. . .	793	683	664	728	683	—6.
Urea, in grammes .	8.425	10.293	7.596	8 010	10.293	+28.
Uric Acid ,, . .	0.237	0.133	0.159	0.198	0.133	—32.

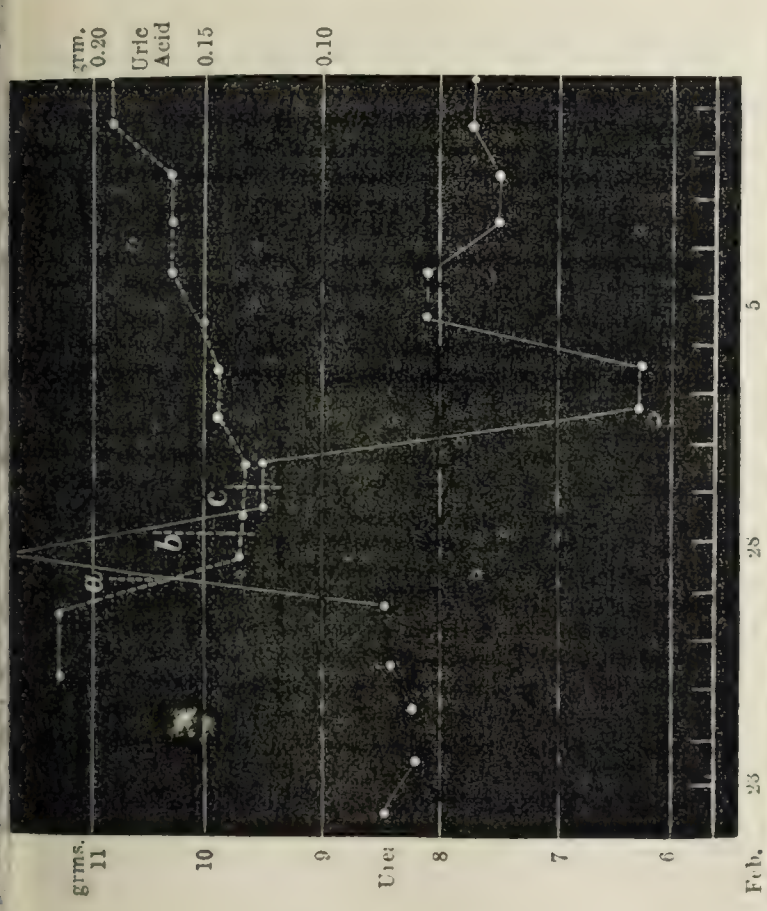
Results.—My experiments merely confirm the observations of S kowski and Virchow in regard to the urea excreted.

The point of chief interest is the clear demonstration afforded t benzoate of soda really does diminish the excretion of uric acid. present, I cannot discuss the relationship of the hippuric acid produ to this diminution in the uric acid. It is a matter of great impo ance, which I hope further to investigate.

Fig. 4.



Experiment IV.—Excretion of urea and uric acid under benzoate of soda : 7 grms. given at *a*, and 7.5 grms. at *e*.



Experiment VI.—Excretion of urea and uric acid under benzoate of soda : 7 grms. given at *a*, 8 grms. at *b*, and 7.5 grms. at *c*.

III.—Colchicum.

In the cholagogue action of colchicum, Rutherford gives two experiments (Experiments 17 and 18), which show that this drug is undoubtedly a hepatic stimulant and a powerful hydrocathartic.

The dose of the aqueous extract used in these experiments was large (30 grains being given. In all probability, the sample used was not highly prepared.

The influence of colchicum upon the urinary secretion and upon the urinary constituents has, from the connection of this drug with the treatment of gout, been much studied clinically. All the earlier observations on the subject are valueless, as the daily amount of urine is not taken into consideration.

Boecker (*Beiträge zur Heilkunde*, Crefeld, 1849) concludes that colchicum has practically no effect on the renal secretion, but his experiments show too many fallacies to allow of his conclusion being accepted.

Krahmer (*Journ. für Pract. Chemie*, Band xlv) concludes that a rise in the urea and uric acid occurs under colchicum.

Hammond (*Proc. Philad. Acad. Nat. Sc.*, December, 1858, p. 18) gives a series of experiments upon the vegetable diuretics. He finds that, while digitalis, juniper, and squills increase the water excreted, colchicum alone increases the solid constituents.

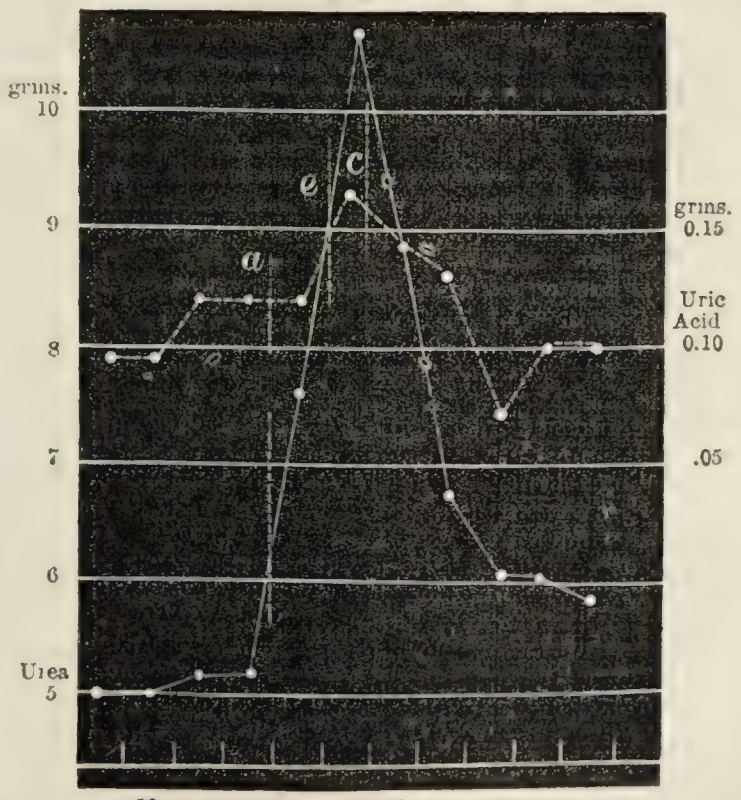
Experiment VIII.

Date.	Urine in c.cs.	Specific Gravity.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
8.1.85	375	1013	5.045	0.095	moved	Weight of dog=13.6 kilos.
9	375	1013	5.045	0.095	,,	Diet as in previous experiment.
10	470	1012	5.140	0.124	not moved	
11	470	1011	5.140	0.124	,, ,,	
12	520	1014	7.644	0.122	copious soft motion	0.5 grm. acetic ext. colchici= 0.037 per kilo.
13	620	1015	10.726	0.167	not moved	0.3 grm. acetic ext. colchici= 0.02 per kilo.
14	610	1016	8.834	0.142	copious soft motion	0.4 grm. acetic ext. colchici= 0.029 per kilo.
15	475	1014	6.692	0.132	moved	
16	350	1013	6.040	0.070	not moved	
17	645	1012	6.040	0.107	moved	
18	550	1011	5.940	0.107	not moved	

Average Daily Excretion of various Constituents under Colchicum.

	Before.	With.	After.	Before and After.	With.	Percentage Change.
Water, in ccs. . .	422	583	505	463	583	+25.9
Urea, in grammes .	5.092	9.068	6.178	5.635	9.068	+60.9
Uric Acid ,, . .	0.109	0.143	0.102	0.105	0.143	+36.1

Fig. 6.



Experiment VIII.—Excretion of urea and uric acid under colchicum : 0.5 grm. of acetic extract given at *a*, 0.3 grm. at *e*, and 0.4 grm. at *c*.

Garrod, in his admirable *Treatise on Gout and Rheumatic Gout*, has given the results of a tolerably full investigation into the action of colchicum upon the uric acid, and of one or two observations on its influence upon the urea. Two experiments upon healthy patients are described.

Garrod also gives six observations on the urine of gouty patients. Observations on the action of a drug in disease are of little value, and we therefore refrain from quoting these experiments.

From his observations, he is led to the following conclusions.

"1. There is no evidence that colchicum produces any of its effects upon the system by causing the kidneys to eliminate an increased quantity of uric acid; in fact, when the drug is continued for any length of time, it appears to exert a contrary effect.

"2. We cannot assert that colchicum has any effect upon the excretion of urea or the other solid ingredients of the urine.

"3. Colchicum does not act as a diuretic in all cases; on the contrary, it often diminishes the quantity of urine, more especially when it produces a marked effect on the alimentary canal."

Certainly, in respect to the action of colchicum upon the urea and uric acid, Garrod has little ground upon which to base his conclusions. Painstaking and careful as are his experiments, they are open to all the many fallacies of clinical observation; while his use of the old method of Heintz for the estimation of uric acid renders even his analysis open to objection.

Obviously, the question of the action of colchicum on the urea and uric acid of the urine must be regarded as totally unsettled, and requiring careful experimental study.

Experiment VIII.—The influence of moderately large doses of the acetic extract of colchicum on the water, urea, and uric acid daily excreted is shown in the accompanying table and abstract, and in Fig. 6.

In this experiment, the chief point of interest, apart from the special action of colchicum, is the illustration it affords of the influence of purgation. On the 12th and 14th, a copious soft motion followed the administration of the drug, and the urea was only slightly increased; while upon the 13th, when the bowels were not moved, a greater rise occurred.

Experiment IX.—In this experiment, a recently prepared sample of acetic extract of colchicum was used. This probably accounts for the great purgation induced by small doses.

Experiment IX.

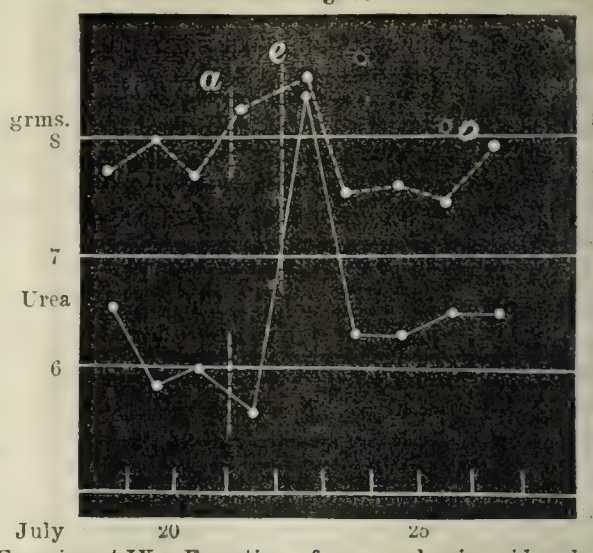
Date.	Urine in c.cs.	Sp.G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
19.7.85	640	1009	6.528	0.083	moved.	Weight of dog=13.37 kilos.
20	580	1009	5.916	0.097	,,	Diet as in former exprimnts.
21	640	1009	6.016	0.083	not moved	
22	700	1008	5.600	0.119	moved—copious, soft	0.2 grm. acet. ext. colchici (fresh)=0.014 grm. per kilo.
23	740	1010	8.314	0.126	moved—soft, mucous evacuation	0.2 grm. acet. ext. colchici (fresh)=0.014 grm. per kilo.
24	645	1008	6.342	0.074	moved—loose	
25	645	1009	6.342	0.077	moved	
26	480	1010	6.490	0.070	,,	
27	480	1010	6.490	0.096	,,	

Average Daily Excretion of various Constituents under Colchicum.

	Before.	With.	After.	Before and After.	With.	Percentage Change.
Water in c.cs. . .	620	720	562	591	720	+21.8
Urea, in grms. . .	6.225	6.957	6.417	6.321	6.957	+10
Uric Acid ,, . .	0.087	0.122	0.079	0.083	0.122	+47

Results.—The above experiments clearly show that, in medium doses, colchicum increases the excretion of water and urea to a moderate amount, and the excretion of uric acid to a much greater extent. Indeed, the most striking feature of these experiments is the very marked increase in the production of uric acid indicated by them, an increase which renders it difficult to explain the well-known beneficial

Fig. 7.



Experiment IX.—Excretion of urea and uric acid under colchicum: 0.2 grm. acetic extract given at *a*, again at *e*. Very free purgation induced.

Experiment X.

Date.	Urine in c.cs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
24.7.85	645	1008	6.342	0.074	moved	Weight of dog=13.15 kilos.
25	645	1009	6.342	0.077	,,	Diet as in previous experiments.
26	480	1010	6.490	0.070	,,	
27	480	1010	6.490	0.096	,,	
28	..	..	..	..	..	
29	520	1010	5.772	0.087	,,	
30	580	1009	5.563	0.128	not moved	0.15 grm. acet. ext. colchici 0.0114 grm. per kilo.
31	620	1009	4.960	0.104	moved—very loose	0.20 grm. acet. ext. colchici 0.0147 grm. per kilo.
1.8	605	1011	6.836	0.109	,,	0.20 grm. acet. ext. colchici 0.0147 grm. per kilo.
2	530	1013	5.500	0.057	moved	
3	530	1007	5.500	0.075	,,	
4	620	1009	5.300	0.091	,,	
5	620	1009	5.456	0.085	,,	

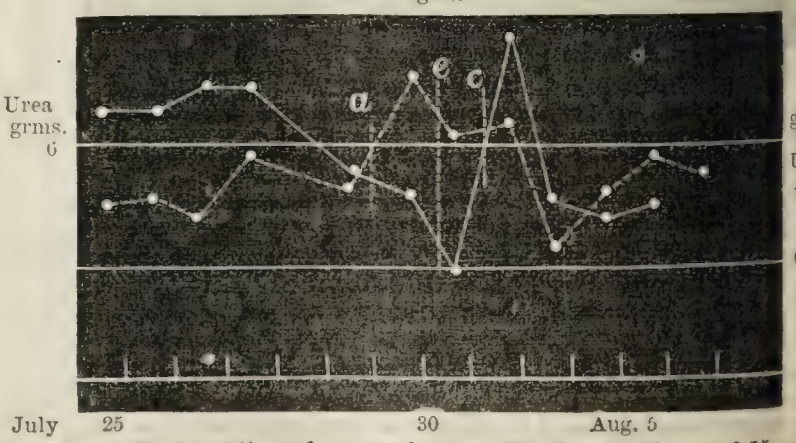
Average Daily Excretion of the various Constituents under Colchicum

	Before.	With.	After.	Before and After.	With
Water, in c.cs.	548	571	606	557	571
Urea, in grms.	6.204	5.786	5.453	5.828	5.786
Uric Acid ,, ...	0.081	0.113	0.077	0.079	0.113

Percentage change in

Water	practically unaltered.
Urea	,, ,,
Uric Acid	+43

Fig. 8.



Experiment X.—Excretion of urea and uric acid under colchicum: 0.15 grm. of acetic extract given at *a*, 0.2 grm. at *e*, and again at *c*.

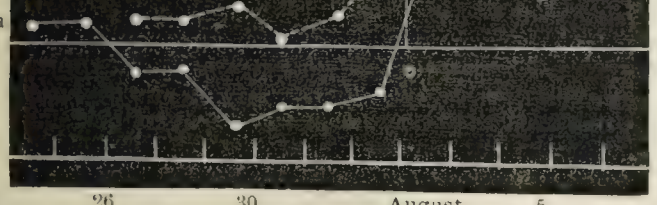
Experiment XI.

Date.	Urine in c.cs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
26.7.85	550	1009	6.182	..	moved.	Weight of dog=13.25 kilos. Diet as in previous experiments.
27	550	1009	6.182	..	,,	
28	620	1009	5.816	0.0621	,,	
29	620	1008	5.816	0.0621	,,	
30	620	1010	5.332	0.0682	,,	
31	562	1010	5.454	0.0526	,,	
1.8	562	1010	5.454	0.0606	,,	
2	620	1009	5.564	0.0806	,,	
3	780	1009	7.176	0.141	moved—rather loose	0.2 grm. acet. ext. colchici=grm. per kilo.
4	720	1009	6.523	0.106	very loose.	0.2 grm. acet. ext. colchici=0.015 grm. per kilo.
5	700	1009	6.720	0.091	not moved	

Average Daily Excretion of various Constituents under Colchicum.

	Before.	With.	Percentage Change.
ater, in c.cs.	557	735	+27.3
rea, in grms.	5.743	6.784	+18
ic Acid	0.064	0.112	+73.3

Fig. 9.



Experiment XI.—Excretion of urea and uric acid under colchicum.

tion of this drug in gout. For, that an increased production, and t merely an augmented excretion, is indicated by these experiments, proved by the fact that, after the administration of the drug is discontinued, no great fall below the normal daily excretion occurs.

[*To be continued.*]

THE ITALIAN HOSPITAL.—The report read at the second annual eting of the Governors of the Italian Hospital (established 1884) tes that at present it has only 25 beds, most of which are generally cupied, and, like many of its older compeers, the expenditure is in cess of the funds received. During last year there were 169 in-patients d 1848 out-patients, thus showing a gross total of 161 in excess of the evious year. It states that a very considerable number of poor sick persons had been relieved and assisted, who otherwise would certainly have rished in a foreign country, with the habits and customs of which ey were unacquainted, and where they would have been abandoned their miserable homes. The subscriptions and donations for the ar amount to £466, while the expenditure, thanks to the honorary vices of the medical officers and the most careful economy on the nagerial expenses, was only £870.

THE Lords Commissioners of the Admiralty have awarded the eenwich Hospital pension of £50 a year for fleet-surgeons and staff geons, rendered vacant by the death of Staff-Surgeon James K. llard, to Deputy-Inspector General James G. T. Forbes.

THE surplus of £60, remaining from the fund provided by the Junior form Club, for the distribution of hot-pots among the deserving poor Liverpool, has been devoted to the Ambulance Fund of the Northern spital.

ABSTRACTS OF ERASMUS WILSON LECTURES ON EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

BY J. BLAND SUTTON, F.R.C.S.,
Assistant Surgeon to the Middlesex Hospital, and Lecturer on Comparative Anatomy.

LECTURE III.—THE ETIOLOGY OF NEOPLASMS.

IT is necessary to adopt some rigorous limitation to the term "tumour," or else to choose a name which shall enable us to discriminate between true tumours and other diseases with which they have been classified.

A neoplasm might be defined as a new growth characterised by histological diversity from the matrix in which it grew: it was distinguished from inflammatory new formations by the variety of its forms, and mode of origin, and the frequent inherent tendency it had to increase. This definition excludes hyperplasia of organs, infective granulomata, etc. With regard to the histological diversity exhibited by a neoplasm, it should be mentioned that it might more or less resemble the matrix-tissue, but certain features were always to be detected whereby its heteroplastic nature could be demonstrated. Few subjects have exercised the ingenuity of pathologists more than the etiology of neoplasms. No exclusive theory could explain the causation and mode of origin of all known neoplasms; indeed, the various groups required separate consideration. The embryological method of grouping neoplasms was the best, especially with respect to etiology, the histological details being left to determine varieties. The mesoblastic group included the connective tissue neoplasms; the epiblastic and hypoblastic group comprised adenomata, carcinomata, and papillomata; the teratomatic neoplasms, containing tissues derived from all three embryonic layers, formed the third group.

Cohnheim's theory, which ascribed the origin of neoplasms to persistent rudiments, was, of all hypotheses, that which had most to recommend it, if the term "tumour" were used in its most restricted meaning. Throughout the lecture, the expression "germinal rudiment" was used in a more extended sense than that in which Cohnheim employed it. The question as to whether germinal rudiments, such as Cohnheim's theory demanded, existed, and whether there were any evidence to show that such germs might become tumours, was discussed. The origin of true cysts from functionless ducts and tubules was an indisputable fact; it was proved by the cystic dilatations of the tubules comprising the parovarium, paradidymis, and duct of Gartner, in man and animals. The lecturer did not see why the origin of solid neoplasms from fœtal rudiments should be doubted, especially if such untransformed tracts of tissue could be demonstrated unequivocally to be heteroplastic in their nature. It was certainly demonstrable that, in the regions where particular tumours were more prone to occur, there was embryological testimony to explain why they occurred there. An epithelioma on the lip was what would be expected, but a similar growth starting in the midst of a block of cartilage would be incomprehensible. A piece of cartilage in the midst of the shaft of a femur of a boy, aged 5 years, was cartilage in the wrong place; nevertheless, such islands were to be met with on careful search. Their existence had been known for some years, and, as Virchow was the first to point out, they might in later life become the starting-point of enchondromata. The lecturer had examined very many of these cartilage-islands, especially in connection with the epiphyses and diaphyses of long bones in rickety animals. These examples proved that embryonic rudiments of enchondromata existed, and also threw light upon the evolution of neoplasms.

In the fact that at an early age the human skull was mainly cartilaginous, man agreed with the cartilaginous fishes, whose skulls never advanced in development higher than cartilage impregnated with salts of lime. In the osseous fishes and amphibians, the overlying bones gradually brought about absorption of the cartilage in different places; but much existed throughout adult life, and even in the skulls of adult mammals traces of this important matrix-tissue remained. Frequent spots for the existence of these belated rudiments were the

region of the asterion immediately posterior to the external auditory meatus, the neighbourhood of the nasal fossæ, the septum nasi, the lower jaw, and the vertebræ.

These regions were favourite situations for enchondromata and osteomata, the latter being simply a higher development of an enchondroma. If a cartilage-island were discovered, it would be impossible to say, supposing it to develop into a neoplasm, whether it would become a cartilage or an osseous neoplasm.

Moles and nævi might be regarded as tumour-germs. Many instances were on record where a small nævus, untreated in early life, formed later an angioma of considerable dimensions, and became a source of danger. All germs or rudiments did not become tumours. Three courses were open to them. 1. They might, later in life, undergo transformation into normal tissue. 2. They might remain quiescent throughout a long life. 3. Irritation might stimulate them into abnormal activity. As to what constituted irritation in this sense, nothing was definitely known. Admitting the origin of enchondromata, osteomata, and angiomata from rudiments, we need hardly doubt the origin of other varieties of mesoblastic tumours from similar sources. They were always confined to regions of the body where the elements of which they were composed were to be unequivocally demonstrated.

The lecturer believed that very many cases of round-celled sarcomata were not genuine neoplasms, but the result of irritation by micro-organisms. It was always necessary to make sure whether a given growth composed of round cells were a sarcoma or the result of a specific irritant, especially if there were more than one growth present. Observations on animals have made Mr. Sutton very sceptical regarding round-celled sarcomata. Mr. Pearce Gould had recently analysed the relation which appeared to exist in very many instances between an injury and the appearance of a sarcoma, and had collected a goodly list of cases, in support of the view, in a paper read before the Medical Society in 1885. In animals, the lecturer found that sarcomata were detected with greatest frequency in parts most exposed to injury. In fishes, the tails and fins; in frogs, the limbs; in birds, the neck and prominent parts of the wings, were the parts most affected; in horses, sarcomata followed blows on the jaws; and a sarcoma might develop on the head of a cat after a blow from a stick; and in one case of an ox which broke its horn, a huge sarcomatous neoplasm subsequently developed from the corneous stump. Careful examination of some of these cases seemed to support the notion that, after the injury, the inflammatory tissue, or tissue of repair, exceeded normal limits, developed erratically, and played the part of a tumour-germ.

The second group of neoplasms contained, in addition to mesoblastic tissue, epithelial elements, derived from either the epiblast or the hypoblast; and, in their structure, they more or less resembled glands. If the resemblance were close, the neoplasm was termed an adenoma, and the cells clothed the alveoli in a regular manner; but, if the cells were merely tumbled in confusion into the alveoli, it was called a carcinoma. It was necessary to discriminate between hyperplasia of a gland and a glandular neoplasm. The latter was important to produce the secretion normal to the gland. Another feature connecting the carcinomata with the secreting glands, was the relation to blood-vessels. The cells of which a gland was composed did not come directly into contact with the blood-vessels, but were separated from them by lymphatic spaces. It was well known that the cancers were poorly supplied with blood, but contained an abundance of lymphatics. Further, cancers in their mode of development mimicked glands. Glands commenced by a downgrowth of epithelium from the epiblast, or hypoblast, as the case might be, into the deeper layers of the mesoblastic tissues beneath. This might be well seen in a section of a fœtal thumb, at the fourth month of intra-uterine life. The sweat-glands appeared as little flask-shaped diverticula. This might be taken as a type of gland-development generally. If, later in life, irritation, local or otherwise, affected the tissue, abnormal epithelial growths might occur, and, rising above the general level, might produce a wart, or dipping into the subepithelial tissues, as in the early stage of gland-formation; but, failing sufficient formative energy, either from decline of vigour or general constitutional debility, the new tissue might never develop functionally, but, running riot, could originate tissues of low vitality, carcinomata. Such ingrowths might occur in the neighbourhood of any gland, mucous, sebaceous, mammary, or others, as diverticula from the acini; and, according to the arrangement and variety of the cells and stroma, so they might be termed epithelioma, scirrhus, or encephaloid. These abnormal downgrowths of epithelium were tumour-germs, in the same sense as the cartilage-islands in a long bone.

Young trees brought forth the best fruit, because in them vigorous growth was at an acme; when this faded, then that which was inferior was produced; so with glands, and hence the greater frequency of cancer in age. Irritation in the young produced papillomata, in the old, cancer, even in animals, where warts were common in youth but cancer amongst them was an extremely rare affection. In the third group of neoplasms, their elements were derived from the three germinal layers, epiblast, hypoblast, and mesoblast. They were conveniently styled, by Virchow, teratoid tumours. They were always congenital and composed of a great variety of elements. They might contain fibrous tissue, bone, cartilage, muscle, skin, hair, nerves, glands, or indeed any tissue. Teratomata were especially liable to occur in those situations where the three blastodermic layers were brought into direct continuity with each other during fœtal life, but the connection was only temporary. The positions of these temporary unions were often indicated by a passage which might exist for a longer or shorter period in the embryo, constituting what the lecturer termed an obsolete canal or passage, that is, canals which in the ancestors of mammals were functional, but reappeared for a time in existing forms, in obedience to the great law of heredity. Amongst these obsolete canals were the curious recess at the top of the pharynx, which brought the infundibulum of the third ventricle into relation with the buccal involution, the neurenteric passage which brought the central canal of the spinal cord and the alimentary canal into relation, round the caudal end of the notochord; the postanal gut, and the branchial arches. The developmental history of the testis, ovary, and Wolffian duct, supported the same view.

Teratomata occurring in the sacral region were not a simple group and Braune's observations long ago proved that some of the cystiforms were connected with the spinal canal, and lay posterior to the coccyx, whilst others lay anterior to that structure. Braune also pointed out that the cystic teratomata connected with the spinal canal were due to dilatations of the spinal meninges; in fact, a spina bifida. Those anterior to the coccyx were, according to Braune, to be regarded as an abnormal growth of Luschka's gland. It was far more reasonable, however, to believe that these growths originated as abnormal dilatations of the postanal gut, a section of the alimentary canal which, for a certain period of embryonic life, existed posterior to the anus, in man, and very many, if not all, vertebrata. The

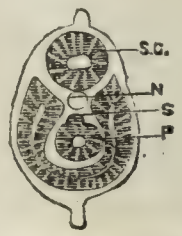


Fig. 1.—Section to show the relation of the postanal gut, P. S.C., spinal cord N, notochord. S, subnotochordal rod.

minute structure of this variety of teratomata agreed, in every particular, with the histological details of this section of the gut. With regard to those cystic sacral tumours connected with the meninges, it was not always that, after birth, the continuity of the cystic interior with the spinal canal could be made out, as in a case reported by Virchow. A negro child, a few days old, presented a tumour on the left buttock to one side of the middle line (Fig. 2). It was removed by a surgeon, Dr. Ludwig Wolff, in Central Africa, who believed it to be a lipoma. After examining the tumour, Virchow came to the conclusion that, notwithstanding its lateral situation, it was, in reality, a diverticulum from the spinal meninges (Fig. 3). At the opposite end of the notochord similar conditions existed. There might be a hernia of the spinal meninges through the floor of the sella turcica, or there might be a tumour containing skin, hair, nerves, muscle-fibre and the like. In the neck, in association with the branchial arches, cysts, or, in rarer cases, tumours composed of complex elements, were developed.

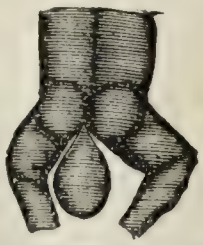


Fig. 2.—The buttocks of a negro child with a congenital tumour.

The same was equally true of the ovary and testes. They arose in connection with the genital ridge, and, at a certain period of their development, were in intimate association with the peritoneal epi-

helium, and, for a time, were connected with it by a series of curious anals known to embryologists as the peritoneal funnels. In addition o this, the Wolffian duct at its commencement lay closely associated



Fig. 3.—Section of tumour seen in the preceding figure.

ith the epiblast. Thus teratomata were not a mere group of curiosi- es, but a class of neoplasms full of interest. They arose from pre- xisting tubules or ducts, which, in the normal development, should ecome obliterated, but they might in fœtal life dilate, and become ixed with various other tissues in their immediate neighbourhood; nd as they lay on the borderland of mesoblastic, epiblastic, and hy- oblastic elements, they became incorporated with them, and formed n many instances amorphous masses, and constituted some of the ost powerful witnesses to Cohnheim's theory of "tumour-germs."

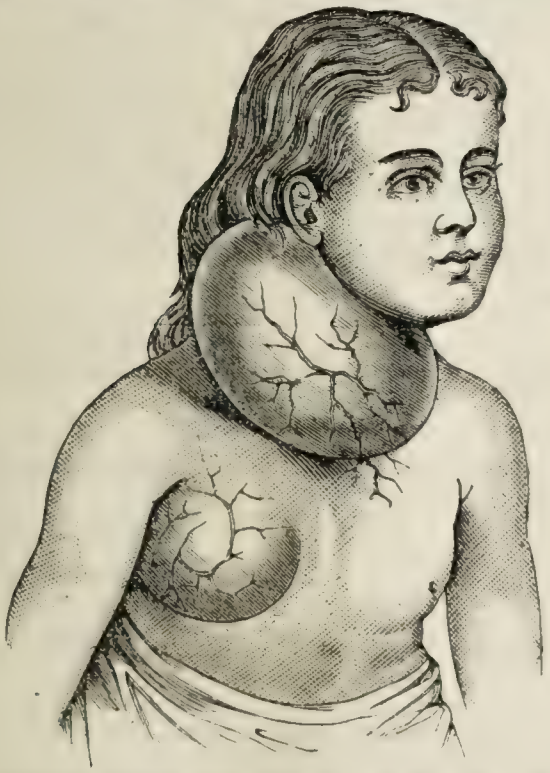


Fig. 4.—Congenital cervical cyst, extending into the axilla (after Smith).

The relation of the teratoid tumours to obsolete canals was illus- ated in a very striking manner in the tongue. Professor His had ecently given a full account of the development of that organ, and escribed in detail the formation of a canal which ran from the fora- en cæcum on the dorsum of the tongue downward to the third ranchial arch, and finally ended in the vesicle or follicle om which the middle portion of the thyroid gland took rigin. Later, the canal became divided into parts; the one n connection with the tongue was known as the lingual duct, nd terminated in the hollow of the hyoid bone. It might occa- sionally be demonstrated in adult life between the genio-hyo-glossi; in this situation dermoid cysts occurred. The lower portion of the duct, known as the thyroid duct, might sometimes be detected in those cases where a middle lobe to the thyroid body existed. The structure and mode of development of that ductless gland closely resembled those congenital coccygeal tumours which lie anterior to the coccyx in association with the alimentary canal, in their origin in a functionless tubule, and in their structure consisting of vesicles lined with cubic epithelium, and bound together by cellular tissue.

Congenital cervical cysts, as Mr. Thomas Smith had well pointed out, always lay beneath the deep cervical fascia; they might be unilateral, or involve the lateral and anterior regions of the neck, follow the deep fascia, and extend into the axilla, or, in rare cases, for a little distance into the mediastinum. Cases of this nature had been described and figured by Messrs. Birkett, Hutchinson, Smith, and Treves. The cyst might extend at times into the axilla. In some of the lower animals, especially the chimpanzee and howling monkeys, a very large subfascial air-sac, connected with the larynx, extended from the hyoid bone to the manubrium sterni, and laterally under the posterior triangles even into the axilla. The cysts in the human subject agreed in anatomical details with the cervical sacs of the monkeys in such a striking manner, that Mr. Sutton was of opinion that these cysts repeated certain simian characters. (Fig. 4.)

In conclusion, it seemed impossible to escape from the conviction that anyone ambitious of becoming a scientific pathologist, must first be a sound human anatomist; he must also acquire a tolerable knowledge of comparative anatomy, and keep well abreast of the teachings of embryology. Having attained a competent acquaintance with these subjects, he would then, in spite of himself, become a firm believer in the fundamental principles of the grand doctrine of evolution.

ABSTRACT OF LECTURE
ON
THE REMOVAL OF OSSEOUS TUMOURS FROM THE EAR.

Delivered at St. Mary's Hospital.

BY GEORGE P. FIELD, M.R.C.S.,
Aural Surgeon to St. Mary's Hospital.

(*Concluded from page 339*).

CASE IX.—Mr. S. W., aged 26, was sent to me by Mr. Swanwick, of West Hartlepool, in November, 1883, for double ivory aural exostosis, causing slight deafness. As by the following February the left meatus was much encroached upon, and the right was almost occluded, an operation was recommended for the prevention of complete deafness. Accordingly, on February 24th, after operating for fifty minutes, I satisfactorily drilled through the tumour in the right ear; the left has, as yet, not been operated on. It appears possible that a tendency to nocturnal epileptiform fits, exhibited by the patient, may be due to the retention by the exostosis at some former time of secretions in the ear.

CASE X.—Dr. W. L. M., of Waterford, aged 35, brother of Dr. G. M., my first patient with ivory exostoses, had, like him, been a great sea-bather. In August, 1884, he experienced a feeling of fulness in the ears, but without pain or deafness. Syringing the left ear with warm water on August 19 rendered it at once very deaf. On the 22nd, Dr. Storey in Dublin diagnosed double ivory exostosis, with irritation and inflammation of the left meatus. On the 28th, the hearing of the left ear was restored, a solution of nitrate of silver (gr. x ad ℥j) having been applied daily. The patient was subsequently seen by me on September 22nd and October 23rd, 1884, and in the following March, by which time both exostoses had increased so much that the speedy onset of complete deafness appeared probable. I accordingly operated on both ears on March 24th, occupying altogether fifty-five minutes. The discharge of pus caused much deafness during the next three weeks, after which the hearing remained variable for a time, and then completely returned. He now hears perfectly well.

CASE XI.—Mr. H. C. W., of Ipswich, who first consulted me in March, 1882, gave a history of some degree of deafness in May, 1881, followed, in January of the next year, by gradual loss of hearing in

the right ear, and eventually by much pain in that organ. The use of a lotion which I ordered him having afforded him relief both from pain and deafness, I saw nothing more of the patient till April 13th, 1885. The hearing had then been diminishing since the previous December, and acute pain had set in. On the 21st, I proceeded to remove a large ivory exostosis from the right ear, employing first the drill, and then, to break up the remains of the growth, the bone-forceps. The result of the operation, which lasted sixty-five minutes, was in every way satisfactory.

Case xii.—The facts detailed in the following history have been furnished by my patient himself, W. B., aged 60, a country solicitor, who was sent to consult me by Mr. Oliver Maurice, of Reading. The patient was accustomed to swimming all the summer, and to plunge his head under water in a big bath every morning throughout the rest of the year. Five or six years since, the right ear began, in extra hot summer weather, to become stopped up for a day or two, or for more than a week at once. No pain was experienced at such times, and the hindrance to hearing used imperceptibly to depart. When, in about two years, the period of obstruction became longer, a medical man was consulted, who found a bony growth in each ear. In accordance with a warning not to let water get into his ears, the patient subsequently stopped them with cotton-wool whenever he bathed; and, except for times of varying duration, in unusually hot weather, his hearing remained long unaffected. In 1885, however, one very warm June day, the patient, when at a friend's house, let a drop of water from a sponge squeezed over the head enter his right ear, in which there was no cotton-wool, with the effect of causing deafness, and, in a few days, great pain, which, after two days, eventuated in a discharge, which gave him relief. I was consulted on June 20th, and the next day removed the bony growth in each ear, chloroform being administered for about an hour and a quarter. For three or four days, a slight dull pain was felt in the ears, and in a week the hearing of the left ear was pretty fair. The convalescent was then removed to new lodgings, where, after the lapse of some hours, it was discovered that the water-closets were devoid of water-supply. Evidently as a result of poisoning by sewer-gas, the patient a few days afterwards became ill with erysipelas in the head, which extended from one ear to the other, and then spread over the whole body. Subsequently, at new lodgings, to which I insisted on his being removed, he had a sharp attack of double pneumonia, and Dr. Broadbent and Messrs. Oliver Maurice and Edmund Owen were called in consultation. During his illness, a discharge of matter into both ears prevented hearing; this, however, gradually disappeared on restoration to health, and his hearing is now as good as ever. I have no doubt that a timely change of residence was in this case the means of saving the patient's life. Indeed, so serious was his condition that, had he not been, although over sixty years of age, a hale and hearty man, accustomed all his life to active exercise in hunting, I think it probable he would never have recovered.

Case xiii.—The next case I have to mention is one that shows the importance of not unnecessarily deferring operation. The patient, Mr. F. G., of Ipswich, was sent to consult me originally by the late Dr. Moore, three years ago, and subsequently by Dr. Currie, on account of a large aural exostosis in the right ear. I saw him occasionally, about every three months, and I told him that, at no very distant date, it would be necessary for him to undergo an operation for the removal of the growth; for, as he at times had a purulent discharge, it would not be safe to allow the complete occlusion of the meatus. On July 6th of this year he came up again to see me, and, when I insisted on the importance of an immediate operation, he told me he was so much occupied that this must be deferred till September; and, on my further pointing out to him, as strongly as I could, the danger he ran of losing his life, he merely replied, "That's my business; I'll take my chance." On July 17th, Dr. Currie wrote to me as follows: "I have advised Mr. F. G., as he still complains of throbbing in his ear, and as the discharge is more distinctly purulent, to have the ear drilled as soon as he can. The fact is, the whole ear is blocked, and I believe all treatment but operation to be useless. He has no rise of temperature at present." The patient still persisted in putting off the operation, despite all advice. At the end of July I went away for my holiday, and on August 3rd, Dr. Currie telegraphed to me to Gloucestershire, where I was staying, to come to Ipswich at once, as Mr. G. was dangerously ill with, he feared, cerebral abscess. I started off at once, but on my arrival in town I received another telegram to say that the patient was dead. There can, I think, be no doubt that Mr. G.'s life would have been saved by a timely operation.

Case xiv.—Bishop B., my next case, came to consult me, September 18th, 1885, with a large ivory exostosis nearly filling the external meatus of the right ear. He had at times suffered from an offensive discharge from this ear, together with much pain over the right side of the head. On September 21st, he was placed under the influence of ether, and operated on in the usual manner, the removal of the exostosis taking about sixty minutes. He made an excellent recovery, and had no bad symptoms. In a month's time, he went abroad, having recovered a very fair amount of hearing.

Case xv.—Miss R., aged 12, was sent to consult me by Mr. S. Robson, of Durham, October 5th, 1885, having a very large exostosis, completely blocking up the auditory canal. Deafness had persisted since a very severe attack of scarlet fever eight years previously. On October 6th, after administration of chloroform, I employed the dental engine for sixty minutes, securing an opening which permitted of some amount of hearing; but, as the child was not in good health, and the exostosis, on account of its density, would require protracted renewal of the drilling, I recommended that any further operative measures should be deferred till the spring, when I see no reason to doubt that the enlargement of the opening will prove as satisfactory in its results as in the other cases just described.

Cases of Exostoses Tabulated.

No. of Case.	Name.	Sex.	Age.	Dwelling-place.	Ear affected.	Nature of Growth.	Seat in Meatus.	Assigned Cause.	Number of Operations.	Result of Treatment.
1	Dr. G. M.	Male	32	Waterford	Each	Ivory exostoses	Posterior wall	Sea-bathing	Two for each ear	Normal hearing, both ears.
2	S.	,,	31	Dartford	,,	,,	,,	Habitual sea-bathing	Two for right, three for left ear	,, ,, ,,
3	H.	,,	48	Waterford	Left (Rt. deaf)	,,	,,	,,	Two	Restored hearing, both ears.
4	M.	Female	19	London	—	Two spongy pedunculate osteomata.	One anterior, one posterior wall	?	One	Normal hearing.
5	A.	,,	21	Ipswich	Right	Ivory exostosis	Posterior wall	Measles	,,	Restored hearing.
6	J. F.	,,	18	London	Left	Pedunculate soft growth.	,,	?	,,	,, ,,
7	H.	,,	24	Hull	,,	Soft growth.	Anterior wall	?	,,	,, ,,
8	W. G. D. G.	Male	46	Waterford	Each	Ivory exostoses	Posterior wall	Habitual sea-bathing	One for right, one for left ear	Normal hearing, both ears.
9	S. W.	,,	26	West Hartlepool	,,	,,	,,	Sea-bathing	One for right ear; left not yet operated on	Restored hearing.
10	Dr. W. M. (brother of No. 1)	,,	35	Waterford	,,	,,	,,	Habitual sea-bathing	One continuous for both ears	Normal hearing, both ears.
11	H. C. W.	,,	29	Ipswich	Right	,,	,,	Bathing	One	Restored hearing.
12	W. B.	,,	60	Reading	Each	,,	,,	,,	One continuous for both ears	(1) Erysipelas, and (2) double pneumonia from sewer-gas. Recovery with normal hearing.
13	F. G.	,,	38	Ipswich	Right	,,	,,	?	None permitted	Cerebral abscess and death.
14	Dr. B.	,,	64	Hong Kong	,,	,,	,,	Scarlet fever	One	Improved hearing.
15	R.	Female	12	Durham	Left	,,	Completely occluding	,,	,,	Improved hearing; case in progress.
16	J. L.	Male	29	London	,,	Spongy osteoma	Anterior wall	Measles	,,	Improved hearing.

Case xvi.—The following is a case in which the drill might, no doubt, have been successfully employed, but in which the nature of the exostosis admitted the use of a readier means of extirpation. The patient was sent up from the country to the George Bird Ward, St. Mary's Hospital. I found that he had for years, on and off, suffered from discharge from the left ear, and that he had latterly complained of great pain on the left side of the head. The meatus, as examination with a probe revealed, was completely occupied by a large and apparently fixed spongy osteoma. Directly the patient was well under the influence of chloroform, I seized, and without much difficulty removed, with strong forceps, a growth measuring three-quarters of an inch in length and one-third of an inch in thickness.

The above cases I have recorded as showing the possible importance, nay, in some cases, the urgent necessity of operating for the removal of aural exostosis. But, as this may be no trifling matter, it is perhaps advisable to point out the class of cases in which (1) an operation is not requisite, and (2) is altogether unjustifiable. I have been sent numerous cases of multiple exostoses, in many of which I have been able to give the assurance that no operation is or probably will be needed, although deafness may for a time have been almost absolute. These bony excrescences, in many an instance, occur opposite to one another, and, as they grow, become wedged together, so that increase at the extremities is arrested, and a triangular central space is left. This channel, when very small, as not unfrequently, may afford a sufficiently free passage for sound, but readily becomes blocked by cerumen or even water, with the result of causing complete deafness. Careful cleansing of the meatus must then be resorted to, and the patient should be warned never by any means to allow water to enter the ear. Practice of this precaution, and occasional repetition of the cleansing, may be all that is required for the continued preservation of the hearing.

I was, some time ago, consulted by two brothers, the one a medical man, and the other a celebrated actor, each the subject of bilateral multiple exostoses, originating in oft-repeated sea-bathing. To them, as to any others occupied in a more or less public capacity, impairment of hearing would have been a matter of most serious import. I was able to assure them of the high probability of what they have for two or three years since enjoyed, continuance of perfect audition without recourse to operation. This, however, could scarcely have been expected had each meatus contained what are sometimes to be met with, namely, four or five exostoses growing close together or behind one another. Such a condition obtained in the case of a distinguished lawyer, under my care for some few years. As he came to see me every two or three months, I was for long enabled to keep the meatus clear; but latterly its calibre became so much reduced that, as deafness would have been incompatible with the discharge of his official functions, an operation must soon have been imperative had not his death occurred from bronchitis.

The cases in which operation is unjustifiable are those in which it would be dangerous, because of the growth being not only of extreme density, but situated at a great depth within the meatus. Cases of deeply seated soft exostoses (spongy osteomata) may, on the other hand, be treated instrumentally without risk, as in the instances of removal by forceps above recorded. The confounding of these with the harder growths has doubtless led to the accounts, occasionally to be met with, of the ready removal of ivory exostoses after a few minutes' drilling. As we have seen, the drill may be quite unnecessary for the softer class of excrescences, whereas experience proves that it alone, used for a considerable length of time, can be of any avail for the penetration of the harder growths.

These cases only go to strengthen conclusions long since arrived at by me:—(1) that aural exostoses must not be considered as at all necessarily the outcome of gout, rheumatism, or syphilis; (2) that their origin can, with strong probability, be attributed, in many, if not in all cases, to some preceding local irritation; (3) that they can be safely and most effectually treated by drilling, when a suitable guard is employed to protect adjacent structures; (4) that their speedy removal is indicated wherever they hinder the elimination of secretions and discharges from the auditory canal, cause pain by pressure, or impair or prevent audition.

Medical Magistrate.—Dr. W. R. Haydon has been placed on the Commission of the Peace for the Borough of Tiverton.

Wigan Medical Society.—The following office-bearers have been elected for 1886. *President:* William Berry, Esq., J.P. *Vice-President:* J. B. Stuart, Esq., F.R.C.S.Ed. *Honorary Secretary and Treasurer:* R. P. White, M.B.Ed. *Committee:* J. White, Esq., J.P., W. C. Burnish, Esq., N. Hannah, Esq.

A REPORT OF THE CAUSES OF BLINDNESS

IN 111 INMATES OF, OR WORKERS AT, THE SHEFFIELD INSTITUTION FOR THE BLIND, WITH REMARKS.

By SIMEON SNELL, M.R.C.S.Eng.,

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The present report is based on an examination of the children or young people, inmates of the Sheffield Blind School. Generally speaking, shortly after admission, each scholar has been examined by me, and thus, with one or two exceptions, each case has passed under my direct observation. The medical certificates with which each applicant for admission has to be provided, though answering well their immediate purpose, are, generally speaking, too vague to render much aid to scientific inquiry. Where it has been possible to clear up doubtful points by communicating with the children's parents or friends, it has been done; but, in some instances, among inmates coming long distances, from the North or South of England, this has been impossible. Care has, however, been taken to render the report as accurate as circumstances permitted. The numbers have been increased by an examination of the workers at the Workshops for the Blind, a part of the same institution.

Since the Blind School was opened, I have records of 76 cases; from this number, 3 are excluded from consideration, as not having been seen by me, or for other reasons, thus reducing the total to 73. Of this number, 41 are males and 32 females.

At the Workshops, a total of 46 are employed, and all have been examined. Eight had, however, been already noted whilst previously attending the blind school, and the number is consequently reduced to 38. Nine are females, and 29 males. The eight excluded were also males. The scholars, with one or two exceptions, are all under 15 years of age, and it is required that each should be of good health, and free from fits and mental or other afflictions, that would interfere with educational work, prior to industrial training. At the workshops, competency to learn and to perform the work undertaken would appear to be the only requirements for admission.

The series of observations recorded as to the causes of blindness in any given number of persons so afflicted are not many, and fewer are are those in which each individual case has been examined by the writer. I trust therefore that the present report, even with the limited number treated of, may be of some interest and value. I will proceed to separate into groups the various cases.

Ophthalmia Neonatorum.—Among the inmates of the Blind School, in no fewer than 27, blindness can with tolerable certainty be assigned to this disease as a cause, and in one in all probability so; making a total of 28, or 38.3 per cent. At the Workshops, the number is 10, or 26.3 per cent. The difference in percentage between the blind of the two establishments appears just what would be anticipated. For, in the Blind School, all are young people, with very few exceptions under 15 years of age; whilst at the Workshops are adults of all ages, amongst whom, increased age, the causes of blindness from occupation or otherwise, have come into play, and necessarily have reduced the percentage. The number, out of the total of 111 at the two establishments, afflicted from this disease, is 38, or 34.2 per cent.

A point which may be mentioned in passing, is the greater number of males blind from ophthalmia neonatorum than females. In the Blind School, the numbers are 17 males, 11 females; at the Workshops, 7 males, and 3 females. The greater number of males among those generally under consideration may, of course, be held to account for this difference; but does it do so altogether? Among the last 78 cases of this disease registered at the Sheffield General Infirmary, it would seem that 42 were males and 36 females, again a difference in favour of the male sex.

Blennorrhœa in Adults or Subsequently to Infancy.—Three cases at the Workshops, or 7.9 per cent., would appear to come under this head, two males and one female. A female, aged now 31, suffered from the disease at 13, and has undergone operations (iridectomies?) in both eyes without benefit. A male, aged 48, suffered from ophthalmia in the East Indies as a soldier; now there is corneal staphyloma and general symblepharon; the right eye can see fingers. The other man, aged 36, states that he lost his sight from contagious ophthalmia at 8 years of age; many other children suffered from the same disease at the time. The appearances of the eyes do not altogether bear this out. The case is one of interest. In February, 1877, he was under my care in the Infirmary. The cornea and the media were sufficiently

clear to enable a good view of the fundus to be obtained; a whitish yellow-looking appearance was observed even without the ophthalmoscope, but particularly with its aid. No vessels were traced over it, but its surface was irregular. The diagnosis suggested, of ossification of the choroid, was rendered more likely by palpation of the globe. Towards its posterior part, it felt quite hard and solid when touched with the fingers. The eyeball was at times irritable and painful, and it was therefore enucleated. On the interior of the eye being examined, it was found occupied by a large stout shell of bony deposit, thicker posteriorly, where was an aperture corresponding to theoptic nerve entrance of the free, and thinner at its anterior edge. It reached to some little distance behind the ciliary processes. The condition of the left eye on June, 1885, was as follows. There was a large leucoma, which, however, left a part of the pupil free; there were myopia and large crescent; he had large pigmentary irregularities in the fundus (bony deposit ?), but view was difficult.

Osseous deposit in an eye is frequently met with, but a case in which, during life, the media have remained clear, and for the condition to be diagnosed, is rare. Mention may be made of a case recorded by Professor Laqueur, of Strasburg, in Knapp's *Archives of Ophthalmology* for 1878 (vol. vi). A diagnosis of osseous deposit was made by the ophthalmoscope and by palpation, but enucleation was not resorted to.

In the Blind School two cases, where the eye was lost in early life, seem to come under this class. Both are males. One lost his sight at sixteen months, "cutting his corner teeth," the other at eight months and a half.

Sympathetic Ophthalmitis.—At the Blind School, there are six whose blindness may be assigned to this disease, or 8.2 per cent. The ages at which the exciting eyes were injured were 12, 7, 14, 4, with a subsequent injury at 8 (probably the really exciting hurt), 11, 14. The injuries were caused in the following ways: by a knitting needle, in one case; blow from a stone, in one; hit with a stick, in two; a piece of pot, in one; in one, also, after typhoid fever, in which the cornea was destroyed (hypopyon ulcer), an iridectomy was attempted, and, failing to remove this iris satisfactorily, the ulcerated cornea was incised. In all the cases, the exciting eye was enucleated.

The time when the disease was set up in the sympathising eye is very uncertain, and should be stated in this way. In one case, the exciting eye was removed six months after the injury, and the other organ had been affected for some time, though, five months afterwards, he could still see to read with it; another (hypopyon ulcer), about two months; in another, up to eleven months after injury, the other eye remained good; in the others, no time is assigned, or very uncertainly.

In the Workshops, there are four cases of sympathetic ophthalmitis, or 10.5 per cent. The ages at which the accident to the exciting eye occurred were 22, 22, 21, 16; and the injury was occasioned by bursting of a ginger-beer bottle; the point of a scissors; a piece of steel penetrating the eye; a knife-blade projecting from machinery. In two only of these cases were the globes enucleated. The length of periods elapsing after injury, before the sympathising eye became affected, is thus stated. One commenced within the first two months, but sight was not entirely lost for two years; another began to fail a month after; and the other two at three weeks and six weeks.

There are 5 males and 1 female at the Blind School; and, at the Workshops, 3 males and 1 female. Of the whole number, 6 are right eyes and 4 left. Of the adults (4), in only half of the cases was the injury associated with their employment. Taken together, the early age at which all were attacked appears to favour the opinion that sympathetic ophthalmitis is more likely to occur in injuries among the young.

I may mention that one inmate of the Blind School, in whom the acuteness of the attack had long passed, was admitted into the Infirmary under my care, and, after two operations, sufficient iris was removed to give him a useful pupil. There was occlusion of the pupil, and the lens appeared to have undergone absorption. He was, with a glass, enabled to read Jäger 2, and soon left the school to learn to earn his livelihood as a sighted worker.

In all, there were 10 cases of sympathetic ophthalmitis, out of a total of 111, or 9 per cent.

Accidents, simultaneous to both eyes, and resulting in blindness, afford three instances at the Workshops, or 7.8 per cent. They are all males. 1. Now aged 42; accident at age of 34; was blasting stone. 2. Aged 64; accident occurred twenty-five years ago, whilst blasting stone; a piece of stone stuck in the right eye; the left retained a glimmer of sight for some time. 3. Aged 62; accident twenty-seven years since; whilst sinking a coal-shaft and blasting, powder struck his face; he "never saw again;" powder-marks on his face. In each case, the corneæ in both eyes were completely destroyed; and one eyeball in the first case, and both in the third, were adherent to the upper eyelids.

Lime entering the eye appears to be the cause of blindness in one case at the Workshops. The man is now aged 54. At 3 or 4 years of age, he got lime in his eyes, and sight gradually went; he could continue as a labourer until 19. There are now xerosis of the cornea and conjunctiva, general symblepharon, and ingrowing eyelashes, for which he has undergone operation; the use of vaseline has enabled him to find his way about.

Small-pox is answerable for blindness in three cases at the Blind School, or 4.1 per cent. One case was not vaccinated, and had the disease when eighteen months old. Another, much pitted, had small-pox at three weeks, and is said to have been vaccinated after having the disease. The third case was only vaccinated in infancy, and has four fair marks, and was 16 years old when she suffered from small-pox. Two were males, and one a female.

At the Workshops, two assign their blindness to this disease, or 5.3 per cent. One had small-pox at 10 years of age; she is uncertain as to vaccination, but no marks are to be found; she is much pitted. The second case was not vaccinated. There was one female and one male. As to this last case, it should be mentioned that it was the left eye that was lost completely by the attack of small-pox. The right eye was, he says, unaffected by small-pox, but my recollection is that, when he came to the Infirmary some time since, there was a small leucoma (adherens ?). On April 3rd, 1882, he was iridectomised for acute glaucoma; sight was nearly gone, a little vitreous humour escaped (he was a most unruly patient, and declined an anæsthetic); ultimately, the globe shrank.

Altogether, the total number of cases blind from small-pox is 5 out of the 111, or 4.5 per cent.

Scarlet fever occasioned one case of blindness at the School, or 1.3 per cent. It was a male, and occurred at 9 years of age. At the Workshops, there was one case, also, and it happened to a female, again, at the age of 9. The percentage is 2.6, or, of the total of 2 in 111 cases, 1.9 per cent.

Measles at the age of 11 months rendered one female at the School blind, or 1.3 per cent. There is no case at the Workshops.

Fever, probably typhoid, is assigned as the cause of blindness at the School, in a female, at 15 years of age, or 1.3 per cent. There is no case at the Workshops.

Cases of Congenital Blindness: Cataract.—At the Blind School there are five inmates whose blindness is traceable to this cause, or 6.8 per cent. All have undergone operations in both eyes, but in all the cases the operation would appear to have been delayed until late. In two the age is known fairly well, and was about eight years; another seems to have been near 10 years of age. Three have been operative successes, and they possess faint vision for large objects; 1 appears capable of improvement; 4 are males and 1 a female.

At the School also there are 7, or 9.5 per cent. other cases of congenital blindness. They are as follows:—

1. Congenital hydrophthalmos; the right eye has been iridectomised; the left burst, and then dwindled whilst an inmate; she died of phthisis.

2. The parents and medical certificate say "born blind," the exact cause doubtful; the eyeballs are small; the cornea in each is clear, but small. No operation has been performed, as far as information goes.

3. Both optic discs are atrophied; irregular edges suggested a preceding neuritis; there is bare perception of light; is said to have been born blind.

4. Constant nystagmus; pigment-patches in each fundus; discs atrophied, right bluish white; known to be blind at three months of age.

5 and 6. A brother and sister, aged at the time of examination respectively 14½ and 13. In both, the optic discs were perhaps a little pale, and the vessels were thought to be small, but there was no marked change in the fundus; in the girl there was nystagmus. A communication (at the time of writing) from the father leaves no doubt as to their both having been born blind. The elder one (boy) was early seen by Sir William Bowman, who testified that there "was no light-perception." The parents had four other children, one a boy, preceding the two here mentioned, and three children succeeding, and all possessed good sight; the father and mother were not relatives before marriage. The boy is "far from being bright intellectually"; the little girl is somewhat crippled and dwarfish for her age, is of a bright and happy disposition, but not, I fear, very quick at learning. Hearing in both "is tolerably good." A cousin of the children's father (their grandfather's sister's daughter) had a blind boy and girl. It was the knowledge of this coming to the mother during pregnancy that is assigned as the cause of the blindness in the elder, and the

thought of the misfortune to the other as the cause of the younger. There is no other blindness in the family, nor have they intermarried; neither father or mother suffered from any nervous disease. Another case at the school would also appear to be congenital. Three of this number were males, and four females. The total number of cases of congenital blindness is 12, or 16.4 per cent. None under this class are found among the cases reported at the Workshops.

Optic Atrophy.—At the Blind School, 11 owe their affliction to this cause, or 15.2 per cent. ; 9 of this number are females, and 2 males. One lost her sight at 21, and another at 11 ; the others generally when aged 4 or 5. As far as can be ascertained, the histories resembled those of meningitis: in one, the blindness occurred after whooping-cough (a fit), and another had a blow on the head with a shovel when aged 2.

At the Workshops, there are 8 blind from atrophy of the optic nerve, or 21 per cent. One man, now aged 26, lost his sight at 7 years of age, during scarlet fever ; another, now aged 35, at 14 was knocked down by an engine, lost his senses, and when consciousness returned, he could not see, and his mind was affected for eighteen months. Another, also, at 15 lost his sight with head-symptoms ; he was a file-cutter (saturnine neuritis ?). The only female among this series became blind at 19 ; she was under observation with double optic neuritis, passing into atrophy ; cerebral and specific indications were present. The ages at which the others lost their sight were 43, 27, 22, and 20. This last was struck on the eye by a piece of grease. He lost consciousness for a time ; there was no vomiting ; the sight of the left eye was lost immediately ; of the right, about three weeks later. There was no evidence of injury in the fundus of the left eye ; both optic papillæ were papery white.

The 19 cases in all comprise, out of the 111, a total of 18 per cent. It is worthy of remark that, in three of these instances, there is a history of head-injury.

Cornea.—Affections of the cornea are responsible for 5 cases at the Blind School, or 6.8 per cent. There are 2 males and 3 females. Two of these instances here resulted from interstitial keratitis ; one is absolutely deaf. Another case had corneal staphyloma ; the globe was painful, and was excised by me before admission into the school ; the other eye had corneal fistula, and the little sight then possessed rapidly failed. She died of erysipelas. The other two are stated to have lost their sight whilst "teething;" one, with leucomata, possesses fair sight after iridectomies by Dr. Little, of Manchester, and myself ; in the other, the globe (left) is shrunken ; an operation had been performed on it in London ; the right cornea is cloudly, the pupil closed ; it looks as if iridectomy had been attempted.

At the Workshops, there is one case suffering from the effects of diffuse keratitis. The left cornea is fairly clear, the right still nebulous ; she possesses fair sight.

Iris.—The only case coming under this head deserves longer notice; it is one of irido-choroiditis, associated with blanching of the eyelashes. He is employed at the Workshops. In March 1877, he came under my care at the Infirmary. He was then the subject of irido-choroiditis in both eyes. He had first noticed something wrong with his eyes sixteen months before ; the left commenced about a fortnight before the right. The eyelashes in both eyelids, on each side, were observed to have become whitened. This alteration in the eyelashes had been first noticed two or three months before coming to me. The colour of the hair and eyebrows was brown. I showed the man (then aged 21) to the members of the Sheffield Medico-Chirurgical Society on March 15th, 1877, as a "probably unique case." A little later he went to Moorfields, and was under the care of Mr. Jonathan Hutchinson, who has referred to the case in his lectures at the Royal College of Surgeons. Two iridectomies were performed on the right eye. Now (June, 1885) the right globe is shrunken ; in the left eye, the pupil is plugged ; the iris bulged forward ; there is no perception of light. The eyelashes still remain whitened on both sides ; in the upper eyelids, a few darker ones are interspersed.

I will close this report by referring to miscellaneous cases, which I do not otherwise classify.

Coloboma of Iris and Choroid.—The subject had been always defective in sight ; at 20, he was struck by lightning, and lost sight in a few days ; he is now aged 47. In both eyes there is coloboma below of the nerves, reaching through the choroid. In the right eye, it embraces the optic disc and affects the sheath. He declined to allow a mydriatic to be used for a thorough examination.

Retinitis Pigmentosa.—A male, aged 43, had nyctalopia as a child. He could read up to 12 years, holding the book very near. His sight gradually failed, and he has worked in a blind factory for more than twenty years. There was a large quantity of pigment in each fundus, reaching close up to the discs, which are white and waxy-looking. There are hypermetropia and nystagmus. His father and mother are not relatives ; vision of the family is good.

Choroido-retinitis.—The subject is a male, aged 42. His sight commenced to fail at twelve years of age ; specific history is denied. In both eyes are atrophic and pigmentary patches ; the right eye is less opaque and has perception of light, the left lens is becoming opaque and the vitreous humour cloudy, preventing a perfect view of the fundus; perception of light is defective. He was under observation many years ago.

Hydrophthalmos and Cataract.—A female, aged 38, has been blind since 4½. The right eye is hydrophthalmic, and has no perception of light. In the left the lens is opaque, the pupil active; there is good perception of light. Her condition, it is possible, might be improved by operation.

The following are among the inmates at the Blind School.

In a boy aged 7 : "One eye was extracted at 18 months, and the other at 3½ years, for cancers," so says the medical certificate. The case was not seen by me, and no further information is obtainable.

Another boy, aged 8½ years, lost his sight at 12 months. There is nystagmus, and examination is very difficult; in each fundus are large pigmentary patches ; the discs are atrophied.

Malingering.—This case, a girl, aged 18½, operated on by Mr. Higgens, for squint (left eye), was sent from a London workhouse, as totally blind. Shortly after admission to the Blind School, sight commenced gradually to recover. When she was examined, hypermetropia was found, and excellent vision ; the left eye was amblyopic. She has since done work at the school, as general servant. I think it likely she feigned blindness at the workhouse, to avoid work, and that she found the education of the blind more irksome than anticipated, and gradually recovered vision.

In conclusion, I must acknowledge the kind services rendered in the preparation of this report by my friend, Mr. J. R. Turner.

TREATMENT OF VARICOCELE BY EXCISION.

By A. W. MAYO ROBSON, F.R.C.S.,
Honorary Surgeon to the Leeds General Infirmary

THE various methods adopted for the cure of varicocele go far to prove that, as yet, no one means is so thoroughly satisfactory as to leave nothing to be desired. Of the various measures I have myself adopted, I have found none to equal, in completeness and safety, the complete excision of the bundle of enlarged veins. After any radical operation for varicocele, there must of necessity be a greatly disturbed circulation in the scrotum, and a liability to hydrocele or slight orchitis, and this I have found occasionally even in subcutaneous ligature of the veins ; but, as will be seen by the following cases, which have occurred in my practice during the last year, orchitis supervened only once, and then in a syphilitic subject, who had had specific orchitis a short time before being treated for varicocele.

The train of nervous symptoms frequently accompanying varicocele is often so severe as to demand treatment; and, when some tangible cause is found, such as a varicose condition of the pampiniform plexus, producing congestion and neuralgia and ultimately atrophy of the testis, it is the surgeon's duty to give relief, especially when it can be done without danger. The operation of excision is performed as follows.

The skin of the scrotum, having been shaved and well washed, is enveloped in a carbolic dressing, which is left on for twelve or twenty-four hours preceding operation.

After the patient has been anæsthetised, and every antiseptic precaution adopted, the cord of the affected side is caught between the left finger and thumb over the site of the varicocele ; the vas deferens, which is easily felt, is allowed to slip backwards, leaving the enlarged veins within the grasp.

A vertical incision of three-quarters of an inch is now made through skin and fascia, quite down to the veins which immediately bulge through the wound, and are caught between the finger and thumb of the right hand; the finger-nail then serves to break through a film of fascia which separates the veins from the vas deferens. A double No. 2 catgut ligature is passed round the bundle of veins, and the two ligatures thus placed *in situ* are tied about an inch or more apart, the intermediate varicocele being completely cut away.

No bleeding occurs, as a rule, and the wound is so small, and falls so well together, that sutures are scarcely required. A small catgut drain may be left in, but this is not absolutely necessary. The wound is covered with carbolised gauze, and over this is placed a good pad of salicylic silk or wool. In some cases, the dressings are not removed for a week, when the wound is completely healed; but, when

a drainage-tube has been left in, it should be removed on the second day.

Case I.—Mr. A., aged 23, residing in Leeds, a member of a learned profession, suffered from varicocele on the left side, neuralgia of the left testicle, and constant aching. He was hypochondriacal, and said he was quite unfitted for work, on account of his depressed mental condition. The operation was performed under eucalyptus-air; healing by first intention occurred, and the patient was out in a fortnight. He is now quite well, physically and mentally, and I constantly see him in active work. There is no visible scar where the wound was, and nothing to indicate that there has ever been an abnormality.

Case II.—Mr. W., a colliery-proprietor, residing near Leeds, consulted me for a gleety discharge, "prostatic," from which he had suffered for several years, and for which various operations had been done. He had, associated with a large varicocele, neuralgia of the left genito-crural nerve, dragging pains, atrophy of the left testicle, and intense mental depression. After treatment of various kinds, without much improvement, I advised and performed excision of the varicocele. The operation was followed by a slight hydrocele, which disappeared after three months. The patient reported himself after six months, looking quite a different individual, having lost his nervous symptoms and his gleety discharge, and being quite free from pain. There was no sign of the hydrocele, and the testicles were of normal size. He was then about to marry.

Case III.—Mr. B., a schoolmaster, residing in Bramley, suffered from such intense nervous debility, that he felt quite unable to carry on his duties, and had thoughts of suicide. His attention was morbidly centred on a large left varicocele, which had apparently caused atrophy of the left testicle, as it was only half the size of the right. He complained of neuralgia and dragging pains. I advised operation, to which he consented. The wound healed by first intention, and he returned home in a fortnight. He reported himself after three months, saying, "I am quite a new man, and my work is a pleasure." In place of a large soft pulse, pale face, dilated pupils, cold clammy hands, and general want of briskness, he stepped sharply into my room, looked happy, had a firm good pulse, and plenty of red blood in his cheeks, and warmth in his hands.

Case IV.—G. E., aged 19, wished to go into the army, but could not pass because of a left varicocele of considerable size. It caused a dragging and aching pain, but not so much as to require treatment, had it not been for his wish to enter the service. He had been twice operated on by ligature, without relief. Excision was performed in the usual way, but, unfortunately, he displaced the dressing the first night, and the wound suppurated; the inguinal glands inflamed but did not suppurate. He was discharged cured in five weeks.

Case V.—F. P., aged 24, was admitted to the Infirmary, with the usual nervous symptoms, and neuralgic and dragging pains. Excision was performed, and he was discharged cured in a fortnight.

Case VI.—J. W. R., aged 30, was operated on by me in April, 1884, for double varicocele, by subcutaneous ligature; this was followed by slight orchitis, which soon subsided. He returned in six months with the varicoceles quite as large as before operation. He had in the meantime been suffering from syphilitic orchitis. His discomfort necessitated something being done, hence I excised both varicoceles in October. The wounds healed kindly, and he had no pain; but the orchitis returned in the right side, and required specific treatment.

Case VII.—J. H. was admitted to the Infirmary, suffering from left varicocele on August 18th. The operation was done on August 21st, and he was discharged cured September 7th, 1884.

Case VIII.—J. W., aged 20, was admitted to the Infirmary on account of dragging and pain in the left side of the scrotum, due to a large varicocele, which was excised under eucalyptus-air on April 2nd, 1885. He was made an out-patient in twelve days.

Case IX.—J. W., aged 32, was admitted into the Infirmary on January 1st for a large left varicocele, which caused a dragging pain, and prevented him from lifting. Excision was performed on January 9th, neither sutures nor drainage being employed. He was discharged cured in ten days.

Case X.—A. W., aged 44, was admitted December 3rd on account of severe left genito-crural pain, apparently dependent on a large left varicocele, which was excised on December 10th. The wound healed by first intention, and he was discharged in a fortnight.

The description of further cases would be tedious; but the foregoing will, I trust, serve to illustrate the safety and efficiency of complete excision, if done strictly antiseptically.

A NOTE ON SO-CALLED LEAD-NEURITIS.

By C. S. JEAFFRESON, F.R.C.S.Eng.,
Surgeon to the Northumberland, Durham and Newcastle Infirmary for Diseases of the Eye.

Dr. Oliver's very interesting and instructive clinical lecture on lead-poisoning leads me to make a few remarks upon the ocular symptoms in these cases.

It is upwards of fourteen years since this special form of neuritis was introduced to the profession, and perhaps it is time now that our knowledge upon the subject should be passed in review, and we should see whether the experience gathered during this period tends to confirm or weaken previous impressions as to the reality of the disease. When professional notice was first directed pointedly to its symptoms, I was professionally connected, and had been for some time, with one of the largest lead-works on the Tyne. The question interested me much at the time, and I made numerous observations and notes upon the cases that came under my care. Since then, I have had many opportunities of following up the subject; and I must own that I am somewhat sceptical as to the existence of any special form of neuro-retinitis which may be said to depend directly upon lead-poisoning.

That lead-poisoning was an occasional cause of blindness, was common knowledge to the profession years before the ophthalmoscope came into use; but I believe it is due to Mr. Jonathan Hutchinson that this special form of neuritis finds its place in the index of most of our text-books, although the information they give is of the most meagre and sketchy nature. Here I would point out how extremely ready the profession are to add new maladies to the already long list with which they are provided, especially if the new-comer have the benefit of being introduced to the world of disease by a man of position and repute. He is welcomed, and takes up his position often unchallenged. Other writers copy what has been previously written of him, and thus he is handed down from generation to generation. It so happened that, at the time Mr. Jonathan Hutchinson published his paper, in the seventh volume of the *Royal Ophthalmic Hospital Reports*, Dr. Clifford Allbutt had in preparation his work on the *Ophthalmoscope in Medicine*. He introduced Mr. Hutchinson's paper *verbatim* into this work, which attracted much attention, and had a very large circulation; and, since then, lead-neuritis and neuro-retinitis have acquired an established position.

Now, I think if lead-poisoning were capable of producing a special form of inflammation of the optic nerve and retina, we might reasonably expect to meet with cases of this kind in the out-patient department of our ophthalmic hospitals. We are here surrounded by numerous lead factories, and we not unfrequently see cases in which the effects of lead are manifest in the optic discs and papillæ of patients, as a secondary, but never as a primary or independent condition. We are never applied to by patients suffering from slight symptoms of lead-poisoning, who exhibit neuritis and neuro-retinitis which we could call of a specific kind. Ten or twelve years ago, I passed in review a large number of the hands, both male and female, engaged at the largest lead works here; and, although many exhibited the blue line, significant of saturnine poisoning, I found no case of neuritis or neuro-retinitis. Latterly, I have repeated this experiment upon a large number of female hands (who are most prone to suffer), and in no case could I discover either neuritis or neuro-retinitis.

But, if lead-poisoning is incapable of producing a specific neuro-retinitis, it frequently brings about conditions in which neuritis is common. The renal affection is, of course, well known; and, no doubt, in many of the cases, this is the cause of the neuro-retinitis, although the albuminuria may not be a permanent condition. Another condition, however, and one to which all ophthalmic surgeons would attribute considerable importance, is the suppression of the catamenia. Dr. Oliver, in his lecture, says nothing upon this question. Yet, as far as my experience goes, this is one of the first and most important symptoms of lead-poisoning in females, and it is one in which, quite independent of any specific action of lead, neuro-retinitis and papillitis are not uncommonly developed. Cases of papillitis, in females suffering from suppression and great irregularities of the menses, are coming much more frequently before our notice. The third condition, which, to my mind, plays the most important part in the development of papillitis in cases of lead-poisoning, and to which most of these cases are, to my mind, due, is the tendency to sudden effusion into the ventricles of the brain and subarachnoid space in case of lead-poisoning.

I have seen not a few cases in which the ophthalmoscopic sym-

ptoms were only developed contemporaneously with the cerebral disturbances, and I believe they are but the mechanical expression of increased intracranial pressure. I have, on more than one occasion, seen patients who were suffering from acute symptoms of lead-poisoning, whose discs I had examined in the morning and found normal, the same evening became the victims of the most acute cerebral symptoms. Violent epileptiform convulsions, dilated pupils, blindness, exhibit a well marked "Stauungs-papilla," or choked disc. I have known these patients pass into a semi-comatose condition, and remain so for several days, and then gradually recover, with impaired mental faculties and different degrees of blindness.

The pathology of these cases, as far as vision is concerned, I believe to be entirely due to mechanical causes; and the amount of impairment of sight is exactly in proportion to the duration of the intraocular pressure, and the amount of secondary neuritis which the strangulation of the disc may bring about. The extremely short time in which, in these cases, a normal disc may be observed to pass into a condition of the most intense congestive œdema, to my mind, excludes the idea of a specific neuritis, and is a convincing argument in favour of Mang's theory of the production of optic neuritis by distension of the intravaginal sheath space.

I think, then, that most of the so-called cases of lead-neuritis may be accounted for upon other grounds than the specific action of lead; and that, at all events before this cause is admitted, other more common causes must be excluded. In the notes of the cases detailed by Mr. Hutchinson, the question of renal disease and menstrual suppression is not touched upon. One, the case of Kate M., was known and seen by me in its earliest stage, and it was undoubtedly one in which the eye-symptoms were due to rapid intracranial effusion.

I regret that I have no time to enter more fully into this question; but I hope this note may lead to an expression of opinion from others who have had special opportunities of seeing large numbers of cases.

EMBOLUS OF THE BASILAR ARTERY.

By CHARLES M. CHADWICK, M.B., M.R.C.P.,
Physician to the Leeds Public Dispensary.

THE following case appears to be worthy of record, as one which is rarely seen in practice, and perhaps of still further interest from the fact that the *post mortem* examination revealed no signs which would lead to any definite conclusion as to the origin of the lesion.

W. E., aged 21, a collier, was first seen by Mr. Stericker, Senior Resident Medical Officer at the Leeds Public Dispensary, on the morning of December 8th. He was a pale, fairly nourished young man. At one time, he was somewhat intemperate; since marriage, nine months ago, he was said to have been quite steady. There was a history of marked loss of hair about two years ago; otherwise, no history pointing to specific disease. There had been no miscarriage, and no child. Two brothers and two sisters were alive and well. He had always had good health.

The patient was quite well, and at work, till two days before the attack, when he was said to have complained of pain at the back of the head. It being Saturday night, the patient took a strong purge of senna, salts, and liquorice. On the following day, he got up; he appeared much better, and his appetite was good. Towards evening, his wife went out for a few minutes, and, when she came back, he was "all of a heap" in the arm-chair, and could neither speak nor walk. He signed to her that he wanted to go to bed. He was carried upstairs, and never moved his position, spoke, or showed any further signs of consciousness, till his death, which occurred fifty-six hours later. It was said that he once drew up his legs and slightly moved his right arm.

When seen, the patient was lying on his back in bed. The skin was covered with a copious sour-smelling perspiration; the eyes were semi-closed, and the pupils (partially dilated) reacted well to light. The deep reflexes were increased, the superficial well marked. There was well-marked ankle-clonus. The right arm was semi-flexed over the chest; the legs and left arm were extended. The temperature was 100.2; pulse, 98; respiration, 20. The patient was continually uttering a wailing sound, tears running down his cheeks; and the facial muscles were contorted as in ordinary crying. Any irritation, such as pricking, or twisting the hair about the temple, would produce this at once; and, in the latter case, the head was turned towards the side where this was done; the facial muscles of the same side were contracted. The mouth could not be opened; the tongue was motionless; the lips and mouth were covered with sordes. Any attempt to allow fluids to run down was followed by coughing and choking.

The patient remained in the same state; the breathing became more laboured, the pulse more rapid and feeble, and he died "quite quietly" fifty-six hours after the attack.

Post Mortem Examination, conducted eight hours after death.—All the organs were found to be healthy. The heart was not enlarged; the valves were entirely free from vegetations; the left ventricle was contracted. The veins in the meninges were congested, and at the anterior extremity of the basilar artery was a small rounded clot, increasing its calibre at this point to the size of a small pea, and plainly visible before opening the vessel. On opening the vessel a round clot, black internally and colourless externally, was seen.

REMARKS.—The *post mortem* appearance, the age of the patient, and the sudden onset, would lead to the determination that this was a case of embolism; while the reported pain in the back of the head, and the absence of signs in the heart indicating embolus, would lead to the supposition that thrombus was the cause of the occlusion. Had the occlusion occurred at the proximal instead of the distal extremity of the vessel, death would have been either immediate, or much more rapid, from asphyxia.

NOTE ON VIBURNUM PRUNIFOLIUM IN ABORTION.

By W. MACFIE CAMPBELL, M.D., Liverpool.

SINCE the publication of Dr. Wilson's paper in the *Liverpool Medico-Chirurgical Journal* of January, 1885, I have had the opportunity of testing the use of viburnum prunifolium, so much vaunted in America, in several cases of threatened miscarriage, and I can entirely endorse the good opinion he has formed of it. Nothing, probably, in midwifery is more disappointing than the ordinary routine-treatment of miscarriage by opium or Indian hemp on the one hand, or ergot on the other. For these drugs as often act in the way contrary to the prescriber's intention as in accordance with it. How often has a dose of Battley's solution, administered to arrest uterine action, and give rest and ease from pain, been followed by immediate and severe expulsive pains, while the attempt to empty the uterus by a dose of ergot has resulted in a perfect calm, and a disappearance of symptoms.

It is a comfort thus to have some hope of success in dealing with such a condition as miscarriage; and although I have so far only the notes of six cases, of which five were successful, yet, these five being consecutive, and the effect exactly following the administration of the remedy, I have no hesitation in my own mind in giving the credit to the viburnum. The case of failure was my first.

CASE I.—Mrs. B., two months pregnant, had discharge of blood, with uterine action. She was treated in the usual manner, with opium and rest for two days, when extract of viburnum, in two-grain doses, three times a day, was ordered. There seemed no effect upon the pains, the os continued to dilate, and the uterus was soon empty. Perhaps the dose was too small[1]; at any rate, I had lost two days, which I take to be the reason of the failure.

CASE II.—Mrs. H., pregnant for the seventh time, two months and a half, was awakened by a gush of water early one morning, followed by a bloody discharge. On examination, the os was soft and dilatable. She was kept in bed, and given at once three grains of extract of viburnum every four hours. There was no return of bright blood, and the discharge gradually ceased. The relief to the pain after the first dose was in this case very marked.

CASE III.—Mrs. B., in her sixth pregnancy, one night during the fifth month was wakened by the "breaking of the waters," the escape being sufficient to saturate her night-dress and bedclothes. This was followed by pains. I saw her in the early forenoon, and gave three grains of the extract three times a day, and there were no further symptoms.

CASE IV.—Mrs. G., in the fifth month of her second pregnancy, had a bloody discharge, with uterine pains. The same dose was used, and with the same good result.

CASE V.—Mrs. W., in the second month of her sixth pregnancy, had already had two miscarriages. Two grains of extract of viburnum, three times a day, gave relief, as also a month afterwards, when the same threatening symptoms appeared.

CASE VI.—Mrs. S., first pregnancy, fourth month. This case was particularly interesting from the fact that miscarriage had been imminent in her case at each monthly period. The first and second attacks occurred in America, when she was given viburnum, and her medical man provided her with a large store of the liquid extract, which he told her was unknown in England. She had an attack at sea, and in due time in Liverpool, and was pleased to discover that

[1] In repeated large doses it is apt to give rise to headache.

the drug could be taken in pill, and was equally efficacious, as the liquid extract is very nauseous. While I was from home she had another attack, in which she was attended by Dr. Westby, who considers she was only saved from miscarriage by the viburnum. During this last attack, she took her pills five and six times a day; in fact, her faith was such, that she would have taken too many. Bromide of potassium was also given to allay her nervous excitement.

Two other cases turned up during my absence, both of which completed their miscarriage; and I cannot help feeling that, if they had been treated with viburnum, the result would have been different. One sent for Dr. Westby on the third day; the other was treated by another doctor with opium and morphia hypodermically.

It does not do to build too much upon the result of these few cases; but I have been so constantly foiled in my endeavours heretofore to prevent miscarriage, that I hope to have found in viburnum the sure arrester of uterine action, which we certainly at present do not possess.

As recommended by Dr. Wilson, I prescribe the solid extract prepared by Messrs. Clay and Abraham, of Liverpool, from the liquid extract.

THE TREATMENT OF PAINFUL FISSURE OF THE ANUS, WITHOUT OPERATION.

By A. D. MACGREGOR, M.B., C.M., Kirkcaldy, N.B.

In the interesting and instructive lecture on the male perinæum, by Mr. C. G. Wheelhouse, the operation of "stretching" the sphincter ani is advocated, in preference to "cutting" the muscle. This treatment Mr. Wheelhouse recommends in fissure of the anus, because "we can attain our end without causing an external wound, and thereby rendering our patient liable to septic poisoning." I have hitherto treated these fissures without any operative interference at all, and with such success as to warrant a continuance of the method. The following case will illustrate it.

J. T., a coachman, aged 56, had, for eighteen months, suffered such agonising pain during defæcation, that an enforced habit of constipation was established. From time to time, he relieved his bowels by enemata, first taking a large dose of laudanum to alleviate his sufferings. On examination with a speculum, I found a fissure, nearly an inch in length, with irregular edges and an indurated base. The sphincter was much hypertrophied, and contracted powerfully and spasmodically during the examination.

I ordered a full dose of castor-oil, with some rhubarb for its secondary astringent action, forbidding the customary laudanum. When this had operated, I had the bowel well washed out with an enema containing Condy's fluid. This done, I passed the speculum, and painted the fissure with a solution of chloride of zinc (twenty grains to one ounce); then introduced a piece of lint, smeared with boric ointment, the contraction of the sphincter keeping it in contact with the sore. The bowels were kept in check by pilula plumbi et opii. Liquid food only was allowed.

The subsequent treatment consisted in the use of a powder (powdered boric acid, half-a-drachm; violet powder, one ounce), which was sprinkled freely on lint, and introduced into the anus to dry up any discharge, and the continued use of the boric ointment.

By these means the fissure was entirely healed in six days, and there has been no return of the symptoms.

I have always found one application of chloride of zinc enough; it usually causes some smarting and uneasiness, but nothing more effectively purifies the ulcer, or stimulates the reparative process. The introduction of cucaine robs the operative procedure of one drawback—the necessity of taking an anæsthetic; yet, I may recommend a trial of this treatment, at least in the case of those who have an innate horror of anything approaching "cutting."

Bequests and Donations.—Mr. A. F. Millns, the late Borough Treasurer, has bequeathed £1,000, and a moiety of the "residue" of his estate, to the Windsor Royal Infirmary.—Mr. William Tattersall has given £250 to the Recreation Hall Fund of the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties.—The Charing Cross Hospital has received £200 under the will of Mr. John Purssord.—"Z. O. T." has, in addition to many previous donations, given £100 to the Royal Free Hospital.—Mr. Joseph Sturge has given £200, further, on account of £2,000, to University College Hospital.—"Liverpool Jack" has given £60 to the London Hospital.—"A Friend" (per Mr. J. Tindall Harris) has given 50 guineas to the North-Eastern Hospital for Children.—"M. A." has given £50 to the Metropolitan Convalescent Institution.

THERAPEUTIC MEMORANDA.

PURE TEREBENE AND TERPENE.

I have received so many letters from medical men in different parts of the country giving the results of their experience with pure terebene in the treatment of winter-cough, that practically there has been an informal collective investigation. I have before me brief notes of 94 additional cases, and in 81 of these a distinct success is recorded. In six of the cases of failure, a further investigation showed that there had been an incomplete diagnosis, the patient suffering from some complication, such as aneurysm or aortic disease, the existence of which had not previously been suspected. In ten cases, the patients complained of nausea after taking the medicine; and in several instances, when inhaled from lint, it excited the cough, and apparently acted as an irritant. The explanation is, that much of the pure terebene now sold is of very inferior quality, and would be more accurately described as "impure" terebene. Medicines, as a rule, do not improve by keeping, but pure terebene is certainly an exception, for as it gets older, it becomes bland and oily. It is to be feared that most of the old stock, which, in consequence of the small demand, must have been in druggists' shops for years, has now disappeared, so that greater care has to be taken in the selection of good specimens. Much of the pure terebene now sold is crude and irritating, and quite unfitted for medicinal use. My attention has been called to the fact that there is a terebene which is labelled "patent." I distinctly stated in my paper that the substance I employ is not a "patent" preparation. In almost every case, I find the pure terebene has been given on sugar, and has not been used in the form of spray, probably from the difficulty experienced in obtaining the atomising apparatus. The combination of oil of cubebs, oil of sandal-wood, and pure terebene, which I used with success, has given good results in other hands. I have had no returns of cases of phthisis treated in this way, but most of my correspondents speak of having found pure terebene of benefit in acidity, flatulence, and other forms of dyspepsia. The smell of violets which the terebene imparts to the urine is often referred to, and in one instance it gave rise to complications. A lady called on her lover, who was ill in bed with bronchitis, and was very angry because he would not show her his violets. She searched for them, but did not find what she had expected. I am surprised that pure terebene has not been recommended for diseases of the bladder and urethra. My experience of its employment in these cases is limited, but I have certainly found it useful in cystitis and gleet. Delicate and fastidious women sometimes object to the smell and taste of pure terebene, and I then use terpene in the form of tabloids with good results, although I do not think it is equal to pure terebene.

William Murrell, M.D., Weymouth Street, W.

TEREBENE.

In the article on Terebene in the Journal of February 6th, one of its characteristics, and that which is the test of its purity (optical neutrality) is omitted. English oil of turpentine is strongly dextrigyrate, a column of 200 millimètres giving a rotation of —59°, whilst terebene is absolutely without action on polarised light.

For several years, I have used oil of turpentine with excellent results in the treatment of acute as well as chronic bronchitis, being led thereto by a fortunate mistake about a decade ago. I had sent an illiterate old fellow a mixture of senega with carbonate of ammonia, and a compound of olive-oil, turpentine, and caustic ammonia to apply to the chest. A day or two afterwards I found him wonderfully better, and he told me, literally with tears in his eyes from a recent dose, that the last medicine was the best he had ever had, but that it had taken the skin off his tongue and throat. He had been taking the liniment (through no fault of mine), and applying the mixture as an epithem.

An objection to the remedy is, however, its very offensive taste, and especially so with children, and this terebene happily removes; but, while much more agreeable, it has certainly proved less efficacious in my hands than its base. And again, in justice to Dr. Bond, who, I think, has been rather hardly treated, it should be stated that his commercial terebene is undistinguishable in taste and smell from the hydrocarbon in its pure form, and, although somewhat viscid (from contained colophene ?), it acts with me quite as well therapeutically as the much more expensive purified form, and I find it yields by fractional distillation in a current of steam about 30 per cent. of optically inert terebene. There is another body having the same formula

(C^{10} H^{16})[1] common to the whole group, oil of lemon, which would, I dare say, be quite as efficacious as a bronchial stimulant, and even more pleasant to take.

G. F. MASTERMAN, York House, Stourport.

CLINICAL MEMORANDA.

LATE MANIFESTATION OF TERTIARY SYPHILIS, UNPRECEDED BY SYMPTOMS OF CONSTITUTIONAL SYPHILIS.

THE two following cases will illustrate the fact that tertiary symptoms of syphilis may declare themselves many years after the primary infection, no symptoms whatsoever of constitutional syphilis having shown themselves during a long, active, and healthy life.

CASE I.—In the spring of 1880, I was called in consultation to give an opinion regarding an ulcerated condition of the tongue. The disease was considered epithelial, and removal of the tongue was proposed. Mr. X., a professional gentleman, residing in Bombay, aged 50, the father of several children (the youngest a baby), all healthy, and himself in good general health, presented the following condition. On the dorsum of the tongue, and to the left of the median raphe, there existed a deep greyish ulcer, having all the appearances of a suppurated gumma; two smaller ulcers, similar in character, were situated on the same side of the tongue, also close to the raphe, but nearer the base of the organ. There had been no hæmorrhage; the discharge was scanty, the breath slightly fœtid; pain was experienced during mastication, and talking was difficult; the submaxillary glands were somewhat enlarged, hard, and movable; the soft palate, tonsils, and pharynx were slightly congested, otherwise healthy. As far as could be ascertained, the patient had never previously suffered from secondary or tertiary symptoms of syphilis.

Under the influence of a mercurial treatment, and the local application of iodoform, the ulcers of the tongue gradually healed, and ultimately a complete and permanent cure was obtained.

CASE II.—In January, 1880, Mary B. was admitted into the clinical ward of the Jamsetjee Jejeebhoy Hospital, Bombay, suffering from a tumour situated in the left parotid region.

Mary B., aged 66, had spent forty-three years in India, and during that period, beyond occasional attacks of ague, she had enjoyed good health. She had been a widow for many years, and resided with her son, a healthy man aged about 40. About two months previously to admission, she first noticed a small hard circumscribed swelling, just below the lobe of the left ear. The growth increased rapidly in size, both downwards and laterally. On admission, the left parotid region was the seat of an irregular extremely hard tumour, superficially movable, and measuring about three inches and a half in diameter; at night, it was the seat of a severe lancinating and burning pain, whilst during the daytime the pain almost disappeared. There was no fever, but the appetite was impaired, and she felt low and depressed, owing to sleepless nights. She had suffered from a "discharge" in her early married life, which had left her without treatment. She had no remembrance of having ever suffered from eruptions on the skin or elsewhere.

The age of the patient, the seat and rapid growth of the tumour, all seemed to indicate its malignant nature; yet the peculiar nocturnal character of the pain led me to try the effects of a specific treatment. Frictions with oleate of mercury were made over the tumour, and iodide of potassium was administered internally. After a few days, the night pains decreased, soon to cease entirely. The treatment was persisted in, and, a couple of months later, the tumour had entirely disappeared. H. BLANC, M.D., F.R.C.P., Cannes, France.

OBSTETRIC MEMORANDA.

ON THE PREVENTION OF UTERINE HÆMORRHAGE.

I HAVE read with much pleasure the several articles in the JOURNAL bearing on the propriety of preventing uterine hæmorrhage by anticipatory treatment, because this is a practice which I put in operation in the early part of my career as an accoucheur, now more than thirty years ago, and with the most satisfactory results; this method I have carried out to the present day. Where the circumstances are known, and the plan is fairly followed, the issue appears certain.

The observations which I made are detailed at length in the *Obstetrical Transactions*, and in the columns of the BRITISH MEDICAL JOURNAL. The difference between the plan I followed and the one described by the writers in the JOURNAL, is that I made iron the basis of my treatment, combined with acids or alkalies and vegetable tonics, as the symptoms indicated; the object sought being to give tone to the muscular fibres of the heart and uterus, and also to reduce the quantity, and depurate the blood from effete secretions.

The renewed interest in this matter which the recent correspondence indicates, will prove of great service, if all who practise as accoucheurs will bear it in mind, and put it in practice as opportunity offers. JOHN BASSETT, M.D., Co-professor of Midwifery, Queen's College, Birmingham.

CHILDBIRTH DURING AN ATTACK OF SMALL-POX.

THE observations of Mr. Campbell Munro on the above case call for some comment on my part. I do not deny that the child "may have been infected," or "that the judiciously prompt vaccination aborted the impending attack of small-pox." In fact, it was with this very object that I vaccinated the child as soon after its birth as I possibly could. Mr. Campbell Munro, however, appears to think that I attributed the immunity of the child "to chance."

Seriously speaking, I think it is a supremely interesting fact that a woman with the pustules of small-pox at their fullest development, as in Mr. Richmond's case, can give birth to a child, to all appearance, in perfect health. When we consider how long it takes for the pustules to reach their height, and that the child has, all this time, been exposed to the influence of the poison of the most powerfully infectious and contagious of all known diseases, and that, too, in such a hotbed as the uterus, it is a marvel that, even with the promptest possible vaccination, the disease can be averted. In my own case, owing to some little opposition on the part of the parents, the child was not vaccinated until thirty-six hours had elapsed from its birth. Without counting the incubation-period in the mother, the small-pox virus had, in each case, a very long start of the vaccination.

There is another point of great interest to the profession, and which Dr. M. Handfield-Jones informs me he is at present engaged in working out; namely, that under the influence of the puerperal state, the incubation-period of small-pox, fevers, etc., is very much modified, in fact, decidedly shortened. I need not point out that this is a matter which concerns nearly the general practitioner who is at all times liable to be summoned to a confinement, even when fresh from attendance on some contagious and infectious disease. May not also the short incubation-period of the mother throw some light on the apparent immunity of the child? J. QUIRKE, Birmingham.

SURGICAL MEMORANDA.

ASEPTIC CATHETER FOR WASHING OUT THE BLADDER.

DR. FOULIS is to be congratulated on showing a possible, although rarely occurring, source of septic infection of urine in the bladder. At the same time, his apparatus does not entirely guard against the admission of air, which may enter the bladder when urine ceases to pass from the end of the instrument, before the tap allowing the antiseptic solution to flow is turned on. Besides this, the appliance is somewhat cumbersome, and calculated to alarm a timorous patient. I think an equally good result would be obtained by syringing a 5 per cent. solution of carbolic acid, or some other volatile antiseptic, through the catheter, before and after use, as well as anointing the outside with antiseptic oil.

This plan I have considered safe, and have never seen a bad result when it has been carried out. The rush of urine tends to drive out the air in the catheter; however, it is possible, under exceptional circumstances, as Dr. Foulis suggests, that a bubble of air, warmed by the bladder, may escape into that viscus from the instrument; but the vapour of the carbolic solution, used just before, tends to keep the air pure; although, to obviate all exceptions, if the catheter, before being used, be passed into a deep vessel containing some antiseptic solution, and the end closed by the finger or a plug, on the principle of a pipette, until the catheter is in the bladder, all the advantages of Dr. Fouler's plan would be preserved, and many of its inconveniences done away with. To lessen the chance of air being carried into the bladder, a double current catheter should be used, with the ordinary siphon apparatus attached to one orifice.

W. J. PENNY, F.R.C.S., Bristol.

[1] A paper on the action of sulphuric acid on the group C^{10} H^{16}, by Drs. Armstrong and Tilden. *Journal of Chem. Soc.*, vol. xxxv, p. 788.

VACCINATION.—Mr. T. Lamont Macartney, of the Worthing District of the Forden Union, Shropshire, has been awarded a Government grant for efficient vaccination, for the second time.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

HOSPITAL FOR EPILEPSY AND PARALYSIS.

EPILEPTIC AUTOMATISM.

(Under the care of Dr. ALTHAUS.)

W. E., aged 23, single, a railway clerk, was admitted on October 2nd, 1885. There was no inherited neurotic tendency. As a child, he suffered from convulsions during teething. At sixteen years, he was able to take a situation as railway clerk, and had his first fit, apparently without any appreciable cause, when seventeen years and three months old. There was an extraordinary variety about the fits, but the chief peculiarity had always been automatic action, either after an ordinary convulsive attack, or apparently even without one. Thus the patient, after having gone to bed seemingly quite well, would get up in the middle of the night, quite unconscious, and walk for hours about his bedroom. On one such occasion, he took hold of his watch, and kept winding it up until the mainspring broke, and continued the same movement of winding up for hours afterwards, until he recovered consciousness. When fits occurred in the daytime, he frequently came into collisiou with people, and hit or kicked them. If not interfered with in his movements, he did not give trouble; but if anyone attempted to thwart him, he became violent, kicked, and plunged, so that it took five or six men to overpower him.

On one occasion, while sitting quietly in his office and writing, he was suddenly seen to assume a vacant look, and become insensible; he then pulled off his shoes and stockings, walked downstairs, and began to run about the station. The porters, who were acquainted with his peculiarity, were afraid to catch him; but a passenger, who threw some cold water over him, was knocked over, and told by the policeman that the patient must be left alone. A similar occurrence took place twice more on the same station, within a year and seven months. On another occasion, he wanted to pay a visit, but lost himself before arriving, and was noticed walking about the neighbourhood, up and down, for about an hour and a half, being quite insensible; when he came to, he found himself with his eyes black, and lying on the pavement in a pool of blood. He had also "conscious fits," in which he behaved like a drunken man, and did outrageous things, feeling all the time utterly ashamed. In other fits, he fell down unconscious, and his whole body became rigid; he did not bite his tongue, but saliva kept running out of his mouth all the time. The urine had been expelled on only one single occasion. He was also subject to fits in which he was half conscious, and had a peculiar sensation of his tongue being tied; he could speak, but stammered unintelligible words, without any further symptoms. Occasionally the patient had an aura, when he suddenly felt a tingling in his feet, as if the legs went asleep; this sensation gradually proceeded upwards to the thighs, hips, abdomen, and chest, and when it reached his head he lost consciousness, and had a convulsive fit. Sometimes this aura lasted for a few minutes; at other times, however, it was instantaneous, shooting up from the feet into the head all at once. The greatest number of fits which the patient had had in a day was five, but he was rarely free from them for more than a week.

The patient had a good memory, and gave a very graphic account of his illness. He had been discharged from his situation, not for any fault of his own, but because the fits upset the other people in the office, and caused constant disturbance. He wrote a good hand, but had a wild look and a strange expression. The face was covered with acne pustulosa, owing to previous treatment by bromide of potassium. The patient was at times subject to sneezing fits, which came on early in the morning, and lasted a considerable time. His functions in general were normal; but there were hypertrophy and dilatation of the left ventricle, the apex beating in the sixth intercostal space. There was, however, no murmur. There were no other symptoms. He was treated with a mixture containing borax, digitalis, and bromide of ammonium, with pills of zinc and henbane; and for the acne pustulosa of the face, with the ammoniated ointment of mercury. The result was very favourable, as the patient remained free from attacks during his stay in the hospital, which extended over three months, a few slight "vacant turns" in the beginning of the treatment excepted; and the acne of the face was readily cured.

REMARKS BY DR. ALTHAUS.—Chief stress may be laid on the medico-legal importance of the clinical facts showing the presence of epileptic vertigo or automatism. There is only a short step from such a harmless condition, in which a patient goes on unconsciously winding up his watch for hours consecutively, to another in which he kicks bystanders or knocks them down, and from this state to another, in which perhaps homicide, suicide, rape, or arson may be committed, the condition thus merging into what is also called epileptic mania. The epileptic discharge in such cases affects more particularly the highest cerebral centres in the præfrontal lobes, representing the intellect and moral control, which remain for a time in a state of abeyance or paralysis; while the lower centres, and more particularly the central ganglia at the base of the brain, either do not suffer at all, or recover more or less quickly from the shock, and then, being probably in a state of hyperæsthesia, run off, as it were, to act automatically, and are totally deprived of the guiding control of the highest centres. Criminal responsibility can evidently not attach to patients of this class when under the influence of the epileptic discharge; and the bearing of a case like this on that of the convict Harry Patrick, commented upon in the BRITISH MEDICAL JOURNAL for January 2nd, is clearly very great. Although, epileptic automatism thus constitutes a very terrible affection, and a patient subject to it may end his life on the scaffold in the absence of precise knowledge, prognosis as to recovery is favourable, provided sufficient time be given for energetic treatment.

ROYAL FREE HOSPITAL.

ACUTE PNEUMONIA WITH PROFUSE HÆMOPTYSIS: DEATH: POST MORTEM EXAMINATION: NO LESION OTHER THAN PNEUMONIA TO ACCOUNT FOR HÆMOPTYSIS.

(Under the care of Dr. SAMUEL WEST.)

CHARLES Y., aged 29, printer, was admitted on October 11th. He had been laid up six years earlier, for four months, with rheumatic fever and pleurisy. He recovered from this, and remained well till five months before admission; since that period, he had been ailing, and had had a slight cough and shortness of breath, but was at work till his present illness began. On October 10th, he was seized in the shop with sickness, and brought up a good deal of blood; his breath became very short, and he was admitted to the hospital in the early morning. The temperature was then 100.2° Fahr., and it rose to 101° Fahr. a little later. The expectoration was frothy, and much blood-stained. The pulse was 120. The patient was tall, muscular, and well nourished. The skin was dry. There were sordes on the lips and tongue, and the complexion was a little sallow. The respiratory movements were shallow, painful, laboured, and 40 in the minute. At the left base, percussion was impaired, and little air entered. There was general crepitation over the rest of the left lung; but the patient was too ill to be completely examined. The urine contained a good deal of albumen.

On October 12th, he was somewhat better; the temperature was 100° Fahr., and he expectorated much less blood.

On October 13th, the temperature was 103° Fahr., the pulse 110, and the respirations 40. He brought up about five ounces of viscid bloody expectoration (almost pure blood). Loud rhonchus was heard over the whole of the right lung. The physical signs on the left side were the same as before. Six dry cups to the back seemed to give relief.

On October 14th, he was restless; the temperature was 104.2° Fahr., the respirations 40, and pulse 110. The sputa were less in amount, but more viscid, though they contained less blood. There were physical signs of consolidation at the left base. The temperature in the evening was 104.2° Fahr.

On October 15th, the temperature varied between 102° and 103.6° Fahr. The expectoration was still streaked with blood. The respirations were 44, and the pulse 100.

On October 16th, he was weaker. The pulse was 120, the respirations 40. The urine contained much albumen. The left side was dull at the base; vocal vibration and vocal resonance were absent. The breath-sounds were almost inaudible. There was some pericardial friction sound. The right side of the chest was tympanitic over the whole front, and the breath-sounds were very feeble. The posterior base was dull, with exaggerated breathing. The tympanitic resonance was thought to be due to complementary emphysema of the upper lobes, the lower having their tubes plugged.

On October 17th, he was restless and delirious. There was great dyspnœa, and frequent diarrhœa. The temperature was 101° Fahr., and slowly falling. The respirations were 40, and the pulse 120. Loud bronchial breathing was heard over the middle of the left lung. The

dyspnœa became greater, the patient grew weaker, and he died on the evening of October 18th.

At the necropsy, there was adherent pericardium and adherent pleura on the right side, both of old date. There were recent vegetations on the aortic and mitral valves. The left pleura contained about a pint and a half of turbid serum. The left lung was solid throughout, the lower lobe being in the stage of grey hepatisation, the upper in that of red. The kidneys were not diseased. The right lung contained in the apex an old calcareous nodule, but there was no cavity or old disease capable of accounting for the hæmoptysis.

Remarks by Dr. Samuel West.—The case was one of pneumonia, but the characteristic and unusual feature in it was the profuse hæmoptysis. This was the earliest symptom in the attack, and persisted throughout. It was so considerable, that the question was discussed of the existence of some special cause for it other than the pneumonia. The lungs were very carefully examined after death; but no sufficient lesion was discovered, other than the pneumonia, to account for it. I have never seen any case to compare in any way with the present in respect of the amount of hæmoptysis, several ounces of bright blood being expectorated for the first few days of illness.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 23rd, 1886.

George Johnson, Esq., M.D., F.R.S., President, in the Chair.

A Case of Thoracic Aneurysm, Treated by the Introduction of Steel Wire into the Sac. By W. Cayley, M.D.—The patient was a man, aged 48, who was admitted into the Middlesex Hospital on June 5th, 1885. He had been suffering from symptoms of a thoracic aneurysm, since November, 1884, but it was not till five days before his admission that a pulsating tumour made its appearance at the root of the neck, rising about three inches into the neck behind the right sterno-clavicular articulation. The patient was at first treated according to Tufnell's method, and given large doses of iodide of potassium. The tumour continued to increase in size, and it was evident that it must either soon burst externally, or extravasate among the tissues of the neck. On June 24th, Mr. Hulke introduced into the sac, through a fine cannula, forty feet of steel wire. This caused no constitutional disturbance or local pain, and this portion of the aneurysm became completely consolidated. Towards the middle of August, signs of the extension of the intrathoracic portion of the aneurysm—increasing dyspnœa, and severe paroxysmal cough—became more marked, and there was an increase of pulsation behind the sternum, and towards the left sterno-clavicular articulation. As it was evident that the aneurysm must soon prove fatal from pressure on the trachea, it was determined to endeavour to consolidate the part of the sac producing this pressure. Accordingly, on September 10th, Mr. Gould, in the absence of Mr. Hulke, introduced a cannula just above the left sterno-clavicular articulation, directing the instrument obliquely towards the middle line, and introduced 34 feet 9 inches of wire. No constitutional disturbance followed, but no relief was given to the symptoms, and the patient died in a paroxysm of dyspnœa on September 19th. On *post mortem* examination, a large aneurysm was found springing from the ascending part of the arch, and communicating with the vessel by a very large orifice; the whole of the upper portion was completely filled by a clot, embedded in which was the wire. The wall of the aneurysmal sac, where it projected into the neck, consisted only of a little condensed connective tissue. The lower portion of the sac, near its origin from the aorta, caused compression and flattening of the trachea, just above its bifurcation. The first operation produced the desired result in preventing the imminent rupture of the aneurysm. The size and connections of the sac rendered the second operation ineffectual.—The President congratulated Dr. Cayley and Mr. Hulke on their prolongation of the patient's life. He had seen all cases of large thoracic aneurysm under his care die, except one, and that was in a man of 70, who died of old age thirteen years after clear signs of a large thoracic aneurysm had shown themselves. The dangers from this treatment by the introduction of wire, he was inclined to think threefold; first, from the local irritation induced, as had happened in Mr. Moore's case; secondly, from embolism, which might take place in the brain or kidneys; and, thirdly, from the ulceration in the sac, which might be caused by the end of the wire.—Mr. R. Barwell could hardly think that the value of this method was as yet thoroughly determined. He believed that this was the ninth published case. The first was Mr. Moore's well known case; the second, a subclavian aneurysm, into which Dr. Levis had introduced horsehair; the third, a case of popliteal aneurysm, into which Mr. Bryant had also passed horsehair; the fourth, a case of innominate aneurysm, under Dr. Rubio, of Madrid, treated by wire, which showed no change of symptoms during the first four days, but after that was lost sight of, and must be presumed to have died; the fifth and sixth cases, under Baccelli; the seventh, a brachial aneurysm, under Van der Meulen, into which catgut was introduced, a proceeding which deserved considerate attention, as it avoided irritation; the eighth, a remarkable case of abdominal aneurysm, under Professor Loreta, which was treated by abdominal section and separation of the aneurysm from its surroundings, and the introduction of 6½ feet of wire. The case did well till the ninety-second day, when the man died suddenly of rupture of the aneurysm, just at its point of junction with its entrant artery. The aneurysm, after death, was found to have in part consolidated, a result he was inclined to attribute to its manipulation, rather than to the small quantity of wire introduced. The ninth case was this now before the meeting, of Dr. Cayley's and Mr. Hulke's, in which the man had survived the operation eighty-six days. The record could not be considered encouraging, and, for his own part, he had not been tempted to adopt the operation.—Dr. J. Liston Paul, whilst surgeon to the General Hospital at Madras, had had a case under his care in 1874, which he had treated in a somewhat similar manner. A native had been brought to him with a very large innominate aneurysm, bulging forward on the left side of the sternum; into this he had passed 15 feet of white cleansed horsehair. Slight pain and pricking over the tumour had followed. In three days the tumour had grown larger, and gave greater distress; on the fourth day the patient died in a convulsion. No search for emboli was made.—Mr. Bryant was very glad that this method of treatment was again brought under discussion, as he was disposed to think it applicable to more cases than was generally imagined. Of course it could only be thought of in those in which pressure, or manipulation, or ligature, was quite impossible. All such forms had but a faint chance; but in them the introduction of a foreign body should be attempted, if they were within reasonable reach. He preferred horsehair, or fishing gut, or catgut to wire; for the danger of irritation from wire was considerable. In his own case, to which Mr. Barwell had referred, the man was dying of ulcerative endocarditis; his treatment of the popliteal aneurysm with horsehair, had consolidated it, and had so far lengthened life that it had prevented death from its rupture, which was imminent. In applying the treatment to aortic aneurysm, the greatest difficulty would be in diagnosis; but, granted that that could be ascertained, he should consider the treatment most justifiable, and also in the case of abdominal aneurysm.—Dr. B. O'Connor inquired if any bubbles had been found in the aneurysms after this treatment.—Mr. Holmes said that he felt strong encouragement from Mr. Bryant's case, for the specimen showed clearly the progress that had been made towards cure; and Professor Loreta's case tended to the same conclusion. He could not agree with Mr. Barwell, that in that case the consolidation had been brought about by manipulation; a careful examination of the specimen showed the wire as the focus of the clot. The method had been originally suggested in a meeting of the Society, by Dr. Murray, of Newcastle, and he was under the impression that he had made some trials of it. To him they also owed the suggestion of the method of rapid compression under chloroform. There were many cases in which their choice was limited to two alternatives, treatment by electrolysis or by introduction of a foreign body. In his own experience, electrolysis had given purely negative results; others had done better with it, notably Ciniselli. In Mr. Moore's case, thirty-six yards of rather rigid wire had been used, and he had little doubt it was too much, and had set up inflammation; but he had no hesitation in recommending, with Mr. Bryant, either horsehair or catgut, and of the two he rather preferred horsehair, as not melting away.—Mr. Hulke disclaimed any credit for the paper, which was entirely due to Dr. Cayley, but was glad to find that the subject aroused attention. The President had suggested three dangers from the operation; the first was of local irritation. In Mr. Moore's case, the wire was of soft iron, which might easily have passed into the tube of the aorta, not tempered steel, as in Dr. Cayley's case. For his own part, he had still to learn any method of distinguishing whether the opening from the aneurysm into the aorta was large or small. The steel wire which he had used had been carefully coiled beforehand, on a mandril half-an-inch in diameter, and he presumed that it would coil up again within the aneurysmal sac. He passed the wire through a Southey's cannula, in which were lateral holes; when sufficient had been passed, the end was cut with some effort, and slightly bent; this bent end caught in a hole in the cannula, and when the cannula was withdrawn, the end of the wire was left out, and pinned the coil of

the wire in the aneurysm to the chest-wall. That seemed at first unfortunate, as leading to some bleeding; but very possibly its counterbalancing advantages were greater, for it made it impossible that the coil of wire should fall from the aneurysm into the main stream of the aorta. If horsehair or catgut were used, he could not feel sure how or where they would travel in the aneurysm, nor could they be made certainly aseptic; catgut might be carefully treated, and yet give deadly results if it had been taken from animals dying of *milzbrand*. Of the possible methods of treatment, he considered the injection of ergotin in the neighbourhood of the aneurysm, as suggested by Von Langenbeck, as no longer worth discussion; the treatment of electrolysis in his own hands had proved positively disastrous; if the needles used were fine, they grew hot, and caused sloughing; if they were insulated, great force was needed to push them through the sac of the aneurysm. The only remaining treatment was that by wire, and the arguments for that were in some cases strong.—Dr. CAYLEY considered that the risk of embolism, which the President had suggested, was not serious; it had occurred in Mr. Moore's case, not from the treatment of the aneurysm, but from the ulcerative endocarditis. He admitted that it was impossible to be certain in any diagnosis of a large opening into the artery from a small one; but, roughly speaking, a louder bruit indicated a narrower opening. He was able to assure Dr. O'Connor that there were no bubbles either in his case or in Mr. Moore's.

On the Changes which occur in Bone and Soft Tissues after Amputation of a Limb, and from Certain other Conditions. By GEORGE POLLOCK, F.R.C.S.—The changes to which the author referred included not only such as were met with in the bone of a stump of an amputated limb, and in parts affected with paralysis, but also those observed in parts which had extra work thrown upon them in compensation for the loss of other parts with which they were originally associated and had to act. The differences found in the two lower extremities of an old man, who had undergone amputation of one thigh many years before death, were described. On the amputated side, the femur was found wasted, and the neck joined the shaft at a much more open angle than natural, while on the other side the femur was hypertrophied, and the neck joined the shaft at a right angle. The causes and results of these changes, and of the corresponding changes in the two sides of the pelvis, were described. The conditions observed in a man whose thigh had been amputated in infancy were related, and reference was made to observations by Mr. Hilton on the changes that followed amputations. The bones of the right extremity from a case of paralysis were also exhibited. They were greatly atrophied, and had undergone fracture; while the excessive hypertrophy which occurred in one limb after amputation of the other was illustrated by a well marked case. The views of various writers as to the causes of the changes in these cases were given, and the author remarked that the alterations in both muscle and bone were often more rapidly effected, and also more extensive, than was generally supposed. He drew prominent attention to the fact that in the cases related two distinct and different processes—the one atrophy, and the other hypertrophy—went on side by side, and asked whether this fact might not admit of practical application; whether, in appropriate cases, by a careful combination of exercise, position, and rest, together with the use of mechanical appliances, something might not be done to accelerate improvement. A table of specimens was added to the paper.—Professor HUMPHRY called attention to a specimen he had brought from Cambridge, at Mr. Pollock's request. The right lower limb had been amputated; the pelvis on the side of the amputation was greatly atrophied. The circle of the brim of the pelvis was not at all diminished, but the processes from the girdle had suffered. The ala of the ilium was atrophied, and also incurved from the absence of the pull of the gluteal muscles, to balance the pull of the abdominal muscles; the descending ramus and the tuber ischii were both atrophied; the acetabulum was much diminished, showing that the amputation had been performed in early life. The femur was short, the neck more open than usual. The common angle of the neck and shaft of the femur was 140°; during growth, it went down gradually to about 130°. That might be in part due to pressure, though it must be remembered that in all other cases growth took place against pressure. In adults the angle was not constant; it was greatest in tall men, least in short women. He had measured the angles in many femora, and had come to the same conclusion as Meckel, that the diminution of the angle, often spoken about, was overrated. In a specimen of old femur, which had been amputated in a boy, and had swung useless all his life, the angle was 150°. In another case of hydrocephalus, where the child had always been recumbent, the angle was 160°. There was no traction to induce these abnormalities, and he felt them hard to understand. If he found a case in which the angle had opened, he was led to conclude that amputation had been done early in life. He showed a specimen also of a stump resulting from amputation, which had been performed thirty-six years before death, in which the stump was quite normal.—Mr. J. H. MORGAN brought forward specimens of the heads of the femora, from a man who had had one leg amputated twenty-five years before his death. The sound femur, though cut off just at the same level as its companion, was double its weight. The difference in the angle of the neck was very slight.—Mr. T. SMITH was inclined still to maintain the classical position that the angle of the neck of the femur to the shaft lessened, as a rule, with age, owing to the weight of the body; he found no difficulty in illustrating that, and imagined that when, by amputation the weight was taken off one femur, it tended to revert to its childlike form.—Mr. HOWARD MARSH would ask Professor Humphry a question as to the recurrence of conical stumps. He had seen Mr. Savory amputate a crushed limb with flaps, which seemed at the time superabundant; yet a conical stump formed in four or five months, and, to remedy it, a second operation was performed; but, in spite of it, the conical stump recurred. They came to the conclusion that it was because in the patient, who was a boy, the growing point of the epiphysis was above the amputation. As to the curves of the neck of the femur, he was accustomed to think of the smaller angles going along with strength; they were commoner in blacksmiths than in poets, and perhaps that was due to the tendency of the unused limb to revert to a fœtal type.—Professor HUMPHRY was inclined to think the conical stump was more probably due to a retraction of the soft parts than a growth of the bone. He hesitated to accept Mr. Smith's explanation of the bending of the neck of the femur as due to the weight of the body, for there was no parallel instance in any other part of the body.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 22ND, 1886.

R. DOUGLAS POWELL, M.D., F.R.C.P., Vice-President, in the Chair.

On the Combined Use of Cucaine and Nitrate of Silver in Certain Superficial Affections of the Eyes.—Mr. BRUDENELL CARTER read a short paper on this subject, to the effect that, while local applications of nitrate of silver were often of great service in congestive and ulcerative affections of the eye, it was generally quite undesirable and unnecessary to allow its action to spread beyond the particular areas; one of its effects being, he said, to strip off the corneal epithelium, when allowed to come into contact with it. It was generally somewhat difficult to limit this action, owing to the pain caused by its use, and the accelerated secretion of tears which ensued, and it was to mitigate these conditions that cucaine was so useful. By destroying sensation temporarily, it allowed the operator to apply his remedy with all the delicacy and certainty he could desire, and the lacrymal secretion did not increase so as to interfere with what he was doing.—Mr. JULER would have liked to hear some expressions of opinion as to the physiological action of cucaine, the discovery of the properties of which drug he considered to be scarcely inferior in importance to that of chloroform.

Notes on Severe Endocarditis, with Special Reference to Cause and Treatment.—Dr. A. E. SANSOM read a paper on the above, giving notes of several cases of the disease, which he preferred to call severe or grave endocarditis, instead of malignant, a term which, he thought, tended to give rise to confusion. Under this head, he included the aberrant forms of endocarditis, not being secondary to rheumatism, etc. The result of experiments on animals had been to prove that, although injections of the micrococci-cultivations caused serious local and constitutional symptoms, they did not produce the vegetative or ulcerative endocarditis unless some artificial irritation of the valvular structures was resorted to simultaneously. In two cases of voluntary self-inoculation in healthy men, free from cardiac symptoms, the same result was obtained. Dr. Sansom hence was disposed to consider that the disease was due to the ravages of a micrococcus acting on structures which had been, or still were, diseased. Hence the peculiar danger of septicæmia after childbirth, in women who suffered from valvular disease. The same thing applied to cases of osteomyelitis, etc., under similar circumstances. He had used thirty-grain doses of sulpho-carbolate of sodium with marked success.—Dr. STEPHEN MACKENZIE suggested the term essential as an improvement on "grave," in the same sense as it was used in "essential anæmia."—Dr. SIDNEY PHILLIPS objected to the term "essential," which, even in reference to anæmia, was rather misleading than otherwise. Endocarditis was, he said, admitted to be almost invariably secondary to some other disease.—Dr. GILBART SMITH alluded to several cases of his own characterised by periods of quiescence, followed by exacer-

ations, and ending in recovery.—Dr. SANSOM said he preferred his wn expression for those forms of the disease not associated with eumatism.

GLASGOW AND WEST OF SCOTLAND BRANCH.

ANNUAL MEETING, JANUARY 30TH, 1886.

JAMES MORTON, M.D., President, in the Chair.

Dry Dressings.—Mr. MAYLARD read a paper on this subject, after me observations on the value of bichloride of mercury as an anti- ptic; the kinds of dressings employed were described. The ordi- ary requirements for any suitable case consisted of absorbent tton-wool and Gamgee's tissue, both first saturated in a 1 to a 1,000 lution of mercury, then dried, and a coarse muslin bandage. The ses suitable for the dressing were those where operation had been rformed, in whom the wound would be aseptic from the first. The inciples to be attended to referred both to the operation and to the ter-treatment; in the former, it was needful to secure every bleeding int, to wash the wound well with a 1 to a 1,000 bichloride, and then y it as much as possible. The edges of the wound must be brought curately together (where possible), and drainage effected by some sily absorbed material; strands of carbolised gut in superficial unds; Macewen's decalcified chicken-bone tubes in deep. In the ter dressing, iodoform was to be first dusted over, then a small d of the prepared absorbent wool directly applied, and over this two ers of the impregnated Gamgee tissue. In applying the bandage, e edges of the dressing must be firmly secured, but only slight essure produced upon the wound. In this method of dressing, air uld freely permeate the bandage, tissue, and wool, so drying up e serous and bloody discharge, and keeping the part at a tempera- re equal to that of the other covered regions of the body. The ssing should not be removed (supposing no untoward symptoms nifest themselves, which were unlikely if proper care were taken render the wound perfectly aseptic from the first), until healing s supposed to have taken place. Cases were given illustrating the cessful results of the treatment. Roughly compared with the linary Listerian dressing, it was calculated to be five or six times cheap.

Radical Cure of Hernia.—Dr. KNOX described Fitzgerald's opera- n for the radical cure of hernia, which he had been in the bit of performing for the last two years. He pointed out simplicity of the operation and its great advantage in ng subcutaneous, and also stated that its effects were all it could be wished so far as he had ascertained. It was how- r, necessary to keep the patients under observation for some rs, before a decisive judgment on this or any other operation for the lical cure could be given. He also showed a patient who had been rated on successfully twelve months before, for the radical cure of a y large ventral hernia, by abdominal section. The sac had been rely removed, and the resultant cicatrix was linear and perfectly n.

Renal Abscess: Nephrotomy.—Mr. H. E. CLARK showed a patient, s. P., with nephritic abscess. The ureters were catheterised by Newman, on December 23rd, 1885. His analysis showed the ne from the right kidney to be normal, but that from the left to alkaline, albumen and pus being present in abundance. Nephro- y was performed by Mr. Clark, on January 4th, by an incision the left loin; about one pint of pus was evacuated. Attention s specially called to the variations in the temperature, and in the ount of urine passed. The latter was as low as 14 ounces in nty-four hours on one occasion, but since the operation it had dually increased. There had been very little discharge from the and, but there was a considerable leakage of urine by it. It con- uence of this, removal of the kidney was contemplated as soon as icient contraction had taken place.

Pulsatile Tumour of Left Orbit.—Mr. CLARK showed this patient. gital compression of the left common carotid artery (five minutes ry three hours) was tried for four days, but without any improve- nt. Ligature of the artery was performed on December 11th, 5.

Sarcoma of Breast in a Male.—Mr. CLARK showed a man, James with sarcoma of the breast, of about fourteen months' duration. It increased in size since his admission to hospital.

Progressive Muscular Atrophy.—Dr. WOOD SMITH showed a case of gressive muscular atrophy, combined with secondary lateral rosis in the spine, occurring in a married woman aged 45. The ase commenced eight months ago, and had steadily progressed, h unfavourable symptoms.

Pityriasis Rubra or Dermatitis Exfoliativa (Wilson).—Dr. WOOD SMITH showed this case. The patient, a girl aged 15, had been exposed to great changes of temperature in a bleach-field. Her illness began six weeks ago, with many small spots on the arms; these spread over her body and coalesced in about three weeks. The skin had remained dry, brilliantly red, and there had been profuse desquamation. Near the root of her nails a slight ridge existed, and the growth subsequent to the illness exhibited a depression.

Paroxysmal Hæmaglobinuria, or Intermittent Hæmatinuria.—Dr. WOOD SMITH showed a case of this disorder in a lad who had been for years under occasional supervision. The symptoms only occurred when the patient was exposed to cold, and consisted in shivering, more or less pain in the region of the kidneys, and a desire to pass urine, which at these times was of a port-wine colour, acid in reaction, highly albuminous, and of a specific gravity of from 1025 to 1032. The anæmic appearance of the lad, the microscopic examination of the urine, and the condition of the eyes, as shown by the ophthalmoscope, were also referred to.

Purpura Rheumatica.—Dr. ROBERTSON showed this case. The patient was a young man, aged 26. His legs and arms were studded with numerous petechiæ, and there were similar spots on the back of the trunk. This was the third crop of eruption since his admission into the ward. Coincident with the first one, there was an attack of sub-acute rheumatism, affecting knees, ankles, and elbows. There was cardiac disease of some years' standing which arose in connection with rheumatic fever.

Apparatus for Applying Heat and Cold.—Dr. ROBERTSON showed an apparatus for applying heat and cold at any required temperature to the spine. It consisted of a long bag divided longitudinally into two compartments with inlet and outlet tubes, the former being attached to the tap at the bottom of a vessel containing hot water, standing by the patient's bedside a little above the level of his body. The bag was being applied daily for three hours to the dorsal and lumbar regions of the spine, and water at the temperature of 130° was slowly circulating through it. The patient's illness was of about eighteen months' standing, and was regarded as chronic meningitis, with slight implication of the motor columns of the spinal cord. He was a man about 50 years of age. He said that he had experienced great relief from the pains and other unpleasant sensations in his limbs, since the bag was applied.

Blood in Anæmia.—Dr. ROBERTSON described the condition of the blood in a case of severe anæmia. The instrument used was the hæmacytometer of Dr. Gower. On an average, there were not more than twelve corpuscles in each of the little squares of the instrument; and, as in health there were about fifty, it followed that in this case there was only about a fourth part of the proper number. The reduction involved the white as well as the red corpuscles. Dr. Robertson stated that last winter he had a case under his care, in which this aglobulism was still more pronounced. In that patient's blood, there was only about one-tenth of the proper relative number of corpuscles.

Lead-poisoning.—Dr. ROBERTSON described three cases of poisoning by lead. The patients were young women, from 16 to 22 years of age. Two of them wrought in works for the dyeing of yarn, and prepared it for packing. Considerable quantities of fine dust were thrown off into the air in this process, and would seem to have been inhaled to some extent by the workers. Besides, their hands were constantly soiled by it. Both lead and arsenic were in the dyes, but the symptoms had been quite distinctive of the poisonous action of lead. One of the girls had severe general convulsions both before and after admission into the hospital. She was now, however, well and about to be dismissed. The other patient had suffered from severe mental disturbance, noisy delirium for the first three weeks, and, since, a certain amount of incoherence, which was still observable. It was anticipated that the mind would fully recover, but the girl was blind; and Dr. F. Fergus, who examined the eyes with the ophthalmoscope, had reported that there was marked atrophy of both optic discs. At first, she seemed to be quite deaf, but now hearing is partially restored. The third patient worked in a pottery, and appears to have had her system poisoned by a glaze containing lead used in her employment. The symptoms were entirely abdominal in this case; colic, constipation, vomiting, etc. She had well-nigh recovered.

General Paralysis.—Dr. ROBERTSON described this case. The defect of speech and enfeeblement of mind were well marked, but there were no grandiose delusions. After pointing out the symptoms, Dr. Robertson observed that it was remarkable how often practitioners failed to diagnose this disease, even when the features were pronounced and distinctive.

Locomotor Ataxy.—Dr. WALLACE ANDERSON showed a case of locomotor ataxy with Charcot's joint-lesion, in a man aged 50. Both hip-joints were affected, the femur on each side being dislocated

upwards on the ilium. He walked, of course, with some difficulty, but with no pain, and willingly made the joints crack for the edification of the onlookers. The general affection was of thirteen years duration, and, in the early stages, the severe lightning-like pains in the lower limbs had been a prominent symptom.

Atrophy of the Lung.—Dr. WALLACE ANDERSON showed a case of marked atrophy of the left lung in a boy, aged 17. It was diagnosed as cirrhosis of the lung, the history, so far as it went, pointing to a recent origin, and to no acute pulmonary affection. Only for the last year had he suffered from general weakness and loss of flesh. He had a slight cough, without sputa; the temperature was normal.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 11th, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Double Wrist-Drop and Paralysis of Extensors of Feet (Lead).—Dr. PORTER exhibited a file-cutter suffering from symmetrical lead-palsy of the thumbs, wrists, and ankles. He had had attacks of lead-colic; his muscles were generally flabby and wasted, and he showed the blue lead-line. The muscles principally affected in the lower extremities were the extensors of the toes, and the peroneus tertius; the tibialis anticus was so to a less extent. Dr. Porter drew attention to the prominence of some of the carpal bones in the paralysed hands. The uncounteracted flexors tending to produce a rounding of the dorsal surface of the hand, stretching and weakening the ligaments, and the paralysed and atrophied extensors failing to give a proper support to the small joints, a certain amount of displacement of the small bones occurred.

Esmarch's Band in the Removal of Foreign Bodies, and in the Bites of Rabid Animals.—Mr. B. WALKER remarked on the value of Esmarch's band, in minor as well as in major operations. Where foreign bodies were embedded in the limbs, if sufficient information were obtained as to their situation, this band, or its substitute, would materially assist in an endeavour to remove them. A flat band should be used in the first place, to deprive the limb of blood, before applying the tubular one for constriction. In the case of a bite from a rabid dog, where complete arrest of circulation was desirable, this band was most efficacious. Any appliance should be elastic; a man's ordinary braces, under an emergency, would be a good substitute.—The PRESIDENT approved of the use of Esmarch's band, as proposed.

The Electro-magnet.—The PRESIDENT drew attention to the value of Snell's electro-magnet, and also of a magnetised needle, as aids to the detection of pieces of steel or iron.—Mr. LOCKWOOD mentioned the case of a man, who applied at the hospital, asserting that a piece of steel was in the urethra. The finest point of Snell's electro-magnet was introduced, and the portion of steel extracted.—Mr. SNELL had always anticipated the electro-magnet would be found of service in general, as well as in ophthalmic surgery.

Typhoid Fever: Death after Eight Months.—Mr. LOCKWOOD related this case, occurring in a woman, aged 22. She had been an inmate of the workhouse infirmary for typhoid fever in May last; and, on leaving in September, she still had a high temperature at night, and a great deal of pelvic trouble. She was admitted into the hospital, under the care of Dr. Thomas, on October 22nd. She was pale, anæmic, and much emaciated; there was diarrhœa; the abdomen was tympanitic all over, with tenderness over both iliac regions; there was a swelling in the left, and gurgling in the right. She lost flesh during her time in the hospital; diarrhœa was intermittent, and the stools were sometimes stained with blood. She had vomiting, especially at the latter part of her life. She gradually sank, and died on December 20th. The urine was albuminous. At the necropsy, the pelvic organs were found adherent. Both ovaries had undergone cystic degeneration. In the ileum, seven or eight ulcers were found extending from the cæcum upwards for two inches. The left kidney was very large; the right kidney was completely riddled with cysts, and the suprarenal capsule was large, and, on section, was not unlike the appearance of those bodies in Addison's disease.—Dr. THOMAS, at the outset, regarded the case as one of peritonitis, probably tuberculous, and not one of recurrent typhoid fever. He had never met with a satisfactory case of recurring typhoid. An additional reason for not believing in the recurrent attacks of typhoid was the difficulty in connection with the germ-theory; the bacilli being exhausted, there could be no renewal.—Dr. MARTIN had observed a case with three well marked relapses. The periods of remission extended, in one instance, to fourteen days, and, in the other, to eleven days. With the relapse, the symptoms recurred. In the first relapse, the rash was unquestionable.—Dr. DYSON had seen Dr. Martin's case, and regarded it as a typical example of typhoid fever. He saw no difficulty with the germ-theory with regard to recurrent attacks of enteric fever. Remission and convalescence having set in, a more generous diet would be prescribed, the patient's powers would be renewed, and therewith the energies of the bacilli would be stimulated.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 3RD, 1886.

J. HOLMES JOY, M.D., President, in the Chair.

Healed Phthisical Cavity.—Dr. FOXWELL showed a case of healed phthisical cavity, in a man who had, some months previously, been in the General Hospital under his care for repeated hæmoptysis, continuous pyrexia, and considerable excavation at the right apex, and who had now for two months done his work as a commercial traveller's porter. At present, there were no signs by which the existence of a cavity could with certainty be diagnosed, owing to the amount of fibrotic contraction; nor was there any indication of progressive disease.

Functional Anæsthesia of Hand.—Dr. SUCKLING showed a man who had been under his care, suffering from complete anæsthesia of the left hand. Ten months previously, in lifting an eighteen-gallon can of milk with a fellow-porter, his assistant dropped the can, and the patient suffered a severe strain of the arm. Anæsthesia and paresis of the hand immediately followed. There was no trophic or electric change, and the only symptom that might have indicated actual injury to the roots of the brachial plexus was a slight dilatation of the left pupil, which was possibly due to irritation of the root of the first dorsal nerve. Dr. Suckling concluded that the case was one of functional hyperæsthesia, and probably due to hypochondriasis, the man seeming depressed. The functional nature of the case was proved by his rapid recovery after faradisation, and by the fact that if, when blindfolded, a mark were made some distance below the line where he said he could feel, when the bandage was taken off, he always felt down to this mark; so that a daily diminution of the area of anæsthesia was produced by deceiving him in this manner.

Flat-Foot.—Mr. BARLING showed a youth on whom he had operated for flat-foot. The deformity had arisen after acute rheumatism three years previously, and was of the most severe kind, especially on the right side. The left foot was treated by forcible manipulation; the right by Ogston's operation, as the tubercle of the right scaphoid bone prevented restoration of the arch until it was mostly removed. The arch of each foot was now excellent as far as appearances went, and the patient could walk some miles without distress; but, although there appeared to be bony ankylosis on the right side, yet that was, from the patient's statement, the weaker foot. It was, however, the worse before treatment.

Effects of Antipyrin on Temperature.—Dr. SAUNDBY exhibited the temperature-charts of two cases of pneumonia, and two cases of enteric fever treated by antipyrin. The temperature had been taken simultaneously in the rectum and in the axilla, and the results showed that the curves were almost completely parallel. Exceptionally, a slight fall in the axilla was accompanied by no fall, or even a slight rise, in the rectum, but the general course of the temperature was the same in both places; the observations were made in some cases every hour, in others every two hours. Dr. Saundby referred to a paragraph in a medical paper, where Professor Jaccoud was made to assert his disbelief in the utility of antipyrin, on the ground of its heat-reducing effect being solely peripheral, the rectal temperature remaining the same, or even rising while the axillary temperature fell. He believed that these charts disproved this assertion, and were evidence of the powerful antipyretic effects of this drug.

Mr. WHITTENDALE showed a case of movable kidney.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 3RD, 1886.

JAMES HARDIE, F.R.C.S.Eng., President, in the Chair.

Hospital Battery.—Dr. DIXON MANN showed a hospital battery for diagnostic purposes, fitted up with larger sized Leclanché cells than those in general use. The battery, which was mounted on wheels, included an induction-coil, and was furnished with a galvanometer graduated in degrees of current. He also showed a small portable testing battery composed of a new form of chloride of silver cell. Dr. Mann made some remarks on the necessity of using electrodes with interruptors for electrical testing, and illustrated his remarks by exhibiting several kinds of hand-interruptors.

Excision of Wrist.—Mr. WRIGHT showed a child, aged 5, in whom the whole carpus, except the pisiform bone, had been removed, the bones

of the fore-arm and metacarpus being left intact. Movement and power were almost as good as on the other side. Tubercular synovitis, with disorganisation of the joints and breaking down of some of the carpal bones, existed before operation. The wounds had been healed for five months. A single straight dorsal incision on the radial side of the common extensor (Langenbeck's operation) was the one employed.

Spina Bifida.—Mr. SOUTHAM showed a case of spina bifida in an infant, successfully treated by injection with Dr. Morton's iodo-glycerine solution.

Optometer.—Dr. MULES exhibited Couper's magazine optometer.

Case of Diabetes Insipidus (Specific Cerebral Disease).—Mr. COATES showed a patient who had recovered from diabetes insipidus. The patient, a male, gave no history or previous symptom of syphilis, but he had an obstinate gonorrhœa (?) five years before. His illness began six months before he came under observation, with the passage of large quantities of urine (as much as two and a half gallons in the twenty-four hours), great thirst, severe headache, vomiting, and defective vision with the left eye. When first seen, the great headache confined him to his bed; he was passing between eight and ten pints of urine daily, and drinking an equal quantity of fluid, and he was almost blind with the left eye, without any obvious or ophthalmoscopic cause. The urine, which contained neither albumen nor sugar, had a specific gravity of 1002. The case was regarded as one of specific cerebral disease, and was treated with gradually increasing doses of iodide of potassium, and with mercurial inunctions. At the end of four months he was free from headache, the polyuria had disappeared, the specific gravity of his urine was 1012; the defective sight was gradually improving, he could walk about quite comfortably, and he felt as well as ever he had done before.

Case of Perforation of the Vermiform Appendix, followed by Acute Cæcal Abscess: Diffuse Peritonitis: Operation: Death.—Mr. COATES related the case of a young woman who was suddenly seized with acute abdominal pains. These subsided, and she was able to resume her duties for twenty-four hours. The pain returned, being very severe on the right side of the abdomen; and, as she was constipated, powerful purgatives were freely administered by her friends. On the fifth day she was seen by Mr. Coates, who found her suffering from acute peritonitis, with tympanites and exaggerated pain over the cæcal region; she was very ill, and gradually became worse. The tympanitic bowel obscured any swelling in the right iliac region; but, a deeply seated sense of resistance in that neighbourhood daily becoming more marked, chloroform was administered on the ninth day. The existence of fæcal pus having been demonstrated by the aspirating cannula deep down underneath the distended bowel, a diction was made, and about five ounces of fæcal pus were evacuated from a cavity around the cæcum, from the anterior of which a small one was removed. The cavity had an opening into the peritoneum. It was thoroughly cleansed, and drainage-tubes were inserted. After the operation, the acute symptoms were relieved; but the patient gradually sank, and died in twenty-four hours.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 5TH, 1886.

T. R. JESSOP, F.R.C.S., President, in the Chair.

Formation of Cardiac Thrombi.—Dr. CHURTON showed a thrombus from the apex of the left ventricle, from a man, aged 28, and referred to a similar specimen shown by him at the last meeting. The naked eye and microscopic appearances in the present case supported his opinion that endocarditis at the apex preceded the formation of such a clot, which was more adherent to the endocardium than many false "membranes" were to the surfaces beneath them. The clot had softened much, and had become a white thin-walled cyst full of puriform fluid. The patient also had subacute nephritis, atheromatous aorta and intra-pulmonary hæmorrhages.

Microscope.—Dr. DE BURGH BIRCH showed Lewis Wright and Newman's lantern-microscope, as an "educational appliance," and demonstrated on a screen the circulation in a frog's mesentery, with the definition of 150 diameters.

The Uses of Electricity in Diseases of the Œsophagus.—Dr. JACOB read a paper on this subject. He gave an account of several cases of spasm and of paralysis where this agent had been of use. It was applied locally by means of an œsophageal rheophore. He also showed Hecht's electric cautery for the throat and nose, manufactured by Albrecht, of Tübingen, which he had found of great service in treating granular disease of the pharynx. He remarked on the comparative painlessness of this form of cautery, patients much preferring it to the caustics in common use.—Mr. FLETCHER LITTLE referred to a case of a lady cured of long standing dysphagia by faradism, applied to the back and upper part of the sternum by large rheophores, and spoke of the advantage of the latter.—Dr. MAJOR urged the use of exact measurements (milleampères) in the use and record of cases where electricity was used.

Scarlet Fever terminating fatally on the Ninth Day.—Dr. SPOTTISWOODE CAMERON read notes of this case. The temperature had fallen steadily till the seventh day, when it rose to 101°, and the following day to 102°. There was no throat or kidney complication; and, on *post mortem* examination, the only macroscopic lesion was a passive congestion with blood, which, exposed for two hours to the air in the sections of the viscera, showed no disposition to redden. The number of the blood-corpuscles was below the average, but not sufficiently so to account for the cyanosis which immediately preceded death, or for the *post mortem* condition of the blood. Dr. Cameron looked upon the case as showing an altered condition of the hæmoglobin.—Dr. JACOB recommended the more frequent use of the spectroscope in the examination of the blood in such cases, and suggested the possibility of certain morbid poisons causing changes in the hæmoglobin which should render it incapable of oxidation.—Dr. HUTCHINSON held that stasis might begin centrally or peripherally, and suggested that the latter was the case in Dr. Cameron's patient.

Unusual Eruption in Scarlet Fever.—Mr. RICHARDSON reported this case, which occurred in a boy aged 5. The eruption appeared on the second day. It was confined to the anterior surface of the body, from the umbilicus to the upper fourth of the thighs; it was of a dark brownish purple colour, not removed by pressure; the margin being sharply defined, studded with round flattish vesicles of a pearly yellow colour, largest in the centre of the abdomen, decreasing from one-sixth of an inch, and ceasing altogether about an inch from the margin. The fever was not great; temperature 99°. There was a slight blush on the fauces and white tongue; no catarrh or enlarged glands. The vesicles gradually dried up, the purple colour changed to brown, and the cuticle peeled off in large patches; the skin on the eighth day being smooth and pinkish, as after a blister. Desquamation of the rest of the body did not commence until after the eleventh, and was completed by the twenty-fourth day; the scales being small, except on the soles of the feet and palms of the hands. There were no renal symptoms. Mr. Richardson remarked on the great mildness of the epidemic of scarlet fever which had been lately prevalent, and the great absence of renal disease, even though there had been great exposure to cold.—Dr. CAMERON said that at Huddersfield, under their compulsory notification clause, 240 cases had been reported in the last six months, with 11 deaths. In the Fever Hospital there had been 200 cases, with 4 deaths. The mortality throughout the country had been 5 per cent. in the last six months.—Dr. HUTCHINSON said that at Scarborough the recent cases of scarlet fever had been of a most severe type, with almost invariable renal complications, in spite of the most assiduous care.

Menière's Disease treated by the Compressed Air-Bath.—Mr. J. FLETCHER LITTLE read notes of this case. The patient, a professional man, suffered from syphilis before marriage. Since his marriage he had had several children, all of whom were free from specific taint. Menière's disease was diagnosed by a London aural surgeon in the spring of 1885, and anti-syphilitic remedies were ordered. Last autumn, deafness had much increased. The general health was very indifferent, and the spirits greatly depressed. The compressed air-bath, at one and a half atmospheres, was tried, with immediate improvement. After two baths, the hearing had greatly improved, and the general health was better. An interval of six weeks had occurred without any return of the symptoms of Menière's disease. The patient was now taking iodide of sodium.—Dr. BELL spoke of Menière's disease as a symptom of many conditions, rather than a separate disease.—Mr. MAYO ROBSON spoke of the connection of the disease with disease of the semicircular canals, and mentioned a case where the symptoms came on suddenly and acutely in a man on hearing an organ in church. The case seemed to be syphilitic in origin, and was cured by iodide of potassium.—Dr. CHURTON referred to a case which, after being given up as hopeless by many medical men, was cured by severe counter-irritation applied by a quack.

MEDICAL MAGISTRATES.—The Lord Lieutenant of Ireland has been pleased to confer the Commission of the Peace for the borough of Londonderry on Thomas Davis, M.D., of Londonderry.—Mr. Augustus R. Ticehurst, of St. Leonard's-on-Sea, has been appointed by the Lord Chancellor a magistrate for the borough of Hastings.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

WEDNESDAY, FEBRUARY 3RD, 1886 (SECOND MEETING).

GEORGE BUCHANAN, M.D., President, in the Chair.

Discussion on Cancer (continued).—Mr. A. ERNEST MAYLARD confessed to a feeling of considerable difficulty in accepting the limited view usually held by those who acknowledged the epithelial origin of carcinoma. Since the appearance of Waldeyer's admirable paper fifteen years ago, most pathologists had accepted those views therein expressed; and, while believing that every carcinomatous tumour could be traced to an epithelial source, they were frequently forced to admit its primary appearance in regions accredited by histologists to be destitute of true epithelium. Dr. Coats had pointed out its appearance primarily in the peritoneum and pleura, but these were seats where the surface-cells were neither accepted as epithelial, nor believed by embryologists to be derived from the epiblast or hypoblast, the usually acknowledged source of the true epithelial cells. Mr. Maylard asked, if one accepted the secreting cells of the kidney or the testicle—in both of which primary carcinoma occurred—as epithelial, why should not the same term be extended to the lining cells of the peritoneum, pleura, arachnoid, lymph-spaces and lymph-vessels, which, like the kidney and testicle, were, according to embryologists, of mesoblastic origin? The cells lining the peritoneum were in function like those on the surface of the skin; and it would be no more a misnomer to apply the term epithelium to these cells, than it was to apply it to the secreting cells of a gland. The embryonic theory was an untenable one, insomuch as primary carcinoma made its appearance in organs derived from the mesoblast, as it did from the other two layers of the blastoderm. Fewest exceptions, if indeed any, would follow the extension of the term epithelium to any surface-cell. Carcinoma would then, possibly, be always traceable to such cells; whether they lined the wall of a lymph-vessel, the lining of the large serous cavities, or the surface or involutions of the skin and mucous membranes. Mr. Maylard leaned to the opinion that carcinoma was, to a large extent, a natural process of senile decay. While some local cause, as irritation or inflammation, was most frequently the immediate incentive to new growth, the predisposition of the tissues was the feature most needful for extension and dissemination; as, in declining years, of the body generally, or of particular parts, as the breast and uterus, locally. In the cases of early development of carcinoma, it was argued that there existed a possibly inherited predisposition of the tissue to prematurely lead to those changes which naturally required years to come about. Mr. Maylard remarked that he believed in the heredity of carcinoma; not that it consisted in a transmission of any actually diseased tissue, but only in a predisposition of certain tissues, to allow the rapid and extensive development of normal epithelium, when once it had been induced to break beyond its accustomed limits. Mr. Maylard supported Dr. Coats in his acceptance of Thiersch's view, believing that the primary invasion of the subepithelial tissue by the overlying epithelium, was due to a loss of resistance of these underlying tissues. In favour of the opinion that a cancer-cell was only a normal epithelial cell altered through excessive nutrition, Mr. Maylard gave an account of some careful observations which he had made of fresh cancer-cells. Breasts removed for scirrhus were conveyed in a hot bath to the laboratory, where, within a few minutes after removal, scrapings from the edge of a section were examined on the hot stage. In this way, the cells were observed in as natural a condition as possible. Mr. Maylard gave his observations at great length, and his conclusions were, that there appeared nothing which lent any support to the supposed specificity of a cancer-cell. The mode of secondary infection was discussed; and the view, that disseminated growth were repetitions of the primary seat, was supported by reference to numerous microscopic sections of infected lymphatic glands. Particular attention was drawn to a case of secondary infection of the sublingual salivary gland, where, some months previously, the tongue had been removed for carcinoma. Here the squamous epithelial cells were seen in the ducts and acini of the gland, the latter retaining perfectly their normal spheroidal-celled lining; and in places where the acini were enormously distended, the lining cells were flattened up against their wall. In no place was there the least appearance of infection of the advancing epithelial cells. The natural inference seemed to be, that the tumour had sent its radicles from the floor of the mouth into the ducts of the gland, and so on into the acini. Mr. Maylard, in concluding his remarks, alluded to the question of operative interference. Believing in the local seat of the first appearance of cancer-growth, he held that all that was essential for cure was an operation at a sufficiently early date, and of a sufficiently radical character. To remove a tongue without taking also the mucous membrane from its immediate vicinity, or to amputate a breast without clearing the axilla, might be palliative, but could not be called curative. He had, on many occasions, found the axillary lymphatic glands infected, where none could be detected previously to operation.—Mr. JONATHAN HUTCHINSON (London) then followed with a very able and extensive contribution. This will shortly appear *in extenso*. The concluding speaker was Dr. HECTOR CAMERON, whose remarks were listened to with much attention and interest.—The discussion was again adjourned.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

THURSDAY, FEBRUARY 4TH, 1886.

F. E. MANBY, F.R.C.S., in the Chair.

Omental Hernia: Herniotomy: Radical Cure.—Mr. VINCENT JACKSON narrated a recent case of herniotomy. A woman, aged 47, was admitted into the Hospital on January 20th, 1886, on account of a right femoral hernia. Two days before, the patient slipped on a piece of orange-peel. Immediately afterwards, she found that a small lump in the right groin, which had been noticed for three months, had increased in size, and become painful. Soon afterwards she felt sick, but did not vomit. Upon examination, it was ascertained that a right femoral hernia existed, the contents being probably wholly omentum. Efforts at reduction having failed, herniotomy was performed, under chloroform; and, after the neck of the sac had been freely divided, and taxis unsuccessfully applied to the omentum, it was ligatured with carbolised silk, and the portion below the ligatures, weighing one and a half ounces, cut away. The sac was now tied together with a catgut ligature, as near the neck as was possible. The wound was brought together and dressed as usually. Recovery followed rapidly.

Ivory Exostosis Growing from Right Parietal Bone.—Mr. VINCENT JACKSON showed a girl, aged 12, with a large ivory exostosis growing from the upper portion of the right parietal bone. Its presence had been noticed for the last three years; lately it had become painful, and had grown more rapidly.

Abuses of Hospital Charity.—Mr. J. W. BATTERHAM read a paper on this subject. After indicating the proper objects of hospital relief, he argued, from the large numbers treated at hospitals, that many unfit persons were relieved at them, and gave instances of well-to-do persons who were not ashamed of receiving hospital charity. He advocated the total abolition of admission by tickets of recommendation, on the grounds that governors had not proved to be the best persons to select patients for hospital-relief, but that, on the contrary, their privileges of recommendation were often abused. He also stated that tickets were indirectly purchased by well-to-do people, who presented themselves for treatment, with the idea that they were in no way indebted to the charity. The administration of the Hospital Saturday Fund was also blamed, as leading to foster the idea that the hospital was a huge provident dispensary, where workmen who subscribed to the fund could obtain free medical aid, even though their circumstances were such as did not justify their acceptance of charity. The present methods of dispensing medical charity were shown, in many cases, to be unjust to the general practitioner; and the honorary staffs of hospitals were urged to assist in amending them, inasmuch as, though their personal interest in reform might be less, their influence in effecting it was greater than that of their less favoured professional brethren.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, JANUARY 15TH, 1886.

T. EVELYN LITTLE, M.D., President, in the Chair.

Dentigerous Cyst.—Mr. ARTHUR BAKER read a paper on a case of dentigerous cyst occurring in the lower jaw of a boy aged 16. The tumour had existed for six months previous to operation. When opened, an unerupted canine tooth was found at the bottom of the cyst. This tooth showed the malformation known as dilaceration of its root. The importance of diagnosticating cases of this disease was shown by the fact that in a similar case, where the cyst was not recognised, one-half of the jaw had been excised. The paper was illustrated by photographs and casts; the dilacerated tooth was also shown.—Mr. STORY asked if dilaceration of the tooth was sufficient to account for the cyst. There was only one other case on record, in which a dilacerated tooth was found occupying the cavity of one of those so-called dentigerous cysts.—Dr. MACSWINEY said cases were sometimes met with in children, where it seemed impossible for the unaided powers of the child to erupt the tooth, and on such occasions he had seen a soft tumid condition over the tooth, which had not

scaped through the gum; this, when incised with a gum-ancet, had given exit to a clear viscid fluid.—Dr. CORLEY also spoke; nd Mr. BAKER (in reply) said he did not think the exact cause of uch cysts, as he had described, was known. In the present case, the ilaceration was a factor which prevented the eruption of the tooth t the proper time, by twisting it out of its proper course. The cysts nentioned by Dr. MacSwiney as occurring over the milk-teeth of hildren were pretty well recognised as of frequent occurrence, and it as undoubtedly normal that a small quantity of fluid should collect etween the enamel and the follicle.

Perforating Ulcer of the Stomach opening into the Left Ventricle of ie Heart and Causing Death by Hæmorrhage.—Dr. FINNY exhibited n extremely rare specimen of an oval ulcer (1 × ½ in.) of the omach, situated on its anterior wall two and a half inches from the rdiac end, and two from the lesser curvature, leading up to and per-rating the heart. The floor of the ulcer was the muscular structure f the under surface of the left ventricle, about one inch from the pex; and the ulcer, after perforating the stomach, had eaten through ie diaphragm and the pericardium. The stomach was adherent to ie diaphragm round the ulcer, but the adhesions were very slight id of recent date. The pericardial sac had been obliterated by ad-esive inflammation, and over the whole of the left ventricle the ad-esions were very dense. Through the larger of several interstices etween the exposed muscular tissue of the apex a probe could be assed upwards, and was found to enter the left ventricle behind a usculus papillaris attached to the posterior mitral curtain. The atient, a farm-labourer, aged 19, had died of syncope on December h, 1885, preceded by the passage of blood from the bowels. There as no hæmatemesis. At the necropsy, the stomach and the whole testinal canal were found full of liquid blood; the stomach alone ntained two quarts. The source of the blood was the left ventricle, id it was probable that the blood escaped into the stomach, during th systole and diastole. The fatal steps in the pathological history the case were; 1, ulcer of the stomach of unknown duration; 2, eumatic pericarditis and adhesions of the left ventricle to the dia-ragm, with obliteration of the sac; 3, recent activity in the ulcer, rforating into the muscle of the heart. The general muscular ructure of the heart under the microscope was perfectly normal, and e from fatty degeneration, except the fibres at the floor of the per-ration, which were granular and broken down, though free from all t. This case was not unique, as there were three similar cases re-rded in Vienna; the first by H. Chiari in 1880, the second by F. enner, and the third by Oser, in 1881.—Dr. FRAZER believed this se was altogether novel in Dublin. The nearest approach to the se of Dr. Finny, was one that occurred in the practice of the late . M'Dowel, where an abscess of the liver penetrated the pericardium d set up inflammation, and air entered both stomach and pericar-um.—Dr. DUFFEY had observed a case of ulcer of the stomach, in ich an opening was formed into the lungs, causing a gangrenous scess. The patient was a young woman, aged 20, who, after an ness of sixty-four days, which commenced with a pleuritic attack, veloped symptoms resembling those of enteric fever. She died with mptoms of gangrene of the lung; and after her death, in the lower e of her left lung was found a gangrenous abscess of the size of a n's fist, communicating with a small ulcer in the anterior wall the stomach. There were no symptoms of gastric ulcer that he could cognise during life. The base of that ulcer was in close proximity the left ventricle of the heart, but had not perforated it. The case orted by Professor Chiari occurred in a woman 71 years old. at of Professor Oser was in a woman of the same age. Brenner's se occurred in a woman, aged 55. In Chiari's case, the patient had mptoms of hæmatemesis and passage of blood from the intestines. Dr. HENRY KENNEDY said, as regarded pain, a great deal depended the situation of the ulcer. According to his experience, when the er was on the anterior wall of the stomach, the suffering was very ch less than in other cases, and was also intermitting.—The ESIDENT remarked that Dr. Finny had laid stress on what he called ution by the gastric juice of the muscular wall of the heart. That med rather a startling novelty in pathology.—Dr. FINNY said, in his e, the specimen contained no foreign body. He thought that peri-ditis was due to a rheumatic attack which had preceded the per-ation of the diaphragm by the ulcer from the stomach. Nor did see any difficulty about the solution of the muscles of the heart by gastric juice. Dr. Purser and Dr. Bewley, who had examined the or of the ulcer and the granular muscular tissue of the heart, uld bear him out in the statement that not the least appearance fatty degeneration was exhibited by the portions of those parts that re examined under the microscope. The base of the ulcer and the scular tissue of the heart were turned into a granular *débris*, which was the result of the solution. The rest of the heart was perfectly healthy, and showed no sign of fatty degeneration whatever. Having dissolved and gone through the diaphragm, which was of its full thickness, the gastric juice might have acted in a similar way on the muscular tissue of the heart.

Specimens of Bright's Disease.—Dr. A. W. FOOT presented kidneys, which were representative examples of the last stage of parenchymatous nephritis when the organs had undergone atrophic changes. They were the variety of Bright's kidney, called by Dr. G. Johnson the "small fatty kidney." The heart presented the appearances of a notable, though not extreme, degree of hypertrophy of the left ventricle without valvular disease or atheroma in the aorta. The pericardium was universally adherent, but had recently become so, as it could be peeled off without any great difficulty. The heart, empty of coagula, freed from the pericardium and any superfluous parts of its large vessels, weighed sixteen ounces. The lungs presented the features of œdema and capillary bronchitis. The specimens were obtained from the body of a labouring man, aged 33, who had been habitually exposed to the cold and moisture of the Wicklow mountains. Immediately after admission, the total urine of twenty-four hours amounted to but 38 fluid ounces, clear, pale, specific gravity 1011. The quantity of urea in it was 5.53 parts per 1,000. Next day, the urinous odour of his breath was very perceptible. In a few days, diarrhœa came on, from six to eight motions in the twenty-four hours; getting rid, probably, of some of the urea which the kidneys failed to eliminate. No effect was produced upon the dropsy by rest in bed, milk-diet, and hot air and hot water baths given on alternate days. His sight, he said in answer to inquiries, was "as good as ever." He preserved his appetite to a remarkable extent. Bartels had observed this, and how, even with this capacity for food, the anæmia, emaciation, and loss of strength increased uninterruptedly. This fact, he remarked, should not cause astonishment, considering the enormous quantities of albumen eliminated with the urine in this disease. The hypertrophy of the left ventricle in this case was attributable to the secondary atrophy of the kidneys.—Dr. HENRY KENNEDY and Dr. MACSWINEY made some remarks, and Dr. FOOT replied.

MEDICAL SECTION.

FRIDAY, JANUARY 29TH, 1886.

J. MAGEE FINNY, V.P.K.Q.C.P., in the Chair.

Therapeutic Uses of the Digestive Ferments.—Dr. PURSER read a paper on the above subject, in which he condemned as useless and irrational the internal administration of these substances, and argued that their true use in medicine was limited to the preparation of artifically digested food.—Dr. HENRY KENNEDY took exception to Dr. Purser's observations about the effect of pepsine, of which he had had favourable experience in children, with whom imagination could not be said to operate.—After some remarks from Dr. FALKINER, Dr. WALTER G. SMITH regarded Dr. Purser's conclusions as founded on uncontrovertible data. It was time to protest against the illogical and irrational mode of using so-called aids to digestion. The real uses of ferments were clearly indicated by Dr. Purser, namely, the preparation of food before it was put into the patient's stomach, or before it was put into the patient's rectum.—Dr. J. W. MOORE said that rectal alimentation was one of the principal uses of digestive agents, from the addition of which to nutritive enemata he had seen good results.—Dr. ATTHILL said he was sure Dr. Purser's remarks were based on scientific principles, but possibly some of his deductions were not strictly correct; because experiments carried on outside the body could not be identical with experiments inside. He did not agree with Dr. Purser that those ferments were absolutely useless, having himself prescribed pepsine with good results, especially in the case of children and delicate women. In artificial feeding *per anum*, peptonised food was of the greatest importance.—The CHAIRMAN concurred, from his own experience, with Drs. Kennedy and Atthill as to the value of the therapeutic influence of pepsine, which he believed to be of great use in imperfect digestion.—Dr. PURSER replied. The preparation of pepsine by means of glycerine was a very well-known method of extracting digestive ferments. As to the effect of medicine on children and delicate women, he did not say the effect was produced through the imagination; but he did not know anybody who gave pepsine and nothing else. The diet was always regulated to make it more easily digestive, and pepsine was prescribed with acid or aromatic water. To say the thing was different inside the body and outside the body, showed an erroneous conception of digestion, which did not take place inside, but outside the body. The mucous membrane of the stomach was just as much outside the body as the palm of the hand.

Fœtid Expectoration from the Lung.—Dr. H. KENNEDY detailed two instances in young females, where a very profuse expectoration, attended by a most offensive odour, occurred. The physical signs were in each case confined to one lung, and were those of chronic strumous pneumonia. In each case there were slight signs of hectic, with the nails curved; whilst menstruation was irregular. Under the use of a combination of powdered uva ursi and charcoal, the patients improved much in their general health, and the fœtor quite ceased at the end of ten days, and in about a month each patient left the hospital. No inhalation was used.—Dr. HAYES instanced the case of a woman in Dr. Steevens's Hospital, who was the subject of fœtid bronchitis. He suggested an inhalation, consisting of a combination of creasote, carbolic acid, iodine, and spirit, and in twenty-fours hours the smell decreased, and disappeared in a few days.—Dr. WALTER G. SMITH said that the use of charcoal had been over-estimated. It would absorb gases and fœtid odours, and abstract alkaloids, in the dry state, but, once thoroughly wet, its deodorising qualities ceased. The distance to which drugs penetrated by inhalation into the air-passages was much less than was generally supposed.

REVIEWS AND NOTICES.

VON ZIEMSSEN'S HANDBOOK OF GENERAL THERAPEUTICS. Vol. iv. The Treatment of Disease by Climate. By Dr. HERMANN WEBER; translated from the German by HEINRICH PORT, M.D., M.R.C.P. London, Physician to the German Hospital, etc.—General Balneotherapeutics. By Professor OTTO LEICHTENSTERN; translated from the German by JOHN MACPHERSON, M.D., Inspector-General of Hospitals (retired). London: Smith, Elder and Co. 1885.

CLOSELY following on its predecessor, the volume before us transports our attention at one bound from the puny attempts of man to modify the attributes of the ambient atmosphere to the laboratory of nature, where, if expense be no object, every degree of atmospheric pressure may be tried at will, together with every conceivable variation in climate as regards sunlight, hygroscopy, etc. It is a pleasant change to watch the means which nature offers for the amelioration or cure of disorders resulting from contraventions of her laws; although here, as elsewhere, one half of the necessary energy is expended in clearing away preconceived and erroneous ideas on the subject.

It is singularly inconsistent that, while we scrutinise with painful interest even the slightest changes in the composition of the water we drink, we are far less particular as to the quality of the air we breathe, probably because the relative quantities of impurity involved are very much less than with water. When, however, we reflect on the comparatively large quantity of air which we breathe, the importance of even small departures from the normal in its composition will be evident. Further, the intimate contact of the air with the lining membrane of the respiratory tract cannot be compared to the chemical laboratory awaiting water in the stomach, thanks to which the vast quantities of germs absorbed daily are destroyed or rendered inert. We may, moreover, by various means, correct any shortcomings in the quality of our water-supply, and so render ourselves independent of the water in our immediate surroundings; but this is obviously impossible in the case of the air we breathe, which comes into close contact with the blood, without any chemical purification being even attempted.

Climate is, of course, made up of a variety of factors, all of which have their individual importance as apart from their collective bearing. Nor is their influence to be surmised from their purely physical attributes, since the moral effect on the patient is in itself a factor of the greatest importance. A certain climate may exactly fulfil the indications in any particular case, and yet, from a want of suitable surroundings in the shape of amusements or variety of scenery, be unsupportable to the patient; in fact, he is no more able to take advantage of the climate without due regard to his tastes and amusements, than he could maintain his nutrition on a diet which, although theoretically sufficient, is wanting in appetising qualities. By the combined effect of several of these factors, or groups of factors in mutual relation, weather is produced, the importance of which to individuals and to the country is seen in the readiness with which it is made the subject of observation and criticism. Indeed, the kind of weather which prevails in any region, or at any place, during different seasons, months, and days, and at different times of the day, constitutes the chief characteristic of the climate of a region or place; and it (and consequently climate) is dependent on a variety of circumstances beyond its mere latitude and longitude. The proximity, or otherwise, of the region to sheets of water or deserts of heated sand, its accessibility to the action of warm, cold, or damp winds, etc., may materially influence its climate, and therefore its advantages as a health-resort. The fogs of London and Newfoundland, the hot southern blasts of Algeria and the Mediterranean, with the irksome easterly winds of western Europe, are familiar instances of these collateral influences.

Passing on to the therapeutic effect of climatic conditions, the first noticeable feature is the large allowance that has to be made for individual idiosyncrasy in the selection of a climate. It is easier to enumerate the cases in which such-and-such a climate is unadvisable, than to lay down precise rules for the guidance of patients and their medical advisers. The influences at work are so complex on both sides, that it is no reason for surprise that the results obtained often differ materially from those which were anticipated. For example, sea-air is said to be unsuitable for patients suffering from any serious disturbance of the circulatory system, or from asthma or hysteria. The physiological effects of climates of high altitude, or mountain climates, have been even less accurately investigated than their physical conditions, and it is more difficult to summarise them briefly. The mere rarefaction of the air often provokes a definite train of symptoms even in healthy subjects; and, in patients whose powers of adaptation to their environment are necessarily more limited, these inconveniences may be extremely well marked, although, after a lapse of time, the equilibrium may become more or less restored. The value of mountain-air in phthisis is discussed at length, and the author, so far as the circumstances allow, has laid down a series of rules in reference thereto, which may enable physicians to choose, with some show of reason, when called upon, to advise as to a change of climate. In close relationship with altered climatic conditions, is the problem of dietetics. Many places owe no small share of their beneficial influence to their peculiarities in the matter of diet; but the subject is one in which the patient should be advised, either by his own medical attendant, or by one on the spot, who may be supposed to know more of its requirements.

The author takes us over all the principal health-resorts or possible health-resorts, from Ootacamund in the Neilgherry mountains, to Manitou in the Rocky Mountains, and from the Fiji Islands to the Hebrides, giving the main physico-geographical characteristics of the region or spot, together with a summary of the information obtainable as to the class of cases most likely to be benefited at each. The English and Scotch resorts are not omitted, and many useful hints are given as to the conditions under which improvement in health or amelioration of symptoms may be hoped for.

Passing on to the section on Balneotherapy, by Professor Otto Leichtenstern, we notice, with pleasure, that his first care is to repudiate and condemn the practices and literature which have done so much to acquire a reputation of charlatanism for the so-called "mineral cures." Our still scanty knowledge of the physiological action of warm and cold, and of baths containing salt and gas, is, the author says, carried in the domain of pathology far beyond the boundary of certain conclusions, and to the construction of haphazard theories. The phrases which used to flourish like rank weeds in the older balneology, such as the "blood-purifying power" of certain waters, "active vivification," "increase of or aid to metamorphosis of tissue," "increase of cell-activity," these and numberless equally bad or worse fashions of speech have still a place in modern works on balneology: which boast freely of their physiological accuracy. The author's own conclusion is that, in spite of many important labours in this field, our present knowledge does not suffice to build up on it a satisfactory theory or explanation of the mode of operation of mineral waters in different pathological conditions; although, of course, the efficacity of suitable treatment, by means of mineral waters, is too well recognised and appreciated to require more than an acknowledgment. He alludes to the frequency with which the *post hoc* is confounded with the *propter hoc*, and sets the example of a more serious manner of writing than is found in various treatises on balneology.

Naturally, the first series of observations bear on the physiological effects of cold and hot baths, having regard to their thermal qualities alone; and from these it would seem that the result of a cold bath, if not prolonged, is to provoke a rise of the internal temperature, the loss of heat incidental to the bath leading to a marked and immediate increase in the heat-production (accompanied by increased excretion of carbonic acid), which continues for some time subsequently. No difference could be distinguished between the physiological effect of a cold bath whether in simple water or in one charged with salts or gases. If the radiation of heat from the body-surface be checked by

mmersion in a hot bath, then the heat accumulates, and a rise of temperature results. This rise, however, does not long survive the cause of it, partly on account of the rapid loss of heat from the turgid skin, and partly on account of the evaporation which takes place from the damp skin. Under the influence of cold, there is increased decomposition of non-nitrogenous substances in the body, as manifested by an augmentation in the quantity of carbonic acid excreted, but no change in the metabolism of albuminoids is noticed, unless the bath be so prolonged as to determine an actual lowering of the body-temperature. Some interesting experiments by Schüler are given, showing how promptly the internal circulation is affected by hot and cold baths respectively. With the former, he saw the vessels of the pia mater contract, and, with the latter, they dilate. Winternitz, too, noticed that the volume of the arm of a person experimented on diminished on the application of a warm, and increased on that of a cold, bath. These well marked perturbations of the circulation obviously enable us to form an opinion as to the unadvisibility of cold baths in a certain class of cases. On the other hand, the relaxing and enervating effect of prolonged warm baths is often of service in affections involving heightened or perverted peripheral sensitiveness, or reflex and cramp-like muscular contractions. The prolonged application of moist heat appears to diminish cutaneous sensibility, and so to relieve the irritability common to many skin-diseases.

As to the alleged electric operations of the bath, the author only refers to them in order to show the improbability of their existence. The theory of the absorption of salts or gases by the skin, during a bath, does not meet with more favour at his hands, with the exception of sulphuretted hydrogen and iodine, all his observations going to prove that even water was not absorbed to any appreciable extent, while in no case could any trace of salts be found after prolonged immersion in any of the secretions or excretions of the body.

Touching the action of water applied inwardly, it is shown that the drinking of cold water lowers the temperature of the body, and so differs from its external application. Contrary to the usually accepted idea, the author is disposed to consider that water drunk on an empty stomach is not absorbed there to any great extent, but rapidly passes on, no increase of water in the blood being noticeable, even after the engurgitation of large quantities of water, though this might result from the elimination of water from the kidneys augmenting *pari passu*.

The medicinal action of the mineral waters containing salts and gases is extensively dealt with, analyses being given of the chemical constituents of the various springs, with their principal therapeutic uses. In the form of an appendix, fifty pages are devoted to the peat and slime baths, artificial mineral waters and baths, together with a list of affections in which certain waters are particularly recommended.

Dr. Leichtenstern has the advantage of being in a position to give an authoritative and dispassionate opinion on most of the points concerning which doubts may be entertained, and we may congratulate him on his clearness and impartiality.

The translations are in both cases excellent. The volume is a valuable addition to our literature, and a worthy factor in this most important cyclopœdia of therapeutics.

HANDBOOK OF DISEASES OF THE SKIN. Edited by H. VON ZIEMSSEN, M.D. New York: William Wood and Co. 1885. London: Sampson Low, Marston, Searle, and Rivington.

THIS large volume of over six hundred pages is, we venture to say, the most important book on skin-diseases that has been published since the appearance of the classical work of Hebra and Kaposi. The publishers have succeeded in their professed endeavour to condense the original as much as possible without loss of clearness, and are warranted in alleging that they have produced a book worthy of being a presentation-work, and not a mere commercial venture. On account of the delay in the appearance of the German edition, the volume was not ready at the time when Ziemssen's *Cyclopædia of the Practice of Medicine* was completed; and this work now appears as a supplementary volume, which is presented by the publishers to the subscribers to the *Cyclopædia*. We felicitate the publishers on the successful manner in which they have carried out their generous intention.

The contributors to the volume are Professor Auspitz, Dr. Babes, Professor Geber, Dr. Lesser, Dr. Michelson, Professor Neisser, Professor Schwimmer, Dr. Unna, Dr. E. Veiel, Dr. Th. Veiel, Dr. Weyl, and Professor Ziemssen, names which at once vouch for the importance which is to be attributed to the book. The articles contributed by these authors must be considered more as monographs than as chapters; and, as some of the writers had not previously contributed with the fulness that could have been wished to contemporary dermatological literature, these monographs will be perused with considerable eagerness by all those who take much interest in the present state and in the progress of dermatology.

The first sixty-six pages are devoted to an important treatise on the Anatomy and Development of the Skin by Dr. Unna, of Hamburg, a subject in which, as is well known, he has done excellent original work. The Physiology of the Skin is treated by Dr. H. von Ziemssen. To the medical practitioner, the work on the General Pathology and Therapeutics of the Skin by Professor Auspitz will be especially welcome. Professor Auspitz is known as the author of a work on the classification of skin-diseases, which, to those who might not have been previously familiar with his scientific investigations, afforded evidence of the philosophical and learned spirit which distinguishes him, and rendered it a matter of regret that, unlike dermatologists as a class, he had not written a book on the practical side of the speciality. This gap is now, to some extent, filled up by the publication of the chapter in von Ziemssen's book; but even now, after perusing this chapter, we rise from it with a desire to have more from the same pen, and with the hope that some day Professor Auspitz may find it possible to write a practical text-book on diseases of the skin. In the chapter to which we refer, the reader will find not only most valuable suggestions in relation to treatment, but he will find what is of really far more value—a clear exposition of the principles according to which these details of treatment should be managed. In the treatment of diseases of the skin, it is the intelligent use of selected remedies that is more valuable, as a rule, than any special remedy in itself. Professor Auspitz has set himself the task of explaining why remedies of a certain kind produce their therapeutic effects, and why the same therapeutic action may be attained by very different means. Whilst part of his chapter will be more interesting to the general practitioner, the pathologist will find in his remarks on the general pathology of the skin a mine of information, and the results of the application to the diseases of one organ of the well established principles of pathology by a physician whose mind has been trained in the strict application of scientific knowledge.

Professor Schwimmer of Buda-Pesth has undertaken the chapters on Hyperæmiæ, Anæmiæ, and Hæmorrhages of the Skin, and on the Neuroses of the Skin. Professor Schwimmer some years ago published a valuable monograph on the relations of certain skin-diseases to morbid conditions of the nervous system. In the last of the chapters to which we have referred, he has brought together comprehensively the facts that have been, up to the present time, ascertained in connection with this relation, and has at the same time shown, in a suggestive manner, what a wide field still remains for research before the subject is placed on a scientific basis.

When the practitioner consults a work on skin-diseases, it is usually in order to obtain assistance in the treatment of the protean and troublesome manifestations of Eczema. The chapter on this disease has been wisely confided to Dr. Theodore Veiel, whose reputation as a successful therapeutist in diseases of the skin is well recognised on the Continent, and is not unknown in England. To the same author has been confided the treatment of Anomalies of the Sebaceous Glands and of Acne Rosacea and Sycosis. The directions in these chapters are concise, clear, and eminently practical.

It is characteristic of a work like the present, that subjects of less practical importance are treated more fully than is the case in a work wholly written by one author. Accordingly, we find exhaustive chapters on the Diseases of the Nails and of the Sweat-glands, Neuroma, Adenoma, and Carcinoma of the Skin by Professor Geber, and in these chapters we find in detail matter that is necessarily very cursorily treated in ordinary text-books.

In the treatment of hyperhidrosis, Professor Geber is sceptical as regards the action of atropine. While acknowledging that in profuse (especially night) sweats, as in phthisis, it moderates the perspiration for some time, he states that this effect is not always secured, and is generally temporary, and purely palliative.

In the treatment of profuse perspiration of the feet, Professor Geber states that, up to the present time, there is but one mode of treatment which is satisfactory, the cycle of treatment by diachylon ointment which was devised by Hebra. He describes the method in much the same terms as those in which it is explained in Hebra's book.

As an example of the thoroughness with which every part of his subject is treated, we may cite Professor Geber's remarks on bloody sweat. He states that in hæmathidrosis there exists a strong tendency to rhexis of the vessels, and that, as a rule, other abnormal hæmorrhages occur at the same time in the mucous membranes, and in the internal organs. It is established, he

remarks, that in nearly every case, physical or mental emotions have preceded the attack, and that the latter is ushered in by local processes. In some patients, neuralgia, hyperæsthesia, itching, or other disturbance of sensibility, is present at the point in question; or else, without any altered sensibility, there appears a local hyperæmia, swelling, and often discolouration of the surrounding parts. Then there is an exudation or streaming of a bright red, or, according to the admixture of serum, a pale red fluid, from the pores. How little the sweat-glands, as such, take an active part in this process, may be inferred from the fact that a like fluid often comes to the surface at the same time from the mucous membranes, and that the process can frequently be excited by local mechanical influences, and that it is by no means permanently confined to one place, appearing where the skin is more delicate; for example, the ungual phalanx, the face, and the flexor and inner surfaces of the extremities.

In regard to fœtid perspiration, he states that the smell is not always due to the decomposition of the secretions in clothing, remarking that he had had under treatment a patient who otherwise did not show the least traces of bromhidrosis, but who, whenever he began to perspire more freely, as after eating and drinking heartily, or by active exercise, exhaled so offensive a smell that he was forced to shun all social intercourse.

Professor Geber remarks that, in Germany, ringworm of the body is not exactly rare, but that ringworm of the head is extremely rare: a fact which we might almost have guessed from a perusal of discussions that have recently taken place in connection with the difference between ringworm of the head and alopecia areata.

We regret that space will not allow us to quote more freely from this interesting book. We recommend it cordially and with confidence to every practitioner who wishes to have at his command a compendium of all that is known up to the present time in relation to the pathology, diagnosis, and treatment of diseases of the skin.

AN INTRODUCTION TO PRACTICAL BACTERIOLOGY: BASED UPON THE METHODS OF KOCH. By EDGAR M. CROOKSHANK, M.B.Lond., F.R.M.S., Demonstrator of Physiology, King's College, London. Illustrated with coloured plates and wood engravings. London: H. K. Lewis, 1886.

NOBODY any longer doubts that the life-history of micro-organisms is deserving of the most careful study, or that the alleged pathogenic properties of some species require investigation. Even the most sceptical admit that the facts observed, and the deductions drawn, by those who are firm believers in these pathogenic properties require to be disproved before they can be disregarded. M. Pasteur has been the great pioneer who has rapidly surveyed this vast new field, has traced its boundaries, and with the prophetic spirit of genius, has indicated the advantages which the human race may derive from its examination. Dr. Koch's great merit has been to simplify, systematise, and render more certain the methods of investigation; in this he has been assisted by a host of predecessors and followers, but he has freely adopted every improvement, and has himself shown great fertility in resources. For the recognition and separation of the various species of micro-organisms, the gelatine method possesses many advantages, and is, indeed, at the present time, almost if not quite, indispensable. Dr. CROOKSHANK, therefore, in preparing a handbook for the laboratory, has done well to devote the greater part of his space to the methods used in the hygienic laboratory in Berlin, over which Dr. Koch presides. The apparatus used is carefully described and figured, and the directions for preparing nutrient media are full and explicit; the methods of cultivating on meat-jelly, on potatoes, on blood-serum and in liquid media, are described with the fulness of detail so essential in a handbook for the laboratory; various methods of staining bacteria in microscopic preparations of fluids and tissues are given; and a short sketch of the precautions to be observed in making experiments closes this section of the work. The second part of the work contains a systematic and descriptive account of a vast array of micro-organisms, and directions for carrying out the special methods suitable for obtaining the best microscopical specimens of each. The classification adopted is that suggested by Zopf as a provisional scheme; in this scheme, the schizomycetes or fusion-fungi are divided into four great classes; coccaceæ, including all forms which are known only as cocci; bacteriaceæ, characterised especially by the possession of the rod form, and including, among its various genera (bacterium, spirillum, vibrio, and bacillus), most of the pathogenic organisms not found among the coccaceæ; leptothricheæ, presenting, in addition to rods, thread-forms which show a distinction between base and apex; and cladothricheæ, presenting threads with false branchings, and spirals. Short appendices on yeasts and moulds, and on the examination of air, water, and soils, form a useful addition to the volume.

Every subject is profusely illustrated, and most of the coloured illustrations, both those of cultivations and of microscopical specimens, attain a very high degree of excellence; all these drawings are original, and reflect very great credit on the technical and artistic skill of Dr. Crookshank and his collaborator. While heartily commending the work for the general care and accuracy with which it has been written and illustrated, a protest must be entered against certain technical expressions which are introduced. The use of the word attenuation in the sense of dilution, as applied to plate-cultivations, is most unfortunate: attenuation has already been adopted to express a natural process, and its gratuitous application to a detail of manipulation, threatens an altogether unnecessary confusion. Neither can we congratulate Dr. Crookshank on his attempted introduction of the word "öse," which many Englishmen could not pronounce correctly, and for which there is an obvious English alternative. Lastly, why should the excessively clumsy, and, in fact, inaccurate phrase or compound word, "gelatine-peptone-broth" be used in place of its ordinary English equivalent?

NOTES ON BOOKS.

Au Hasard du Chemin. Par M. and Mme. MEUNIER. (Paris: Rothschild.)—M. and Mme. STANISLAS MEUNIER have, in an attractive and literary form, published a most useful volume on natural history; it is entitled *Au Hasard du Chemin*, and describes the places visited by students of natural history. The itinerary includes the countries situated between the Channel and the Alps, starting from Normandy. All the wealth of animals, plants, and geological formation, met with during these travels are described with scientific accuracy, leavened by literary skill. Six hundred and sixty-six illustrations serve as ocular demonstrations to the vivid descriptions met with in the volume.

The Hunterian Oration delivered at the Royal College of Surgeons of England, February 14th, 1885. By JOHN MARSHALL, F.R.C.S., F.R.S., LL.D., Past President of the College. Published at the request of the President and Council of the College. (London: Smith, Elder, and Co.)—The periodical delivery of an oration upon a given subject involving much abstract matter is not necessarily an evil either to the lecturer or to his audience, as many cynics and so-called practical men love to declare. In this particular case, the fitness of things is self-evident, for the oration is a lecture upon a man of science and a surgeon by a man of science and a surgeon. Moreover, Mr. Marshall's literary and rhetorical power adorns his observations with clearness of detail and elegance of diction. He begins by a short reference to the career of Professor Allen Thomson and Mr. Cæsar Hawkins, according to the custom of Hunterian orators. He then traces the life of John Hunter backwards, beginning at the end of his career. Hunter's activity during the last five years of his life was particularly noteworthy. Though Surgeon-General Inspector in the Army, and engaged in active practice, he did not relinquish those scientific researches for the pursuit of which he was more than ever suited, through long experience and mature judgment. Mr. Marshall then endeavours to point out the mental attitude which Hunter would probably assume in regard to the active work and salient opinions of the present day. It is shown that Hunter foresaw much that has been discovered since his death; and, above all, he recognised what barred him from progress—deficiency in the perfection of the microscope, and similar causes. In many of his opinions, he was clearly an evolutionist. Much of the harmony between Hunterian and modern opinion is shown to be due, not to a gift of prophecy in Hunter, nor to a slavish adherence to his doctrines on the part of modern biologists and surgeons, but rather to the principle that the lines which he has laid down are followed by observers and experimenters of the present day, who do not blindly quote and copy him, but work for the advancement of science just as he worked for its advancement.

THE ROYAL METEOROLOGICAL SOCIETY.—At the meeting of this Society on February 17th, the following papers were read: On the Warning of Clouds, by Captain H. Toynbee; on the Thickness of Shower-Clouds, by Mr. A. W. Clayden; on the Formation of Hail Rain, and Snow, by Mr. A. W. Clayden; on Three Years' Work with the Chrono-Barometer and Chrono-Thermometer, by Mr. W. F. Stanley.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 27th, 1886.

THE LESSON OF THE EPIDEMIC OF HYDROPHOBIA.

DURING one of those periodical scares by which the British public becomes possessed, it is hopeless to attempt to obtain a hearing for a temperate statement of the facts out of which the scare has grown. During the last six weeks of 1885, the daily newspapers were inundated by a flood of letters intended to prove that the now famous police-edict was ridiculous, or unnecessary, or mercenary, or cruel. The scare, as is generally the case, has subsided as quickly as it arose, and the lecture given at the Parkes Museum of Hygiene on February 18th, by Mr. Victor Horsley, Professor-Superintendent of the Brown Institute, affords an opportunity for examining the position.

That there has been, during the autumn and winter months of 1884 and 1885, an epizootic prevalence of rabies in London, and probably throughout the south of England, cannot be doubted. The actual number of dogs known to have been affected is small, but each dog is a potential centre for the spread of the disease; and half a dozen rabid dogs detected in one district of London during as many months must be considered, when the damage that each may inflict, and the injurious effect on the public mind, are taken into account, as representing a very serious amount of disease. The admission of rabid dogs into the Brown Institute in 1884 reached its maximum in November; three dogs were admitted in December; but after that date the epizootic declined, and but few rabid dogs were admitted until the autumn. In November last, the epizootic had again gathered head, and seven dogs were admitted in that month. The police-order came into force on November 20th; one rabid dog was admitted on November 22nd, but from that date up to the end of January no cases were admitted; a dog admitted then was brought from a distance, and there was reason to believe that it had contracted the disease outside the metropolitan area. The enforcement of the order with regard to the muzzling of dogs, and the destruction of stray dogs, was, therefore, followed by a very remarkable disappearance of the disease; and there is a strong presumption that the two circumstances stood in the relation of cause and effect. This opinion, very definitely adopted by Mr. Horsley, was fully confirmed by Professor Robertson, Principal of the Veterinary College, who stated that the admission of rabid dogs into the College ceased very shortly after the order was enforced. That this would be the case was, of course, to be confidently anticipated from previous experience; but it is satisfactory to find that the observation of the epizootic has already afforded a fresh proof that rabies is a disease which can be efficiently and rapidly stamped out by police regulations; as Dr. Fleming, who presided at the lecture, pithily said, "As soon as we have destroyed the last rabid dog, the disease is extinguished." Cats and horses, it is true, suffer from the disease; but it is by dogs that it has been, in almost every known instance, disseminated, the reason probably being, according to Mr. Horsley, that the two former animals very swiftly succumb to the disease, so that their power for mischief is limited to one or two days at most.

The recognition of the early symptoms of rabies is an important point. The animal first becomes depressed, and mopes; in some cases this condition of nervous depression deepens, the dog becomes partially paralysed, and the characteristic dropping of the lower jaw ensues. As a rule, however, the first stage of depression is followed by a condition of extreme irritability, with hallucinations; these hallucinations may lead the dog to attack his master, but, more commonly, it escapes from control, and is then apt to bite strangers, without any provocation; the last stage of this variety resembles the concluding scenes of the other variety—the so-called "dumb-madness;" the nervous prostration, the mental hebetude, and the partial paralysis, render the animal comparatively harmless at this stage, though the saliva is still virulent, and sometimes sufficient power remains in the jaw to permit a fatal bite to be inflicted. The suggestion originally made by Dr. Fleming, and adopted by Dr. Burdon Sanderson, to print a description of the early symptoms on the back of the dog-licence, appears to be a good one so far as it goes; but it may be doubted whether, even so, the disease would be commonly recognised before the animal had passed into the stage in which the existence of hallucinations renders it dangerous. Only about 25 per cent. of persons bitten on the exposed parts of the body—and a rabid dog is said to show a curious preference for biting the hands and face—contract the disease, so that it is not easy to estimate the value of therapeutic measures. Dr. Pringle was able to tell the meeting that he had survived the bite of an undoubtedly rabid dog, which had bitten him on the bare finger; he immediately freely incised and sucked the wound. This treatment appears to be the best on the instant, if the mouth be free from abrasions; or a cupping-glass may be extemporised out of a tumbler or wineglass. The suggestion to use solid carbolic acid freely, as an escharotic, seems to be a very good one. It is fairly soluble in the fluids of the tissues, and quickly renders the part anæsthetic; the experience with this caustic is, of course, as yet limited, but Mr. Horsley stated that two men employed at the Brown institute, whose wounds had been thoroughly treated with solid carbolic acid, had not suffered from the disease; and a child, also treated in that way, remained well, though a dog and a horse, bitten by the same animal, died of the disease.

The persistence of popular errors with regard to rabies is extraordinary; there are persons who still believe that a rabid dog is afraid of water, that rabies arises spontaneously in hot weather, and so on. Everybody who has studied the subject with an unbiassed mind has become convinced that the disease is one which is completely amenable to police-regulations. If all the regulations with regard to dogs were put under the control of the police, and systematically enforced throughout the country, the disease would be extinct in a few months; but as long as preventive measures are enforced in some districts and not in others—as long, for instance, as we are content to stamp it out in London, but allow it to prevail as

an enzootic in Lancashire and Yorkshire—so long shall we be liable to epidemics. The multiplication of homeless and ownerless curs is an unmitigated nuisance. The muzzling of respectable dogs is not a serious grievance; the dog, of course, does not like the muzzle, and tries to get rid of it, but he soon grows accustomed to it, and is no more troubled by it than a horse is troubled by his bit, or probably less. A muzzle, at any rate, cannot be more uncomfortable than high-heeled boots, or tight stays, or chimney-pot hats, while it has the advantage of subserving a rational end.

FALLACIES OF OBSERVATION.

MEDICINE, like all other sciences, depends for its advancement on the combined use of observation and experiment. In observation, we watch phenomena as they occur, and endeavour to record their order and sequence. In experiment, we modify phenomena, placing them under some new set of conditions and rearranging them at will. In both, our ultimate object is to find a clue to some fact of causation. Bacon compared experiment to the torture of witnesses—a bold figure which brings into strong relief the fact that experiment consists in active interference on our part with the order of nature, that thus we may extract knowledge which the natural sequence of phenomena would effectually conceal from us. In medical inquiries, the two methods are more or less constantly combined. We watch symptoms with the view of discovering the natural history of disease—that is pure observation. We give a remedy with the view of modifying or removing some symptom—that partakes of the nature of an experiment. But most frequently we do both, using our remedies as our knowledge allows, but always in a more or less experimental fashion, and employing observation to note their effects and the modifications assumed by disease under their influence.

Experiment, pure and simple, has a somewhat limited range in medical science, considerations of humanity limiting the scope and methods of our inquiries. We are not justified in employing a new and doubtful remedy if we already possess an old one, of which the successful application to the case in point is certain and indisputable. We are not at liberty to withhold all remedies for a time, then to apply them, and then again withdraw them, if by such a course the life of our patient would be seriously endangered. Yet this is the method by which the action of drugs could be most speedily and certainly established.

Correct observation is probably the most valuable gift which the medical practitioner can possess. In conjunction with sound reasoning power, it affords the basis of eminence and success; but, of the two, correct observation is the more vital, inasmuch as the subtlest reasoning on wrong premisses can lead only to error and confusion. Yet errors of observation are not merely constant with careless and indolent practitioners, but more or less vitiate even sound and scientific inquiry. We note only those obvious fallacies against which it behoves everyone to be on his guard.

First, there is the familiar *post hoc, ergo propter hoc* fallacy, or the error of supposing that, because one phenomenon follows another, it is necessarily, or even probably, its effect. A child is getting its first tooth, and it becomes affected with eczema of the face and scalp. The mother unhesitatingly blames the unoffending incisor, and the medical man not unfrequently fosters the delusion. A patient affected with rheumatism, and soon afterwards developes valvular disease. We unhesitatingly refer the cardiac affection to the pre-existence of rheumatism. Why is the latter inference sound, and the former unsound? Because universal experience, proved not by one individual case, but by thousands of cases, shows that there is an etiological connection between rheumatism and cardiac disease, while there is no evidence of a similar relation between dentition and eczema. In such cases, one instance proves nothing; a score of instances prove little; but, when the relation of antecedent and consequent appears constant in our experience, we are justified in suspecting that it has its foundation in some fact of causation. Whether causation can be analysed into any thing more than mere uniformity of antecedence and sequence is a moot point with logicians, but we cannot too clearly realise that it takes a multitude of instances of one phenomenon following another even to raise a presumption that they are causally related. The sober recognition of this fact would save us many premature attempts to establish the virtues of new remedies. An observer tries a new drug in some given case, and his patient does well. His duty is not to rush into print with a premature pæon of triumph, but to go on trying his remedy in as many and as *varied* cases as possible, until he has shown that the benefit apparently received in his initial case was not a mere chance fluctuation in the uncertain current of disease, but really a definite therapeutic effect.

An allied error to that just considered is known as the fallacy of simple enumeration, by which is understood the mistake of supposing that the mere aggregation of unclassified instances of conjoined phenomena affords any sure basis for an induction. To take the classical illustration—in this country the human form is universally associated with a fair skin; but, although the observer might note millions of instances of this conjunction, he would not thereby be justified in concluding that the tales of black, brown, and red, men were mere fictions. Why? Because the simple enumeration of instances affords no evidence, unless we can feel assured that our instances are typical, and that if exceptions anywhere exist they would have come under our observation. Hence the Baconian maxim, *Inductio quæ procedit per enumerationem simplicem res puerilis est.* An observer treats six cases of chorea with arsenic, and recovery in every instance results. Another observer treats a similar number with sulphate of zinc, with the same happy result. These drugs may both be equally efficient or both equally inert, recovery being merely the natural evolution of the disease; but nothing is established by so limited a series of observations. Six cases might recover under a given line of treatment, but the seventh might die. In order to feel at all sure in our induction, we need first to know the natural history of a disease apart from the action of remedies, and secondly, we need a large body of evidence to show that a given result is causal and not accidental.

A third error is confounding joint effects with cause and effect. A match is applied to a piece of wood; there is first smoke and then fire, and this is a constant relation, but the smoke does not cause the fire, both being joint effects of the application of the match. During the prevelance of a cholera-epidemic, it is said that peculiar minute organisms are invariably found floating in the air. It does not follow that the cholera produces the organisms, or *vice versâ*, as it is quite conceivable that both might be joint effects of some atmospheric or telluric influence of which we are still ignorant. It is now conclusively proved, in our opinion, that the bacillus of Koch is always

present in true tubercle, but we are still a long way from receiving final proof that the bacillus produces the tubercle. In migraine, we have first what Hughlings Jackson calls "retinal projections," then headache, and lastly vomiting; but the retinal projections do not cause the headache, nor the headache the vomiting, all being joint effects of the nerve-storm under which the patient is labouring.

A due degree of watchfulness with regard to these three common varieties of fallacy will save us from many errors and disappointments, and, if universally practised, would save medical science from those premature advances which have so soon to be followed by inglorious retreats. It is also worth bearing in mind that increasing experience brings increasing knowledge only to the correct and careful observer. If our daily observation only lead us to lay up a store of false inductions, we shall not grow wiser as we grow older, but rather we shall become more and more bewildered with a chaos of facts, which can be reduced to order only by careful observation and sound generalisation.

DAMP AND DIPHTHERIA.

SOME weeks ago, we drew attention to damp in its relation to diphtheria. To the discussion of this interesting subject, Dr. D. Astley Gresswell, in a paper read recently before the Epidemiological Society, makes an important contribution. In this paper, special stress was laid upon "chronicity" of diphtheria and "recrudescence" of diphtheria in the individual, and upon these in their relation to the sanitary characteristics of the environment.

Dr. Gresswell interprets facts which have come to his notice (while engaged on inquiries into diphtheria in various parts of the country on behalf of the Local Government Board as tending to show that certain individuals, generally "living in dark, damp, stuffy, and mouldy dwellings," can maintain a continued activity of the virus of diphtheria in the system, when once implanted therein, and, under certain conditions (such as exposure to wet and cold), can and do revive the virus in an infectious form. He detailed many examples, two of which may be mentioned. 1. Agnes P. contracted diphtheria in December, 1881. She has ever since suffered from sore-throat whenever exposed to cold, especially if the feet have been wet, and her tonsils "swell up enormously whenever she gets cold." She had one such attack of sore-throat in July, 1883, shortly after taking on the duties of monitress in a school, and, within a few days of the onset of her illness, three children attending the same school fell ill, and two of them died of diphtheria. Dr. Gresswell was unable to make out any other likely source of infection for these children than that afforded by Agnes P., and he was led, after due inquiry, to interpret her infectiveness as due to a recrudescence of the diphtheritic virus resulting from inflammation of the tonsils set up by exposure to wet. Again: 2. One of the children infected by Agnes P., in July, 1883, apparently carried infection, directly or indirectly, to every member of his family, namely, father, mother, and children, aged 16, 14, and 13. Two of these, aged 14 and 13 respectively, have ever since suffered from sore-throat: "the slightest cold goes to the throat," and the tonsils swell largely on exposure to wet or cold. A woman who had daily communication with the above-mentioned family, and especially with the one aged 14, took diphtheria while Dr. Gresswell was engaged on his inquiry (April, 1885). The facts of this case, others being duly weighed, suggested that either the house and its surroundings, or the children living in the house, supplied the infecting material. Dr. Gresswell inclines to think that the children supplied it; and he regards these and many other like experiences he has met with as tending to show that an attack of the disease leaves the tonsils of particular individuals in a condition peculiarly reactive to exposure to wet and cold; and, further, as raising justifiable suspicion that the virus of diphtheria, once implanted in the body, may continue dormant therein for a long period, and again, under certain conditions, enter, as it were, on a fresh life of activity and reproductiveness. *A priori*, there is no unlikelihood in this. On the contrary, recrudescence in the body of the virus of glanders, of syphilis, of ague, of relapsing fever, and perhaps even of scarlet and typhoid fevers, leads us almost to look for it; and the analogy furnished in the manifestations of protoplasm, low as well as high in the scale of life, is in its favour.

There remain for consideration the conditions essential to this new life of diphtheria-infection lying dormant in an individual. In the first place, there was in every case that came to Dr. Gresswell's notice a distinct history of exposure to wet or cold shortly prior to the recrudescence. In the second place, there was the fact that persons with a capacity for redeveloping diphtheria had, almost without exception, inhabited dark, damp, stuffy, and mouldy dwellings, set among a variety of other insanitary conditions; the dwellings and their surroundings having remained unimproved from one decade to another. He suggests that such conditions may foster in individuals continuously exposed thereto the development of a constitution in which the germ of diphtheria is peculiarly able to maintain itself.

He says that in the diphtheria-infected district of Erpingham there are many damp, ill ventilated, and mouldy dwellings, which may, it would seem, be regarded as "abodes," as "cultivating grounds," of diphtheria—dwellings which, though the sites of frequently recurring diphtheria, have not been put into proper repair, or drained or ventilated, which have not even been re-papered, or whitewashed, or disinfected. Facts elicited in the course of his inquiries have led Dr. Gresswell to regard habitations of this particular class as actually, and many others as liable to become, agencies in the development and spread of diphtheria. It would be difficult to say whether these dwellings themselves supply the whole of the conditions requisite for maintenance of the material cause of diphtheria, or whether the persons (or perhaps the tonsils) of their inmates become, by reason of sustained inhabitation of these dwellings, modified to the extent of affording exceptionally suitable "hosts" for the maintenance of this virus. He regards unwholesomeness of dwellings of the sort referred to, as at any rate conducing to conservation of the virus of this disease in tonsils that have once become infected by it; and he thinks of exposure to wet and cold as not more than an exciting cause of fresh growth or recrudescence of it.

Should the facts recorded by Dr. Gresswell as to chronicity of diphtheria, and its recrudescence in the individual, be confirmed by other observers, much of what has heretofore been obscure as to the disease will be susceptible of ready explanation. That the etiology of this still obscure disorder sadly requires more light, will be admitted by everyone; and it is quite possible that in Dr. Gresswell's suggestions and inferences may be found the germ of a new revelation as to its genesis and life-history.

WE regret to hear that Mr. George Busk, F.R.S., is seriously indisposed.

MR. CHRISTOPHER HEATH and Professor Ray Lankester have been elected life-governors of University College, London.

THE Lord Mayor has consented to preside at the Festival Dinner to be given in aid of the Extension Fund of St. Mary's Hospital, on Friday, April 2nd, at the Albion Tavern.

AT a public meeting of the University College Medical Society, to be held on Wednesday, March 3rd, at 8 P.M., in the Botanical Theatre, Mr. Victor Horsley, F.R.C.S., will read a paper entitled "Brain-Surgery in the Stone Age." The paper will be illustrated by oxy-hydrogen lime-light. No tickets required.

FURTHER cases of yellow fever on board Her Majesty's ship *Urgent*, stationed at Port Royal, are reported, and the ship has been moored a mile further off shore. Of the twenty-five in all who have been attacked, seven have died.

HER MAJESTY THE QUEEN has graciously consented to lay the foundation-stone of the new examination-hall now in course of erection on the Embankment by the Royal Colleges of Physicians and Surgeons of England. The ceremony will take place on March 24th. This gracious act will be highly appreciated by the medical profession.

METROPOLITAN DEFENCES AGAINST INFECTIOUS DISEASES.

MR. SHIRLEY MURPHY will give a lecture on "Metropolitan Defences against Infectious Diseases," at the Parkes Museum of Hygiene, 74A, Margaret Street, on Thursday, March 4th, at eight o'clock.

MEASLES AT STOURBRIDGE.

A SEVERE epidemic of measles has raised the death-rate of Stourbridge for the month to 38.1 per 1,000. The mortality from measles alone was at the rate of 20.9. The medical officer states that, four years ago, a similar epidemic raised the death-rate to 46.7. Most of the elementary schools have been closed for some time past, and the health of the district is now improving.

TWELVE TAPEWORMS IN A HOST.

DR. GURFINKEL writes, in the *Vratch*, No. 46, 1885, that recently he came across an extremely rare case of helminthiasis (in a peasant), in which a dose of decoction of pomegranate root expelled one hundred and two *arshins* (= 238 feet, 1 *arshin* = 2⅓ English feet) of tapeworms, twelve distinct heads being found in the mass.

HYDROPHOBIA.

SEVERAL soldiers in different French regiments have been bitten by mad dogs. M. Pasteur has consented to treat them, without payment. Some wards in the military hospital, the Val-de-Grace, have been prepared, in order to receive patients menaced with hydrophobia. Madame Dagnan has bequeathed 6,000 francs for the benefit of M. Pasteur's patients.

THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.

A MEETING of the British Medical Temperance Association was held on Tuesday, February 23rd, in the rooms of the Medical Society of London, at which Dr. Norman Kerr communicated the results of the second year's operations of the Dalrymple Home for Inebriates, and a paper was read by Dr. C. R. Drysdale, on the Use of Alcohol in Hospitals. The following resolution, proposed by Dr. Drysdale, and seconded by Dr. J. J. Ridge, was unanimously passed: "That this meeting desires to record its emphatic protest against the inclusion in hospital ordinary dietaries of any form of alcoholic liquor, the indiscriminate use of which is dangerous to reclaimed drunkards, gives rise to an erroneous view of the value of alcohol as a strengthening agent, and is a wasteful expenditure of charitable funds."

THE LATE MR. J. C. WORDSWORTH, F.R.C.S.

WE record, with regret, the death of Mr. J. C. Wordsworth, on February 22nd, aged 63. The deceased gentleman was formerly surgeon to the British Civil Hospital, Smyrna, and on the staff of the army in the Crimea. He was also at one time assistant-surgeon to the London Hospital; but he was probably best known through his connection with the Royal London Ophthalmic Hospital, Moorfields, to which he was for many years one of the surgeons. About three years ago he retired from the active staff, and was appointed one of the consulting surgeons.

FEMALE MEDICAL EDUCATION IN RUSSIA.

THE Russian lady doctors find warm advocates in some of the Moscow journals. The *Russkiya Viedomosti*, for example, states that they have been most valuable in towns, in the country, and in war. They are very suited for medical duties in girls' schools, and other institutions consisting of female inmates. As in the case of the Zenana mission and similar British institutions, Russian lady-doctors have made themselves very popular amongst the Mahomedans. The writer endeavours to impress upon the St. Petersburg municipal council the importance of subsidising the female medical courses, though other help is also necessary, both from the State and from private munificence.

HEALTH-LECTURES IN BAYSWATER.

A VERY large audience, numbering nearly 700 persons, assembled on February 22nd at the Paddington Baths, to listen to the eighth and last of the popular health-lectures, given for the National Health Society by Dr. Schofield. The subject was "Home-Nursing." After going in detail into most of the important questions connected with the hygiene of the sick-room, practical demonstrations were given by two trained nurses on the making of the bed for sick persons, the preparation of poultices, the treatment of fractured limbs, the way to give a vapour-bath to the patient, the "pack," etc. At the conclusion of this useful lecture, Dr. Schofield, after a few preliminary remarks upon the exercise of the various muscles of the body, introduced to the audience Miss Bergman, of the Hampstead Gymnasium, who, with the assistance of her pupils, gave an excellent demonstration of the Swedish system of gymnastics, showing the various exercises for developing the muscles of the body.

SCARLET FEVER AT SALFORD.

SCARLET fever has recently broken out in the Broughton district of the borough of Salford, and, in consequence, a notification, signed jointly by the medical officers of health for Crumpsall (Dr. Buckley) and Salford (Dr. Tatham) has been published throughout the district, stating that facts have come to their knowledge which seem to indicate that the disease has in certain cases been communicated through the medium of milk. They therefore recommend, as a precautionary measure, that for the present all milk should be boiled before use. The advice given in this particular case is such as might with advantage be more generally adopted. It may be noted that as high an authority as Dr. Buchanan, in his last annual report as medical officer of the Local Government Board, "cordially endorses" the advice "that English people should adopt, as their invariable rule in the use of milk, the custom usual among many continental nations, of boiling all milk as soon as they receive it into their houses."

TYPHOID FEVER AT BROOKLYN.

UNDER the directions of Dr. J. H. Raymond, the Commissioner of Health of Brooklyn, a very searching investigation has been commenced into the reasons for the prevalence of typhoid fever in that city, particularly in its relations with the drainage-arrangements. From a preliminary report which has been published, it appears that typhoid fever has existed to a greater or less extent in the city since

he year 1848, the date of the first records of mortality. No record worthy of the name has, however, ever been made of the number of ases which have occurred in Brooklyn, and therefore no comparison, ased on cases, can be made as to its prevalence throughout the city, r any portion thereof, for different years. The only figures which are vailable for purposes of comparison are the certificates of death hich are filed by attending physicians; and a study of this record of eath demonstrates that the disease was more prevalent during 1885 han in any of the eleven preceding years. In 1885, it was more revalent in two sections of the city than elsewhere, and both of hese sections are upon comparatively high ground. The water-upply and milk-supply are absolved from responsibility for spreading he disease. It is stated, however, that a thorough disinfection of he discharges of the patients has never been practised; but they ave, in an infected condition, been thrown down the drains, and ave in this way not only communicated the disease to other mem-ers of the same household, but have contaminated the sewers. The ewer-air, tending always toward high levels, and finding a ready ntry into other houses, especially those in the immediate neighbour-ood, through defects in the plumbing, has conveyed the disease to ther households. With the view of avoiding this last source of anger for the future, a vigorous house-to-house inspection of the lumbing arrangements is being made through the city by Dr. Ray-nond and Dr. Wyckoff, his energetic colleague. We are indebted to he latter for specimens of the very complete and practical working orms, which are being used for the purposes of this inspection.

UNQUALIFIED ASSISTANTS.

THE letter which we have published from Mr. Allbutt, of Leeds, defending the employment of unqualified assistants to do the work of a general practitioner, is one which well deserves attention. The practice which he describes and defends appears to amount to a very serious buse. If his statement that it is general be at all founded upon ccepted or proved fact, it calls for serious reprobation. It is probable hat it is to this employment of unqualified assistants that many of he worst abuses of the cheap dispensary system are due. The whole ubject appears to us to be worthy of individual and collective inves-igation by the respective Branches of the Association; and it may be uggested that special committees might with advantage be appointed n the Branches, to investigate and report examples of such abuse, nd to furnish information as to how far such abuse prevails in the espective districts, and how it can best be dealt with, either by an xpression of professional opinion or by legal enactment. It can ardly be contended that such practice is in consonance with the ublic interest. The decision of the judge in the case which we eported, and which opened the discussion, indicated the illegality f the practice. Ought it to be allowed to flourish? and cannot ur Branches aid to repress it?

PROPOSED COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES AT CARLISLE.

THE profession at Carlisle has taken into consideration the sub-ect of the proposal of the corporation, to which we recently alled their attention, to require, under the powers of a ocal Bill which is to be prosecuted in Parliament, notifi-ation of infectious cases to be made by the medical man in ttendance to the medical officer of health, under a penalty of orty shillings. The feeling of the local medical men is unanimous gainst such a proposal; and, at a meeting of the profession, held at he Carlisle Dispensary on February 18th, the following resolutions ere passed: 1. That this meeting strongly disapproves of the com-ulsory notification clauses in the Carlisle Corporation Bill, and ledges itself to use its utmost efforts to obtain their withdrawal; . That, with that object in view, a deputation be appointed to wait pon the Parliamentary Committee of the Corporation, to urge the bjections entertained by the medical men of Carlisle to the clauses; 3. That a petition against the clauses, signed by the medical men of Carlisle, be prepared, and that representations be made to the Parliamentary Bills Committee of the British Medical Association, with a view of obtaining their support; 4. That a Committee be appointed to carry out the above resolutions.

FEMALE MEDICAL LICENTIATES IN INDIA.

HER MAJESTY having signified to the Countess of Dufferin her intention of presenting medals to the most distinguished female licentiates in the medical schools of India, the central committee propose awarding them in the following manner. A gold medal will be offered for annual competition in each of the four Indian Universities, Bengal (Calcutta), Bombay, Madras, and Punjab (Lahore); students at the Agra Medical School being allowed to compete at Lahore. These medals will be called the "Queen-Empress Medals," and will only be awarded to candidates who attain a high standard of proficiency. His Excellency the Viceroy has also placed five silver medals at the disposal of the National Association; and the central committee propose offering them for competition among the female students of the hospital assistant class, one to each of the medical schools of Agra, Bombay, Calcutta, Lahore, and Madras.

ASTLEY COOPER PRIZE.

IT is announced that the next triennial prize of £30 0, under the will of the late Sir Astley P. Cooper, Bart., will be awarded, early in 1889, to the author of the best essay or treatise on "The Origin, Anatomy, Results, and Treatment of Tubercular Diseases of Bones and Joints." The conditions annexed by the testator are, that the essays shall contain original experiments and observations which shall not have been previously published; and that each essay shall (as far as the subject shall admit of) be illustrated by preparations and drawings, which shall be added to the Museum of Guy's Hospital, and shall, together with the work itself, become henceforth the property of that institution. And it is expressly declared in the will that no physician, or surgeon, or other officer of Guy's or St. Thomas's Hospital, nor any person related by blood or affinity to any officer in either of the said hospitals shall at any time receive or be entitled to claim the prize. But, with the exceptions here referred to, this prize is open for competition to the whole world; though the essay may not be the joint production of two or more authors. Candidates are informed that their essays, either written in the English language, or, if in a foreign language, accompanied by an English translation, must be sent to Guy's Hospital on or before January 1st, 1889, addressed to the physicians and surgeons of Guy's Hospital. Each essay or treatise must be distinguished by a motto, and accompanied by a sealed envelope containing the name and address of the writer. None of the envelopes will be opened except that which accompanies the successful treatise. The unsuccessful essays or treatises, with the illustrative preparations or drawings, will remain at the Museum of Guy's Hospital until claimed by the respective writers or their agents. A printed form, giving particulars regarding the conditions to be complied with, may be had on application to the Dean, Guy's Hospital, Southwark, S.E.

CHARMS AND SUPERSTITIONS IN THE TREATMENT OF DISEASES.

THE Bishop of Bedford is quite at home among the people, and knows them in sickness and in health. He gives some curious examples of the still prevalent superstitions as to charms against sickness, which are worth preserving among the records of medical folk-lore. For many years he laboured in a country parish in Shropshire, and the remedies believed to be efficacious in many complaints absolutely surprised him. In cases of whooping-cough, for instance, a woman would send children suffering from it along the towing-path of a canal to meet a particular boat, the reason being that the boatman was a seventh son, and any remedy suggested by a seventh son would, it was thought, do good. Another popular remedy was to pass children over and under a briar seven times; another horrible

thing was to draw three yards of black ribbon through the body of a frog, and wear it round the neck; and another thing was to make a child breathe into a frog's mouth. It was supposed, too, that anybody riding on a piebald horse could cure the whooping-cough. He had seen a woman pretending to charm away a tumour on the lips of another woman with elder-pith which was got at night under a full moon, and by the use of some words which, the charmer said, were in the Bible, but on being told that they were not, she said she was sure they were in the Prayer-book, and this was equally incorrect. A farmer, who had the toothache, had given to him some gander's teeth to put in his waistcoat pocket. These were only a few of the superstitions that had come under his notice in North Shropshire, and perhaps some of our readers can add to this curious budget of surviving superstitions.

ACCURATE AND INACCURATE DISPENSING.

It is a not unfrequent complaint on the part of the public that the charges of the druggists are so high, that their bills often mount up nearly as high as those of the medical men. To this the invariable reply is that the patient must be prepared to pay for the skill and accuracy required of the chemist in his work, over and above the value of the article of the drug supplied, which is often quite trifling. It is very desirable that such skill and accuracy should be at all times displayed by the members of the dispensing fraternity. But is this always the case? Apparently not. A few days ago, Dr. Edward Seaton and Mr. Otto Heyner presented to the Chelsea vestry the results of a joint inquiry undertaken by them last July, and prosecuted up to the present date, to ascertain the degree of accuracy which was observed in the dispensing of prescriptions, chiefly in their own parish. In all, fifty prescriptions were sent out, namely, thirty to chemists and druggists, fourteen to co-operative stores, two to "doctors' shops," and four to certain drug-companies. They decided to give a liberal margin for errors, and accordingly did not schedule any prescription as incorrectly made up if the chief constituent were within 10 per cent. of the amount ordered. According to this classification, no fewer than seventeen out of the fifty prescriptions were incorrectly dispensed. The limits of error were very wide indeed, for in one case the quantity of the drug supplied was less by 85 per cent. than that ordered, and in another, 57 per cent. more than had been ordered. The chemists and druggists pure and simple have come out of this ordeal with great credit, as in only two cases did the errors mount up so largely as to be scheduled, whilst "co-operative stores" figure on the black list three times, the "doctor's shop" once, and the "drug company" three times. Thus, to put it in another way, 75 per cent. of the prescriptions dispensed by the latter class are untrustworthy, 50 per cent. of those from doctor's shops belong to the same category, whilst 20 per cent. of the prescriptions dispensed at the stores, and 6 per cent. of those at a regular druggist's, will also exceed the margin of error. The moral is obvious.

HYPERTRICHOSIS.

Two examples of this condition occurring in a boy and a girl—brother and sister—natives of Paraguay, are being exhibited at the Westminster Aquarium. In both cases, the back is covered with fine hair, about a centimètre long on an average, but varying considerably in thickness. In the boy, the hair begins to be developed immediately below the lower angles of the scapulæ, and is continued down to near the bend of the knee. On the girl's back it is more extensive, almost the whole of the back being covered. On the anterior surface of the body there are only patches of hair, growing in the form of moles, in size varying from a threepenny-piece to a shilling, or rather larger, in the boy, and a patch on the front of his thigh, about the size of the palm of the hand. In the girl, the hair, we were informed, extended from the back round the waist, and the number of hair-covered moles was much more numerous than on her brother; these were situated indefinitely over the front of the body, face, and extremities. In the mesial line of the thorax, over the sternum, contrary to what might have been expected, there is no hair developed in either case. There is also no hair developed on the cheeks, chin, or upper lips. In those parts of the body where the abnormal hair is developed, there is well marked pigmentation of the skin, it being of a dark brown colour. On the back of the girl, and on the outer side of the left thigh of the boy, a large subcutaneous cyst, containing a small quantity of fluid is present; the cyst on the boy's thigh is lower down than the bursa over the trochanter, with which it seems to be unconnected. The age of the girl is stated to be eighteen years, that of the boy six years, or perhaps a little older, as the permanent central incisors have nearly come into place. The family-history of these abnormalities is that they are two of a family of four children. Neither parent nor the other two children present any marks or peculiarities whatever. In general appearance, there is nothing repulsive in either of them. The hair of the head is black in colour, and quite straight. There is no prominence of the glabella, and the form of the head is mesaticephalic.

CHAMBERLAND'S FILTER.

Heer Horn, assisted by Professor Forster, has experimented with satisfactory results on the filter invented by Dr. Chamberland, assistant to Professor Pasteur, of Paris. The invention was made with the object of freeing the water in waterworks from micro-organisms. The filter consists of a hollow metal cylinder with a suitable tap; this is affixed to the main by means of a screw. In the cylinder, there is a porous porcelain tube, shut off from above, and disposed in such a manner that the water is forced by pressure to pass through the porous tube. With a sufficient pressure of water, twenty litres can be filtered per day. This pressure is not easily reached in Amsterdam, so that not more than sixteen litres per day can be filtered. Experiments made with the filter show that sterilised broth kept at a temperature of 30° C., exhibits, after the course of some months, neither fungi or bacteria; whilst some drops of the "Down's water" from the usual tap, when mixed with gelatine, give, after sixteen days, considerable numbers of fungi and bacteria. If passed through the filter, however, it is scarcely discernible from ordinary filtered water. The difficulty experienced in practice, however, in using this filter, is that of heating and purifying the porcelain filtering-rods, a process of great nicety, and beyond the resources of the ordinary householder.

IDEAL CHOLECYSTOTOMY.

Dr. Bernays, Professor of Anatomy at the St. Louis College of Physicians and Surgeons, describes, in the *Weekly Medical Review*, a case where he opened the gall-bladder, and sewed it up after removing a calculus. The patient was a woman, aged 46, who had been subject to repeated attacks of colic for nearly six years, but the presence of gall-stones in the gall-bladder was not, for a long time, suspected, as there was no jaundice. Cachexia at length set in, and a very hard movable tumour was found in the region of the gall-bladder. An incision was made through the linea alba, from one inch below the ensiform cartilage to the umbilicus. The tumour then proved to be the gall-bladder, tensely distended through accumulation of fluid; the operator detected a hard substance in the cystic duct. The bladder was lifted out of the abdominal wound as much as possible, and a pint of clear thick mucus was removed by the trocar and cannula; a number of gall-stones could then be felt. An incision, an inch and a quarter in length, was next made in the fundus of the gall-bladder, and twenty calculi were removed. The stone which was impacted in the cystic duct could not be extracted by manipulation; it appeared to have become engaged in the first convolution of the so-called valve of the duct. The operator introduced a probe-pointed knife into the sac, under guidance of the left hand on the outside of the sac, and carefully cut some of the tissues which imprisoned the calculus. Three or four nicks were made, with great care and delibera-

on, as it was found extremely difficult to pass the blunt end of the knife safely between the calculus and the surrounding tissues. After fifteen minutes, the calculus suddenly yielded, the fingers of the operator's left hand forcing it into the cavity of the gall-bladder, whence it was extracted. Dr. Bernays then returned the gall-bladder into the abdominal cavity, on the principle advocated by Sir Spencer Wells. The edges of the wound in the bladder were united by superficial interrupted silk sutures, and also by eight Lembert's sutures embracing the peritoneum and some fibres of the muscular coat. The patient made a rapid recovery, and was in good health a year after the operation. Dr. Bernays terms this operation ideal cholecystotomy, as it appears to come "nearer the ideal of a surgical *restitutio ad integrum* than any other." He considers that it is indicated when the gall-bladder is normal in structure, and when the bile-ducts have been cleared of obstructing calculi. When the bladder is ulcerated or suppurating, or when there are permanent obstructions beyond reach at the time of operation, he considers that cholecystotomy, with the formation of an abdominal fistula, is advisable. Langenbuch's operation termed cholecystectomy, and consisting in the entire removal of the gall-bladder, should, in Dr. Bernays' opinion, be limited to cases of malignant or otherwise incurable disease of that structure. Von Winiwarter's operation, on which sometimes the terrible name cholecystenterostomy has been inflicted, consists in establishing a communication between the gall-bladder and small intestine; and we have already made some note of it in a leading article in the JOURNAL of February 14th, 1885. Dr. Bernays is opposed to it, both upon surgical and on physiological grounds.

CHLOROPEPTONATE OF IRON.

THE *Bulletin Général de Thérapeutique* describes Dr. Jaillet's experiments which have led him to prescribe and recommend the use of chloropeptonate of iron. He injected ten grammes of this salt into the veins of a bitch weighing twenty-one pounds. There was neither coagulation nor embolus. Two hours after the injection was made, sixty cubic centimètres of blood were removed from the femoral artery, half of which was allowed to coagulate, in order to analyse the serum; the other half was defibrinated. The dog remained alive more than two months after the experiment. The serum contained chloropeptonate of iron. The blood-corpuscles, examined under the microscope, were found to be perfectly normal. Dr. Jaillet has experimentally ascertained, by hypodermic, rectal, and intravenous injection, and by ingestion, that chloropeptonate of iron enters the circulatory system, and is absorbed into the blood. Chloropeptonate of iron is a chemical combination of peptone and iron-perchloride, which does not undergo any change from the gastric juice, nor from the alkalies of the blood. It is absorbed and assimilated just as it is administered, and produces, in consequence, a higher temperature, increased disassimilation, and more copious excretions. The appetite increases, and the patient grows thinner; but the physiological qualities of the blood improve.

CUCAINE AND SEA-SICKNESS.

IN a paper read at a recent meeting of the Liverpool Chemists' Association, Mr. R. M. Sumner related some personal experiences as to the use of cucaine, both as a preventive against, and a remedy for, sea-sickness. Mr. Sumner professes to have had considerable acquaintance with cuca leaves for many years, both in business and in personal use, and to have believed strongly in the exhiliarating and stimulating effect which they have upon the nerves. Owing, however, to the nauseous character of the pharmaceutical preparations of the leaves, he had personally been in the habit of chewing the leaves without alkali. The report of the trials made last autumn by Professor Manassein, of St. Petersburg, with a solution of cucaine, induced him, being very subject to sea-sickness, to test its efficacy on himself, during some cross-channel passages he made. Having dissolved 3 grains of cucaine hydrochlorate in 1½ ounces of water, he took one-third of this solution before starting, and another third soon after leaving land; and, although the weather was boisterous, he declares that he not only felt no inconvenience from the trip, but even enjoyed the motion of the vessel. Satisfied with the results obtained, and wishing to find a more permanent solution, he next used a solution of cucaine, in camphor water, with which, after being kept four weeks, he obtained like good results with a smaller dose than formerly. But, though the camphor-water proved an excellent preservative for the cucaine, it was not pleasant to the taste, besides which a solution was somewhat inconvenient. He therefore had some cucaine lozenges made, each containing one-twelfth grain of cucaine hydrochlorate These he describes as at once active, palatable, portable and permanent. With four of these lozenges, taken at intervals, he, in another trip, was enabled to defy sea-sickness. Since then, the author has severely tested the powers of cucaine with unvarying good results, but thinks that, in the majority of cases at least, one-third of a grain would be required, although Professor Manassein only prescribed one drachm of a solution of cucaine, of the strength of one in a thousand to be administered every two or three hours.

TUMBEKI: A PERSIAN NARCOTIC.

IN the Consular Reports from Trebizond, for some years past, mention has been made of a vegetable product, "tumbeki," occurring in the same list as tobacco, and evidently an article of regular commerce between Persia and Turkey. Quite recently, also, in an interesting article in *Harper's Magazine*, on "The Domestic and Court Customs of Persia," tumbeki is referred to as a species of tobacco in high repute in Persia, which, owing to its remarkable narcotic properties, is always smoked in a water-pipe. In order to obtain more definite information with regard to tumbeki, and the importance of its narcotic and possible medicinal properties, Mr. E. M. Holmes, the Curator of the Museum of the Pharmaceutical Society, has entered into correspondence with consular and other authorities upon the subject; and the results were embodied in a communication, made at an evening meeting of the Pharmaceutical Society, on Wednesday, February 10th. Mr. Holmes found the authorities somewhat at variance as to whether tumbeki is the produce of *Nicotiana rustica* or *N. persica*; but leaves, which he received as tumbeki from Trebizond and Constantinople, both correspond in character with *N. persica*, the stem-leaves of which are sessile, whilst *N. rustica* has stalked cordate leaves. It appears, further, that there are three qualities of tumbeki—the Shiraz, Kechan, and Teheran—all derived from the same plant, though the value of the first is double that of the last two. In order to test the accuracy of the statement that tumbeki contains more nicotine than tobacco leaves (*N. tabacum*), portions of four samples were submitted to analysis by Messrs. Eastes and Ince. After trying various processes for the estimation of the nicotine, they arrived at the conclusion that the most reliable method consisted in preparing an extract of the leaves with dilute sulphuric acid, removing albuminous matters from the extract, and precipitating the alkaloid with a standard solution of Mayer's reagent (a mixture of mercuric chloride and potassic iodide). By this method, they obtained results corresponding to the following average percentages of nicotine: Shiraz, 5.835 per cent.; Ispahan, 5.4945 per cent.; Hidjaz, 2.046 per cent.; and Kechan, 2.90925 per cent. In further analysis of the leaves, the authors found the extractive matter to range from 40 per cent. in the Kechan to 55 per cent. in the Shiraz sample; the saccharine matter to be highest in the Kechan sample, whilst the ash was about 25 per cent. in all the samples.

THE ERASMUS WILSON LECTURES.

IN the present number of the JOURNAL, the last of Mr. J. B. Sutton's lectures on "Evolution in Pathology" is published in abstract. We dwelt at some length last week on the second lecture, which contained much material suggesting future experimental research. The first lecture was of a profoundly philosophical nature, not likely to

be thoroughly appreciated, excepting by experts in biology and evolution. The third contains some useful hints for the pathologist at least. The presence of islands of cartilage in long bones, an abnormality supplying a site for a possible enchondroma, is a subject to which Virchow and the lecturer have turned attention, and which must not be overlooked. The passages in relation to fœtal relics, as the source of dermoid and congenital cystic tumours, are of high scientific interest. From a clinical point of view, the most important portion of the lecture is the paragraph on sarcoma. Once, after the name sarcoma had been correctly defined, a tumour of this class was generally looked upon as arising from some internal cause only to be explained by the pathologists. It had been noted that epitheliomata correspond locally with irritation from tobacco-pipes, soot, etc., and that even fatty tumours grow with suspicious frequency on parts of the back subject to pressure from braces. The clinical records of Paget and other pathologists, then showed a relation between the appearance of sarcoma and a history of local injury. Recently this relation has been made more and more evident, in cases described in the archives of the Pathological and Medical Societies. Mr. Sutton, observing sarcoma to follow injury in animals, examined certain cases, and found that, after the injury, the inflammatory tissue, or tissue of repair, exceeded normal limits, developed erratically, and played the part of a tumour-germ.

PILOCARPINE IN FISH-POISONING.

Dr. K. Danilevsky, of Jeleznovodsk, Terskaia Government, records, in the *Vratch*, No. 50, 1885, a case of poisoning by salt sturgeon, treated and cured by pilocarpine. The patient, a letter-carrier, began to vomit about four hours after eating. When first seen, on the next morning, he looked pale, haggard, extremely prostrated, his tongue and lips being quite dry, leathery (sole-like); saliva was entirely absent, in spite of the patient making incessant masticatory movements; the eyelids were swollen, and half closed; the pupils were dilated. The abdomen was tense; the skin dry; the pulse weak, easily compressible, and slightly quickened; respiration, deglutition, and speech were embarrassed, in consequence of extreme dryness of the mucous membranes (in spite of constant drinking-water and milk); the urine and excrements were absent from the outset. On the third day, all the symptoms decidedly grew worse, only a teaspoonful of highly concentrated urine being voided; the bowels were moved only after repeated enemata. During the fourth and fifth days, the prostration became dangerous, and there appeared intense anxiety, coldness of the limbs, and aphthous patches on the soft palate. At this stage, to alleviate the patient's subjective feelings, pilocarpine, a fourth of a grain a day, in a solution, was resorted to (only stimulants and warming bottles having been previously used). On the sixth day, a striking change followed. The patient became stronger, cheerful, able to speak loudly; the aphthæ disappeared; the saliva flowed freely; the pulse improved, the respiration became easy, and the daily amount of urine was increased. On the ninth day, the patient was able to sit up. The general weakness, however, lasted for another twelve days, the patient still looking "as if he were recovering from a prolonged severe disease." Dr. Danilevsky thinks that it is worth while to give pilocarpine a fair trial in cases of fish-poisoning.

FISH OUT OF SEASON.

The unmanly and unsportsmanlike practice of catching fish out of season cannot be too strongly reprehended. There is no doubt about its being illegal; the Freshwater Fisheries Act, 1878, and the Norfolk and Suffolk Fisheries Act of the year before (41 and 42 Vict. cap. 39, 40; and 41 Vict. cap. 98) plainly forbidding it; nor can the public plead ignorance, as notices have been freely shown by the Fisheries Department and the Home office, giving particulars of the provisions by law relating to "close time," "sale," etc., of freshwater fish. Yet, between October 2nd and February 1st, trout and char are taken wholesale, for the most part with gaffs, and snares, and spears, and all kinds of poaching implements; and even the roe of the fis thus cruelly taken, is used as bait for taking others. During th "close time" for freshwater non-migratory fish other than pollar trout, and char (that is, from the middle of March to the middle o June), very little mercy is shown. Even that atrocious instrumen dynamite, is now used by the night-poachers. Of course, anythin we could say as to the ruinous wastefulness of catching fish during "close time" is likely to weigh very little with the offenders who d this dirty work; but these, after all, are not the chief culprits. I there were no market for fish out of season, very few would be caught To the dealers who traffic in such goods, and to the public who buy we appeal. They are themselves doing an illegal act, and inciting others to break the law: they are acting inhumanly to the spawnin fish, they are doing their best to deprive the poor altogether of a much esteemed and economic food. Perhaps, however, there is a argument that may be more convincing even than these—it is, tha fish out of season are unwholesome. A fish in prime order should b rather short in the body, small in the head, thick in the shoulders and (as Frank Buckland says) should have a "grand prize-pig-lik back;" it should be firm-fleshed throughout, and the *rigor morti* should be well marked. Anyone who has seen a fish taken just be fore or immediately after spawning, will know how far it falls shor of this description. Such fish have not the normal flavour, and soo decompose; and, even if eaten quite fresh, are likely to produc symptoms closely resembling those produced by sausage-poisoning epigastric pain, diarrhœa, retching, and sense of heat in the throat Fortunately for those fond of fish, the different species have differen seasons; thus, there is always some kind of fish in good condition, and there is no excuse for a practice which is unlawful, cruel, waste ful, and unsanitary.

SCOTLAND.

Professor Stirling presided at a students' smoking-concert on Saturday evening last; and, in some remarks, referred to the necessity for a closer connection between professor and students, and also the need of increased accommodation for students' meetings, reading-rooms, etc.

We understand that Dr. M. Hay, Professor of Medical Jurisprudence in the University of Aberdeen, is a candidate for the post of Public Officer of Health for the City of Aberdeen, vacant by the appointment of Dr. Simpson to Calcutta. Dr. Hay's university duties are not onerous, involving as they do teaching during the summer session only, so that he would have ample time to devote to the duties of Public Health Officer.

THE DEAN OF THE MEDICAL FACULTY AT ABERDEEN.

Professor Stephenson has been unanimously elected Dean of the Medical Faculty of the University of Aberdeen, *vice* Professor Brazier, resigned. Professor Brazier has also resigned the office of Secretary to the Medical Faculty, an office which he has held for about a quarter of a century, and the duties of which he has fulfilled with eminent satisfaction. The long list of medical graduates of Aberdeen will look back with pleasure on the many kindnesses and sound advice received from Professor Brazier in his capacity of Secretary, and latterly, as both Secretary and Dean.

DEATH OF DR. J. A. SIDEY.

Dr. James A. Sidey, a well known medical practitioner in Edinburgh, died, on Tuesday, suddenly, at the age of 61. He was surgeon to the prison of Edinburgh, and had besides a large general practice. Dr. Sidey, we read, was a collector of works of art, having reference chiefly to old Edinburgh, and many of the illustrations in Cassell's recent work on the subject were copied from drawings in his possession. He was the author of two privately printed illustrated volumes

of verses, principally humorous, entitled *Mistura Curiosa* and *Alter Ejusdem*. He also contributed to the recently issued volume of the Glasgow Ballad Society.

PROFESSOR FRANK OGSTON.

A large company of the friends of Professor Frank Ogston met in the Imperial Hotel, Aberdeen, on the evening of February 19th, and entertained him to supper prior to his leaving for Otago to begin his duties there as Professor of Medical Jurisprudence.

EXTIRPATION OF THE ENTIRE LARYNX FOR EPITHELIOMA.

This operation was performed, for the second time, by Dr. David Newman, surgeon in charge of the Department for the Diseases of the Throat and Nose at the Glasgow Royal Infirmary. The case was one of intrinsic epithelioma without secondary glandular formations, and was in all respects a favourable one for surgical interference. The operation was performed on Saturday, February 6th, and we are glad to learn that the patient is progressing favourably towards recovery. This is now the fifth time that the operation has been performed in Glasgow. The details of the case will be published in a course of lectures on Tumours of the Larynx by Dr. Newman.

MR. LAWSON TAIT ON ABDOMINAL SECTION.

On Wednesday, February 17th, the Medico-Chirurgical Society of Edinburgh had a field night, when Mr. Lawson Tait read a paper on Abdominal Section, and commenced a discussion on the merits of that operation in the diagnosis and treatment of disease. The meeting was held in the Hall of the Royal College of Physicians, Queen Street, Edinburgh; it was presided over by Professor Grainger Stewart, and was attended by the Members of the Society, many of whom had come from a considerable distance to be present, by a large number of the profession, and by about four hundred of the advanced students of medicine. In his paper, which will be published *in extenso*, Mr. Lawson Tait gave a history of the subject of abdominal section in this country, from the time when it was considered a proscribed operation, till the present time, when it is justly regarded as one of the greatest and surest advances that surgery has made in the diagnosis and treatment of disease. He mentioned that, in his own practice, he had had recently over 130 cases of operation without one fatal result. He also entered into the subject of antiseptics, in relation to ovariotomy, giving some remarkable cases that had occurred in his own practice in connection with scarlet fever. The paper was listened to with great interest, and many points in it seemed to commend themselves to the audience. Professor Simpson, in the discussion which followed, entered upon a critical examination of Mr. Lawson Tait's apparent desire that such operations should be limited as far as possible to specialists, and pointed out the importance of having such things taught by men who actually performed such operations. Professor Annandale directed attention to various papers in Journals, communicated by him, which conclusively showed that abdominal section and other operations on the abdomen had early taken place in Edinburgh. Dr. Maclaren, of Carlisle, also spoke as to the operations of the same nature performed by him, while acting as general surgeon in the Carlisle Infirmary. Dr. John Duncan, Dr. Halliday Croom, Dr. Byrom Bramwell, and Dr. Berry Hart, also spoke; and Mr. Lawson Tait concluded by referring to the various points raised by the different speakers. Altogether the meeting was a success, and the Society did well in obtaining the Physicians' Hall for its accommodation. The students present would have liked, perhaps, that Mr. Lawson Tait had given some details regarding the various methods and objects of abdominal section.

Presentation.—Mr. Harwood Casson has (in addition to that reported last week) been presented by the inhabitants of Longford with a handsome inlaid marble clock, bearing the following inscription: "Presented to H. Casson, Esq., by the inhabitants of Steeple and Little Langford, January, 1886."

IRELAND.

During the December quarter of the past year, among the deaths recorded in Ireland were those of nine centenarians. Of these, three were 100; one, 101; two, 103; two, 104; and one, 105 years respectively.

It is announced that Mr. Foster Green has offered to build at his own cost a new wing to the Throne Hospital, Belfast, for consumptive patients, on condition that £15,000 are raised for the endowment of the wing during the next two years; £1,750 have been promised. It is to be hoped that Mr. Green's generous offer will meet with a suitable response.

VICE-REGAL APPOINTMENTS.

His Excellency the Earl of Aberdeen has made the following appointments to his Court: Physician in Ordinary, G. W. Hatchell, M.D.; Surgeons in Ordinary, P. C. Smyly, M.D., and E. D. Mapother, M.D.; Surgeon to the Household, T. Nedley, M.D.; Surgeon-Oculist, A. H. Jacob, M.D.; Surgeon-Dentist in Ordinary, D. Corbett, M.R.C.S.Eng.

VACCINATION.

According to the returns of vaccination received for the fourth quarter of 1885, there were 24,000 persons successfully vaccinated; in 3,124 instances the operation was postponed, and 77 children were reported as insusceptible of vaccination. The deaths of 1,535 unvaccinated children under three months old were registered during the quarter; making a total of 28,745 children, with regard to whom particulars as to vaccination were ascertained.

HEALTH OF IRELAND.

During the December quarter, the registered births numbered 26,675, equal to 21.7 per 1,000; and the deaths 20,127, or 16.3. The birth-rate was 0.2 under the average, and the death-rate 0.4 below the average rate for the corresponding quarter of the past five years. The returns for the quarter compare favourably with those of previous years; and, notwithstanding that scarlatina was prevalent in many districts, and whooping-cough proved very fatal in a few localities, the total mortality from the principal zymotic diseases was the lowest recorded in any quarter since details regarding causes of death were first included in the quarterly returns in the year 1873. Measles caused 81 deaths, being a considerable decrease; scarlatina, 287 deaths, or 59 in excess of the number for the previous quarter. The mortality from typhus fever was considerably below the average, and there was a slight decline in the deaths from whooping-cough. Diphtheria caused 51 deaths, enteric fever 151, and diarrhœa 286, a number considerably under the average.

ASYLUMS IN IRELAND.

A correspondent writes:—This report of the inspectors on Irish asylums for the year 1884 has been issued more than a year after date. Beyond the expression of regret at the close of the report that, through unavoidable causes, it has not been available for issue at an earlier period, no reason is given for the delay in publication. A laborious and long report would have accounted for, and perhaps justified, this proceeding; but the report is short, and there are no very conspicuous signs of labour bestowed upon it. The number of insane under treatment in Ireland amounted, on December 31st, 1883, to 14,088. The reader of the report, wishing to compare this number with that twelve months later, has to spend much time and care before he can ascertain the desired information; and, having made the calculation for himself, finds that his figures do not exactly tally with the number quite incidentally mentioned in the report. It is a most extraordinary thing that the inspectors do not give in a single table a general summary of the number of the insane in Ireland and

their location. The contrast between the statistical tables of the English commissioners and those of the Irish inspectors is very marked, and is greatly to the discredit of the latter. Much of the information contained in the Irish tables might well be dispensed with; and other details, really valuable, might have been presented. Returning to the number of patients on December 31st, 1884, there appear to have been 14,280. Of this number, 9,687 were in district asylums, 3,775 in workhouses, 639 in private asylums, and 178 in the Dundrum Criminal Asylum. The increase over the previous year is 192. The population of Ireland being 5,000,000, about one individual in every 350 is mentally affected, or, omitting epileptics, idiots, and congenital imbeciles, one in every 450. In England, the ratio of the insane and idiotic to the population is one in 345. There are no tables showing the percentages of the recoveries and deaths, the causes of insanity, or the form of mental disorder, except in the case of Dundrum, where it is interesting to observe that there was not at the close of the year a single case of general paralysis. In conclusion, it is to be hoped that future reports will be more creditable to those who prepare them, that a general summary of facts will be given in one table, and that some of the tables will be prepared on an uniform plan with those in the Blue-book for England and Wales. Should such a reform be introduced next year, we shall be willing to endure a still longer delay than has occurred in the preparation of the present disappointing report, the grammatical composition of which is in parts very imperfect.

MEDICAL REFORM.

A Ministry, in which Lord Spencer and Sir Lyon Playfair, who are both familiar with existing medical legislation, and have shown great interest in the question of reform, occupy the posts of President and Vice-President of the Council, would be able to undertake the conduct of a comprehensive measure with every prospect of success. We understand that there is reason to anticipate that such a measure may be submitted to the present Parliament.

SIR WILLIAM GULL ON THE ADMISSION OF WOMEN TO THE MEDICAL PROFESSION.

On Saturday afternoon, February 20th, a well attended meeting was held at the Medical Society's Rooms, Chandos Street, Cavendish Square, with reference to a memorial to the late Miss Frances Helen Prideaux.

Among those present were Sir Wm. Gull (in the chair), Dr. Broadbent, Professor Schäfer, Dr. King Chambers, Dr. Hack Tuke, Dr. Cheadle, Dr. Myers, Dr. Sainsbury, Dr. McWilliam, Dr. Ford Anderson.

Sir William Gull, who presided, said they had met that day to establish a scholarship in medicine, in memory of Miss Helen Prideaux, a bachelor of medicine of the University of London, who last year died of diphtheria on the eve of presenting herself for the final M.D. degree. Miss Prideaux, whose character and intellectual endowments he highly extolled, had vindicated the right of woman to take the highest position in a difficult and intellectual profession. In the course of her studies she obtained, at the University of London, the exhibition and gold medal in anatomy, the highest award in that difficult department of medical studies; and later on she took a first-class in medicine and other subjects. In the dim and now distant past, one objection that was strongly felt against the admission of women to University degrees was, that it might lead to a lowering of the standard of proficiency. Miss Prideaux, by heading the honours list, had answered this objection, and swept away this prejudice from the path of all who might follow her. For himself he confessed that he had opposed the admission of women to medical studies, in common with many of his distinguished colleagues, and looking as carefully as he could into the motives which then prevailed with him, and he had no doubt with them, too, there was a misgiving that in practice the good work of medicine might be deteriorated, and without a sufficient opposing check. But when the movement acquired force, and the legislature had, by their Act and by a charter to the University, confirmed the rights of women to an equal claim with men to University examination, it seemed to him that it would have been unfair and factious on his part longer to have stood in opposition. His duty was, therefore, to take quite another position, and in the best spirit of chivalry he could command to promote what had thus far been proved a desirable object. In taking the chair at that meeting, for founding a medical scholarship to be awarded to women—for the furtherance of their medical studies after qualification for practice—he felt himself charged with a very high and honourable duty, both to his profession and to society. The spirit of medicine was one of intellectual freedom, and, in accordance with that, they would place the Helen Prideaux Memorial high over the lower atmosphere of personal contentions and current opinions which were but for the day. The Helen Prideaux Memorial would, he hoped, from year to year successfully call upon others to follow her bright example, and prove that society had been fully justified in asking for the medical offices of women. Medicine should not stand by indifferent, but in generous recognition ought to add her quota to the memorial of so much that added to the wealth of our social life. He desired to place the memorial above the troubled atmosphere of professional questions—to give this medical work which women had undertaken an impersonal and intellectual character. To maintain the high standard which they all desired for the medical education of women, more care seemed to be required than for the same pursuits of men, for this, if for no other reason, that they had not at present colleges with the prescriptive authority of time and usage to guard and guide them. Moreover the slower perception of man was in itself a safeguard. If the rudder were put into more sensitive hands, the rules of navigation needed to be more simple and precise. To the less elevated mind medicine was apt to become a mere trade; to the more elevated and better educated it was a profession; but in woman—he believed also in man, but more especially in woman—it needed the character of a religion where high sentiment quickened and directed all actions. This work of women, conducted as Miss Helen Prideaux and other of her colleagues showed it could be, must favourably react upon the whole profession. It hinted to them that their medical knowledge and medical teaching required more exactness, more precision, less assumption of knowledge where perhaps there might be none, and the more careful use of words, with the suppression of such as had no meaning. For if women failed in the practice of medicine so far as it was confided to them, it might be owing to the other side of the profession, who now represented the sources of medical science. The failure of the work in more delicate hands might be traceable to the imperfection of the medical knowledge with which they had been supplied. And it was no light matter to contemplate the possibility of such a failure where the cause of it might be directly traceable to themselves—to them, the men—who had much larger means of knowledge. Though not altogether, there was some fitness in his addressing the meeting, for although he had no authority on the part of the University of London, yet as one of its Fellows and the oldest medical member of its Senate, he felt it to be a duty and a privilege to take his part in the furtherance of their university interests, touching the education of women, and especially in that faculty in which he was chiefly interested. When they considered the great medical distinction achieved by Miss Helen Prideaux, and that her medical education was conducted under the auspices of the London School of Medicine for Women, and her training furthered by the committee of the New Hospital for Women, who appointed Miss Prideaux one of their assistant-physicians, they must gladly recognise the merits of a system which favoured and produced such results, and not solely the result they commemorated that day, for the calendar of the University of London afforded many names which deserved to be honourably associated with that of Miss Helen Prideaux. There was a meed of honour due to all those who laboured with her in her medical work, and to all who laboured for her in her painful and arduous studies, for such she personally confessed to him they had been to her, however successful. The memorial would, he hoped, as time went on, be a vindication of the claim of women to a more liberal consideration on the part of the corporate bodies in the kingdom, and might enable them to see their way to a recognition of educated medical women to practice, and save them from an implied indignity by obliging them to go to a distant part of the kingdom for such recognition, unless they had strength and opportunity to pass through the loftier portals of the University of London.

On the motion of Dr. Broadbent, seconded by Professor Schäfer, it was resolved "That the income derived from the sum now raised in commemoration of the late Helen Prideaux be given as a prize every second or third year to a woman who has already completed the ordinary course of medical education, to help her on to a further stage, and that it be called the Helen Prideaux Prize Fund." It was further resolved that the Dowager Lady Stanley of Alderley, Mr.

anley Boyd, and Mrs. Garrett Anderson, be trustees of the fund, d have absolute power to award the prize.
A vote of thanks to the chairman concluded the proceedings.

PARLIAMENTARY BILLS COMMITTEE.

ection of Chairman.—Lunacy Acts Amendment Bill. — Local Government Reform.—Private Health Bills.—Burgh Police and Health (Scotland) Bill.—Honorary Secretaries.—Registration of Midwives Bill.—Lunacy Acts Amendment Bill.

MEETING of the Parliamentary Bills Committee of the British edical Association was held at the offices of the Association, 161A, rand, on Friday, February 19th. The following members were esent: Dr. Robert Barnes, Dr. Bucknill, Dr. Alfred Carpenter roydon), Dr. Langdon Down, Dr. Balthazar Foster, M.P. (Birngham), Mr. Ernest Hart, Dr. Mickle, Dr. Phillips (Reading), Mr. anton (Hanley), Mr. Sibley, and Dr. J. H. Aveling. Mr. Fowke, the neral Secretary, was in attendance.
Mr. Sibley was voted to the chair.
Election of Chairman.—On a proposal being made that Mr. Hart ould be asked to resume the chairmanship of the Committee, Mr. art said that, under the altered circumstances of the Committee, he s not desirous of resuming that office, and it was for the Committee to nsider whether it would not be better that they should appoint a w chairman, and one who could also represent them on the Comttee of Council.
Dr. BUCKNILL thought it was exceedingly desirable that this Comttee should have the same chairman who had rendered such nal services for a series of years, in order to preserve the conuity of the work. He moved that Mr. Ernest Hart be appointed airman and convener. Dr. ALFRED CARPENTER seconded the olution, which, after complimentary observations from various mbers, was carried *nem con.*
The minutes of the previous meeting were read and approved.
Letters of apology for non-attendance were received from Dr. rnes (Carlisle), Mr. Wickham Barnes, Mr. Reginald Harrison, Dr. ilipson (Newcastle-on-Tyne), Dr. Joseph Rogers, Dr. Charles ton, Mr. Elias Owen, Dr. Tiffen, and Dr. Whittle.
The CHAIRMAN stated that the proceedings of the Comttee subsequent to the last formal meeting had been pubhed in detail in the report, a copy of which was forwarded every member of the Committee for their consideration, and their authorisation for his signature. That report was printed the JOURNAL, and presented at the annual meeting at Cardiff, h such slight modifications as some of the members suggested, and pted. He considered that the document, which was of considerable gth, and showed that a very large amount of work had been done, uld be put on record. It was proposed by Mr. SIBLEY, and onded by Dr. BARNES, that the Report which had been forwarded each member of the Committee, and approved and adopted at the nual meeting, be entered on the minutes, which was approved.

LUNACY ACTS AMENDMENT BILL.

The CHAIRMAN proceeded briefly to recapitulate what had been ne since their last meeting. As to the Lunacy Acts Amendnt Bill, the subcommittee which they appointed met, and with assistance especially of Dr. Mickle, Dr. Orange, and Dr. Langdon wn, a very elaborate report was prepared. To assist all the members the Association in making suggestions, an exhaustive analysis of the l was prepared and published in the JOURNAL of April 11th. At meeting of the subcommittee which followed, all the clauses of Bill were gone through, and a report was prepared for an amendnt of the Bill, which was published in the JOURNAL (Vol. i for 5, pages 1073-5). He had communicated this report to the Lord ancellor on behalf of the Committee, and together with that report at a memorandum, for which they were likewise largely indebted Dr. Mickle, explaining in great detail the reasons for the amendnts which they urged. Many of the more important amendments l, he was happy to state, been adopted by the Lord Chancellor.
Dr. BALTHAZAR FOSTER, M.P., expressed a wish to hear a general tement with regard to the actual position of legislation for the dical profession in the ensuing session.
The CHAIRMAN, continuing, said some of the proposed amendments the Committee were adopted by the Lord Chancellor, but the de: of the Government led to the withdrawal of the Bill. There was, vever, one remnant of Lord Selborne's measure, relating to persons ndering at large, and deemed to be of unsound mind, which was taken up by Mr. Balfour, the new President of the Local Government Board, and was passed into law as the Lunacy Acts Amendment Bill, 1885. That Act provided in substance that if a relieving officer, overseer, or constable, were satisfied that it was necessary, for the public safety, or the welfare of an alleged lunatic, that he should be placed at once under care or control, the officer might, without further order, remove him to the workhouse of the local union. That was the only amendment which had passed into law. The Bill of last session was now to be reintroduced, and had been announced by Lord Granville on the previous day. He thought practically this would be Lord Selborne's Bill over again. That Bill was still defective from their point of view, and he suggested that they should at once reappoint their subcommittee of last year (adding to it Dr. Balthazar Foster and Dr. Bucknill) to consider the amendments which they then drew, and which had not been adopted, and to press their consideration upon the new Lord Chancellor, especially as to whether any further protection could be secured to the medical man.
It was proposed by Dr. ALFRED CARPENTER, that the subcommittee of last year be reappointed, with the addition of Dr. Balthazar Foster, M.P., and Dr. Bucknill. This was carried.

LOCAL GOVERNMENT REFORM.

The CHAIRMAN said that he had prepared material in connection with this subject when it came on, but there was no present indication as to when it would be brought on in the House of Commons. The special interest of this Committee in the question would be the remuneration and tenure of office of medical officers. The tenure of office of medical officers of health was now extremely unsatisfactory.

PRIVATE HEALTH BILLS.

The CHAIRMAN said he need not here give them the result of last year's Bills; but, as to the Bills now before the House, he had had the private Bills promoted by corporations searched and examined for the detection of clauses providing for the compulsory notification of disease, or for any other clauses affecting the public health law of the country. The number of corporation Bills generally was only about one-third of those introduced in previous sessions, and only three of these contained medico-sanitary clauses. These Bills were promoted by the Corporations of Ashton-under-Lyne, Carlisle, and Guildford. Copies of these Bills were laid upon the table. Blackpool, which had given notice of its intention to promote a Bill containing a variety of medico-sanitary clauses, had decided to withdraw its Bill altogether for the present year. He (the Chairman) had, in order to carry on the continuity of the work, on his own behalf communicated with the medical men of influence in those localities, to know the feeling in those districts.
The three Bills in question (Ashton-under-Lyne, Carlisle, and Guildford) all contained clauses providing for the dual notification of cases of infectious disease to the sanitary authority by the medical attendant and by the occupier. They also contained provisions to which he did not think the Committee should object, what were known as the regulation clauses of Mr. Sclater Booth's Committee of 1882, as to provision of temporary isolation-accommodation, nurses, closing of shops, lists of cowkeepers' customers, retention and removal of corpses, and the like, all of which were very useful clauses.
He had communicated with Ashton-under-Lyne, and there did not appear to be any special feeling among the profession there on the subject of compulsory notification. The medical men had not expressed any opinion on the clauses for notification of disease, but it was believed that several were not opposed to them. The Committee had no *locus standi* except through local medical men. The standing rule was, that no one could appear but those who were directly interested; and unless the medical men there interested themselves, nothing could be done. All the Committee could do was to call attention to the matter, and, if any medical man moved in the matter, supply him with information and assistance. At Guildford, it appeared that the profession were of opinion that the duty of reporting cases of infectious diseases should lie with the head of the family affected, and this was also the view of the Medical Officers of Health. He suggested that a letter should be written to the Honorary Secretary of the South-Eastern Branch of the British Medical Association, calling his attention to the matter, and offering assistance.
With respect to Carlisle, very soon after the announcement in the JOURNAL of the intention of the Carlisle Corporation to ask for compulsory powers, he received a communication from a leading medical man there, asking for information as to how they should go to work if they wanted to oppose it; and he (the Chairman) had, in the name of the Committee, offered some suggestions as to the furtherance of the

views of the practitioners who were opposed to it, and they were furnished with facts and figures which would enable them to take action. A letter was read from a medical practitioner of Carlisle, showing that the information given had been much appreciated. A meeting of the local medical men had been summoned for the previous day, and it was for them to move in the matter.

Burgh Police and Health (Scotland) Bill.

Lord Granville had announced on the previous evening that this Bill was to be re-introduced into the House of Lords. It contained a number of objectionable clauses, and they had drawn up a very full memorandum stating their objections; and he (the Chairman) thought some steps ought to be taken in reference to that Bill. He had asked Dr. Carter (Liverpool) to bring up to date the figures in his statement appended to the memorandum. He proposed that a subcommittee should be appointed, and a deputation wait upon the Lord Advocate.

The Chairman said he could not help thinking that, in that connection, it would be a very useful thing if that Committee were at once to pass a resolution asking all medical members of Parliament, who were also members of the Association, to accept the post of honorary members of this Committee; because, in any interview of that kind, it was very desirable that they should have the interest of the medical members of Parliament to go with them.

Dr. Balthzar Foster, M.P., said he should be very glad if they could arrange some way of getting the medical men who were in Parliament to act with them. He was himself proposing some day to call them together, and to talk the matter over; and the reason for his presence at the meeting was, to see in what way they could act together.

It was decided to send to each medical member of Parliament a copy of the Chairman's memorandum on the above Bill, and finally to arrange a conference between some members of the Parliamentary Bills Committee and such medical members of Parliament as they could collect.

It was moved by Dr. Balthazar Foster, M.P., seconded by Mr. Spanton, and carried unanimously, "That the memorandum in respect to the Burgh Police Bill, and the suggested amendments in respect to the Lunacy Acts Amendment Bill, be reprinted and circulated among the medical members of Parliament."

Honorary Secretaries.

Dr. Foster said it seemed to him that, in the Council of the Association, it was very desirable, as far as possible, that each committee, acting as that committee did, should have someone authorised to speak on behalf of the committee at the meetings of the Council. Mr. Hart's interest in the work had been so long and so continuous, as to designate him as the best possible Chairman, but it would be a great advantage, in his absence from the Council, to have an honorary secretary as a representative on the Council.

On the motion of Dr. Balthazar Foster, it was resolved: "That, for the purpose of facilitating communication between this Parliamentary Bills Committee and the Council of the Association, Dr. Alfred Carpenter and Mr. Sibley be requested to act as honorary secretaries."

Registration of Midwives Bill.

Dr. Aveling, in pressing upon the attention of the committee the Bill for the Registration of Midwives, reminded them that a deputation introduced by Dr. Farquharson had waited upon the Lord President of the Council (Lord Carlingford), who was of opinion that the Bill was too stringent, and thought if it were less so, there would be a great chance of getting it passed into law. He suggested that the subcommittee should be asked to look over the Bill again, and see if there were any parts in which it might be made less stringent; he thought there were points in which it might be.

The Chairman asked if it was the opinion of the meeting that the subcommittee on this Bill should be reappointed, and that it be pressed once more upon the attention of the Government.

A resolution in accordance with this suggestion was moved by Dr. Robert Barnes, seconded by Mr. Spanton, and carried.

The Chairman said they were greatly indebted to Dr. Aveling for the assistance he had given in this matter.

Lunacy Acts Amendment Bill.

Returning to the subject of this Bill, the Chairman invited suggestions as to the alterations needed in the report which had been submitted last year to the Lord Chancellor, and which they had decided again to press upon the attention of the Government. Lord Halsbury had expressed his willingness to pass Lord Selborne's Bill; and it w now said that the new Lord Chancellor would reintroduce the Luna Bill, which had the important support of Lord Selborne; so that three Chancellors—Halsbury, Selborne, and Herschell—seemed su stantially to have adopted the Bill.

Mr. Spanton called attention to Par. 20, Section 20, of the Men randum of the Committee on the Bill, which stated that "t judge, magistrate, or justice, in making an order for committal to asylum under this section, might make an order upon the guardia of the union in which the lunatic was found, for payment of t proper remuneration of the medical practitioner upon whose certifica the lunatic was committed, and of all the expenses incidental to t inquiry upon which the order of committal was made;" but no pr vision was made for the payment of the medical man when the p tient, after being examined, was found not to be insane, and no co mittal followed.

Dr. Alfred Carpenter said there was an absurd but disagreeab idea prevalent among the magistrates, that these orders were fr quently signed too freely by the medical man, because he obtained t fee for examination. No fee was got if the person examined were n committed.

Dr. Robert Barnes was of opinion that there should be a fee f examination.

Dr. Bucknill said the medical man was in a different position wi respect to different patients. If a medical man were called in by a ju tice to visit one of the three classes, wandering lunatics, neglect lunatics, or lunatics cruelly treated, he had to make a report; a these justices might call in the medical man to assist them again, a give evidence upon oath, and then they had the power of giving hi reasonable remuneration.

Dr. Carpenter: That is according to the new custom.

Dr. Mickle pointed out that a very slight alteration in the wordi of the clause would make the necessary provision.

Dr. Langdon Down drew attention to Section 16, and to t security there was for a medical man signing a *bonâ fide* certifica in the intervention of Attorney General or Public Prosecutor.

Dr. Mickle pointed to Section 8, Subsection 4, which reads: " medical practitioner who, in the manner required by this Act, signs a certificate that a person is of unsound mind, shall not be liable to a civil or criminal proceeding for signing such certificate, or for a act done with the view of enabling the practitioner to sign the ce tificate, if the certificate is signed and the act is done in good faith and again that no action should be brought except by conse of the Attorney General, which afforded protection to the pers signing the certificate; but no protection was afforded to medical m who took charge of patients. He desired to call the attention of t meeting to a resolution passed at the annual meeting of the Briti Medical Association at Cardiff, in the Psychological Section, whi he had been asked to bring before the attention of the committe "Dr. Hack Tuke proposed, that the section of the Lunacy La Amendment Bill, dealing with the protection of medical men signi certificates, should be extended to medical men who took charge patients, and that, in any action taken against such medical men, t person instituting proceedings should be required to give security f the costs incurred in the event of his losing the action. Dr. Stewa proposed as an amendment that the latter part of the resolution omitted. The amendment was not seconded, and the original moti was carried, Dr Mickle undertaking to lay the resolution before t Parliamentary Bills Committee."

Dr. Bucknill said the clause referred to (Section 8, Subsection 4 appeared to him to give no assistance of protection to the medic man. It all turned upon the question whether the medical man h acted "in good faith."

Dr. Mickle stated that the subcommittee felt that those who r ceived patients under certificates were in an extremely defencele position, and that they were not at all defended by the law, and th the opportunities for taking action against them were altogether t easy. They felt it very strongly, and recommended that the medic man who signed the certificate and the medical man who received t patient should receive reasonable protection, so that no merely vex tious actions could be readily brought against them. Subsequently, t subsection above referred to had been introduced, which to some exte protected the signer of the certificate; but nothing had been done protect those receiving patients.

Dr. Bucknill expressed himself dissatisfied with the amendmen and cited a case in which the medical officers of an asylum had be mulcted in very heavy costs in an action taken against them by dangerous lunatic. He was of opinion that, for the protection of t medical man signing certificates, the Lord Chancellor's amendme

s inadequate. As regarded those who received patients, there s not a single word in the Bill for their protection.

Dr. ROBERT BARNES thought it a very strong case, and said there re a number of medical men in the country who would not sign tificates.

Mr. SPANTON suggested that, in every instance in which a lunatic s certified by a magistrate, the medical practitioner should be empt from any liability.

Dr. BUCKNILL considered it worthy the consideration of the Comttee, whether the certificates of lunacy, as they existed, ought not to abolished altogether, and the medical man put in the position of medical expert witness. It could not have been done under the l act, before the magistrate was called in in all cases; but under the w act, calling the magistrate in in all cases, he did not see why e medical men should not be put in the position of a witness; a tness was privileged for all he said in good faith. The difference s this: if a medical man gave an opinion in a court of justice, or on affidavit, that a patient was insane upon insufficient observan, he was not liable; in other cases he would be. He believed a an insane and offered to make an affidavit, but he would not give certificate.

Dr. ALFRED CARPENTER: Dr. Bucknill would suggest that the agistrate should be a committing officer, and if any action arose, it ould be against the magistrate; all the others should be witnesses; at was, he thought, a much more satisfactory way of dealing with

Dr. Bucknill reminded them that Lord Shaftesbury opposed to e last the introduction of the magistrate. Lord Selborne's argument was, that the introduction of the magistrate would take the onus the responsibility off from other people's shoulders.

The CHAIRMAN suggested that they should get the Subcommittee gether as soon as possible immediately the Bill was printed, and draft further report, with as complete a protection clause as possible, and t it moved as an amendment.

This suggestion was agreed to.

Dr. BUCKNILL thought it would be a very simple request to ask at the medical men should be placed in the position of ordinary tnesses.

Dr. MICKLE said the new Act would have given no protection to the dical men at Bethlem Hospital at all; any protection given would ve been to the men who signed certificates.

The CHAIRMAN said the question was, whether there was a *bonâ fide* otection now for the signers of the certificates; they had agreed to deavour to extend it to the receivers. Dr. Bucknill seemed to think t.

Dr. MICKLE said there was only a modified protection.

Dr. BUCKNILL said he would suggest that no action be brought ainst a medical man for giving an affidavit, unless he said that ich was false; and he would put a man who signed a certificate in e position of a man who made an affidavit.

Dr. CARPENTER advocated that in any action, even with the thority of the Attorney-General, some pledge should be given to reburse the medical man for the damages, if not proved against him. the case of a pauper, the board of guardians would do so.

Dr. MICKLE pointed out that this precisely covered the ground of e resolution passed at Cardiff.

COLLECTIVE INVESTIGATION COMMITTEE.

ST OF RETURNS RECEIVED DURING THE MONTH OF JANUARY, 1886.

Aberdeen Branch: III, J. Mackenzie Booth, M.D. (2); X, C. A. Arnold.
Border Counties Branch: XII, H. A. Lediard, M.D., F.R.C.S.; XIII, T. B. een; XIV, A. B. C., T. B. Green.
Dorset and West Hants Branch: I, T. G. Parrott (2); II, G. S. Mahomed.
East Anglian Branch: X, J. P. Wills (3); XIII, J. Montagu Day.
Lancashire and Cheshire Branch: Liverpool District: XIV, A. B., G. Waller eeves, M.D. Manchester District: III, D. J. Mackenzie, M.D. (3).
Metropolitan Counties Branch: IV, A. Ogier Ward (2); X, J. Russell Harris, D., D. F. Buller Reardon; XIII, J. Harper, M.D., F. T. Taylor, M.B. (2); XII, urice Davis, M.D.
North of England Branch: III, R. S. Peart, M.D. (3).
North of Ireland Branch: X, R. Esler, M.D. (4).
South-Eastern Branch: West Surrey District: X, W. Gripper, M.B.
South Wales Branch: X, A. Sheen, M.D. (2); XIV, A. B. C., T. Hall Redwood, D.
Egypt: Cairo: XI, F. M. Sandwith.
Monte Video: I, IV (2), H. F. Parsons.

The Committee beg also to acknowledge the receipt (to February nd) of the following replies to the inquiry of the International Coess into the geographical distribution of certain diseases. The rerns from some of the Branches have not yet been received.

Aberdeen Branch: 15.
Bath and Bristol Branch: 55.
Birmingham and Midland Counties: 0.
Border Counties Branch: 40.
Channel Islands Branch: 4.
East Anglian Branch: 72.
East Yorkshire Branch: 33.
Edinburgh Branch: 51.
Glasgow Branch: 76.
Gloucestershire Branch: 22.
Lancashire and Cheshire Branch: Liverpool District: 42.
Metropolitan Counties Branch: 176.
Midland Counties Branch: Derby District: 24.
Nottingham District: 29.
North of England Branch: 45.
North of Ireland Branch: 64.
North of Scotland Branch: 35.
Oxford Branch: 11.
Reading Branch: 18.
Shropshire and Mid-Wales Branch: 30.
South-Eastern Branch: East Kent District: 48. West Surrey District: 14. East Sussex District: 30. West Sussex District: 9.
South Midland Branch: 37.
South of Ireland Branch: 28.
South Wales Branch: 70.
South-Western Branch: 64.
Southern Branch: Isle of Wight District: 8.
South Hants District: 12.
Staffordshire Branch: 32.
Thames Valley Branch: 20.
West Somerset Branch: 17.
Worcester and Hereford Branch: 29.

The Secretary to the International Committee begs also to acknowledge the receipt (to February 22nd) of the following returns from members of the profession, not members of the Association:

Metropolitan District (inquiry issued January 30th): 247.
Scotland (inquiry issued February 6th): 124.
Ireland ,, ,, ,, 121.

The issue of the inquiry will probably be completed at the time when this acknowledgment appears.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF

INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT. —The next meeting will be held on Thursday, March 18th, at 8.30 P.M., at the London Hospital. A demonstration of patients suffering from Diseases of the Circulatory System will be given by Dr. Sansom, Physician to the Hospital.—JOSEPH W. HUNT, 101, Queen's Road, Dalston, Honorary Secretary.

NORTH WALES BRANCH.—The intermediate meeting, under the presidency of J. Lloyd-Roberts, Esq., M.B., will be held at the Hotel, Penmaenmawr, on Tuesday, March 9th. The following papers and communications have been promised: *Post Partum* Total Suppression of Urine, by John Roberts, M.D., Chester. On the Common Diseases of the Cervix Uteri, by F. Imlach, M.D., Liverpool. A case of Hæmiopia, by Richard Williams, M.R.C.S., Liverpool. Collective Investigation, by W. Jones-Morris, M.R.C.S., Portmadoc.—W. JONES-MORRIS, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above districts will be held at the Grand Hotel, Brighton, on Wednesday, March 24th. Mr. Hodgson will preside. Communications with respect to papers should be sent to the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of the above district will be held at the Queen's Hotel, Upper Norwood, S.E., on Thursday, March 11th, at 4 P.M., H. G. Plimmer, Esq., of Norwood, in the chair. The business of the meeting will include the election of a new honorary secretary, and also the consideration of a communication received from the President of the East Anglian Branch (Essex District) relative to the formation of a Medical Defence Fund in connection with the British Medical Association. The following papers have been promised. Dr. William Duncan: On the Commoner Accidents attending Parturition; their immediate and remote effects, and their treatment. Mr. G. Buckston Browne: On the Treatment of Prostatic Retention of Urine. Members desirous of exhibiting, or reading notes of, cases, are invited to communicate at once with the Honorary Secretary. Dinner will be served at 6 P.M. precisely; charge, 7s., exclusive of wine.—J. HERBERT STOWERS, M.D., Honorary Secretary, 23, Finsbury Circus, E.C.

GLASGOW AND WEST OF SCOTLAND BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held in the Royal Infirmary, on Saturday, January 30th; Dr. JAMES MORTON, President, in the chair.

Business.—The report of the Council was received, and the office-bearers were elected. Dr. Donald Fraser, of Paisley, was appointed President-elect.

Communications.—The following communications were made.

1. Mr. MAYLARD read a paper on Dry Dressings.
2. Dr. MACEWEN gave a demonstration on Radical Cure of Hernia, and showed Illustrations of Dry Dressings.
3. Dr. KNOX showed a patient on whom Fitzgerald's operation for Hernia had been performed.
4. Mr. H. E. CLARK exhibited several Cases: (*a*) Pulsating Tumour of Orbit, treated by ligature of the common carotid; (*b*) Compound Separation of Lower Epiphysis of Tibia, with demonstrations of the use of wood-wool in antiseptic dressings. (*c*) Tumour of the Breast in a male; (*d*) Renal Abscess, in which nephrotomy had been done, and where nephrectomy was contemplated.
5. Dr. WOOD SMITH showed (*a*) Case of Progressive Muscular Atrophy with Lateral Sclerosis; (*b*) Cases of Pityriasis Rubra; (*c*) Paroxysmal Hæmoglobinuria.
6. Dr. ROBERTSON: (*a*) Case of Purpura (Peliosis) Rheumatica (*b*) Apparatus for the application of Heat and Cold at graduated Temperatures in diseases of Spinal Cord; (*c*) Blood in Anæmia, by Hæmacytometer; (*d*) Cases of Lead-Poisoning.
7. Dr. WALLACE ANDERSON: Cases of (*a*) Charcot's Joint-Lesion in Locomotor Ataxy; (*b*) Pseudo-hypertrophic Paralysis; (*c*) Atrophy of Lung.

These demonstrations were given at separate hours.

Luncheon was provided by the Directors of the Infirmary for the visitors; and, at the close of the demonstrations, the members dined at Maclean's Hotel.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

A MEETING was held, by the kind invitation of Dr. Adams, at Brook House, Clapton, on February 18th: present, F. WALLACE, Esq., in the chair, and about thirty-five members and visitors.

Elephantiasis of Penis.—A case of elephantiasis of the penis and scrotum was shown by Dr. A. T. GIBBINGS. The patient had never been abroad, and the general opinion was that the case was not of the specific character associated with the presence of filaria.

Cases of Skin-Disease.—Dr. STEPHEN MACKENZIE gave a demonstration of patients suffering from skin-diseases, the following, among others, being shown: molluscum contagiosum (two cases); morphœa (two cases); pemphigus (two cases); purpura rheumatica; lichen pilaris; lichen planus; lichen circumscriptus; seborrhœa; exfoliative dermatitis; tubercular eruption (syphilitic).—A most cordial vote of thanks was given to Dr. Mackenzie for his exceedingly instructive and interesting exhibition.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Pulmonary Lesions successfully treated by Terpene.—The Influence of Operations on Tuberculosis.—Double Pneumonia treated with Pilocarpine.—Small-pox treated with Strong Doses of Opium and Hypodermic Injections of Ether.—The Action of the Liver on Alkaloids.—General News.

DR. DESCROIZELLES, Physician to the Hospital for Children, has successfully treated with terpene a case he describes as pulmonary tuberculosis, or chronic bronchitis simulating tuberculosis. The patient was a boy, 8½ years old, small and delicate; he had been previously treated at the same hospital for pleurisy on the right side. He coughed, vomited, and spat blood, had night-sweats, completely lost his appetite, and was too weak to move. Very little could be learned concerning his antecedents. In the right infraclavicular region, there were dulness on percussion, a cavernous *souffle*, and subcrepitant *râles*. The sputa were abundant, both mucous and purulent, and mixed with blood. The axillary temperature rose to 38.6° Cent. (101.5° Fahr.). The pulse was 120, and respirations 40. The chest over the part affected was painted with tincture of iodine, and a gramme of phosphate of soda was given daily. The child grew worse, hæmoptysis occurred several times, and there was alternate diarrhœa and constipation. The dulness on percussion became more and more marked at the apex of both lungs, but especially on the right side, where moist *râles*, almost gurgling sounds, were heard, also a cavernous sound. On the left side, moist crackling sounds had replaced dry crackling sounds. The child grew weaker, and refused food; his cheeks were sunken and flushed; and death seemed imminent. Glycerine and creasote were substituted for phosphate of soda without any good result. Dr. Descroizelles then decided to administer terpene. Two grammes of this substance were dissolved in 40 grammes of alcohol and 20 of distilled water, and the child took three or four teaspoonsful of this mixture daily. A marked improvement followed; less sputa were expelled, and they were free from blood; the appetite increased, the general condition improved, and the patient became convalescent. Lime-phosphate and gentian wine were given instead of terpene. In the interval between the beginning of September and the middle of November, the pulmonary symptoms disappeared, and the auscultatory sounds were normal. The child was sent into the country, apparently re-established in health.

At a recent meeting of the Paris Surgical Society, an interesting discussion took place on the effect of surgical operations on the course of tuberculosis. M. Mahon, an army-surgeon, forwarded notes

two cases. A soldier, aged 24, son of a phthisical father, entered e hospital with a tubercular affection of the fourth and fifth metarsal bones. Resection of the bones was performed. Fever soon set , and the synovial membranes of the foot were affected. The leg as amputated. The patient rapidly recovered, and his health connued excellent. The other patient was also a soldier aged 24. He ntered the hospital for arthritis of the knee subsequent to a fall. hree punctures were made. The first fluid that escaped was serous ; fterwards it was purulent. Arthrotomy was performed, and symoms of pulmonary tuberculosis were manifested. There was hectic ver, and severe pain in the articulation. The limb was amputated ; d, although there was improvement, the patient died. M. Mahon nsiders that surgical operations do not exercise any influence on sceral lesions, and that the cases above described indicate that the ternal lesion is the principal factor in the morbid process, and that rgical treatment often results in cure, always ameliorates the condion, and often arrests the visceral lesion. M. Chauvel believed that similar cases the necessary operations should be performed as early possible. M. Desprès believed that patients with tuberculous sions ought not to be operated on. M. Lucas-Championnière counlled operating, and cited M. Ollier's opinion. According to M. llier, partial operations are not more favourable to generalisation of isease than radical measures. M. Lucas-Championnière believed that sections and all operations that cause suppuration are more danerous in tuberculous patients than amputations. M. Verneuil counlled operating to remove pain, but always radically, not partially. . Berger stated that formerly he believed that operations provoked neralisation, but subsequently he has seen operations exercise a vourable influence on pulmonary lesions. MM. Pozzi, Richelet, olaillon, and Le Fort also counselled surgical operation in the resence of tubercular lesions, when called for.

Dr. Humbert Mollière has successfully treated double pneumonia with ilocarpin ; the patient, exhausted by dysentery and albuminuria, as attacked with pneumonia in both lungs, and the intestinal disrbance was greatly aggravated. A centigramme of pilocarpin was jected ; the respiratory movements fell from 48 a minute to 24, and yspnœa was much relieved ; four hours later, a fresh injection was ade, and was repeated the next morning; each injection was followed y profuse sweats and salivation, and dyspnœa was greatly relieved. he patient rapidly recovered. In administering pilocarpin, M. lollière was guided by former experience. An elderly man with remia, accompanied with dyspnœa and delirium, who seemed dying, as greatly relieved, and ultimately cured by a similar treatment. r. Mollière describes another case. A young woman with a comaose form of uremiæ and renal lesion, following a cardiac affection, as freed from the comatose condition by injections of pilocarpin.

M. Du Castel, at a recent meeting of the Société Medicale des ôpitaux, read a paper on the advantage of strong doses of opium and ubcutaneous injections of ether in small-pox. During the last four ears, he has adopted this treatment with all his cases. He divides mall-pox patients into two classes ; those who have been vaccinated, nd those who have not been. In those who have not been vaccinated, opium and ether considerably modify the period of suppuration. mong those who have been vaccinated, this treatment completely uppresses it. Fifteen centigrammes of opium are administered to omen, twenty to men. Two Pravaz's syringefuls of ether are injected daily. This treatment reduces the illness to a period of eight r ten days.

At the last meeting of the Biological Society, M. Roger read a aper on the action of the liver on alkaloids introduced into the organism. M. Roger made experiments with nicotine, caffeine, etc., nd observed that, in order to kill the animals, it was necessary to ject into the general circulatory system double the quantity injected nto the portal system; which indicates that, as Schiff supposed, the ver has a destructive influence on these alkaloids. M. Roger hen tried to ascertain if, in a normal condition, the portal vein arried to the liver a certain dose of toxic alkaloid which disappeared ; e obtained affirmative results. The liver transforms certain subtances into glycogen ; dangerous alkaloids it transforms into subtances less so.

Patients continue to arrive to be treated by M. Pasteur. Three oung children have been sent from the provinces. A soldier from Nancy, bitten by a mad dog, has been sent to Paris at the expense f his regiment. A professor of the Lycée Corneille at Rouen has olicited M. Pasteur's care under the following circumstances. He ad a pet cat, which was generally gentle and domesticated. Suddenly it became savage, would not be stroked, and mewed most itiably. His master stroked it, and was bitten. He paid no attenion the bite, but the next morning the cat died ; its viscera were sent to M. Pasteur, who diagnosed hydrophobia. The next morning the professor went to Paris. A little girl, who tried to stroke the cat, was also bitten, and has been sent to Paris by charitable friends to be treated by M. Pasteur.

News arrives from Tours that a contagious and epizootic affection has, for the last two years, attacked the horses of the 2nd Regiment of Chasseurs. The War Minister has directed that they should be conveyed direct to Pontivy, where the regiment is now stationed, by railway ; and the stables at Tours are to be disinfected before a fresh cavalry regiment arrives.

The Seine Council of Hygiene and Salubrity discussed at a recent meeting, whether stale eggs, with either external or internal spots, the air-chamber increased, and the yolk not lying in the centre of the egg, should be considered not fit for food. M. Chatin stated, in a report on the subject, that spotted eggs can be used for making pastry, and by bakers for glazing bread ; the white can be used for dressing skins and furs. Eggs which are positively bad are recognised by their odour, and these are always returned to the vendor. M. Chatin does not think that any fresh legislation is necessary to regulate the trade in eggs.

A month ago, a few cases of cholera were announced at Sables d'Olonne, in the Vendean department. Dr. Viaud, of the Island of Gen, writes to the *Gazette Médicale* of Nantes, that several cases of cholera have happened there. Dr. Canteteau, of Sables d'Olonne, writes that there have been fifteen cases and eight deaths since November 25th. The epidemic seems to have been imported from Brittany to Olonne, and from Olonne to the island by a little fishing-boat. The owner of the boat, and two relations who nursed him, died from cholera. The mother of one of these women is also dead from the disease. The wife of the fisherman was attacked with cholera, but has recovered. If the epidemic spread along the Vendean Coast, where the simplest hygienic precautions are unknown, it is to be feared that the mortality will be terrible.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

The Discussion on Cancer.—The Students' Union.—The University Ambulance Company.—Bequests to Local Charities.—The Philosophical Society.—The Corporation and Artisan Dwellings.—Dr. Russell on Glasgow Vital Statistics.

I THINK I am correct in stating that a sense of relief has been experienced by all concerned that the so-called discussion on cancer at the Pathological Society has come to an end. There is a very general feeling that the plan of procedure adopted on the present occasion was a mistaken one. The discussion (so-called) in reality consisted of a series of written essays by different members of the profession, who read them to the assembled audience, and supplemented them by any verbal criticism on the statements of those who had preceded them that were not in harmony with their own. No doubt, when collected together, the papers will be a valuable contribution to the literature of the disease, inasmuch as they contain the views of men whose opinions are well worthy of consideration, and of considerable weight ; but I question if anything was really learnt as to whether there is any class of cases of malignant disease favourable for operative measures, or as to when the knife should be used for cancer of the mamma, and when it should be withheld. Perhaps the Society aimed at collecting all diversities of opinion as to the pathological aspect of cancer, and in this it has been eminently successful.

The prospect of soon having a hall and buildings of its own has infused fresh life and vitality into the movement for the formation of the Students' Union at our University. To ensure a thorough representation of the students in the various Faculties, it has been decided to elect a Council, under whose management the Union will be. The representatives to serve on this Council will be chosen in varying numbers from the different Faculties ; and, as far as I can gather, that of Medicine will send twenty members, against thirty-two from the Arts, six from the Divinity, and seven from the Law Faculties. From these again will be chosen an Executive Committee, which will be made up of the President and other office-bearers of the Council, supplemented by one member from the Faculty of Divinity, three from Arts, two from Medicine, and one from Law. In this way, it is thought that all interests will be fairly and fully represented, and that the Council will be able to carry out the objects for which it has been established ; the chief of which are, to serve as a means of communication between the students and the University authorities, and to promote social and academic unity among those attending the University.

The movement for the establishment of an University Ambulance Company has been very heartily responded to by the students. One hundred and twenty names have been enrolled, and the members have been divided for instruction purposes into two half-companies, which meet on Tuesdays and Thursdays in the Lower Museum Hall. At present, they are being made thoroughly efficient in stretcher-drill and the handling of the wounded. It is to be hoped that, along with their Edinburgh comrades, they may be fortunate enough to obtain Government recognition and a suitable capitation grant. At present, considerable difficulty is being experienced in obtaining the necessary ambulance material, owing to the want of funds.

During the past week, intimation has been made of some very handsome bequests that have fallen to local charities by the will of the late Mr. James McEwan. By the terms of the settlement, the Royal and Western Infirmaries each get £5,000, while the large sum of £10,000 has been allocated in varying proportions among other charities; and as the list includes about thirty-five of these, the generosity now made public has made itself felt over a wide area.

The last meeting of the Philosophical Society was largely devoted to a paper by Mr. Swan, in which he advocated the use of the electric light in mines; and he strengthened his position very much by showing a safety-lamp which he had devised, and which was certainly all that could be desired in the way of portability and efficiency. The question of loss of life in mines is so intimately bound up with the matter of the kind of light employed and the amount of its illuminating power, that it is to be hoped that Mr. Swan's paper will meet with the attention it deserves, as the number of lives lost annually by pit-accidents is lamentably large.

Our city authorities have meanwhile decided not to enter on any scheme for the erection of dwellings for the artisan classes similar to the Nashgrove buildings in Liverpool, a report on which was laid before them some time ago. The chief reason for coming to this conclusion was that it is very doubtful if our City Improvement Trust has the legal right to undertake such work as would naturally fall to private enterprise. The experience of the Improved Industrial Dwellings Company of London ought to encourage private individuals to enter on this important question, and help the authorities out of their difficulty. By doing so they would confer a public benefit on the city.

If anyone is desirous of learning how density of population and overcrowding affect the sanitary condition of a large city, let him peruse the pamphlet just issued by our medical officer of health, Dr. Russell, on the Vital Statistics of Glasgow. It is the first instalment of a work giving the city death-rate in districts, and it is full of interesting facts. It shows that while we have progressed in attention to matters of detail in connection with sanitary work, some of the larger and more important questions of sanitary reform are still calling for radical changes, and that, at present, Glasgow is "the unhealthiest town in Scotland," the causes being that the inhabitants of Glasgow are more crowded upon the soil than in any other Scottish town, while they are, at the same time, the most crowded in their houses. I cannot here go into figures, but they fully bear out these two factors in our high death-rate.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Annual Meetings of Hospitals.—Provident Dispensaries.—Alleged Abuse.

THREE of the most important charities of this city, namely, The Eye Hospital, St. Mary's Hospital for Women, and the Children's Hospital, have recently held their annual meetings; their reports, as usual, are full of interest, and record much good work done during the year. As usual, there is the annual appeal to the public for more funds to carry on their work; and, while the Eye Hospital is rejoicing in its new buildings in Oxford Road, St. Mary's is crying aloud to the ladies of Lancashire to collect sufficient funds, to build them also a new and more imposing hospital.

The eleventh annual report of the Manchester and Salford Provident Dispensaries was presented this week to their annual meeting, and will be read with much interest at the present time. The report states that these dispensaries have been in existence for about eleven years, and the present state of their affairs appears to be, at least financially, very satisfactory. There are nine branch dispensaries in existence, and a tenth is about to be added; seven of these are self-supporting, and the other two are very nearly so. They have a total number of nearly 17,000 paying members, the gross number which includes children under 14 years of age amounts to nearly 20,000; the subscriptions received during the year amounted to £3,500, of which £2,000 were paid to the medical staff. The officers of the Provident Society, with which these dispensaries are in connection, report that they have continued their investigations as to the circumstances of applicants for treatment at the various hospitals with which they work, namely, the Royal Infirmary, Children's Hospital, and Clinical Hospital, and found that 13.5 per cent. were ineligible for free medical treatment, inasmuch as they were in receipt of upwards of 20s. per week. The report further states that, when these investigations were commenced in 1875, 42 per cent. of the applicants of the above charities were ineligible for seeking gratuitous medical relief. It must, however, be borne in mind that the working class and small shopkeepers are at the present time much worse off than they were ten years ago, and less able to pay for medical advice.

The Council have much reason to congratulate themselves upon the position now occupied by the dispensaries as compared with a few years ago, and they deserve much credit for the energy and perseverance they have displayed in making them a success. It would have been interesting to have been able to have learnt something from the report as to what means are taken to prevent the admission of members who are in comfortable circumstances, and well able to pay the moderate fees charged by practitioners. Every applicant is admitted on his merits as decided by each local committee of paying members, and no wage or income-limit is recognised. From some letters which have recently appeared in a local paper, signed "Justitia" and also "A Dispensary Surgeon," it would appear that, in one provident dispensary at least, families are admitted who are in receipt of £2 to £4 and £5 per week. There is, besides this, some reason to believe that, in the anxiety of the branches to make ends meet, or to secure a balance at the end of the year, too little care is exercised in keeping out well-to-do applicants. It is found practically that the class who are just above free hospital cases are hardly worth recruiting into the Provident Dispensary; they are too improvident in their habits; they are members when sick, and non-members when well; while the best recruiting-ground is to be found among the comfortably circumstanced working-classes, who have hitherto been in the habit of employing a private medical man. The Provident Dispensary movement originated in the undoubted abuse of the free hospital-system which took place some years ago. The public were appealed to, to start and carry on the movement when in its infancy, and the public have now, when the movement is an undoubted success, a right to demand of the responsible managers of these dispensaries that they themselves are not repeating and perpetrating the very abuses they were called into existence to prevent.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications chiefly by reason of their unnecessary length.

CASES OF INFLAMMABLE EXPIRED AIR.

SIR,—Dr. Beatson's case, reported in the BRITISH MEDICAL JOURNAL of February 13th, is very interesting as an example of a rare condition occurring in certain diseases of the stomach which induce an unusual formation of acids or an abnormally long sojourn of food in the stomach, so that it undergoes fermentative decomposition.

In the *London Medical Record* for 1874, there are three important papers upon this subject. From the first, a paper by Schultze (*Berl. Klin. Woch.*, July 6th and 13th, 1874), we learn that, in 1865, Professor Friedreich, of Heidelberg, made a communication regarding a patient who discharged inflammable gases; and the following analysis of the gas by Professor Carius is given.

	Per Cent.	Volume.
Carbonic acid	26.56	28.45
Hydrogen	32.30	31.55
Marsh-gas	0.34	0.24
Oxygen	7.36	6.82
Nitrogen	33.44	32.94

Waldenburg, in 1864, in the *Allgemeine Medizinische Centralzeitung*, published a case of dyspepsia with eructations of gases which were, according to the patient's statement, readily inflammable, and "exploded with a visible bluish flame."

In 1870, Popoff published (*Berliner Klin. Wochenschrift*, Nos. 38, 39, and 40) an example from the practice of Professor Botkin, of St.

Petersburg, of the same kind; and Frerichs (*Ibid.*, No. 8, 1874) described a similar case as occurring in his hospital-practice.

Schultze gives Friedreich's case in full, and adds details of another referred to by Carius, as well as the notes of a case of dilated stomach in which, *post mortem*, "on puncture of the stomach, there escaped a large quantity of gas, which burned with a clear blue flame about half a foot long."

The second paper contains an account of a case published by Dr. C. A. Ewald, of Berlin, in the *Irish Hospital Gazette*, from the practice of Professor Frerichs. The analysis of the gas is as follows:

	First Analysis.	Second Analysis.
Carbonic acid	17.40	20.57
Hydrogen	21.52	20.57
Carburetted Hydrogen	2.71	10.75
Oxygen	11.91	6.72
Nitrogen	46.44	41.38

With traces of sulphuretted hydrogen.

This gas burnt with a "brilliant yellow flame, fully a foot long."

The third paper is by Heynsius (*Nederlandsch Tijdschrift voor Geneeskunde*, 1874, No. 37), who speaks of a patient who suffered from violent eructation after eating, discharging gas which caught fire when a flame was brought near, as in lighting a cigar. The flame gave little light, but burnt with a distinct, though not loud explosive report.

He gives no analysis of the eructated gas, as none could be obtained; the vomited matter contained carbonic acid and hydrogen, but no marsh-gas.

The only example which has come under my notice was the case of a gentleman, a patient of Dr. Scott Orr, of Glasgow, who kindly supplied me with the facts, as given by the patient himself.[1] I never saw this gentleman, whose case was related to me accidentally, and I am not aware that he ever sought medical advice for his peculiar and distressing condition.

Dr. Beatson suggests that the gas in his case was carburetted hydrogen. In the analysis of Dr. Ewald's case, this gas was present in notable quantity, and the peculiar "brilliant yellow flame" supports the notion that it was this that took fire. In the other cases, however, the gas was probably hydrogen, as its flame was only feebly luminous, while the quantity of marsh gas in Carius's analysis is very small. Perhaps Dr. Beatson will be able to obtain an analysis of the gas, and will note the colour of the flame.

So far as the cases at present published can inform us, all seem to have obstruction of the pylorus.

Ewald strongly recommends washing out the stomach with a siphon tube; Heynsius says this caused only temporary benefit, while chlorinated water gave more relief than anything else. Creasote, charcoal, and carbolic acid, have all been tried; but Waldenburg obtained better results with glycerine in half-ounce doses three times a day.

I would suggest that these cases would do better on small quantities of solid food every two or three hours, without vegetables, and with very limited quantities of fluid during and soon after eating, than upon the milk-diet which it is too much the fashion to order in all cases of gastric disorder.—I am, sir, yours obediently,

Birmingham. ROBERT SAUNDBY, M.D.

SIR,—My attention has been called by Dr. Beatson, of Glasgow, to a case in which explosive gas was generated in the stomach, and which has been published in the BRITISH MEDICAL JOURNAL for February 13th, page 295. A similar instance having occurred in the case of a patient of mine two years ago, I think it right, from its extreme rarity, to send you the following particulars, which I am sure will interest your readers. My patient was an old gentleman, aged about 70, who has since died of apoplexy. I quote from a letter I asked him to write to me, describing his symptoms, and I may add that I have the most perfect confidence in his statements.

"Some five or six years ago I had great acidity and indigestion, and then found relief from Gregory's mixture and bismuth, and, for a good time, found comfort by using these. But within the last year or two, indeed longer, I have been much troubled by great flatulency, general puffiness after dinner and during the night, with considerable pain at the pit of the stomach. Not troubled with heartburn or acidity so much, but with eructations of wind or gas, and this of such an offensive smell as to render me most uncomfortable, indeed unhappy, in any one's company or proximity, and latterly the pain so severe, or rather oppressive, as to prevent my sleeping. About four or five months ago, while lighting my pipe of an evening, it so happened that one of these involuntary eructations took place while the match was at my pipe, and the gas then took fire, and burned my moustache and lips, and frightened me a good deal. It was just such an explosion or puff as would occur on your putting a pinch of gunpowder to a light. My son H. was sitting by me, reading, and immediately looked up in astonishment. He has witnessed the same thing occur either two or three times, and it has occurred in all five or six times. I have tried all sorts of changes of diet, but to no purpose. It would seem that there takes place a generation of unwholesome gas in great quantity, in the evening, and not particularly from a heavy meal, for my principal is breakfast, and it never troubles me, although I always then eat a hearty meal."

I am indebted to Dr. Saundby, of Birmingham, for referring me to a somewhat similar case, noted in Ewald's *Lectures on Indigestion*, page 64, translated by Dr. Saundby, in 1880.—I am, sir, yours faithfully, R. SCOTT ORR, M.D.Edin.

Glasgow.

[1] Dr. Scott Orr's account of the case will be found below.

EMMET'S OPERATION, OR SO-CALLED TRACHELORRHAPHY.

SIR,—In a very interesting lecture on this subject, published in the JOURNAL of January 2nd of this year, Dr. Graily Hewitt states that "it was first performed in England by Dr. Playfair." I believe it was first performed in England by myself. In some notes read before the Obstetrical Society on March 1st, 1882, Dr. Playfair says: "Nor do I know of any paper on the subject in our medical periodicals, or in our gynæcological text-books, with the exception of the two recent works of Drs. Galabin and Edis, in which there is a brief notice of it, but no estimate of its importance, or results apparently based on personal experience." It may be gathered from this communication that Dr. Playfair's first operation was done about two years previously, that is, early in 1880. In the discussion on the paper, Dr. Fancourt Barnes distinctly challenged Dr. Playfair's statement, quoting from the second edition of my *Diseases of Women*, 1878, in which work is a description of Emmet's views, concluding in these words: "I can confirm the accuracy of Emmet's views. I have performed the operation with satifactory results." Dr. Fancourt Barnes further cited a case in which he had assisted me in performing the operation five years previously. Before Dr. Playfair's first case, I had also performed it in St. George's Hospital. To this interpellation Dr. Playfair did not reply. I am sure Dr. Graily Hewitt's error was unintentional.—I am, etc., ROBERT BARNES.

15, Harley Street.

THE OXFORD MEDICAL SCHOOL.

SIR,—In the annotation which appeared in the last number of the JOURNAL, concerning the Oxford Medical School, there is a sentence which might possibly convey an erroneous impression. I refer to the last paragraph, in which it is said, "adequate provision must be made for the systematic study of human anatomy and physiology; and, in facilities for dissection, Oxford is, at the present time, woefully deficient." If it be meant that the space now at the disposal of the lecturer on human anatomy is absurdly limited, considering the importance of the subject, and the prospective expansion of medical studies in Oxford, I have nothing to dissent from in a criticism which it is hoped will not long be deserved. If, however, it be meant that the present students cannot obtain, and do not obtain, due and complete instruction in practical anatomy, then I must say that the statement is not in accordance with fact. Those at present studying in the department would be the first to say that every facility is afforded them, both in respect to teaching and to material; and their successors need not fear that arrangements will not be made to meet their wants for the future. It is not intended that human anatomy, at Oxford, shall be either shelved or superseded.—I am, etc., SPES.

CHOLERA IN INDIA.

SIR,—I trust you will give me the opportunity of making, in your valuable journal, a few remarks concerning the epidemic of cholera in the Bunda district, investigated by me last year, and to which you have referred in your review of the Annual Sanitary Report of the Sanitary Commissioner of the North-West Provinces and Oudh, for 1884. In kind terms you have quoted a portion of my report, stating that the disease was brought into the Bunda district in 1882, by pilgrims returning from Allahabad Mêla. This is undoubtedly the fact, but, as I endeavoured to prove, the mortality occurred almost entirely at that time among the pilgrims themselves, who had left Allahabad either sick or sickening from the disease. The actual residents of the district suffered very slightly, and, indeed, their mortality appeared to be but slightly above that obtained throughout the provinces. The most valuable lesson learnt from the inquiry was, how a district

through which a very large concourse of sick people was passing, was liable to be regarded as suffering from epidemic disease to an extent altogether out of proportion to the real facts—since the mortality registers would show persons as dying of the disease, without any reference to where they might have contracted the same.

Without going into the much-vexed question of the method of propagation of cholera, I have to confess that this inquiry did no more than to make me more chary than ever of definitely accepting any particular theory. One fact alone seemed to stand out prominently, namely, that when the disease was once originated from any cause in a particular locality, its extension or decline would most surely be decided by whether it found there, in filth and impurity, a suitable field for its operations, or not.—I have the honour to be, yours faithfully,

SAMUEL J. THOMSON,
Deputy Sanitary Commissioner.

North-West Provinces and Oudh.

MEDICO-LEGAL AND MEDICO-ETHICAL.

UNQUALIFIED ASSISTANTS.

SIGMA trusts that the decision of Judge Greenhow, at the Leeds County Court last week, in the case of the claim of Mr. H. A. Allbutt, for payment for medical attendance rendered by his unqualified assistant, will have a deterrent effect on those members of our profession who make a practice of placing unqualified assistants in sole charge of surgeries and branch practices. In many large towns, duly qualified medical men are to be found who associate themselves in partnership with unqualified practitioners; and this is merely the natural result of a toleration of the practice of employing unqualified assistants. He suggests that the executive of the British Medical Association should, by means of circulars issued to all registered medical practitioners in the United Kingdom, ascertain the feeling of the profession on the subject, and should then communicate with the various licensing bodies, urging upon them, in the interests of the profession generally, the necessity of adopting some stringent regulation, prohibiting their members and licentiates from associating themselves with any but qualified and registered men in the duties of their profession.

A QUALIFIED ASSISTANT says that the subject of Mr. Allbutt's letter is one of great importance, especially to those members of the medical profession—perhaps more numerous than Mr. Allbutt seems to imagine—who are desirous of obtaining some insight into practice as assistants before starting for themselves. By the employment of unqualified assistants, an injury is inflicted upon those who, having gone to the trouble and expense of taking their diplomas, find themselves forestalled by these illegitimate competitors; for, though it may be doubted whether it is the custom of the majority of practitioners throughout the country, yet it obtains extensively enough to seriously limit the appointments available. Most students can, and do, attend their requisite cases from the extern midwifery department of their hospitals. That enough qualified assistants could not be found were none others employed need not be feared, as nearly all men who purpose entering general practice go as such for a year or more, and must outnumber those *bonâ fide* students who take assistantships whilst attending the medical schools, and who are therefore limited to towns favoured with those institutions. As to salaries, £70 to £100 *per annum* (indoor) would surely not necessitate a practitioner raising his fees, if his practice really demanded another's services. Perhaps enough has been stated to show that medical men should unite to suppress an evil dangerous to the public, unjust to many of their younger brethren, and derogatory to all.

MR. ALFRED SMART (Bassingbourn) writes that Mr. Allbutt's letter appears to open up the whole question of unqualified assistants. He was under the impression that a majority of the profession rather wished for some restrictions as to the duties of such. A case like that of Mr. Allbutt, where the assistant carries on the whole practice with very scant supervision, is not a suitable case for the profession to carry to a higher court. It is one of those cases in which greater restriction is needed; for it is a great injustice to the qualified assistants that it should be possible for an unqualified man to hold such a position. Mr. Smart does not advocate doing away altogether with the unqualified assistant; but that he should be restricted to keeping books, dispensing, attending to the surgery under the direct supervision of the principal, and in case of emergency. As regards attendance on the necessary number of midwifery cases, Mr. Smart says that he attended the number of cases required whilst at the hospital, which, he thinks, is the usual way. The "clever and needy students" have the sympathy of the profession, and very few are prevented from getting their qualifications. If the law as regards the unqualified assistants were made more severe, it would prove a great incentive for them to endeavour to become qualified. He does not think that Dr. Gisburn's executors can claim for Mr. Bowell's services; but, at the same time, he does not consider the cases are at all alike, as Dr. Gisburn was resident, and his name was on the plate, whereas, in Mr. Allbutt's case, the name of Mr. Bowell was on the door. In conclusion, Mr. Smart is surprised to see a man of integrity, and holding a good position, employing an unqualified man, in direct opposition to the legitimate members of the profession. At least, if not illegal, it certainly is derogatory.

DR. J. P. WILLS (Bexhill) writes that the profession at large is very greatly indebted to Mr. Allbutt for the bold expression of his opinions. That Mr. Allbutt and others who employ unqualified assistants are not (at any rate, in many cases) consciously guilty of offence, he willingly admits; some have not considered the matter, being content to follow general usage, and others have their better judgment warped by the love of gain. But what is the employment of such assistants but the supplying of advice, etc., by an unqualified (*ipso facto*, a legally incompetent) person, and charging for that of a qualified (that is, a legally recognised as competent) agent? That more or less is charged does not affect the answer, because an unqualified person may not charge at all; and it results that B., who, being unregistered, is not entitled to any fee, may by collusion with A. (registered), evade the law, and enjoy the privilege of a duly authorised member of the profession. The public, and especially the ignorant poor, who chiefly fall under the care of these unqualified ones, regard them as "properly qualified doctors." Students should, as adjured by Mr. Allbutt, consider the matter; for what makes it difficult for the junior practitioner to earn a decent income, or get a respectable salary as assistant, but the competition of these "practical men," who have never succeeded in taking a minimum qualification, but who count their midwifery practice by the 10,000?

J. B. F. is compelled to agree with the decision of the Leeds County Court. He feels that the dispensary system has become greatly abused. A dispensary is worked cheaply by an unqualified man under a qualified employer, the latter only being called in when a case is very serious, because of the chance of a death-certificate, which must be signed by a duly qualified practitioner. Even a prescribing druggist at least sees his patient, and takes direct responsibility. The establishment of branches entails the greatest evils; they are really so many shops for selling physic and for cheap doctoring.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS, Friday, February 19th, 1886.

Lunacy-Laws.—The LORD CHANCELLOR presented two Bills for amending and consolidating the laws relating to lunacy, and the Bills were read a first time.

Tuesday, February 23rd.

The Sale of Poisons.—Lord MILLTOWN gave notice that on Friday next he would ask Her Majesty's Government whether, considering that a Bill on the subject had been read a second time last session and referred to a Select Committee, it was the intention of the Government to introduce a Bill for regulating the sale of poisons.

HOUSE OF COMMONS.—Wednesday, February 24th, 1886.

The Public Health Act.—Mr. J. E. JOHNSON-FERGUSON asked the President of the Local Government Board whether his attention had been drawn to a prosecution by the Atherton Local Board before the Leigh (Lancashire) bench of magistrates under the Public Health Act, 1875, for the removal, in a public conveyance, of the dead body of a child who died from an infectious disorder without previously notifying to the owner or driver that it had died from such a disorder; and whether, it having been decided that the offence was not one within the meaning of the Act, he would take steps to have the Act amended. —Mr. CHAMBERLAIN said his attention had been called to the prosecution in question, and he had no doubt whatever that the decision of the magistrates was right, and that the word "person" in the Act did not include a dead body, and that a dead body was not a thing *ejusdem generis* with bedding, clothing, or rags. Under these circumstances, it was evident that there had been an omission in the Act, and, if the Act came up for amendment, that point would be noticed.

Lunacy (Vacating of Seats) Bill.—This Bill was read a second time.

The following are among the Orders of the Day. Mr. ISAACS: Out-door Relief.—That, having regard to the large number of artisans and others who are at present out of employment, and whose families are suffering great privations in consequence; and, further, having regard to the fact that the workhouses throughout the kingdom are much overcrowded, this House is of opinion that the Local Government Board should be instructed to relax their rules in regard to the granting out-door relief to the necessitous and deserving poor, until the present depression in trade shall have happily disappeared. —Rivers Purification Bill, "for the purification of rivers," presented, and read the first time; to be read a second time on Tuesday, March 16th, and to be printed. [Bill 101.]—Mr. STANSFELD: Contagious Diseases Acts, 1866-1869.—To call attention to the Contagious Diseases Acts, 1866-69, and to move the following resolution: That, in the opinion of this House, the Contagious Diseases Acts, 1866-69, ought to be repealed.—Beer Adulteration (No. 3) Bill; second reading.—Butter Substitutes Bill; second reading.—Sanitation of Houses Bill; second reading.—Private Lunatic Asylums (Ireland) Bill; second reading.—Beer Adulteration Bill; second reading.—Beer Adulteration (No. 2) Bill; second reading.—Contagious Diseases Acts Repeal Bill; second reading.—Mr. ERNEST BAGGALLAY: Rating of Hospitals (Metropolis).—To call attention to the unsatisfactory state of the law in respect to the rating of hospitals and other public charities in the metropolis; and to move a resolution. [An early day.]

NAVAL AND MILITARY MEDICAL SERVICES.

A DIAGRAM OF THE MEDICAL DEPARTMENT WITH AN ENGLISH ARMY CORPS IN THE FIELD.

By Surgeon-Major G. J. H. Evatt, M.D., Army Medical Staff.

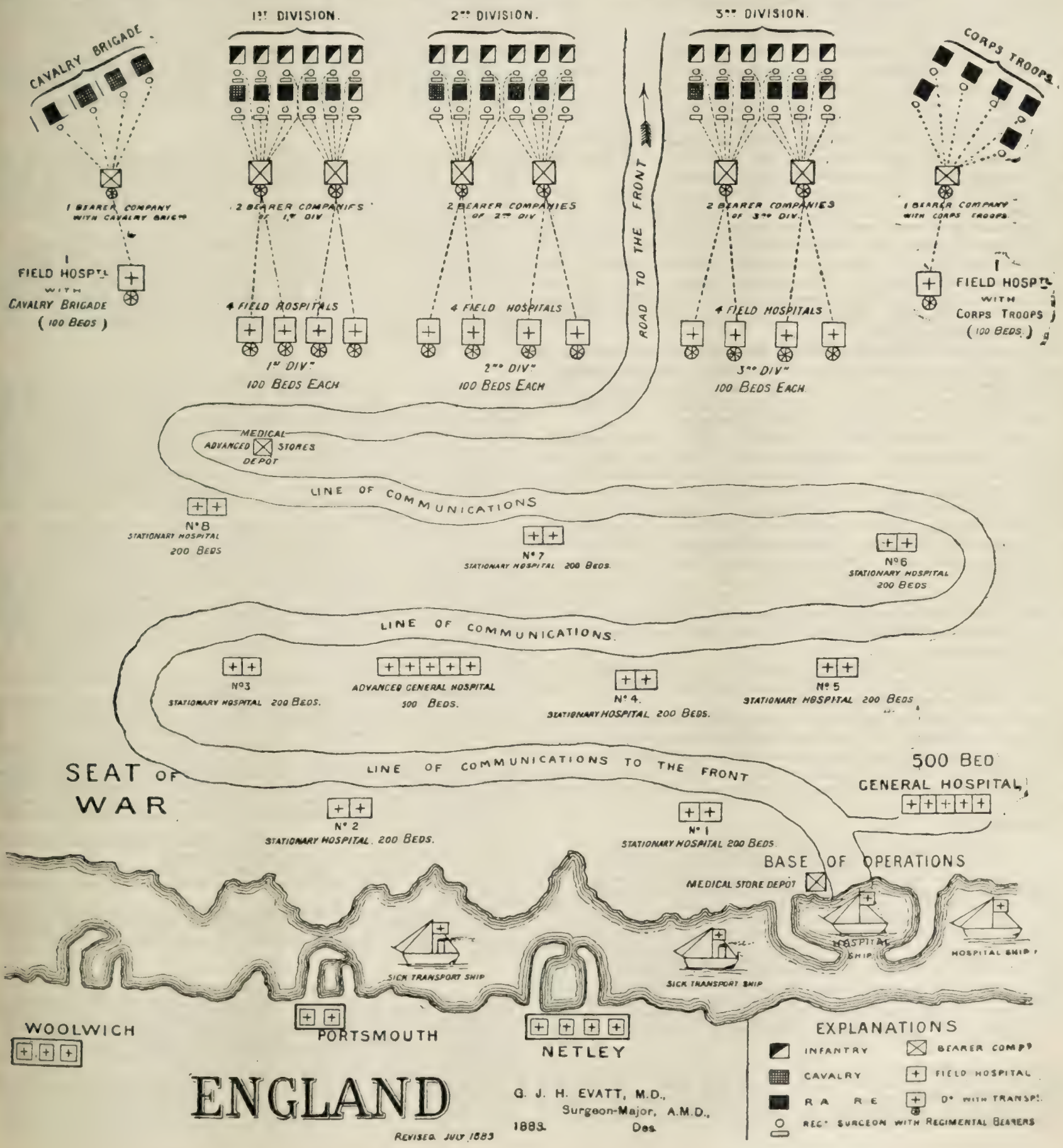
With the view of rendering our system of field medical organisation more easily understood by non-military persons, I have designed a diagram which shows its outline more clearly than would any long verbal explanations. It may be explained in sections.

The Army Corps the Basis.—The basis of our medical organisation is the "Army Corps" (36,000 men). The War Office publish from time to time an army corps scheme, showing the detail of the corps for every branch of the service; thus, the number of guns, infantry, cavalry, transport, and medical service are laid down to a single man or a horse. We can thus tell exactly in peace the means given us to achieve success in war, and can also, if we are clever enough, see exactly where we shall probably break down.

Constituent Elements of the Army Corps.—An army corps has three divisions, each of twelve military units, in two brigades, with added cavalry, artillery, and light infantry troops.

Cavalry Brigade.—Three regiments of cavalry, with one battery of horse artillery, make up the cavalry brigade. The divisional cavalry is included in each division.

Corps Troops.—Thirty guns of reserve artillery, with engineer, details for telegraphic work, form the corps troops.



Medical Units: Regimental.—With each battalion or regiment is one surgeon, and with him the regimental ambulance detachment, about two to four men per company.

Brigade Staff.—The cavalry brigade alone has a brigade principal medical officer.

Divisional Aid.—Every division has two bearer companies and four "field-hospitals." Each field-hospital is equipped for 100 patients. These hospitals are mobile, are packed in wagons, and march with the army in the front.

Communication Hospitals.—Every mobilised army corps has eight stationary or communication hospitals, each for 200 sick. They are posted at the *etappeu* stations on the communications.

General Hospitals.—Two general hospitals, each for 500 sick, are allowed to each army corps.

Hospital Ships.—Convey the sick and wounded to Netley. Each ship is supposed to carry 200 patients.

The Seven Stages of the Severely Wounded Soldier.—1. He falls wounded, and is roughly dressed by the battalion surgeon. 2. He is gathered in by the divisional bearer company, and fully dressed at the dressing station of the company. 3. He is handed over to the field-hospital of the division. 4. He is transferred to the communication or stationary hospitals. 5. He is sent by "sick convoy" to the Base Hospital, by either waggon, ambulance, trains, etc. 6. He is transferred to the hospital ship. 7. He is conveyed to England, landed and sent to Netley, or other military hospital.

Medical Hierarchy.—This consists of one surgeon-general for army corps, and one for communication. Deputy surgeons-general, one as principal medical officer of each division, one as principal medical officer to each general hospital, one as the sanitary officer of the army, and one as principal medical officer of the base. Brigade surgeons, one as principal medical officer to the cavalry brigade, one principal medical officer to each stationary hospital, and one as chief of divisions in general hospital, etc. Altogether there are about 242 medical officers for the army corps.

Volunteer Needs.—The volunteers of England, 250,000 strong, or equal to nearly seven army corps, have, behind the battalion aid, nothing save Cantlie's corps, recently started in London. The volunteers do not need either general or communication hospitals, but they do need bearer companies and field hospitals.

To equip the Volunteer Force as it stands to-day with the requisite bearer-companies and field-hospitals as supplied in the front line of the regular army would need, in addition to any regimental aid now existing, 56 bearer companies, 98 field hospitals, or a total of 560 medical officers and 6,692 men, and about 150 quarter-masters. To meet these demands, the volunteers have about twelve surgeons, one quarter-master and 400 men. There is evidently a large balance still needed to be made up. A rough estimate of what is needed is one bearer-company and one field-hospital in each regimental district. This would give a slight surplus of bearer-companies and a diminished number of field-hospitals. But it now remains to be seen if the civil medical profession in England are sufficiently public-spirited to provide for these wants.

The whole object of attempting to train the students of medicine is, besides raising their internal discipline, to provide officers for these medical volunteer wants in the future.

Conscription provides such units in continental services, and one day it may be needful to fall back on a modified compulsory system in England. Volunteering, of course, staves off the evil day.

Enlarged copies of this diagram, with descriptive letter-press, can be obtained at Mr. Lead, Printer, Silver-street, Leicester, at 3s. 6d. per 100.

February, 1886.

TITULAR RANK FOR ARMY MEDICAL OFFICERS.

SIR,—This question is really one which exercises a very large and increasing number of men in the service, and I think justly so. Our ranks, as at present arranged, are nothing short of absurd, and to the outside public unmeaning. I cannot for the life of me understand why we are not at once put on a par with other departments, and given honorary designations tacked on to our surgical ones, so as to define the military status of each rank, and show, on retirement (as suggested by a late correspondent), what military rank we had held on full pay. As a body of officers, we are entitled to have our wishes considered, and not pooh-poohed by any section of the department whose ideas may be more civilian than soldierly. Surgeon-Major Evatt has hit the right nail upon the head in his letter. Until the change (now almost universally demanded) is made, our social status must remain inferior to our brother-officers of the army. As members of the British Medical Association, we are entitled to have your influence as editor with us.—I am, etc.,

A. M. S.

ENGINEER, R.N.—We have been at much trouble to investigate the subject. The question seems to be unwisely raised. It is dealt with in Article 1019A, chapter xxviii, Medical Instructions, p. 135 of the Addenda to the Queen's Regulations and Admiralty Instructions, 1884. There are many subjects best left to individual tact, and this appears to be one of them.

MEMORIALS TO A MEDICAL HERO.

Two "latten" brasses have been erected—one at Netley, and the other at Charing Cross Medical School—in memory of Dr. P. B. Conolly, who died whilst serving in the Camel Corps during the Gordon Relief Expedition. He was present at the siege of Plevna, and the battles of Zlobani, Kambula, Ulundi, Kassassin, and Tel-el-Kebir, and received two medals with clasps, the Khedive's star, and gold cross of Roumania. The memorials are from the works of Mr. Gawthorp, of 16, Long Acre.

WHERE ARE THE MILITIA SURGEONS DISAPPEARING?

SIR,—"Militia Reserve," in the JOURNAL of January 30th, naively asks the above question, and wants to know "why they are allowed to die out." He can scarcely be aware of the shabby treatment the old medical officers of the constitutional force met with at the hands of the military authorities. If he has further interest in the matter, I have no doubt you could easily refer him to the correspondence which took place, and the unhappy and unsuccessful results not only of the efforts of the officers themselves, but the Parliamentary Bills Committee, as well as the hearty assistance rendered editorially in the pages of the JOURNAL of the British Medical Association. The military authorities are hardly likely to refuse voluntary aid, and while it is so freely offered, they will give little consideration to any scheme involving expenditure of money. Much is expected of the medical profession, and it can never be said that it does not respond most generously. When opportunities occur for rewarding that generosity, whether for services rendered on the field of battle, or for long gratuitous service to the public, let me ask, sir, is it lavishly, or even equitably, returned to the members of our profession?—I am, sir, your obedient servant,

O. v. A.

THE NAVY.

FLEET-SURGEON S. A. WILLIS, M.D., has been placed on the retired list of his rank. Dr. Willis entered the Royal Navy, November 7th, 1853, rose to Staff-Surgeon, April 16th, 1862, and to Fleet-Surgeon, November 2nd, 1874. He was Fleet-Surgeon of the *Shah* during the engagement with the Peruvian rebel turret-ship *Huascar* off Ylo, May 29th, 1877, and also during the Zulu war of 1879; for this latter campaign he has the South African medal.

The following appointments have been made at the Admiralty during the past week: HENRY MADDERS, M.D., Staff-Surgeon, to the *Emerald;* F. W. STERICKER, M.D., W. W. PRYN JERVOISE BARRY, M.D., E. A. SPILLER, M.D., E. APTHORP, J. J. M'DONNELL, V. G. THORPE, E. H. MEADEN, J. F. BATE, G. E. KENNEDY, A. J. PICKTHORN, J. ANDREWS, M.D., H. J. HADDEN, J. E. WEBB, M.D., M. H. ACOCK, M.D., and J. H. DAWE, to the *Duke of Wellington*, for service at Haslar Hospital; J. K. CONWAY, M.D., Staff-Surgeon, to the *Liffey;* W. B. DREW, Staff-Surgeon, to the *Himalaya;* J. C. DOW, Surgeon, to the *Himalaya.*

ARMY MEDICAL SERVICE.

BRIGADE-SURGEON C. H. HARVEY, M.D., is granted retired pay, with the honorary rank of Deputy Surgeon-General. He entered the service March 1st, 1861; became Surgeon, March 1st, 1873; Surgeon-Major, April 15th, 1875; and Brigade-Surgeon, June 15th, 1885. He served in the Afghan war in 1880, and took part in the defence of Candahar against Ayoob Khan. He was also engaged in the Egyptian war in 1882; and during the Nile Expedition of 1884-85, he was Principal Medical Officer with the River Column, and was at the action at Kirbekan. For these services he was mentioned in despatches, was made Brigade-Surgeon, and received the Egyptian war medal with clasps for the Nile and Kirbekan, and the Khedive's bronze star.

The undermentioned surgeons on probation are appointed Surgeons:—M. T. YARR; L. P. MUMBY, M.B.; C. H. MELVILLE, M.B.; B. L. MILLS, M.B.; H. RAYNER, M.B.; R. E. GENGE; G. S. CARDEW, M.B.; C. A. RENNY, M.B.; H. THIELE, M.B.; H. COCKS, M.B.; J. B. WILSON, M.D.; W. J. LEE; J. G. BLACK, M.D.; J. KEARNEY, M.D.; F. W. HENNESSEY, M.B.; F. A. SAW, M.B.; W. B. STOKES, M.B.; F. W. G. HALL, M.B.; A. KENNEDY; G. S. TATE, M.D.; H. W. M. KENDALL; H. P. G. ELKINGTON; R. C. G. DILL; J. B. W. BUCHANAN, M.B.; F. T. SKERRETT; H. M. ADAMSON, M.B.; H. M. RAMSAY; T. G. LAVIE; J. ROSE; R. H. COX; H. H. BROWN, M.D.; T. H. CORKERY; E. H. LOCKER; W. R. D. CROOKE, M.D.; W. P. SQUIRE; C. L. WALSH; J. J. O'DONNELL, M.B.; S. J. W. HAYMAN; J. P. S. HAYES.

Surgeon R. V. KELLEY, of the 9th Battalion of the Rifle Brigade, otherwise the Westmeath Militia Rifles, is promoted to Surgeon-Major.

Acting-Surgeon C. H. WELFORD, M.D., of the 3rd Durham (the Sunderland) Volunteers, has resigned his appointment, which dates from February 24th, 1883.

Mr. T. E. JONES has been appointed Acting-Surgeon to the 2nd Volunteer Battalion of the Royal Welsh Fusiliers (late the 1st Flint and Carnarvon Volunteers).

Mr. R. H. WEST has resigned his appointment of Acting-Surgeon to the 2nd Volunteer Battalion of the Prince Albert's Somersetshire Light Infantry (otherwise the 2nd Somerset Volunteers). Mr. West joined the corps January 22nd, 1879.

Surgeon H. G. HATHAWAY, serving in the Madras command, is transferred from doing duty at the station hospital at Cannanore to the medical charge of the station hospital at Calicut.

Surgeon B. A. MATURIN, on arrival from England, is directed to do duty at the station hospital at Kamptee, in the Madras command.

Surgeon C. R. KILKELLY, M.B., is brought on the strength of Her Majesty's British forces in the Bombay command, from January 28th, the date of his arrival at Bombay.

Surgeon-Major AHEARNE, of the Queensland Defence Force, has been permitted by H.R.H. the Duke of Cambridge to go through a course of training in field work at the Army Medical Depôt at Aldershot. This is a satisfactory recognition of the rank of Colonials.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON G. A. ALDER, of the Bengal Establishment, has retired from the service, which he entered as Assistant-Surgeon, August 4th, 1855, attaining the rank of Brigade-Surgeon, November 27th, 1879. Mr. Alder served in Central India during the great Indian mutiny, and received the medal; he was also engaged in the Afghan war in 1879, and took part in the advance to Candahar and Khelat-i-Ghilzai under Sir Donald Stewart (medal).

Brigade-Surgeon M. ROBERTSON, M.D., of the Madras Establishment, has also retired, with a step of honorary rank. He joined as Assistant-Surgeon, August 4th, 1856, and became Brigade-Surgeon, August 5th, 1884. He was engaged in the Persian war in 1857, and during the Indian mutiny, which followed soon after; he

was in numerous engagements with the rebels, including Futtehpore, Aoung, Pandoo Nuddee, Cawnpore, the defeat of the Gwalior contingent, the capture of Lucknow, and some minor affairs.

Brigade-Surgeon T. Beaumont, M.D., Madras Establishment, who retired on October 20th last, is granted the honorary rank of Deputy Surgeon-General.

Surgeon-Major M. M. Munro, Bombay Establishment, who retired July 25th, 1882, is now granted the honorary rank of Brigade-Surgeon.

Surgeon H. M'Callman, M.D., Bombay Establishment, Civil Surgeon of Rutmagherry, is allowed furlough for eighteen months on private affairs; and Surgeon J. Scott, M.B., Madras Establishment, Medical Officer of the 4th Infantry of the Hyderabad contingent, is also granted leave within Indian limits for 182 days on private affairs.

Surgeon C. Adams, M.B., Madras Establishment, is appointed to the officiating medical charge of the 2nd Light Cavalry at Bellary, *vice* Surgeon T. A. Pope, M.B.

It has been notified that in future an officer of the Indian Medical Service who may be transferred from regimental to officiating civil employ, must return to his regiment after three years' absence, or be permanently struck off its strength.

Naval Medical Department.—At the competition for commissions in the Medical Service of the Royal Navy, held on February 8th and following days, in the Hall of the University of London, Burlington Gardens, the undermentioned gentlemen were the successful candidates.

	Marks.		Marks.
F. W. Stericker	3050	E. Apthorp	2455
J. F. Bate	2995	H. J. Hadden	2380
W. W. Pryn	2760	J. J. McDonnell	2360
G. E. Kennedy	2670	J. E. Webb	2360
J. Barry	2600	V. G. Thorpe	2350
A. J. Pickthorn	2535	M. H. Atock	2345
E. A. Spiller	2490	E. H. Meaden	2320
J. Andrews	2465	J. H. Dawe	2310

Examination for Medical Staff.—List of candidates who were successful for appointments as Surgeons in the Medical Staff of Her Majesty's Army, at the competitive examination in London, on the 8th and following days of February, 1886.

	Marks.		Marks.
1. Fayrer, J.	3045	31. Garner, C.	2325
2. Davidson, J. S.	3030	32. Marks, G. F. H.	2310
3. Will, J.	3025	33. Scott, G.	2310
4. Fallon, J.	2980	34. Greig, D. M.	2300
5. Moir, J.	2965	35. Donaldson, J.	2295
6. Salvage, J. V.	2840	36. Holyoake, R.	2275
7. Bostock, R. A.	2835	37. Edye, J. S.	2270
8. Aldridge, A. R.	2830	38. Russell, J. J.	2240
9. Walker, C. P.	2770	39. Bate, L. A. F.	2230
10. Fowler, J. F. S.	2735	40. Allport, C. W.	2215
11. Macdonald, C. J.	2695	41. Barefoot, G. H.	2205
12. Burrows, J. R.	2650	42. O'Callaghan, D. M.	2180
13. Tatham, C. J. W.	2650	43. Windle, R. J.	2175
14. Austin, H. W.	2630	44. Wright, R. W.	2150
15. Clarkson, T. H. F.	2610	45. Knaggs, H. T.	2140
16. Kelly, R. E.	2600	46. Newland, F. R.	2125
17. Hore, H. S. and G. S.	2580	47. Foote, R. E.	2110
18. Donegan, J. F.	2550	48. Travers-Smith, V. E.	2100
19. Keatly, J.	2550	49. Mathias, H. B.	2095
20. Saunders, D. M.	2550	50. Hosie, A.	2080
21. Cottell, R. J. C.	2530	51. Buist, R. N.	2050
22. Bent, G.	2480	52. Watson, J. J. C.	2050
23. Cummins, H. A.	2450	53. Whaite, T. D.	2050
24. Deacon, J. G.	2450	54. Smyth, N.	2040
25. Marder, E. S.	2400	55. Trotter, W. J.	2030
26. Hennessy, D.	2395	56. Dowman, W.	2020
27. Whitty, M. J.	2390	57. Kiddle, W	2020
28. Eckersley, E.	2380	58. Browning, T.	2000
29. Bailey, W. F.	2360	59. Cronin, C. S.	1980
30. Hall, R. J. D.	2330	60. Le Quesne, F. S.	1940

Indian Medical Service.—The following is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination held at Burlington House, on February 8th, 1886. Thirty-seven candidates competed for sixteen appointments. All were reported qualified.

	Marks.		Marks.
1. L. J. Pisani	3265	9. A. W. Dawson	2870
2. W. G. Thorold	3260	10. E. Hudson	2830
3. P. Hehir	3240	11. H. Fooks	2810
4. B. K. Basu	3105	12. W. H. B. Robinson	2800
5. W. R. Edwards	3015	12. H. A. Sheppard	2800
6. J. T. Daly	2955	14. A. C. Deare	2790
7. G. J. H. Bell	2930	15. J. F. Evans	2785
8. N. P. Sinha	2900	16. C. Mactaggart	2710

Bequests and Donations.—Mr. James McEwan, of the firm of Smith and Sharp, sugar brokers, Glasgow, has bequeathed £5,000 each to the Royal Infirmary and the Western Infirmary of that city.—Miss Sarah J. Murphy has given £500, and Mr. Andrew Fernie £100, to the Great Northern Central Hospital, in aid of the fund for a new building.—Miss Dudin Brown has given £100 to the Mary Wardell Convalescent Home for Scarlet Fever Patients, towards building a laundry.

OBITUARY.

GAVIN MILROY, M.D., F.R.C.P.

Dr. Gavin Milroy was born in Edinburgh, where his father was a silversmith. He received his general education in the High School, and studied medicine at the University of his native city. A fellow-student, who survives him, states that he was distinguished by his intelligence and indefatigable industry, as well as by the urbanity of his manners; and that he was also known among his fellow-students as "little Milroy," a term of endearment used by them. It may be said that those characteristics of his youth lasted throughout his long career. He graduated as M.D. in 1828.

On the completion of his student-course, he became one of the founders and active members of the Hunterian Society of Edinburgh; and, in his maturity, he was similarly related to the Epidemiological Society of London, founded under the late Dr. Babington in 1850. He was Secretary of that Society from 1862 to 1864, and its President from 1864 to 1866. Its *Transactions* contain several valuable contributions by him. He was elected F.R.C.P. London in 1853. It appears that he never practised medicine on his own account, but, from his early manhood, made choice of its literary path. Previously to doing so, he availed himself of an appointment as Medical Officer in the Government Packet-service to the West Indies and the Mediterranean; and it is presumable that in the latter, on returning from the Ionian Islands to Malta, he must have undergone quarantine at the latter place, where the practice was rigidly enforced on all arrivals from the Levant. Although his stay in that service may not have been of long duration, he retained his predilection for the Navy, which led him, at a later period, to contribute a paper, titled "The Health of the Navy considered."

Being a young physician of medical erudition, he was retained, together with Mr. Chatto—now the esteemed Librarian of the Royal College of Surgeons—on the staff of the *Medico-Chirurgical Review*; and, after the death of Dr. Johnson, its proprietor, they, conjointly with Mr. Grainger, undertook the management of it until fused with the *British and Foreign Medical Review*. In that position, he made his first mark as a public writer. It fell to him to review, in 1846, a report, by Dr. Prus, "On Plague and Quarantine," to the Academy of Medicine of Paris, the argument of which was against quarantine. He subsequently translated this report. His translation is entitled "Quarantine and the Plague; being a Summary of the Report on these subjects recently addressed to the Royal Academy in Paris, with Introductory Observations, Extracts from Parliamentary Correspondence, and Notes." Through the credit gained by him in performing this task with much ability, he stood forth as an authority on all questions of epidemiology, at that time rising, in public as well as in professional estimation, as an important branch of medical and social science. His views were deemed the best adapted to enlarge commercial enterprise, by abolition or by great mitigation of its chief restraint quarantine; as well as to benefit the public health of the nation, by trusting to sanitary measures alone to guard against the ravages of cholera and other foreign pestilences.

Having gained the good opinion of statesmen, he soon obtained employment in the public service as a Superintendent Medical Inspector of the General Board of Health, 1849-50, and 1853-55; and when, in 1850, cholera first showed itself in our West Indies, he was sent by the Colonial Office to Jamaica "to inspect and report on the sanitary condition of that island," which he effected with promptitude, to the satisfaction of the Government. He afterwards presented to the authorities the details of the origin and track of its great cholera epidemic, and of the social condition of the natives, with recommendations of sanitary measures.

In the spring of 1855, the War Office sent to the Crimea a Sanitary Commission, "with powers of entering into every hospital, infirmary, or receptacle of whatever kind, for the sick and wounded, whether ashore or afloat; reporting the results of their inspection to the superior officers of the service concerned; and, further, to see to keeping the harbour of Balaklava in a clean condition." A vacancy occurring in that Commission, Dr. Milroy was sent out to fill it, and he joined it in July. He proved himself an able coadjutor with Dr. Sutherland in the inspection of camps, hospitals ashore and afloat, of wharves and roads, wherever operations were being actively carried on from Scutari to Kertch.

The recommendations of the Commission were in the right direction, and were such as would have been carried out by the Army Medical Department, had it been possessed of sufficient powers. There can be no doubt that their adoption contributed to the subsequent

healthiness of the army; but, in estimating that influence in this respect, it must be borne in mind that very marked improvement in the health of the army had manifested itself with the first advent of spring, ere the presence of the Commission on the scene could have operated. The excessive strain imposed on the troops by the military exigencies, and the want of adequate food and clothing during the winter, had been relieved by full supplies of both, and the spirit of the troops had been aroused by the prospect of an early re-opening of the batteries. When that took place, the whole aspect of affairs was changed, and a good state of health was established in an army that had landed with epidemic cholera in its train; had fought and conquered with that dire foe in its ranks; and then had passed a hard-worked and half-starved winter in the trenches outside Sebastopol. After the capture, another winter was passed in comfort and health; and when, in the following summer, the terms of peace were on the point of being settled, the Sanitary Commission was recalled. The report of its transactions was drawn up by Dr. J. Sutherland and Dr. Milroy.

In 1858, the National Association for the Promotion of Social Science appointed a Committee to inquire into the Practice and Results of Quarantine in all parts of the world. The late Earl of Shaftesbury was President, and Dr. Milroy was Honorary Secretary of that Committee. In April, 1859, a series of queries, prepared by it, was forwarded to the Foreign and Colonial Secretaries of State by Lord Shaftesbury, for circulation among the Consuls and Colonial authorities. The replies were placed at the disposal of the Committee, and the laborious task of examining, arranging, and digesting the information contained in them devolved on Dr. Milroy, as Secretary, and the results were communicated to the Board of Trade. These were published in Parliamentary Papers; the first, ordered to be printed August 25th, 1860, No. 568, "An Abstract of Regulations in force in foreign countries respecting Quarantine;" the second, ordered to be printed August 21st, 1860, No. 568-1, "Abstracts of Information concerning the Laws of Quarantine;" and the third, ordered to be printed August 6th, 1861, No. 544, "Papers relating to Quarantine." These papers contain information, not only regarding the laws and practice of quarantine, but also on the appearance and prevalence of the diseases for which it is imposed in various parts of the world. It is unnecessary to state that in them the views of the Epidemiological Society of London are fully displayed. Our readers have been indebted to Dr. Milroy, on various occasions, for able communications on his special subjects.

Eventually, a life-pension of £100 a year was granted to Dr. Milroy, in recognition of his various services. From that period, he devoted himself, in retirement, to his favourite studies and to literature. By his influence with the Royal College of Physicians, a committee was appointed to investigate the nature and imputed contagiousness of Leprosy and Yaws; and he was the author of the report of that committee, presented to Parliament in 1873. Fortunately, he had acquired by marriage a sufficiency, and was thus enabled to devote himself to his cherished studies. Always abstemious and economical, he found himself in a position to present to the College of Physicians the sum of £2,000, for the endowment of a Lectureship on Public Health and on Sanitation.

Dr. Milroy lived to the age of eighty-one, retaining to the last his mental faculties, as well as an active interest in social matters of a beneficial tendency. He died at Richmond, in Surrey, on January 11th, 1886, and was interred on the 15th, in Kensal Green Cemetery, beside the remains of his beloved wife, whom he had survived about three years.

He was a successful public benefactor, remarkable for his unostentatious and deferential character, by which he secured the confidence and esteem of those associated with him.

ROBERT DE'ATH, M.R.C.S.Eng., L.S.A., Buckingham.

THE sudden death of Mr. Robert De'Ath is recorded, in his fifty-seventh year. He had visited a patient, and was dismounting from his horse, when he fell across the threshold of the door, and died as the result of cardiac syncope. He had been in practice for many years in the district, and held the offices of borough and district coroner, medical officer of health both for the borough and union, and many other public appointments. Mr. De'Ath had taken a leading part in pleading for better cottage-accommodation for the poorer classes. He suffered great grief from the loss of his wife about six weeks ago, after a lingering illness; and this appears to have greatly depressed him.

VACCINATION.—Mr. T. Andrew Roberts, of Coningsby, public vaccinator, has been awarded a Government grant of £15 6s. for successful vaccination. This is the seventh time he has received it.

INDIA AND THE COLONIES.

INDIA.

SANITATION IN CALCUTTA.—The *Times* correspondent telegraphs: "I have often alluded to the question of sanitation in Calcutta, and have pointed out how that question, involving as it does an attempt to stamp out cholera in its birthplace, has a world-wide interest. A most important memorial to the Lieutenant-Governor of Bengal on that subject is now in circulation. It has been signed by the Chief Justice and other judges, the Bishop, the Catholic Archbishop, many of the clergy, the Advocate-General and the Bar, the leading merchants, the entire body of local physicians, and more than 1,000 inhabitants. It states that since 1881 cholera has swept away more than 20,000 people in Calcutta and its suburbs, that in some suburban wards the death-rate has stood at 70 in the 1,000; that during the decade of 1875 to 1884, out of a population of 257,000 in the suburbs, no fewer than half have perished. The memorial points out that this mortality is clearly traceable to defective sanitation. It expresses hearty concurrence with the Government policy of strenuous sanitary reform, and suggests certain legislative and other changes which the emergency renders necessary. It is to be hoped that the local Government will lose no time in dealing with this important subject."

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, February 13th, 6,083 births and 4,024 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 22.1 and 22.2 per 1,000 in the two preceding weeks, further rose during the week to 23.1. The rates in the several towns, ranged in order from the lowest, were as follow:—Huddersfield, 14.7; Leicester, 15.3; Halifax, 15.3; Bradford, 15.7; Hull, 18.3; Oldham, 18.4; Plymouth, 18.4; Sheffield, 18.6; Leeds, 19.2; Bolton, 19.2; Birmingham, 19.6; Wolverhampton, 19.6; Salford, 20.7; Nottingham, 20.8; Portsmouth, 21.1; Bristol, 21.5; Sunderland, 22.1; Derby, 22.2; Brighton, 22.9; Birkenhead, 23.5; Liverpool, 24.4; Blackburn, 24.6; London, 24.9; Newcastle-upon-Tyne, 25.2; Norwich, 25.5; Cardiff, 29.0; Manchester, 29.1; and the highest rate during the week, 30.9 in Preston. The death-rate in the twenty-seven provincial towns averaged 21.5 per 1,000, and was 3.4 below the rate recorded in London, which, as before stated, was 24.9 per 1,000. The 4,024 deaths registered in the twenty-eight towns included 405 which were referred to the principal zymotic diseases, against 360 and 376 in the two preceding weeks; of these, 188 resulted from whooping-cough, 67 from measles, 46 from diarrhœa, 43 from "fever" (principally enteric), 30 from scarlet fever, 28 from diphtheria, and 3 from small-pox. These 403 deaths were equal to an annual rate of 2.3 per 1,000. The zymotic death-rate in London was equal to 2.8, while it did not average more than 1.9 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Halifax, and 0.5 in Preston and in Cardiff, to 4.1 in Plymouth, 4.2 in Portsmouth, and 6.4 in Blackburn. The deaths referred to whooping-cough, which had steadily increased in the four preceding weeks from 156 to 175, further rose to 188, and showed the largest proportional fatality in Salford, Brighton, and Portsmouth. The fatal cases of measles, which had been 75 and 76 in the two previous weeks, declined to 67 during the week under notice, and caused the highest death-rates in Portsmouth, Plymouth, and Blackburn. The 46 deaths from diarrhœa showed a further increase upon recent weekly numbers. The 43 fatal cases of fever exceeded by 13 the number returned in the preceding week; this disease was proportionately most prevalent in Norwich, Plymouth, and Blackburn. The deaths referred to scarlet fever, which had been 29 and 35 in the two previous weeks, declined to 30, and showed the highest proportional fatality in Birkenhead and Leicester. The 28 deaths from diphtheria exceeded by 5 the number in the preceding week, and included 18 in London, 2 in Birmingham, and 2 in Huddersfield. The 3 fatal cases of small-pox recorded in the twenty-eight towns were all returned in Liverpool; no death from this disease occurred in London during the week under notice, although the death of a London resident from small-pox was recorded in the Metropolitan Asylum Hospital ship *Atlas*, situated outside Registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined in the thirteen preceding weeks from 90 to 18, had further fallen to 11 on Saturday, February 13th; 1 new case was admitted to these hospitals during the week, against 4 and 1 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 6.6 per 1,000, and was below the average. The causes of 94, or 2.3 per cent., of the 4,024 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 6,061 births and 4,253 deaths were registered during the week ending Saturday, February 20th. The annual rate of mortality, which had increased in the three preceding weeks from 22.1 to 23.1 per 1,000, further rose during the week under notice to 24.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 15.3; Leicester, 16.4; Derby, 17.6; Sheffield, 18.1; Bristol, 18.4; Hull, 18.8; Preston, 19.1; Brighton, 19.3; Salford, 19.5; Bradford, 20.0; Newcastle-upon-Tyne, 20.9; Wolverhampton,

20.9; Oldham, 21.2; Cardiff, 22.3; Norwich, 23.5; Leeds, 23.5; Huddersfield, 24.7; Nottingham, 24.9; Birmingham, 25.2; London, 25.6; Liverpool, 26.0; Bolton, 26.3; Portsmouth, 27.9; Manchester, 28.4; Plymouth, 30.0; Sunderland, 30.7; Halifax, 32.7; and the highest rate during the week, 39.1 in Blackburn. The death-rate in the twenty-seven provincial towns averaged 23.4 per 1,000, and was 2.2 below the rate recorded in London, which, as before stated, was 25.6 per 1,000. The 4,253 deaths registered in the twenty-eight towns during the week under notice included 197 which were referred to whooping-cough, 79 to measles, 43 to diarrhœa, 39 to diphtheria, 33 to "fever" (principally enteric), 31 to scarlet fever, and 3 to small-pox; in all, 425 deaths resulted from these principal zymotic diseases, against 376 and 405 in the two preceding weeks. The zymotic death-rate was equal to 2.4 per 1,000. In London the zymotic rate was 2.7, while it did not average more than 2.2 per 1,000 in the twenty-seven provincial towns, and ranged from 0.5 and 0.6 in Preston and Norwich, to 5.0 in Portsmouth, 5.5 in Bolton, and 10.5 in Blackburn. The fatal cases of whooping-cough, which had risen in the five preceding weeks from 156 to 188, further increased during the week to 197, and caused the highest death-rates in London, Bolton, and Cardiff. The deaths referred to measles, which had been 76 and 67 in the two previous weeks, rose again to 79, and showed the largest proportional fatality in Portsmouh, Plymouth, and Blackburn. The 43 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths from diphtheria, which had increased in the three preceding weeks from 23 to 28, further rose during the week under notice to 39, and included 19 in London, 4 in Portsmouth, 3 in Birmingham, and 3 in Liverpool. The 33 deaths referred to different forms of fever showed a decline of 10 from the number in the previous week, and showed the largest proportional fatality in Birkenhead. The fatal cases of scarlet fever, which had been 35 and 30 in the two preceding weeks, were 31; this disease was somewhat prevalent in Leeds. The 3 deaths from small-pox in the twenty-eight towns were all recorded in Liverpool. The death of a London resident from small-pox was recorded in the Metropolitan Hospital-ship *Atlas* situated outside Registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily declined in the fourteen preceding weeks from 90 to 11, were 10 on Saturday, February 20th; 2 new cases were admitted to these hospitals during the week, against 1 in each of the two previous weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 8.0 per 1,000, and considerably exceeded the average. The causes of 94, or 2.2 per cent., of the 4,253 deaths registered during the week under notice in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, February 6th, 852 births and 527 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had declined from 23.9 to 22.4 per 1,000 in the three preceding weeks, further fell during the week under notice to 21.3, and was 0.8 per 1,000 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 13.3 in Leith, 16.5 in Paisley, 17.4 in Greenock, 18.0 in Edinburgh, 19.4 in Dundee, 19.7 in Perth, 20.3 in Aberdeen, and 26.1 in Glasgow. The 527 deaths registered in these towns during the week included 32 which were referred to the principal zymotic diseases, against 36 and 37 in the two preceding weeks; of these, 9 resulted from whooping-cough, 6 from scarlet fever, 6 from diarrhœa, 5 from diphtheria, 3 from "fever," 3 from measles, and not one from small-pox. These 32 deaths were equal to an annual rate of 1.3 per 1,000, which was considerably below the average zymotic rate during the same period in the twenty-eight large English towns. The highest zymotic rates during the week were recorded in Leith, Perth, and Glasgow. The deaths from whooping-cough, which had been 6 and 13 in the two preceding weeks, declined again to 9, all of which were recorded in Glasgow. The fatal cases of scarlet fever were 3 less than the number in the previous week, and were all returned in Glasgow. The 6 deaths referred to diarrhœa were below the average. The fatal cases of diphtheria, which had been 14 and 3 in the two preceding weeks, increased to 5 during the week under notice, of which 3 occurred in Glasgow, 1 in Aberdeen, and 1 in Leith. The 3 deaths from fever showed a slight further decline from recent weekly numbers, and included 1 in Glasgow, 1 in Aberdeen, and 1 in Perth. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 5.8 per 1,000, against 6.0 in London. The causes of 75, or 14.2 per cent. of the 527 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,283,977 persons, 903 births and 606 deaths were registered during the week ending February 13th. The annual rate of mortality, which had declined in the four preceding weeks from 23.9 to 21.3 per 1,000, rose again during the week under notice to 24.5, and exceeded by 1.4 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 11.5 in Perth, 13.3 in Leith, 17.4 in Greenock, 18.6 in Edinburgh, 24.4 in Dundee, 27.1 in Aberdeen, 29.5 in Paisley, and 29.7 in Glasgow. The 606 deaths registered during the week under notice in these Scotch towns included 17 which were referred to whooping-cough, 16 to diarrhœa, 9 to "fever," (principally enteric), 6 to scarlet fever, 5 to diphtheria, and not one either to small-pox or measles; in all, 53 deaths resulted from these principal zymotic diseases, against 37 and 32 in the two preceding weeks. These 53 deaths were equal to an annual rate of 2.1 per 1,000, which were slightly below the average zymotic death-rate during the same period in the twenty-eight English towns. The highest zymotic rates in the Scotch towns were recorded in Paisley, Aberdeen, and Glasgow. The deaths from whooping-cough, which had been 13 and 9 in the two previous weeks, rose to 17, of which 14 occurred in Glasgow, and 2 in Paisley. The 16 fatal cases of diarrhœa considerably exceeded the numbers returned in recent weeks. The deaths referred to different forms of fever, which had declined in the three preceding weeks from 6 to 3, rose again during the week under notice to 9, and included 2 in Glasgow, 2 in Edinburgh, and 2 in Greenock. The 6 fatal cases of scarlet fever corresponded with the number in the previous week, and included 4 in Glasgow. Of the 5 deaths from diphtheria, 2 occurred in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.2 per 1,000, against 6.6 in London. As many as 78, or 12.9 per cent., of the 606 deaths registered during the week in these Scotch towns, were uncertified.

During the week ending Saturday, February 20th, 860 births and 551 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had been 21.3 and 24.5 per 1,000 in the two preceding weeks, declined again during the week under notice to 22.3, but was 2.1 per 1,000 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 17.4 in Edinburgh, 19.2 in Leith, 20.9 in Greenock, 22.6 in Aberdeen, 22.8 in Dundee, 24.3 in Paisley, 24.6 in Perth, and 24.8 in Glasgow. The 551 deaths registered during the week in these towns included 46, which were referred to the principal zymotic diseases, against 32 and 53 in the two previous weeks; of these, 16 resulted from diarrhœa, 13 from whooping-cough, 8 from scarlet fever, 4 from measles, 3 from diphtheria, 2 from "fever," and not one from small-pox. These 46 deaths were equal to an annual rate of 1.9 per 1,000, which was considerably below the average zymotic rate during the same period in the large English towns. The highest zymotic rates during the week were recorded in Leith, Glasgow and Aberdeen. The sixteen fatal cases of diarrhœa considerably exceeded those returned in the corresponding week of last year, and included 7 in Glasgow and 5 in Aberdeen. The deaths referred to whooping-cough, which had been 9 and 17 in the two preceding weeks, declined again to 13, of which 10 occurred in Glasgow. The 8 fatal cases of scarlet fever exceeded by 2 the number in the previous week, and included 6 in Glasgow. The 4 deaths from measles were all recorded in Edinburgh. The fatal cases of diphtheria, which had been 5 in each of the two preceding weeks, declined to 3, of which 2 occurred in Aberdeen, and 1 in Dundee. The 2 deaths referred to "fever" included 1 in Glasgow and 1 in Aberdeen. The mortality from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 6.4 per 1,000, against 8.0 in London. The causes of 66, or 12.0 per cent., of the 551 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending January 23rd, the total number of deaths registered in the sixteen principal town-districts of Ireland was 438. The average annual death-rate represented by the deaths registered was 26.4 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 25.6; Cork, 16.2; Drogheda, 21.1; Dublin, 29.2; Dundalk, 26.2; Galway, 30.3; Kilkenny, 46.5; Limerick, 22.9; Lisburn, 38.7; Londonderry, 26.7; Lurgan, 25.7; Newry, 21.1; Sligo, 4.8; Waterford, 18.5; Wexford, 42.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.7 per 1,000, the rates varying from 0.0 in ten of the districts to 5.3 in Londonderry; the 15 deaths from all causes registered in that district comprising 2 from whooping-cough, and 1 from enteric fever. Among the 109 deaths from all causes registered in Belfast were 3 from measles, 3 from scarlatina, and 4 from diarrhœa; and the 25 deaths in Cork comprised 1 from each of the following diseases: scarlatina, typhus, and diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 200. Twenty-seven deaths from zymotic diseases were registered in Dublin; they comprised 2 from measles, 2 from scarlet fever, 17 from whooping-cough, 1 from cerebro-spinal fever, 2 from enteric fever, etc. Forty-five deaths from diseases of the respiratory system (including 32 from bronchitis, 4 from pneumonia, and 3 from croup) were registered. The deaths of 9 children (including 7 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 14 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 27 deaths, mesenteric disease 8, and cancer 5. Three accidental deaths and 1 case of suicide were registered. In 25 instance the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending January 30th, the number of deaths registered in the eighteen principal town districts of Ireland, was 471. The average annual death-rate, represented by the deaths registered, was 28.4 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 24.0; Cork, 35.0; Drogheda, 4.2; Dublin, 30.6; Dundalk, 17.5; Galway, 37.0; Kilkenny, 29.6; Limerick, 32.4; Lisburn, 24.2; Londonderry, 19.6; Lurgan, 41.0; Newry, 24.6; Sligo, 19.2; Waterford, 44.0; Wexford, 12.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in Londonderry, Newry, Drogheda, Wexford, Dundalk, Sligo, Lisburn, Lurgan, and Armagh, to 6.7 in Galway; the 11 deaths from all causes, registered in the last-named district, comprising 1 from whooping-cough, and 1 from enteric fever. Among the 102 deaths from all causes, registered in Belfast, were 3 from scarlatina, 3 from whooping-cough, 1 from enteric fever, and 1 from diarrhœa. In the Dublin registration district, the deaths registered during the week amounted to 216. Twenty-one deaths from zymotic diseases were registered in Dublin; they comprised 1 from scarlet fever, 1 from typhus, 13 from whooping-cough, and 3 from cerebro-spinal fever. Forty-seven deaths from diseases of the respiratory system were registered; they comprised 29 from bronchitis, 7 from pneumonia or inflammation of the lungs, and 2 from pleurisy. The deaths of 17 children, under 5 years of age (including 13 infants under one year old), were ascribed to convulsions. Three deaths were caused by apoplexy, 21 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis caused 30 deaths, and mesenteric disease 2. Five accidental deaths and 1 case of suicide were registered. In 31 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending February 6th, 526 deaths were registered in the sixteen principal town districts of Ireland. The average annual death-rate represented by the deaths registered was 31.7 per 1,000. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000:—Armagh, 31.0; Belfast, 28.7; Cork, 30.5; Drogheda, 50.7; Dublin, 32.8; Dundalk, 30.6; Galway, 53.8; Kilkenny, 38.1; Limerick, 29.7; Lisburn, 19.3; Londonderry, 41.0; Lurgan, 46.2; Newry, 10.5; Sligo, 19.2; Waterford, 27.8; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.2 per 1,000, the rates varying from 0.0 in Limerick, Galway, Newry, Kilkenny, Drogheda, Dundalk, Sligo, Lisburn, and Armagh, to 15.4 in Lurgan; the 9 deaths from all causes registered in the last-named district comprising 1 each from measles, typhus, and enteric fever. The 122 deaths from all causes registered in Belfast comprised 3 from measles, 5 from scarlatina, and 3 from whooping-cough. Among the 47 deaths in Cork were 2 from measles, 1 from scarlatina, and 1 from enteric fever; and the 23 deaths in Londonderry comprised 1 from enteric fever, and 2 from diarrhœa. In the Dublin Registration District the deaths registered during the week amounted to 228. Twenty-eight deaths from zymotic diseases were registered in Dublin; they comprised 3 from scarlet fever, 2 from typhus, 15 from whooping-cough, 3 from enteric fever, 2 from diarrhœa, etc. Fifty-two deaths from diseases of the respiratory

system were registered; they comprised 38 from bronchitis, and 9 from pneumonia. The deaths of 20 children under 5 years of age (including 15 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 2 by epilepsy, 20 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 25 deaths, mesenteric disease 4, and cancer 3. Three accidental deaths and 1 case of suicide were registered. In 42 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending February 13th, 524 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 31.6 per 1,000. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 26.3; Cork, 24.7; Drogheda, 33.8; Dublin, 38.0; Dundalk, 17.5; Galway, 23.5; Kilkenny, 21.1; Limerick, 39.1; Lisburn, 9.7; Londonderry, 37.4; Lurgan, 41.0; Newry, 24.6; Sligo, 14.4; Waterford, 27.8; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.9 per 1,000, the rates varying from 0.0 in Galway, Kilkenny, Drogheda, Wexford, Dundalk, Lisburn, and Armagh, to 10.3 in Lurgan; the 8 deaths from all causes registered in the last-named district comprising 2 from scarlatina. Among the 112 deaths from all causes registered in Belfast were 1 from scarlatina, 1 from whooping-cough, 1 from diphtheria, 2 from enteric fever, and 1 from diarrhœa; among the 38 deaths in Cork, were 2 from typhus, 1 from diphtheria, and 2 from diarrhœa; and the 21 deaths in Londonderry comprised 1 from each of the following diseases—whooping-cough, enteric fever, and diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 261. Thirty-one deaths from zymotic diseases were registered in Dublin; they comprised 1 from scarlet fever, 8 from typhus, 10 from whooping-cough, 5 from enteric fever, 2 from erysipelas, etc. Sixty-three deaths from diseases of the respiratory system were registered; they comprised 40 from bronchitis and 7 from pneumonia or inflammation of the lungs. The deaths of 18 children under five years of age (including 17 infants under one year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 16 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 34 deaths, mesenteric disease 7, and cancer 8. Seven accidental deaths were registered. In thirty-nine instances, the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears from statistics published in the Registrar-General's return for the week ending January 16th, that the annual death-rate was recently equal to 27.4 in Bombay, and 43.2 in Madras. "Fever" mortality showed the largest excess in Bombay, and the deaths in this city also included 2 fatal cases of cholera. According to the most recently received weekly returns, the annual death-rate in twenty-one of the largest European cities averaged 27.0, and exceeded by 3.1 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 28.2, and showed a decline from the higher rate in the previous week; the 502 deaths included 21 from scarlet fever, 21 from diarrhœal diseases, 18 from "fever," and 10 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 20.0, and ranged from 16.3 in Christiania, to 21.9 in Copenhagen; diphtheria and croup caused 7 deaths in Copenhagen, 7 in Christiania, and 4 in Stockholm. In Paris, the death-rate was 26.1, and showed a considerable increase upon the rates in recent weeks; the deaths included 44 from diphtheria and croup, 14 from typhoid fever, 14 from scarlet fever, and 5 from small-pox. The 219 deaths in Brussels also showed an increase, and were equal to a rate of 26.1; diarrhœal diseases caused 20, and diphtheria and croup 6, deaths. In Geneva, the 29 deaths, including 2 from "fever," gave a rate of 20.9. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was equal to 28.0, the rates only ranging from 27.0 in Rotterdam to 28.2 in the Hague; diphtheria and croup caused 11 deaths in Amsterdam, and 3 in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.0, and ranged from 22.4 in Dresden and 22.5 in Berlin, to 34.7 in Buda-Pesth, 36.8 in Prague, and 38.8 in Trieste. Small-pox caused 9 deaths in Vienna, 9 in Buda-Pesth, and 3 in Prague; diphtheria showed the most excessive mortality in Berlin, Breslau, and Hamburg. The death-rate was equal to 22.1 in Rome, and to 37.5 in Venice; small-pox caused 11 deaths in Venice and 5 in Rome; while 5 fatal cases of diphtheria and 3 of typhoid fever were also recorded in the latter city. In four of the largest American cities, the recorded rate did not average more than 19.6, and ranged from 16.5 in Baltimore to 22.4 in New York. Diphtheria and croup caused caused considerable mortality in each of these cities; and typhoid fever caused 6 deaths in Philadelphia, and 4 in Baltimore.

It appears, from statistics published in the Registrar-General's return for the week ending January 23rd, that the death-rate recently averaged 31.8 per 1,000 in the three principal Indian cities; it was 24.6 in Bombay, 27.4 in Calcutta, and 39.8 in Madras. Cholera caused 40 deaths in Calcutta, and diarrhœal diseases, 49 in Calcutta, and 72 in Madras; the mortality from "fever" showed the smallest excess in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-two of the largest European cities averaged 26.1, and was 3.7 in excess of the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 31.9, and exceeded the rates in previous weeks; the 568 deaths included 24 from "fever," 20 from scarlet fever, and 5 from small-pox. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 23.7, and ranged from 20.6 in Copenhagen, to 26.8 in Christiania; diphtheria and croup caused 6 deaths in Stockholm, while of the 66 deaths in Christiania, 16 resulted from diphtheria and croup, and 5 from scarlet fever. In Paris, the death-rate further rose to 26.4, and the deaths included 32 from diphtheria and croup, 21 from typhoid fever, and 12 from small-pox. The 200 deaths in Brussels were equal to a rate of 23.8, and included 8 from diphtheria and croup, and 3 from "fever." The usual return from Geneva does not appear to have come to hand. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.5, the rates ranging from 20.9 in the Hague to 30.0 in Rotterdam; in Amsterdam, 19 of the deaths resulted from measles, and 6 from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 24.5, and ranged from 20.8 and 24.1 in Berlin and Dresden, to 31.1 in Trieste, and 34.7 in Prague. Small-pox caused 10 deaths in Vienna, 10 in Buda-Pesth, and 4 in Prague; diphtheria showed the greatest mortality in Berlin, Breslau, and Munich. The death-rate averaged 29.4 in three of the principal Italian cities, and was equal to 27.3 in Rome, 28.6 in Turin, and 36.1 in Venice; small-pox caused 7 deaths in Venice, 5 in Rome, and 1 in Turin; diphtheria and croup caused 6 deaths in Rome, and 15 in Turin; and 6 deaths from typhoid fever were recorded in Turin. In four of the largest American cities, the mean recorded death-rate did not exceed 22.3, the several rates ranging from 17.2 in Baltimore to 24.5 in New York. Diphtheria caused considerable mortality in each of these American cities; 11 deaths from typhoid fever were recorded in Philadelphia, and 7 in New York.

It appears, from statistics published in the Registrar-General's return for the week ending January 30th, that the annual death-rate recently averaged 30.7 per 1,000 in the three principal Indian cities; it was 24.6 in Bombay, 32.6 in Calcutta, and 35.5 in Madras. Cholera caused 43 deaths in Calcutta, and other diarrhœal diseases 39 in Calcutta, 26 in Bombay, and 61 in Madras; fever mortality showed the largest excess in Calcutta. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty of the largest European cities averaged 28.9, and exceeded by 6.8 the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 33.2, and exceeded the rate in recent weeks; the 570 deaths included 22 from scarlet fever, 18 from "fever," and 18 from measles. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 20.4, and ranged from 16.7 in Copenhagen, to 27.6 in Christiania; diphtheria and croup caused 14 deaths in Christiania, 5 in Stockholm, and 14 in Christiania. In Paris, the death-rate was equal to 27.3, showing an increase upon the rates in recent weeks; the deaths included 47 from diphtheria and croup, 23 from measles, 12 from typhoid fever, and 6 from small-pox. The 222 deaths in Brussels, including 6 from diphtheria and croup, gave a rate of 26.5. In Geneva the 39 deaths, of which 1 resulted from small-pox, and 1 from typhoid fever, gave a rate of 28.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.7, the rates varying from 22.9 in the Hague, to 29.9 in Rotterdam; 193 deaths in Amsterdam included 24 from measles, and 12 from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 30.4, and ranged from 23.5 and 24.0 in Dresden and Berlin, to 35.9 in Trieste, and 37.7 in Prague. Small-pox caused 15 deaths in Buda-Pesth, and 10 in Vienna; diphtheria showed the largest proportional mortality in Hamburg, Trieste, Breslau, and Berlin; and 11 fatal cases of "fever" occurred in Hamburg. The 166 deaths in Rome included 8 from small-pox, and 4 from diphtheria, and were equal to a rate of 26.2. In four of the largest American cities the recorded rate averaged 22.1, and ranged from 15.5 in Baltimore to 24.5 in New York. Diphtheria showed considerable mortality in each of these American cities, and typhoid fever caused 11 deaths in Philadelphia.

It appears from the statistics published in the Registrar-General's return for the week ending February 6th, that the death-rate recently averaged 30.7 per 1,000 in the three principal Indian cities; it was 24.6 in Bombay, 32.6 in Calcutta, and 35.5 in Madras. Cholera caused 35 deaths in Calcutta, and diarrhœal diseases 52 in Calcutta, 22 in Bombay, and 47 in Madras; "fever" mortality caused the most excessive mortality in Calcutta. According to the most recently received weekly returns, the annual death-rate averaged 27.4, per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by 5.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 32.7, and showed but slight decline from the high rate in the previous week; the 582 deaths included 28 from "fever," 23 from scarlet fever, and 15 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 24.5, and ranged from 21.5 in Copenhagen to 27.7 in Christiania; the 68 deaths in the last named city included 12 from diphtheria and croup, and 6 from scarlet fever. In Paris, the death-rate was equal to 27.2, and scarcely differed from the rate in the previous week; 39 deaths resulted from diphtheria and croup, 15 from measles, 14 from typhoid fever, and 5 from small-pox. The 207 deaths in Brussels gave a rate of 24.7, and included 7 from diphtheria and croup, and 4 from "fever." The rate in Geneva was 29.5, and 1 death was attributed to typhus. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.2, and the rates ranged from 20.6 in the Hague to 24.9 in Amsterdam, where 21 of the 179 deaths resulted from measles. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.3, and ranged from 21.6 and 22.7 in Berlin and Hamburg, to 30.9 in Prague and 32.5 in Buda-Pesth. Small-pox caused 21 deaths in Buda-Pesth, 11 in Vienna, and 3 in Prague; diphtheria caused the greatest mortality in Berlin, Hamburg, Dresden, and Trieste. The death-rate was equal to 23.1 in Rome and to 34.3 in Venice; Small-pox caused 3, and typhoid fever 2 deaths in each of these Italian cities. In four of the largest American cities, the mean recorded death-rate was 22.1, the rates ranging from 15.5 in Baltimore to 24.5 in New York. Diphtheria, including croup, caused considerable mortality in each of these American cities; typhoid fever caused 11 deaths in Philadelphia.

MEDICAL NEWS.

MEDICAL VACANCIES.

The following vacancies are announced.

ANCOATS HOSPITAL, Manchester.—Honorary Physician. Applications to S. Baron.

BELGRAVE HOSPITAL FOR CHILDREN, 78, Gloucester Street, Warwick Square, S.W.—House-Surgeon. Applications by February 27th.

BRISTOL ROYAL INFIRMARY.—House-Surgeon. Applications by March 6th, to the Secretary.

BRITISH LYING-IN HOSPITAL, Endell Street, St. Giles's.—Physician to Out-patients. Applications by March 4th.

CARLISLE UNION.—Medical Officer and Public Vaccinator. Salary, £20 per annum, and extras. Applications by March 3rd.

CLIFDEN UNION.—Medical Officer for Workhouse and Fever Hospital. Salary, £60 per annum. Election on March 3rd.

CLIFDEN UNION.—Medical Officer, Clifden Dispensary. Salary, £125 per annum, and fees. Applications to E. Kendall, Honorary Secretary, Ardagh Lodge, Clifden. Election on March 3rd.

DEVON AND EXETER HOSPITAL.—Surgeon. Applications by March 4th.

DROGHEDA UNION.—Medical Officer. Monasterboice Dispensary. Salary, £130 per annum and fees. Applications to B. R. Balfour, Honorary Secretary, Townley Hall, Drogheda. Election on March 2nd.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E. — Clinical Assistant. No salary. Applications by March 4th.

GREAT YARMOUTH HOSPITAL.—Resident Surgeon and Dispenser. Salary, £90 per annum.

LIVERPOOL EYE AND EAR INFIRMARY.—House-Surgeon. Salary, £80 per annum. Applications to Reg. Haigh, Grosvenor Buildings, Liverpool, by March 10th.

LIVERPOOL NORTHERN HOSPITAL.—Resident House-Surgeon's Assistant. No salary. Applications by March 3rd.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Dental Surgeon. Applications by March 6th, to A. Craske.

PARISHES OF LOCHGOILHEAD AND KILMARICH. — Medical Officer. Salary, £100 per annum. Applications to Rev. J. M'Corkindale, Manse, Lochgoilhead, before March 10th.

PENZANCE UNION, Cornwall.—Medical Officer and Public Vaccinator. Salary, £36 per annum and extras.

PLYMOUTH INCORPORATION.—Dispenser. Salary, £80 per annum. Applications by March 3rd, to W. Adams, 7, Frankfort Street, Plymouth.

RADCLIFFE INFIRMARY, Oxford.—Consulting Dental Surgeon. Applications to the Secretary by March 10th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by March 10th.

ROYAL INFIRMARY, Liverpool. — General Superintendent and Secretary. Salary, £250 per annum. Applications by March 3rd.

SEAMEN'S HOSPITAL SOCIETY, Greenwich.—Visiting Physician. Applications before March 5th to W. T. Evans.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.— Assistant to House-Surgeon. No salary. Applications by March 5th.

ST. HELEN'S FRIENDLY SOCIETY MEDICAL AID ASSOCIATION.—Medical Practitioner. Applications by March 1st.

STROUD GENERAL HOSPITAL.—Registered House-Surgeon. Salary, £80 per annum. Applications to J. Libby, Esq., Honorary Secretary, New Mills Court, Stroud, Gloucestershire.

WESTERN OPHTHALMIC HOSPITAL, 153, Marylebone Road, W.—Assistant Surgeon. Applications by March 1st.

WEST NORFOLK AND LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, £100. Applications by March 13th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Physician. Applications by March 1st.

YORK DISPENSARY.—Resident Medical Officer. Salary, £130 per annum. Applications by March 9th, to S. W. North, 84, Micklegate, York.

MEDICAL APPOINTMENTS.

BLENKARNE, W. L'Heureux, M.R.C.S., L.S.A., appointed Medical Officer to the Leicester Provident Dispensary, *vice* Henry Hargitt, M.D., resigned.

CHUBB, W. L., M.R.C.S., L.R.C.P.Edinburgh, appointed by the Secretary for War to be Visiting Surgeon for Shorncliffe, under the Contagious Diseases Acts, *vice* H. W. Hunt, M.R.C.S.Eng., resigned.

DODSON, Arthur E., L.R.C.P., M.R.C.S., appointed Medical Officer to the Wandsworth and Clapham Union Workhouse.

JOHNSON, G. H., M.R.C.S., L.R.C.P.Ed., appointed Surgeon and Agent to Her Majesty's Coastguard Station at Teignmouth.

OSWALD, Robert J. W., M.R.C.S.Eng., L.R.C.P. and S.Ed., etc., appointed Surgeon to the Royal South London Dispensary.

TISDALL, J., L.R.C.S. and P. Edin., late Assistant Medical Superintendent, West Derby Union Infirmary, Liverpool, appointed Medica Officer to the South Municipal District of the West Derby Union.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

SPARROW.—On February 23rd, at "Haslemere," East Southsea, Hants, the wife of Dr. Gordon Sparrow, of a son.

SWEETING.—On the 23rd February, at 40, Charleville Road, West Kensington, the wife of R. D. R. Sweeting, M.R.C.S.Eng., S.Sc.Cert.(Cantab.), of a daughter.

THE ROYAL SOCIETY'S RELIEF FUND.—At a time when appeals are being made on behalf of the necessitous among the working class, there is another class of the necessitous which is likely to be overlooked—a class which does not, perhaps, at any time receive the attention which it deserves from the charitable—that of cultured men, scientific and literary, who have been reduced to poverty by misfortune, and whom, from their very sensitiveness to publicity, it is always difficult appropriately and effectually to assist. It is for this class that the Scientific Relief Fund of the Royal Society is designed. The fund dates from the year 1859, and the Council of the Royal Society takes charge of any sums contributed to it, and invests them, applying the interest in grants for the relief of such scientific men or of their families as may from time to time require and deserve assistance. Hitherto, the demands upon the fund have been far in excess of its resources. An opportunity, however, has lately arisen of largely increasing the usefulness of the fund through a munificent offer of Sir William Armstrong, C.B., F.R.S. It is that Sir W. Armstrong will contribute a sum of £6,500 on certain conditions, the principal being that an equal sum is subscribed by other friends of science during the present year. In response to an appeal lately made, the Treasurer of the Royal Society has already received about £1,500 from their Fellows, and a handsome contribution of 500 guineas has just arrived from Mr. Ludwig Mond, but there is still a considerable sum to raise before Sir William Armstrong's offer can be secured. Grants from the fund are made only on the recommendation of a committee which investigates the cases, and applications have to be recommended by one of the chartered scientific societies.

SEAMEN'S HOSPITAL, GREENWICH.—The report presented at the fifty-sixth annual meeting of the Seamen's Hospital Society showed that, during the year, 1,551 patients had been under treatment, against 1,751 in 1884; and the number of out-patients relieved was 5,874, against 5,329. The average period of stay of each in-patient was twenty-eight days. The remodelling of the drainage of the hospital had been completed, and by these alterations the sanitary condition of the building and the health of the nurses had been materially improved. The building had been rearranged, and it now accommodated 258 patients, instead of 243 as formerly. Since the foundation, over a quarter of a million seamen of almost every nationality (including out-patients) had been relieved.

ALLEGED FATAL MISTAKE.—On Thursday night, February 18th, two women, both unknown to each other, went to a dispensary in the south of London, then in charge of an assistant to a well known practitioner, and asked to be supplied with some medicine. The preparation was supplied, and each woman went separately to her home. Both took the medicine, both were seized with convulsions, and both expired within an hour of each other. The deaths were duly reported to the authorities; but, upon inquiries being made at the dispensary, the assistant who prepared the medicine could not be found.

DEATH FROM HYDROPHOBIA.—The death of a boy, aged 6, from hydrophobia, has occurred at Brinscall, near Chorley. The deceased, the son of a quarryman, was bitten on the face by a dog on December 31st, and was attended by a surgeon. The wound healed up, and the child apparently became quite well again; but on Thursday night last he complained of sore throat. The medical man saw at once that the boy was suffering from hydrophobia, and stated that he would not recover. He did not appear to suffer acutely, but sometimes talked incoherently about the dog. He died on Friday evening. The jury returned a verdict in accordance with the evidence.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Annual Meeting. Election of Officers and Council for 1886-87. President's Address.—Odontological Society of Great Britain, 8 P.M. Casual Communications by Dr. W. St. George Elliott and Mr. J. C. Foran. Dr. Dudley Buxton: Physiology of Nitrous Oxide.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Shattock: Congenital Cystic Kidney. Mr. Lockwood: Pistol-shot Wound of Cranium, etc. Sir W. Mac Cormac: Tumour of Palate. Mr. Bilton Pollard: Villous Tumour of Accessory Thyroid. Dr. Gulliver: Malignant Disease of Thyroid in Myxœdema. Mr. Pitts: Ossifying Sarcoma of Radius. Dr. F. Taylor: Aneurysm of Septum Ventriculosum. Dr. S. West: Cases of Aortic Aneurysm (1) developing in Wall of Heart, (2) rupturing into Pulmonary Artery. Mr. Clutton (for Dr. Floyer): Congenital Skin-Tumour of Sigmoid Flexure. The following card-specimens will also be exhibited. Dr. Payne (for Dr. Jacob, of Leeds): Tumour of Finger. Mr. Pollard: Dermoid Cyst of Testicle. Dr. Lediard: 1 Sessile Ovarian Blood-Cyst; 2. Hernia reduced *en masse*; 3. Cancer of Rectum: Excision; 4. Cancer of Œsophagus: Gastrostomy. Dr. Turner: Hepatic Cells in Blood of Portal Vein. Dr. Carrington: Mitral and Tricuspid Stenosis. Mr. E. H. Fenwick: 1. Fibro-sarcomatous Polypi from Bladder; 2. Papilloma of Bladder. Mr. Makins: 1. Dislocation of Cervical Spine; 2. Carcinoma involving both Superior Maxillæ. Dr. Drewitt: Heart and Pericardium from a Case of Rheumatic Nodules.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. W. S. A. Griffith, and others. Dr. Lewers: A Case of Circumscribed Sarcoma of Uterus and Vagina. Dr. Matthews Duncan: On Contraction, Inhibition, and Expansion of the Uterus. Dr. George Coates: A Case of Labour in a Primipara suffering from Mitral Disease. Dr. Amand Routh: A Case of Serous Perimetritis.

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. A. Q. Silcock: Cystic Sarcoma of Mesentery simulating an Ovarian Cystic Tumour.

FRIDAY.—West London Medico-Chirurgical Society, 8 P.M. Mr. Percy Dunn will show (1) Large Pulmonary Infarct; (2) Sarcoma of Testis and Cord; (3) Congenital Mitral Stenosis, with General Cardiac Hypertrophy; Weight of Heart, Twenty-seven Ounces. Brigade-Surgeon Curran: Collection of Drawings and Photographs illustrative of Venereal Disease and Goître in the Himalayas. Mr. Swinford Edwards: On Urethral Fever, with Records of Three Fatal Cases. Mr. Hurry Fenwick: On the Precautions to be adopted in the Withdrawal of Residual Urine.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

PRACTICE IN CYPRUS.

EMIGRANT asks for some information about the chances of private practice in Cyprus, the nature of the climate, and any other information which would be valuable to one who is thinking of going there.

PAYING-PATIENTS IN HOSPITALS.

MR. F. W. L. HODDER asks if the London hospitals have rooms for pay-patients, and what is about the cost a week.

ELECTRICITY FOR EXOPHTHALMOS.

G. B. G. asks what kind of electrical treatment, and what form of battery, should be used in the treatment of exophthalmos.

MICROSCOPIC SPECIMENS FOR CLASS USE.

SIR,—I am holding a physiology class here in connection with the Science and Art Department at South Kensington. I have not the necessary time, however, to prepare my own microscopic specimens. I should be much obliged to any of your readers who could advise me where I could purchase specimens made to use, and not merely to sell. I should be still more grateful to anyone who has duplicate slides of the normal tissues, who would present them to my class, which is only composed of poorer students.—I am, sir, yours faithfully,

W. SYKES, Medical Officer of Health.

Mexborough, near Rotherham, Yorks.

ANSWERS.

HEALTH-RESORT FOR A PHTHISICAL PATIENT.

SIR,—In reply to the inquiry of "Associate," I would recommend Wiesen, in the Grisons, Switzerland, as one of the best health-resorts I know of for the purpose he requires.

After a personal experience, as an invalid, of the Riviera, St. Moritz, Davos, and Wiesen, I have the highest opinion of the climate of the latter place.—Yours truly,

M. D. E.

OBSTINATE CONSTIPATION.

IN reply to "A Member," Mr. ARTHUR H. W. AYLING fears he will fail to discover any *modus operandi* except by means of drugs. Mr. Ayling has under care a retired Indian officer who for many years past has had severe chronic constipation; the various remedies tried have but caused uncomfortable results, such as diarrhœa, hard calcareous fæces, tenesmus, etc. For the past two months, he has been administering podophyllin in the following form, with the production of a daily morning motion, of a proper consistency, and voided without pain: ℞ Resinæ podophylli gr. iv; spiritûs vini rectif. ʒj; one teaspoonful to be taken in a cup of black coffee or tea every day at 6 P.M., until otherwise advised. It is necessary to stop the dose for a day or two at intervals.

MR. W. PROWSE (Clifton) recommends "A Member" to try the Prussian tincture of colocynth, or to make a simple tincture of that drug, by macerating an ounce of colocynth pulp in ten ounces of rectified spirit for ten days, and straining. The dose is five to ten minims, in half a wineglassful of water at bedtime, twice a week. The exact dose required by the patient in question should be carefully ascertained, by directing him to commence with the smaller or medium dose, say ten minims, if an adult; and gradually and slowly increase it, until the desired effect is produced, namely, one, and only one, fully formed motion. To obviate griping, which is occasionally caused at first use, it can be prescribed with syrup of ginger, or, better, with ten or fifteen grains of bicarbonate of soda, dissolved in a wineglassful of water, to be taken immediately after the colocynth.

TREATMENT OF WHOOPING COUGH.

IN answer to the inquiry of "E. W. P." in the JOURNAL of February 6th, page 278, several replies have been received.

DR. G. P. RUGG says that, in his experience, the principal thing to be relied upon is antiseptic inhalation. Twenty years since, reasoning from the discoveries of M. Pasteur as to the existence of microscopic parasitic germs, and from the fact that pertussic children derived benefit from exposure to the fumes of gasworks, it occurred to him that carbolic inhalation would probably be beneficial in whooping-cough. He accordingly tried it successfully in the cases of his own children, and has continued to pursue the practice in like cases with the same happy results. Latterly, besides carbolic acid, he has used chlorine sanitas, and other parasiticides; but now, at the suggestion of Dr. R. J. Lee, he employs the oil of eucalyptus almost exclusively; it has the advantage of not requiring any apparatus, and of not being poisonous. A few drops are sprinkled on a pocket-handkerchief, and the patient is allowed to frequently inhale; at night-time, it is placed under the pillow. In three or four weeks, or less, seldom more in uncomplicated cases, the complaint will almost entirely vanish. No internal medicine is necessary in the majority of cases, except an occasional emetic to remove accumulated mucus. In future, however, he will try internally the pure terebene, recently recommended by Dr. Murrell for winter-cough, etc. When he feels the advent of a catarrh, he usually cuts its short by placing the eucalyptic handkerchief under his pillow at night; it greatly relieves the stuffiness of the nostrils and air-passages, and produces a most pleasant sleep. A very agreeable antiseptic perfume may be made by adding a drachm of eucalyptus oil to two ounces of lavender water.

DR. THOMAS DUTTON suggests a trial of a minim of Hewlett's liquor ergotæ with ten minims of glycerine in two drachms of water, for a child under three months, every three hours, and then according to age.

M.D. (London) has found much relief from the administration of one drop of liquor atropinæ, *P.B.*, in a little water morning and evening, for two days. If the patient bears the drug well, a half-minim may be added at midday every two days. If it is gradually increased, the child can generally see to thread beads, or pick up a pin; and as long as the accommodation is sufficient for these purposes, the remedy should be steadily pushed. The above is applicable to children over eighteen months old. Adults require much smaller doses. In many cases, during the later stages, large doses of quinine have undoubtedly a powerfully beneficial action. A child eighteen months old can take a grain and a half, and a child 5 years three to three grains and a half, every three hours. If deafness come on, the drug must be discontinued for the time. A light milk-diet is very desirable during the first three or four weeks, also a warm room.

LIBRARY OF THE UNIVERSITY OF ILLINOIS

Mr. Kenneth Millican has had personal experience of the value of purified terebene. It may be used in one or all of three ways: 1. Internally in doses of three to ten minims for a child (ten to fifteen minims for an adult), administered three or four times daily on a lump of sugar, or in Allen and Hanburys' capsules, or Probyn's lozenges and pastilles. 2. By inhalation: ℞ Terebeni purificati ♏xl; magnesiæ carbon levis gr. xx; aquam ad ℥j. A teaspoonful to be inhaled three times daily in a pint of water, at 140° Fahr., for about ten to twenty minutes. Exposure to change of temperature is to be avoided for half an hour afterwards. 3. As a spray-inhalation, an intermittent handball-spray is best, which should be worked with each inspiration. Of course, the ordinary precautions of an equable temperature, warm clothing, avoidance of draughts and cold, etc., should be maintained.

Eczema and Vaccination.

In answer to "Tertium Quid," Dr. J. Turle thinks that the following may be considered a very analogous experience, though fortunately, for the credit of vaccination, one which does not leave the connection between the virus of vaccinia and eczema in any way doubtful. It is as follows.

At a time when small-pox was very prevalent and fatal in the north-eastern and eastern parts of London, a schoolmaster, living in the city, consulted Dr. Turle one Saturday as to the advisability of his being revaccinated, his wife having strongly pressed him to take that precaution. But he remarked that, of course, there was no fear for anyone of his age. Dr. Turle assured him that age was no protection, and strongly advised him to submit to "the harmless" operation of vaccination. He only promised, however, to "think about it." The following Saturday, just the eighth day after that on which, but for his obstinacy, he would have been vaccinated, he came again, still unvaccinated, but covered all over with an attack of acute eczema, the scales of which, as he undressed, fell from him in flakes.

If any process whatever were performed upon every child in the kingdom in or about the third month, or at any other fixed period for all, a certain number of apparent sequences would follow that process, were it only the making a sign on the child's forehead; and seeing that a certain number of the children so operated on would, with or without the making of the sign or other process, die within a more or less short interval of its making, some, at least, of those deaths might not unnaturally be attributed to the making of the sign.

An Occasional Drawback to Vaccination.

Sir,—With your permission, I would briefly formulate the case to which attention is directed by "Tertium Quid" in the Journal for February 20th, thus:

Vaccinifer healthy—vaccine good, proved by normal results in two other cases.

Subject apparently healthy—predisposed to catarrhal disturbance of its membranes (evidenced by its previous attack of bronchitis).

Vaccination normal—tenth day after inspection, scab acting as foreign body sets up catarrh of the skin.

In young children, slight irritation is often sufficient to start an eczema, when there exists a tendency to it. Common excitants are: Wet bonnet-strings behind the ears; carelessness in cleansing the head or changing the diapers, not to mention scabies, which so commonly is the real, though often unsuspected, excitant of infantile eczema.

"Tertium Quid" has been fortunate in treating eczema successfully by vaccination. In periods of epidemic, I have vaccinated eczematous adults without any such good results. An infant with the eczematous diathesis is not necessarily either puny or ill-conditioned; among some hundreds of examples of infantile eczema, I have noted that the greater number were plump and well-formed.

I do not think that a longer interval between previous illness and vaccination would, in "Tertium Quid's" instance, have availed to save the infant from eczema, any further than that, if the vaccination had been delayed long enough, some other excitant would probably have induced an eczema, and so saved vaccination from this "opprobrium." In the instance where "Tertium Quid" deferred vaccination for years, the father was probably glad of something to which he might attribute the "stunting" of one child and the death of another. Did "Tertium Quid" suspect syphilis there? It is not at all unusual for the later children of infected parents to be born healthy (or apparently so).—I am, sir, yours faithfully,

Arthur J. Harries, M.D.

12, Pall Mall East, S.W.

Stammering.

Mr. E. J. Seltman (21, Westbourne Park) writes that, after many years' experience in such cases, he entirely agrees with Mr. Bernstein in the need of caution against many who profess to cure stammering by a "system" of tricks (such as rhythmical or monotonous speaking, shutting the teeth, raising the pitch of the voice, etc.), and how necessary it is to place the sufferer under the care of one competent to ascertain the cause, and treat each case individually, also exercising the proper moral control, by virtue of experience and the force of individuality. Dienhardt's system, so widely practised for years in Germany, and which has met with such real success in this country, works exclusively on these lines. Mr. Seltman offers to give further information on the subject to any who are interested.

Arsenic in Scarlet Fever.

Mr. Edward Thompson, Wolston, Coventry, believes that arsenic has prophylactic powers against scarlet fever, as well as many other zymotic diseases. He has not tried it in the case of this particular disease, but has found it act beneficially, probably as a germicide, in phthisis, ulcerated throat, and pertussis. Mr. Thompson gives Fowler's solution in full doses, and, though of course exercising every precaution, he has never seen disagreeable results, even when the drug has been administered in full doses to an infant.

Dr. J. C. Murray (Stranraer, N.B.) writes that, if "An Associate" will write to him, he will have pleasure in sending him some printed matter, and also in answering anything he may wish to know.

E. E.—The question cannot be answered. There are experts in the administration of anæsthetics who may be consulted. No opinion can be formed on such a written statement, but the nitrous oxide has a far less fatal record than chloroform.

B. M.—The reference is to Sir James Paget's Essays.

Inquirer.—There is no rule, but there is a custom to that effect.

Dover.—We do not find the name of the author of this undignified and unprofessional circular in the list of members.

Doctor's Gig.

Opifer que per Orbem Dicor writes, in answer to the letter of Mr. A. de W. Baker in the Journal of January 30th, that he has had one of "Beddoes Moore's doctors' gigs" in use for about two years. It is a most comfortable and luxurious carriage. There is neither oscillation nor knee-motion, and he has not a single fault to find with it. It is a perfect luxury to anyone having to traverse country or any roads, winter or summer; and it is an open or closed carriage at the will of the owner.

Upon a recent visit to Mr. Moore's works, he was astonished at the skill and ingenuity which he has displayed in his more modern carriages, in the application of India-rubber joints and springs, by which the body of the carriage seems completely shut off from whatever shaking the shafts may undergo upon rough or stony roads, the perfect immunity from wet and cold, the graduated sizes which he makes for any horse or cob, or even adapts the same comfort to anyone only driving a small pony (a thing hitherto unknown).

D. C W.—It would be better to get introductions from some of your old teachers.

Darville.—The patent referred to was taken out so late as 1873, and does not, therefore, at all enter into the question of priority.

NOTES, LETTERS, ETC.

Royal College of Surgeons of England.

The following questions in anatomy and physiology were submitted to the candidates at the recent primary examination for the membership. In each subject, candidates were required to answer at least four questions, and might answer all six. *Anatomy:* 1. What is Poupart's ligament? describe its connections, and enumerate in their relative position the structures which lie beneath it. 2. Give the steps of the dissection necessary to expose the right common carotid artery. 3. Give the course and relations of the profunda artery of the thigh, and trace out its branches. 4. State how you would expose the anterior surface of the pronator quadratus muscle, and enumerate the structures removed, in the order in which they are seen. (No description of the structures beyond the limits of the dissection is required.) 5. Describe the position and relations of the pancreas. 6. Describe the right and left auricles of the heart. *Physiology:* 1. Describe the structure of the placenta. What are its functions? 2. What are the average quantities of carbon and nitrogen excreted by an adult in twenty-four hours? In what forms and by what organs are they excreted? 3. State the conditions in which oxygen exists in arterial blood. Give the evidence on which your statements are based. 4. Describe the structure of the refractive media of the eye. How is the image of an object formed on the retina? 5. Describe the forces by which the movement of the blood is effected. 6. Classify nerves according to their functions. Give examples of each class.

The following questions in surgical anatomy and the principles and practice of surgery, midwifery and diseases of women, and the principles and practice of medicine, were submitted to the candidates at the recent pass-examination for the diploma of member. *Surgical Anatomy and Surgery:* Candidates were required to answer at least four (including one of the first two) of the six questions, and were strongly advised to answer all six questions. 1. Give the relations of the urinary bladder in both sexes. 2. Describe the anatomical structure and relations of the mammary gland in the female. Give also its nerve- and blood-supply, and the glands to which its lymphatics pass. 3. Mention the cystic and cystoid tumours of the scalp (including the forehead.) Give their differential diagnosis and appropriate treatment. 4. Describe the physical qualities of healthy pus. In what tissues and localities does its presence produce the most severe symptoms? 5. Describe the signs and their causes of intra-capsular fracture of the femur. How would you differentiate this from other injuries of the hip? 6. Give the pathology, symptoms, and treatment of so-called strumous disease of the knee-joint. *Midwifery and the Diseases of Women:* Candidates were required to answer three of the four questions. 1. What are the forces which propel the fœtus through the genital canal? 2. Describe the mechanism of labour with the face presenting, the chin behind and to the left. 3. Under what circumstances would you induce labour prematurely? 4. What is a pelvic hæmatocele? What are the causes which may lead to its formation? What symptoms and signs would lead you to think that this condition was present? *Principles and Practice of Medicine:* Candidates were required to answer three of the four questions, including question No. 4. 1. Give an account of the etiology, anatomical characters, symptoms, physical signs, and treatment of acute pericarditis. 2. Enumerate the chief intestinal worms. What symptoms may they give rise to? How would you treat the several forms? 3. Describe a typical case of scarlet fever. Enumerate its chief varieties, complications, and sequelæ. Indicate the principles of treatment. 4. What are the actions, therapeutical uses, and doses of the following preparations: iodide of potassium, carbonate of ammonium, acetate of lead, spirit of nitrous ether, infusion of digitalis, compound jalap powder, syrup of chloral, and tincture of squill?

Cauterisation in Hydrophobia.

Sir,—In the Journal of February 20th. Dr. J. W. Miller advises the application of vinegar after the bite of a dog suspected of rabies, with some doubt, however, as to the ability of the bitten person to have it applied early enough. In April, 1881, I attended a woman who had been bitten nine weeks before by a rabid puppy. She told me that the instant after she bathed her hand freely in hot vinegar, getting her husband, who had also been attacked immediately before, to do the same. Clearly, it was useless. The husband died first, then the wife ten days afterwards. On seeing her husband fall a victim, she made all preparations for her own end, finally coming to her natal spot to die there. Opium, chloroform, curara, were tried by me to no purpose. Death supervened in three days; the mind was clear from first to last.

I have treated scores of dog-bites, some received from wandering, homeless mongrels; but, up to this, I have never met a case that became hydrophobic afterwards. My plan has mostly been to apply fuming nitric acid; and when I found minute punctures of teeth, to first lay them open, and then smear the wounds freely with the acid.—I am, etc.,

J. Farquhar, M.D.

Harrogate.

The Talk of the Day.

Mrs. A.: "I hear that the Montmackingtons are going to spend the winter in Paris." Mrs. B.: "Indeed? You surprise me! When were they bitten?"—*Boston Transcript.*

A Degree in Medicine for London Students.

Sir,—Under the above heading, a correspondent (Mr. G. Birt, M.B.Lond.) writes, in the Journal of January 30th, with reference to the University of London, stating that it is "the only university in the United Kingdom that is open to all, without residence at any particular college."

Now, sir, this is not a fact. In 1881, the Royal University of Ireland came into existence, taking the place of the old Queen's University, which was dissolved on account of the opposition of a section of the Irish people to it. One of the fundamental clauses in the Act of Parliament founding the Royal University, was the placing of all colleges on a level as regards its degrees. Accordingly, the Royal University of Ireland is identical in principle with the University of London. Its degrees are open to all comers. The standard of examination is rigid, namely, 50 per cent., and the examinations themselves are of an essentially practical character. The course for the medical degree includes the following examinations, namely, Matriculation, First University Examination in Arts, First Medical, Second Medical Examinations, and Degree Examination. Anatomy and Physiology are particularly stiff, and are required both at the "half" and the "degree."

The Royal University is endowed with £20,000 *per annum*, in addition to private endowments, and accordingly there are valuable exhibitions for competition.—I am, sir, faithfully yours, Hibernia.

Erratum.

In the Journal of February 13th, under the heading of the pass-list of the Royal Colleges of Physicians and Surgeons of Edinburgh, Mr. Herbert Peck's surname was incorrectly spelt Peek.

Mortality from Round Worms.

Sir,—The case related by Mr. Philip Birch, in the Journal of February 6th, more than ever convinces me of the fallacy of prescribing one dose only of santonin, and expecting a favourable result. The children in this locality are infested with round worms, and I have had one or two deaths from what appeared to me to be "worm-fever" only. The number of worms passed in individual cases is surprising. In one case which I treated, a girl aged 13, after taking one dose of santonin, passed twenty by the mouth, nearly all in a lump, and over thirty by the rectum on the same day, and continued to pass some daily for a week. I have often found that four or five doses of santonin can be retained without any result when the worms are present; therefore I invariably put up six powders of from three to five grains each, according to the age, with a quarter of a grain of calomel in each, and order the first two to be taken twelve hours apart, and the rest every twenty-four hours; and, about four hours after the last, the patient takes a dose of castor-oil. I have never known any remain after this treatment.—I am, faithfully yours, A. H. Boys.

Pill, Somerset.

The Spontaneous Evolution of Urinary Calculi.

Sir,—Allow me to add, in connection with my narrative of General Martine's case, that I have two specimens of this condition in my collection. They were both given to me, some years since, at Peshawur, the first by Mr. Sub-assistant-Surgeon Chetun Shah, a well known native practitioner, on whom the Government of India had just then conferred the distinction of Bahadoor—a distinction, I may add, that is as much sought after in the East as the honour of knighthood is among ourselves; and the second by a private soldier of the (then) 72nd Highlanders. Both are, I think, well calculated to show the relative capacity or calibre of the urethræ of the two sexes. They came into my possession under the following circumstances.

Knowing my weakness for such curiosities, Mr. Shah kindly presented me with the first of these, and he wrote, at my request, on the paper in which it was enclosed, that the woman, named Chikree, who passed it spontaneously during urination, was then 44 years of age; and he added, I think, that she had been a prostitute. Its weight was, at this time, 601 grains; but it was subsequently sawn through, and when I examined it again at Warrington, in April, 1879, it only weighed 478 grains, or two grains short of an ounce. It measured, at this time, 2¼ inches in its longer diameter, and 1¾ inches in its shorter one, that is, laterally. Hence it must have lost considerably, both in size and weight, as well by the "sawing" as by the friction, desiccation, etc., it has been since subjected to. Its shape is oblong, and it has a peculiar calcareous accretion on its sharper end, which is not unlike the stump of a broken bowsprit. This was, doubtless, the medium through which it expanded this canal and by which it escaped through the urethral opening; and there was, I think, no after-dribbling or other ill consequence.

The second was presented to me, about the same time, by a Welshman, named George Jones, whose attention had been directed to it and me by, as I assume, the fact that I had just then successfully extracted a mulberry calculus from the bladder of one of his sergeants. (A report of this latter case appeared in the *Edinburgh Medical Journal*. It was the only one of its kind that I saw in the service.) It is bean-shaped, and weighs now 12 grains. It caused its owner terrible suffering on his long march from Umballa to Peshawur, during which he passed it, one day, after much straining and bleeding, in his "topper," a kind of bathing-machine-like bamboo structure, in which, hoisted on the top of a hackery, married soldiers travel in India; and I know that it weighed considerably more when I first got it. It, too, is the largest specimen of its kind with which I am acquainted.—I am, sir, your obedient servant, Wm. Curran.

Auriol Road, W.

P.S.—Having just come across another case of this kind, I hasten to send it to you, and to ask that it may be published. It occurs in Suetonius's description of the personal appearance, habits, or weaknesses of Augustus, the successor of Cæsar, and runs as follows. After mentioning the spots, evidently syphilitic, which which his (Augustus's) body was covered, Suetonius says that "questus est et de vesicâ, cujus dolore, calculis demum per urinam ejectis, levabatur;" and this, being interpreted, means that "he (Augustus) complained also of his bladder, but was relieved from the pain of this, when the calculi it contained were finally expelled from it, along with the urine."

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. L. C. Wooldridge, Barnes; Mr. Edmund Owen, London; Mr. J. H. Menzies, London; Mr. H. A. Fotherby, London; Dr. J. Farquhar, Harrogate; Mr. S. H. Lindeman, Punjab; Dr. B. Rake, Trinidad; Mr. H. Hodges, London; Our Dublin Correspondent; Dr. A. E. Sansom, London; Dr. D. Moriarty, Ghazipur, India; Mr. F. H. Morris, Swansea; Subscriber (Egypt); Mr. Caleb Garggory, Tunbridge Wells; Mr. Jabez Hogg, London; Mr. E. J. Wilson, Cheltenham; Mr. F. W. Passmore, London; Mr. Wm. Leigh, Chiswick; Mr. E. T. Thompson, Wolston, Coventry; Mr. J. B. Fairman, Sheffield; Mr. R. J. W. Orton, Newcastle-under-Lyme; Mr. W. Jones-Morris, Portmadoc; Mr. R. Davis, Bath; Mr. J. H. Morgan, London; Dr. R. Wade Savage, London; Mr. F. C. Banks, London; Dr. J. Farrar, Morecambe; The Secretary of the Hospital for Women, Liverpool; Mr. H. Wecker, Plymouth; Mr. T. A. Prentice, Armagh; Mr. R. L. Greene, Stratford-on-Avon; Mr. T. H. Moore, Norwich; Mr. T. G. Alderton, London; Mr. E. Mackintosh, Elgin, N.B.; Mr. F. Carre, Letterkenny; Mr. J. Whitehouse, Sunderland; Mr. J. E. Cooney, London; Our Manchester Correspondent; Dr. J. Tatham, Salford; Our Aberdeen Correspondent; Mr. W. L'Heureux Blenkarne, Leicester; Dr. Glascott, Manchester; Dr. J. W. Hunt, Dalston; Dr. A. J. Harries, London; Mr. C. H. Presgrave, Leeds; Mr. E. C. Greenwood, London; Mr. W. Sykes, Mexborough; Mr. J. Dobson, Tooting; Mr. R. J. H. Scott, Bath; Mr. E. White Wallis, London; Dr. Brailey, London; Dr. S. Martin, London; Mr. A. Smart, Bassingbourn; Dr. Horrocks, London; Dr. J. P. Wills, Bexhill; The Honorary Secretary of the Harveian Society; Mr. G. Stillingfleet Johnson, London; Mr. G. A. Harris, Punjab; Mr. T. Andrews Roberts, Coningsby; Mr. Vacher, Birkenhead; Dr. W. G. K. Barnes, Port of Spain; Dr. Davis, Londonderry; Mr. J. H. Peck, Jamaica; Mr. P. H. Emerson, Southwold; Dr. J. Turle, Finchley; Dr. A. T. Brand, Driffield; Dr. J. Eaton, Cleator; Dr. W. Gayton, London; Mr. C. B. Harness, London; Mr. A. G. Southcombe, London; Mr. W. T. Jackman, Coggeshall; Mr. G. Meadows, Hastings; Mr. W. Berry, Wigan; Dr. W. W. Stainthorpe, Redcar; Messrs. Griffin and Co., London; Mr. H. Terry, Northampton; Mr. J. Morton, Guildford; Dr. R. Barnes, London; Mr. N. Hannah, Ashton-in-Makerfield; Dr. Carter, Liverpool; Mr. H. M. Addison, London; Mr. J. Tisdall, Liverpool; Dr. J. M. Finny, Dublin; Dr. O. Grant, Inverness; Mr. A. Sutro, London; Dr. Sieveking, London; Mr. W. H. Hughes, London; Dr. F. C. Mewbar, Toronto; Messrs. Savory and Moore, London; Dr. Rentoul, Liverpool; Dr. H. Barnes, Carlisle; Dr. J. S. Holden, Sudbury; Mr. J. E. Salway, London; The Director-General of the Medical Department of the Navy; Mr. C. Siewers, London; Mr. Hamilton, Hanwell; Mr. E. J. Seltman, London; Mr. V. H. Wyatt Wingrave, London; Mr. B. Jones, Leigh; The Director-General of the Army Medical Department; Mr. F. B. Hulke, Deal; Dr. Huggard, Davos Platz; Mr. G. May, Reading; Dr. J. R. Morison, Hartlepool; Mr. A. Cresswell Rich, Liverpool; Mrs. Thompson, London; Our Paris Correspondent; Messrs. McDuffey and Son, London; Miss E. Ellis, Ealing; Mr. E. J. Penny, Hayes; Mr. J. E. Schön, Littlebourne; Sir William Smart, London; Dr. Duncan J. Mackenzie, Glossop; Dr. W. K. Giddings, Leeds; Mr. W. F. Haslam, Birmingham; Dr. A. Carpenter, Croydon; Mr. W. E. Green, Sandown; Mr. Henry Taylor, Guildford; Mr. Joseph Hobson, Leeds; Mr. C. E. Walker, Darlington; Mr. T. B. Holman, Neuilly-sur-Seine; Mr. Talfourd Ely, London; Mr. G. F. Masterman, Stourport; Mr. H. W. Seager, Hampton Court; Mr. T. Cook, London; Mr. Raymond Johnson, London; Mr. J. K. Murray, Kendal; Salop; Mr. W. J. Laurie, Ayr; Dr. E. H. Jacob, Leeds; Mr. Thomas Harvey, Brixham; Sir Henry Pitman, London; Mr. C. Scott Kilner, Bury St. Edmunds; Mr. G. J. Wilson, Oxford; The Secretary of the Pathological Society of London; Our Edinburgh Correspondent; The Secretary of the Royal Medical and Chirurgical Society of London; Mr. Lawson Tait, Birmingham; Dr. B. Foster, Birmingham; Dr. W. Woodward, Worcester, etc.

BOOKS, etc., RECEIVED.

The Management of Labour and of the Lying-in Period. Guide for the Young Practitioner. By Henry G. Landis, A.M., M.D. London: Charles Griffin and Co. 1886.

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REPORT
TO THE
SCIENTIFIC GRANTS COMMITTEE
OF THE
BRITISH MEDICAL ASSOCIATION.

REPORT ON THE RELATIONSHIP OF THE FORMATION OF UREA AND URIC ACID TO THE SECRETION OF BILE.

By D. NOEL PATON, M.D., B.Sc., F.R.S.E.,
Biological Fellow of the University of Edinburgh; late Senior President Royal Medical Society of Edinburgh.
[From the Physiological Laboratory of the University of Edinburgh.]

[Abstract of Report.[1]]

(Concluded from page 383.)

IV.—Perchloride of Mercury.

Experiments 78*a*, 78*b*, 78*c*, and 78*d* of Professor Rutherford's series nearly show that perchloride of mercury is a cholagogue of considerable power.

In spite of the length of time during which mercury has, in different forms, been largely employed in medicine, I can only find one or two experiments on its action on the tissue-metabolism (*Stoffwechsel*), as estimated by the amount of nitrogen excreted.

Harvey (*Brit. and For. Medico-Chir. Rev.*, vol. xxix, p. 515) records a series of experiments on the action of blue-pill mass and perchloride of mercury upon the excretion of urea in dogs; from which he concludes that no increase in the urea excreted occurs under the administration of these drugs. Unfortunately, his experiments are not satisfactory. The diet given was much too liberal, and we find, in consequence, very large daily variations in the amounts of water and of urea excreted. Besides, such a substance as "paunch," upon which his dogs were fed, is not of sufficiently fixed a composition to render it suitable for such experiments.

The only other observation of any value which I have been able to find is by Hermann von Boeck (*Zeitsch. für Biol.*, vol. v, p. 393). It is to be regretted that this most careful observation was not made upon a healthy man. Unfortunately, a syphilitic case was selected, so that the results obtained must be accepted with great caution. The method of experiment was ingenious and admirable. The nitrogen contained in the diet was estimated and compared, before and under the administration of the drug, with the nitrogen excreted by the kidneys and in the fæces.

The patient was a man, aged 44, who had been infected with syphilis three months before, and who suffered at the time from secondary syphilis, condylomata, etc. On October 10th, he was put upon a fixed diet, and from the 12th to the 15th the excretion of urea was nearly constant. On the 15th, mercurial inunctions were commenced. On the 20th, salivation occurred; and, on the 22nd, the eighth and last inunction was given.

Before the inunctions—from the 12th to the 15th,

52.1 grammes of nitrogen were taken in } = + 0.5 per cent.
52.4 ,, ,, ,, excreted }

During the application period—

193.2 grammes of nitrogen taken in } = + 5.6 per cent.
204.0 grammes of nitrogen excreted }

I cannot agree with Boeck's conclusion that, "Dieses Plus ist ganz unwesentlich, und beruht zum Theil auf Fehlern der Methode, zum Theil, vielleicht auf den Diarrhöen, die mehr stickstoffhaltige Stoffe vom Körper entführten;" for his very complete table shows that the urea of the urine was considerably increased.

[1] The full report is published, with details, in the *Journal of Anatomy and Physiology*, vol. xx, pages 114 and 267.

Experiment XII.—The drug was given in the form of a pill, made up with a very small quantity of oatmeal and gum. During and following the administration of the drug, no constitutional symptom could be detected.

Experiment XII.

Date.	Urine in ccs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
18.4.85	580	1010	6.148	0.075	moved	Weight of dog=13.14 kilos.
19	650	1010	6.500	0.084	,,	Diet as in previous experiments.
20	635	1010	6.500	—	,,	
21	635	1011	6.500	0.102	,,	
22	685	1009	6.773	0.084	,,	
23	685	1010	6.773	0.108	,,	
24	605	1011	6.715	0.138	,,	
25	740	1010	7.400	0.148	,,	0.02 grm. perchloride of mercury in pill=0.0015 grm. per kilo.
26	780	1009	6.552	0.101	,,	
27	655	1011	7.598	0.085	,,	0.04 grm. perchloride of mercury in pill=0.0030 grm. per kilo.
28	810	1015	14.580	0.137	,,	0.05 grm. perchloride of mercury in pill=0.0038 grm. per kilo.
29	745	1009	7.003	0.097	,,	
30	630	1011	6.300	0.082	,,	

Average Daily Excretion of the various Constituents under Perchloride of Mercury.

	Before.	With.	After.	Before and After.	With.	Percentage Change.
Water, in c.cs. . .	639	745	630	634	745	+17
Urea, in grms. . .	6.534	7.978	6.300	6.408	7.978	+24
Uric Acid ,, . . .	0.098	0.107	0.082	0.090	0.107	+18.8

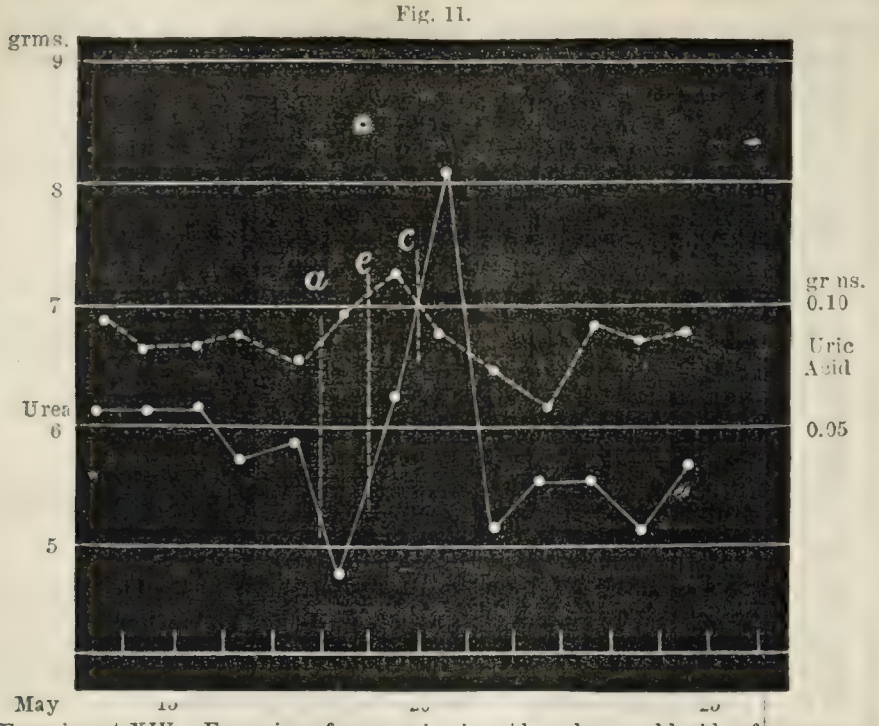
Experiment XIV.

Date.	Urine in ccs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
13.5.85	570	1011	6.099	0.0957	moved	Weight of dog=13.37 kilos.
14	630	1010	6.114	0.0819	,,	Diet of oatmeal, 113.6 grms.; milk, 320 ccs.
15	640	1010	6.144	0.0832	,,	
16	510	1010	5.814	0.0856	,,	
17	560	1010	5.936	0.0784	,,	
18	590	1009	4.720	0.099	,, (soft)	0.05 grm. $HgCl_2$ in pills of 0.025 grm. each = 0.0037 grm. per kilo.
19	560	1011	6.216	0.112	moved	0.10 grm. $HgCl_2$ in pills of 0.050 grm. each = 0.0074 grm. per kilo.
20	675	1011	8.100	0.087	,,	0.10 grm. $HgCl_2$ in pills of 0.050 grm. each = 0.0074 grm. per kilo.
21	420	1010	5.156	0.0705	,,	
22	517	1009	5.457	0.053	,,	
23	517	1010	5.457	0.094	,,	
24	550	1010	5.170	0.088	,,	
25	560	1010	5.600	0.089	,,	

Average Daily Excretion of the various Constituents under Perchloride of Mercury.

	Before.	With.	After.	Before and After.	With.	Percentage Change.
Water, in cc.s. . .	582	608	513	547	608	+11.15
Urea, in grms. . .	6.021	6.345	5.346	5.683	6.345	+11.6
Uric Acid, ,, . . .	0.085	0.099	0.079	0.082	0.099	+11

Fig. 11.



Experiment XIV.—Excretion of urea and uric acid under perchloride of mercury: 0.05 grm. given at *a*, 0.10 grm. at *e*, and 0.10 grm. at *c*.

Experiment XV.

Date.	Urine in ccs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
2.6.85	622	1008	6.310	0.088	moved	Weight of dog=13.37 kilos.
3	622	1009	6.310	0.088	,,	Diet of oatmeal, 113.4 grms.;
4	605	1008	6.310	0.092	,,	milk, 320 cc.
5	605	1009	6.310	0.092	,,	
6	640	1008	6.016	0.083	,,	
7	652	1008	5.660	0.090	,,	
8	652	1009	5.660	—	,,	
9	670	1010	7.303	0.170	,,	0.06 grm. $HgCl_2$ in 0.5 cc. saturated solution of iodide of potassium in gelatine capsule; 0.0044 grm. per kilo.
10	605	1013	7.381	0.085	,, (loose)	[1]0.087 grm $HgCl_2$ in 0.5 cc. saturated solution of iodide of potassium in gelatine capsule; 0.0065 grm. per kilo.
11	710	1007	6.319	0.205	moved (loose)	0.075 grm. $HgCl_2$ in 0.5 cc. saturated solution of iodide of potassium in gelatine capsule; 0.0056 grm. per kilo.
12	560	1010	6.720	—	moved	
13	575	1007	5.750	—	,,	
14	552	1007	5.847	—	,,	
15	552	1007	5.847	0.095	,,	

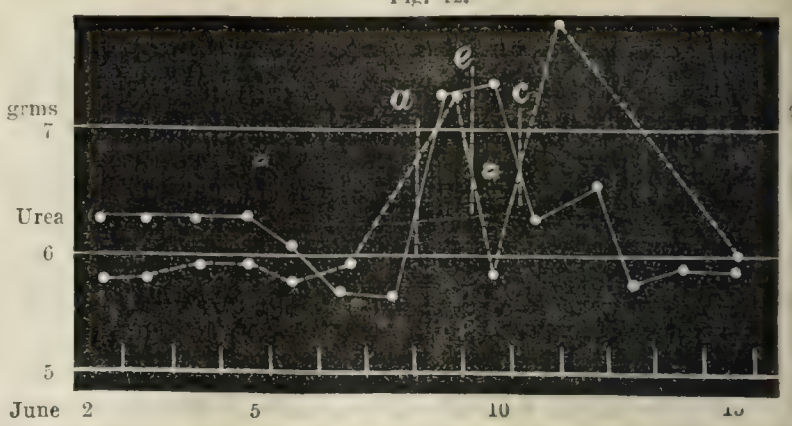
[1] Urine contains a distinct trace of albumen, and the fermentation-test shows the presence of a small quantity of sugar.

Average Daily Excretion of various Constituents under Perchloride of Mercury.

	Before.	With.	After.	Before and After.	With.	Percentage Change.
Water, in ccs. . .	619	636	568	593	636	+7.2
Urea, in grms. . .	5.995	6.930	5.798	5.896	6.930	+17.5
Uric Acid, ,, . . .	0.088	0.153	0.095	0.091	0.153	+68

Results.—Both the perchloride of mercury and the iodide of mercury cause a distinct rise in the excretion of water, urea, and uric acid. My reason for using the iodide of mercury will be explained in a future paper, while considering the nature of the relationship between the urea-forming and bile-forming functions.

Fig. 12.



Experiment XV.—Excretion of urea and uric acid under perchloride of mercury solution of potassic iodide: 0.06 grm. given at *a*, 0.087 grm. at *e*, and 0.0 grm. at *c*.

V.—Euonymin.

Experiments 27 and 28 of Professor Rutherford's series sh that euonymin is a powerful hepatic stimulant. In regard its action on the composition of the urine, I can find only one o servation, by Cook (British Medical Journal, vol. i, 1883, p. 106 To a man kept on fixed diet, one grain of the drug was administer on an empty stomach on the days marked with an asterisk.

Date.	Urine.	Specific Gravity.	Urea.	Uric Acid.
Nov. 1*	38 ozs.	1020	360 grs.	11.7 grs.
2*	34 ,,	1022	382 ,,	14.3 ,,
3*	50 ,,	1020	340 ,,	17.4 ,,
4	46 ,,	1020	375 ,,	14.3 ,,
5	43 ,,	1020	340 ,,	12.5 ,,

He concludes from this single experiment, that, while euonym exerts no influence upon the excretion of urea, it increases the exc tion of uric acid.

Practically, nothing is known of the action of the drug upon t urinary constituents.

Experiment XVI.—Before November 3rd, the variations in the dai excretion of urea were considerable, but the average from October 28 to November 3rd was 5.4 grammes *per diem*. From November 3r the daily excretion became more constant; and, on the 7th, 0.5 gramm of green euonymin, procured through Duncan and Flockhart fro

Experiments XVI and XVII.

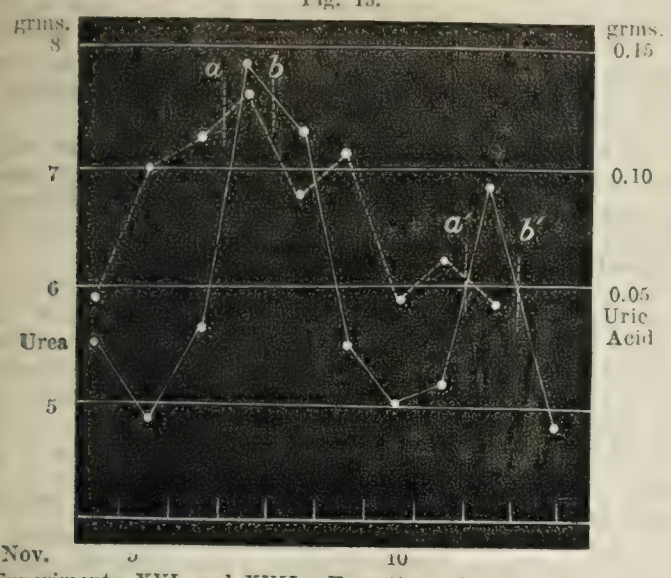
Date.	Urine in c.cs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
4.11.84	450	1011	5.535	0 042	not moved	Weight of dog=12.23 kilo
5	550	1011	4.840	0.100	,, ,,	Diet, oatmeal=85 grms.;
6	550	1011	5.650	0.110	moved	milk, 300 cc.
7	575	1013	7.977	0.132	,,	Euonymin 0.5 grm.=0.0 grm. per kilo.
8	500	1015	7.358	0.083	,,	Euonymin 0.75 grm.=0.0 grm. per kilo.
9	465	1014	5.580	0.109	not moved	
10	470	1013	5.000	0.047	moved	
11	450	1013	5.265	0.060	,,	
12	455	1015	6.998	0.042	copious soft evacuation	Euonymin 1.5 grm.=9.1 grm per kilo.
13	500	1010	4.800	—	copious soft evacuation	Euonymin 2.0 grm.=0.1 grm. per kilo.

Average Daily Excretion of the various Constituents under Euonymin

	Before.	With.	After.	Before and After.	With.	Percentage Change.
Water, in c.cs . .	56	537	461	488	537	+10.0
Urea, in grms. . .	5.341	7.667	5.432	5.386	7.667	+42.3
Uric Acid, ,, . . .	0.084	0.107	0.072	0.078	0.107	+37.14

eith and Co., was administered in the form of a pill made up with drop or two of alcohol; and next day 0.75 gramme was given. The accompanying table, chart, and abstract show the influence of e drug upon the urine.

Fig. 13.



Experiments XVI and XVII.—Excretion of urea and uric acid under euonymin: 0.5 grm. given at *a*, 0.75 grm. at *b*, 1.5 grm. at *a'* and 2.0 at grms. at *b'*.

Experiment XVII.—This is simply a continuation of Experiment VI, larger doses of the drug being given, 1.5 grammes on the 12th, d 2.0 grammes on the 13th. On the second day, the purgative tion of the drug was very marked; while, even on the 12th, the tions were soft and unusually copious. It will be seen that, in is experiment, the urea was not so markedly increased as in the evious one; in fact, that on the 13th, when the purgative action of onymin was so manifest, a fall below the mean took place.

Experiment XVIII.—The dog had been upon the usual diet since vember 14th; and, in spite of considerable daily variations, the erage excretion of urea, from November 25th to December 1st, was 02 grammes *per diem*. The experiment was commenced on Decem- 1st. Unfortunately, the urines of the 2nd and 3rd were lost. It of interest to observe that, upon the 7th, when a loose copious tion was produced by the drug, the urea was not nearly so mani- tly increased as on the two other days.

The uric acid participated in the irregularity of the urea in its rate elimination, and it appeared in this case to be uninfluenced by the ug; unless, indeed, the rises on the 8th, 9th, and 10th, are to be nsidered as due to the euonymin.

Experiment XVIII.

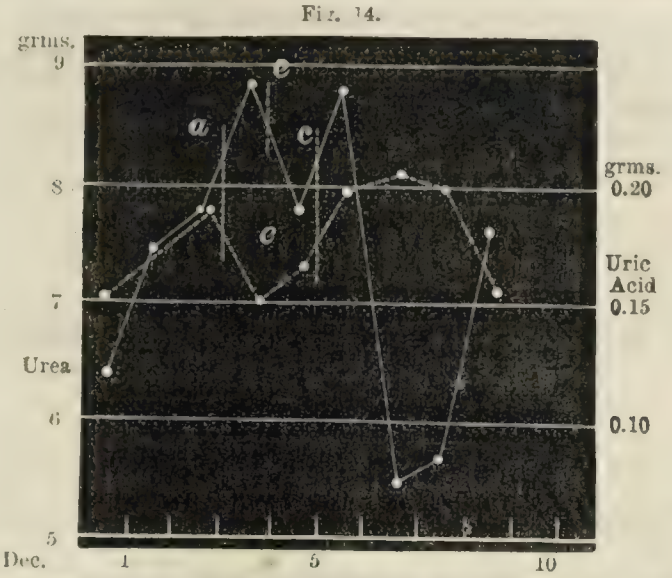
ate.	Urine in ccs.	Sp. G.	Urea in grms.	Uric Acid in grms.	Bowels.	Remarks.
12.84	650	1008	6.240	0.154	moved	Weight of dog=13.16 kilos.
	720	1012	7.421		not moved	Diet, oatmeal, 113 grms.; milk, 320 ccs.
	680	1010	7.820	0.190	moved	
	750	1013	8.800	0.150	not moved	1.0 grm. euonymin = 0.08 grm. per kilo.
	750	1010	7.725	0.165	soft motn.	1.0 ,, ,, = 0.08 grm. per kilo.
	750	1013	8.795	0.202	moved	1.5 ,, ,, = 0.10 grm. per kilo.
	650	1009	5.499	0.204	,,	
	575	1010	5.582	0.201	,,	
	505	1014	7.777	0.156	,,	

erage Daily Excretion of the various Constituents under Euonymin.

	Before.	With.	After.	Before and After.	With.	Percentage Change.
ter, in ccs. . .	683	750	573	628	750	+19
a, in grms. . .	7.160	8.440	6.723	6.723	8.440	+20.3

uric acid is not given in his table, as a marked increase took place in the three days immediately following the administration of the drug.

Fig. 14.



Experiment XVIII.—Excretion of urea and uric acid under euonymin: 1.0 grm. given at *a* and at *e*, and 1.5 grm. at *c*.

Results.—1. The urea is very markedly increased, especially when purgation is not induced. Experiments XVIII and XIX show well the influence of purgation in preventing the full action of the drug upon the urea and uric acid. 2. An increase in the uric acid is also indicated in Experiment XVII concomitantly with, and in Experiment XIX following, the administration of the drug.

Summary of Results.

1. *Salicylate of Soda.*—(A) *Inman.* In dose of 0.106 gramme per kilogramme, salicylate of soda causes no change in the amount of water passed, a slight increase in the urea, and a very marked diminution in the uric acid excreted. This last change is by far the most manifest; in one experiment, the diminution was as great as 64 per cent. (B) *In dogs.* In doses of from 0.45 gramme to 0.6 gramme per kilogramme, salicylate of soda caused a marked diminution in the water passed, a rise in the urea, and a great diminution in the uric acid excreted.

2. *Benzoate of Soda*, in doses of from 0.51 to 0.58 gramme per kilogramme causes little or no change in the amount of water. The urea is greatly increased, and the uric acid is diminished, though not so markedly as with salicylate of soda.

3. *Colchicum*, in doses of 0.02 to 0.037 gramme per kilogramme of the acetic extract (*B.P.*) causes a very marked increase in the urea and uric acid. When the doses are small, the water is also increased; but, with large doses, the water secreted may actually fall, while neither the urea nor the uric acid are so markedly increased as with smaller doses.

4. *Perchloride of Mercury*, in doses of from 0.0015 to 0.0075 gramme per kilogramme, causes an increase in the excretion of water, urea, and uric acid.

5. *Euonymin*, in doses of from 0.04 to 0.10 gramme per kilogramme causes a slight increase in the water excreted, a very marked increase in the urea and uric acid. In larger doses, 0.16 gramme per kilogramme, it causes purging, with no diminution in the water passed by the kidneys, but without the marked rise in the urea excreted.

We thus see that, in dogs in a condition of nitrogenous balance, stimulation of the flow of bile by means of these drugs is accompanied by an increased production of urea. That an increased production, and not merely an increased excretion of urea, occurs, is clearly shown by the fact that, after the administration of the drug was stopped, the amount of urea merely returned to the normal, and did not manifest a fall corresponding to the initial rise.

I would therefore conclude that the formation of urea in the liver bears a very direct relationship to the secretion of bile by that organ. On the nature of this relationship I have not touched in the present paper; but at an early date I hope to give the results of a series of experiments upon this subject.

To the physician, the results of these observations must have considerable interest, especially of those which, dealing with the influence of salicylates and benzoates upon the excretion of uric acid, afford a key to their mode of action in gout. No less interesting is the demonstration of the fact that colchicum increases, and does not diminish, the production of uric acid.

In conclusion, I have to tender my thanks to Professor Rutherford, who, by suggesting to me as a subject for research the influence of the action of the hepatic stimulants on the composition of the urine,

induced me to undertake the present series of experiments. I have also to thank him for encouragement and advice, during the prosecution of the work in the Physiological Laboratory of the University of Edinburgh.

ABSTRACTS OF

THREE LECTURES

ON

THE BRAIN-MECHANISM OF SIGHT AND SMELL.

Delivered at the Royal College of Surgeons.

By ALEXANDER HILL, M.D., M.R.C.S.,
Hunterian Professor to the College; Fellow of Downing College; Lecturer and Demonstrator of Anatomy to the University of Cambridge.

Lecture I.

Nothing in the progress of science is more conspicuous than the frequency with which the standpoint of investigation is changed. For a time, the assault of a difficult problem is carried on from a certain point; and it may be that, for a generation, observers are content with the slowly widening breach produced by their successive blows. But when a more commanding position is discovered, it is soon occupied by the reorganised forces, each man eager to discharge his shot at the stronghold, from the new vantage ground. Never before, in the history of science, has the whole plan of attack been so completely changed as by the doctrine of evolution. Before Darwin, our intellectual reflection of the universe showed but stationary forms. Plants and animals, arts and creed, stood still—each a final and completed form. The man of science and the man of letters, each alike viewed the object of his study as a thing at rest. At the master's word, all was changed. The inhabitants of the mind's realm began to move; every creature in it bore a history—emerging from the past, and growing from a minute simple form, it was tending towards perfection and complexity. Before Darwin, the universe appeared immutable; since Darwin wrote, it is seen to be mobile. The recognition of this great fact has penetrated every science; fresh impetus has been given to research, fresh aims to study, and, in those branches of science to which we more especially devote ourselves, inquiry has entered upon new ground. Anatomy still deals with structure, and the final aim of the study of structure is to discover function. But the anatomist no longer regards his material as fraught with teleological lessons only; it discourses to him of the past; it suggests the future. No longer does the structure just exposed by his scalpel stand alone, but attracts to itself out of the gloom forms that have passed, and is linked in relationship with all that now exist. And so, while the exigencies of knowledge are enormously increased, the aims of study are more sharply defined. We want to know of every animal, of every organ, even of every cell, how it came by its present form. Nor does it impress upon our minds an image, until we can, as it were, see it move; until we can trace its path. Like a solitary stone standing upright on a plain, it only satisfies our mental grasp when, by comparing it with other forms, by observing on it traces of the tool-marks, by painful interpretation of its inscribed signs, we realise the forces under the influence of which it assumed its outline and position. The scientific standpoint of to-day might thus be defined. We study the History of the forms around us.

Such historical study, however, is no mere intellectual pastime; it has come to be a practical necessity that we should know something of the changes through which structures have passed, in order to distinguish between the immediate suitability to perform function, and historical continuity of form. In no case is this so obvious, as when our attention is directed to the central nervous system. For, among the organs of the body, the nervous system is the real aristocrat. First to be formed in the embryo, first to be considered when the supply of food for the organism runs short, it is last to adapt itself to altering circumstances. Muscles may come and go in obedience to the needs of the race; bones change in form to bear the altered strain of the muscles; blood-vessels strike out new paths for themselves to supply them more expeditiously and with less risk of compression; but nerves still keep on in the old paths, content with the simple reason th these it was their ancestors were wont to use. Forearm and leg ha twisted on their axes; posterior interosseous, and anterior tib arteries long since have learnt to take a short and sheltered cou between the bones; but ulnar and peroneal nerves still pass to th destinations round the postaxial border of the limb, nor can gene tions of suffering "funny bones" induce them to adopt any less d nified course. The nervous system is full of archaisms, and its evo tion must be understood before its structural peculiarities can correlated with their use.

Although our knowledge still presents several gaps, the origin a growth of the nervous system can be worked out with remarka completeness, owing to the constancy with which it adheres to t original lines of its growth, and to the primitive cell-layer in wh it first appeared.

Unicellular animals present no trace of a nervous system, nor any to be found in such compound animals as consist of two c layers only. It is with the appearance of a third layer (the me derm or mesoblast) that it first arises. The mesoblast is derived fr the outer layer, the epiblast; and partly also, perhaps, from the in layer, or hypoblast. Its most characteristic elements are musc fibres, by which the power of withdrawing from danger is given the animal. The muscle-fibres are at first processes of the ectoderm cells; and, in order that their contractility may be of use to t animal, it is necessary that the ectoderm should be sentient, so th the intimations of danger which it receives may cause the muscle-fib to contract. To conduct these impulses from the sentient epiblast the contractile mesoblast, a continuity between the two is kept up means of protoplasmic strands or nerves; and long after the proc of development has been abridged, and the mesoblast become a separ layer, some of the cells of which develop into muscular fibres, t conducting strands still grow to meet the muscles from the epibla As far as we know, it is only from this latter layer that the nerv system is developed.

The next step in development consists in the grouping together such ectodermal cells as, owing to their containing pigment or crysta are peculiarly suitable for the reception of sensory impressions, i distinct sense-organs. At the same time, instead of each cell bei connected only with its own muscle-fibre, such junctions between t nerve-fibres are introduced as will enable the impulses received b few cells to be conveyed to a number of muscle-fibres or to vari groups of fibres, according to the nature of the movement it is sirable to produce. Such junctions are effected by means of gangli cells, which hence may best be termed *distributive*. These are tained from the sensory ectoderm, certain cells losing their disti tive characters, and sinking into the mesoderm to serve as nodes the nerve-plexus. In the covered-eyed Medusæ, the plexus prese no tendency to centralisation, except such as occurs at the bases the sense-organs. In the naked-eyed Medusæ, commissures are veloped, and distinct nerve-rings produced. Thus appears, for t first time, what one may regard as a central nervous system. Th system is variously disposed, and presents different degrees of agg gation throughout the animal kingdom; but it is important to member that it always remains a plexus, the primary function which is to distribute the stimuli received by sense-organs to appr priate combinations of muscles.

Among invertebrate animals, the central system comprises t parts, which might be termed head-ganglia and body-ganglia respe ively, united together by a commissure which surrounds the œ phagus. In vertebrate animals, the system lies entirely dorsal to t alimentary canal, and no traces of a primitive duality are to be d covered. In Amphioxus, appearances are to be found which indic that, in its earliest stage, the vertebrate central nervous system co sisted of a solid plate of epiblast, but in all other forms it constitu from the first a tube which extends from behind forwards; its p terior extremity communicating originally with the hinder end of t gut. The single layer of cells, of which its wall is formed, proliferat and of the new layers thus produced, the innermost becomes the e thelium of the central canal; the others, ganglion-cells of the gr matter. From the ganglion-cells, processes grow out as nerv Some of the processes extend outwards to the muscles, others exte up and down the central tube, bringing its various cells and grou of cells into connection; these latter constitute the white matter the cord and brain. The origin of the sensory nerves is not by a means so clear. Certain it is that they, and the cells in the spinal co with which they are in connection, appear much later than the mot nerves and cells. At the time of their origin, the posterior ro ganglia are already large and well developed. These root-gang grow, not from the central system, but from separate thickenings

e epiblast, each of which gives origin at the same time to a segental sense-organ. Most of these sense-organs disappear as development proceeds. It also appears certain that a part, if not the hole, of the nerves on the distal side of the ganglion, grow from its lls, and not from cells of the central tube; and it appears to the cturer probable that the fibres of the posterior roots also grow from e cells of the ganglion centralwards into the cord, instead of from e cord to the ganglion, as usually supposed. A consideration of e effects of cutting nerves in such cases as have been hitherto deribed, leads him to formulate the law that nerve-fibres die when cut f from the cells of which they are processes, and from which they rive their nutrient supply. It is well known that, when the posrior roots are cut, the fibres which remain attached to the root-nglia live, those entering the cord die. As the result of his tempts to trace the distribution of these fibres within the cords of wer vertebrates, the lecturer concludes that they break up into the exus known as the gelatinous substance of Rolando, from which aments are reassociated, to form the processes of the spindle-shaped lls of the posterior cornua of the cord. The cells of the root-ganglion, hich in lower vertebrates are fusiform, bipolar, become in higher rtebrates so folded on themselves, that the poles are brought to-ther, the cell being, as it were, connected with the fibre by the rtical limb of a T; while the afferent and efferent nerve-fibres, as e two horizontal limbs, are directly continuous, and the passage of e impulse through the cell is thus avoided. If this view be correct, ery sensory nerve, in its passage to the Central Tube, is interrupted (1) a bipolar cell, and (2) a process-plexus, before it reaches a nerve-ll of the cord. Bateson's observations on Balanoglossus, which he nsiders to represent the ancestors of the vertebrate stock, taken in njunction with appearances described in the development of other rms, render it probable that the posterior root, as well as the nglion, arose at first by delamination from the epiblast. The nsory nerve was thus at first an ectodermal path between the single nse-organ of each segment, and its centre in the cord. Its homogical value is very different from that of the motor nerves, which consist of the processes of the cells of the anterior cornua, and pass with-ut interruption to the muscles, at first separately, but collected in ter forms into one or more bundles for each segment.

HE CLINICAL DIAGNOSIS OF CANCER OF THE UTERUS.

By ARTHUR W. EDIS, M.D., F.R.C.P.,

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HE following cases cannot fail to prove of interest to all who are able to be called upon to give an opinion in similar cases, and seem be well worthy of record.

The first two patients were admitted under my care in the course one month, and the two together represent two years and a half much suffering and severe mental anxiety. Both of them were ndemned to death as guilty of suffering from an incurable malady; nd, although in one case it was carried to a court of appeal, the erdict was upheld, when possibly a little more systematic consideraon of the case might have led to a complete acquittal, such as I ave now the pleasure of recording.

I will first give simply the notes of the cases, which are as follows.

CASE I.—S. D., aged 44, widow, the mother of four children, the oungest 16 years old, had been always delicate, but enjoyed fair ealth until three years ago, when she suffered from profuse periods, elvic pain, and discomfort. About two years ago, she became subject to violent attacks of pain in the lower abdomen, with a forcing ensation two or three times a week, particularly after exertion. She ad continuous pain in the left side, where a hard lump could be elt in the iliac region. Twelve months ago, an unusually severe ttack was accompanied by collapse and profuse hæmorrhage, necesitating her remaining in bed for a month. She then went to one of ur large metropolitan hospitals, and was recommended to go to the rompton Cancer Hospital, where she was admitted on October 31st, 884, and remained in until February 24th, 1885.

Through the courtesy of her medical attendant, I am enabled to resent the main points of her case whilst there. "No family-history f cancer; much hard work and mental trouble; symptoms of two ears' duration; pain chiefly in hypogastrium, also in back, but not so marked there, and down the thigh; some discharge; little intravaginal cervix. Body of uterus formed hard mass filling up pelvis, and fixed; margin of os uteri healthy."

Two attacks of severe abdominal pain, with tenderness in the hypogastrium and febrile symptoms, occurred during her stay in hospital. After the second of these (September 22nd, 1884), the house-surgeon notes that "*per vaginam* a large fluctuating mass like the membranes, part very hot (pus)." The physician further adds: "I am afraid we looked on the case as a routine one."

She stated that, whilst in the Cancer Hospital, the lump in her side nearly disappeared. On leaving, the attacks of pain returned after exertion of any kind. She had a constant white discharge, of a foul odour, and pain in the lower abdomen and back. The bowels were generally very confined, and there was a constant desire to defæcate, with much straining at stool.

In September, 1885, she fell and injured her side and face. She presented herself in the out-patient department of the Middlesex Hospital for these injuries, and was admitted to a surgical ward. She then stated that, whilst straining at stool on the morning of admission, she felt something come down, and found a swelling protruding from the vagina. When first seen, her condition seemed very deplorable. She was emaciated, with a sallow complexion; her lips were pale; her countenance anxious; the eyelid was ecchymosed from the fall. She lay on her side, groaning and complaining of severe abdominal pain. She was much collapsed, with small pulse, 108.

On examination, a tumour, of the size of a small fist, was found protruding from the vulva; it was globular in shape, and firm to the touch, like a fibroid. It was apparently very sensitive, the patient complaining much on any attempt at manipulation. For this reason, chloroform was administered in order to allow a thorough examination. On passing the finger within the vagina by the side of the tumour, the rim of the cervix uteri could be felt surrounding the pedicle, which appeared to be unusually large. On conjoined manipulation, no fundus uteri could be detected in the usual position above the pubis. The uterine sound passed only about three-fourths of an inch beyond the rim of the cervix, and could not be made to pass beyond this. The opinion formed was that a fibroid of the fundus had partially inverted the fundus uteri; and, it being feared that if an écraseur were applied a portion of the fundus would be included, Aveling's repositor was adjusted, after the mass had been returned within the vagina, and efforts were made to reduce the inversion. Persistent efforts failing to accomplish this, the écraseur was subsequently applied, and the tumour removed. It was found to be a fibroid tumour, the pedicle being about three-fourths of an inch in diameter. The uterine sound could then be passed three inches beyond the rim of the cervix, showing that the uterus was not inverted, as at first imagined. The direction in which the sound entered was upwards and backwards, the uterus being retroverted, thus explaining why the fundus could not be detected on conjoined manipulation on the first examination. The pedicle sprang from the anterior wall of the uterus, about an inch within the cervix.

The patient subsequently convalesced without a bad symptom, and left the hospital greatly improved in health.

CASE II.—C. G., aged 49, widow two years; mother of five children; four miscarriages. Her last confinement at term was eighteen years ago; the miscarriages occurred subsequently to this, the last being six years ago, each of them about the third month. After the birth of her youngest child, the patient suffered severely from sore-throat, and her hair came out very much at this time. The catamenia had always been regular until the last two years, lasting about a week, attended by considerable pain in the back.

In May, 1884, the patient had a severe attack of flooding, coming on at the menstrual epoch, and lasting about a fortnight. As a result of this loss, the patient was confined to bed for six months, and during this time she lost a considerable quantity of blood at each menstrual epoch, the pain in the back at these times being greatly aggravated. Since Christmas, 1884, she had been confined to the house, feeling very weak, but the menorrhagia had not been so severe, and the pain had also been less, while, for the last two months previously to admission to Prudhoe ward, there had been no sanguineous discharge whatever.

For about twelve months the patient had had an intermenstrual discharge, slightly tinged with blood at times, but generally of a whitish colour and quite odourless, except on two occasions, when, for a couple of days, the discharge was offensive.

The practitioner who was called in at the date of her attack in May, 1884, pronounced the case to be one of cancer, and that nothing could be done to arrest its progress. She accepted the verdict with

perfect resignation, and awaited the end, which seemed very long in coming. It was only about two months before admission, when the hæmorrhage ceased, the appetite increased, and the general health began to improve, that she ventured to question the opinion expressed nearly eighteen months before, and asked her medical man whether it was possible he could have made a mistake.

On admission, on September 26th, 1885, the patient was seen to be of spare habit of body; her countenance was anxious, her complexion somewhat sallow, anæmic. The tongue was moist, and clean. The chest-sounds were fairly normal. The heart's action was weak; there was no *bruit*. Several *tâches de Morgan* were visible on the chest and abdomen; the organs were apparently normal; there was some tenderness in the iliac fossæ.

On vaginal examination, the uterus was found to be bulky, somewhat less mobile than normal. The cervix was excessively bulky and expanded, with large prominent nodules, partly due, no doubt, to antecedent laceration of the cervix in some previous confinement, but also to hypertrophy of the follicles of the os uteri from occlusion. The surface of the vaginal cervix was soft and smooth to the touch, bathed with a thick tenacious mucus, perfectly odourless. The os uteri was sufficiently patulous to admit the tip of the finger, the cervical canal being granular, but not giving rise to hæmorrhage, even after several examinations. The vaginal cervix projected only about half an inch beyond the vaginal *cul-de-sac*, and was so enlarged in bulk, that only a portion of it could be brought within view when an extra large speculum was introduced. It measured nearly three inches in diameter.

The case was evidently one of hyperplastic induration and enlargement of the cervix, with laceration and hypertrophy of the follicles. The history given of her condition eighteen years ago, after her last confinement, more than suggested the possibility of syphilitic taint. The duration of the symptoms, nearly eighteen months since the first attack of flooding, with the absence of any ulceration of the cervix, or friability of tissue, or bleeding on examination, or infiltration of the lumbar glands, or neighbouring tissues, precluded the diagnosis of cancer. In justice to the practitioner, who first diagnosed the case as malignant, it is but fair to say that the case so simulated one of epithelioma of the cervix, as to make the diagnosis one of unusual difficulty.

The result of treatment was entirely confirmatory of the diagnosis arrived at. The employment of the hot vaginal douche twice daily, packing the vagina continuously with glycerine tampons, scarification of the cervix, when several follicles were punctured, allowing thick inspissated mucus to exude, hot water injections, the occasional application of iodine liniment, nitric and carbolic acids, attention to diet, together with reprieve from prolonged sentence of death, all combined to produce such marked improvement, that, in less than a month from the date of admission, the cervix was reduced to nearly half its former size, and before leaving was, to all intents and purposes, fairly normal. Convalescence in this case was tedious, owing to the deteriorated condition of her general health, from long confinement to bed. The circulation was exceedingly feeble, and her powers of assimilation much impaired. She left the hospital on December 17th.

Since writing out the above notes, two other cases have been admitted into the Middlesex Hospital, both certified as cancer; one was a purely hysterical patient; the other an evident example of malingering. Brief notes may prove of interest.

Case III.—R. F., aged 34, single, a nurse, was admitted into Whitbread Ward, on November 19th, 1885, certified as suffering from cancer of the uterus and ovaries. She gave up work three years ago, on account of persistent vomiting and retching. She had taken morphine, occasionally for about two years, to relieve the pain. The abdomen was uniformly distended, tympanitic. The uterus was perfectly normal in size and position; there was no pelvic abnormality. A small mucous polypus protruded from the cervix uteri. She had been an in-patient in Guy's Hospital seven years ago, for displacement of the uterus. On anæsthetising the patient, the abdominal enlargement entirely disappeared. All morphine injections were discontinued. Nutrient enemata were administered; no food being given by the mouth for several consecutive days, until the sickness had entirely abated.

Case IV.—M. A. G., aged 50, married seventeen years, mother of six children (youngest 9 years old), eighteen months ago began to suffer with bearing down pains in the back and lower abdomen. For the last twelvemonth she stated she had suffered from vaginal discharge, often tinged with blood, but not offensive. She had had vomiting after food, the last five months, and was losing flesh. The bowels were very confined; she had occasional dysuria, and pyrosis. She had been in a provincial hospital for five months, before coming to t Middlesex Hospital. The abdomen was distended, tympanitic; s said it was painful on pressure. The uterus was normal in positic less mobile than natural. The cervix was fissured. There was gran lar erosion round the margin of the os. There was no evidence wh ever of cancer. She was discharged at the end of a fortnight. T diagnosis was chronic dyspepsia, and malingering.

Remarks.—My object in publishing these cases is solely to impr upon my professional brethren the extreme importance of weighi most carefully all the facts of the case, before announcing a patient w die. If the practitioner be not in the way of seeing uterine cas or the symptoms be such that he has the least doubt as to the natu of the malady, let him call in, or refer the patient to, some co petent authority, before condemning her as suffering from a hopel disorder. The mere coincidence of these two cases being in the wa at the same time suggested the publication of them as a warning all. Before subjecting a patient to incarceration in a lunatic asylu as of unsound mind, two separate and distinct certificates, by t independent medical men, are requisite to sanction such a step bei legally taken; and yet it too often happens that a patient is pronounc to be in a helpless state from a most terrible malady, entirely at the d cretion of any one practitioner. Not a year passes without my seei numbers of such cases, not only in hospital practice, but also private, where I have been enabled not only to reverse the verdi but to treat successfully the condition which gave rise to the mistak It occasionally happens that patients are sent to the cancer-war at the Middlesex Hospital, as suffering from cancer, when no trace such a condition can be detected; and the patients are returned their homes within a very brief period, to their own joy, but to t practitioner's dismay.

In looking through my private case-book, I find that the mo simple conditions have been mistaken for cancer. One patient present herself, where the pain and hæmorrhage were due simply to an enti absence of molar teeth. Imperfect mastication, colicky pains, deterior tion of health, and emaciation followed. The condition was entire relieved by the insertion of a set of artificial teeth, proper regulatio of the diet, and the administration of a light tonic. The uterus w merely chronically hypertrophied.

Pregnancy, with an intensely granular condition of the cervi where there is a copious vaginal discharge, seems to be one of the co ditions by no means unfrequently mistaken for cancer, more especiall if there have been any symptoms of threatened abortion, or eve hæmorrhage from a granular cervix.

Fibroids in various stages, during expulsion, and in process sloughing, or when extruded into the vagina, as in case No. 1, see also to puzzle the practitioner.

Retained products of conception, overlooked abortion, where som laceration or granular condition of the cervix uteri exists, simulat cancer in some instances.

Even hæmorrhage and pain from a vascular caruncle of th urethra, where a fibroid tumour coexisted, gave rise to a most d plorable mistake in one instance.

Pelvic hæmatocele, diagnosed as cancer, figures in several instances the peculiar hue of the complexion typical in cases of hæmatocel being mistaken for the cancerous cachexia, more especially when th pain and hæmorrhage are severe. One case presented apparently suc manifest symptoms of cancer, that an error in diagnosis seemed in possible. A "cancer-crater" admitting the finger, a rough, har friable surface, bleeding readily on touch, incontinence of urine, an a most foul vaginal discharge, seemed to leave no room for doubt but the detection and removal of a forgotten pessary, introduced man years before, imbedded in the anterior vaginal wall, and having ulcer ated through into the bladder, not only relieved the symptoms, bu removed "the cancer."

Chronic hypertrophy—the areolar hyperplasia of Thomas—where th cervix is lacerated, and the pain unusually severe, contributes a fai number of cases of error of diagnosis.

Inversio uteri, although comparatively rare, should not be forgotten The history will generally keep us from error.

Pelvic cellulitis following parturition, where the cervix is lacerate and ectropion occurs, may deceive the unwary, more especially i there be any placental débris and hæmorrhage in consequence.

Endometritis, with a marked history of syphilis, where the cervi uteri is extremely bulky and the discharge very profuse, is by n means an uncommon cause of error.

Chancres upon the cervix uteri, although exceedingly rare, hav yet led to serious mistakes being made.

In cases at all doubtful, the fact of free hæmorrhage occurring o vaginal examination often enables us to determine the malignan

ture of the affection. I regard this as one of the most reliable mptoms. The cervix may be lacerated, the edges everted, with an tensely granular degeneration of the mucous membrane; and yet, on thdrawing the finger, no trace of blood is detected, showing that e case is not malignant.

The age of the patient will also assist us. Cancer of the uterus is nparatively rare before 35, although I have seen fatal cases so early 26. After the menopause, if a patient begin to lose blood *per ginam*, there having been an interval of a few years, the case is tty sure to be malignant in nature, provided alcoholism can be cluded. We must not forget, too, that cancer does not invariably gin in the cervix uteri; it may arise in the fundus uteri. These es are more numerous than generally supposed.

The nature of the discharge in cases of epithelioma of the cervix is nerally very characteristic. It is not the usual muco-purulent retion met with in many instances, where the cervix is merely the t of granular degeneration, or the vagina is in a state of chronic lammation. It is more of a serous or sero-sanguineous nature, ving a peculiar characteristic pungent odour, acrid, and producing ex- iation of the vulva and surrounding surfaces.

The character of the pain in malignant disease is different from that t with in mere chronic hypertrophy of the uterus, or granular generation of the cervix. In the former case, the pain is almost ariably worse at night, when the patient is lying down; whereas in latter the pain is worse on standing, and relieved when the recum- nt posture is assumed.

The so-called cancerous cachexia is not always a reliable symptom. is often simulated in cases of hæmatocele, and where persistent or quent recurring hæmorrhage from a projecting intra-uterine fibroid polypus occurs. Besides this, when the disease has advanced so as to cause the constitutional cachexia, the local condition is nerally so evident as to preclude any error in diagnosis.

REMARKS ON THE EMPLOYMENT OF CUCAINE.

By R. SHALDERS MILLER, M.B., B.S.Lond., F.R.C.S.,
Senior Surgeon to the Western Ophthalmic Hospital.

n nearly a year and a half, cucaine has been extensively used in is and other countries in a great variety of cases. At present, it ms to be undergoing revision, which may lead to a knowledge of e limits of its application. It is, perhaps, remarkable that a drug th such powerful physiological properties should have produced nparatively little harm, whether locally or internally administered. e case recorded by Dr. De Havilland Hall, in the *Lancet* of ovember 21st, is the only one of which I have heard, where any ngerous effects followed its use; in the other cases of unpleasant sequences recorded, the symptoms a good deal resembled those at- nding a boy's first experience of tobacco. I have witnessed such sults in only one case out of nearly two hundred instances in which ave used it; and in that case the patient was a man very much t of health from poor living, and I believe that the symptoms then re as much due to fear of the operation (tapping the anterior amber of the eye) as to the cucaine.

In another case, where I had subcutaneously injected two grains of caine for the removal of a mass of indurated glands, nearly as large the fist, from the posterior triangle of the neck, the patient had a lent attack of roseola, beginning the day after the operation; and ssibly this may be attributed to the cucaine. I have seen very ere roseola follow the hypodermic injection of morphine in one stance, and in two cases after the use of a suppository containing half grain of morphine. I have never, as yet, seen any ill effect, ally, from the application of cucaine; probably because I have in- riably used a perfectly fresh solution. It is a convenient plan to ep the solid cucaine in a long narrow tube bottle, with one grain visions engraved on it. One grain or more can then readily be ured out; or, if it be desired to use less than a grain, that quantity n be divided into halves or quarters on a clean piece of paper, and e solution prepared on the spot, for cucaine dissolves in cold dis- led water in a few seconds.

I have thus had no experience of the growth of mould in the so- tion, but I cannot doubt this has been the cause of those disasters nich have ensued upon the application of cucaine to the eye. I once arly lost an eye, upon which I had performed iridectomy, through plying some atropine solution, in which I afterwards found an undant development of mould. Cucaine has been said to possess a ble antiseptic power, and this has also been denied because of its bility to the growth of mould. But boracic acid is an antiseptic, as regards low animal organisms; yet it does not prevent the develop- ment of mould in vegetable infusions. I have frequently used cucaine very freely in squint operations, applying it first to the surface of the eye, and, after opening the conjunctiva and the capsule of Tenon, in- jecting several drops into the latter before dividing the tendon; and no bad effect, either local or general, has so far ensued.

Of the gelatine discs I can say but little, having seldom used them; but I have also not met with any bad results from them. In the form of an ointment, with vaseline or a fatty basis, cucaine appears to keep well, but in this shape its applicability is limited. Cucaine paralyses the terminations of the ordinary sensory nerves; this anæs- thetic effect is heightened by the contraction of the blood-vessels which it produces; and the latter action renders it very useful in superficial inflammation of mucous surfaces, especially those of the eye and the urethra.

As to the strength of the solutions used, this will vary according to the structure to which the cucaine is applied, the mode of application, the nature of the operation about to be performed, and the severity of inflammation, pain, or irritation.

For intraocular operations, a 2 per cent. solution is generally used, the sensibility of the cornea being readily abolished by the cucaine; the same strength answers for the removal of foreign bodies, and for acute inflammations of the cornea and conjunctiva.

For squint and enucleation of the globe, a 4 per cent. solution answers better. The 2 per cent. solution, used in a spray such as that made for me by Messrs. Mayer and Meltzer, suffices for laryngoscopic examination, and for Eustachian catheterism where the nose is very sensitive. A 4 per cent. solution is better for removal of nasal polypus, and is best applied by the spray. For hypodermic injection, I have always used a 5 per cent. so- lution, and have, by its means, painlessly removed chronically en- larged lymphatic glands, several "painful subcutaneous nodules," a large vascular tumour of the thigh, etc. In such cases, some of the same solution may be applied with the spray, or with a camel's hair brush, to the cut surfaces as the operation proceeds. This produces no subsequent irritation, nor does it interfere with healing by first in- tention.

For excision of the tonsils, or shortening of the uvula, it is best to paint a 20 per cent. solution on the part to be operated upon; this is better than the spray, as the action of the cucaine is limited to the part requiring treatment. I have hitherto never used a stronger so- lution than 5 per cent. with the spray.

In the acute stage of gonorrhœa, a saturated solution of boracic acid, containing two grains of cucaine to the ounce, quickly relieves the pain and scalding, each injection affording immediate relief; probably a larger proportion of cucaine might be used with advantage, but the high price of the drug has hitherto been a drawback to its liberal employment. I now always use the above injection at the very begin- ning of the attack, and find that it greatly shortens the acute stage, the discharge very soon becoming gleety.

An ointment containing 5 grains to the ounce is very useful for lubri- cating catheters, and I have used the same for lithotrites and evacuat- ing catheters, with the result of leaving no pain or soreness after the operation of lithotrity. An ointment of the same strength, using lard as the vehicle, is very soothing in intercostal neuralgia, and has answered, in my experience, better than anything else in pruritus ani et pudendi. I have used cucaine, also, in operating for fistula in ano, introducing a thin gelatine-cucaine stick (freshly prepared) into the fistula, and another into the anus.

In chronic coryza and hay-fever, nothing affords so much relief as cucaine. A 2 or 3 per cent. solution may be used in the spray for this purpose, or a snuff-powder of starch and bismuth, containing 1 per cent. of cucaine.

A lozenge, containing from $\frac{1}{20}$ to $\frac{1}{10}$ grain of cucaine, relieves cough arising from irritation of the throat, as, for example, where there are cheesy follicles in the tonsils.

As an internal remedy, my experience of cucaine is limited to one case, where a pill, consisting of a quarter of a grain of cucaine, and one grain of extract of hyoscyamus, promptly and permanently cured obstinate vomiting, due to excess in stimulants. I am aware that it has been successfully tried in sea-sickness, and possibly it might be of value in some cases of sickness due to pregnancy.

Lastly, as to the time occupied in producing anæsthesia by cucaine; the drug acts rather slowly, and ample time should be allowed for each drop, or puff of spray, to take effect, intervals of two minutes being not too much. In this way, the greatest local effect is ob- tained, with the least chance of any toxic symptoms. Of course, where it is hypodermically injected, the anæsthesia is more quickly produced.

A CASE OF COMPLETE RUPTURE OF THE URETHRA, WITH EXTRAVASATION OF URINE.

By ERNEST MACKENZIE, M.B., C.M., Cheadle, Staffordshire.

William S., aged 42, baker, etc., in descending from his warehouse, fell off the ladder astride the iron handle of a truck standing vertically. Shortly after the accident, in trying to relieve the desire for micturition, he noticed a stream of blood coming from his meatus, followed with difficulty in the passage of urine. He lost about two ounces of blood.

October 5th, 1885. He at once sent for me, and on examination the perinæum was found to be slightly swollen, excessively tender, with a small skin-abrasion in the centre. He was ordered a hip-bath, and sent to bed. A few hours later, with the assistance of my father, all our attempts to pass a catheter failed, a quantity of blood followed these attempts. Warm fomentations were applied to the perinæum, which somewhat relieved the pain.

October 6th. Micturition was difficult and painful; the urine was preceded by a few drops of blood, and followed by a "peculiar creeping, smarting sensation," referred by the patient to the perinæum. The swelling in the perinæum had increased, and become harder. There was no oozing from the skin-abrasion. Temperature 100° Fahr. For the next three days, his temperature ranged between 100° Fahr. and 101° Fahr.

October 10th. Temperature 102° Fahr. The swelling or tumour in the perinæum had much increased in the night, and fluctuation was detected. This was opened by free incision, when from one to two ounces of bloody urine with a little pus gushed out. The patient was asked to micturate, which he did in a free stream through the opening just made. He was much relieved by the incision and free micturition.

October 11th. Temperature 101°. In order to ascertain, if possible, the extent of the injury to the urethra, the wound in the perinæum was stretched with a pair of blunt pointed dressing-forceps, when the divided vesical end of the urethra could be seen deep in the perinæum. Hence our diagnosis of complete rupture of the membranous portion of the urethra. A No. 10 gum-elastic catheter (without stylet) was passed through the penis as far as the wound, and a second from the wound into the bladder. This was withdrawn, and the first one, after many attempts, was passed onwards into the bladder, guided throughout by one finger of the left hand in the perineal opening. This was tied in and left. The perineal opening was washed out every morning and dressed.

October 14th. Temperature 99° Fahr. The glans penis was painful, the foreskin œdematous; there was a discharge of thick yellow pus along the outside of the catheter. This increased until October 20th, when it was thought necessary to withdraw the catheter, which was found to be quite decayed, the portion within the bladder corroded.

An attempt to pass another catheter failed, and, as each attempt was followed by a good deal of bleeding, it was decided to leave it for a few days.

On micturating for the first time after the removal of the catheter, a very narrow stream of urine passed from the meatus, the main stream passing through the perineal opening.

For several days, micturition was accomplished partly through the penis and partly through the opening, till October 28th, when all the urine passed by the penis. Sometimes during the next few days there would be slight dribbling from the perinæum during the act, till, on November 3rd, I managed to introduce into the bladder a No. 7 *bougie à coude*, the resistance at the wound not being very great; this was followed by a No. 8 and No. 9 with difficulty; the latter was left in for three hours; on the following day for five hours. Bougies were passed each day until, on November 11th, a No. 11 was passed.

November 11th. The perineal opening was healed up completely. The patient was able to walk about, though not quite with his usual stride. A bougie was to be passed daily for some weeks.

Remarks.—The withdrawal of the catheter was rendered necessary by the action of the decomposing urine, examination afterwards showing clearly the risk incurred in letting it remain longer. The speedy action of the urine was remarkable.

Had we succeeded in passing a second catheter after the withdrawal of the first, the result could not have been more satisfactory. It is remarkable that a blow severe enough to completely sever the urethra should have produced nothing more externally than an abrasion o skin.

February 22nd, 1886. It is still necessary to pass a bougie once a week.

NOTE ON THE ASSOCIATION OF RHEUMATISM WITH SCARLATINA.

By T. F. RAVEN, L.R.C.P., M.R.C.S.E., Broadstairs.

In a group of cases of scarlatina, recently under observation, severa points of interest were presented; and the appearance of irregula rheumatic affections especially deserves notice.

All the cases occurred under one roof. The house was in a thoroughly satisfactory sanitary condition. The disease began with a domestic servant, who, a few days previously to her attack, had been out with her lover and had been kissed by him. He was just convalescent after an attack of quinsy, which was well marked, and had ended by crisis. There was no other trace of infection. The prominent symptoms in her case were pain and stiffness in the muscles at the back of the neck. There was some tonsillitis, and an ill-marked rash was visible upon the chest only. Peeling of the cuticle followed, and she suffered an attack of erythema nodosum, after which she had subacute rheumatism of the hands and knees. There was no albuminuria.

Three little boys contracted the disease from her. Of two of these cases, it is enough to say that one was mild and the other sharp. The third case, which occurred last, is worth a brief notice. The boy, aged 4 years, was discovered to have a faint rash on the abdomen otherwise, he seemed in good health. His temperature was subnormal no affection of the throat could be detected; his appetite and spirits were unaffected. In two or three days the temperature arose to 100°, and the rash became vesicular. Some clear fluid could be drawn off with a needle, but, unfortunately, there was no one in the house to whom inoculation could be recommended.

During the progress of these cases of scarlatina, symptoms of rheumatism appeared among three adult members of the household. Colonel E. was taken ill with feverish symptoms. He had severe pain in the muscles at the back of the neck. The throat was injected. The temperature rose to 103°, but quickly subsided. This was followed by subacute rheumatism of the fibrous structures of the knee-joints, and by sciatica on both sides. He was physically depressed, and suffered from an indolent boil on the hand. There was at no time any rash, or albuminuria. The urine was pale and copious.

E., an adult female, who was nursing one of the boys, complained of severe pain and stiffness in the muscles behind the neck. The throat was red, and she was feverish. No rash appeared. The urine was pale and copious, and non-albuminous.

B., an adult female, was taken ill with feverish disturbance. The neck was stiff and very painful, and subsequently she suffered pain about the sacrum. Her throat was somewhat injected, but she had no rash. Here, again, the urine was free from albumen.

I have never before witnessed symptoms like these in connection with scarlatina. In discussing the subject with a medical friend a short time ago, he at once remembered that some time previously, whilst in close attendance upon scarlatina, he suffered a feverish attack, accompanied by severe pain in the cervical muscles.

THE DISINFECTION OF PHTHISICAL SPUTUM.

By H. HANDFORD, M.D.,
Physician to the Nottingham General Hospital.

The tubercle-bacillus, on account of the relatively high temperature (86° to 106° Fahr.) required for its growth, can only live and multiply in animal bodies, at any rate, in temperate climates. But, though the bacilli are thus prevented from multiplying naturally outside an animal body, and soon die, it is not so with their spores, of which each bacillus, when in the spore-bearing condition, contains from one to three or four. The spores are very much more tenacious of life, and will bear great extremes of heat and cold. They are, however, with certainty killed by exposure for fifteen minutes to a moist heat of 212° Fahr.; this can be obtained either by steam or by plunging into boiling water. Dry heat is not so certain in its action, and requires a much longer exposure, about two hours to a temperature of 250° Fahr. The duration of the vitality of the spores at the ordinary temperature, in a climate such as this, reaches, at any rate, three or four months, and occasionally longer. This has been shown by Koch

and by Schill and Fischer (*Mittheilungen aus dem Kaiserlichen Gesundheitsamte*, Band ii, p. 133. Berlin, 1884), who dried phthisical sputum, and, on using it for inoculating guinea-pigs, found it still active after the lapse of thirteen weeks. After twenty-five weeks, the same specimen had lost its activity, two guinea-pigs inoculated with it remaining healthy. Another specimen, found active after thirteen weeks, had diminished in activity after twenty weeks, only two out of three guinea-pigs becoming tubercular after inoculation; and had still further diminished after twenty-six weeks, only one guinea-pig out of three being affected. Finally, after thirty-two weeks, it became inactive, four guinea-pigs inoculated with it all remaining sound.

In most cases of phthisis, the sputum contains tubercle-bacilli, often in great numbers, and usually in the spore-bearing condition. This was very clearly shown by Dr. Gaffky (*Mitth. aus dem K. Gesund.* Berlin, 1884), who examined the sputum daily in twelve cases of phthisis.

The sputum was examined 982 times.
Tubercle-bacilli were found 938 ,,
,, not found 44 ,,

Thus, the result was positive in 95.5 per cent. and negative in only 4.5, although, on each day, only one cover-glass preparation was examined.

The spores retain their vitality, and remain capable of growing and producing tubercle-bacilli, for a period of at least three months, provided only they meet with suitable conditions. It is important, therefore, with a view to checking this wide-spread dissemination of tubercle-spores, to take measures to disinfect phthisical sputum. With the purpose of ascertaining the most suitable method of effecting this object, Drs. Schill and Fischer carried out a series of experiments in the Hygienic Laboratory in Berlin (*Mitth. aus dem K. Gesund.* Berlin, 1884). Corrosive sublimate, thymol, iodoform, arsenious acid, iodine, and carbolic acid, were employed among other things, and the most suitable was found to be a 5 per cent. solution of carbolic acid. When mixed with an equal quantity of this solution, fresh sputum was, after twenty-four hours, completely disinfected. Exposure to steam at a temperature of 212° Fahr. for half an hour to one hour, or to boiling water for ten minutes, was also effective.

Let us trace the phthisical sputum from the lungs, and see what is probably the usual fate of the tubercle-bacilli and their spores, contained in it.

In the process of expectoration, the bronchi, trachea, or larynx may, and not unfrequently do, become inoculated. Also, if during the process of expectoration, the pus be inhaled by some sudden disturbance of the respiratory movements, and carried into the other lung, or into an as yet healthy part of the same lung, a fresh growth of tubercle, and a fresh centre of infection, may be set up. For this there would appear to be no remedy.

A certain amount of the sputum is swallowed, and this occasionally —in fact, in a large number of cases, sooner or later—gives rise to tubercular disease of the intestine. The practice of swallowing sputum should be avoided, not only as a nasty habit, but as one involving some risk of auto-inoculation.

On leaving the mouth, some of the sputum is projected immediately on to the ground in the open air, and cannot be dealt with. Much of it eventually dries, and is carried about by the wind, clinging to particles of dust. The bacilli themselves die, but the spores retain their vitality and are capable of propagating disease.

A large proportion of the sputum is expectorated into special receptacles; these should contain a 5 per cent. solution of carbolic acid, equal in quantity to the amount of the sputum. This practice, suggested by Dr. Ransom, has been carried out in all cases of phthisis in the Nottingham General Hospital for the past two years or more, each spittoon containing two or three ounces of carbolic lotion before being used. If this process of disinfection be not carried out, the spores find their way in an active condition (for they are not killed by the growth of putrefactive bacteria among them) into the sewers or middens, and eventually, some of them, into the air. Handkerchiefs and sheets contaminated with sputum are thoroughly disinfected by boiling water; blankets and mattresses, etc., by exposure to steam for about one hour, as in the Washington Lyon disinfecting apparatus, on to a dry heat of 250° Fahr. for several hours, as in many other disinfecting stoves.

Attempts have been made to destroy the tubercle-bacilli in the lungs by the inhalation of antiseptic vapours and atomised fluids. For this purpose creasote, iodine, carbolic acid, eucalyptus oil, sanitas, etc., have been used. But Dr. Hassall (*The Inhalation-Treatment of Diseases of the Organs of Respiration, including Consumption*) has shown that the quantity of the antiseptic that enters the lung is so infinitesimal as to be quite incapable of destroying the tubercle-bacilli, much less their spores. This applies not only to the oro-nasal inhalers, but also to the method of inhalation by the vapour of hot water, and to the inhalation of fluids atomised by the steam-jet. By all these methods beneficial effects are often produced, more especially in the way of allaying cough; but the action is probably chiefly on the larynx and trachea. Whether the method of inhalation in specially constructed chambers, supplied with medicated air, wil be more successful, is very doubtful. It has not, at present, been much used on account of the great expense.

PELVIC TUMOUR COMPLICATING PREGNANCY.

By P. HORROCKS, M.D., B.Sc., M.R.C.P.,
Assistant Obstetrician to, and Demonstrator of Practical Obstetrics and Gynæcology at, Guy's Hospital.

E. D., aged 30, came to the gynæcological out-patient department at Guy's Hospital, under my care, in July, 1883, complaining of profuse losses at the monthly periods, accompanied by severe pain. Each period lasted seven days, and the loss was so profuse that the patient was greatly weakened thereby, and stated that she sometimes "fainted away."

On examination, a tender, semi-elastic, solid tumour, convex below, was felt occupying the central and left lateral pouches of Douglas, the cervix being pushed forwards, and a little to the right. Bimanually, the fundus uteri, which was rather high up and to the right, could be felt distinct from the tumour at the top, but apparently intimately connected with it along the greater part of the posterior and left lateral surfaces. The mobility of the uterus was impaired, and the tumour moved somewhat rigidly with the fundus. The patient stated that she had had three children, all born alive at full term, and no miscarriages. The last child was born in November, 1879, and she dated her present complaint from about July, 1882.

The tumour was diagnosed as a fibro-myoma of the uterus, and half-drachm doses of liquid extract of ergot were given. Later, an uterine sound was passed for three inches and a half, with the concavity forwards and a little to the right, and the handle over to the left. Very little mobility could be obtained. She missed the next period, and the ergot was stopped, and bromide of potassium given instead; she missed two more periods, and, on October 4th, I found the uterus considerably enlarged, though the cervix was not so soft as one would expect in pregnancy. I thought she was pregnant, but she was not sure about it. There was a little fluid in the breast. A week later, flooding came on, and a "tumour" was passed (ovum ?).

November 17th. The uterus was decidedly smaller than on the last visit. Ergot was again administered. The tumour behind was larger, if anything.

In December and January, she had seven weeks' amenorrhœa, and suffered from bleeding piles. She menstruated at the end of January.

April 26th, 1884. There had been amenorrhœa during the last nine weeks. On examination, the tumour could be felt as before, but the uterus was considerably enlarged, and probably pregnant. The patient was carefully watched, and, the pregnancy advancing unmistakably, she was admitted into the hospital under my care on June 10th.

The uterus now reached midway between pubes and umbilicus, and more towards the left than the right side. The tumour could be felt as a large swelling in the pouch of Douglas. She complained of pain and difficulty in passing motions. There were large external piles. She was ordered an ounce of castor-oil immediately, and unguentum gallæ cum opio for application. There was no action of the bowels. A mixture of magnesia and sulphate of magnesia was ordered. No action followed; and a soap-enema was ordered. This acted fairly well. I examined the patient three times a week, and each time endeavoured to push the tumour up into the iliac fossa out of the pelvis. Eventually I succeeded, and, as it seemed to lie well out of the way in the left iliac fossa, I sent the patient home on June 25th. I saw her from time to time in the out-patient department, and she went on to full time, and was safely delivered of a living child. It was not until the child was about two or three months old that I saw the patient again. The fibroid tumour was much smaller, and lying more on the left side, in the left lateral pouch of Douglas, but not so low down as before. It had evidently involuted during the *post partum* period, and had been dragged from the left iliac fossa into the pelvis.

Up to the present time (February, 1886), I have had the patient under observation. The tumour is not much less, but is certainly not larger than it was. This is strongly in favour of the view that it is an uterine fibro-myoma.

The question of removal by operation was carefully considered at the time she was in the hospital, but I decided not to operate, and there is at present no reason whatever for doing so.

TOXICOLOGICAL MEMORANDA.

POISONING BY OXALIC ACID AND WHISKEY.

THE following case may be of interest. A domestic servant, in a fit of anger at receiving notice from her mistress, and with the intention, not of committing suicide, but, as communicated to a fellow-servant, of annoying her mistress, bought one ounce of oxalic acid and half a pint of Irish whiskey, put the acid into the whiskey, thoroughly shook the bottle and its contents, mixed these with equal parts of boiling water and sugar, and drank the whole as a "grog," glass after glass (in tumblers), till it was all finished. (These facts were proved beyond any possibility of error, but I need not state the circumstantial evidence.) Ten minutes after drinking the last tumbler, she rushed into the sitting-room, where her mistress was sitting, became violent and abusive, and was finally very sick over a fur rug; and her mistress, noticing that the vomit reddened the rug, sent for me. I found her in a state of deep collapse (she having suddenly "fainted"), with great coldness of extremities and a hardly perceptible pulse. She could be slightly roused by the pain produced by pressing over the abdomen, but in no other way; though all through the case there were violent twitchings of the left side of the face, which became more and more intense, in proportion as enforced semi-consciousness was established. I was soon able to ascertain for certain, from the nearest druggist, what poison she had purchased; and the immediate treatment adopted offers no points of interest. But there is this point of interest in the case: two hours after I had followed up several doses of saccharated solution of lime with a full dose of castor-oil, the patient gradually came out of the collapse, and became like one furiously and madly drunk, as though, at that late period of the case, five hours after her potations, the whiskey, which had been the vehicle for the acid, were suddenly exercising an overbearing influence over her. In fact, from the oxalic side of the case, save for the after-effects of throat-corrosion (on subsequent days), I had no more trouble; but, from the "drunken" side of the condition, I had unmixed trouble for about two hours more, having finally to subdue her excessive attempts at amateur pugilism with a lively application of water in considerable quantity to the top of her head. What surprised me was that the collapse should have preceded in so marked a manner any alcoholic symptoms, should have passed off suddenly, and have given place to an outburst of maniacal fury, which, though severe, was only in proportion to the depth of the collapse which preceded it.

G. H. R. DABBS, M.D., Shanklin.

OBSTETRIC MEMORANDA.

CHILDBIRTH DURING AN ATTACK OF SMALL-POX.

SOME years ago, I was called to a woman who had just been delivered of a child. She was suffering from a severe attack of bronchitis, and the small-pox rash was fully out on her. I thought matters looked badly for both; but the woman made a good recovery, and the child was not affected with small-pox. Some weeks after birth, I vaccinated the child, with a satisfactory result.

May not a case such as this be held to illustrate Mr. Hutchinson's papers on syphilis, as showing how seemingly capricious exanthematous diseases may be in their infectious character?

A. H. F. CAMERON, Liverpool.

THE following are details of another case, which goes to disprove the invariability of the rule of the transmission of diseases of this class to the child *in utero*, although the sequel was a fatal one.

I was called to a woman one evening, about seven o'clock, and found her with a variolous rash just out, and a little over seven months' pregnant; but there was no indication of commencing labour. At 4 A.M. the following morning, I was again sent for; and, on my arrival, a male child in the eighth month of gestation was already born; it presented no evidence of small-pox. It survived four days, during which time there was no rash at all, death being due to its premature existence. The mother's eruption was confluent; it reached its vesicular stage on the third day of the appearance of the rash. The uterus was fairly well contracted the day after delivery, and was syringed out twice, and the vagina every subsequent day. Both the lochia and milk were entirely suppressed; her temperature rose to 104° Fahr. twelve hours after delivery, but fell gradually to 99° Fahr. on the fifth day. There was no secondary fever, and, although the eruption became to some extent pustular, it was comparatively slight. Deglutition became very difficult, and ultimately impossible, except for very small quantities of fluid. Secondary symptoms were wanting, the temperature remaining a little above normal until death, which took place on the eleventh day after the appearance of the eruption.

The treatment consisted of the administration of stimulants, milk, and eggs by nutrient enemata, by which the strength was well maintained; but the absence of all secondary symptoms, including the later rise of the temperature, seems to indicate the non-elimination of the poison. The patient passed urine freely at first, but it afterwards became "smoky," containing large quantities of blood. Delirium set in during the last two nights.

F. SEPTIMUS BARNETT, M.R.C.S., Stoke Newington.

A CURIOUS CASE OF TRIPLE PREGNANCY.

SOME time ago, I was called to attend Mrs. T. On my arrival, I found the os uteri fully dilated, and the child was soon born, everything being perfectly natural. For three days, intense labour-pains prevailed, and some amount of bleeding was present. On the fourth day, I was surprised to see a mass, about the size of a small pigeon's egg, expelled after a protracted labour-pain; this proved to be twins, which I afterwards preserved in spirit for my collection. The patient now made a good recovery. She was 19 years old; this was her first confinement. She was also the subject of advanced Bright's disease.

HAYGARTH ADDISON, L.F.P.S.G., Holloway, N.

A CASE OF TRIPLETS.

I WAS sent for to Mrs. B., aged 28, at 9.30 P.M. on Sunday evening, February 21st. She was a multipara, in labour with her third pregnancy. She had been married seven years. The first labour was a "cross-birth" and difficult; the second, at three years' interval, was natural. In her present pregnancy, she quickened on January 1st, and considered herself to be about six months pregnant. I had been attending one of her children a short time before, and, when asked to attend her in confinement, noticed her appearance, which was that of a woman at full term; so that I could hardly believe that she was barely six months pregnant, and thought she must have made some mistake in her reckoning. Labour-pains set in at 9 A.M. on the morning of the 21st, and had continued at frequent intervals during the day.

On examination, I found the os dilated, and membranes presenting. On rupturing the membranes, the presenting parts felt were the cord, which soon became prolapsed, the ear and side of the head, a hand, and the hip, with the leg flexed on the trunk. After some severe pains, a small fœtus, quite dead and discoloured, was born, doubled up in the position observed in spontaneous evolution. The cord was very long, and a loop had become completely prolapsed before the birth took place. The abdomen still remaining large, I examined, and found another bag of membranes presenting. This was ruptured, and a drachm of liquor secalis ammoniatus administered. A second child was shortly delivered; it was an ordinary head-presentation. The uterus, although in a state of contraction, still remaining bulky, a further examination was made, and a third bag of membranes ruptured; and the remaining fœtus was delivered, the head presenting as before. Both of these latter children were alive, and cried, though feebly, on birth. Their umbilical cords were short, only about half the length of the first. The amnial sacs contained a large quantity of fluid. The uterus contracted well, and the secundines were delivered by manual expression.

On examination of the placenta and membranes, I found the three divisions of the amnion well marked. One of the placentæ was separate, only united to the rest by non-vascular membrane; the other two placentæ were united into one irregular shaped mass.

The two children born alive died during the night, one a few hours after the other. The sexes were two females and one male. The mother is making a good recovery.

HERBERT J. ILOTT, M.D., Bromley, Kent.

THE Ashby-de-la-Zouch Rural Sanitary Authority have appointed two medical officers of health, instead of one, upon the vacancy caused by the death of Mr. William Joyce.

FREDERICK BLAKESLEY, M.D.Edin., has been placed on the Commission of the Peace for the borough of Bolton; Charles Edward Prior, M.D.Aberd., for the borough of Bedford; and Augustus Rowland Ticehurst, M.R.C.S.Eng., for the borough of Hastings.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LIVERPOOL ROYAL INFIRMARY.

WOUND OF WRIST, WITH DIVISION OF MEDIAN AND ULNAR NERVES: COMPLETE PARALYSIS OF MOTION AND SENSATION: SUTURE OF NERVES EIGHTEEN MONTHS AFTERWARDS: RECOVERY.

(Under the care of Mr. REGINALD HARRISON.)

WILLIAM E., aged 21, a groom, was admitted in June, 1884. Eighteen months previously he fell through a greenhouse, severely cutting his left wrist. There was a mark of a deep cut transversely across the wrist, just above the anterior annular ligament. The hand was stiff and useless, all the muscles were atrophied, and sensation and motion were completely absent in the part supplied by the median and ulnar nerves. The patient had been obliged to give up his occupation as a groom.

Mr. Harrison opened up the scar by a long vertical incision, and dissected out the ends of the ulnar and median nerves; these were found clubbed, and attached to the scar-tissue. After a rather tedious dissection, the ends of the nerves were freshened with the knife, and brought together as accurately as possible with catgut sutures. The wound was closed, and the limb placed on a splint, with the hand slightly flexed. The wound healed quickly.

A month after this operation, the patient was again placed under ether, when the stiffened hand was subjected to free movement. The amount of stiffness, especially in some of the phalangeal joints, was so great, as to occasion considerable difficulty in thoroughly effecting what was desired. For forty-eight hours after this was done, the patient experienced considerable pain in a part that previously had been almost insensible. The patient left the Infirmary shortly afterwards, improving slowly but steadily.

On December 18th, 1885, the patient again presented himself for examination, when the following report of his condition was taken by Mr. Fox-Parry.

"He has resumed his employment as a groom, and can clean down horses with his left hand, button his clothes, or use a spade just as well as he could do before his accident. The thumb can be fully extended, flexed, and moved normally. The index, middle, and ring-fingers cannot be fully flexed, but sufficiently to grasp any ordinary instrument, and also to act with the thumb. The little finger is of no use, and is slightly and permanently flexed. Sensation is everywhere complete, except in the little finger; the inner side of the ring-finger is as sensitive as the other side."

REMARKS BY MR. HARRISON.—This case points to the importance of suturing divided nerves together in all recent injuries, and of the advantage that might follow such a proceeding even after so long an interval as eighteen months had elapsed after the primary injury. The nerve-supply, in this instance, was completely re-established, except in a few fibres of the ulnar nerve, which, from the absence of sensation in the little finger, apparently failed to unite. With this exception, any inconvenience that the patient is now conscious of is not due to impaired motor or sensory nerve-supply, but to the changes which the joints have undergone by remaining in a stiffened condition for over eighteen months.

WESTMINSTER HOSPITAL.—The Board of Management has lately caused a letter to be sent to the physicians and surgeons of this hospital, to the effect that "the members of this board desire to convey their best thanks to the medical officers of the hospital for the zeal and devotion with which they have performed their duties during the past year." Such a testimonial is, of course, very gratifying to the recipients, but a certain amount of curiosity is excited as to its cause. No such expression of opinion has obtained, at all events, for many years past, and, no special epidemic having tried the resources of the staff during the year which has just passed away, the pleasure caused by its receipt is not unmixed with surprise at its emission. If the testimonial be intended to inaugurate a new era of increased cordiality and good fellowship between the members of the board and the hospital staff, the measure cannot be too highly commended.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MONDAY, MARCH 1ST, 1886.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

AT this, the annual general meeting, the report of the President and Council of the Society, for the year 1884-5, was presented, showing a slight increase in the number of Fellows and revenue of the Society, and a very marked increase of the Fellows and visitors present at the meetings of the Society, compared with the returns of the previous year, namely, from 750 to 960, of whom 171 joined in the discussions. The number of books lent from the library had increased from 3,429 to 4,269, about 25 per cent.

President's Address.—The PRESIDENT delivered the annual address, touching briefly on the lives and works of the twenty-one Fellows who had died in the past year; among the more eminent of whom were Mr. James Moncrieff Arnott, President of the Royal College of Surgeons in 1850 and 1859; Mr. John Gay; Dr. Wardell, of Tunbridge Wells; and Mr. Joliffe Tufnell. Among the Honorary Fellows was Dr. W. B. Carpenter, to whom the President paid a warm tribute of praise for his patient popularisation of physiology and candid researches into the difficult problems presented by mesmerism and other branches of mental physiology. Of the three Foreign Honorary Fellows whom they had lost, Professor Henle was perhaps the most eminent. In a brief review of his chief works, the President dwelt especially on the most interesting and important of his anatomical discoveries; namely, that of the muscularity of the middle coat of the arterioles, which he clearly described and figured in his *Allgemeine Anatomie*, in 1841. This discovery formed the anatomical basis for the experiments and conclusions of Brown-Séquard and Claude Bernard, which led to the present knowledge of the action of the vaso-motor nerves on the arterioles, and the demonstration of their power by producing contraction of the small vessels, either in the lungs or general system, sufficient to overpower and arrest the right or left ventricle of the heart. Professor Henle, in fact, had shown how the vaso-motors could exert what he had himself ventured to call a "stop-cock," action on the blood-stream. The physiologists were agreed in the matter, but not the pathologists. Dr. Goodhart, the learned and most eloquent Bradshaw Lecturer, last August had maintained, in opposition, as he admitted, to the teaching of modern physiologists, that the now generally recognised hypertrophy of the muscular arterioles in cases of chronic Bright's disease was the result, not of overaction in opposition to the heart, but of "an effort of the entire muscular element of the circulatory system to forward a fluid to which the absorptive or appropriative powers of the tissues are ill adapted." If such a doctrine of the propelling power of the arterioles were true, the physiologists were all wrong. Dr. Goodhart further objected to the "stop-cock" theory, that there was no such antagonism in nature as that would imply. On the contrary, however, there was orderly antagonism of flexors or extensors, and many other voluntary muscles, and of circular and radiating fibres of the iris among involuntary muscles. In looking back upon the work of the Society during the past year, the discussion on cholera naturally claimed the first place. It had served to show clearly the very contradictory opinions which were held, not only as to the causes, infectiousness, pathology, and treatment of the disease, but even on such easily demonstrable facts as the relative amount of blood in the right and left sides of the heart after death by collapse. Dr. Koch's position in holding the comma-bacillus to be not only constantly present, but also the agent of propagation of the disease, had been strengthened, in his opinion, since the discussion, by experiments related at the Cholera Congress at Berlin, in May 1885. Dr. Koch had found that he could reproduce cholera in guinea-pigs by introducing comma-bacilli into their stomachs, and insure their death by injecting opium into the peritoneum, whereby the rapid escape of the bacilli from the intestinal canal was prevented by the arrest of peristaltic action. This was quite in accordance with his own observation that the abrupt arrest of choleraic diarrhœa by opium tended to fatal collapse, because it prevented the escape of the poison.

Votes of Thanks.—Dr. GRAILY HEWITT proposed, and Dr. GREEN seconded, a vote of thanks to the retiring President; who, in returning thanks for the vote, spoke warmly of the help he had received from their honorary secretaries, Mr. Howard Marsh and Dr. Douglas Powell, and from their excellent resident librarian, Mr. Bailey.—Dr. B. O'CONNOR proposed, and Dr. ALTHAUS seconded, a vote of thanks to the retiring members of the Council, which was acknowledged by Dr. C. T. WILLIAMS.—Dr. CHURCH proposed, and Dr. BUZZARD seconded, a vote of thanks to their retiring Honorary Secretary Dr. DOUGLAS

POWELL; and in conclusion, a proposal by Mr. BERKELEY HILL, requesting the President to print his address, was unanimously agreed to.

Election of Officers and Council.—A ballot was held to elect the officers and other members of Council for the year 1886-87, with the following results. *President:* *George David Pollock. *Vice-Presidents:* *John William Ogle, M.D., Hermann Weber, M.D., Thomas Bryant, Matthew Berkeley Hill. *Treasurers:* Charles Bland Radcliffe, M.D., Timothy Holmes. *Secretaries:* *Walter Butler Cheadle, M.D., Howard Marsh. *Honorary Librarians:* Wilson Fox, M.D., F.R.S., John Whitaker Hulke, F.R.S. *Other Members of Council:* Thomas Buzzard, M.D., William Selby Church, M.D., *Thomas Henry Green, M.D., *John Wickham Legg, M.D., *Walter Moxon, M.D., *Henry Cooper Rose, M.D., *Marcus Beck, *Edward Bellamy, *Jeremiah McCarthy, Walter Rivington. Those gentlemen to whose names an asterisk is prefixed were not on the Council, or did not fill the same office last year.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 26TH, 1886.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Traumatic Inguinal Aneurysm: Rupture of Sac: Ligature of the Common Femoral and External Iliac Arteries.—Mr. C. MANSELL MOULLIN read a paper on this case. The patient, a slightly built man, aged 34, had received a severe blow in the groin from the edge of a flat piece of iron about four weeks before admission to hospital. There was a good deal of swelling and discoloration about the part for some days, but this, according to his account, disappeared almost completely. Three weeks after the blow the swelling reappeared, and continued to increase until the morning of admission, when, during some effort, he was seized with violent pain, and a large pulsating tumour made its appearance in the groin, extending into the scrotum and perinæum. The foot and leg were not much swollen, but the skin in the groin was red and œdematous, and the scrotum much discoloured. An incision was made into the swelling over the femoral artery (after an abdominal tourniquet had been applied), and a longitudinal slit found in the wall of the vessel, immediately under Poupart's ligament. A director was passed down it, and the artery separated and tied below the injured part with catgut. A fresh incision was then made above Poupart's ligament for the purpose of securing the external iliac above the rupture. No other vessel was tied. The blood-clot, some of which was old and very adherent, some quite recent, was turned out as far as possible, a large drainage-tube inserted, and the limb carefully wrapped up in cotton-wool. The subsequent course was perfectly simple, except that the wound suppurated freely, and until a side opening was made, remained full of decomposing clots. The limb wasted exceedingly, and a small slough formed on the side of the heel, but the gangrenous patch was only of the size of a shilling. Four months afterwards, pulsation could just be detected in the posterior tibial, and perhaps in the anterior.

Aneurysm occurring in a Stump.—Mr. C. SYMONDS read notes of this case. A man, aged 46, sustained a compound fracture of both bones of the leg in the site of an old syphilitic ulcer, on the floor of which the tibia was exposed, and was admitted into Guy's Hospital, August 7th, 1883. Gritti's amputation was performed under full antiseptic precautions. The man was cachectic, and had lost a good deal of blood. Suppuration, with a foul discharge, occurred, and, later, two abscesses were opened on the outer side, and one on the ner side of the stump. Healing took place very slowly; and on his discharge, nine weeks after the operation, the stump was somewhat swollen and hard, especially on the inner side. Five days later, he returned with blood oozing from a pin-like opening in the original cicatrix; and two days later, when he was admitted, the bleeding was severe, and a large pulsating swelling was observed on the inner side. The skin over it was red and œdematous. There was thought to be an abscess communicating with the femoral artery. Before laying open the swelling, the superficial femoral artery was ligatured, the whole thigh being œdematous. When cut into, blood alone escaped from the swelling. The incision was enlarged, and the clots turned out, when alarming hæmorrhage occurred from the femoral artery. This was found to come from a small aneurysm, which had ruptured. This was laid open, and the vessel tied above and below. The artery was isolated by passing a catheter into it. The man ultimately recovered, though slowly, and had a sound and useful stump. In his remarks, Mr. Symonds said the aneurysm had formed on the vessel two inches above the site of amputation, existed previous to the man's first discharge, and had ruptured soon afterwards. He referred to the rarity of the case, and to the general belief that aneurysm did not follow ligature of a healthy vessel from pressure, nor embolism of an artery, unless the embolus were in a state of active change, and set up a similar inflammatory and softening process in the wall of the vessel itself, which then yielded to the ordinary blood-pressure. Admitting these facts, Mr. Symonds thought that a condition similar to that found in embolism must be looked for to explain the present case. It was suggested that the explanation of the cause of the aneurysm lay in the inflammatory state of the stump; and Mr. Symonds thought it best explained by supposing the vessel to have been involved in the acute inflammatory process, which ended in other parts in the formation of pus, but in the vessel in softening only. He supposed that a periarteritis existed, reducing the vessel-wall to an embryonic state, just as was seen occurring in the floor of ulcers, and in inflamed connective tissue. The localisation was explained by supposing that, at the point affected, the vessel formed part of the wall of an abscess or sinus. In support of this suggestion, the condition of the vessels in the walls of phthisical cavities, from which hæmorrhage occurred, was cited. Here, either an aperture in the wall of the vessel was found, or an aneurysm. The latter change, he believed, was not uncommon in phthisis, and Mr. Symonds suggested that aneurysmal dilatation would be found to precede secondary hæmorrhage in stumps more frequently than was now supposed. A paper which he published in the *Transactions of the Pathological Society*, vol. xxxv, page 146, was referred to as illustrating the case. In this paper, two vessels affected with acute arteritis were described and figured, on one of which several aneurysms had formed, secondary hæmorrhage resulting from the rupture of one of these. Referring to his suggestion in the above paper, that in secondary hæmorrhage an unhealthy condition of the wound and vessel existed, and that the bleeding was determined not so much by failure of formation of clot as by suppurative arteritis, Mr. Symonds said that the present case gave support to that view, and brought into harmony hæmoptysis and secondary hæmorrhage. He suggested that in both the processes, so far as regarded the vessel, were identical, and resulted sometimes in the formation of an aperture, and sometimes of an aneurysm.—The PRESIDENT agreed with Mr. Symonds in his view that secondary hæmorrhage was due to inflammation, and endarteritis of the vessel. He referred to the case of a man with compound fracture of the thigh, for which amputation was performed. Two weeks subsequently, the whole wound was healed except one sinus; and at the end of five weeks there was profuse hæmorrhage, followed by death. At the *post mortem* examination, the clot in the artery was found to have been destroyed by suppuration and endarteritis. The President inquired why Mr. Moullin had laid open the traumatic aneurysm, instead of trying the external iliac artery.—Mr. MANSELL MOULLIN replied that the swelling looked like an abscess, being red and œdematous.—Dr. GOODHART thought he could bring, from his experience in the *post mortem* room at Guy's Hospital, some support to Mr. Symonds's remarks that secondary hæmorrhage was due to inflammation. Formerly, in cases of secondary hæmorrhage, he was wont to find almost invariably that there was suppuration in the tract of the artery. But, during the last six years he did not think there had been a case of death from secondary hæmorrhage; this fact he attributed to the fact that suppuration under the present improved methods of surgery was largely abolished.—Mr. PEARCE GOULD asked Mr. Moullin why the ligature was placed so far above the wound in the artery, for the wound was below Poupart's ligament.—Mr. BENNETT asked, as to Mr. Symonds's treatment of his case, what under the circumstances led him to tie the superficial femoral artery. The bleeding was surely more likely to have been arrested by ligature of the deep, than of the superficial, vessel. In fact, why had the ligature been used at all? Why had not a tourniquet been placed above, the abscess opened, and the artery tied at the place itself where the hæmorrhage was occurring?—Mr. MOULLIN stated, in reply, that the wound was immediately under, not below Poupart's ligament; and he did not think he could have tied the artery at the place wounded without dividing Poupart's ligament, and otherwise much disturbing the parts thereabout.—Mr. SYMONDS thought the best practice in his case, as things eventuated, would have been to tie the common femoral artery; but, as pressure on the superficial femoral was found to arrest all the hæmorrhage, he had tied that vessel. It would have been best of all to have placed a tourniquet on the artery above, and then to have tied the vessel above and below the aneurysm.

Intussusception of the Upper Part of the Jejunum, of Twenty-one Months' Standing.—Dr. GOODHART read notes of the case, of which the clinical interest depended upon its long duration, and upon the resemblance of the abdominal tumour, during life, to a floating kidney. The case occurred in the practice of Mr. Sandford Arnott, of Brixton. The patient, a girl, aged 19, had been first seen a year and three-quarters before her death, and was then suffering periodical attacks of vomiting and abdominal pain, with progressive wasting. A knotty

irregular tumour was felt in the lower part of the abdomen, above the uterus. She then attended the out-patient department at King's College Hospital for eight months, and subsequently at University College Hospital, with obstinate constipation, fæcal tumours, and what was thought to be a floating kidney. She was relieved by enemata of sulphate of magnesia, but, notwithstanding, her attacks recurred, and in these she was frequently seen by Mr. Arnott. The abdominal tumour never disappeared, but latterly it altered its position, and came to correspond with the situation of the left kidney. It varied in size and shape, some days being decidedly kidney-shaped; and generally it had a curve in its length, the concavity being towards the umbilicus. She was seen by Dr. Goodhart in her last attack, because the vomiting had been more severe and continuous than before. She was then pale, and very thin, although not giving the appearance of any extreme emaciation. Her mother described her as hardly ever free from sickness for more than a week, the actual attack lasting generally twenty-four to thirty-six hours. Lately, she had been sick almost daily. The abdomen being exposed, the existence of a dilated stomach was at once apparent; it occupied the upper half of the abdomen, and its muscular contractions were plainly visible; but below this, in the left inferior quarter of the abdomen, was a second tumour, running from the flank obliquely downwards towards the pubes. This was the mass that had been felt throughout the progress of the case. It was an elongated tumour, that underwent slow rhythmic alterations, becoming alternately hard and soft, and was obviously some part of the intestine in labour. Vaginal and rectal examination gave no additional information. However, it was clear that there was some intestinal obstruction, although there was no sufficient material for determining its exact nature. She had never passed any blood, the evacuations being always of a light brown colour; and, although she suffered from constipation, it was never such as to resist the action of an aperient. It was arranged that she should be admitted to Guy's Hospital; but, before this was accomplished, she died, apparently from the exhaustion of the continued vomiting. At the *post mortem* inspection, made by Mr. Arnott and Dr. Goodhart, the dilated stomach was found to occupy the greater part of the abdomen. Below, and to its left, in the inguinal region, were two or three coils of small intestine, small, but prominent, as if something pushed them up from behind; and, on turning them aside, a large intussusception was seen; it ran from near the spine into the pelvis, and looked more like rectum in thickness and size, but it proved to be small intestine, the neck of the intussusception being at the commencement of the jejunum. It was about eighteen inches in length, and, when further examined, was found to be associated with, and no doubt caused by, the existence of large polypoid masses of growth which sprang from the mucous membrane of the small intestine in several parts.—In reply to the President, Dr. GOODHART stated that no blood had been passed at any time from the bowels.—Mr. GODLEE had seen intussusception go on for a long time without producing constipation; and in that case for several weeks the child could pass motions through the bowel. Another patient in University College Hospital had an abdominal tumour, for which colotomy on the right side was performed. Nothing being found wrong there, abdominal section was performed, and again nothing found; but at the *post mortem* examination an intussusception was discovered.—Mr. BARKER remarked that in that case a growth in the wall of the bowel caused the intussusception.

Acute Intestinal Obstruction, followed by Acute General Peritonitis; Abdominal Section; Release of the Implicated Bowel; Thorough Sponging-out of the Peritoneum; Rapid Recovery.—Mr. A. E. BARKER gave full details of this case. The patient was a man, aged 23, who had enjoyed good health with the exception of flatulent dyspepsia, up to Saturday, November 14th, 1885. At 7 P.M. on that day, he had a loose motion, with a feeling of sickness, and three or four minutes after was seized with a violent pain in the abdomen, and fell down, rolling about in acute suffering. This pain commenced at a point midway between the umbilicus and right groin. At 7.30, he began to vomit, and continued to do so through the night, and next day, until Monday evening, when Mr. Barker was sent for. At the onset, he was seen by Mr. Knaggs, of Camden Road, who gave large enemata, with opium internally, and hot fomentations over the abdomen. This treatment was continued with much judgment for the next forty eight hours, but with no relief. On the contrary, the pain increased, and became general over the whole abdomen; the vomiting continued of a grass-green colour, but never became stercoraceous; the belly grew more and more distended, and the centre of acute tenderness shifted to the left side of the umbilicus. The peritoneum also began to fill with fluid; there was complete obstruction of the bowels from the first, and no flatus was passed. No distinct tumour was to be felt anywhere. When he was seen by Mr. Barker on Monday evening, the condition was very grave, and he at once decided to perform abdominal section, regarding the case as one probably of obstruction from a constricting band, or from volvulus of the small intestine. With strict antiseptic precautions, the abdomen was opened in the middle line, from the navel to the pelvis, and was found to contain much flaky serum and free gas; the intestines were coated with lymph, and moderately distended. The small intestine was now passed through the fingers from below upwards, until the middle third of the jejunum was reached. When this was drawn upon, there came a sudden rush of fluid through the portion held in the fingers, and the next moment there came out a loop of bowel deeply congested and ecchymosed, and distended to about three or four times its normal girth, and containing much fluid. Beyond this loop the gut was distended and moderately congested, but was sharply marked off against the implicated loop by the absence of ecchymoses. The bowel was now passed through the fingers downwards, to make sure that no other obstruction existed, and then the cæcum and veriform appendix were turned out of the wound and examined with the same object; they were quite sound, though sharing in the inflammatory distension and congestion to a slight extent. The hand was now passed into the abdomen, and every part of it was explored, but nothing further was found. The gut having been carefully cleansed was now replaced, and the whole abdomen was mopped out with carbolised sponges, passed into every recess on long holders. The greatest accumulation of inflammatory products was found in the flanks and pelvis, and required repeated sponging. When the whole cavity had been cleaned, the wound was united with seven deep and two superficial carbolised silk sutures in the usual way, and was dusted with iodoform and dressed with salicylic wool, secured with a broad binder. The patient bore the operation well on the whole. He had a good deal of pain in the night, and vomited twice before morning. The vomited matter was no longer bilious, but consisted of watery altered blood. It came up for the last time at 9.30, twelve hours after operation. The patient progressed extremely well after this, the peritonitis disappearing rapidly. The wound was dressed for the first time on the fifth day, and was then found united by first intention. Five of the stitches were taken out, and the wound was supported by broad strips of sticking plaster applied directly to the skin with salicylic wool and a binder over all. On the seventh day, the remaining stitches were removed, and the wound was supported as before. On the eighth day, a motion was passed spontaneously, and again on the ninth. These motions were stained with old blood. On this day, owing to an error in diet, he vomited and burst open the upper two-thirds of the wound, in spite of the strapping, and a knuckle of the intestine protruded. On seeing this six hours later, Mr. Barker removed the dressings, cleansed the protruded gut under the spray, wiped out the abdomen and the wound, and replaced the gut. The opening was closed as before, and similarly dressed. The temperature in the rectum rose on the night following to 102°, but beyond this there were no disquieting symptoms throughout convalescence, the patient being able to take light solid food for a couple of days later. The wound healed in great part by first intention, but some of it by granulation. (Patient shown.) In reviewing this case, Mr. Barker dwelt upon the following points: 1, the nature of the obstruction; 2, the performance of abdominal section in the midst of acute general peritonitis; 3, the rapid disappearance of the latter after operation. He pointed out that, from a comparison of this with recorded cases, there could be no doubt that it was a case of volvulus of the jejunum, a very rare condition. The whole case corresponded closely with the few others on record, none of which had been operated on except one. The onset of general peritonitis he regarded as an extra reason for early operation in such cases, and showed that this view was supported by pathological reasoning and clinical experience. The rapid disappearance of the peritonitis, due to the release of the intestine and cleansing of the abdominal cavity, was then commented on; and it was pointed out that the good result was besides in great part to be attributed to the judicious treatment of the case from the first with opium and enemata, and the comparative rest that the bowels were then placed in up to the time of operation, which was not delayed a moment after it was evident that other means had failed. That such an operation could only be successful when performed early, and under the strictest antiseptic treatment, was also pointed out.—The PRESIDENT congratulated Mr. Barker on the success of his brilliant piece of surgery. He agreed with him in his diagnosis. A band was the only other thing which could have produced the symptoms, but with a band he would have had more trouble in releasing the bowel. The existence of peritonitis, he considered, was no bar to the operation. Certainly, in ovarian surgery, the existence

of suppuration was thought to be no bar at all to the prosecution of the operation. He would ask Mr. Barker how the gas came to be in the peritoneum.—Mr. BARKER thought this had been satisfactorily explained. It was considered that it escaped into the peritoneal cavity from the intestines by a process of osmosis. It had been often witnessed at University College Hospital, in cases of colotomy. The gas in his own case was inodorous.—Mr. J. K. FOWLER said that he had had a somewhat similar case under his care at the Middlesex Hospital. He advised the opening of the peritoneum, in which opinion Mr. Hulke coincided. The collapsed intestine was found on the right side of the abdomen ; it was traced upwards, and, as in Mr. Barker's case, suddenly upon traction a coil of distended bowel came into view, and was found to be quite free before the operation was concluded. The patient did well for four days, and then sank from syncope. He thought that surgeons would find it much more easy to examine the collapsed rather than the distended bowel, in performing abdominal section. He asked what was the position of the distended bowel in Mr. Barker's case.—Dr. CARRINGTON, in criticising this paper, asked if so acute a peritonitis was an usual symptom of volvulus. He thought an acute peritonitis was likely to set up an acute enteritis, which would give rise to discharge of mucus and blood. Many cases of undoubted peritonitis at the first, were subsequently followed by perforation and other troubles.—Mr. BARKER, in reply, said that Dr. Carrington had contended that his was not a case of volvulus, from the fact that blood-stained mucus and blood were passed from the intestine, but the lower four-fifths of the bowel certainly had no enteritis within ; whilst also nothing came away with the enemata. Treves said, too, that acute peritonitis was very frequent with volvulus. Peritonitis was not a contra-indication to operation, but older surgeons did not always teach this, and he was, therefore, glad to hear Mr. Bryant advocate it from the chair.

Living Specimens.—Mr. GODLEE exhibited a Case illustrating the Effects upon the Eye of Injury to the Sympathetic in the Neck. Mr. MAKINS : A Case of Congenital Syphilis. Mr. R. W. PARKER : A Case of Congenital Tumour in the Neck. Mr. BALLANCE : A Case of Compound Depressed Fracture of the Skull, with Laceration of Brain—recovery.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 2ND, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Bilateral Cystic Disease of the Kidneys.—Mr. SHATTOCK exhibited a specimen which showed, without doubt, that the cysts in these kidneys were due to retention ; all transitions could be traced from long dilated passages to the more defined circumscribed cysts. The smaller cysts, as well as the dilatations, were lined with similar well formed cubical epithelium. He thought that the cystic disease might possibly arise from a mal-development of the histological elements of the kidney, and that the spaces were retention-cysts originating in the tubules of the Wolffian body. The frequent association of other malformations with congenital cystic disease of the kidney, pointed out by Virchow, was to be remembered in this connection. In the specimen shown, there were no other abnormalities ; the ureters were normal and pervious, as was also the pelvis and the calyces of the kidneys. Externally, the organs were smooth, presented traces of lobulation, and the capsule could easily be separated. The organ measured three inches long and two inches broad. Since the discovery of widely distributed remains of the Wolffian body in the ovarian stroma, increasing interest attached to cystic ovarian diseases; and similar remains found in the testicle gave rise to similar suggestions. The metanephros which formed the permanent kidney was, in reality, a specially differentiated posterior portion of the primitive mesonephros. If Kölliker's view, that the renal tissue was formed by tubular extension from the branching upper end of the ureter were accepted, it might be supposed that the congenital cystic kidney was due to a want of differentiation of the metanephric blastema from that of the mesonephros, or Wolffian body. The existence of two or three ureters could be understood, if it were remembered that in the mesonephros of the amphibia there were as many ureters as there were segments of the mesonephric kidney.—Dr. NORMAN MOORE thought that the healthy condition of the glomeruli in congenital cystic kidney strongly pointed to the condition being due to a developmental fault. In cystic kidney, secondary to interstitial nephritis, the glomeruli were affected.—Mr. J. BLAND SUTTON said that, of nine cases of congenital cystic kidneys which he had examined, in seven there were other deformities present. In sheep, dogs, horses, and asses, the same deformity was not unfrequently to be met with. In the kidney of the teleostean fish, in the mesonephritic remnants seen in the ovaries and testicles of malformed fœtuses, and in kidneys such as those shown by Mr. Shattock, the microscopical appearances were the same.—Mr. A. Q. SILCOCK thought Mr. Shattock's theory did not account for the very great superabundance of fibroid tissue, nor for the occurrence of cysts in the liver which were not unfrequently met with in association with congenital cystic kidney.—Mr. SHATTOCK, in reply, said that he thought it probable that further search might discover mesonephric remains in the stroma of the kidney itself. He looked upon the fibroid overgrowth as secondary to the tension produced by the distended cysts.

Pistol-shot Wound of Cranium.—Mr. C. B. LOCKWOOD showed the cranium of a suicide. A bullet had traversed the hard palate, the ethmoid bone, and the frontal part of the brain. The bullet was extracted from an abscess, which formed behind the coronal suture. The lateral ventricle had not been opened ; the layers of arachnoid around the aperture were adherent, but there was no other evidence of meningitis. The portion of brain wounded appeared to be contracting by a process of cicatrisation. The patient remained in a state of stupor except when aroused, when he was cheerful, and possessed some memory.—In reply to Mr. MARMADUKE SHEILD, Mr. LOCKWOOD said that the abscess appeared twenty days after the injury, and that many pieces of bone came away with the discharge. The man survived for one month after the injury. The aperture of exit was probably larger than the aperture of entry.

Villous Tumour of Accessory Thyroid.—Mr. BILTON POLLARD showed a tumour which he considered had been developed in an accessory thyroid gland. When first noticed, the growth was about the size of a pea, and was situated in the right anterior triangle, about two inches from the middle line, at the level of the upper border of the thyroid cartilage. It grew gradually, and attained the size of a hen's egg in a year and eight months. During the next four months it grew rapidly, and, when the patient was admitted to University College Hospital, it nearly filled the right anterior triangle of the neck. It was freely movable, but did not alter in position during deglutition. It was so deeply placed that Mr. A. E. Barker had found it necessary to excise along with it the middle third of the sterno-mastoid muscle and two inches of the internal jugular vein. Two enlarged glands were removed from the lower part of the posterior triangle, but they were not examined microscopically. The tumour mainly consisted of a cyst about the size of an orange ; it was lined by a smooth membrane, and into its interior several villous growths projected. The solid portion of the growth was divided by fibrous septa into compartments, closely packed with a granular substance, which microscopical examination showed to be composed of delicate villous processes covered by short columnar epithelial cells. In some parts, the growth was composed of small spaces and tubes lined with cubical epithelium, and filled with a colloid substance. The structure of this portion bore close resemblance to that of the thyroid gland. The origin of the tumour was open to doubt, but Mr. Pollard thought its appearances were fully explained by supposing that it grew from an accessory thyroid gland, that cysts had first been formed, and that subsequently they had become filled with delicate papillary growths.—In reply to the President, Mr. POLLARD said that he did not consider that the tumour was malignant. —Dr. NORMAN MOORE had seen one case of large villous growth associated with cystic disease of the thyroid, and inquired whether the thyroid was enlarged.—Mr. J. B. SUTTON suggested that the tumour was associated with the fœtal canal which extended from the middle lobe of the thyroid up to the hyoid.—Mr. POLLARD said that the thyroid did not appear to be enlarged.

Malignant Disease of Thyroid.—Dr. GULLIVER showed an enlarged thyroid tumour from a case of myxœdema. The thyroid body was the seat of a cancerous growth which had infiltrated the glands, and the sterno-hyoid muscle. The patient was a woman, aged 44, who had been suffering for four years from well marked symptoms of myxœdema. The patient had some stridor, which did not increase notably. She died of asthenia. The case seemed to illustrate the frequency with which malignant disease was associated with atrophied or functionally-inert organs. Mr. Shattock had mentioned to him the case of a lad, aged 18, affected with sporadic cretinism ; the thyroid was chronically enlarged, and, after death, was found to be affected by malignant disease, obviously as in the case shown, of later date than the atrophic changes.—Dr. W. B. HADDEN said that, in nearly thirty cases of myxœdema in which he had records of the *post mortem* appearance, there was interstitial degeneration of the thyroid gland, and proliferation of the epithelial cells.

Ossifying Sarcoma.—A specimen of ossifying sarcoma of the radius was shown by Mr. BERNARD PITTS. The patient was a man, aged 21, who had first noticed some pain, stiffness, and swelling of the wrist,

bout six weeks before he came under treatment; he had sprained he wrist two years earlier. A gland at the bend of the elbow subsequently enlarged. An incision into the bone appeared to show that he swelling was due to new bone, of inflammatory origin. Pedunulated exostoses of the fibula and great trochanter were noticed at his period. Later, the bony growth extended the whole way up he radius, and the patient died from involvement of the pleura. fter death, the left pleura was found to be much thickened, hard and ony; both lungs contained numerous nodules of bony growth. On icroscopic examination, the growths were seen to consist of large ound cells, arranged in an alveolar matrix, which was apparently unergoing ossification. The primary tumour appeared to be a subperioeal ossifying sarcoma.

Aneurysm of Septum Ventriculorum.—Dr. F. TAYLOR showed an neurysm of the septum ventriculorum. The patient was a man, aged 5, who died of cerebral hæmorrhage. In the undefended space was aperture opening into a sac, which bulged into both cavities on the ght side of the heart. The sac presented several secondary pouches. here was no endocarditis; the heart was hypertrophied. The aneurism was probably of congenital origin, as was shown by its smooth rface, its exact limitation to the undefended space, and the absence any signs of inflammation. A soft systolic murmur was to be eard at the apex. He showed a second specimen from the Museum Guy's Hospital, which only differed in that it involved the undeended space in part, and the muscular tissue in part. This specimen d been found in a patient who died of psoas abscess in 1858. No her case had occurred since.—Mr. STANLEY BOYD showed a specimen aneurysm projecting beneath the left coronary artery, the opening ing just below the aortic cusp. The sac was divided by a septum. here was evidence of endocarditis, probably of some duration.—Dr. NGEL MONEY referred to a specimen from a girl, seven years age, who was admitted with pyrexia; a loud systolic urmur could be heard widely over the heart, but best er the septum. There was an aneurysm of the undefended space hich opened near its apex by a small foramen into the right venicle; the peculiarity of the aneurysm was that its walls were formed the separated layers of the septal cusp of the tricuspid valve. All e cardiac valves were in an unusual "pouchy" condition, suggesting peculiar process, thought to be syphilitic. The brain contained a mour, which was also probably syphilitic.—Dr. PERCY KIDD thought ost of the aneurysms of the undefended space were congenital, but t all.—Dr. COUPLAND referred to a specimen taken from the body a young man, whose case has been fully recorded by Dr. Henry ompson in his *Clinical Lectures*. The aneurysm had apparently en produced by softening and degeneration, secondary to an injury flicted by the kick of a horse. The two ventricles communicated rough the muscular substance by small apertures which opened into arger cavity in the substance of the intraventricular septum. The fices were surrounded by recent vegetations.

Congenital Intestinal Polypus.—Mr. CLUTTON showed, for Dr. OYER, a congenital cutaneous polypus which had been removed m the sigmoid flexure. The patient, a girl, aged 8 or 9, was ken suddenly ill in October, 1884, with pain, rigors, high temperare, and diarrhœa. In the course of three weeks, she passed a large antity of very offensive matter and blood; in another week after this charge, a tress of hair of considerable size was removed from the us. The acute symptoms subsided in four or five weeks, but she ll continued to suffer from distressing tenesmus, which had been sent throughout. About Easter, 1885, a tumour was noticed, dur- these attacks of tenesmus, to protrude at the anus, and was urned as often as it appeared, with relief to the symptoms. In gust, 1885, she came under the care of Dr. Floyer, who, whilst ating her for chronic constipation, found a swelling in the left iliac sa. Shortly after this, in examining the rectum, Dr. Floyer felt a ypus, attached by a double pedicle to the mucous membrane. a considerable distance from the anus. Under chloroform, it was ily demonstrated that the tumour in the iliac fossa was the polypus ich could in efforts of straining be forced down into the rectum. . Clutton tied the pedicles with silk, and removed the tumour. e specimen possessed a perfect cutaneous envelope, covered with e short hairs. At a spot near the pedicles, there was a bald shining ch with a sinus in its centre, which was thought to have been the t of the abscess when discharged in October 1884. A long tress nair was also shown, which was believed to have been attached to tumour over the surface of this abscess. The central parts of the ypus were composed of fat and fibrous tissue, with a little bone. usion was made to a similar case recorded by Dr. Port in the *insactions*, vol. xxxi. Dr. Port's specimen was removed from the cous membrane of the rectum, at about two inches and a half from the anus. In the case now recorded, there was evidence to show that it was seated at the juncture of the sigmoid flexure with the rectum. This was the only difference between the two cases.—Dr. FLOYER stated that a swelling could still be felt in the iliac fossa; it was probably due to the pedicle of the tumour. The general symptoms (sweating and debility) from which the patient had suffered persisted. Dr. CHARLEWOOD TURNER suggested that the tumour might be an ovarian tumour invaginated into the intestine, as, it was said, ovarian tumours became invaginated into the bladder.—Mr. J. B. SUTTON thought this improbable, and suggested that the tumour had arisen in connection with the neurenteric canal.

Card-Specimens.—Dr. PAYNE (for Dr. Jacob, of Leeds): Tumour of Finger.—Mr. BILTON POLLARD: Dermoid Cyst of Testicle.—Dr. LEDIARD: 1. Sessile Ovarian Blood-Cyst; 2. Hernia reduced *en masse*; 3. Cancer of Rectum; Excision; 4. Cancer of Œsophagus; Gastrostomy.—Dr. TURNER: Hepatic Cells in Blood of Portal Vein.—Dr. CARRINGTON: Mitral and Tricuspid Stenosis.—Mr. E. H. FENWICK: 1. Fibro-sarcomatous Polypi from Bladder; 2. Papilloma of Bladder.—Mr. MAKINS: 1. Diastasis of Cervical Spine; 2. Carcinoma of both Superior Maxillæ.—Dr. DREWITT: Heart and Pericardium from a Case of Rheumatic Nodules.—Mr. STANLEY BOYD: Aneurysm of Heart.—Mr. LUNN (for Mr. Larder): Aortic Aneurysm.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 10TH, 1886.

WALTER DICKSON, M.D., President, in the Chair.

Diphtheria as a Chronic Malady in Particular Individuals, with liability in them to Recrudescence.—Dr. D. ASTLEY GRESSWELL drew attention to the fact that many persons for years after an attack of diphtheria suffered from sore-throat, liable to exacerbations, and that in several instances he could give no satisfactory explanation for an outbreak of diphtheria, unless he admitted the possibility that persons suffering in this way retained diphtheritic infectiveness. He detailed six outbreaks, in which the above explanation seemed to him to be the only reasonable one that offered itself. In one instance, about thirty or more persons had been taken with, and five of them had died of, diphtheria contracted directly or indirectly from a girl who had suffered from the chronic condition referred to. He also detailed the history of sustained prevalence of diphtheria in a farm-house from March, 1881, to July, 1885 (the latter being the date of his inquiry into the prevalence at the farm-house), and in this a like explanation seemed to be the only one open. Dr. Gresswell dwelt upon the evident bearings which diphtheria in chronic and recrudescent phases had upon sustained prevalence of the disease in a community. He then cited analogous instances, such as syphilis, ague, glanders, scarlet fever, and typhoid fever; and in this connection he laid special stress upon gleet in its relation to gonorrhœa, and upon chronic in relation to acute contagious ophthalmia. He suggested that recrudescence of disease, dependent upon a parasitic organism, might prove to be interpretable as due to such rejuvenescence of the parasitic organism, as was known to occur among the cryptogamia. Here he suggested that protoplasm might consist of molecules having definite shape, and responding like certain inorganic individuals to every wave-movement in its environment. He said that, in all the instances in which he had found these cases, the surrounding conditions were such as would be unhesitatingly pronounced unwholesome; and he suggested that persons living under these conditions, instead of entering upon a straightforward recovery, lapsed, so to say, into a chronic condition, the diphtheritic virus leading a smouldering life in the tonsils for weeks and months, and at times (especially when the person had been exposed to wet and cold) entering upon a renewed vitality. As a practical outcome, he claimed to show that houses should be made wholesome, and that attention should be directed towards the cure of chronic tonsillar trouble following upon diphtheria.—In the discussion which followed, the PRESIDENT, Sir W. SMART, Dr. THORNE, Dr. WILLOUGHBY, Dr. MOIR, Dr. MCKELLAR, Dr. LAWSON, and Mr. C. E. PAGET, took part.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 1ST, 1886.

W. M. ORD, M.D., F.R.C.P., President, in the Chair.

Spastic Paralysis.—Dr. HUGHES BENNETT read a paper on this pecular affection, more, he stated, with the view of obtaining the opinions of others on its doubtful and difficult features, than with the idea of saying anything new about it himself. Much remained to be elucidated, and Dr. Bennett invited discussion on the special points

as to whether the organic degeneration of the lateral columns of the cord, frequently associated with spastic symptoms, was essential for their production; or whether these symptoms might be accounted for by functional derangement of the same regions, or of the psychical or motor centres. Secondly, whether organic or functional, was the primary seat of disease in the cells of the brain or cord, or in the conducting fibres, central or peripheral; and were the symptoms the result of irritation or inhibition? Thirdly, might primary functional disorder eventually lead to secondary organic degeneration? Lastly, what was the anatomical substratum of the affection described under the term hypertonic paresis, and where and in what manner did it originate? There was the further question, as to whether the condition was one of organic or of functional disease, and as to what clinical criterion would decide the point during the life of the patient.—Dr. HUGHLINGS JACKSON dissented from the hypothesis, put forward by Dr. Gowers, as to the destruction of the inhibitory centres. He thought that very probably the cerebellum was not without some influence in the production of paralysis agitans. He mentioned the case of a patient, whose deep reflexes were first exaggerated, after a rapid succession of several hundred fits, and then abolished.—Mr. HORSLEY thought that the theory as to the destruction of the inhibitory centres was an unnecessary hypothesis.—Dr. ANGEL MONEY considered, on the contrary, that the hypothesis of Dr. Gowers was a very valuable one, for several reasons. He mentioned the discovery that, in animals kept under the influence of curare for some time, definite changes took place in the motorial end-plates, in support of the idea that functional paresis might possibly give rise to structural lesions.—Mr. HARRISON CRIPPS said that it was necessary to draw a very careful distinction between hysterical cases and those of true paralysis.—Dr. W. B. HADDEN said that his attention had been called to the fact that patients confined to bed, in consequence, for instance, of a fractured thigh, invariably developed ankle-clonus in the opposite leg. In one case of pernicious anæmia, which terminated fatally, sections of the spinal cord revealed typical sclerosis of the corresponding side.—It appeared, however, from some remarks from Dr. ORD, that there was a nervous history to this case, the commencement of which had been a severe effort while at work on the railway.—Dr. BEEVOR had noticed an increase in the reflexes after epileptiform attacks, especially on the side most convulsed.—Dr. BENNETT, in reply, regretted that more information had not resulted from the discussion, and said that he attributed the symptoms to the existence of excessive functional activity.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 18TH, 1886.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Recent Specimen.—Dr. SIDNEY PHILLIPS showed the intestines and spleen of an infant, the subject of typhoid fever, exhibiting the characteristic lesions in all stages.

Cyanosis in New-born Children.—Mr. G. EVERITT NORTON read, for Mr. RAYNER, a paper illustrating a peculiar form of cyanosis affecting a number of newly born infants under his observation. [The condition was described by Mr. Rayner in the JOURNAL of February 13th, page 294.]—The PRESIDENT and Dr. SEDGWICK referred to the possible dangers of staining by the internal administration of anilin, and to the lowering of temperature which sometimes accompanied it.—Dr. MAGUIRE pointed out that the dye might cause cyanosis, either by direct staining or by destruction of the red blood-corpuscles, as in poisoning by chlorate of potash; or, by combining with the hæmoglobin, the anilin might prevent the chemical process of oxidation; either of the latter processes might cause lowering of temperature.—One of the cyanosed infants was exhibited to the Society.

Modern Remedies in Cardiac Disease.—A paper on this subject was read by Dr. SANSOM.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THURSDAY, FEBRUARY 11TH, 1886.

S. H. AGAR, M.D., in the Chair.

Subperiosteal Amputation at the Shoulder-Joint.—Mr. JORDAN LLOYD showed a man, aged 20, whose right arm had been amputated at the shoulder-joint for injury. Amputation was first performed through the middle of the right humerus. The stump not doing well, a straight incision was made down the front of the bone, which was shelled out of its periosteum. The patient had still a stump nearly four inches long, with new bone-formation within it, with movements in most directions, and very suitable for the application of an artificial limb.

Nephrotomy.—Mr. H. L. BROWNE showed a stone which he had removed by nephrotomy from a man, aged 46. The tumour occupied the right half of the abdomen. The cyst contained three pints of pus, its cut edges were stitched to the abdominal wall, and the cavity was drained. There were no bad symptoms for eleven days, when death occurred suddenly from heart-clot. The calculus weighed 11 ounces.

Exostosis of the Parietal Bone.—Mr. VINCENT JACKSON exhibited an osseous tumour which he had removed, on the same day, from the right parietal bone of a girl, aged 12. This so-called ivory exostosis had been noticed for three years, but within the last three months had grown rapidly, and had become painful. It measured 3 inches in its largest diameter, 2½ inches in its shortest, and 12½ inches in circumference. The removal of the tumour was effected by the chain-saw.

Multiple Fibro-neuromata.—Mr. CHAVASSE showed a spinal cord and portions of its nerves from a woman who had died of spinal meningitis after removal of a cervical tumour. All the nerves examined were found to be the seat of fibromatous enlargements. The tumour removed, sections of the growth, and of the various neuromata, were exhibited.

Pelvic Hæmatocele.—Dr. MALINS read a paper on the treatment of pelvic hæmatocele.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 17TH, 1886.

J. HOLMES JOY, M.D., President, in the Chair.

Papillomatous Cyst of Parovarium.—Mr. J. TAYLOR showed a papillomatous cyst of the parovarium, which had been successfully removed by abdominal section. The patient was also suffering from uterine myoma, and protrusion of the cervix uteri from the vaginal orifice. Since the operation no protrusion had occurred, showing that this was due in great measure to the weight of the tumour which was removed. Twisting of the pedicle, and the rapid development of a blood-cyst below the original tumour, occurred shortly before operation. The appendages on both sides were removed.

Cysts of Broad Ligament.—Mr. TAYLOR also showed a specimen and drawings of multiple minute cysts or vesicles of the broad ligament, from a case operated on by Mr. Tait. This was a very rare condition, and he did not believe that any similar case had been described. He thought it possible that the case might be one of herpes of the broad ligament.

Unilateral Myelitis.—Dr. SUCKLING showed a man who had been under his care for acute unilateral myelitis, due to syphilis. The patient was now able to walk, but complained of weakness of the left leg and numbness of the right. Dr. Suckling had carefully investigated the muscular sense, and found that it was defective on the side of the lesion, the patient being able to distinguish between half-ounce and quarter-ounce weights on the right side, but not on the left. In this case, Brown-Séquard's dictum, which Dr. Ferrier had recently opposed, was confirmed. The case had been fully reported in the *Birmingham Medical Review* for August, 1885.

Specimens.—Mr. CHAVASSE showed: 1, the stomach and œsophagus from a case of gastrostomy; 2, a vesical calculus, weighing 5½ ounces that he had successfully removed from a man, aged 21, by lateral lithotomy; 3, half an inferior maxilla from which a spindle-celled sarcoma was growing; this was removed from a man, aged 40. During the operation, the larynx became blocked with thickened mucoid discharge, and tracheotomy was done to relieve the dyspnœa; the patient at the present time is doing well.—Mr. WALTER FOWLER showed a youth on whom he had performed partial excision of the wrist for disease.

Paper.—Dr. FOXWELL read a paper on acute laryngitis in children.

"FIRST AID" INSTRUCTION FOR ASYLUM ATTENDANTS.—An interesting ceremony took place on Friday, February 26th, at the Royal Albert Asylum, Lancaster, when Lord Winmarleigh, the Chairman of the Central Committee, distributed St. John Ambulance certificates of proficiency in "first aid to the injured" to thirty-three of the staff of the institution. The Medical Superintendent, Dr. Shuttleworth, had held classes for instruction, which were attended by as many as sixty-seven of the asylum officers, attendants, and nurses, and of these, thirty-four presented themselves for examination. Lord Winmarleigh, in the course of his remarks, pointed out the usefulness in every station of life, "from the palace to the cottage," of such knowledge as that imparted under the scheme of the St. John Ambulance Association; and specially congratulated the recipients of the certificates upon their having qualified themselves to render, in emergencies, what might be invaluable service to those under their charge.

REVIEWS AND NOTICES.

THE CAUSES AND PREVENTION OF BLINDNESS. By ERNEST FUCHS, M.D., Professor in the University of Liege. Wiesbaden: J. F. Bergmann. 1885. English Edition. Translated from the German. By Dr. R. E. DUDGEON. London: Baillière, Tindall, and Cox.

THE admirable essay, published under the above title, gained a prize of £80, offered by the English Society for the Prevention of Blindness, through its secretary, Dr. Roth. The award was made by a jury upon which the principal European countries were represented.

With regard to the causes of blindness, implying by this term that the patient is unable to guide himself in daylight, and that he is incurable, it is a matter of regret that our information is so incomplete. Dr. FUCHS can only refer to the comparatively small, and necessarily imperfect, statistics of Magnus and others, from which it may be inferred that blindness is congenital in a comparatively small number of cases (less than 4 per cent.); that ophthalmia neonatorum accounts for more than 10 per cent.; and that strumous affections are to blame in about 8 per cent. The same tables ascribe hereditary syphilis as a cause in about a half per cent., whereas gonorrhœa is a factor in twice that proportion. Small-pox has been a cause of blindness in 2 per cent., whereas glaucoma and optic atrophy have been destructive in the proportion of nearly 9 per cent. and 20 per cent. respectively. Doubtless, many of these last referred to cases are remote products of acquired syphilis.

As to prevention, the author is fortunately able to give a more full and satisfactory account. But many of the measures that he recognises as effective are at present inapplicable to this country. For example, the judicious regulation of marriages would do much to prevent congenital absence or maldevelopment of the eyes, since statistics have established that parents, blind from birth or infancy, produce an unduly high proportion of children exhibiting such defects. Similarly, the hereditary transmission of the syphilitic or strumous diathesis might be checked; and the same might be said of retinitis pigmentosa, which is undoubtedly often ascribable to consanguineous marriages. He dilates on the beneficial influence of change of air, as instanced by such beneficent institutions as the National Hospital at Margate, in the prevention of blindness from strumous affections of the cornea, and points out that twenty such institutions are at work in Italy.

Myopia, though less important as an immediate cause of blindness, producing, even in Germany, only about 1 per cent. from choroiditis, and probably much less than 5 per cent. from retinal detachment, rightly deserves the important place which Fuchs has assigned to it in his essay, since it is the cause of an enormous proportion of more or less defective sight.

The author discusses very fully the hygiene of school-life, as regards the lighting, the position of the body in writing, and of seats and desks, the best form of type, and the hours of study. It is not too much to say, that this part should be read by every parent and by every teacher.

For the prevention of ophthalmia neonatorum, he advises the instillation of a 2 per. cent. solution of nitrate of silver, after the method of Credé, into the eyes, immediately after the washing of the new-born child. He speaks of the too frequent ignorance and prejudice of midwives. This also is a point upon which information should be widely disseminated among the public in this country, especially since the efforts of the Ophthalmological Society to obtain some legislation have, so far, failed to procure any support from the Government. He agrees with Von Arlt, in considering the granular ophthalmia of adults (sago-grain trachoma and papillary trachoma) to be closely allied to the various forms of purulent ophthalmia. He gives an interesting account of the history and distribution of sago-grain trachoma, with a series of rules for its prevention in asylums, schools, etc.

He holds alcohol, as well as tobacco, to be a cause of toxic amblyopia. As a preventive, he suggests that the cheap forms of alcohol should not be sold, in that they contain a dangerous amount of fusel-oil; and that a high tax should be put upon alcoholic drinks.

In the treatment of injuries, he has a high opinion of immediate enucleation, as a means of preventing sympathetic disease. With regard to the future, he speaks hopefully. He looks to education as a means of diminishing quackery, and making skilled treatment still more effective. He attributes the steady decrease of blindness in England, from 1,020 per million in 1851 to 879 per million in 1881, to more wide-spread knowledge among the people, causing them to seek earlier medical aid. At the same time, he deplores the defective teaching of ophthalmology which especially prevails in this country.

In conclusion, he attempts to emphasise the importance of the subject by a reference to figures. Calculating that, of the 311,000 blind in Europe, only three-fourths require to be supported by others, and that of these only the third part would, had they sight, be earning daily wages, he makes the annual loss, on this account only, to be nearly two and a half millions sterling. When this is added to the cost of maintenance, it involves, to the States of Europe, an annual loss of nearly six millions.

The book is well printed and got up. We wish it a wide-spread diffusion.

DIE MEDICINISCHE PHYSIK. Von ADOLF FICK, Professor der Physiologie in Würzburg. Third edition. Vol. 1, 8vo.; 135 Figs.; 438 pp. Braunschweig: F. Vieweg und Sohn.

As long as medicine consisted of a mass of traditional knowledge, embodied in the writings of Hippocrates, Galen, Celsus, and of their successive commentators, an intimate knowledge of Greek and Latin was as necessary to the practitioner as it is still to the orthodox theologian. But times have changed; the spirit of the experimental methods of investigation pervades medical thought. We no longer look to the "ipse dixit" of the master as the sole standard of truth; we ask for facts, and the proof of facts. The ponderous tomes which once formed the means and end of the physician's knowledge, now rest undisturbed in their dusty sleep. But we have not yet completely outlived the belief that the study of the ancient languages forms the one indispensable preparation to a medical curriculum. The classical education required before a man is allowed to enter upon the latter has, it is true, been reduced to an almost infinitesimal quantity. This is not the place for discussing the absolute value, as an intellectual training, of such a modicum of Greek and Latin, nor of comparing its efficacy to that of a corresponding amount of modern languages. The question which suggests itself in presence of a book on medical physics, is whether mathematics should not occupy the first place in the preliminary training of the future physician. The reasons for answering it in the affirmative are well put in Professor Fick's preface.

The work now before us has for many years been out of print, though its earlier editions had placed it very high in the estimation of physiologists and scientific physicians. In the meanwhile, the demand for it has not been lessened by the publication of other books bearing the same title; and we owe a debt of gratitude to the author for the care he has bestowed on this third edition. A new introductory chapter on the preservation of energy initiates the reader in the great principle which governs our modern views of the physical universe. The first section (Molecular Physics) treats of the fundamental phenomena of cell-life, inhibition, diffusion, filtration, and osmosis. The second deals with considerations of a mechanical order: elastic forces, myographic methods, the geometry of joints, and muscular statics. The chapters on Hydrodynamics contain important disquisitions relating to the physics of circulation, and the registration of wave-movements. The chapter on Sound is short, and furnishes the necessary data for the interpretation of the phenomena of resonance. In the fifth section, the important theories concerning the production of Animal Heat occupy the main place. The author next passes to Optics, explaining the principles involved in the construction and use of the various instruments of investigation used in medicine. Under Electricity, a clear account of the diffusion of the current in conductors is properly given as an indispensable preliminary to the physiological and therapeutical applications of this agent

An appendix on the applicability of the calculus of probabilities t medical statistics closes a book, the contents of which should be mastered by every physician who wishes to establish his physiologica knowledge on a scientific basis, and avoid the many fallacies that beset the use of physical methods in research and diagnosis.

PRACTICAL HISTOLOGY AND PATHOLOGY. By HENEAGE GIBBES, M.D. Third Edition. London: H. K. Lewis. 1885.

THIS work, though elementary in its character, contains a considerable amount of information which is useful to workers with the microscope, even although they may be beyond the pupillary stage. It particularly contains a great deal of valuable information, brought into convenient shape, regarding the ever-increasing list of staining reagents, giving the formulæ for preparation, and explaining very clearly the method by which they are to be used. The methods of cultivating and staining bacteria are also noticed.

Information is given regarding the magnifying power of object-

glasses and eye-pieces; and there are useful tables for the conversion of English measurements and weights into the more convenient decimal system, which is now in common use.

Dr. HENEAGE GIBBES is well known as an enthusiastic and practical worker with the microscope, and any book from his pen, dealing with these matters, can hardly fail to prove more or less useful.

TRANSACTIONS OF THE AMERICAN OTOLOGICAL SOCIETY, EIGHTEENTH ANNUAL MEETING, JULY 14TH, 1885.

THIS number of these well known *Transactions* contains several articles of much interest; amongst others, Dr. Charles H. Burnett discusses the relation between chronic otitis media catarrhalis and chronic rhinitis. Of fifty-five consecutive cases of chronic aural catarrh under his care, he found that forty-seven presented well marked symptoms of hypertrophic nasal catarrh, and eight cases showed equally distinct symptoms of atrophic rhinitis. Hypertrophic and atrophic forms of aural catarrh are, according to this author, associated with these two forms respectively. He rightly lays stress on the importance of examination and treatment of the nasal cavities in aural catarrh; but his definition of hypertrophic nasal catarrh appears to lack precision, for we should not feel inclined to regard simple engorgement of the turbinated bodies in this light.

Dr. St. John Roosa has invented a new term, "presbykousis," for the deafness of old age, characterised by a diminished perception through the bones of the head, comparative loss of hearing-power for the watch, and ability to hear much better or quite well in a quiet place. On page 457, we notice that Gardiner Brown's test of feeling and hearing the tuning-fork is erroneously described as "Lenox Brown's." The volume closes with an interesting paper by Professor Graham Bell, On the Possibility of Educating the Hearing of Deaf-Mutes, followed by a discussion on the same subject. The professor urges the importance of utilising the hearing-power of those who are semi-deaf. The education of the inmates of the Nebraska Institution for Deaf-Mutes by means of artificial aids to hearing has, he says, given such startling results, that now no less than 15 per cent. of the pupils are graduated as hard-of-hearing speaking people, and not as deaf-mutes. The author, among other suggestions, proposes the formation of a central bureau in Washington, for the collection of statistics regarding deaf-mutes.

THE PRESERVATION OF HEALTH, AS IT IS AFFECTED BY PERSONAL HABITS. By CLEMENT DUKES, M.D.Lond., M.R.C.P., Physician to Rugby School; Howard medallist, etc. London: Rivington. 1886.

THIS little book, which is a reprint of the essay for the Howard medal of the Statistical Society of London, for 1884, is now issued for private circulation. It is to be regretted that the many useful hints and information contained in this unpretentious volume should be restricted to the few, since the lessons conveyed are of a nature to render their general dissemination very desirable.

After insisting in a clear and intelligible way on the advantages of cleanliness and temperance in the ordinary everyday occurrences of which life is made up, the author deals in an impartial and scientific manner with the great question of the consumption of alcohol. Although his views are not those of the professed abstainers, the general tenor of his remarks cannot fail to impress the desirability of, at any rate, a very rigid temperance. Many of the fundamental laws which build up sanitary science in its bearings on the individual, his habits and his habitation, are explained fully and simply enough to render it possible for every reader of the book to understand and provide for the execution of the precautions which tend to foster health and prevent disease.

Passing on to more delicate subjects, subjects indeed generally and unfortunately considered so difficult of approach, that few care to treat them except in a style and in a language which must necessarily render them unintelligible to the very class who stand most in need of the advice and information thereby conveyed, Dr. DUKES speaks out his mind courageously on the subject of juvenile impurity, showing how prevalent and how injurious a vice it is, not only in its immediate bearings, but as affecting the moral tone of the after-life. He is sanguine that, would parents do their duty by making use of their particular influence and authority, boys would less readily fall victims to the temptations which will only too surely assail them on their entrance at any large school. That teachers or masters can reasonably be expected to cope with the evil, is not, he says, to be supposed; but that much may be done by the proper persons, he does not hesitate to affirm.

We can congratulate the author on having made a valuable contribution towards promoting the happiness and health of the community at large, and repeat our regret at the restriction imposed on its circulation.

VORLESUNGEN ÜBER PHARMAKOLOGIE FÜR AERZTE UND STUDIRENDE. Von Dr. C. BINZ, Ord. Professor und Geheimer Med.-Rath; Director des pharmakologischen Instituts der Universität Bonn. III Abteilung (Schluss). Berlin: Hirschwald. 1886.

LECTURES ON PHARMACOLOGY. By Dr. C. BINZ.

THIS is the third and last part of Professor BINZ's lectures, the first part having been published in 1884. The author's name is a sufficient guarantee for the scientific rendering of this rapidly progressing subject of pharmacology. Yet Professor Binz does not ascribe too great a part to experimental therapeutics in medical science. At the conclusion of the book, he fairly and judicially sums up the methods by which we may learn, ascribing their proper value to experimental pharmacology, to chemical reaction, and to empiricism. As he well points out, the results of experiments with drugs on animals are but slight indications for their employment in disease, speaking generally; but in many instances they indicate the direction in which their usefulness lies.

The arrangement of the chapters in the book is not in any way special; though, as far as possible, drugs of similar action are grouped together. Dr. Binz has brought the whole width of his extensive reading to the preparation of these lectures; the early empirical writers, as well as the later scientific ones, are quoted. His work is to be considered, not as solely recording his individual opinion, but as giving the results obtained by the best workers. It would, however, be unfair not to add that many of the subjects treated Dr. Binz has made his own. We may give as examples the action of quinine on the lower organisms, and of alcohol in fever. The work is highly to be recommended for those who require a short and scientific account of the action of drugs.

NOTES ON BOOKS.

The Two Foundations of St. Bartholomew's Hospital, A.D. 1123 *and* A.D. 1546. Being an Introductory Address given at a Meeting of the Abernethian Society, October 8th, 1885. By W. MORRANT BAKER, F.R.C.S., Surgeon to the Hospital. (London: Smith, Elder, and Co.)—Mr. Baker has compiled an interesting memoir of no small antiquarian value, certain to be popular amongst the numerous old students of the great City hospital. The work dwells upon the foundation of the Priory of St. Bartholomew by Rahere, and upon the endowment of the hospital by Henry VIII, consequent upon the exertions of Sir Thomas Gresham and other citizens, after the dissolution of the priory by the great Tudor king. The petition of the citizens on this occasion is worded in a manner, which showed that they understood the importance of insisting upon the maintenance of those principles which the founder of a charity intended to be maintained. The citizens urged the king that the City hospitals had been "fownded of good devocon by auncyent fathers, and endowed wt great possessions and rents, onely for the relyeff, comforte, and ayde of the poore and indygent people not beying hable to helpe theymselffs, and not to the maynten'nce of preestes, chanons, and monks, carnally lyving as they of late have doon, nothyng regardyng the myserable people lyeng in the streete." Mr. Baker then gives a summary of the development of the government of the hospital to the present date. The book is elegantly bound and printed.

VACCINATION.—Mr. W. F. Sheard, public vaccinator of the Putney District, has received an award of £15 3s. for efficiency of vaccination in his district, this being his third award.

MEMORIAL OF MR. J. S. NORMAN.—In 1883, Mr. Hugh Green, surgeon, of West Mersea, Essex, presented the parish with a turret clock for the church, as a mark of respect and esteem for the above-named gentleman, his uncle; and, within the last few days, a tablet has been placed in the west wall of the church, bearing the following inscription: "In 1883, the turret clock was presented to this parish by Hugh Green, M.R.C.S.E. and L.S.A., practising here, as a mark of respect and esteem for his late uncle, J. S. Norman, who here, for twenty-eight years, honourably fulfilled the duties of a surgeon, and died A.D. 1860, universally beloved and respected."

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 6th, 1886.

THE LUNACY ACTS AMENDMENT BILL, 1886, IN THE HOUSE OF LORDS.

THE temperate speech with which the Lord Chancellor moved the second reading of the Lunacy Acts Amendment Bill, in the House of Lords, on Monday, affords augury of a settlement of the important objects of the Bill, on better and fairer lines than might have been the case. His lordship paid what we believe to be a well-merited tribute to "the honour, the credit, and the intelligence of the great medical profession, and of the Commissioners in Lunacy."

As to the admission of "private" patients, according to the report in the *Times*, his lordship states that "under the present laws it was possible for an individual totally unconnected with the alleged lunatic, by ties of blood or otherwise, with the assistance of two medical men, to procure the incarceration of an individual for an indefinite period, under the pretence that he was insane." But, is this the case? Do not those who imagine it to be so, leave out of sight altogether the whole machinery of the official visitation of lunatics, and other numerous safeguards against the improper detention of a sane person for an indefinite space of time, as an alleged lunatic? Indeed, there are indications that, in consequence of the attitude which those in charge of private asylums have recently felt compelled to take, the minimum degree of insanity prerequisite to admission to private asylums, is, on the whole, higher than in the case of public asylums.

A change in the law as regards the reception of private patients is eminently desirable, but not solely on the grounds put forth as the *minus* of the present bill, and which refer to the necessity for safeguards against improper confinement of persons supposed lunatic, but really sane. Proper safeguards against this are absolutely essential, but there are other reasons for a change in the law on this point, not touched upon by the framers and supporters of the Bill, whether these are within or without the Houses of Parliament. For matters are at present in a state highly prejudicial to the best interests of the "private" insane patient. Alarmed by several actions at law taken against relatives or other persons who, without fee or advantage to themselves of any kind, have taken upon themselves the thankless and disagreeable office of signing the order of admission of a patient to an asylum—in this, acting as the patient's best friend—relatives of patients have, in many cases, shrunk from performing this duty. Not only so, but, in consequence of actions at law against medical men, and of the existing state of public and judicial prejudice on the matter, numerous medical men in this country have for some time past refused to sign certificates of insanity in any case; and, indeed, if all of them were fully aware how totally unprotected they are when acting in good faith, few or no medical men would now sign such certificates. Hence, in many cases, "private" patients are not now put under care and treatment until every measure of delay has been exhausted, and often not until the curable stage has passed away. Some rather tardy recognition of this appeared in their lordships' debate. But the Bill fails to protect either the relative or friend who signs an order for the reception of a patient, or the medical men who receive and detain such patient; although it provides that no prosecution can be taken against the medical men signing certificates, except by order of the Commissioners, Attorney-General, or Public Prosecutor.

That the order for reception of a private patient must, by the Bill, be signed by a judge, magistrate, or justice, specially appointed, will be widely welcomed as a safeguard. But it is far from being an unmixed good. It will in many cases deter friends from acting, and lead to delay in placing patients under care and treatment, and, in that regard, will contrast unfavourably with the state of things existent until lately: but, it is probable, it will not be productive of more delay than is the inhibiting effect of the present and recent public agitation and litigation. Several of their lordships impugned the good faith of some of those in charge of private asylums, and seemed to have been much impressed by alleged, but unproved, improper detention of patients. Clearly, from the nature of the cases, and of their circumstances, it is to private asylums that most of those insane patients are sent, who, in consequence of their possession of means, of education, and of their familiarity with legal advisers and litigation, are likely to take legal proceedings if they consider themselves to be aggrieved, and are likely to state their cases before a Parliamentary Committee; and yet a number of the cases in which such legal proceedings have been taken, or in which statements as to improper detention were laid before the late Parliamentary Select Committee on lunacy law, were those of persons who had been in public asylums. And after a minute investigation, extending over months, and embracing many cases of alleged improper detention, that Committee, having afforded every facility and publicity for the statement of grievances, reported that no case of improper detention had been made out. To assert that persons are illegally "incarcerated" in private asylums, and that the facts remain in oblivion because such persons are not likely to complain, is to make a facile assumption.

The truth of the matter is, that certain classes of patients—including some who to the ordinary or casual observer appear to be coherent and sane, and yet some of whom are most dangerous to themselves or others—stoutly maintain their sanity, and the illegality of their detention; and it matters not whether they be in private or in public asylums, they resent their "incarceration," as they term it, and are ready to take every means to harass and damage any and every person concerned in their certification, reception, and detention as lunatics. If discharged from a private asylum, whether possessed of means or not, they not seldom seek to act upon this feeling. If discharged from a public asylum, they nurse their supposed grievances, but often feel impotent to move in the matter by legal proceedings. No matter what may be the method of procedure provided by law for placing persons in asylums, and no matter whether it be a

public or private asylum to which they are sent, patients of the type we have mentioned will continue to allege improper detention, and to assert their own sanity, past and present. Abolish private asylums, and let the patients now entering them enter public asylums, and allegations by patients as to their improper detention will not, we fear, be thereby greatly lessened.

One effect of the Bill will be to gradually abolish private lunatic asylums, new licences not being allowed, and no existing ones extended in the future; while measures are taken to compel the justices in all counties and boroughs to build or buy accommodation for private patients, thus creating powerful competitors with the present private asylums. This solution is one which will be generally, but not universally, accepted as satisfactory. Several of their lordships expressed the view that this outlay of ratepayers' money should be carefully regarded; and, considering that, if the project of the Bill be carried out in this particular, nearly every county and borough in the land will be compelled to erect or buy, and thenceforward carry on, a private asylum managed by public officials, and each of these asylums will be briskly competing with every other for what is a very limited class of patients, the likelihood is that the rate- and tax-payers will come out of it rather unfavourably.

Let the subject of abolition of private asylums be thoroughly threshed out before a fairly representative parliamentary tribunal. Then, if it be decided that the private asylum system is an evil, both as regards the interests of the insane and of the general public, let it be abolished, on terms of compensation equitable alike to asylum proprietors and to the general public. Meanwhile, to cast a slur on private asylums, and leave them to the decay of a lingering death, is scarcely the best way to secure that they shall have the services of thoroughly good professional men; for which there has rightly been an expressed anxiety. The proposal to abolish the reception of individual patients by private medical men under license and supervision, is open to many objections.

RESPIRATORY THERAPEUTICS.

THERE is an evident tendency, especially among continental physicians, to react against the system of endeavouring to treat affections of the respiratory organs exclusively by means of medicinal agents, which act on the system at large. It is beginning to be recognised that many, if not most, of these affections are local in their origin and in their course, until indeed the maintenance of life itself is menaced by the acquired incapacity of one important organ. The sooner this view of the pathology of lung-diseases is recognised, the better will it be for the comfort, if not for the cure, of the patient. We may even go a step farther and maintain that, even in lung-affections where the constitutional condition is not without importance, either in their etiology or in their course, much relief may be obtained and improvement effected by a judicious resort to the means which modern therapeutic research and ingenuity have placed at our command.

The truth of what we have advanced is already partially admitted by the profession and by the public, in the limited applications of remedies in the form of vapours or sprays; but this method of treatment merits, and will doubtless obtain, a more thorough employment as a knowledge of its advantages becomes more general. Mechanical difficulties have long stood in the way of the more extensive adoption of the method of direct application to the irritated or inflamed mucous membrane of the respiratory tract; but this can now no longer be alleged as a sufficient reason for its non-employment. That it involves more trouble, and especially more direct supervision on the part of the medical attendant, is not to be denied; but that this increased trouble should be deemed an adequate objection to its administration, can scarcely be allowed. A recent contribution by Dr. Murrell on the subject of pure terebene as an inhalation, shews that the value of such applications is gradually becoming appreciated in this country.

The resources of this branch of therapeutics are more extensive than one is apt to imagine. Not only can constitutional effects be readily and promptly induced when desired, but drugs can be inhaled in the form of a vapour, or in solution as a spray, or in the solid form as an impalpable powder. By these means any desired effect can be produced, anodyne or expectorant, soothing or astringent, or antiseptic; all can readily be directed immediately on to the affected surface, and their beneficial results promptly and certainly obtained. Nor is this all. Thermic therapeutics have been resorted to, ever since the days of Hippocrates as an adjunct to the more ordinary methods. By means of variations in the temperature of the inspired air, the characteristic effects frequently utilised in what we may call external medication may be made to exercise their influence here, and there can be no reason to doubt their efficacy in this case as elsewhere. Then, again, modifications in the composition of the inspired air may be and have been turned to account. The inhalation of a more highly oxygenated atmosphere, or of one more rich in that active form of oxygen, ozone, has during the present century been largely experimented with; and, even if the results have not come up to the somewhat extravagant hopes entertained when Priestley first discovered and promulgated the novel and curious qualities of this gas, enough has been observed and recorded of its influence to justify one in hoping for its further employment in the future.

The most modern addition to this department of therapeutics is perhaps the mechanical treatment of certain affections of the respiratory tract by means of alterations in the pressure of the air. The various apparatus, designed with this object in view, comprise quite an arsenal, from the complicated inventions of Finkler and Koch to the simple accordeon-bellows of Fränkel. On a more elaborate plan, the pneumatic chambers are available, and have been in operation for some years with, it is alleged, eminently beneficial results in a restricted class of cases. We are all of us familiar with the advantages attending a change of air with certain patients and in certain maladies; and it cannot be doubted that much of the good so obtained is attributable partly to the change in atmospheric pressure, in combination with variations in the hygroscopic and electric properties of the respired air. What has been done of late has been with a view of conducting the treatment on a scientific basis, whereby, with careful observation, the credit due to the various factors of pressure, temperature, and composition, can be more accurately determined, and long, expensive, and unnecessary voyages rendered to a large extent superfluous.

The methods of inspiring compressed air or expiring into compressed air have given especially good results in certain cases. The effect of the former is obviously to raise the tension of the air in the lungs, thereby facilitating and accelerating the interchange of gases. The expansion of the thorax is perceptibly increased even in a

ealthy subject; and where the lung is bound down by false membrane, or is otherwise prevented from complete inflation, the increase its vital capacity is as rapid as it is marked. Patients suffering om asthma, chronic bronchitis, bronchorrhœa, or emphysema, often perience great relief from even a single application. The increase of ressure need not and ought not to be very great. From one-sixtieth one-thirtieth of an atmosphere is that most generally employed. It is to be regretted that in this country no facilities exist for stematic treatment of this kind, beyond one or two special institutions; and in this respect we are much behind our continental ethren. In Germany and France the treatment is in full swing, nd is said to be attended with much benefit in those cases where its nployment is indicated. In a country like ours, where bronchial fections form a large and distressing proportion of our troubles, is singularly inappropriate that fresh means and appliances for eatment should be left comparatively untried.

CLINICAL INSTRUCTION AT THE INFECTIOUS HOSPITALS.

WE are able to announce, with great satisfaction, that the Metropolitan Asylums Board has at length reverted to that which was the riginal policy of those at whose instance these organisations were rought into existence. In the article on the Hospitals of the State the *Fortnightly Review*, in which Mr. Ernest Hart drew out the scheme r the substitution of the then scandalously disorganised and neglected orkhouse-infirmaries by a series of Metropolitan State hospitals or asyms, it was an important element of the scheme that such hospitals ould be medically administered, on the basis which experience had ught to be successful in the great hospitals of the metropolis, and at they should be attended by visiting physicians, and thrown open r the purpose of clinical instruction. In this there was a two-fold ject: to secure efficiency and progress in the medical administraon of such hospitals, and to secure them from abuse. Nothing, it as urged, is so effective in inducing progress, and in keeping medical dministration up to the mark, as to put the medical charge of the ards in the hands of visiting physicians of good professional position constant contact with their practising brethren, and holding that sition in the profession which the visiting physicians of metropolitan spitals rarely fail to attain. Not only would in this way a high der of talent, experience, and a progressive eminence be secured in e visiting physicians, and consequently in the medical administraon generally, but it could probably be secured in this way on easier rms than by any other method. Further, it was urged that the mission to the wards of clinical assistants and of medical pupils ould be in every way to the advantage of the patients, who would us have at their service a class and an amount of clinical aid in e recording of cases, and in the watching of their progress from y to day, which could not be supplied by any system of payment ich would not be exorbitant and excessive. Further, the presence the wards of a critical and earnest band of students would be an sensible but ever present incentive to study, and to exertion on the rt of the medical officers.

The first part of these recommendations, that the medical service ould be administered by practising visiting physicians, was rejected Mr. Hardy; not, we hope, a final decision, for we are convinced that horoughly satisfactory medical service will never be attained until this form of administration is secured. It was, however, provided that these hospitals should be open to the clinical instruction of students, and that the students should frequent the wards. This had a twofold object: first, such objects as have been above described; and, secondly, in providing medical students, who are to be the medical practitioners of the future, with such opportunities for the study of infectious diseases as these hospitals afford on a great scale, and such as few, if any, of the metropolitan hospitals are in a position to supply. Even this provision was, however, struck out and repealed at a later date, through the jealousy of the Poor Law Board, which has long acted upon the foolish principle of shutting up its infirmaries and hospitals, and keeping them as much as possible from the public eye, and from the salutary influence of medical criticism. We have repeatedly referred to the unwisdom of that course, and have predicted the inevitable result which must follow. The scandals which attended the Hampstead Hospital inquiry, and other more recent and lamentable events, have shown that our prediction was not without a solid basis of rightly interpreted experience; and it is satisfactory to be able to state that, owing largely to the influence of some of the medical members of the Board, a step has been taken in the right direction, and that at a meeting of the Board on February 27th, Sir Edmund Currie proposed, and Dr. Fowler seconded, a resolution in favour of the adoption of a report containing the following provisions.

a. That, at such of the hospitals of the Board as can furnish the necessary accommodation, gentlemen, who must be registered medical men, be invited to apply for the posts of clinical assistants.

b. That such clinical assistants shall be appointed by the Hospital Committees for a period of three months, and shall reside in the Hospital, paying the sum of 12s. per week each for their board, and the sum of £3 3s. per term as a fee to the Medical Superintendent.

c. That they shall work under and be subordinate to the Medical Superintendent of the Hospital, but in no case be held responsible for the treatment of the patients.

d. That the clinical assistants shall be subject to the regulations in force at the several hospitals.

e. That the General Purposes Subcommittee be instructed to draw up rules and regulations for the observance and guidance of the clinical assistants.

In accordance with the resolution carried, application is to be made to the Local Government Board for an order, authorising the managers to make the several infectious hospitals available for clinical instruction, as contemplated by Section 29 of the Metropolitan Poor Act of 1867.

Dr. Fowler, in his speech, dealt especially on the practical difficulty of medical students, since the abolition of apprenticeships, obtaining any sound knowledge of infectious fevers and small-pox. Hardy's Act had virtually taken away from the London schools the material whence instruction could be practically afforded. In 1884, there were admitted 2,576 cases as infectious fever into the five land-hospitals of the board. Of these, 261, or more than 10 per cent., were suffering from diseases other than fever. In the same year, 6,803 cases were admitted as small-pox into the same five hospitals and into ships. Of these, 99 were suffering from diseases other than small-pox. These 360 cases, in which the diagnosis was faulty, had to be kept in hospital for two or three weeks, for fear that they might have caught the infection in the hospital. Some were so ill, that they never left the hospital again alive. The estimated cost to the ratepayers, Dr. Fowler stated, was 10s. per week for each case, or a total of £540 *per*

annum for the whole 360 cases. It is not, of course, assumed that all errors of diagnosis will ever be eliminated; but it is certain that a more general and practical instruction of students in the symptoms and diagnosis of infectious fevers is exceedingly desirable; and that, if these hospitals be largely utilised, such information will be placed within reach. The larger reform which still awaits to be carried out is the abolition of the present post of medical superintendent as now arranged, and the substitution for it of a resident medical officer, subject to the control of visiting physicians, and the admission of medical students, as such, to the wards of its infectious hospitals. It cannot be pretended that that which works so well in the great voluntary metropolitan hospitals, should not also be incorporated in the constitution of the metropolitan hospital asylums. Special regulations might be necessary, but these could easily be provided. The present resolution is a step in the right direction, but much more remains to be done before the infectious hospitals of the Metropolitan Asylums Board can be placed on a perfectly satisfactory footing, or will have rendered the service which they are capable of rendering, either to their patients, to the training of the medical profession, or to the public at large.

THE Government, it is stated, are prepared to accept Mr. Stansfeld's resolution for the repeal of the Contagious Diseases Act.

THE Public Medical Society of Paris is about to organise a Hygienic Exhibition, in relation to the health conditions of urban and suburban Paris.

THE *New York Medical Record* states that an association has recently been formed in Philadelphia under the presidency of Dr. H. C. Wood, which has for its object the prevention of the imposition of fresh restrictions with regards to experiments on living animals.

IMPORTATION OF SPANISH RAGS.

THE importation into England of rags from Spain has been prohibited by an order of the Local Government Board for a further period of two months from the 1st of March instant.

THE DARENTH SMALL-POX CAMP.

THE Court of Appeal has held that the small-pox camp at Darenth did not injure the adjoining property, and upholds Justice Pearson's judgment, refusing Mr. Fleet an injunction. A full account of the decision is given on another page.

CHOLERA PROSPECTS.

THE Minister for War has despatched some engineer and medical officers to the Porquerolles Isles, to arrange for the reception of 1,000 sick and wounded men from Tonquin. The Mayor of Marseilles has received official assurances that the troops returning from Tonquin will not be landed at Marseilles or at Toulon.

MINUTES OF THE MEDICAL COUNCIL.

THE volume of minutes of the General Medical Council, for the year 1885, has been issued with commendable rapidity, and in a very complete form, by Messrs. Spottiswoode and Co. It contains an unusual amount of interesting information, especially the detailed statistical report regarding medical students, with tables and diagrams. The tabular statements as to visitations of examinations are also of much interest. They show the fees and expenses of visitation exclusive of printing, in their gradually ascending ratio. In 1866-7, £172 was spent in visiting six universities and five corporations, by twelve visitors. In 1885, £2,030 was spent by nine visitors, in visiting ten universities. But for these costly visitations, and the long-spun and dreary discussions of the Council, they would find it difficult to spend more than a very small proportion of the money which they annually receive for registration fees. The registration is the only part of the Council's work which is really well done for which the profession receive any valuable return, and it costs only a fraction of the amount received.

THE CROONIAN LECTURESHIP.

IT may be remembered that, owing to the great increase in the annual income of the Croonian Trust, the Royal College of Physicians have had for some time under consideration the question of turning this "unearned increment" to good account. We understand that the matter is now engaging the attention of a Committee of the College, who have drafted a scheme which would provide, not only for the delivery of a course of lectures, but also for the prosecution of original researches in clinical medicine.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of this Association was held at Bethlem Hospital on February 24th; Dr. H. Rayner in the chair. Dr. Mickle read a paper on "Some Abnormal Forms of Breathing;" and a paper by Dr. Savage was also read, on the subject of "Drunkenness in Relation to Criminal Responsibility." In the discussion upon the latter paper, the opposite views held by judges in recent cases were remarked upon as leaving the present legal aspect of the subject in an unsatisfactory state.

THE METROPOLITAN PROVISION FOR INFECTIOUS CASES.

AT the last meeting of the Metropolitan Asylums Board, a letter was read from the Local Government Board, on the subject of the managers undertaking the duty, on payment from the vestries, who are the "sanitary authorities" to whom the duty of providing infectious asylums for the non-pauper classes is committed, of providing for such cases. The Local Government Board allowed and approved the terms of an agreement with the vestries for the care of these classes, but stated that the department had no power to compel the vestries to enter into agreements for the care of non-pauper patients.

GERMAN MEDICAL CONGRESS.

THE fifth German Medical Congress will be held at Wiesbaden on April 14th-17th, under the presidency of Professor Leyden, of Berlin. The pathology and treatment of diabetes mellitus, the operative treatment of pleuritic effusions, and the treatment of syphilis, are the principal subjects chosen for discussion. The last-named subject will be introduced by Professor Kaposi of Vienna; the discussion on diabetes will be initiated by papers from Dr. Stokvis of Amsterdam, and Professor Hoffman of Dorpat. Professor Ziegler has chosen an interesting subject, the transmission of acquired pathological peculiarities; and Professor Brieger will again take up the subject of ptomaines.

INOCULATION FOR YELLOW FEVER.

NEARLY eighteen months have now elapsed since Dr. Domingos Freire, of Rio Janeiro, announced that he had succeeded, with the assistance of M. Rebourgeon, not only in cultivating a very peculiar micro-organism, which he supposed to be the cause of yellow fever, but also, by a method which was not disclosed, in so diminishing the virulence of the organism, that its cultivation could be employed as a preventive. Many hundreds of persons, it was said, had been thus inoculated, and none had suffered from the disease to which they were freely exposed. The statements, important as they would be, if confirmed, were supported by so small an array of facts that they have not been generally accepted. The *New York Medical Record* announces that the President of the Louisana State Board of Health is using his best endeavours to induce the legislature of the United

tes to appoint a commission to inquire into the question, and it is y much to be hoped that he may be successful. Either Dr. Freire's servations are correct and very valuable, or they are incorrect and rse than valueless. In either case, an impartial investigation is ially to be desired.

YELLOW FEVER AT RIO DE JANEIRO.

CORDING to the latest advices from Rio de Janeiro, yellow fever, ich made its appearance there in November last, has since then n rapidly spreading, and is now very seriously prevalent. Many ths are said to occur daily. The port sanitary authority of Liver- l have recently received a communication from the Local Govern- nt Board directing their attention to these circumstances, and ging special and careful inquiry by the medical officer of health as sickness of any kind that may have occurred on board vessels iving from Rio.

HOME NURSING.

IS valuable system, which will greatly diminish the pressure on pitals and demands for gratuitous aid, is being developed in many ts of London. At the fifth annual meeting of the North London rsing Association, which undertakes to provide trained nurses to it the homes of the poor in North London, it was reported that ring the past year 2,194 visits on an average had been made to the nes of poor persons, by the staff of nurses belonging to the associa- n. There had been a falling off in the number of donations, but, the other hand, the costs of the visits had been diminished by a ct system of economy. The continued appreciation of the valuable p rendered by the nurses to medical men, was seen in the increase he number of those gentlemen who had sent cases, namely, 120, as inst 92 in the previous year. The total number of medical men ler whom the nurses had worked during the year, was 204.

A TEACHING UNIVERSITY FOR LONDON.

E Executive Committee of the Association for Promoting a Teach- University for London, have recently issued a report describing proceedings, and detailing its proposals in their present shape. ese proposals are essentially the same as those which have already n many times stated and discussed in these pages: Faculties con- ing of teachers, Boards of studies elected by the Faculties, and a erning senate or council partly elected by the Faculties, and partly inated by the educational institutions included within the system he University, is the general plan suggested. The Committee, it uld seem, have not yet abandoned the hope that the existing Uni- sity may so far enlarge its borders, as to include the new univer- as a separate "teaching side," and an opinion is expressed very ngly unfavourable to the scheme which proposes to give to the al Colleges of Physicians and Surgeons, acting conjointly, the right grant degrees in medicine. "Such a severance of the machinery granting degrees in London from general academic influences," ld be, it is said, "most inadvisable, especially at a juncture when, suitable alliances and co-operation, a wider and worthier scheme graduation in arts, science, medicine, and laws, might be adopted."

DEATH FROM CHLOROFORM.

AD death from this anæsthetic formed the subject of a coroner's iry, on Tuesday last, at Swansea. The evidence tendered to the t showed that Lady Flora Wilmot took chloroform on Monday rnoon, for extraction of a tooth. The anæsthetic was adminis- d by Mr. Fry, and the tooth removed by Mr. Scott. Both these tlemen stated that the deceased seemed to be in good health, and previously taken a similar dose of two teaspoonfuls of chloroform a like purpose; she was unconscious for twenty minutes, and then This is another of those unfortunate occurrences which should e to enforce upon practitioners called upon to administer an anæs- ic, the desirability of carefully adjusting the vapour to the case for which it is used. The experience of all administrators of repute undoubtedly points to the conclusion, that chloroform is not a safe anæsthetic for use with adult patients; and the pages of this JOURNAL have for years teemed with instances of death during its administration. For the extraction of teeth, and other equally brief operations, nitrous oxide gas seems to be the best anæsthetic now known, but there is the difficulty that its use necessitates a special apparatus; which, for gentlemen who are rarely called upon to employ it, is a serious drawback to its usefulness. The next best anæsthetic for those who desire the least possible apparatus is perhaps the A.C.E. mixture: which, for the sake of those who have not yet used it, we may say is composed of one part (by measure) of alcohol, to two parts of chloroform, and three parts of pure ether, making altogether six parts. It may be administered on flannel, lint, or a handkerchief precisely as is chloroform. Its only drawback appears to be, that it is a little slower in its action than is chloroform alone; but, at the same time, it improves rather than depresses the pulse. And those who use it do not generally care to revert afterwards to the use of pure chloroform. The liquid should be mixed just before its employment.

THE EXPENSES OF THE HOSPITAL SATURDAY FUND.

A STATEMENT, prepared by Mr. R. Frewen, the secretary, shows that the organisation had, during the twelve years of its existence, distributed £74,271 among the hospitals, dispensaries, convalescent homes, and surgical appliance societies of the metropolis. In 1874, when the fund was started, only £6,141 was collected, and six years afterwards there was merely an addition of £11; but, in 1885, the receipts had increased to £11,192. The awards advanced from £4,494 in the first year, to £5,250 in the sixth, and £9,500 in the twelfth year. The percentage of expenses to awards was 35.20 in the first four years; 18.30 in the second four years; and in the last four years 14.50. At the last meeting of the Council, Mr. A. F. Swain moved a resolution declaring that the delegates "viewed with regret the continued heavy working expenses of the fund, and recommended the immediate formation of a committee to inquire into the causes of this." He held that it would be found practicable, upon investigation, to reduce to some extent nearly all the heads of expenditure; and remarked that the present cost of management evoked adverse criticism among workmen in the various London workshops, deterring many from subscribing. The Chairman of the Council said that body were earnestly endeavouring to reduce the expenditure. He concurred in the opinion expressed at the last general meeting, that the expense of the movement was a disgrace to it, and ought by all means to be reduced. Mr. Bunn said that inquiry was needed, and he proposed an amendment—which was accepted by Mr. Swain, in lieu of his resolution—instructing the Council to investigate the working expenses, with a view to the reduction of the cost of management, without impairing the efficiency of the work done. This was unanimously adopted.

CANVASSING AT THE ROYAL BENEVOLENT MEDICAL COLLEGE.

WE have before us a copy of a circular addressed to the governors of the Medical Benevolent College, once more deprecating the system of canvassing for votes, which was denounced by 2,728 governors in 1879, as leading the candidates and their friends into an unnecessary and often fruitless expense, and too frequently resulting in the election of persons assisted by money or influence, in preference to the most friendless. After full debate, both in annual meeting and in council, it was resolved definitely to discourage this system of canvassing, and to appoint a responsible committee of examination, whose duty it should be each year to carefully investigate the relative claims of those who have been admitted by the Council as candidates, whether for pensionerships or foundation scholarships. It was further their duty to select from each class a number of names equal to the number of vacancies in each class, being the names of those who, after thorough investigation of the circumstances and claims of every candidate

should be found to be most deserving of the support of the governors and subscribers. The Council has loyally carried out both the letter and the spirit of these resolutions. Gradually, however, the governors seem to have allowed themselves to forget the responsibilities of their position, and to yield to the importunities which they had condemned, and by their weakness to assist in allowing the old system of costly canvassing, with all its cruelties and injustice, to rear its head again. The evils of canvassing for election at charities are universally acknowledged. The result of this practice is to insure the election not to the worthiest cases, but to those which happen to have most influence, or which have at command a sum of money which shall enable them to repeat their importunities, and to press their cases upon the notice, in preference to others more needy, more suffering, and more deserving. A vigorous canvass on behalf of certain candidates possessing influential friends, and having the command of money, last year deliberately excluded from the benefits of the charity five out of eight of the cases which, after careful comparative investigation by an independent committee, had been declared to be those which had the strongest claims upon the benefits of the institution. We would once more urge that the governors of the Medical Benevolent College should consistently refuse to lend their names as referees, or as recommending any case, except upon the understanding that such names shall not be put upon any card which is to be used in defiance of the rules of the charity, for public canvassing; and, indeed, if the system is to be repressed, the co-operation of the governors ought to be counted on to treat any resort to this evil practice as in itself a disqualification for their votes.

BRAIN-SURGERY OF THE STONE-AGE.

On Wednesday, March 3rd, in the Botanical Theatre of University College, Professor Victor Horsley delivered an address to the Medical Society on the "Brain-Surgery of the Stone-Age;" the President, Dr. Sidney Martin, being in the chair. After giving a short account of the discoveries relating to the dwellings of the human race of the stone-age, the lecturer proceeded to discuss the evidence of the operations performed on the skull at that time. Photographs, showing the skulls in which trephining had been performed, were exhibited; and the arguments for and against the consideration of these openings as trephine-apertures were brought forward. Professor Horsley mentioned the fact that many of these apertures were in the part of the skull over the motor area, and hazarded the theory that the operations were done chiefly for traumatic epilepsy.

POPULAR LECTURES ON THE LAWS OF HEALTH.

The National Health Society is doing good service to the public by encouraging the delivery of courses of popular lectures on the Laws of Health. The course of lectures at the Paddington Baths, opened lately by Sir Andrew Clark, and delivered by Dr. Schofield, of which we spoke last week, has been followed by an examination; and the presentation of three prizes and several honorary certificates, took place last Tuesday evening, after an address by Sir Spencer Wells, who commented on the very remarkable fact that these lectures had been attended by more than seven hundred persons, about two-thirds of the students being women. He added that a still larger proportion of women had come up for examination, and, of the thirty prizes and certificates, all excepting two had been gained by women. After some remarks on Mr. Goschen's recent address at the Mansion House, on Reading, Hearing, and Thinking, Sir Spencer said that, in the lectures encouraged by the National Health Society, a good deal more was done to make hearing a lecture more useful than merely reading one, than Mr. Goschen had contemplated; for examination and practical demonstration were added to the lecture. The student not only heard, but was made to think by questions, and to show not only that he knew how many useful things were done, but that he could himself do them properly. Not only must he prove that he had acquired knowledge, but that the knowledge was exact and accurate, and ready for use in an emergency. After presenting the prizes and certificates, and congratulating the young men and women who had obtained them, Sir Spencer urged those who had not been successful not to be discouraged by one failure, but to determine by continuous efforts to obtain success hereafter; to become more useful members of society, and to devote some part of the leisure not required for the restoration of the energy necessary for daily work, to the acquisition of the knowledge of the laws of health, which must be useful to themselves, their families, and their neighbours, and which must strengthen that bond of sympathy and fellowship which is so comforting to all who suffer, and which, while making our young men and women healthier and wiser, also makes them happier and better.

NEWSPAPER CURES.

As a proof of the old adage, that "the wish is father to the thought," we are pleasurably startled now and again with the announcement, in the newspapers, that a cure has been discovered for that fell disease the Saxon bane, consumption. This announcement comes round with about the same regularity as that of the famous sea-serpent, whose remains, if the animal could only be caught, would meet with a cordial welcome in our museums of comparative anatomy. These alleged remedies generally reflect, to some limited extent, the then current views as to the pathology of this terrible affection, and they thus secure for themselves a share of the popularity which almost invariably surrounds the last new hypothesis, until by-and-by they die a natural death, sometimes after having diverted a certain quantity of pecuniary benefit into the pockets of the ingenious authors of the respective "cures." We are all familiar with the gushing accounts in the daily papers, especially those which affect sensation concerning some new hypothesis, which, from a very germ or embryo, is developed into a full-grown adult discovery. To it is attributed all the power for good, and all the authority, which attach to remedies whose usefulness has been attested by clouds of medical men and patients. Koch discovers a crooked organism in the intestines of cholera patients, and forthwith cholera is no more; he lights upon another in connection with tuberculosis, and behold the problem is solved—in the newspapers. The difficulties, the doubts, the uncertainties, all are forgotten in the would-be accomplishment of a "consummation devoutly to be wished." During the past week, however, we have been treated to a more novel phase of this tendency, and one possibly more open to criticism than the majority of such effusions which interest and may even amuse, while they can scarcely do any harm. Within a few days of the appearance in a lay contemporary of a sensational article on the reported good results obtained in one or two cases of phthisis by the inhalation of the spores of the "bacterium termo," by an Italian physician, a letter is published in the same journal from a medical gentleman, named Lambert, residing in Liverpool, in which he claims to have effected—or rather partly effected—the cure of a very advanced case of phthisis. So eager is this eager benefactor to give the world the benefit of his experience, that, unwilling to lose valuable time in checking the results by even one other observation, or even in completing the cure of the case he has in hand, he rushes into print with an enthusiastic and glowing account of the wonders he has achieved. That his conduct is irregular and open to misconstruction, he candidly admits; but he conceives his indebtedness to the writer of the article on the subject to be so great, that he is unable to restrain himself from proclaiming it *urbi et orbe*, and substantiates his assertions by appending his name and address. His excuse for thus deviating from the more usual course is that "tears may be dried, sorrows soothed, hopes revived, and lives saved," by means of this new bacterium which he finds of such "thrilling interest and great promise." We shall await the sequel with some anxiety, not so much, indeed, the results of this gentleman's further experience, for the subject is being investigated by men whose zeal and ability are probably at least equal to his own, less his *ad captandum* style, but to know exactly what

nion to form as to the judicial wisdom of the author of this won-ful semi-cure, who prefers confiding the results of his reflections, afessedly immature and inconclusive, to the general public, rather an, by judicious and systematic inquiry, aiding in the dissemination d verification of what should be, according to his views, a great ad-nce in the treatment of phthisis.

SIR J. FAYRER ON CHOLERA.

a lecture by Sir Joseph Fayrer, on Tuesday evening, to the Young n's Christian Association, Exeter Hall, he traced the history of olera from ancient times to the present, described its characteristics d the peculiarities of its incidence in the various countries of the rld, and pointed out what were regarded as predisposing causes, narked that there were several theories as to the origin and causes the disease, but none of them satisfactorily explained all the phe-mena. But though the real cause of cholera was still unknown, t the laws which affected its production, development, and diffusion d been so far ascertained by observation that, happily, the measures which its progress might be stayed and its fatality mitigated were w sufficiently well known as to come well within the scope of sani-y work. Hence all were agreed as to the preventive effect of easures of sanitation. Sir Joseph Fayrer rejected the theory of con-gion by personal intercourse, and therefore condemned in strong ms the inutility of all coercive measures of quarantines and cordons. he British and Indian Governments, who based their action in the tter on well ascertained facts, had wisely discontinued all quaran-e measures on both sea and land, and relied solely upon sanitary ws. He dwelt upon the importance of personal hygiene. Good ntilation, perfect drainage, prevention of overcrowding—all those ings should be secured in every town and village in the country. he more perfect their sanitary precautions were, in short, the more mplete would be their protection and immunity from cholera. Ex-rience and inquiry had shown on the other hand, how futile coercive easures alone had proved to cope with the disease ; for where insani-tion prevailed, there the disease assuredly found favourable means development. He regarded it as a grave defect in our sanitary laws at so much in this respect was left to individual effort, and con-nded that in those circumstances it became the duty of every intel-gent man and woman not only to observe the necessary conditions of otection themselves, but to make it clear to their neighbours that in e full and complete observance of sanitary laws alone was to be und an efficient safeguard against cholera.

OBSTETRICAL SOCIETY OF LONDON.

T the meeting of this Society, on Wednesday evening, March 3rd, e President announced that it was intended to publish, in future, a sciculus of the proceedings, and that it would be at the option of a llow to order either the fasciculi, as they appeared, or the complete arly volume of the *Transactions*. Dr. Barbour demonstrated a fine ries of frozen sections from subjects which had died in the early rt of the first stage of labour, in the third stage, and shortly after e conclusion of the process of parturition. The attachment and tachment of the placenta, and other important factors in relation to egnancy and childbirth were discussed, in relation to the appear-nces displayed by Dr. Barbour's preparations. Dr. W. S. A. riffith exhibited a specimen of tubercular disease of the Fallopian be, and a microscopic slide showing bacilli in a tubercular mass om the tube. Dr. Horrocks observed that he had seen a case of bercle of the tube, spreading to the peritoneum, where Dr. Good-rt and himself had no doubt that the tube was the primary seat of sease. Dr. Champneys showed, preserved in a stoppered glass-tube, me pellets of chloride of mercury and chloride of ammonium, ready be dissolved in water, for antiseptic washings. Dr. Matthews uncan observed that the mercuric salt was decomposed in London ater, and rendered useless ; glycerine was a better solvent. Dr. Lewers exhibited an uterus removed entire, on March 1st, for cancer of the body. Dr. Playfair submitted to the inspection of the Society, an ingenious calculating rule, designed by a gentleman, for the precise reckoning of the date of labour. Dr. Godson showed a double monster of the syncephalic iniops variety. The only paper which was read, was an interesting contribution by Dr. Lewers, on a case of circumscribed sarcoma of the uterus and vagina.

CLINICAL SOCIETY.

THE papers read at the last meeting of this Society were, as our report of the proceedings published at another page will show, chiefly of surgical interest, though the two cases of abdominal obstruction should not escape the attention of physicians. The first paper gave particulars of a case of traumatic inguinal aneurysm, with rupture of the sac, for which Mr. Mansell Moullin tied the common femoral and external iliac arteries, the one below and the other above the sac, with complete success. Mr. C. Symonds detailed the second case, which was one of aneurysm occurring in a stump, resulting from Gritti's amputation. Upon the formation of the aneurysm, the superficial femoral artery was first legatured, the aneurysm then cut into, and the vessel tied above and below the sac. The patient recovered. Mr. Symonds, in his subsequent remarks on the case, took occasion to observe that secondary hæmorrhage from a stump was, in his opinion, due to inflammation and endarteritis, and the softening of the wall of the vessel consequent thereon. If this opinion be correct, and Mr. Bryant remarked that it had his concurrence, the lessened suppuration from all wounds under modern surgical methods may be expected to diminish the frequency of secondary hæmorrhage. That this anticipation is likely to be verified, one fact noticed by Dr. Goodhart renders highly probable. He stated that, during the last six years, there had been no case of death from secondary hæmorrhage at Guy's Hospital, and he attributed the circumstance to the present lessened suppuration in surgical cases. Dr. Goodhart next related particulars of a case in which intussusception of the upper part of the jejunum had existed for twenty-one months, with periodical attacks of vomiting, abdominal pain, progressive wasting, and a movable tumour which simulated somewhat a floating kidney, but underwent rhythmic contractions, and was obviously some part of the intestine. The patient never had serious constipation, and never passed blood from the bowel. She was to be admitted to hospital for active treatment, when she died from the exhaustion of the continued vomiting. It was subsequently found that the intussusception was associated with, and probably caused by, large polypoid growths into the jejunum. Mr. A. E. Barker lastly detailed a very interesting and most successful case in which a male, aged 23, had acute intestinal obstruction, followed by acute general peritonitis. Mr. Barker performed abdominal section. The intestine was traced upwards between the fingers until, at the middle of the jejunum, a loop highly inflamed, distended, and ecchymosed, became suddenly unravelled. It was not seen *in situ*, but, from all the attendant circumstances, was supposed to have been implicated in a volvulus. The whole cavity of the peritoneum, which contained a non-odorous gas and large quantities of inflammatory serum, was carefully mopped out with carbolised sponges, passed on long holders into every recess. The patient improved at once, and eventually recovered, though, through an error in diet on the ninth day, vomiting was produced, during which the upper two-thirds of the wound were burst open, and a knuckle of intestine protruded, which was washed by Mr. Barker under the carbolic spray, and replaced after the abdomen and wound had been again wiped out. Mr. Bryant stated that he also considered the existence of acute peritonitis no bar to the operation of abdominal section, and instanced ovarian surgery as affording proof of the soundness of his views, for in ovariotomy the existence of suppuration is certainly not held to warrant withdrawal from the operation. Mr. Barker's case, and the many other instances of successful abdominal surgery now rapidly accumulating, all tend to show that

another domain, formerly considered to be almost entirely appropriated to the physician, is being cautiously but surely won over to the regions over which the surgeon holds nearly unchallenged sway.

DEATH OF MR. COOPER FORSTER.

It is with deep regret that we have to record the somewhat sudden death of Mr. J. Cooper Forster, M.B., ex-President of the Royal College of Surgeons, in his sixty-third year. That distinguished surgeon had been staying with his family at Cannes, and, towards the end of last month, he began to feel indisposed. Early last week, he left Cannes, and was submitted to intolerable annoyance in the railway-journey through France. To be closely confined for over twenty-four hours in an overcrowded carriage is sufficient to entail serious fatigue on a person in good health. To Mr. Forster, this discomfort proved more or less directly fatal. He arrived on Wednesday, February 24th, in London, and felt better on the Thursday, but, on Friday, serious symptoms arose, and his family were summoned to town by telegraph. Notwithstanding the assiduous attention of Drs. Wilks and Habershon, Mr. Forster died at four o'clock on Tuesday morning. His illness bore the symptoms of typhoid fever. He was throughout his life known as an accomplished surgeon of very agreeable social qualities, identified heart and soul with Guy's Hospital, to which he was for many years attached. In 1881, he resigned his appointment as Surgeon, as he and Dr. Habershon, who also voluntarily severed his connection with the hospital, felt that they could not with dignity submit to certain new regulations enforced by the treasurer and governors. Mr. Forster wrote a well known work on *The Surgical Diseases of Children*, and contributed largely to the transactions of societies. We shall speak more fully of his labours in a future number of the JOURNAL.

ABNORMAL SYNOVIAL CYSTS.

In the twenty-first volume of the *St. Bartholomew's Hospital Reports*, Mr. Morrant Baker continues certain observations which he made in a previous volume on the formation of abnormal synovial cysts in connection with the joints. Mr. Baker had noted that in cases of effusion into the knee-joint, especially in osteo-arthritis, the secreted fluid may find its way out of the joint and form a synovial cyst, through distension of neighbouring parts. This cyst may lie in the popliteal space and upper part of the calf, or entirely in the calf, towards the inner aspect of the leg and far from the knee-joint. Fluctuation may not be communicable from a large cyst of this kind to the knee-joint, but it is found that the absence of this fluctuation does not prove that the cavities of the joint, and the cyst do not communicate with each other. These cysts tend to disappear, without leaving traces of their appearance, and should not, as a rule, be operated upon. They are sometimes observed by the patient before the primary joint-disease. Mr. Baker's further researches have shown that cysts of this class are also formed in connection with the shoulder, elbow, hip and ankle joints, as well as with the wrist. These abnormal cysts are found a little below the clavicle, or in the upper arm near the biceps; above the internal condyle of the humerus, in the upper part of Scarpa's triangle, in front of or external to the ankle, and either in front of or external to the wrist. The apparent want of direct communication between the joint and the cyst is frequently deceptive, and increased experience has rendered Mr. Baker yet more inclined to advise against operative proceedings.

ABSCESS OF THE LIVER FOLLOWING PELVIC CELLULITIS.

Dr. E. W. Roughton has recently described an interesting case of this rare complication in the last volume of the *St. Bartholomew's Hospital Reports*. A woman, aged 25, married one year, but never pregnant, was seized with pain in the hypogastrium and back, vomiting and dysuria, on May 14th, 1885. The symptoms of pelvic cellulitis developed in a few days. The cervix uteri was found to be ar back in the pelvis, and in front of it lay a dense mass of tender induration, only slightly displaceable. The swelling increased, and albuminuria set in; pus also occasionally appeared in the urine. On June 20th, the patient complained of pain in the lower part of the right side of the chest; there was slight pleuritic friction over the painful area. On July 1st, there was fulness and tenderness in the hepatic region, and an abscess of the liver was suspected. On July 11th, ten ounces of pus were removed by aspiration; four days later, no improvement having followed the tapping, a free incision was made into the abscess. "After the anæsthetic had been stopped for about five minutes, and whilst the dressings were being adjusted, she suddenly ceased breathing, and although artificial respiration was vigorously performed, she did not rally." At the necropsy, three large abscesses were discovered in the substance of the liver; only the most superficial had been opened. A dense mass of inflammatory deposit surrounded the uterus, and the right ovary contained about two drachms of pus. The base of the right lung was collapsed, and its pleura slightly roughened; the intestines showed no signs of ulceration (the patient had suffered from typhoid fever in August, 1884), and all the other viscera were healthy, nor were any abscesses found in the joints or subcutaneous tissues. Dr. Roughton has seen another case of hepatic abscess following pelvic cellulitis. It is hard to see why there should be the slightest doubt about the abscess being a complication, and not a pure coincidence.

SCOTLAND.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.

The number of patients treated in the Sick Children's Hospital during February was 111, of which 48 were new cases received during the month. There were 406 patients treated at the dispensary, and 8 were vaccinated, making in all 525 cases that received treatment at or in the hospital during the month.

MATERNITY HOSPITAL, EDINBURGH.

During the year 1885, there were confined of children, in the wards of the Royal Maternity and Simpson Memorial Hospital, Edinburgh, 272 women, an increase of nine on the previous year; while the out-door cases numbered 633, as compared with 602 in 1884. Forty-four nurses were trained during the year, the same number as in 1884. At the annual general meeting (the forty-first in the history of the hospital), held in Edinburgh on Tuesday, presided over by the Lord Provost, and numerously attended, the reports were submitted and approved. Unfortunately, the expenditure continues to exceed the ordinary income, and will continue to do so until the permanent income of £800 is secured. The total income for the year was £820, but this included £213 of legacies; the expenditure amounted to £750. The vacancy on the staff, caused by the death of Dr. Angus Macdonald, will lead to the promotion of one of the assistant-physicians, and the vacancy thus created has already several candidates in readiness for it.

EXTENSION OF MARISCHAL COLLEGE, ABERDEEN.

The Plans Committee of the Aberdeen Town Council have generally approved of the plans of the proposed extension of Marischal College. It is not intended that the work should be proceeded with for some time.

ABERDEEN ROYAL INFIRMARY.

The Royal Infirmary Committee have agreed to recommend to the Court of Managers, that the infirmary medical staff be increased by a medical officer for diseases of women, and one for diseases of the skin, two assistant-physicians, one assistant-surgeon in addition to the fourth surgeon, a surgeon for diseases of the ear, and two additional resident physicians, to be called respectively house-surgeons and house-physicians. They have also decided to recommend that the

dical staff should meet together as a medical committee at least e a month, and report on such subjects as the Committee of anagement may request their opinion on, and on any matter which ey may desire to bring under the Committee's notice.

HAIR OF INSTITUTES OF MEDICINE (PHYSIOLOGY) IN ABERDEEN.

E believe that several candidates have intimated their intention to ply for this chair when it is declared vacant, which, we understand, ll not be for some time. The candidates, so far, are Drs. Noel ton and Ashdown of Edinburgh, Professor Haycraft, of Birming- m; Dr. Macgregor Robertson, of Glasgow; and Dr. J. A. McWil- m, of University College, London. No election can take place til Professor Stirling resigns. The patronage is vested in the own.

OUTBREAK OF SMALL-POX AT WOODSIDE.

Woodside, a village near Aberdeen, a somewhat serious outbreak small-pox has occurred. Three women have been attacked in one ek, and the infection is believed to have been caught from a bale rags which the women were working with in connection with the per-works situated there.

SMALL-POX AT QUEENSFERRY.

E outbreak of small-pox at Queensferry, which occurred some little ie ago, rendered necessary special accommodation, and the local hority combined with the Forth Bridge Works in fitting up a ship, *Hugomont*, as a hospital. At a meeting of the local authority d on Monday, it was stated the fitting-up of the *Hugomont*, and ier expenses, amounted to £500, and the hospital was carried on at weekly outlay of about £25. Dr. Hunter reported that there were n 23 patients on board the ship, 10 of whom were convalescent, t another was about to be removed there. There were also 3 cases ng treated at home, 1 at Dalmeny, and 2 at Queensferry.

IRELAND.

AN amateur concert will be held on March 8th, in aid of the funds the County and City of Cork Hospital for Women and Children. lebt of about £400 is still due on the building-fund, and it is to be ed that the institution, which has so many claims for support, l soon be free from the debt which has been incurred.

THE MEATH HOSPITAL.

EIR Excellencies the Earl and Countess of Aberdeen visited this pital last week, and were conducted over it by the members of the iting staff and some of the governors.

ADDRESSES TO THE LORD LIEUTENANT.

's Excellency the Lord Lieutenant received a deputation from the ig and Queen's College of Physicians in Ireland last Saturday, and from the Royal College of Surgeons in Ireland on Wednesday, en he was presented with the usual addresses from these bodies, tomary on the arrival of a new lord lieutenant in the country.

THE DUBLIN HOSPITALS COMMISSION.

E sittings of this Commission were resumed on Monday last. Wit- ses connected with Mercer's Hospital were examined, who gave evi- ice in reply to charges made against the management of that insti- ion, chiefly by one of the members of its medical staff and board governors.

BELFAST ROYAL HOSPITAL.

a quarterly meeting of the committee, held last week, bequests l donations amounting to £1,071 were acknowledged. The Board reported that the Consumptive Hospital, at the Throne, was publicly opened by Mr. Foster Green, for the reception of patients, on December 1st last, and that all the beds were occupied. Dr. Lindsay, assistant physician of the Royal Hospital, has been appointed to the medical charge of this department. The Board call attention to the fact that Mr. F. Green has offered, at his own cost, to build a new wing to the Throne Hospital for consumptive patients, on condition that £15,000 is raised for the endowment of the wing during the next two years. Towards raising this sum, £1,550 has been promised; and Mr. Green, in order to stimulate the work, has promised £500, if the whole sum be raised in six months. During the quarter now ended, it had been decided to create a department of pathology in connection with the hospital; and, at a special meeting of the General Committee, held on December 14th last, Dr. Henry Burden was unanimously appointed pathologist, and has since entered upon his duties.

HEALTH OF DUBLIN DURING 1885.

DURING last year, the births registered in the Dublin Registration District numbered 10,144, equal to 29 per 1,000; and the deaths 10,022, or 28.4, against an average rate of 29.4 for the preceding ten years. The deaths from the principal zymotic diseases amounted to 1,096, equivalent to a rate of 3.1. Two deaths from small-pox were registered during the year, being the only deaths recorded from this disease in the district since May, 1881. Measles caused 296 deaths, or an increase of 269 as compared with the preceding year; scarlet fever, 178, against 191; fever, 237, or 65 below the average annual number for the ten years previous. The deaths from whooping-cough numbered 191, or an increase of 59; diarrhœa and dysentery, 190, or 75 below the average. Cerebro-spinal fever caused quite an epidemic, and 52 cases terminated fatally, the remaining deaths from zymotic affections including 40 from erysipelas, and 27 from diphtheria. The mortality from phthisis amounted to 1,273, while diseases of the respiratory system caused 2,055 deaths, which included 1,288 from bronchitis, 423 from pneumonia, and 59 from croup. Apoplexy caused 153 deaths; epilepsy, 56; mesenteric disease, 220; tubercular meningitis, 258; and cancer, 175.

MEDICAL REFORM.

THERE is, we understand, increasing reason to believe that the Government will deal with the question of Medical Reform. Lord Spencer and Sir Lyon Playfair are both well acquainted with the difficulties of the question, and with the nature of the numerous obstacles which have stood in the way of the success of previous measures. There is, it is stated, some probability that a comparatively short and simple measure, dealing with the essentials of the question as they chiefly affect the public interest, and leaving matters of detail to be arranged by existing medical authorities, might be carried, where a more elaborate measure would be defeated.

THE MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting held on February 26th, the Central Committee of the Association of Members of the Royal College of Surgeons of England passed the following resolution.

"That the Association of Members of the Royal College of Surgeons, believing that the proposal to increase largely the number of Honorary Fellows of the College would in no way tend to a solution of the questions now pending between the Council and the Members, determines to resist the adoption of such a scheme, as being detrimental to the best interests of the College, its Members and Fellows."

At the same meeting, a subcommittee was appointed to consider and report to the Central Committee such alterations in the existing charters of the College as it may seem advisable to draft, in view of the presentation to the Privy Council of the petition now in course of signature by the Members of the College.

PASTEUR ON HYDROPHOBIA.

At the last meeting of the Paris Academy of Science, M. Pasteur read a second note on his treatment for hydrophobia. He said he was, with everyone else, astonished to discover the number of people bitten by mad dogs to be so considerable. On February 25th, with the aid of Dr. Grancher, he inoculated the 350th patient. Of those inoculated, one, Louise Pelletier, aged 10, is dead. When she was brought to M. Pasteur's laboratory, he had little hope of saving her, and stated in his note to the Academy of Sciences that, in the interest of science, he ought to have refused treating her, but preferred satisfying the desire of her relations. She was conveyed to M. Pasteur six days after she had been bitten by a large dog. On her head was a large purulent sore, which had not been improved by medical treatment. On November 27th, eleven days after the treatment was applied, symptoms of hydrophobia were manifested, and the child died on December 3rd.

A serious question remained to be decided—whether the child died from the treatment, or from the bite. Twenty-four hours after death, the cranium was trephined in the region of the wound, and a small quantity of cerebral substance was removed. Two rabbits were inoculated with it, and died from hydrophobia eighteen days subsequently. Immediately after the death of these rabbits, others were inoculated from their spinal cords, and died fifteen days subsequently. These series of inoculations show that Louise Pelletier died from the bite, and not from the inoculations, otherwise the second series of rabbits would have died after seven days' incubation instead of fifteen. The rest of the patients are in a satisfactory condition, and the inoculations have never produced any serious local disturbance, neither phlegmonous swellings nor abscesses. After the last inoculations, there is sometimes a little redness and œdema. M. Pasteur states that statistics show that it is especially during the first five months after the bite has been inflicted, that hydrophobia declares itself. The patients under treatment are classified as follows: 100 were bitten before December 15th, two months and a half ago; 100 ranging from six weeks to two months; 150 were still under treatment, and are in excellent health. M. Pasteur urges that an inoculation establishment for hydrophobia should be organised.

M. Vulpian dwelt on the necessity of relieving M. Pasteur from the care and trouble of finding a shelter for his patients. He also said that it was of the highest importance that the treatment for some time further should be applied at Paris under M. Pasteur's superintendence. M. Pasteur estimates the expenses to be 50,000 francs (£2,000). Patients arrive from all parts of the world. Four Americans treated, and apparently cured, arrived twenty-one days after the bite had been inflicted. Nevertheless, it is an error to suppose that prolonged delay is not dangerous. Incubation operates from forty to sixty days, and treatment at that period would coincide with the onset of the symptoms. M. Pasteur does not consider that Government ought to be asked to subsidise the inoculation establishment; it ought to be supported by public and international donations.

M. Freycinet said that he believed that he might promise the support of the Government. The governing authorities would consider it a privilege to be associated with M. Pasteur's enterprise.

M. Leblanc, member of the Academy of Medicine and Sanitary Director at the Prefecture of Police, has furnished M. Pasteur with the following statistics. In 1878, among 163 persons bitten by mad dogs, there were 24 deaths from hydrophobia. In 1879, 76 were bitten, and 12 died. In 1880, 68 were bitten, and 5 died. In 1881, 156 were bitten, and 11 died. In 1883, 45 were bitten, and 6 died. M. Pasteur desires that the establishment should be a centre for studying virulent and contagious diseases. The data he has discovered in relation to hydrophobia must also have some bearing on other diseases. It is a question now under discussion whether diphtheria may not be successfully treated on principles based on those which M. Pasteur has already exposed.

THE ROYAL UNIVERSITY OF IRELAND.

The fourth annual report of the University to the Lord-Lieutenant has just been presented. It is stated that the progress of the first three years of the existence of the University as a working institution has been maintained, and that there is every ground for hoping that its success is assured, and that it will take rank in the future among the permanent institutions of the country. The number of persons who presented themselves at the various Academic Examinations of the University in 1885 was 2,534, being an increase of 433 on the year 1884. Examinations in the Faculty of Medicine were held in the months of April and May. One hundred and thirty candidates presented themselves for the final examination for the Degree in Medicine, or its complement, the Mastership in Surgery or the Mastership in Obstetrics. Of these, 71 were successful in passing the examination, and were admitted to the degrees, two or three having passed the special honour examination. At the preliminary professional examinations, held at the same time, known respectively as the first and second examination in medicine, 96 candidates presented themselves, of whom 53, or 55 per cent., passed, two obtaining honours. The total number of candidates who presented themselves at the autumn final examination in the Faculty of Medicine was 174, of whom passed the examination for the Degree in Medicine, or for the Mastership in Surgery or the Mastership in Obstetrics. Of these, 8 passed the special honour examination. Of 88 who presented themselves at the second examination in medicine, 42 passed, three with honours; and of 111 who presented themselves at the first examination in medicine, 76 passed with honours. At the examination for the Diploma of Sanitary Science, two candidates passed the examination. Particular attention is directed to the honourable position the women students of the University have again secured for themselves, the excellent academic work they have done, and the distinction they have secured. The result has been so successful that it is plain that greater facilities and improved character of education would be attended with satisfactory academical results from women students. Commodious buildings have been erected, at considerable expense, to enable the University to hold in a proper manner the scientific and other examinations which are prescribed by the University curriculum. But these buildings are utterly destitute of equipment, of apparatus, etc, without which such examination cannot be conducted; and the University has no funds out of which such equipment can be procured. It is simply impossible for the University to acquit itself of its duty towards its students and the public, unless its examination halls are fitted in a manner suited to the scientific requirements of our time. It is to be hoped that His Excellency will be able to move the Treasury to discharge this evident duty of the State promptly. The buildings are almost ready; but it is manifest that no examination can be held in them until they are properly fitted up.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.
ELECTION OF MEMBERS.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Inquiries are in progress on the subjects of

Diphtheria,	Acute Rheumatism,
Old Age,	Cancer of the Breast.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

The Etiology of Phthisis.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

The Connection of Disease with Habits of Intemperance.—Additional replies are earnestly requested on the schedule issued with

e JOURNAL of May 9th, 1885. Copies of the schedule may be had once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination cases in which the lesion has existed for an unusual length of time thout producing serious symptoms; THE EXTREME DURATION OF FECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proed these two subjects for future inquiry, and has referred them to e Branches of the Association, in accordance with its regulations, th a view to preliminary discussion during the present year. Arngements have also been entered into with the Section of Medicine the Annual Meeting of 1886 to hold a discussion upon "Cases in nich Disease of the Heart-Valves has been known to exist for upards of five years without causing serious symptoms;" and with the ction of Public Health to hold a discussion on "The Duration of fectiousness." The inquiry-papers, to be subsequently issued, will based upon the information afforded in these Branch and general scussions.

Application for forms, memoranda, or further information, may be ade to any of the Honorary Local Secretaries, or to the Secretary of Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

OUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers xhibiting specimens are requested to communicate with the Honorary Secretary. . MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT. he next meeting will be held on Thursday, March 18th, at 8.30 P.M., at the ndon Hospital. A demonstration of patients suffering from Diseases of the culatory System will be given by Dr. Sansom, Physician to the Hospital.—EPH W. HUNT, 101, Queen's Road, Dalston, Honorary Secretary.

OUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint eting of the above districts will be held at the Grand Hotel, Brighton, on dnesday, March 24th. Mr. Hodgson will preside. Communications with pect to papers should be sent to the Honorary Secretary, T. JENNER VERRALL, Western Road, Brighton.

OUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of the ve district will be held at the Queen's Hotel, Upper Norwood, S.E., on Thurs-, March 11th, at 4 P.M., H. G. Plimmer, Esq., of Norwood, in the chair. The iness of the meeting will include the election of a new honorary secretary, and the consideration of a communication received from the President of the East lian Branch (Essex District) relative to the formation of a Medical Defence d in connection with the British Medical Association. The following papers e been promised. Dr. William Duncan: On the Commoner Accidents attending turition; their immediate and remote effects, and their treatment. Mr. G. kston Browne: On the Treatment of Prostatic Retention of Urine. Members rous of exhibiting, or reading notes of, cases, are invited to communicate at with the Honorary Secretary. Dinner will be served at 6 P.M. precisely; ge, 7s., exclusive of wine.—J. HERBERT STOWERS, M.D., Honorary Secretary, Finsbury Circus, E.C.

OUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting will be at the Harp Hotel, Dover, on Thursday, March 25th, at 3 P.M., Dr. Charles sons in the chair. The dinner will take place at 5 P.M., at the Harp Hotel. members of the South-Eastern Branch are entitled to attend these meetings. to introduce professional friends. All gentlemen purposing to dine are parlarly requested to inform Dr. Parsons by Tuesday, the 23rd instant, that er arrangements may be made. *Agenda:* 3 P.M., Dr. Bowles will open a dision on The Prognosis of Heart Valve Disease, of Five Years' Standing. The e subject has been chosen by the Collective Investigation Committee for Dision during the present year. It is hoped that all members will bring short s of any cases they may have, especially in reference to the nature and posiof the valvular murmurs when they first came under observation. Mr. A. G. rn and Dr. John Ormsby: Cystic Omental, Simulating Ovarian Disease; arotomy Drainage, and Result. Dr. T. Eastes: Three Cases of Visceral Ab-. The readers of papers are requested to bring with them brief summaries insertion in the Minutes and Journal.—W. J. TYSON, Honorary District etary, 10, Langhorne Gardens, Folkestone.

ORTH WALES BRANCH.—The intermediate meeting, under the presidency of loyd-Roberts, Esq., M.B., will be held at the Hotel, Penmaenmawr, on Tues-March 9th. The following papers and communications have been promised: *Partum* Total Suppression of Urine, by John Roberts, M.D., Chester. On ommon Diseases of the Cervix Uteri, by F. Imlach, M.D., Liverpool. A of Hæmiopia, by Richard Williams, M.R.C.S., Liverpool. Collective Investin, by W. Jones-Morris, M.R.C.S., Portmadoc.—W. JONES-MORRIS, Honorary tary.

ORCESTERSHIRE AND HEREFORDSHIRE BRANCH.—The spring meeting will be at the Worcester Infirmary on Friday, March 12th, at 3 o'clock. Dinner at tar Hotel at 5 o'clock. Tickets (exclusive of wine) 5s. each. Papers, etc.: Dr. Strange: Remarks on Some Aspects of Intestinal Obstruction. Mr. Buck: Notes on Newly-approved Remedies. Mr. Bates: A Case of Porro's Operation. Dr. Crowe: A Case of Syphilitic Fever. Mr. Crowley, Dr. Strange: A Case of Cerebral Tumour.—G. W. CROWE, Honorary Secretary, Worcester.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above district was held at the Infirmary, Gravesend, on February 26th; O. R. RICHMOND, Esq., in the chair.

Medical Defence Association.—A letter from the Essex District of the East Anglian Branch, concerning a Defence Association, was referred to the Branch Council.

Next Meeting.—It was decided to hold, if possible, the next meeting at Erith, in April, and that Mr. F. Spurrell be requested to preside on the occasion.

Vote of Condolence.—A vote of condolence was unanimously passed to Mrs. J. M. Burton, on the death of her husband, the late greatly lamented Mr. J. M. Burton, of Blackheath.

Medico-Ethical Committee.—Dr. J. H. GALTON was elected a member of the above committee, to fill the vacancy caused by the decease of Mr. Burton.

Papers.—The following papers were read and discussed.

1. Dr. Curnow: Typhoid Fever and its Complications; their Treatment.
2. Mr. W. Rose: Some Points connected with the Operative Treatment of Inguinal Hernia.
3. Dr. Firth: Three Cases of Puerperal Convulsions.

Dinner.—Twenty members and visitors dined at the New Falcon Hotel.

SHROPSHIRE AND MID-WALES BRANCH: HALF-YEARLY MEETING.

A HALF-YEARLY meeting of the Branch was held at the Salop Infirmary on Tuesday, February 23rd, at 3 P.M.; the President, J. D. HARRIES, Esq., occupied the chair.

New Members.—The following gentlemen were duly elected members of the Branch: J. A. Bratton, Shrewsbury; A. Howie, Westbury, Salop; A. Macindoe, Market Drayton.

Medical Defence Fund.—The aims and objects of such a fund having been explained by the Honorary Secretary, the following resolution was carried unanimously: "That this Branch cordially agrees with the East Anglian Branch in its endeavour to establish a Medical Defence Fund, formed and administered in connection with the British Medical Association, and that its members should be asked to contribute a small sum annually to this fund; those who do so becoming entitled (should occasion arise) to legal advice and assistance."

Papers.—The following were read.

1. Mr. Vincent Jackson (Wolverhampton) read a paper on the Permanent Treatment of Relapsed Cases of Severe Talipes Varus, illustrating his remarks by casts, photographs, etc. After detailing the steps of the operation, he concluded by showing a patient who had been relieved of this deformity by this method.
2. Mr. Webb (Ironbridge) read a paper on cases illustrating the use of the Microscope in Diagnosis and Prognosis. He also exhibited a variety of interesting specimens.
3. Mr. W. Eddowes (Shrewsbury) showed a series of Hospital Cases.

The proceedings terminated with a vote of thanks to the Chairman.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paramyoclonus Multiplex.—The Propagation of Pulmonary Tuberculosis through Phthisical Patients in General Hospitals.—Transfusion of Blood.—Primary Endocarditis.—Death from Dental Caries.—General News.

PARAMYOCLONUS MULTIPLEX is the most recent pathological novelty. Two cases are on record; one described by Friedreich, who invented the name; and another by Löwenfeld, of Munich, under the name of myoclonus spinalis multiplex. A third, a few days ago, was met with among M. Charcot's out-patients at the Salpêtrière Hospital. The patient was a lead-worker, aged 52, but not employed in a lead-foundry. He had never suffered from lead-poisoning. When 27 years of age, the patient had severe dull pains in the legs, which were cured by vapour-baths. He was obliged to use crutches. The joints were not swollen. Three years ago, the pains returned, accompanied

by pains in the arms and shoulders. On awaking in the morning, his limbs, besides being painful, had a sensation of numbness and intense cold; there were also violent darting pains in the penis, which came and went quickly. The patient since suffered from cramps; his legs were weak, and he became quickly fatigued. Last August, he had an attack of vertigo, and was unconscious during twenty minutes; delirium followed. During the last three years, he had sudden muscular contractions; he did not, however, apply to the hospital on account of these, but for extreme weakness. When he attended the out-patient department, a peculiar movement was observed in the knee-joint; whether of flexion or of extension, it was difficult at first to say; and he was admitted into the wards in order to study this peculiarity. The muscular contractions were most violent when the patient was lying down or in bed. Compression increased rather than relieved them. The patient was pale and anæmic. He had an inguinal hernia; his digestion was impaired, and nutrition was imperfect. The urine was normal; sexual desire was entirely absent. The patient left the hospital a few days after his entrance, because he wished to return to his family.

At a recent meeting of the Academy of Sciences, a paper from M. Leudet, of Rouen, was read. It was on the propagation of pulmonary tuberculosis in hospitals by the admission of phthisical patients. In the Hôtel Dieu, at Rouen, Dr. Leudet treated 16,094 adult patients of both sexes in his wards between the years 1854 and 1885. Among them, 13,466 were admitted once, and 2,628 admitted from two to twenty-nine times in the thirty-one years. Dr. Leudet sought to ascertain the ulterior development of pulmonary tuberculosis among the 2,628, who had often remained in contact with an atmosphere contaminated by tuberculous patients. The proportion of phthisical patients admitted into M. Leudet's wards was 17 per cent. On deducting from the 2,628 the number of patients admitted several times for tuberculosis, there remained 1,208 admitted for other diseases. Of these, 277, or 22.9 per cent., became tuberculous. The proportion of patients becoming tuberculous after repeated admissions was 5.9 per cent. greater than the proportion of tuberculous patients on entry to the entire amount of the patients admitted. M. Leudet states that he has observed these patients in their ordinary life, where they were exposed to unhealthy conditions; and he concludes that the propagation of pulmonary tuberculosis by hospital contagion is not demonstrated. Dr. Leudet next considers the peculiar conditions favourable to contagion; these he divides into three classes. The first includes diseases which confer a special tendency for contracting pulmonary tuberculosis—pleurisy, glycosuria, and continued fever. The second class predisposes the economy to contract tuberculosis, but in a less degree than the diseases of the first class—syphilis, typhoid fever, erysipelas, diseases of the spinal cord, and small-pox. The third class is still less favourable to tuberculosis; it consists of alcoholism, malarial disease, pneumonia, uterine affections, rheumatism, and hysteria. A fourth class is almost inert; it contains affections of the alimentary canal, renal disease, bronchitis, pulmonary emphysema, cardiac affections, and cerebral diseases. M. Leudet believes that, in adults, bronchial inflammation and intestinal disorders are not specially favourable to the development of tuberculosis.

M. Duret has practised transfusion of blood at the Charity Hospital, Lille, with great success. The patient was in a drunken excited state, and cut his wrist breaking a pile of plates. He was conveyed to the hospital in a dangerous state from hæmorrhage. Esmarch's band was applied to the arm, and the vessel cut was ligatured. The patient's condition became more and more serious; the heart-beats were scarcely heard, and only at very long intervals. One of the patients, whose general condition was vigorous, furnished the blood. From 250 to 300 grammes of it were injected into the circulatory system of the wounded man. There was no immediate improvement, but breathing gradully regained its normal character; the heart-beats and the pulse were stronger, and more regular. After two hours the patient regained consciousness; he passed a good night, and the next morning he was out of danger. The ulnar nerve was sutured the morning following the transfusion. Repair was rapid, and sensibility was thoroughly re-established after three weeks.

Dr. Fournier, physician of Angoulême, publishes in the *Gazette des Hôpitaux* of January 30th, some interesting notes concerning primary endocarditis. During the years 1877, 1878, 1879, and 1880, he caused twenty-seven soldiers to be exempted from military service because they presented valvular lesions, which he attributed to primary endocarditis. All the men had a cardiac souffle; the rhythm varied; the circulation was irregular. The symptoms, which were attributed to excessive cold or chill, were preceded by oppression, præcordial pains, and palpitation, unaccompanied by pneumonia, pleurisy, or articular rheumatism. The following case is typical of this affection, which Dr. Fournier has observed to be frequent among soldiers. The patient had two successive attacks, with an interval of ten months and a half. He was 24 years of age. His bed in the military dormitory was close to the door, and he caught a violent cold, and was treated for laryngo-bronchitis. This condition continued, and he was sent to the military infirmary. About three weeks later, he had violent dull but agonising pains in the præcordial region. His tongue was white, his appetite lost, and he had frequent dry cough. The cardiac *bruits* were sudden, intermittent, and irregular. He was cupped in eight places, and an emetic was given. The following day the patient was admitted into Dr. Fournier's wards. The cardiac pains were less, but the heart-beats were strong, irregular, and intermittent; the *bruit de galop* and *souffle* had disappeared. A blister was applied to the cardiac region. The pulse was slightly intermittent and irregular. The patient left the hospital feeling well. The heart-beats were strong, but considerably less so than when he entered. Subsequently, after a long march with his regiment, he had another attack, and was treated at a hospital where his regiment was stationed; he remained in it nine days. The treatment was absolute rest, and the patient was apparently cured.

At a recent meeting of the Paris Surgical Society, M. Poncet showed several microscopic preparations of dental periostitis and caries, which resulted in death. The patient was a man, aged 46, over-fatigued and alcoholic. He was admitted into the wards of Val-de-Grâce ten days after the disease showed itself. There was a considerable swelling at the angle of the jaw, and he presented the symptoms of septicæmia. The next morning, both forearms were œdematous on the outer surface, and on the right side there were serous vesicles. The patient died forty-eight hours afterwards. The necropsy revealed the presence of small abscesses in the right masseter muscle, also along the upper half of the sterno-mastoid. The œdema of the forearms was beneath the aponeurosis, and was purulent. The spleen was soft; there was slight sclerosis and fatty degeneration of the liver. The right cardiac ventricle contained large blood-clots. In the arms there were no metastatic abscesses, nor induration; the œdematous area contained quantities of microbes. In the blood-clots also, there were colonies of these micro-organisms. M. Poncet concludes that the patient died from microbe-pyæmia, resulting from dental caries.

A new pharmaceutical journal has appeared; it is entitled *Archives de Pharmacie*. It is founded by the former contributors of the *Répertoire de Pharmacie*. This paper is edited by M. Crinon, and will appear monthly.

The Municipal Council of Marseilles has voted 60,000 francs (£2,600) for the benefit of the sufferers from small-pox. One-half will be distributed among the sufferers; the remaining sum will be used for disinfecting the clothes, dwellings, etc., of the patients.

The Municipal Council of Paris has authorised the expenditure of 4,500 francs (£180) for drawing up complete and correct statistics of the cholera-epidemic of 1884.

The second session of the Surgical Congress will take place on October 18th, 1886, and continue until the 24th of the same month. The conclusions of all papers to be read at the Congress are to be forwarded to the Secretary between the 1st and 15th July; otherwise, papers cannot be read until others have been heard. Discussions will take place on the following subjects: the Nature, Pathology, and Treatment of Tetanus; Nephrotomy and Nephrectomy; Orthopædic Resections; Surgical Operations for Irreducible Dislocation.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The Laparotomy Question: Inquiry into the Operation Cases at the Hospital for Women.—The De Tomanzic Trial.—Financial Condition of the Hospitals.—Proposed New Hospital in the Isle of Man.—A Liverpool Case for M. Pasteur.—Hospital Appointment.

I HAVE delayed making any reference to the laparotomy discussion here, and the charges that have been brought against Dr. Imlach, first, because the question is still *sub judice*; and, secondly, because a great deal of animus and personal feeling has most unfortunately been introduced. But, having regard to the interest that has been so very generally excited in reference to this matter, it may be well to give a brief summary of the course of events up to the present time. About three years ago the Hospital for Women was established, and Dr. Imlach was appointed one of the Honorary Surgeons. He immediately began to turn his attention to diseases of the uterine appendages, and their operative treatment. In May, 1884, he read an account of six cases of removal of the appendages, before a meeting of the Medical Institution. A heated discussion followed. On December

h, 1885, Dr. Imlach read a paper on "Ovarian Abscess and Pyo-oinx," and another hot discussion took place, in which Drs. llace and Burton joined. At a meeting of the Medical Institution February 4th of this year, Dr. Carter read a case of "Renal Cal-us." The patient had been twice operated upon by Dr. Imlach, t one ovary and then the other being removed. She did not im-ve, and, suspecting some renal trouble, he asked Dr. Cameron to ait her into the Southern Hospital, where she became a patient of Carter's. After a considerable time had elapsed, it was decided make an exploratory incision into the right kidney. This was e, and a large calculus was removed. The narration of this case to the charges being made against Dr. Imlach, that he had removed ovaries without sufficient cause in this and other cases, and that patients were not made aware of the serious nature of the opera-and its consequences. It should be mentioned that Dr. Imlach rts positively that both his patient and her mother were fully rmed as to the nature of the operations performed on her by him. iscussion followed the reading of Dr. Carter's case, in which Drs. nett, Alexander, Imlach, Paul, Wigglesworth, Grimsdale, Came-, and Burton took part. Other cases were mentioned by some of speakers, in which no relief had resulted from the operation, and which it was alleged that the patients were not fully cognisant of nature and consequences of the operation. Dr. Grimsdale, after arking on the large number of cases of abdominal section that occurred at the Hospital for Women—a point also referred to by rs of the speakers—moved the following resolution :—"That, in v of the large and increasing number of cases of abdominal section he Hospital for Women in this city, as shown in their Annual lical Reports for 1884 and 1885, this meeting is of opinion that a t committee should be appointed for the purpose of investigating grave questions of practice and ethics involved in the performance ese operations." This was seconded by Dr. Cameron, and carried imously. The undermentioned gentlemen were appointed to e on this committee :—The President of the Medical Institution Nevins), Drs. Cameron, Waters, Macfie Campbell, Alexander, Messrs. Bickersteth, Mitchell Banks, and J. H. Wilson. The mittee has commenced its work of investigation, and your readers l be duly informed of the result of their deliberations.

he trial of De Tomanzie, the unqualified practitioner, of Liverpool, ie recent Chester Assizes, on the charge of causing the death of a an, by the performance of an illegal operation, resulted in the ittal of the prisoner. The medical evidence for the prosecution ared definite enough ; but, for the prisoner, several witnesses e strongly as to the impossibility of his having performed the ation in question. Apart from the medical testimony, the prin-l evidence on the side of the prosecution rested upon the dying aration of De Tomanzie's patient ; and this undoubtedly constituted lement of weakness in the case. The evidence that was given by ualified medical man, in favour of the prisoner, has been very gly commented upon by the profession generally here ; and Lord f Justice Coleridge, in summing up, made some observations that rently had reference to this witness's evidence.

this season of the year, it is customary to hold the annual meet-of the various charitable institutions in the city. This year it been painful to observe how, in almost every instance, the finan-condition of the hospitals has been reported to be unsatisfactory. , the Royal Infirmary has a debt now standing at over £6,000 ; Northern Hospital is in debt to the extent of about £1,500 ; the hern Hospital to the extent of over £2,000 ; the Children's mary nearly £1,000 ; the Eye and Ear Infirmary has a debit ice of £1,900, in addition to a mortgage on the building of £3,000; so on with other charities. The causes for this seem to be mainly general character—falling off in the annual subscriptions, dona-, amounts received from the Hospital Sunday and Saturday l, etc. ; but, in some cases, outlays for special purposes have d to the year's expenditure. This state of affairs would seem to etty general in many towns in this neighbourhood, and not alone ned to Liverpool. I have before me the reports of the annual ings of hospitals at Wrexham, Birkenhead, etc., in which in each the charity is stated to be in debt. In several instances it is rent that the general depression in trade has greatly influenced ubscription and donation lists, and probably also the legacies, is stated that many persons who have subscribed regularly for y years, have been compelled through circumstances to withdraw subscriptions.

. H. B. Noble, J.P., of Douglas, has given a large plot of land ie purpose of erecting a new hospital in that town, and also the of £5,000 towards the building of it. The only condition hed to this generous gift was, that the institution should be called "Noble's Isle of Man Hospital." The offer was unanimously accepted by the Hospital Committee. A new hospital is urgently needed in the Isle of Man, the present building being most inadequate, and also very badly situated and defective in every way.

A girl has recently been sent from here to Paris to be under the care of M. Pasteur. She had been bitten by a dog a few days before.

Mr. G. G. Hamilton has been appointed honorary surgeon to the Northern Hospital, in the room of Dr. Macfie Campbell, who has resigned.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications chiefly by reason of their unnecessary length.

ALLEGED ABUSE OF PROVIDENT DISPENSARIES.

Sir,—May I be allowed a word in regard to the alleged abuse of the provident dispensary system, referred to in your Manchester Special Correspondence in the Journal of February 27th? It is the old story revived, and this time specially directed against the Pendleton Branch, the most successful dispensary in the Association. About four years ago a similar and more general accusation was brought forward, and the result of the inquiry, to which it led, was to confound and silence the accusers. Since then, the movement has made considerable progress, and it is only accordant with human cupidity that the system should be taken advantage of and abused by those for whom its benefits were not intended. I know of no such abuse. On the recommendation of a committee, representative of the Manchester Medico-Ethical Society, the weekly wages limit of 30s. was abolished, and the rule regarding admission now stands thus :—"Members shall be artisans and others, whose application for membership shall be approved by the Committee. Cases of alleged improper admission may be referred to the District Provident Society for investigation." The removal of the wages limit has not had the effect of admitting people better off than were previously admitted; if anything, I think it is the other way. All cases, and they have been very few, which I thought improperly admitted, I referred to the District Provident Society; and, on their report, the Committee promptly excluded every one of them. Is not that fact alone sufficient answer to the charges of anonymous unfriendly correspondents, that the dispensary is systematically abused, and that the Committee care only for members who can pay? The names of the Committee alone, including as it does some of the most influential gentlemen in Manchester, are a guarantee against the truth of such an accusation. At all events, the Committee is composed of reasonable men, who would gladly give a fair hearing to any grievance medical practitioners may have against the dispensary; failing that, the District Provident Society would investigate and report upon any case sent to them, backed up by the name of the sender. Either course would have a more definite effect than rushing to the newspapers, and bringing injurious charges against the institution anonymously.

The members of the Pendleton Provident Dispensary are such as could not pay doctor's bills, except through the agency of a collector. That class of people I invariably advise to join the dispensary, when I have attended them privately first; and hundreds of families have joined in consequence. Many join groaning under the burden of a debt incurred through medical attendance; and many join who were in the habit of receiving charitable medical aid. No medical man need ever become connected with a provident dispensary in the hope of making money out of it; but, by hard work, I believe a medical man can make a living by the system. The work, though hard, is purely professional; there is no dispensing, no book-keeping, no collector; and the money question between medical man and patient is out of sight altogether.—I am, sir, yours faithfully,

Alexander Stewart, M.D., One of the Medical Officers to the Pendleton Provident Dispensary.

EMMET'S OPERATION: TRACHELORRAPHY.

Sir,—In his letter in the Journal of February 27th, claiming to have been the first to perform trachelorraphy in England, Dr. Barnes refers to what he describes as "Dr. Fancourt Barnes' interpellation" on this point, which followed the reading of my paper on Emmet's

operation at the Obstetrical Society, and complains of my having made no reply to it.

I adopted this course for two reasons: first, because I had never said that I had been the first to perform the operation in this country, and, therefore, the matter did not concern me; secondly, because the question whether Dr. Barnes, or myself, or anyone else, had been the first to resort to a procedure practised for many years in America, and thoroughly understood, seemed to me to be of such infinitely little consequence that it was not worth while discussing. What I think I may fairly lay claim to, and this has doubtless misled Dr. Graily Hewitt, is to have been the first to direct the attention of the profession prominently to a subject which had been strangely neglected in this country, by a set paper, in which the operation was thoroughly discussed for the first time, and a full estimate of its results attempted. Dr. Barnes' oracular utterance, in the second edition of his book, which I had not seen, as I only possess the first edition, "I can confirm the accuracy of Dr. Emmet's views: I have performed the operation with satisfactory results," which constitutes his contribution to the literature of the subject, can scarcely be said to have done this; and I venture to say that, until the discussion which followed my paper, scarcely a member of the profession in Great Britain, unless specially engaged in gynæcology, had ever even heard of trachelorraphy. Such, at least, was the view held by the originator of the operation; and, if I can congratulate myself on my paper at all, it is because it was the means of gaining for me Dr. Emmet's acquaintance and friendship; for, when Dr. Emmet visited Europe shortly afterwards, he called on me, and presented me with a case of his perfected instruments, which I have used ever since, in recognition of what I had done in making his operation known in this country.—I am, etc., W. S. PLAYFAIR.

31, George Street, Hanover Square, W.

SIR,—In reply to Dr. Barnes' letter, I beg to say that, when I published my paper on the above subject in January last, I was unaware of Dr. Barnes' claim to have been the first to perform the operation of trachelorraphy in this country. Dr. Barnes is quite right in concluding that my error, if error there be, was unintentional. It so happens that I was not present at the Obstetrical Society when Dr. Playfair's paper was read, and when the discussion referred to took place.—I am, etc., GRAILY HEWITT.

36, Berkeley Square, W.

EVOLUTION IN PATHOLOGY.

SIR,—Now that attention is being directed to evolution in pathology, I have thought that the enclosed cutting from my pamphlet on Evolutional Pathology, which has been some months in proof, and which I beg herewith to forward, may be of interest.

"Of the new formations, the Enchondromata seem most pointedly to illustrate reversion. Enchondroma myxomatodes presents characters such as are seen in the notochord. The cells of some Enchondromata are stellate (their processes uniting into a network); and, in order to see a like condition, we must descend to near the root-forms of the vertebrate-tree, the Selachii. Again, Enchondromata are most common in the limbs, and especially in their distal parts; and, since the original condition of the vertebrate limb is represented in the Selachii as a multitude of cartilaginous rods arranged in a definite manner (the rods increasing in number towards the distal extremity of pro- meso- and meta-pterygium), I am inclined to regard these several facts as owning a homologous relation.

"Corroboration is seen in the frequency with which cartilaginous bodies develop in connection with certain joints of the limbs in man and animals. These bodies are either single or multiple, and they are of all sizes up to that of a small apple. Cruveilhier figures a number of rounded cartilaginous bodies in the elbow-joint. Mr. T. Smith removed *over two hundred loose rounded cartilages* from the knee-joint of a man on December 13th, 1882, at St. Bartholomew's Hospital. He also operated on a woman, whose case has been recorded in the *Transactions of the Pathological Society of London*, vol. xxxi, by Mr. Harrison Cripps, Assistant-Surgeon to St. Bartholomew's Hospital. This woman, aged 28 years, had for six years presented a tumour in the upper third of the right arm immediately beneath the skin. The tumour was pyriform, tapering towards the axilla. It was three inches and a half long, and two inches in diameter at its thickest part. It was encapsuled, and within the capsule there were found one large mass of cartilage and *twelve more detatched lobulated bits* of cartilage. There were also similar detached nodules of cartilage in the axilla.

"The limbs of the higher animals contain, in fact, dormant germs of the ancestral rods of cartilage. Indeed, cartilage-cells have been found in the synovial tufts of some joints; and it is from such centres that some of the above mentioned cartilages apparently developed."

Cases such as those above described are, I believe, but very rarely met with; but they serve, I think, to add weight to the suggestion that we must look to lower forms of life for aid in interpreting developments spoken of as abnormal or irregular.—I am, sir, yours obediently, D. ASTLEY GRESSWELL.

THE PASTEUR-CHAMBERLAND FILTER.

SIR,—In the JOURNAL of February 27th, appeared a short article giving an account of the results obtained by Horn, working under the direction of Professor Forster, of Amsterdam, with the Pasteur-Chamberland filter. As the reader might gather from the concluding lines of your article, that some difficulties attend the use of this filter, I venture to correct a possible misconception. This admirable invention appears to me to realise practically the ideal of a filter, for it removes all living forms and their germs, without affecting the chemical composition of the water. Having employed one of these filters in my house during the last three months, I have become convinced that they have only to be known in order to replace all other filters.

As was mentioned in your article, the water to be filtered is forced under pressure through a tube of unglazed porcelain, and in this process is so freed from organic germs that, as was first found by M. Pasteur, and confirmed by Dr. Percy Frankland, and by Horn, it is perfectly sterilised. in order to demonstrate the fact, the porcelain tube must, of necessity, be first sterilised by the action of heat, so as to destroy the germs accidentally adhering to the inside of the filter; and this is a procedure which can only be practised by skilled persons provided with suitable appliances. Where pure water is needed for domestic purposes, however, this preliminary sterilisation by heat is altogether unnecessary, for the object is to remove all germs which may accidentally have become mixed with it from the water which passes through; and this will be effected as perfectly by an unsterilised tube as by one which has been sterilised.

The quantity of water which passes through the tube, or tubes, of the Pasteur-Chamberland filters, depends upon: 1, the texture and thickness of the unglazed porcelain, of which the tubes are constructed; 2, the pressure of water; 3, the deposition of organic and inorganic matters upon and within the outer layers of the porcelain tube. The latter circumstance accounts for the fact that, after the filters have been in use for some time, the rate of filtration sensibly diminishes. When this occurs, say after two or three months, the porcelain tube should be removed, a proceeding which can be effected in a few seconds, and then its outer surfaces rubbed with a hard brush, whilst water is allowed to flow over it from a tap; on replacing it in its former position, the process of filtration will go on as before.

The filter which I have is connected with a pipe supplying water to the butler's pantry, and the pressure is that of a column of water nearly thirty feet high. After being in operation for nearly three months, the filter delivers at the rate of more than twenty-six pints of filtered water in twenty-four hours.—I am, sir, yours, etc.,

St. Leonard's-on-Sea. ARTHUR GAMGEE.

A "POST-GRADUATE" COURSE FOR MEDICAL MEN IN LONDON.

SIR,—May I have a place in your JOURNAL for the following proposals?

1. *General Statement.*—I propose that some energetic London medical teachers, assistant surgeons and physicians of hospitals, and junior specialists of various kinds, should combine and institute in London a course of instruction for medical men already in practice, forming a complete secondary system of instruction, such as is needed by men of eight or ten years' standing in the profession, who desire to refresh their knowledge.

2. *Duration and Period of Course.*—It should be held for two months twice annually, in April and May, and in September and October. April is a non-working month for ordinary students in London hospitals and schools, so is September. May and October are not high pressure months, and I propose to utilise them for this advanced class. The classes should be held daily, except Saturday and Sunday.

3. *Choice of Teachers and Location of Class.*—If possible, the course should be free from any particular school or hospital. The teachers should be chosen for distinction in each school. Thus, the surgery teacher should come from one school, the teacher of medicine from

nother, and so on. The class-rooms of a school or society should e hired for use during the periods referred to.

4. *Fees and Payments.*—These should be liberal, and sufficient to ay the best of the younger school of men to act as teachers.

5. *Limitation of Numbers.*—The numbers attending the course nould be strictly limited (perhaps to forty), so as to ensure personal eaching-contact with each individual, and that laboratory and nicroscopic accommodation might be available.

6. *Courses of Instruction.*—These should be as follows:—*a. Higher hysiology.*—Teaching and demonstrating the newer theories of life in ne fullest way, and their application to disease. *b. Surgical Anatomy nd Practice*, with operations on the subject, and practical demonstra- ons in the wards of some leading hospital where the teacher would e surgeon, and where either in April, when the students were down, r on off days, when students were not present, demonstrations and eaching could be given. *c. Medicine, Pathology, and Pharmacology*, n its fullest sense, taught, like surgery, on patients in a large hos- ital. *d. Obstetrics and Diseases of Women and Children*, covering ne whole ground, and the teacher using his hospital for demonstra- ons; some special hospital could be utilised. *e. Hygiene, Sanitary cience, and Chemical Analysis*, working up, if possible, to the sani- ry science certificate of some licensing body. This subject is not fficiently taught to the average student. Lunacy, ophthalmic dis- ses, and other special subjects, as needed. Operative dentistry might e added to the courses.

If such classes were formed, and a good set of names secured as achers, and the work well advertised, I think success would follow. here must be in England many medical men in daily practice, who nd themselves weak on some special points, but who cannot go to ondon, and have to organise classes for themselves individually.

The teaching would be personal and colloquial, rather than dog- atic and by lecture. It would be a medical society on a disciplined sis, where all were eager to learn, and the intellectual friction of any minds would be highly useful. Our best men might feel nnoured in teaching such classes. Who would come to them? The ountry medical men, the army surgeons, naval officers, colonial prac- tioners home on leave, American and foreign medical men, anxious see what London thought and England did.

Two months is short for all this; but we can hardly ask for more the beginning. Men can work for two months from early morn- g till night; and even every night could be made an organised edical society, before which teachers or specialists, not on the regu- r teaching staff, could give paid lectures and demonstrations. It ould be possible for such an organisation to supply to each medical an, at fair terms, a *locum tenens*, who would carry on his work r two months.

I do not think there is a hospital in London that would oppose ch use being made of its wards; but this would be a question be- een the hospital medical officers and the governing body. If one spital refused, another might agree. I am told, by persons I have nsulted on this subject, that schools will never combine for this rpose; and that the only chance of success would be to let one ecial school start the work. This also is, no doubt, an easier ethod; but what men in practice want to see is not one special e of work by one set school, but rather, what London as a whole doing. Surely there must be in London individuals able to organise ch courses.

The main point, to my mind, is limitation of numbers and personal aching. The overgrown student-classes of the medical schools are be avoided.

I suppose a class of forty medical men, each paying twenty guineas, uld pay the teachers; but I do not think money stands in the way. e danger is, that medical men would think they knew enough, and uld not come to it, lest they should lose caste with the public. I pe the reverse idea is universal; if not, it certainly ought to be.—

ours, I. V. R. C.

SMOKE-ABATEMENT.

SIR,—In the criticism of the lecture delivered by me at the Royal stitution on February 5th, you take exception to the principles, and estion the facts.

Had the writer of the article seen the actual working of the fire- aces of various kinds in Leeds, embodying more or less the prin- oles advocated in the lecture, or even had he been present at my ture and observed the evidence of good combustion of coal there oduced, he would hardly have written as he has done.

The writer says, "the higher the intensity of combustion, the ater the heat evolved in a given time." True; but the heat olved during highly intensified combustion, being the result of strong draught, is chiefly spent upon the chimney, and this few can wish, and nobody can defend.

Then comes a statement equally true, "a given quantity of combustible can evolve but a given heat." But if rapid combustion, that is, combustion intensified by draught, spends an undue amount of heat in the chimney, and slow combustion, at a high temperature, throws more heat into the room, as is my contention, based upon long continued and wide observation; then slow combustion is, for all practical purposes, the most effective of the two.

Again, my critic says that I "completely ignore the element of time wherein complete combustion is effected." But time is the very basis of my contention, which is this, that coal, burning at a white heat (that is, practically white in colour; whether technically white and 2,700°, I know not) is coal burned under the influence of too strong a chimney-draught, and too rapidly as to time, the resulting intense heat, too intense for a short period, being mostly wasted in the chimney; whereas, under the principles of construction urged in my lecture, coal burning at an orange heat is coal burned under the influence of stored-up heat, not of draught; and although it may not reach the high pitch of intensity of short duration of coal forced by draught, it maintains the red heat of lower intensity, which is sufficient for good combustion, and delivers effective heat into the room for a much longer period.

The orange heat, moreover, is as adequate for perfect combustion as the white heat. This is shown by the blazing of the volatile gases in the early period of combustion, and by the abundant pale flame in the coke period of the fire. If further evidence were needed, it could be found in the fine snuff-like powder that falls into the "economised" ash-chamber, and in the absence of cinders, which are found in fire-places not controlled by the "economiser." Had the writer been critically seeking for evidence of the intensity of combustion in the fire-places recommended by me, he would have learned, at my lecture, that the chamber under the fire had been hot enough to reduce a piece of coal, 2½ ounces in weight, to half an ounce of cinder, in about four hours. Perhaps he is able to say what the temperature is implied underneath the fire to achieve this.

The writer throws doubts upon the actual saving of coal by the action of the economiser applied to ordinary grates. This has been proved by the comparison of individual fireplaces, and also by the gross consumption of coal in some houses. No doubt the amount of saving varies very greatly, and does not occur in every grate, as I pointed out from the first; but, as to the fact of considerable saving, I have received very extensive testimony, from which I quoted largely at my lecture on economy of coal at the Parkes Museum two years ago.

The writer says "that the tests made by the Smoke Abatement Institution of the system he (Mr. Teale) recommends have shown no substantial economy from its adoption." This cannot refer to the complete system of construction advocated at the Royal Institution, which the Smoke Abatement Society have not yet had an opportunity of testing. As to the earlier forms of fireplace, perhaps the writer of the article can explain how it came to pass that my system should have been tested and pronounced against without any communication with me whatever. In the attempts which I have made to spread abroad a knowledge of the right principles of fire-place construction, I am contending for the good of the public, and it is for the public to inform itself accurately of the facts of the case, and then to take care of its own interests.—I am, etc.,

Leeds. T. PRIDGIN TEALE.

FEVER AND SMALL-POX IN LONDON.—The statistics presented at the meeting of the Asylums Board, on Saturday, showed the satisfactory fact that only eight cases of small-pox had occurred during the fortnight all over the metropolis, and that there was only an increase of two in the number of fever patients remaining under treatment in all the hospitals of the Board. There was a total number of 14 small-pox patients remaining under treatment, and 241 fever patients, of whom 198 were suffering from scarlet fever, and 38 from enteric fever. With this abatement of small-pox will come probably an abatement of care in revaccination, and then a fresh epidemic of small-pox will soon fall, especially upon the adolescent and the adult.

INTERMITTENT FEVER TREATED BY HYPODERMIC INJECTION OF CARBOLIC ACID.—Dr. Narich, of Smyrna, publishes, in the *Progrès Médicale* of January 30th, the history of a case of intermittent fever extending over a year, not susceptible to the influence of quinine. From January 20th to 27th, an injection of forty centigrammes of crystallised phenic acid and fifty grammes of distilled water was made, night and morning, in the left arm. From the time the first injection was made, a period of nine months, the patient has been entirely free from the attacks.

MEDICO-LEGAL AND MEDICO-ETHICAL.

INFECTIOUS HOSPITALS: IMPORTANT DECISION.

(*Before* Lords Justices Cotton, Bowen, *and* Fry.)

FLEET *v.* METROPOLITAN ASYLUMS BOARD—THE DARENTH SMALL-POX CAMP CASE.

Judgment, which had been reserved on February 22nd, was given on Tuesday. The action was by the owner of an estate near Dartford and his tenants, and was in effect to restrain the defendants from carrying on the camp. The estate was separated from the land occupied by the defendants by a lane running along a depression between two slopes, on one of which stood the plaintiff's mansion-house, and on the other was the camp. The tenants occupied houses along the lane. The mansion was 900 yards from the camp, some of the houses were 300 yards off, and part of the plaintiff's property was as near as 80 yards. Convalescent small-pox patients only were brought to the camp, and they were brought in ambulances along secluded roads from a jetty on the bank of the Thames, to which they came from the hospital-ships in the river. The camp had been partly occupied on two occasions between 1880 and 1883, and again during the severe outbreak of small-pox in 1884. There were then from 1,000 to 1,200 patients in the camp. This action was commenced in 1884. Mr. Justice Pearson decided for the defendants, and the plaintiffs appealed.

Mr. Finlay, Q.C., and Mr. Yate Lee were for the appellants; Sir R. Webster, Q.C., Mr. Edward Clarke, Q.C., Mr. C. H. Anderson, Q.C., and Mr. Lyon for the defendants.

Lord Justice Cotton said that the plaintiffs sought to prevent the defendants from carrying on their small-pox hospital; and the legal question to be decided was whether there was an appreciable injury to the healthiness of the plaintiffs' property. The plaintiffs must make out that there was real danger, otherwise, however much they might feel the hospital to be an annoyance, they could not get an injunction. The management of the hospital was not really attacked, though the bringing of the patients from the Thames to the camp was, to some extent, relied on. They were brought in ambulances from the jetty along a secluded country lane, and no appreciable danger to the plaintiffs' property was made out on that head. But then it was said that, notwithstanding the defendants' case, there were necessary dangers from the hospital. The first was that the hospital servants went out to a public-house in the neighbourhood; but the evidence was only that on one occasion a hospital servant called for some bottles of whisky to be brought out of the inn to him. It was said, further, that complete disinfection was impossible even by washing with carbolic soap. But the medical witness must have meant that it was impossible to be absolutely sure that all cause of infection was removed. The precautions taken for disinfecting persons going out of the camp were such, that practically there was no danger from them. Then there was evidence that one person had effected an entrance into the enclosure of the camp; but it appeared that there was a gate off its hinges, and it was clear that in general, even if a person should enter the enclosure, he would be stopped before he actually got into the camp. As to the alleged danger from visitors spreading infection, it was said that they only went to see the worst cases, and were particularly likely to carry infection out. The gate used by them was at a point remote from the plaintiffs' houses, and the danger, if any, was rather a public than a private nuisance. There might be danger of infection in the railway carriages, but there was no evidence of appreciable danger to the plaintiffs. The chief point, however, to which the plaintiffs' evidence was addressed, was, that the mere existence of so large a number of patients in the camp made the camp of necessity an appreciable source of danger; that by some poisoning of the air or by particles carried in the air the disease could be spread to the plaintiffs' houses. Some of the plaintiffs' experts said that the infection could be carried two and a half miles, and most of them thought there was danger at the distance of half a mile. He had some doubt whether the Court ought to grant an injunction on that evidence, even if it had been uncontradicted; but the defendants' witnesses held an entirely different view. Some said fifty yards was enough to put an end to risk, and one said the distance across the court would do. All the witnesses admitted that their opinions were theoretical, and not the result of experiment or observation, nor had science settled how the disease came to an end, or how infection was transmitted. One of the plaintiffs' witnesses said there must be a combination of circumstances for the danger to show itself. Except one doubtful case, it appeared that there had been no case of small-pox near the camp, and there was plenty of evidence that the fifty yards' margin round the camp was enough. With regard to the evidence offered of the examples of the London small-pox hospitals, it was not necessary to decide whether it was admissible; both sides had desired that it should be gone into, and the question was whether it helped the plaintiffs' case. As to the Stockwell Hospital, there were no details to enable the Court to judge how far an increase of small-pox in the neighbourhood was due to the hospital or to other causes. The evidence from the Hampstead and Hackney Hospitals rather diminished the effect of the plaintiffs' expert evidence. There were many differences between them and the Darenth camp. The details were most important. In the case of the Hackney Hospital, it appeared, from the circles drawn on the maps with centre at that hospital and similar circles with other centres, that there was a large proportion of the disease near the hospital, but there were most remarkable circumstances which made it doubtful whether this result was due to the hospital. It appeared that there were many cases of small-pox in the Infirmary of the City of London Workhouse, which was some distance from the hospital; but in the Hackney Union Workhouse, which was quite close, there were very few. In particular lines from the hospital there was a large increase, and in others none. It seemed that the disease began at a distance, and it appeared to converge towards the hospital, not to extend from it. If less care were used in the crowded streets than at Darenth, in regard to the ambulances, that might account for the lines of disease to the hospital; but in the case before the Court the patients were brought along comparatively solitary lanes, and the examples of the London hospitals would not show that there was any danger here. It seemed clear that there was less danger from convalescents than from patients in the acute state of the disease, and therefore patients in the Darenth hospital were in a less dangerous state than those who were brought to the small-pox hospital in London. The Court could not say that no danger would arise to the plaintiffs from the hospital, but the plaintiffs had not made out affirmatively that there was any real danger to their property if the hospital was allowed to go on. No injunction could therefore be granted, and the appeal must be dismissed.

Lord Justice Bowen found it impossible to doubt that the camp was extremely disagreeable to the plaintiffs, but things which merely abridged a man's pleasure or made him anxious were not actionable nuisances. Such evidence of danger as had been produced depended on scientific theories. In the examples drawn from the London hospitals, the conditions were wholly different from those of the camp at Darenth. He made no objection to the expert evidence. Indeed, in such a case, it was right for the court to go by it entirely. A court of justice was not a fit place for the exercise of inductive logic; life was short, and it was impossible to give endless time to the examination of a scientific theory for the benefit of one set of litigants. Suppose, for instance, it should be suggested that the Court should examine the circular theory of storms; it would take years for the judges to inquire into the theory, and for themselves determine whether it was established by experience. Or, again, let the case be taken, which science no doubt would consider puerile, of a theory which had been put forward that famines in India were connected with spots on the sun. It would be hopeless for the Court to undertake to examine all the instances that could be brought forward. They could only take the opinions of experts, and go by them. With regard to the theory of aërial dissemination of disease, the voice of science was still uncertain. No doubt, sooner or later, science would discover and assert with confidence whether infection does blow across the hills and valleys; but he declined to be driven into the scientific question, or to forecast the future. It would be most dangerous to form an independent opinion on a scientific question from the smatterings of science that might be picked up during the hearing of a case. In the present state of science, the plaintiffs had not been able to show that there was appreciable danger from the hospital, and therefore their appeal must fail.

Lord Justice Fry, in stating his concurrence, said that the plaintiffs had undertaken to show that there was what Lord Chief Justice Cockburn called "a well founded and reasonable apprehension of danger" from the hospital. It appeared that in all the time during which there had been small-pox camps at Darenth, only one case had occurred in the neighbourhood, which was attributed, even by the plaintiffs' witnesses, to the camp, and the evidence was not convincing that it was due to that cause. There was, in fact, no evidence whatever of danger, but the plaintiffs said there must be danger from the nature of the thing, and it was strongly in their favour that a Royal Commission had reported that the presence of small-pox hospitals was a source of danger to their neighbourhoods, and suggested seven ways in which the infection might be spread—(1) the transit of patients, (2) persons coming, (3) visitors returning, (4) letters, (5) officers and nurses, (6) bedding and clothing (7) imperfect sewer arrangements.

Of these, the 4th, 6th, and 7th were not suggested; and, as to the others, there was no substantial evidence of danger from them. There was, on the other hand, evidence of admirable care in the management of the camp. As to the theory of aërial communication of disease, the evidence was only of opiuion, and it showed, as Lord Bramwell had said, that something might be communicated to somebody somewhere. Some said infection was in its nature gaseous, others that it was by particles, and of these there were two parties—those who held the germ theory, that the disease consisted of separate organisms, and those who thought the infection was communicated only by particles of the body of a diseased person. It was not known what put an end to the disease, or how the infection was destroyed. The danger was the balance of infection over the power of destroying it. There was the greatest difference of opinion about that power. Some said pure air destroyed infection; others not; and others said fire was necessary, and that a light breeze would spread the infection, not destroy it. Nor was it settled at what period the infection was greatest, though the better opinion seemed to be that a convalescent was less dangerous than a patient in the height of the disease. He would confine himself to saying that the plaintiffs, relying on atmospheric dissemination, had not made it out. But he would not leave the case without expressing his admiration for the care, skill, and diligence, and, he would even add, the courage, of those who had the management of the camp.

Lord Justice BOWEN added that he hoped the defendants would not ask for costs, as the plaintiffs had great cause for being alarmed, and had a good deal of reason for urging the appeal.

Mr. ANDERSON, Q.C., for the defendants, said they were a public body, who had to consider the ratepayers, and they could not give up their right to costs.

Lord Justice COTTON said he was sorry costs were asked for, but the Court could not depart from the usual rule, and the appeal must be dismissed with costs.

UNQUALIFIED ASSISTANTS.

T. A. C. WRITES, referring to Mr. Allbutt's letter, that if it be true even hospital surgeons employ first and second year men, innocent of midwifery, to attend to their patients; and, further, that many "first-class practices" are conducted mainly by students unqualified, without salary. Such a state of things is a scandal to the profession at large, and to the possessors of these "first-class practices" in particular. As to the twenty midwifery cases required by the College of Surgeons, there is attached to every medical school a maternity department. The questions as to how needy medical students are to enter the profession, and the pecuniary inability of equally needy practitioners to employ qualified men, are individual, and do not touch the point at issue. The question as to where qualified men are to be got, is easily answered by reference to the books of medical agents, or the advertising columns of the medical journals. The question resolves itself into this. Is the field of medical practice to be equally open to qualified and unqualified men as assistants? if so, why not as principals? To grant this would be a sure way to discourage the obtaining of diplomas, and to reduce the profession to a minority of qualified medical men, in the receipt of first-class incomes, derived from "first-class practices, conducted mainly by (a majority) unqualified students, who receive, in pay, board and lodging." T. A. C. hopes the decision of the county court judge may be sustained, and may act as a precedent for like cases.

A YOUNG QUALIFIED MEDICAL MAN is opposed to Mr. Allbutt's views. He observes that it is no new thing for patients to decline to pay for services rendered by an unqualified assistant, and it has been decided in the patient's favour before. If the patient know that the man is unqualified, and then accept him, it is different, but he is generally passed off as a full-fledged medical man. We should resent a like fraud on the part of any of our tradesmen. It does not seem just for unqualified men to earn a living which often the qualified one cannot obtain, after hard work for his diploma. The employment of unqualified assistants is unjust to the public, who have a false article given to them, and to the profession, because it lowers status and fees. Medical students who have passed the half-examination of any of the licensing bodies might be licensed to practise purely as assistants, under the immediate supervision of qualified medical men; and no other unqualified practice should be allowed.

BRANCH SURGERY.

SIR,—We should be glad of your advice under the following circumstances.

We are practising in partnership in a small town, and at a village four or five miles from our residence we each have patients, although there is a resident medical man in the place. Would it be consonant with professional etiquette to start a surgery there for the convenience of those patients, and to attend there on certain days?—Yours truly, A. AND B.

*** Although there is not, to our knowledge, any written ethical rule condemnatory of such a step as that suggested by A. and B., there is a principle of action which, in our opinion, they will do well to carry out, and refrain from "starting a surgery in the village;" for not only would it, from our point of view, be contrary to true professional feeling, but also, under the circumstances, to the principle of doing as we would be done by. Moreover, in the event of any case of urgency occurring among their patients, the practitioner in residence would doubtless act in strict accord with professional courtesy, and, having provided for the emergency, resign the case to them

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, February 26th, 1886.

The Sale of Poisons.—The Earl of MILLTOWN asked Her Majesty's Government whether, considering that a Bill upon the subject was read a second time in that House last session, and referred to a Select Committee, it was their intention to introduce this session a Bill for regulating the sale of poisons. He said that a feeling of very considerable uneasiness had existed in the public mind for some time in consequence of the great laxity of the regulations with regard to the sale of poisons. This laxity gave not only great facilities for the committal of crime—murder and suicide—but also in many cases led to accidental death. His feeling in the matter had been considerably intensified of late by a case of a very remarkable nature now before the public. All he intended to say about that case was that it disclosed the extraordinary facility which persons, who were absolutely unknown to the vendors, had for obtaining the most deadly poisons. His noble friend Lord Carlingford introduced a Bill on this subject last session, and after petitions had been received from nearly every town in England praying their lordships either to reject the measure or refer it to a Select Committee, he agreed to adopt the latter course. For some reason or other, the Committee was not appointed, and the Bill was allowed to drop. He ventured to hope that the noble earl the President of the Council would reintroduce either the Bill of last session, or a similar Bill, which would contain provisions regulating the sale of poisons by apothecaries, general practitioners, and veterinary surgeons, as well as by chemists.—Earl SPENCER said that the Government were now considering the subject, and in a very few days he hoped to be able to inform him whether they intended to introduce a Bill. He would undertake, if they did introduce the Bill, to give a convenient time for its consideration.

Monday, March 1st.

Lunacy Acts Amendment Bill.—The LORD CHANCELLOR, in moving the second reading of the Lunacy Acts Amendment Bill, stated that it was substantially the same measure as that introduced by Lord Selborne last session, but it embodied, in addition to the provisions of the Bill of last session, certain amendments in respect of private asylums, which had been introduced by the late Lord Chancellor, and those amendments he had much satisfaction in adopting. The fact that any person could have another incarcerated as a lunatic on the certificate of two medical men had sunk deeply into the public mind. He thought that, to the credit of the honour and intelligence of the great medical profession, that power had been very little abused; but the great risk that there was of abuse, under the existing system, called for a change. Under this Bill, a judicial investigation on the petition of a relative, or other person showing a right to move in the matter, must be held before any suspected lunatic could be incarcerated. There would be an exception allowed to that rule in cases of urgency. But, in such cases, if, at the end of seven days, a petition were not presented, the lunacy order would lapse, and the person confined under it must be discharged. Again, a judicial order made on petition and investigation would be good for only three years. At the end of that period, there must be a new investigation or a discharge. Among other provisions as to pauper lunatics, there was one that no person should be regarded as a pauper-lunatic who was not a lunatic in the receipt of parochial relief, or in want of such relief. As to private asylums and licensed houses, as long as the keepers of establishments in which lunatics were lodged had a pecuniary interest in those establishments, the state of things would be unsatisfactory; but he did not think the public mind was prepared for the immediate suppression of private asylums and licensed houses, and probably their compulsory abolition, after a fixed period, would not be regarded with any more favour. It was proposed, therefore, to go no further in the Bill than to provide that there should be no new licences issued for such establishments, and that there should be no addition to the number of patients in those now existing. Such a provision would tend to the increase of public asylums, and with such increase, the private asylums and licensed houses would gradually disappear.—Lord SELBORNE expressed his hope that the Bill would pass both Houses in the present session.—Lord COLERIDGE concurred with those who thought that such a measure was required, and suggested that the Bill might, with advantage, be amended so as to go further in the direction of extinguishing private houses.—Lord MILLTOWN, while admitting the strength of the Lord Chancellor's argument against the immediate extinction of private asylums, would have been glad had the Bill gone

the length of providing for it. He thought that, at all events, provision ought to be made against any but properly qualified persons being allowed to keep such establishments.—Lord BEAUCHAMP observed that, in respect of accommodation for lunatics, the local authorities had shown no indisposition to do their duty.—In the course of a conversation which ensued, Lord BRAMWELL and Lord EGERTON made suggestions for the improvement of the Bill in certain of its details.—Lord ESHER expressed his opinion that three years was too long a term for the duration of a lunacy-order.—Lord ASHBOURNE asked the Lord Chancellor to either extend certain of the provisions of the Bill to Ireland, or to obtain the assurance from the Government that they should be embodied in a Bill amending the Lunacy Acts in that country; and Lord CLIFFORD, of Chudleigh, suggested that in the asylums which were to take the place of private establishments, care should be taken to secure a classification of patients.—The LORD CHANCELLOR, in reply, stated that he would be very happy to avail himself of suggestions for the improvement of the measure.—The Bill was then read a second time, as was also the Lunacy Consolidation Bill, which is merely a codification measure.

HOUSE OF COMMONS.—Thursday, February 25th, 1886.

Army Medical Officers.—In reply to Sir T. LAWRENCE, Mr. CAMPBELL-BANNERMAN said that no British Medical officers had been sent to report on the campaign between Servia and Bulgaria.

The Pollution of the Thames.—Mr. T. ROGERS asked the Secretary of State for the Home Department whether it was the intention of the Government to take efficient steps to carry out the recommendations of the Royal Commission on the Pollution of the Thames, by the outfalls at Barking Creek and Crossness.—Mr. CHILDERS: This question has been repeatedly under the consideration of the Metropolitan Board, who have charge of the sewerage of London. They have not yet finally reported to me their conclusions, but I will press the Board for an early answer.

Monday, March 1st.

Rabies and Hydrophobia.—Sir R. CROSS asked to what extent had there been a decrease in the number of cases of rabies and of hydrophobia since the police order had been issued.—Mr. CHILDERS replied that he would be willing to grant a return, if it were moved for.

Tuesday, March 2nd.

Chair of Physiology at Aberdeen.—Mr. TREVELYAN, in reply to a question from Mr. J. CAMPBELL, stated that he had received a letter from Professor Stirling, stating that he does not propose formally to resign till the close of the present session.

The Lighting and Ventilation of the House.—The Earl of LIMERICK rose to move that the evidence of John Percy, M.D., taken before the Select Committee on the Office of the Clerk of Parliaments and Office of the Gentleman Usher of the Black Rod, in session 1869, be laid upon the table, and that the same be printed. The evidence would be of much value in reference to the lighting and ventilation of the House.—The Earl of CAMPERDOWN thought that the ventilation of the House would be improved if the windows were thrown open.

NAVAL AND MILITARY MEDICAL SERVICES.

COURSE OF INSTRUCTION AT HASLAR.

THE sixteen gentlemen, who recently obtained commissions as surgeons in the Royal Navy, having joined Haslar Hospital, the eleventh session of the Naval Medical School was opened on March 1st.

Among those present were the Commander-in-Chief, Sir George O. Willes, K.C.B.; Sir John Watt Reid, M.D., K.C.B., Director-General of the Medical Department of the Navy; Inspector-General Dick, R.N.; Captain Colomb, R.N., H.M.S. *Duke of Wellington*; Deputy Inspector-General Mortimer, R.N.; Brigade-Surgeon Codrington, A.M.S.; Mr. Giffard, R.M., Secretary to the Commander-in-Chief; Fleet-Surgeon Maclean, R.N.; and Flag-Lieutenant Floyd, R.N.

Fleet-Surgeon Walter Reid, M.D., who conducts the course of instruction, delivered the opening address. He pointed out the advantages to those entering the Naval Medical Service, of a residence at Haslar Hospital, with its many naval associations and surroundings, and gave an outline of the course that would be carried out during the session.

At the conclusion of the address, the Medical Director-General thanked the Commander-in-Chief for being present; and Sir George Willes, speaking in response, welcomed into the naval service the gentlemen who had just entered, and offered them some friendly advice, of which, after fifty years' experience of naval life, he knew the great value.

The opening ceremony over, all present adjourned to the mess-room, where the visitors were entertained at luncheon by the officers of the establishment.

ENTRANCE-EXAMINATION FOR THE NAVY.

M.B.—1. We believe that the text-books are specially recommended to be read in preparing for the entrance-examination for surgeons in the navy. 2. It would probably be possible to prepare for such an examination under the circumstances described, but it must be borne in mind that the examination in medicine and in surgery is in part practical.

MEDICAL STAFF.

SURGEON-MAJOR JOHN WALKER, M.B., who is attached to the station hospital at Murree, in the Bengal command, is appointed to perform the duties of Civil Surgeon at that station, *vice* Surgeon H. L. Battersby.

Surgeon JOHN MARTIN, on arrival from England, is directed to do duty at the station hospital at Secunderabad, in the Madras command.

Surgeon R. I. POWER, serving the Bombay Presidency, is transferred from general duty Sind Circle, to general duty Quetta District.

Surgeon-Major FRANCIS FALWASSER, F.R.C.S., died at Neemuch, Central India, on the 4th ultimo, having nearly completed his forty-ninth year. He entered the Army Service, January 19th, 1860; became Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1875. He was without war experience.

INDIAN MEDICAL SERVICE.

THE following admissions to the Bengal Establishment have received Her Majesty's approval: Messrs. H. R. WOOLBERT, G. H. BAKER, THOMAS GRAINGER, M.D., J. R. ADIE, A. C. YOUNAN, A. W. ALCOCK, A. R. EDWARDS, and J. M. CADELL.

Surgeons-Major E. C. BENSLEY and R. POWER, both of the Bengal Establishment, whose retirement was recently announced, have been granted the honorary rank of Brigade-Surgeons.

Surgeon J. FFRENCH MULLEN, M.D., Bengal Etablishment, Civil Surgeon of Tipperata, is appointed to act as Deputy Sanitary Commissioner of the Metropolitan Circle during the absence on deputation of Surgeon-Major K. P. Gupta, M.B.

Surgeon E. CRETIN, M.B., Bengal Establishment, is appointed to hold civil medical charge of Fyzabad, in addition to his military duties, during the absence on privilege-leave of Surgeon-Major B. O'Brien, M.D.

Surgeon H. ADEY, Bombay Establishment, Medical Officer to the 29th Native Infantry, is appointed Civil Surgeon at Jacobabad in addition to his own duties.

The furlough for eighteen months granted to Surgeon H. M'CALMAN, M.D., of the Bombay Establishment, Civil Surgeon of Rutnagherry, is cancelled.

Surgeon-Major A. BARRY, M.D., and Brigade-Surgeon C. K. COLSTON, of the Bombay Establishment, have been permitted to return to duty by the Secretary of State for India.

Surgeon-Major H. J. BLANC, M.D., Bombay Establishment, Physician to the European General Hospital, Bombay, has been granted an extension of leave for six months on medical certificate.

Surgeon-Major W. MCCONAGHY, M.D., Bombay Establishment, Civil Surgeon of Dharwar, is allowed furlough to Europe for fifteen months on private affairs, with the necessary subsidiary leave.

ERRATUM.—Under the heading of "Indian Medical Service," in our last issue, "Brigade-Surgeon G. A. Alder" was misprinted for "Brigade-Surgeon G. A. Watson." In line 3 of the same paragraph for "Mr. Alder" read "Mr. Watson." We are requested to add that Mr. Watson received a clasp with the medal for his services in Central India during the mutiny.

Mr. D. E. FLINN has been appointed Acting-Surgeon to the 18th Lancashire (Liverpool Irish) Rifle Volunteers.

THE TREATMENT OF PHTHISIS AT DAVOS PLATZ.—Dr. H. Ten Cate Hoedmaker, a Dutch physician, practising at Davos Platz, has made many observations on the action of antipyrin on phthisical patients; and concludes, from his own experience, that patients with fever and without antipyrin are more comfortable than those without fever and treated with that drug. He states that he has found salicylic acid most valuable as a specific, especially when combined with arsenious acid. Altogether, four grammes of salicylate of soda and four milligrammes of arsenious acid are given in the day in the form of pills. Dr. Hoedmaker lays no special restriction on his patients, leaving them at liberty to follow their own inclinations, as far as is consistent with their general health. No definite symptoms of poisoning have resulted from the large doses employed, nor any disturbances of the digestive organs. Indeed, the general condition is increasingly improved with the continued use of the drugs, and no cumulative action has been observed. A marked effect, differing from that of the salicylate alone, has been visible after a period varying from four to seven days. The value of the medicine, in the case of old lung-infiltrations and degenerations, Dr. Hoedmaker is at present unable to estimate; but, in his opinion, it not only benefits symptoms but is also directly curative. He suggests that experiments should be made at hospitals with the two drugs above mentioned; the arsenious acid alone to be given for a week, and followed by the salicylate uncombined.

HOSPITAL AND DISPENSARY MANAGEMENT.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE.

THE report of this institution for 1884 is eminently satisfactory. Among structural changes made in the building may be mentioned the addition of three alternative staircases as provision for escape in case of fire, and the erection of new sculleries and conservatories. The accommodation available for patients has been added to by the opening of three detached houses, in none of which are there any locked doors. One of these houses is in the hospital grounds, and another adjoining them, the third is fourteen miles away, in the Forest of Dean; it is an old family mansion called the Wilderness, capable of accommodating from fifteen to twenty patients.

The total number of patients has increased from 138 to 150; the applications for admission still, however, considerably outnumber the vacancies. The average number of patients under treatment in 1884 was 143, against 135 in 1883. The average weekly income per patient was £2 13s. 2d.; the weekly expenditure (including a charge of 6s. 5d. for incidents) was £2 1s. 6d. Five patients were maintained gratuitously, and several others at sums less than the average weekly cost; it is stated that, during 1884, the sum of £1,700 was expended in supplementing the payments of the poorer patients. Dr. Needham notes, in the year's admissions, an unusually large proportion of cases of suicidal melancholia: out of thirty-one admissions, sixteen were suffering from acute melancholia, and six from acute mania. The death-rate was very low, having been only 3.5 per cent. on the average numbers resident. All the deaths were from natural causes; in no case was there a necropsy.

The statistical tables appended to the report are complete, and appear to be generally accurate, with the exception of the last column of Table III, which gives the percentage of deaths on the average numbers resident. It is somewhat startling to find the mean percentage-mortality, for the twenty-five years during which the hospital has been open, given as 14.5, 7.8, and 11.2 for males, females, and total respectively. On examining the figures, however, and making an independent calculation, we find that the correct percentages were 10.5, 5.07, and 7.8. The error appears due to the idea that a mean percentage for several years may be obtained by dividing the sum of the percentages for these years by the total number of years; and that a total percentage is necessarily the half of the sum of male and female percentages. The only correct method is to make a separate calculation of each and every percentage, whether it be for only one year, or for a period of several years.

The Reports of the Commissioners in Lunacy are printed with the hospital-report. They say "it would be difficult to name another institution for the care of the insane where so much attention is given by the resident authorities to every individual patient. The consequence is general contentment."

It is therefore satisfactory to observe that, in addition to a large staff of attendants and nurses, there are nine lady-companions (why no gentlemen-companions?), and an efficient assistant medical officer, to second Dr. and Mrs. Needham in the work to which they devote themselves with such marked success.

DORSET COUNTY LUNATIC ASYLUMS.

IT seems clear, from the report of the Committee of the Asylums at Charminster and Forston for 1884, and that of the Commissioners in Lunacy, that the available accommodation is no longer adequate to the increased number of patients (more particularly females), and that the County of Dorset will soon have to take into consideration the provision of additional accommodation. On December 31st, 1884, there were in the two asylums 429 county pauper patients; and in addition, sixteen patients belonging to the town and county of Poole, one criminal patient, and twenty-five non-paupers.

During 1884, the percentage of recoveries on admissions reached 40.8. The percentage of deaths on the average total number resident was only 5.8; out of the twenty-six deaths, *post mortem* examinations were made in twenty-one cases.

The number of attendants and nurses is not too large; it would seem that by day there are but eighteen attendants (including two head attendants) for 217 male patients, and the same number of nurses for 254 female patients. There are also six artisan and three laundry attendants, who can, however, scarcely be reckoned as on the nursing staff. Seventy-nine men and sixty-nine women walk beyond the grounds; probably these numbers might be considerably increased, were the staff of attendants larger. Beer is still included in the dietary, each patient having half-a-pint for dinner, and workers one or two extra half-pints. Attendants are allowed two pints daily, and nurses one pint.

The weekly charge for county patients is only 8s. 2d.; the average weekly cost per head is 8s. 0½d.

The statistical tables are very numerous and complete. Unfortunately the total percentages in Table III. are worked out on the incorrect method criticised in the case of Barnwood House. The result of this is, that the average death-rate for the thirty-nine years covered by the tables is rather larger than the truth; while the total percentage of recoveries on admissions, which are given as 35.7, 44, and 40, for males, females, and total, respectively, should be reduced to 31.7, 39.2, and 35.6, respectively.

There is at least one respect in which the Dorset Asylums cannot be called "Havens of unrest"; for we note that two-thirds of the attendants and nurses have lived many years in the Asylum service, and that the matron at Charminster resigned at Michaelmas, 1884, after thirty-seven years' service, while Mr. Symes has filled the post of Medical Superintendent for more than thirty years.

INDIA AND THE COLONIES.

INDIA.

MEDICAL EDUCATION OF WOMEN.—Her Majesty the Queen-Empress has signified to the Countess of Dufferin her intention of presenting medals to the most distinguished female licentiates in the medical schools of India. A gold medal, to be called the "Queen-Empress Medal," will be offered for annual competition in each of the four Indian Universities, Bengal (Calcutta), Bombay, Madras, and Punjab (Lahore), students at the Agra Medical School being allowed to compete at Lahore. His Excellency the Viceroy has placed five silver medals, to be called the "Viceroy's Medals," at the disposal of the National Association; and the Central Committee propose offering them for competition among the female students of the Hospital Assistant Class, one to each of the Medical Schools at Agra, Bombay, Calcutta, Lahore, and Madras. The details of competition are under consideration.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE EVESHAM BOARD OF GUARDIANS AND MR. H. E. HAYNES.

WE have received a copy of a letter sent by the Local Government Board to Mr. H. E. Haynes, medical officer of the third district of the Evesham Union, in reply to an application by that gentleman for the decision of the department, as to the interpretation to be put on the 182nd and 183rd articles of the General Orders, so far as it relates to the case of Elizabeth Perkins, to whose case we referred in our issue of February 6th. We regret to find that the Local Government Board concurs with the view of the clerk to the Evesham Board of Guardians, that a district medical officer must be in attendance at the confinement, or immediately afterwards, to entitle him to claim the extra fee of £2; but, although the department has thus decided, yet it marks its sense of the exceptional duties performed by Mr. Haynes, by the following: "The board, at the same time, direct me to state that if, under the circumstances of the present case, the guardians think proper to submit to the board a proposal to vote to you a gratuity under the proviso to Article 172 of the Order, the board would be prepared to consider favourably such an application.—Signed, ALFRED D. ADRIAN, Assistant Secretary."

We much fear that, having regard to the refusal of this Board recently to augment Mr. Haynes's stipend, which is extremely small, small chance exists of getting a gratuity. It is to be regretted that the department could not see its way to directly recommend the Evesham Board to pay; but then poor-law medical officers must be grateful for even small mercies. We should strongly advise Mr. Haynes to try his luck.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, February 27th, 5,925 births and 4,217 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated popula-

tion of 9,093,817 persons. The annual rate of mortality, which had increased from 22.1 to 22.4 per 1,000 in the four preceding weeks, declined again during the week to 24.2. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 13.1; Leicester, 17.9; Bradford, 18.1; Halifax, 19.3; Hull, 19.6; Brighton, 19.7; Huddersfield, 20.0; Bristol, 20.5; Birkenhead, 20.8; Birmingham, 21.7; Sheffield, 22.1; Sunderland, 22.1; Wolverhampton, 22.2; Liverpool, 22.6; London, 25.0; Cardiff, 25.4; Leeds, 25.5; Norwich, 26.1; Salford, 26.2; Newcastle-upon-Tyne, 26.2; Portsmouth, 26.4; Oldham, 26.4; Nottingham, 26.6; Bolton, 27.3; Manchester, 28.9; Preston, 29.4; Plymouth, 30.0; and the highest rate during the week, 30.5, in Blackburn. The death-rate in the twenty-seven provincial towns averaged 23.5 per 1,000, and was 1.5 below the rate recorded in London, which, as before stated, was 25.0 per 1,000. The 4,217 deaths registered during the week in the twenty-eight towns included 385 which were referred to the principal zymotic diseases, against 400 and 425 in the two preceding weeks; of these, 161 resulted from whooping-cough, 91 from measles, 34 from scarlet fever, 33 from diphtheria, 33 from "fever" (principally enteric), 32 from diarrhœa, and 1 from small-pox. These 385 deaths were equal to an annual rate of 2.2 per 1,000. The zymotic death-rate in London was equal to 2.7, per 1,000, while it did not average more than 1.8 in the twenty-seven provincial towns, and ranged from 0.0 in Norwich, Derby, and Birkenhead, to 3.6 in Nottingham, 4.8 in Plymouth, and 5.5 in Blackburn. The deaths referred to whooping-cough, which, in the six preceding weeks, had risen from 156 to 197, declined during the week to 161, and showed the largest proportional fatality in London, Portsmouth, and Salford. The fatal cases of measles, which had been 67 and 79 in the two previous weeks, further rose during the week under notice to 91, and caused the highest death-rates in Oldham, Nottingham, Plymouth, and Blackburn. The 34 fatal cases of scarlet fever exceeded by 3 the number in the previous week; this disease was somewhat prevalent in Leeds. The deaths referred to diphtheria, which had steadily increased in the four preceding weeks from 23 to 39, declined again during the week to 33, and included 20 in London, 5 in Bristol, and 2 in Birmingham. The 33 fatal cases of fever corresponded with the number in the previous week, and caused the highest death-rates in Preston and Wolverhampton. The 32 deaths referred to diarrhœal diseases were below those returned in recent weeks. No fatal case of small-pox was recorded during the week either in London, or in any of the twenty-seven provincial towns. The number of small-pox patients under treatment in the Metropolitan Asylum Hospitals, which had steadily declined in the fifteen preceding weeks from 90 to 10, rose again to 15 on Saturday, February 27th; 7 new cases were admitted to these hospitals during the week, against 1 and 2 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 8.1 per 1,000, and considerably exceeded the average. The causes of 108, or 2.6 per cent., of the 4,217 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,283,977 persons, 784 births and 580 deaths were registered during the week ending February 27th. The annual rate of mortality, which had been 24.5 and 22.3 per 1,000 in the two preceding weeks, rose again last week to 23.5, but was 0.7 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 14.1 in Leith, 15.3 in Aberdeen, 16.0 in Greenock, 18.0 in Perth, 19.6 in Edinburgh, 20.7 in Dundee, 20.8 in Paisley, and 31.0 in Glasgow. The 580 deaths registered during the week under notice in these Scotch towns included 19 which were referred to whooping-cough, 12 to diarrhœa, 6 to "fever" (principally enteric), 6 to scarlet fever, 5 to measles, 3 to diphtheria, and not one to small-pox; in all, 51 deaths resulted from these principal zymotic diseases, against 53 and 46 in the two preceeding weeks. These 51 deaths were equal to an annual rate of 2.1 per 1,000, which was slightly below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Paisley, Leith and Glasgow. The deaths from whooping-cough, which had been 17 and 13 in the two preceding weeks, rose again to 19, of which 17 occurred in Glasgow. The 12 fatal cases of diarrhœa showed a decline from those returned in recent weeks, and included 6 in Glasgow. The deaths referred to different forms of fever, which had been 9 and 2 in the two previous weeks, rose to 6 during last week, of which 2 were returned in Greenock, and 2 in Leith. The 6 fatal cases of scarlet fever showed a decline of 2 from the number in the preceding week and included 5 in Glasgow. Of the 5 deaths referred to measles, 3 occurred in Edinburgh, and 2 in Glasgow. A fatal case of diphtheria was recorded in Glasgow, in Edinburgh, and in Dundee. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.8 per 1,000, against 8.1 in London. The causes of 65, or 11.2 per cent., of the 580 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending February 20th, the total number of deaths registered in the sixteen principal town-districts of Ireland was 469. The average annual death-rate represented by the deaths registered was 28.2 per 1,000 of the population.[1] The deaths registered during the week in each of the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 41.3; Belfast, 26.3; Cork, 25.3; Drogheda, 8.5; Dublin, 31.6; Dundalk, 17.5; Galway, 33.6; Kilkenny, 38.1; Limerick, 16.2; Lisburn, 9.7;[1] Londonderry, 19.6; Lurgan, 46.2; Newry, 42.1; Sligo, 24.1; Waterford, 32.4; Wexford, 25.7. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in nine of the districts to 10.3 in Lurgan; the 9 deaths from all causes registered in that district comprising 1 from measles, and 1 from typhus. The 112 deaths from all causes registered in Belfast comprised 1 from measles, 1 from scarlatina, 1 from typhus, 3 from whooping-cough, and 2 from simple continued and ill-defined fever; among the 14 deaths in Waterford were 2 from diarrhœa; and the 4 deaths in Dundalk comprised 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 215. Twenty-two deaths from zymotic diseases were registered in Dublin; they consisted of 16 from whooping-cough, and 1 from each of the following diseases: measles, scarlet fever, typhus, enteric fever, ague, and erysipelas. Sixty-eight deaths from diseases of the respiratory system were registered; they comprised 52 from bronchitis, and 11 from pneumonia. The deaths of 13 children under 5 years of age (including 9 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 9 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 27 deaths, mesenteric disease 2, and cancer 5. Three accidental deaths were registered. In 37 instances the cause of death was "uncertified," there having been "no medical attendant" during the last illness.

[1] Return not received; the numbers for the preceding week have been adopted.

HEALTH OF FOREIGN CITIES.

It appears from the statistics published in the Registrar-General's return for the week ending February 13th, that the annual death-rate recently averaged 32.1 per 1,000 in the three principal Indian cities; it was 24.6 in Bombay, 35.7 in Calcutta, and 38.1 in Madras. Cholera caused 59 deaths in Calcutta, and "fever" mortality showed the largest excess in the same city. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 27.8, and was 4.7 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 33.3, and the 593 deaths included 26 from "fever," and 22 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.9, and ranged from 18.4 in Copenhagen to 27.0 in Stockholm; diphtheria and croup caused 4 deaths in Stockholm, and 10 in Christiania, and 4 fatal cases of scarlet fever were also reported in the latter city. In Paris, the death-rate was equal to 26.3, and exceeded the rate in London by 1.4; the 1,132 deaths included 31 from diphthera and croup, 20 from typhoid fever, and 6 from small-pox. The 211 deaths in Brussels included 5 from whooping-cough, and 3 from "fever," and were equal to a rate of 25.2. The rate in Geneva was 23.8. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.0, the rate ranging from 20.6 in the Hague, to 29.6 in Rotterdam; measles caused 16 deaths in Amsterdam and 7 in Rotterdam, and diphtheria and croup 4 in Amsterdam and 4 in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.8, and ranged from 22.6 and 26.6 in Berlin and Munich, to 31.9 in Prague and 32.5 in Buda-Pesth. Diphtheria showed the greatest mortality in Berlin, Hamburg, Dresden, and Trieste; small-pox caused 17 deaths in Buda-Pesth, 9 in Vienna, and 2 in Prague. The death-rate was equal to 34.7 in Rome, and to 45.0 in Venice; small-pox caused 8 deaths in Rome, and 5 in Venice, and the deaths in Rome also included 2 from measles, and 6 from diphtheria. In four of the largest American cities, the recorded death-rate averaged 23.9, and ranged from 18.1 in Baltimore, to 25.1 in New York. Diphtheria caused considerable mortality in each of these American cities; the deaths in Philadelphia included 10 from typhoid fever.

It appears from the statistics published in the Registrar-General's return for the week ending February 20th, that the annual death-rate recently averaged 33.9 per 1,000 in the three principal Indian cities; it was 23.6 in Bombay, 35.6 in Calcutta, and 47.4 in Madras. Cholera caused 48 deaths in Calcutta, and diarrhœal diseases 50 in Calcutta, 76 in Madras, and 27 in Bombay; "fever" mortality showed the largest excess in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 26.7, and was 2.3 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 35.1, showing a further increase upon the rates in previous weeks; the 624 deaths included 83 from diarrhœal diseases, 24 from "fever," 15 from diphtheria, and 12 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 20.5, ranging from 18.4 in Copenhagen, to 24.1 in Stockholm; diphtheria and croup caused 6 deaths in Copenhagen, and 9 in Christiania, and 2 deaths from typhoid fever occurred in Copenhagan. In Paris, the 1,135 deaths were equal to a rate of 26.3, and included 40 from diphtheria and croup, 10 from typhoid fever, and 6 from small-pox. The 167 deaths in Brussels were equal to 21.7 per 1,000; and the 24 deaths in Geneva, including a fatal case of diphtheria, gave a rate of 17.3. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 26.1, the rates ranging from 17.2 in the Hague to 34.3 in Rotterdam, measles caused 12 deaths in Amsterdam and 8 in Rotterdam, and 6 deaths were referred to diphtheria and croup in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.5, and ranged from 20.1 in Dresden, and 22.6 in Berlin, to 32.9 in Vienna, and 35.4 in Prague. Diphtheria showed the greatest mortality in Berlin and Buda-Pesth, small-pox caused 17 deaths in Buda-Pesth, 14 in Vienna, and 7 in Prague. The death-rate averaged 35.4 in two of the largest Italian cities, and was equal to 33.6 in Venice and 36.2 in Rome; small-pox caused 9 deaths in Rome, and 6 in Venice. In four of the principal American cities, the mean recorded death-rate was 23.1, the rates ranging from 18.8 in Baltimore, to 27.5 in New York. Diphtheria and scarlet fever showed more or less fatal prevalence in each of these American cities; typhoid fever caused 8 deaths in Philadelphia.

OBITUARY.

SIGISMUND SUTRO, M.D., Consulting Physician to the German Hospital.

We have to announce the death of Dr. Sutro, following, within three days, an apoplectic attack, with paralysis of one side.

Dr. Sutro was a native of Bavaria, born in December, 1815. He was naturalised shortly after his arrival here, over forty years ago. He was for a very long period connected with the German Hospital, as senior, and latterly as consulting-physician. He was known to almost every German in London, and widely esteemed and beloved. In all his patients, rich and poor, he took the same deep fatherly interest, having a large and generous heart that sympathised deeply with all affliction. He was highly esteemed and well thought of by the profession. He loved his work, and, till within the last couple of years, when he took some needed rest, he was ready at the call of duty night

and day, almost begrudging himself the necessary time for meals. The best and most affectionate of husbands and fathers, he leaves a widow and five children to mourn his loss, which will also be felt deeply by a wide circle of friends. Dr. Sutro was the author of *Lectures on the German Mineral Waters, and on their Rational Employment, with Appendix on Principal European Spas and Climatic Health Resorts; a Short Account of German Spas*, and of articles on the Progress of German Medical Science, etc.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The under-named gentlemen were admitted Licentiates of the College on February 6th.

Pierce J. J. O'Connor, J. A. Scully, P. J. Sheridan, and J. G. Westlake.

The following gentleman was admitted a Fellow of the College on February 12th.

Surgeon J. M'Cloughry, I.M.D., 5th Bombay Cavalry.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentleman passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on Thursday, February 11th, 1886.

Pridham, William Frederick, 10, Cromwell Crescent, South Kensington, S.W.

The following gentleman passed on February 18th.

Deyns, Charles John, Fenny Stratford, Bucks.

The following gentlemen passed on February 25th.

Kempe, Charles Edward, 24, Ladbroke Grove Road, W.
Ward, Stanley Edward, Haverhill, Suffolk.

MEDICAL VACANCIES.

The following vacancies are announced.

ANCOATS HOSPITAL, Manchester.—Honorary Physician. Applications to S. Baron.

BOROUGH OF HALIFAX.—Borough Analyst. Applications by March 18th to Keighley Walton, Town Clerk, Halifax.

BRISTOL ROYAL INFIRMARY.—House-Surgeon. Applications by March 13th, to the Secretary.

CARDIFF UNION.—Vaccination Officer. Salary, £140. Applications by March 16th to A. J. Harris, Clerk, Cardiff.

DEVON COUNTY ASYLUM.—Junior Assistant Medical Officer. Salary, £120. Applications by March 18th to T. E. Drake, Solicitor, Exeter.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Application by March 18th to the Secretary.

ELY UNION, RURAL SANITARY DISTRICT.—Medical Officer of Health. Salary, £45. Applications to E. B. Claxton, Clerk.

ELLAND LOCAL BOARD OF HEALTH.—Medical Officer of Health. Salary, £30. Applications to T. England, Solicitor, Halifax.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100. Applications by April 7th.

GREAT YARMOUTH HOSPITAL.—Resident Surgeon and Dispenser. Salary, £90 per annum.

GUEST HOSPITAL, Dudley.—Resident Medical Officer. Salary, £120. Applications to E. Poole, Secretary, before March 19th.

LISNASKEA UNION.—Medical Officer. Maguiresbridge Dispensary. Salary, £95 per annum and fees. Applications to Mr. Law, Honorary Secretary. Election on March 11th.

LIVERPOOL EYE AND EAR INFIRMARY.—House-Surgeon. Salary, £80 per annum. Applications to Reg. Haigh, Grosvenor Buildings, Liverpool, by March 10th.

NENAGH UNION.—Medical Officer. Nenagh Dispensary. Salary, £125 per annum and fees. Applications to Mr. Anthony Nolan, Honorary Secretary. Election on March 9th.

NEWCASTLE-ON-TYNE DISPENSARY.—Visiting Medical Assistant. Salary, £120. Applications to the Honorary Secretary.

NORFOLK AND NORWICH HOSPITAL, Norwich.—Assistant to House-Surgeon. Applications by March 17th to H. Chester.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, E.—Resident Clinical Assistant and Registrar. Salary, £60. Applications by March 22nd.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Dental Surgeon. Applications by March 6th, to A. Craske.

PARISHES OF LOCHGOILHEAD AND KILMARICH. — Medical Officer. Salary, £100 per annum. Applications to Rev. J. M'Corkindale, Manse, Lochgoilhead, before March 10th.

RADCLIFFE INFIRMARY, Oxford.—Consulting Dental Surgeon. Applications to the Secretary by March 10th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by March 10th.

SALOP FORESTERS MEDICAL AID ASSOCIATION.—Surgeon. Salary, £160. Applications to John Hunchcliffe, Foresters' Hall, Shrewsbury.

STROUD GENERAL HOSPITAL.—House-Surgeon. Salary, £80 per annum. Applications to J. Libby, Esq., Honorary Secretary, New Mills Court, Stroud, Gloucestershire.

WEST NORFOLK AND LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, £100. Applications by March 13th.

YORK DISPENSARY.—Resident Medical Officer. Salary, £130 per annum. Applications by March 9th, to S. W. North, 84, Micklegate, York.

MEDICAL APPOINTMENTS.

BRAMWELL, J. W., L.R.C.S.E., appointed Honorary Surgeon to the Cheltenham General Hospital.

BROWNE, Oswald, M.B., appointed Honorary Physician to the St. Marylebone General Dispensary.

BUIST, A. C., M.B., appointed House-Surgeon to the Stockport Infirmary.

CLAY, Augustus Frederic, M.R.C.S. and L.S.A., appointed Casualty Surgeon to the Queen's Hospital, Birmingham.

COOPER, Charles B., L.R.C.P., M.R.C.S., and L.S.A., appointed House-Physician to the Liverpool Northern Hospital.

FOUNTAIN, E. O., B.A.Cant., L.S.A., M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior House-Surgeon to the Western General Dispensary.

GARDNER, Henry Willoughby, M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the Liverpool Infirmary, Myrtle Street, Liverpool.

GODDARD, Charles Ernest, L.R.C.P.Lond., M.R.C.S.Eng., A.K.C.Lond., appointed Surgeon to Sudbury Cottage Hospital, and District Medical Officer and Public Vaccinator to No. 2 Harrow Division (Sudbury and Wimbley), Hendon Union.

GOULD, E. E., M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator to the Hailsham Union, Sussex.

HORTON, Wilfred W., M.D.Edin., appointed Assistant Medical Officer to the Wonford House Hospital, Exeter.

MACVIE, Adam, M.D.Ed., appointed Medical Officer of Health for Baildon, Yorks.

MARSH, F., F.R.C.S., appointed Casualty-Surgeon to the Queen's Hospital, Birmingham.

OSWALD, R. J. W., L.R.C.P.Ed., M.R.C.S.Eng., appointed Surgeon to the Royal South London Dispensary.

POWELL, Scudamore Kydley, M.D., M.R.C.S., L.S.A., appointed Honorary Visiting Physician to the Infirmary for Consumption and Disease of the Chest, Margaret Street.

PURDY, James R., M.B., C.M., appointed Medical Officer to the No. 4 District of Hunslet Union (Oulton with Modlesford), *vice* C. Jewison, M.R.C.S., L.S.A., resigned.

SHARMAN, Mark, M.B.Glas., M.R.C.S.Eng., appointed Medical Officer to the Leicester Provident Dispensary.

TURNER, A. Jeffris, M.B., appointed Assistant House-Surgeon to the Stockport Infirmary.

WHITFIELD, John Neil, L.C.P.S.G., L.M., L.S.A.Lond., appointed Medical Officer to the Friendly Society's Medical Institute, Northampton.

WILLIAMS, R. Muzio, M.R.C.S., L.R.C.P., L.S.A., appointed Resident Medical Officer to the London Fever Hospital.

WORTHINGTON, Sidney, M.B.Lond., F.R.C.S.Eng., appointed House Surgeon to the Female Lock Hospital, London.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

CAMPBELL.—At 1, Princes Gate, East, Liverpool, on February 24th, the wife of W. Macfie Campbell, M.D.Ed., of a son.

PARSONS.—In January, at San Jorge Durayno, Monte Video, the wife of Doctor Herbert Parsons, of a daughter.

STAMPER.—On February 26th, at Pembroke Dock, the wife of J. Fenton Stamper, M.D., of a son.

DEATH.

TOWNE.—On February 28th, at 99, Rectory Road, Stoke Newington, Annie Lilian (Lillie), the dearly loved daughter of Alexander Towne, Surgeon, aged 3 years.

HOSPITAL ATHLETICS.—The remarkable growth of athletic pursuits among metropolitan medical students was evinced this week by the singularly numerous and brilliant assembly which took place at the Holborn Restaurant to celebrate the annual festivities of the St. Mary's Hospital Athletic Sports Club. Not less than 203 past and present students of the hospital were present; among others, Dr. Farquharson, M.P., Mr. Ernest Hart, Dr. Danford Thomas, Mr. Mivart, F.R.S., Surgeon-General Perkins; Surgeons-Major Myers, Pratt, Evatt, Hill; Brigade-Surgeons Clarke and Anderson; Colonel Greenway, Dr. Milner Moore (Coventry), Mr. Rayner (Uxbridge), Mr. Havill (Felixstowe), Mr. Philps (Peckham), Mr. Parsons (Wimbledon), Dr. John Moore (Moreton-in-Marsh), Mr. Snowden (Portsmouth), Mr. Hickman (Newbury); Drs. Milson, Owen Roberts, Knott, Lyle, Hubbard, Staples; Messrs. Parker, Young, Walker, Doran, Noble Smith, etc. The speakers were naturally inclined to dwell upon the successful cultivation of physical training as going hand-in-hand with, and perhaps partially explaining, the unprecedented success of St. Mary's Hospital School as an institution of medical and scientific training. In the recital of the various exploits by which the athletes had distinguished themselves, it was mentioned that, out of seventeen students who passed in every subject at the recent preliminary scientific examination at the University of London, five passed from St. Mary's.

Although the youngest school in the metropolis, St. Mary's Hospital School has early taken rank among the premier metropolitan Schools, the number of entries last year exceeding seventy. The whole of the staff were present, and the proceedings were naturally of an enthusiastic character. The Dean, Mr. Field, who was in the chair, and who has distinguished himself by unceasing attention to the social well-being of the students, and who has been a prominent supporter of the athletic clubs, received a tumultuous ovation. St. Mary's Hospital staff are distinguished for their music, as well as their scientific attainments; and this part of the evenings proceedings was, therefore, unusually successful; Mr. Anderson Critchett, Mr. Mivart, Mr. Ernest Lane, among others, contributing greatly to the pleasures of the evening.

LAKMI AND NAFFA.—Besides wine from the grape, whose preparation calls for no special notice, there is a kind of "palm wine" or *lakmi*, furnished by the sap of the date palm (*Phœnix dactylifera*). Trees in full vigour are selected for tapping. If the life of the tree is to be sacrificed, the incision is made so as to destroy the terminal bunch; but more generally the tree is to be preserved, and in that case the cut is kept clear of the terminal bunch, and is carried round the stem. The juice escaping from the wound is conducted by a reed into an earthenware pot (*karreri*), and may amount to nearly two gallons daily at first, gradually sinking to about half that quantity towards the end of the tapping, which is seldom allowed to exceed a month. The collection being terminated, the incision is carefully plastered up with clay, and, after about two years, with irrigation, the tree will resume fruit-bearing. Much of the "wine" is drunk fresh, when it resembles sparkling cider, but becomes insipid after losing its carbonic acid. Its colour is opalescent and milky. After undergoing alcoholic fermentation, it contains 4.38 per cent. of alchohol, 0.22 carbonic acid, and 5.60 of mannite. The Moors make extensive use of a spirit prepared from the water in which comb is boiled in treating beeswax. This water, being impregnated with honey, is allowed to ferment, and is then distilled; the spirit is called *maharga*. It is flavoured with aniseed or with *naffa*, that is, fennel acid (*Fœniculum dulce*).

ROYAL METEOROLOGICAL SOCIETY.—At the annual general meeting, held on January 20th, the following officers and Council were elected for the ensuing year. *President:* W. Ellis, Esq. *Vice-Presidents:* G. Chatterton, Esq.; E. Mawley, Esq.; G. M. Whipple, B.Sc.; C. T. Williams, M.D. *Treasurer:* H. Perigal, Esq. *Trustees:* Hon. F. A. R. Russell; S. W. Silver, Esq. *Secretaries:* G. J. Symons, Esq., F.R.S.; J. W. Tripe, M.D. *Foreign Secretary:* R. H. Scott, Esq. *Council:* E. D. Archibald, Esq.; W. M. Beaufort, Esq.; A. Brewin, Esq.; F. W. Cory, Esq.; H. S. Eaton, Esq.; C. Harding, Esq.; R. Inwards, Esq.; B. Latham, Esq.; J. K. Laughton, Esq.; W. Marcet, M.D., F.R.S.; C. E. Peek, Esq.; Captain H. Toynbee.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Dr. W. H. White, Dr. F. de Havilland Hall, Dr. Gilbart Smith: Cases of Aneurysm of the Aorta.

TUESDAY.—Royal Medical and Chirurgical Society. Mr. J. Bland Sutton: A Case of General Seborrhœa, or "Harlequin Fœtus." Dr. Paul Chapman: On Cardiography, with Special Reference to the Relation of the Time of Duration of Ventricular Systole to that of Diastolic Interval. Dr. Hebb: A Case of Tuberculosis of the Skin.

WEDNESDAY.—The British Gynæcological Society, 8.30 P.M. Specimens will be shown by Dr. Bantock, Dr. Barnes, Mr. Lawson Tait, and others. A paper on Porro's Operation will be read by the President.—Epidemiological Society of London, 8 P.M. Sir Wm. R. E. Smart: Cholera Epidemics in Ships and Fleets.—Royal Microscopical Society, 8 P.M. A. D. Michael: Life-History of an Acarus, one Stage whereof is known as Labidophorus talpæ, and upon an Unrecorded Species of Disparipes.—Hunterian Society. Dr. Arthur Davies: Four Cases of Cerebellar Disease. Dr. Turner: On Arteritis. Mr. Symonds: Histological Characters of Diphtheritic Membrane.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M.; Living and Card Specimens at 8 P.M. Report of Committee on Sympathetic Ophthalmitis. Priestley Smith: On Primary Glaucoma in Relation to Age. Dr. Bristowe: Hæmorrhage into the Brain Attended with Optic Neuritis. W. H. Jessop: A New Pupillometer; (2) On Herpes Frontalis Affecting the Eye. W. H. Adams Frost: A New Model Showing the Movements of the Eye. W. Lang (for Dr. I. W. Barrett): A New Microtome. Dr. Argyll Robertson: On the Operation of Central Blepharoraphy. Dr. L. Werner: On the So-called Central Guttate Choroiditis. R. Brudenell Carter: Two New Forms of Perimeter.

FRIDAY.—Clinical Society, 8.30 P.M. Dr. Roderick Maclaren (Carlisle): Hernial Cerebri Successfully Treated by Closing the Opening in the Skull with a Silver Plate. Dr. Whipham and Dr. Myers: On Some Chronic Nervous Sequelæ of Small-Pox, Especially as Affecting the Speech (illustrated by living specimens). Dr. Samuel West: A Case of Baruria in a Woman. Mr. Jonathan Hutchinson: A Case of Necrosis of the Lower Jaw from the Medicinal Use of Phosphorus. Dr. Ewart will exhibit a Modification of the Binaural Stethoscope Suited for Differential Observations.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M. Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M. West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ea Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu.,

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2 o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30 Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throa Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Edito 161A, Strand, W.C., London; those concerning business matters, non-delive of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161 Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editori business of the JOURNAL be addressed to the Editor at the office of the JOURNA and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDIC JOURNAL, are requested to communicate beforehand with the Manager, 161 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, shou authenticate them with their names—of course not necessarily for publicatio

CORRESPONDENTS not answered, are requested to look to the Notices to Cor spondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers Health if they will, on forwarding their Annual and other Reports, favour with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

Home for an Epileptic Young Lady.

M.B. is anxious to place an epileptic patient in the house of a medical man, and would like some member to communicate with him, stating terms, locality, etc.

Surgeons to the Coastguard.

X. Y. Z. wishes to obtain an appointment as admiralty surgeon and agent connected with the coastguard, and asks where he should send his application, whether it is usual to send an application to the Admiralty Office, and, even so, whether that would be of any use. Who are the persons who fill these vacancies?

A Question of Treatment.

J. K. M. asks for suggestions as to the treatment of the following case. The patient is a sallow-faced looking woman, aged 28, with one child, and no suspicion of syphilis on either paternal or maternal side. Three months ago, after her confinement, the soles of her feet felt hot and tender to touch, and had an intense prickling sensation. Through neglect, the blisters which formed suppurated, and the whole epidermis came off. By antiseptic treatment and rest in bed they are now better, but the prickling sensation remains as bad as ever, though the new skin is perfectly healthy. She had also endocervicitis, which has succumbed to ordinary treatment. For two months she has had a course of arsenic.

Pupil Wanted.

Dr. Stedman will be most thankful for information as to the best means of obtaining a pupil (resident) at the Royal Surrey County Hospital, Guildford; also, a fairly advanced student who, for a small salary, would take work in absence of house-surgeon, and undertake dispensing.

Ligature of the Vertebral Arteries for Epilepsy.

J. W. asks for information as to the origin of the operation of tying the vertebra arteries for epilepsy, and especially on the following points. 1. Are animals subject to epilepsy? 2. Have they vertebral arteries? 3. If so, was the first experiment to cure tried on the animal? 4. If yes, or no, on whom was the first operation performed, and with what result? 5. Subsequent operations, if any, the result.

*** In reference to the above, Dr. W. Alexander, of Liverpool, who suggested the operation in 1881, obliges us with the information that the three cases first operated on are quite well and free from fits up to the present time; the subsequent ones have not been so uniformly successful. A summary of the results in all the cases will appear in the forthcoming *Dictionary of Surgery*, edited by Mr. Christopher Heath. The operation, he considers, is not by any means dangerous, and it is a great pity it does not more frequently succeed in curing epilepsy. No experiments were performed on animals, as Dr Alexander did not think they were needed, or would have been useful. Sir Astley Cooper, as he afterwards found out, tied the vertebrals in dogs, with results entirely different from what actually occurred in man after a similar operation. The first operation was performed on a poor fellow, helpless, and often nearly dead from epilepsy, who prayed that anything might be done to relieve him. A facility of easily reaching the artery was acquired by numerous experiments on the dead subject. One vertebral artery was tied at a time in the first instance, and no death occurred till about the twentieth case, when one took place from pyæmia.

Travel in the Riviera.

Sir,—I have an invalid friend who wishes to visit the Riviera, and surrounding district up to Genoa, partly for pleasure and partly for health; and he has asked me what handbook I should advise for the same, one not only about the climate, but also the best routes to travel, the most comfortable hotels, with a slight regard to economy, etc. Would you kindly inform me what handbook you should advise me to recommend to him?—Yours faithfully,

A Member of S. W. Branch.

*** One of the best English handbooks for climate and stations of the Riviera is certainly that by Dr. Sparks, and Dr. Marcet's excellent book gives some account of hotels, and living, and climate, and notices of all the stations. There is but one route to the Riviera from London, through Paris. For the details asked for, our correspondent had better consult his foreign Bradshaw, or other ordinary guide-books. We do not know of any special one.

Medical Degrees.

Sir,—I should be much obliged if you or any of your readers could give me any information as to the probability or otherwise of any change being made by the Royal Colleges of Physicians and Surgeons of London in their charters, so as to allow them to grant the degree of M.D. to their Licentiates and Members respectively.

This is a question of considerable interest to a large number of your readers, as many, like myself, who are anxious to obtain a degree, and, if possible, a British one, would be quite content to wait a short time if there be any probability of our being able to obtain one at home; failing this, our only resource is Brussels. It really seems hard that Englishmen who have studied in the metropolis of the world should be unable to obtain a degree there on reasonable conditions.—Yours truly,

Jean Taureau.

*** The subject is under consideration by the colleges, but we cannnot say what the result will be, or how soon it will be announced. The matter is one that requires grave consideration.

H. W. S. asks members to recommend books on diet for invalids.

ANSWERS.

Homes for Imbecile Children.

Mr. William Leigh (Chiswick) should apply for information to the Secretary of the Asylums for Idiots, Earlswood, Redhill, Surrey; or of the Royal Albert Asylum for Idiots and Imbeciles, Lancaster.

Preliminary Examinations.

Mr. W. Iliffe.—Certificates of having passed the junior Local Examination of Oxford or Cambridge, including Latin and Mathematics, with either Greek, French, German, or Natural Philosophy are recognised by the General Medical Council for the registration of medical students. There is no preliminary Arts Examinations at the Colleges of Physicians and Surgeons in England.

Salicylates in Gonorrhœa.

In answer to a query in the Journal of February 20th, Salix describes the following case. M. N., on the fourteenth day of a third attack of gonorrhœa, while the discharge was still abundant, and the neck of the bladder had apparently been involved for three days, as evidenced by frequency of micturition, was seized in the evening, after unwonted exposure to cold and fatigue, with muscular pains, headache, and shivering. The temperature during the night rose to 103.2°, followed by profuse sweating. The next morning, the discharge was found to have ceased. Pain on movement was complained of in one hip and the opposite knee, and the patient was put on thirty grains of salicylate of soda every four hours, combined with bromide of potassium. Within the next week there were several rises of temperature, without rigor, each followed by profuse acid sweats, the temperature rising twice to 103.4°, and becoming nearly normal, or even subnormal, in the intervals. The pains in the joints did not reappear after the second day. On the sixth day a herpetiform rash, probably sudominal, appeared on the abdomen and thighs. Two days later, profuse serous diarrhœa set in, apparently due to enteritis of the larger bowel. The salicylate was then discontinued, and the diarrhœa controlled by morphine suppositories; but for five days more the irregular temperature rises continued, not, however, above 102.2°, but still followed by abundant acid-sweats. At the end of this time, thirteen days from the onset of febrile symptoms, the temperature began to remain normal, and the discharge from the urethra, hitherto absent, reappeared as it had previously been. Three weeks later, under simple tonic treatment, the patient was entirely convalescent. There was a vague history of rheumatic fever ten years earlier. Whether this was an instance of gonorrhœal rheumatism or gonorrhœal septicæmia, and in either case, what was the effect of the salicylate, is, perhaps, open to question.

NOTES, LETTERS, ETC.

A Note for the Curious.

On examining the foot of a female patient the other day, I found the second and third toes of the left side undivided—all of one piece—as far as the middle joint, or end of the first phalanges, constituting what is commonly termed webbed toes; but which, in this case, can scarcely be said to be "webbed," seeing that the phalangeal bones are apparently covered with only one piece of integument, without intervening mark or sulcus. On calling attention to this abnormality, and after much questioning, I elicited the following information. 1. Neither her parents nor her aunts (she had no uncles on her mother's side) had such a peculiarity, but her grandmother had. 2. None of her sisters or brothers had joined toes, nor any of her children, but a grandchild has (the eldest son's child). 3. At her third confinement, she gave birth to twins. 4. Her husband's mother had twins, her own husband being one of them. 5. Her eldest son's wife had twins, and this also at the third confinement.—I am, etc.,

J. Farrar, M.D.

Morecambe.

Accidental Poisoning.

The father of the victim writes to a daily contemporary concerning the case of accidental poisoning referred to in the Journal of February 20th, page 366. "There was a paragraph in your issue of the 16th recording the poisoning by misadventure of a youth aged 15 at a public school last week. As the parent of the unfortunate boy, may I be allowed to lift up my voice in a most earnest protest against the culpable carelessness—I had almost said criminal—with which such virulent poisons as carbolic acid, etc., are dealt with by the ignorant and thoughtless? My son died from the effects of the above-mentioned acid, which was administered by a nurse in mistake for medicine, which it resembled closely in colour only. The poison had actually been (as a surplus of a portion used for disinfecting purposes) poured into an empty medicine-bottle, and left on the table in the sick-room with the medicine which was being taken. The 'nurse' at the inquest said that she 'generally' labelled the bottle containing carbolic acid, or placed it in a blue bottle. Had she done so always, the chances are that a promising young life would have been spared. Until people in responsible positions will learn to exercise common-sense and ordinary care, such lamentable deaths as that which I have described will never cease to occur, nor will the indifferent cease to play with human lives."

Antipyretics and Leucocytes.

Sir,—The important position given by Mr. Sutton to the vital action of leucocytes in the inflammatory process, and the close connection existing between local inflammation and general pyrexia, seem to add a new significance to the fact that most, if not all, our antipyretics are protoplasmic poisons and antiseptics. It is, I think, a clinical fact that in specific continued fevers, in which, according to Mr. Sutton's view, the free action of leucocytes would be beneficial, medicinal antipyretics are of very doubtful benefit. As it is not possible to introduce them into the system in sufficient concentration to destroy the invading germ, their action is rather to embarrass the salutary action of the leucocytes.

Where more or less persistent inflammatory products are formed in simple inflammation, antipyretics again seem to fail. The active function of leucocytes is required for the removal of such products.

On the other hand, in rheumatic fever, in which the local inflammations are of a transitory character, and the products of inflammation easily removed, the beneficial effects of salicylate of soda in subduing the inflammatory action are well marked. In the initial stage, also, of acute inflammation, before inflammatory products have been fully formed, the moderating effects of antipyretics may be observed. It seems to me, for instance, that a few doses of salicylate of soda, given very early in a case of pneumonia, do good; and the administration of antimony, etc., is a well-worn practice. These facts seem to me strongly to indicate that the action of these drugs is largely due to their depressing effect on the movements, etc., of protoplasmic elements.—I am, etc.,

Glossop. Duncan J. Mackenzie, M.D.

In view of the success of the Free Registry for the Unemployed at Egham, as described by its founder, Mr. Nathaniel L. Cohen, in the columns of the *Times* of February 9th, an influential Central Committee, including the Earl of Jersey and the Right Honourable Edward Stanhope, M.P., has been formed to organise and assist in the formation of similar registries in other parts of the country. All interested in the scheme (which appears, for country districts, an eminently useful and practical one) are invited to send for particulars to the Honorary Secretaries at 8, New Square, Lincoln's Inn, W.C.

Aqua Vitæ.

The inhalation of oxygen has been largely tried in phthisis and other affections with but temporary and doubtful benefit. Lately, a method is stated to have been discovered by a firm of chemists in Paris, by means of which oxygen can be rapidly and cheaply prepared; and it is now proposed to introduce a drink, consisting of distilled water charged with oxygen gas under pressure, similar to soda or seltzer water, for which, from its theoretically recuperative powers, the name of aqua vitæ is deemed suitable. There is something seducing in the idea of thus imbibing the aëra vitæ, any lack of supidity in which can presumably be readily corrected by the admixture of suitable quantities of one or other of the alcoholic beverages at our command.

It would be interesting to know the results, beneficial or otherwise, of such imbibitions; but for them to have any value as observations, it will be necessary for the individuals who are willing to sacrifice themselves on the altar of scientific experience, to state whether they mixed anything with their allowance of "oxygen water," and, if so, how much, and how often.

Maternal Impressions.

In reference to Mr. Garraway's letter on the above theme in the Journal of January 30th, Mr. T. Graham, of Hilldrop Road, writes that, about fourteen years ago, on examining the reception prisoners at Holloway Gaol, a boy, about 13 years old, came before him with the fore, middle, and ring fingers of his right hand closely webbed together. His finger-nails were extremely long and narrow, each terminating in a very sharp point, like a rat's claw. It appeared that his mother, when pregnant, had been frightened by a rat, and in her terror wrung her hands violently together, no doubt using the right fingers the more forcibly.

A lady had exerted herself greatly, when pregnant, in endeavouring to get an idiot-child admitted into Earlswood Asylum. The mother of the child showed it to the charitable lady. The result was the birth, if not decidedly of an idiot, certainly of an imbecile offspring, with an imperfectly developed head, and, though now eleven years of age, still unsusceptible of any but the most rudimentary education. Mr. Graham does not see how we can well ignore the facts as above recorded. He thinks, with Mr. Garraway, that a woman's surroundings, during her pregnancy, should be free from everything that is repulsive.

Injury of the Elbow-Joint in Children.

Sir,—Will you permit me to make a few observations on a paper of Mr. J. Hutchinson, junior, which appeared in the British Medical Journal of January 2nd? The subject of the paper was Dislocation of the Radius in Children, and followed one by me relating to the same subject, and which appeared in the Journal of December 5th, 1885.

Mr. Hutchinson claims priority of publication, in that he published a paper on the subject in the *Annals of Surgery*, in August. I fully explained the dislocation, I believe for the first time, in the British Medical Journal in 1882, and had been collecting notes of cases for two years previously. The paper which you published on December 5th was written in 1883 for the annual meeting of the East Anglian Branch of the Association. Owing to the abundance of material the paper was not read, but the President forwarded it to you. More than four years' residence in hospitals as house-surgeon gave me unusual advantages in investigating injuries of this kind. I still believe my own method of reduction to be the correct one, and that the displacement has a tendency to recur, or rather to occur again, in the same subject, is undoubted. The *post mortem* experiments of Mr. Hutchinson are most interesting, and quite confirm my own opinions.—I am, sir, faithfully yours,

Umballa, Punjab. Sidney H. Lindeman, Medical Staff.

Pregnancy and Small-pox.

Sir,—In vol. i, page 470, *et seq.*, of *Obstetric Medicine and Surgery*, by Drs. Robert and Fancourt Barnes, the history of small-pox associated with pregnancy is fully discussed, also the statistics relating to ninety-five cases occurring in women at different periods of gestation, all of whom came under my personal observation.—Faithfully yours, Wm. Gayton, M.D.

Haverstock Hill, N.W.

The Binaural Stethoscope in the Detection of Cardiac Murmurs.

Sir,—Some months ago, I had a similar experience to that of Dr. Suckling in auscultating the chest in a case of mitral murmur, and can confirm his observation in the fact that the binaural stethoscope does not conduct the sounds of the heart with the exactness that could be desired. As a rule, I always practise immediate auscultation in examining the heart. The wooden stethoscope may enable one to localise with more exactness pericardial friction-sound than with the ear to the chest.—I am, etc., John Brown, L.R.C.P.Lond.

Bacup.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Graily Hewitt, London; Dr. W. Woodward, Worcester; Dr. Joseph Rogers, London; Dr. W. Gayton, London; Dr. Edwards, Philadelphia; Mr. C. S. Graham, Bristol; Our Egyptian Correspondent; Mr. C. E. Tanner, London; Dr. Henry, Sydney; Dr. Macpherson, London; Mr. C. S. Evans, London; Mr. G. E. Jeaffreson, Framlingham; Mr. J. R. Purdy, Oulton, near Leeds; Surgeon-Major W. T. Black, Edinburgh; Mr. H. G. Brooke, Manchester; Dr. Durand-Fardel, Biarritz; Dr. De Chaumont, Southampton; Dr. Arthur Gamgee, St. Leonard's-on-Sea; Dr. Lindsay, Belfast; Mr. Edward East, London; Mr. Gorton Coombe, Tillingham; Dr. C. E. Prior, Bedford; Mr. Alfred Teevan, London; Dr. Rayner, Hanwell; Dr. Napier, Dunbar; Dr. Simms, Twickenham; Dr. P. M. Rice, Galway; Mr. Joseph Hobson, Leeds; Mr. Bertram M. H. Rogers, London; Mr. W. T. Jackman, Coggeshall, Essex; Dr. Warner, London; Mr. Shirley Murphy, London; Dr. C. A. Gray, Penicuik; Dr. Gowers, London; Mr. T. A. Collinson, Chester-le-Street; Messrs. R. H. Read and Co., Bristol; Dr. R. H. Townsend, Queenstown, Ireland; Mr. R. Dane, South Hampstead; Mr. Austin Meldon, Dublin; Dr. J. J. Welply, Bandon; Mr. T. Cronin, Cork; Mr. H. Waite, Leeds; Mr. L. Paine, Stroud; Dr. Wigan, Portishead; Mr. F. M. Blumer, Stafford; Mr. T. W. H. Garstang, Knutsford; Mrs. E. Kempe, Newton Abbott; Mr. W. Gruggen, Hatfield, Broadoak; Mr. C. G. Campbell, Saddleworth; Dr. F. Imlach, Liverpool; Dr. A. M. Edge, Manchester; Mr. J. Smith, London; The Honorary Secretaries of the Association of Members of the Royal College of Surgeons; Dr. Thin, London; Mr. W. F. Sheard, London; Mr. F. Craddock Palmer, Chalford; Mr. C. E. Parslow, Birmingham; Our Aberdeen Correspondent; Dr. Shuttleworth, Lancaster; The Honorary Secretaries of the Manchester Medical Society; Dr. J. W. Moore, Dublin: Mr. W. E. Green, Sandown; Mr. Frederick Treves, London; The Secretary of the Ophthalmological Society; Dr. G. W. Crowe, Worcester; Dr. Gervis, Ashburton; Mr. A. W. Nankivell, Chatham; Dr. Mackie, Bedford; Dr. Stedman, Guildford; Dr. Richard Jeffreys, Chesterfield; Dr. W. J. Sykes, Wallington; Brigade-Surgeon Watson, Cheltenham; Dr. Playfair, London; Mr. H. Nelson Hardy, London; Mr. W. C. Hearne, Cinderford, Gloucester; Mr. Robert Reily, Boyle; Mr. H. B. Anderson, London; Dr. R. Fowler, London; Dr. P. Z. Hebert, London; Mr. A. E. Chambers, Denton; Dr. Matthew Coates, Streatham; Dr. Pearse, Plymouth; Mr. Francis H. Welch, Netley, Southampton; Dr. Bond, Gloucester; Mr. H. B. Runnalls, Saltash; Mr. C. E. Goddard, Wembley, Middlesex; Dr. Ernest Jacob, Leeds; Dr. Styrap, Shrewsbury; Mr. C. Donkin, Faversham; Dr. Willoughby, London; Dr. A. Ernest Sansom, London; Mr. W. B. Kilburn, Ventnor, Isle of Wight; The Secretary of the London Sanitary Protection Association; Dr. Oscar Liebreich, Berlin; Dr. B. H. Mumby, Portsmouth; Dr. Waters, Liverpool; Dr. A. T. Myers, London; Dr. W. Campbell, Liverpool; Mr. A. S. Myrtle, London; Mr. F. J. Turner, Reeth; Messrs. Burroughs and Wellcome, London; Our Birmingham Correspondent; Dr. A. H. Carter, Birmingham; Dr. A. Stewart, Pendleton; Mr. W. S. Jebb-Scott, London; Mr. J. K. Coutts, Stalybridge; Mr. H. A. Fotherby, London; Dr. W. H. Pearse, Plymouth; Mr. T. Harvey, Liverpool; Dr. Meadows, London; Mr. W. Morrant Baker, London; Mr. Percy Dunn, London; Dr. Alexander Hill, Grantchester; Miss Edith Topham, London; Mr. R. W. Parker, London; Our Dublin Correspondent; Our Paris Correspondent; Mr. D. Maguire, London; Medicus; Mr. T. Holmes, London; Mr. J. Andrews, Gosport; Mr. H. G. Terry, Bath; Mr. W. T. Cole, Holywell; Mr. Law Webb, Ironbridge; Dr. J. Foulis, Edinburgh; Mr. M. Greenwood, junior, Dalston; The Secretary of the Royal Medical and Chirurgical Society, London; The Secretary of the Clinical Society, London; Dr. Henty, London; Mr. J. B. Hamilton, Llandrinio; Mr. A. W. Thomas, Bangor; Our Edinburgh Correspondent; Our Glasgow Correspondent; Mr. Barlow, Dalston; Mr. T. G. Parrott, Bournemouth; Mr. H. Bird, Wattisfield; Mr. H. G. Plimmer, Upper Norwood; Mr. W. T. H. Spicer, Saffron Walden; Dr. S. Martin, London; Dr. A. Macvie, Baillon; Mr. B. M. H. Roper, London; Mr. A. F. Clay, Birmingham; Dr. Tatham, Salford; Mr. G. F. Masterman, Stourport; Dr. H. Barnes, Carlisle; Dr. T. S. Clouston, Edinburgh, etc.

BOOKS, ETC., RECEIVED.

Elements of Materia Medica and Pharmacy. By Alfred W. Garrod. London: H. K. Lewis. 1886.

On the Fœtus in Utero, as Inoculating the Maternal with the Peculiarities of the Paternal Organism. By Alex. Harvey, M.A., M.D. London: H. K. Lewis. 1886.

On Diseases of the Lungs and Pleura, Including Consumption. By R. Douglas Powell, M.D. Third Edition. London: H. K. Lewis. 1886.

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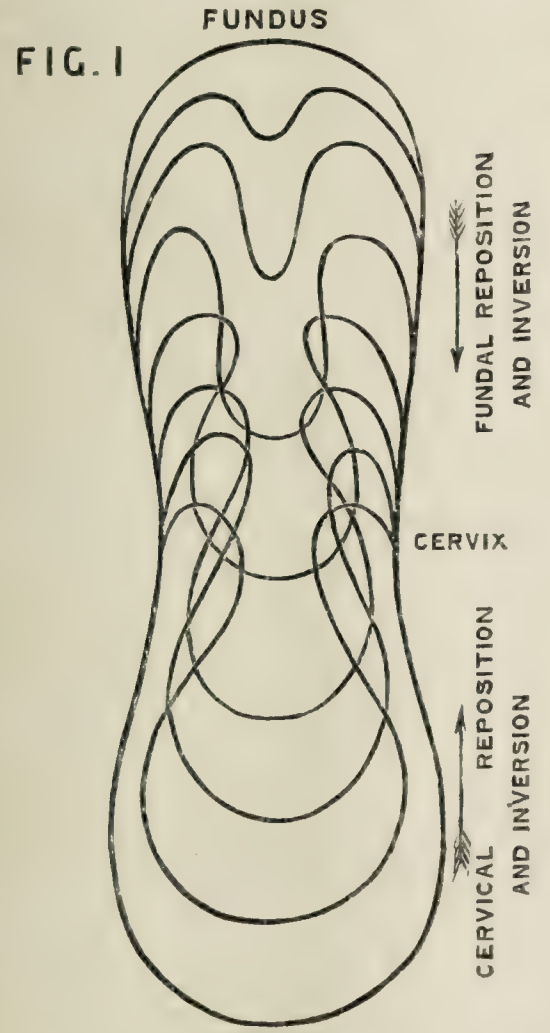
A LECTURE
ON
INVERSION OF THE UTERUS.

WITH TEN CASES SUCCESSFULLY TREATED BY THE SIGMOID REPOSITOR.

Delivered at the Chelsea Hospital for Women.

By JAMES H. AVELING, M.D.,
Senior Physician to the Hospital.

GENTLEMEN,—In the names of my colleagues and self, I have much pleasure in welcoming you once more within these walls. The course of lectures to be delivered this year embraces subjects of the greatest practical interest. Those selected by my colleagues are most important, for they relate to the diagnosis and treatment of diseases which are met with every day. I feel some apology is due to you for choosing as my subject a displacement of the uterus which is so seldom met with, that many medical men, in the whole course of their practice, never see a single case. As I stated, however, last session, that our object in delivering these lectures was to give others the advantage of the experience gained at this hospital; and as it has fallen to my lot to have exceptional opportunities of treating this rare condition of the uterus, I have ventured to occupy your time with some remarks, which must necessarily be synoptical, on inversion of the uterus.



MODES AND GRADES OF FUNDAL AND CERVICAL INVERSION AND REPOSITION

I shall not detain you with the history of this interesting subject, for to give even a brief sketch of it would require more time than we have now at our disposal. Those who may wish for full historical details will find them in that most admirable *Essay, Literary and Practical, on Inversio Uteri*, by our learned countryman, Dr. Crosse.

Inversion of the uterus may be puerperal or non-puerperal, recent or chronic.

Puerperal inversion is when the displacement is found in connection with abortion or parturition.

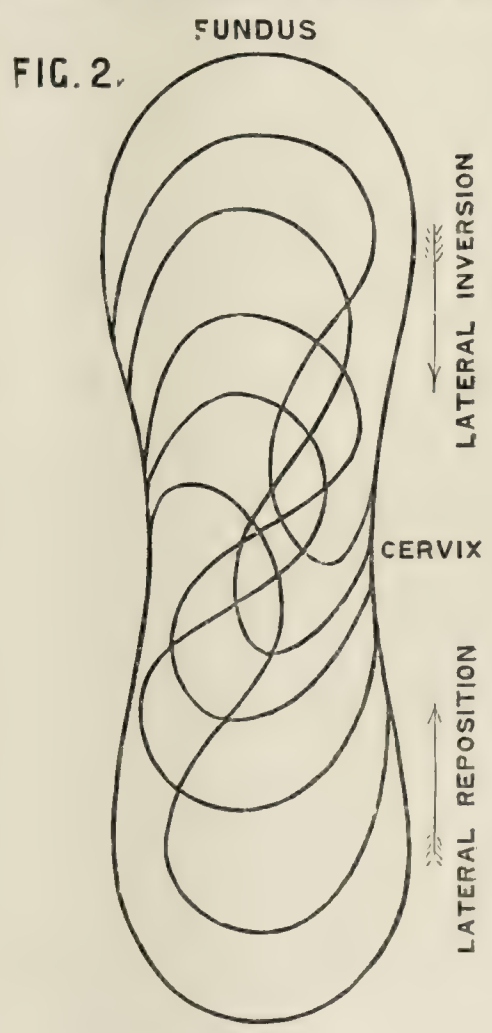
Non-puerperal inversion is when the displacement occurs in an unimpregnated uterus.

Recent inversion includes the period between the occurrence of the displacement and involution of the uterus.

Chronic inversion is so called during the existence of the displacement after involution has been completed.

Frequency of Inversion.—Puerperal inversion is far more common than non-puerperal. Of 400 cases noted by Crosse, he found that in 350 it occurred as a sequel to parturition, in 40 from polypus, and in 10 from other causes. Dr. Atthill doubts the correctness of the view commonly held, that inversion occurs in the very large majority of cases immediately after delivery. He was led to adopt this view in consequence of the fact that, of the five cases he had seen, two were puerperal, and three non-puerperal. This exceptional experience must, I think, be due to the superior obstetric skill of the Irish practitioners and midwives. Dr. M'Clintock does not, however, endorse Dr. Atthill's opinion. He says that, out of twenty-one cases occurring in the practice of obstetricians in Dublin, there were only four in which the inversion was the result of a tumour. In confirmation of the view held by Crosse, M'Clintock, and every other writer on the subject, as far as my reading goes, it will be noticed that, of the eleven cases related further on, only one was non-puerperal. It may be concluded, therefore, for every non-puerperal case, seven of puerperal origin will be noted. The frequency with which inversion occurs in connection with labour has been variously estimated. If we deduct those cases which escape observation, and those which are purposely withheld from publication, it would not probably be far from the truth if the proportion were taken as 1 in 100,000 labours.

Grades of Inversion.—Inversion of the uterus has been divided into



MODES AND GRADES OF LATERAL INVERSION AND REPOSITION

incomplete and complete. Incomplete inversion has many grades; from the first, which is represented by a mere indentation of the fundus or cervix, to the last act of introcession which ends in complete inversion. When the vagina also becomes inverted, the displaced uterus descends, and protrudes beyond the vulva, forming what has been called prolapsed inverted uterus, or utero-vaginal inversion. Some authors describe inversion as complete only when the uterus

has escaped from the vulva, but the situation of the inverted uterus has nothing to do with condition of inversion.

Modes of Inversion.—There are three ways in which the walls of the uterus may pass down through its os during the process of inversion—fundal, lateral, and cervical.

Fundal inversion is when the top of the uterus is carried down, and passes through the os.

Lateral inversion is when the side of the uterus slides down, and first passes through the os.

Cervical inversion is when the lower part of the uterus is primarily extruded (Figs. 1 and 2).

Causes of Inversion.—The causes of inversion are predisposing and determining.

The predisposing causes are very numerous; they may be enumerated as follows: distension or relaxation of the parturient canal, a large pelvis, the erect posture during labour, a short cord, first pregnancy, depression of the fundus, laceration of the os, and, more more potent than all, the attachment of the placenta or of a tumour to the fundus.

The determining causes may be divided into automatic, systemic, and mechanical.

It must always be borne in mind that a number of predisposing, and one or more determining, causes, may be in operation at the same time; and that every case of inversion is probably due to the combined action of many conditions which favour the occurrence of the displacement.

Automatic inversion of the uterus is caused by its own muscular contractions. It is always of the fundal variety, and is determined by an indentation of the top of the uterus, or by some body attached inside to the fundus. In puerperal inversion, the placenta originates this action; in the non-puerperal, a tumour produces the same result. It is only necessary that the uterus should be able to grasp a portion of its fundus, or some body attached to it, to enable the contractions to continue the process of introcession until the organ is turned completely inside out.

Systemic inversion of the uterus is caused by muscular contractions outside the uterus. If certain predisposing conditions exist, such as inertia of the body of the uterus and relaxation or laceration of its os, inversion may be produced by the action of the abdominal muscles, or of the abdominal and respiratory muscles combined. The mode of inversion caused in this way is usually the cervical, the displacement commencing at the cervix, and the fundus reaching the vagina last. The fundal and lateral modes, however, cannot be looked upon as impossible.

Mechanical inversion of the uterus may be either propulsive or extractive, or both.

The propulsive causes are blows on the abdomen, manual compression, such as is used in expelling the placenta; the weight of the abdominal viscera when the patient is sitting or erect; and distention of the abdomen by fluid or gas. Inversion has been caused *post mortem* by the accumulation of gas in the intestines. The mode of displacement from mechanical causes is doubtless usually cervical; but it is possible to imagine the force to be directed against the side of the uterus in such a manner as to determine lateral inversion.

The extractive causes may be manual or gravitatory. Traction on the cord during the third stage of labour has, more than other, been considered as the most common cause of inversion. It may undoubtedly be thus produced, but it is not nearly of such frequent occurrence as many writers imagine. When the uterus is in a state of extreme inertia, traction on the placenta attached to the side of the uterus may produce lateral inversion, for in this mode of displacement comparatively slight force is required; one side of the uterus gliding over the other down through the os, and meeting with little resistance. Traction may be effected by pulling the cord or seizing the placenta itself. Inversion may also be caused by traction on a tumour situated at the fundus, during an operation performed for its removal. If the cord be short, it is quite possible the expulsion of the child might cause such traction on the placenta as to determine inversion; and this displacement has been attributed to traction on the cord produced by the sudden descent of the child, when born during the erect position of its mother.

Diagnosis of Inversion.—The detection of inversion of the uterus is by no means so easy as might be imagined. The occurrence of the displacement is so rare, and the conditions with which it may be compared, and for which it may be mistaken, are so numerous, that the practitioner is very apt to see only what experience has taught him to look for.

The earliest grades of incomplete inversion must be difficult to diagnose. It is, however, stated that a slight depression of the fundus may be felt through the abdominal walls; and this may be possible, if they be thin and yielding. The more certain way of detecting incomplete inversion is by passing the finger in chronic, or the hand in recent, cases into the uterus, and feeling the indented fundus from within. If there be any doubt still left as to the character of the fundal protrusion, a bimanual examination will clear up the doubt.

It is with complete inversion the practitioner has most frequently to deal; and, as the diagnosis of the later grades of incomplete inversion is similar to that of the earlier grades of the complete form, it will be well, in order to prevent repetition, to consider the subject as one.

During recent puerperal inversion, the usual mistakes made are: taking the protruding fundus for the head or breech of the child, a mole, a clot, a polypus, or a placenta. The symptoms are so urgent, and the condition of the patient so critical, that errors are often committed in consequence of the practitioner not giving himself time to determine the exact nature of the presenting body. Hence arise those most distressing cases, in which the inverted uterus is torn away in mistake for something else, and by the act the patient's life and the medical man's reputation are simultaneously destroyed. In recent puerperal cases, the symptoms assist materially in diagnosis. The nervous condition is very marked; shock, pelvic discomfort, and faintness, are observed. Manual examination discovers a large rounded mass in the vagina, which can be pushed up, replaced, and does not fall again, as would be the case with all the other presenting bodies for which it might be mistaken. The fingers passed through the os are also arrested, and no uterine cavity is to be found. The sensibility of the inverted uterus is another valuable diagnostic symptom. In recent cases, the inverted uterus, with a placenta attached (as is usually the case), or a tumour growing from the fundus, has been mistaken for uncomplicated inversion; and I have known a case of inversion, with placenta attached, erroneously pronounced to be a polypus.

The diagnosis of chronic inversion, whether puerperal or non-puerperal, is the same. Involution being complete, a hard, rounded, and smooth body is discovered hanging from the os uteri, which can be traced all round its attachment as a distinct rim. All these characteristics may be found so exactly simulated by a polypus, that the mistake of diagnosing an inverted uterus for a polypoid growth is the one most frequently made. Numerous cases are recorded in which the uterus has been removed in error for a polypus; and a still greater number are related in which the operation has been abandoned in consequence of the pain and shock immediately produced, and which have shown in time the true character of the body about to be removed. In ordinary cases, there is no difficulty in diagnosing between chronic inversion and polypus. The uterine sound can be passed between the polypus and os, until it reaches the fundus, when the organ is found of normal length. A finger passed into the rectum discovers the absence of the uterus from its natural site, and a sound passed into the bladder can be made to touch the finger, positively proving that the uterus is not in its normal position. This is looked upon as conclusive evidence of inversion; but it is not so, for the uterus may be retroflexed with polypus, and the retroflexion felt by the finger in the rectum may be mistaken for the polypus. Another difficulty is met with when the polypus is attached to, or grows from, nearly the whole circumference of the os uteri. I know a case of this sort which was treated by my sigmoid repositor, I need hardly add without success. Physically, the diagnosis was difficult; for the tumour was continuous with the os, and only a small opening existed in front of the tumour, through which a sound could be passed into the uterine cavity. The tumour was, however, softer and larger than an inverted uterus, and the history of the case pointed distinctly to the conclusion that it was not inversion. The patient was ultimately sent to me that I might try my repositor myself. I removed the tumour, and sent it to the distinguished practitioner who, with two others, had made a wrong diagnosis.

A great difficulty in diagnosis arises when an inverted uterus has a growth in its fundus, and it is difficult to find a line of demarcation between the two. In these cases, the uterus is not of the usual form found when inverted, and the tumour may be so large as to lead the practitioner to believe the whole mass to be new growth, and endeavour to remove it.

One other error is sometimes made. When inversion of the vagina has allowed an inverted uterus to protrude from the vulva, the displacement has been mistaken for prolapsus uteri. The wrong diagnosis is all the more easily committed when the os uteri has become closed, a condition not rare in old women. The forms of an inverted and of a prolapsed uterus are very different. In the former, the greatest

diameter is to be found at its distal extremity; in the latter, at its proximal end. The passage of a sound into the bladder will clear up all doubt. In inversion, the instrument will pass up in the normal direction; in prolapsus, it can be made to penetrate the bladder, and pass out of the vulva beside the prolapsed uterus. Even if the inverted uterus be extruded beyond the vulva, it will be found impossible to pass the catheter down to the distal extremity of the prolapsed mass.

Treatment of Inversion.—In considering the treatment of inversion of the uterus, I shall not take into consideration the palliative and mutilative measures which some authors advise, for I believe every case of inversion can be cured by reposition, and of this mode of treatment I shall therefore only treat. Supporting the inverted uterus by a pessary, and removing the organ by operation, are, it is to be hoped, proceedings of a time for ever passed away. I am aware that inverted uteri can be attacked by disease, and in such cases reposition might be impossible.

Modes of Reposition.—As the uterus can be inverted in three different ways, so can it be reinverted.

Fundal reposition is attempted by pressing upon the fundus, with the object of driving it through the cervix. It is the most unscientific method of replacing an inverted uterus, as it demands unnecessary dilatation of its neck.

Lateral reposition is a very effective plan of reducing recent inversion. The manœuvre consists of sliding one half of the uterus over the other and through the os.

Cervical reposition is the best mode of reducing chronic inversion. Reinversion begins at the os, and extends upwards until it reaches the fundus (see Figs. 1 and 2).

Recent puerperal inversion of the uterus can be successfully treated by taxis, the patient having been previously anæsthetised. The ease with which reposition can be effected depends on the promptness with which the displacement is discovered, and the grade at which it has arrived. In all these cases, the reinversion should be done by the lateral method; that is to say, pressure should be exerted on the side of the fundus, so as to make one side of the uterus slide over the other and through the cervix, until the whole organ is reduced. The very worst plan is that of endeavouring to indent the fundus and press it down into the uterus, with the hope of causing it to dilate the parts before it, as it descends. In all cases, the placenta should be removed before attempting reinversion; for, if left attached, the placenta adds materially to the bulk which has to pass through the cervix. It may also be here stated that, in cases of chronic non-puerperal inversion caused automatically by fundal tumours, these should be removed before any attempt at reduction is made. In reducing recent, as in chronic inversion, the axes of the pelvic cavity must be remembered, and taxis made in a line with the axis of of the brim of the pelvis. This point will be referred to again. In applying force for the treatment of inversion it should never be forgotten that, although nature is a willing servant, she must have time to do her work. Steady sustained pressure, with short intervals of rest, is by far the best way of employing taxis. Sudden and violent efforts at reposition only end in causing laceration and disappointment. I succeeded in reinverting a uterus which had been ten days displaced, by the lateral method of taxis. The operation did not last more than two or three minutes. I was requested to see the patient with the object of removing a polypus, for which the inverted uterus had been mistaken.

Chronic inversion of the uterus, whether puerperal or non-puerperal in its origin, has been treated in a great number of ways; and it is most distressing to think what unnecessary torture poor women have suffered, while the measures adopted were so insufficient and unscientific. The time has, however, at length arrived when the treatment of uterine inversion can no longer be looked upon as an opprobrium to gynæcology.

Let us glance briefly at the various procedures which have been proposed and adopted in treating chronic inversion. They may be divided into aids to reposition, and repositors. Aids to reposition have been used in great numbers. Posture, hot and cold water syringing, belladonna, galvanism, and anæsthesia have all been recommended; but, with the exception of the last, they are all useless. Many operative measures have also been adopted as aids to reposition. Compression of the uterus by hand, forceps, or bandage has been used, with the idea of expelling the blood from the uterus, aud relaxing its walls. The plan is not free from danger, as in some cases it has caused extensive sloughing.

Dilatation of the cervix has been the most popular and widely used of all aids to reposition. Attempts have been made to do this by thrusting the fingers into the depression on the abdominal surface of the inverted uterus; and this depression has been reached through the abdominal walls, either immediately through their thickness, or immediately by incision. The cervical ring has also been reached through the rectum and the bladder. Dilatation has also been attempted by introducing the hand into the vagina, and endeavouring to dilate the cervix by spreading out the fingers. Dilatation has been effected by opening the abdomen, and passing dilating instruments into the cervical ring. It has also been employed by opening the fundus uteri, and dilating from within.

Incisions have also been popular, and have been employed by many. They are made on the vaginal surface of the inverted uterus; but it has been proposed to pass a small knife through the fundus, and make them from within. The cervix thus divided certainly loses a large amount of its resisting power; but the proceeding is not safe, for laceration by extension of the incisions takes place. Sutures have been advised for the purpose of maintaining the fundus, when partly reinverted within the cervix.

Repositors.—Various repositors have been used from time to time for the purpose of replacing inverted uteri. The most important of these are the hand, elastic bags, and rods, either straight or curved, with ends round or cupped.

The hand has been used in various ways. The oldest plan was the endeavour to cause reposition by the fundal method, when an attempt was made to indent the fundus by persistent pressure. This, of course, only ended, as taxis usually does, in lacerating the vagina, and not reducing the displacement. The hand is a valuable instrument in recent inversion, but useless in all the chronic forms. It could, indeed, effect reinversion perfectly safely if less time were required, but no hand can maintain the fatigue of taxis for a sufficiently long time. It is most unscientific to demand suddenly from the uterus that which it will willingly grant if reasonable time be afforded. Whether we look upon the uterus as a plastic organ to be moulded, or a muscle to be tired out, it must be equally wrong to endeavour to force it to change its form rapidly. The hand should therefore be discarded as a repositor in chronic inversion, for the plans of making counter-pressure and slight dilatation of the cervical ring by fingers acting through the abdomen, rectum, or bladder, do not make taxis commendable.

Elastic Bags.—It is to the use of elastic bags we owe the knowledge that sustained pressure will safely reinvert a uterus. To our countryman, Dr. Tyler Smith, we are indebted for the first great step towards the scientific and successful treatment of this perilous displacement. He made his plan known in 1858, and, since that year, his mode of treatment, modified in many ways, has been the means of curing a number of very difficult cases. The elastic bag has, however, many faults. It compresses parts which need no pressure; it slips out of the vagina; it obstructs the action of the bladder and rectum, and lacks precision in exerting its power upon the point requiring pressure, and ceases to act effectively when the fundus has been reinverted to the level of the os. The elastic bag has done good service in curing cases, and teaching us the proper principles of successful practice, but its day has passed.

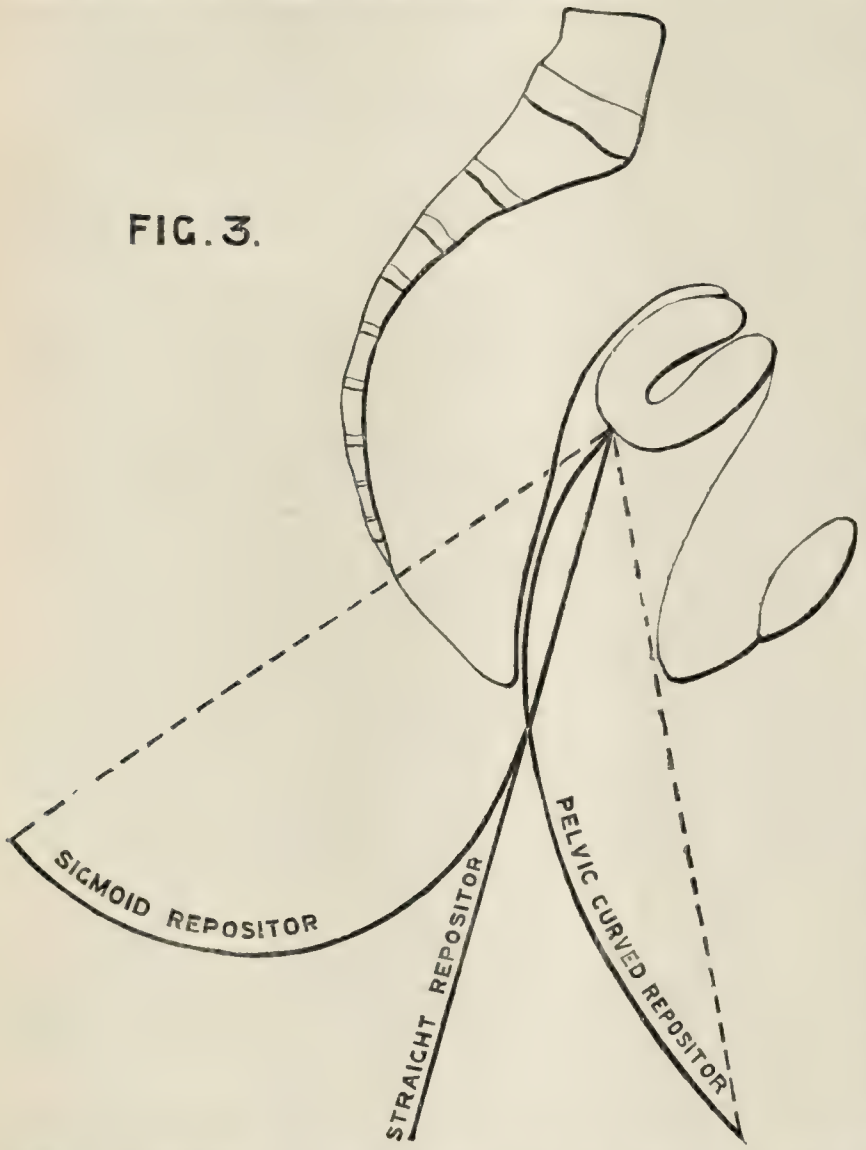
Rods with Rounded Ends.—To a Frenchman, Viardel, must be attributed the credit of having proposed a rod with a rounded end for repositing an inverted uterus. He published his description of the instrument in 1674. Chailly Honoré bent the rod so as to conform with the pelvic curve. His instrument had also a round head, and was used like Viardel's, to reduce the uterus by the fundal method.

Rods with Cupped Ends.—The first cupped repositor is that referred to by Madame Boivin, who makes the following suggestion concerning reinversion. "Might not pressure from below upwards be also made available? A pessary like that of a cup and ball might for this purpose be introduced into the vagina." This eminent medical lady little thought what an important suggestion she was then making. The change from convex to concave ends of repositors was, however, a great advance, and, in fact, became inevitable as soon as operators abandoned the fundal and adopted the cervical method of reposition. The straight cupped repositor just escapes being a perfect instrument. It must always act to a certain extent indirectly, causing the cup to slip back past the fundus, or to urge it against the posterior wall of the vagina in a line diverging 25° (Fig. 3) from the axis of the pelvic inlet.

Curved rods with cupped ends have also been used, but they are less perfect instruments than the straight ones last described. They are, however, much in favour with some gynæcologists who have not taken the trouble to master the mechanism of operative reinversion. With a curved repositor, the direction of pressure against the fundus is in a line diverging as much as 45° from the axis of the pelvic inlet. (Fig. 3). Our countrymen early recognised the necessity of making ...

pressure in the most advantageous direction when reinverting a uterus. Burns, in 1728, said reposition "may be facilitated by pressing up the fundus in the direction of the axis of the uterus"; and Aitkin, in 1784, remarked that reposition of an inverted uterus might be best "effected by pressure in a just direction." But Gooch, in 1831, gave the most explicit directions on this subject. He wrote, "You are to press the uterus against the os tincæ, not upwards and backwards, but in the direction of the upper axis of the pelvis, upwards and forwards towards the præcordia." Nothing more of a practical nature relating to the line in which force should be used can be added to these words, and their importance cannot be overrated.

FIG. 3.



LINES OF PRESSURE EXERTED BY STRAIGHT, CURVED AND SIGMOID REPOSITORS

Sigmoid Rod, with Cupped End.—It was a case of obstinate chronic inversion, to be related more fully presently, which induced me to invent the sigmoid repositor. This case came under my care in 1878. I had, in 1868, invented sigmoid axis-traction forceps, ten years before those of Tarnier, which have the same form, and, remembering that the sigmoid shape of this forceps gave traction in the axis of the pelvic inlet, I came to the conclusion that axis-pushing in the same line might be effected by a repositor having the sigmoid form. With an instrument thus constructed, I felt I should be able to carry out Gooch's instructions, and press the uterus "in the direction of the upper axis of the pelvis," thereby rendering the reduction of an inverted uterus more easy and certain. (Fig. 3.) My anticipations have been fulfilled in a most satisfactory and gratifying manner, for I shall now have the pleasure of relating ten cases of chronic inversion, which have been treated and cured by my sigmoid repositor; and I am sure I may boldly challenge any operator by any other method to show equal success, either as to ease of performance, painlessness, safety, rapidity, and unfailing action. Of course, I am referring to cases treated by sustained elastic pressure, and I exclude from these those of White, whose plan is a combination of taxis and violent pressure, by means of a ten-pound spring against the chest. Before relating these cases, it is due to Dr. R. Barnes to state that he was the first to apply elastic pressure by India-rubber bands to the stem of a repositor

Case I.—Mrs. W. came under my care, suffering from chronic inversion of the uterus. She had been treated by severel eminent gynæcologists with a variety of repositors, and by taxis, and had been sent to Sir Spencer Wells to have the uterus removed. The patient, however, thought she would have one more attempt at being cured without mutilation, and fell into my hands. It was for this case my repositor was made, and it was applied, without causing much pain, on May 7th, 1878, at 3 P.M. The cup was fitted to the fundus; and, by means of four elastic rings, two in front and two behind, all being fastened to a belt kept up by braces, pressure was exerted in a line with the axis of the pelvic inlet to an extent never exceeding two and a half pounds. On May 8th, at 10 A.M., the uterus was found reinverted as far as the internal os. At 9.30 P.M., in consequence of pain, all pressure was removed for thirteen hours. On May 9th, at 10.30 A.M., the repositor was again made active. On May 10th, at 10.35 A.M., the uterus was found completely reinverted. This most obstinate case, therefore, was cured in sixty-seven hours and a half, or in fifty-four hours and a half of active treatment. The patient had no constitutional disturbance, and spent the day after in writing and knitting.

Case II.—Mrs. H., aged 26, was admitted into University College Hospital on August 30th, 1878, with chronic inversion of the uterus, under the care of Dr. John Williams. September 3rd, the sigmoid repositor was applied. September 4th, at 10 A.M., the uterus was found partly reinverted. At 11 P.M., the uterus was found completely reinverted. An offensive discharge continued for some days; but the patient was soon discharged cured. Reposition in this case was effected in thirty-three hours.

Case III.—Mrs. L., aged 26, was admitted into the Chelsea Hospital for Women, under the care of Dr. Aveling, on June 4th, 1879. She had chronic complete inversion of the uterus. Previously to her admission, attempts at reduction by taxis had been made. June 5th, at 4.30 P.M., Dr. Aveling applied this repositor. June 6th, at 3.15 P.M., the uterus was found partly reinverted. June 7th, at 1 A.M., the patient felt the elastic rings "suddenly go loose," and all pains ceased. At 1 P.M., the cup was tilted and easily removed. The finger passed into the uterus to the fundus, and the cavity measured $3\frac{3}{4}$ inches. An offensive discharge continued for some days; but the patient left the hospital for the seaside on June 25th, three weeks from the date of her admission.

Case IV.—S. A. P., aged 22, married, was admitted into the Adelaide Ward of St. Thomas's Hospital, October 30th, 1878, under the care of Dr. Gervis. She had had one child fourteen months previously. Nine hours after her confinement, she had a sudden gush of blood from the vagina, and hæmorrhage had continued with slight intermission ever since. She had been treated for menorrhagia, and had worn a pessary for displacement of the womb. On her admission, she was extremely anæmic, and on examination an inverted uterus was found in the vagina, about the size of a hen's egg. It was decided to make an attempt at reduction by taxis, and on November 4th she was placed under chloroform with this object. The left hand was introduced into the vagina, and counter-pressure with the right made over the hypogastric region. This was continued until partial reinversion of the uterus had occurred, and further pressure was maintained by an air-pessary placed in the vagina. On the following day, the pressure was continued by a soft globular air-pessary, kept in position by a cupped stem-pessary. On the third day, pelvi-peritonitis set in, forbidding any continuance of the vaginal pressure. After this, she became seriously ill, and was in "much peril;" and no further treatment was adopted until January 9th, when a second attempt at reposition was made by means of a boxwood cup and straight stem. Constant pressure being effected by four strips of elastic webbing fastened to the extremity of the stem, and to a band passing round the waist. She bore this treatment for forty-eight hours, when it was found that the fundus had retreated some distance within the cervix. The cup was then removed, and reintroduced on the 13th, and worn until the 15th, when the recurrence of pain and sickness necessitated its removal. During the following month, six different attempts were made at intervals with different cups, but all failed to secure complete reposition, and a further attack of peritonitis, followed by abscess of the right broad ligament, made it necessary to desist from further efforts. On March 31st, Dr. Aveling's sigmoid repositor was introduced at 3.15 P.M., and soon afterwards morphine was injected, as the patient complained of pain. On April 1st, the four elastic bands were tightened without causing any increase of the slight pain, which she felt only when moving. On April 2nd, at 11 A.M., the bands were again tightened, and during the day she had more discomfort. At 7 P.M., she had a rigor, and the temperature rose to 103.4°. The bands were therefore loosened; and, while in the act of

doing so, the resident accoucheur and patient both "felt something give way," and she experienced immediate relief. The repositor, at the patient's request, was not removed until the next day, April 3rd, when the temperature had fallen to 100.8°. At 2 P.M., an unsuccessful attempt was made to remove the cup, which was found tightly grasped by the cervix. At 5.30 P.M., the patient being under chloroform, Dr. Gervis, by tilting the cup, removed it without difficulty, and the uterus was found completely reinverted. Not a single unfavourable symptom followed. She made a speedy recovery, and on the 18th left for the country.

CASE V.—Mrs. S. B., aged 29, married, had a child two years ago. The birth was followed by great flooding, which had continued more or less ever since. Inversion of the uterus had been discovered, and two attempts at reduction by taxis had been made. In April, 1879, the patient entered the Samaritan Hospital under the care of Dr. Rogers. On the 28th, at 10 A.M., Dr. Aveling's sigmoid repositor was applied to the fundus of the uterus without any difficulty, and the required tension was given to the bands by Dr. Aveling. During the day, the patient complained of very little pain, and at 9 P.M. the bands were tightened. The patient slept pretty well, and at 10 P.M. on the 29th, she was very comfortable, and the bands were again tightened. At 5 P.M. they were tightened again. At 10 A.M. on the 30th, the patient said that at 2 A.M. she had felt great relief, something having "given way." On examination, the cup was found within the uterus, and it was removed without difficulty. The fundus was found restored to its natural position. The patient recovered rapidly, without a bad symptom, and left the hospital on May 8th.

CASE VI.—Mrs. D., aged 29, married, was admitted into the Middlesex Hospital under the care of Dr. Edis. She had suffered, more or less, from continuous uterine hæmorrhage since her last confinement, which took place nearly five years previously. Inversion was discovered, and attempts to reduce the displacement had been made by means of air-ball pessaries, which treatment had, on one occasion, been continued for two weeks consecutively. On August 22nd, 1883, at 9.30 A.M., Dr. Aveling's sigmoid repositor was carefully adjusted, an adhesion which existed between the uterus and the posterior vaginal wall having been previously torn through with the finger. During the day, the pressure was carefully regulated, and at 10 P.M. the patient was very comfortable. On August 23rd, at 9.30 A.M., the cup, which was found buried within the rim of the cervix, was removed and readjusted, after syringing the vagina. At 9.30 P.M., the patient was very comfortable. On August 24th, at 9.30 A.M., the patient had passed a comfortable night; the cup was completely within the uterus, and the stem gripped by the contracted os. The repositor was removed, and the partly inverted fundus could just be felt within the uterus. A small India-rubber ball was then passed into the uterus, and the repositor reapplied. At 9.30 P.M., the cup of the repositor was found external to the os uteri, evidently exerting no pressure on the fundus. The ball was therefore removed, and the cup readjusted to the still partially inverted fundus. On August 25th, at 9.30 A.M., on examination, the cup of the repositor was found to be completely imbedded in the cavity of the uterus. It was removed, and, on passing the finger within the cervix, the fundus uteri could be no longer detected. At 4 P.M., the uterine sound was passed three and a half inches, and the fundus could be felt in its normal position by conjoint manipulation. The patient convalesced rapidly, and, when seen some months afterwards, reported herself as "quite well."

CASE VII.—A. N., aged 24, was admitted into the Samaritan Hospital, under the care of Dr. Bantock. She was confined of her last child on September 25th, 1884. About ten minutes after the birth of the child she became very faint, and lost consciousness for several hours. She was admitted on November 24th, in a very weak and anæmic condition. On November 25th, an attempt was made to reduce the uterus by taxis, the patient being under chloroform. The fundus, however, could not be made to pass within the os; she was therefore put back into bed, and Dr. Aveling's repositor applied, but it was not considered prudent to continue its use, in consequence of the discovery that during taxis the mucous membrane of the recto-vaginal septum had been torn for about two inches longitudinally from the perineum. On December 10th, at 9 A.M., Dr. Aveling saw the case with Dr. Bantock, and applied his sigmoid repositor, pointing out that the bands of the one which had been used before were of insufficient strength. On December 11th, at 9 A.M., the uterus was still unreduced; the cup was removed, and re-applied after washing out the vagina with iodine solution. Three hours afterwards, the patient began to complain of pain, and morphine was administered subcutaneously. At 5 o'clock, the uterus was found reduced, and the cup of the repositor was relieved from the grasp of the cervix by a little manœuvring. On December 15th, the patient returned home, feeling wonderfully well and complaining of nothing.

CASE VIII.—Mrs. H., aged 33, was admitted into the Royal Hospital for Women and Children, on September 1st, 1884, under the care of Dr. William Duncan. The patient had been confined three times. After the last she swooned, and did not come round for some hours. For nine years afterwards, she continued to have a discharge of blood almost without intermission. She was very blanched from this constant loss. On examination, a rounded smooth red mass, about the size of a large green fig, was found on the vagina, which was readily diagnosed as an inverted uterus. September 2nd, at 4 P.M., Dr. Duncan inserted the cup of Dr. Aveling's sigmoid repositor into the vagina, and a moderate amount of elastic pressure was applied in the usual manner to the stem. A hypodermic injection of morphine was given. On September 3rd, the patient slept well, and appeared comfortable. The repositor was found to have slipped in front of the uterus, and was consequently doing no good. It was replaced, plugged all round, and considerable pressure applied. On September 4th, the patient had little pain and slept well. The stem seemed to have entered further into the vagina, but the instrument was not disturbed until 4 P.M., when the uterus was found completely reduced. Some difficulty was experienced in removing the cup from the uterine cavity, but this was eventually effected by unscrewing the cup from the stem, and seizing it sideways with strong lithotomy-forceps. Some sickness and feverishness followed, but the patient was practically well on the 18th.

CASE IX.—Mary P., aged 25, was admitted into Guy's Hospital in March, 1884, under the care of Dr. Galabin. She was delivered in September, 1883, and the inverted uterus appeared externally on the third day after. The medical attendant, who appears not to have recognised the character of the case, satisfied himself with returning the mass into the vagina. Metrorrhagia continued up to the date of her admission, and the patient was much blanched. There had been no attempt at reduction. Dr. Aveling's sigmoid repositor was applied, and the reposition of the uterus was completed suddenly when it had been worn fifty-three hours. The reduction was followed by rather severe symptoms of collapse and shock, leading to suspicion of internal hæmorrhage. The patient, however, eventually did well, but had an attack of cellulitis.

CASE X.—E. C., aged 37, was admitted into the Chelsea Hospital for Women on February 4th, 1886, under the care of Dr. Aveling. She was confined on September 26th, 1885. Her labour lasted six hours, delivery being effected by the forceps, continuous traction being made for fifteen minutes—the pains at this time following one another very rapidly. The medical attendant removed the after-birth ten minutes after birth of child, and remarked afterwards that another child was still to come. A great deal of blood was lost after removal of placenta, and ever since there had been a constant vaginal hæmorrhage, amounting to a flooding three weeks before admission. There had been no pain whatever at any time.

On admission, the breasts were very tender to the touch, and much distended with milk. *Per vaginam*, a smooth, hard, pyriform mass was felt projecting into the vagina, having no depression on its surface, becoming somewhat attenuated as it passed upwards, and being encircled by a smooth ring superiorly. The uterus could not be felt bimanually in its usual position, and a sound would not pass. *Per rectum* (with patient straining), a cup-shaped depression was felt surmounting a pyriform mass. A sound passed into the bladder could be readily felt *per rectum*, no structure intervening.

February 5th, 3 P.M. Dr. Aveling applied his sigmoid repositor. The patient, Irish, was very restless afterwards, and therefore received a hypodermic injection of one-eighth of a grain of morphine, with one one-hundredth of a grain of atropine. There was a slight sanious discharge following the introduction of the repositor.—12 P.M. She had had considerable uneasiness in the lower abdomen since 9 o'clock. She experienced sudden relief about midnight. *Per vaginam*, the cup of the repositor was nowhere to be felt.

February 6th, 9 A.M. She had had a good night, without further sedative. The breasts were still much engorged with milk. Pulse, 118; temperature, 101.8°. Had no pain.—3 P.M. The uterus was completely reinverted, and had been so evidently for some hours, as the cervix was so firmly contracted over the cup of the repositor, that the administration of an anæsthetic was required to disengage it.

During the treatment, the patient got out of bed, and wanted to go home. This movement did not displace the repositor. Taking it for granted that the reposition took place when the sudden relief was felt about midnight, the time occupied in reinversion was only nine hours. This short time was probably due to the inversion being of only four months' standing.

Remarks on the foregoing Cases.—It will be noticed that in no case was the pain resulting from the treatment excessive, and only in one case, Dr. Galabin's, were there any unpleasant after-consequences; but, in his case, the ultimate result was quite satisfactory. The time required for reinversion by my method is a question of interest. The following table shows this.

Case	1.....	Operator,	Aveling	Hours,	54½.
,,	2.....	,,	Williams	,,	33.
,,	3.....	,,	Gervis	,,	51¾.
,,	4.....	,,	Aveling	,,	52½.
,,	5.....	,,	Rogers	,,	40.
,,	6.....	,,	Edis	,,	48.
,,	7.....	,,	Bantock	,,	31.
,,	8.....	,,	W. Duncan	,,	48.
,,	9.....	,,	Galabin.....	,,	53.
,,	10.....	,,	Aveling	,,	9.

This table demonstrates that, on an average, each case took about 42 hours for its cure, the longest time occupied being 54½ hours, and the shortest 9 hours.

In Case I, it will be noticed that the pressure employed never exceeded two and a half pounds, and I still think tension to that extent sufficient.

In Case VI, we find valuable experience, namely, not to remove the repositor too soon, and to have no doubt as to the power of the repositor to completely reinvert the uterus.

In Case VII, the cup slipped in front of the uterus exactly the opposite way to that in which the ends of all repositors slip. This displacement was probably due to the tension of the posterior bands being too great. The plan of plugging the cup all round to maintain it in its proper place, I have never found necessary.

Perhaps I may be permitted the satisfaction of calling attention to the fact that, in some of these cases, many methods of treatment, manual and instrumental, had been employed by our most eminent gynæcologists, without success. The superior advantage of my repositor consists in its enabling the operator to press the uterus up in a line with the axis of the brim, and incontestably proves by its happy results that the success of a repositor is in exact proportion with the directness of its action.

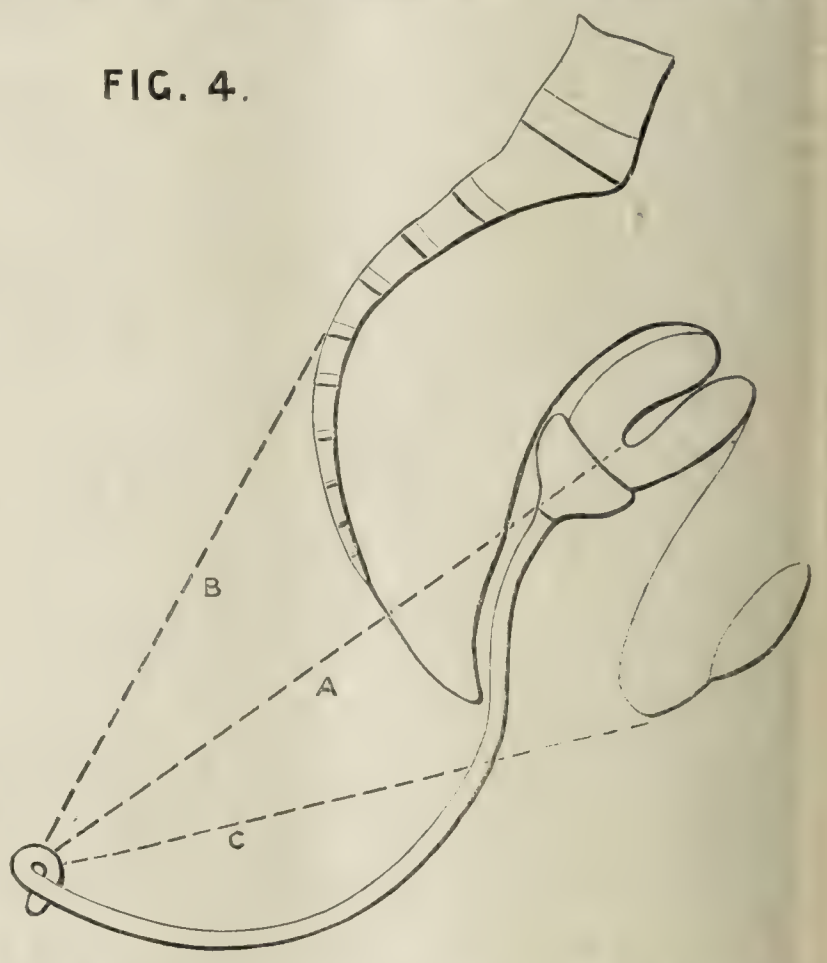
I have now the painful duty of relating a case in which my repositor failed. M. H., aged 48, unmarried, was admitted into the Rotunda Auxiliary Hospital, November 15th, 1880, under the care of Dr. Atthill. On admission, she was very anæmic, and an examination revealed inversion of the uterus induced by the presence of a small fibrous tumour. By a process of enucleation and avulsion, this was removed, and proved to be about the size of a hen's egg. When the patient had recovered from this operation, an attempt to replace the uterus was made by means of Dr. Aveling's sigmoid repositor. The adjustment of this was effected without much difficulty, although the vagina was narrow; the cup of the instrument was, however, too small to receive the fundus of the inverted uterus, and it slipped off whenever the patient altered her position. A similar attempt was made a fortnight afterwards, without using a larger cup, with a like result. After this, White's repositor was tried, but success was not attained by its use. Finally, it was decided to remove the uterus by means of the écraseur. After removal, the fundus was found to be flat, and in diameter about an inch more than that of the cup of Aveling's repositor.

The evident cause of failure in this case was the disproportion between the fundus and the cap of the repositor. By elastic bags, the vagina might have been enlarged sufficiently to have admitted a cup of the required dimensions; and I feel satisfied that the case would have been successful if a larger cup had been used. So confident was I of the curability of the case, that I offered to pay the expenses of the woman coming to London, if I might be permitted to make one more trial before the uterus was removed. I shall always regret that my request was not granted.

Instructions for Using the Sigmoid Repositor.—The first thing to be sure of is, that you have been supplied with a proper sigmoid repositor. Instrument-makers and gynæcologists have their own notions as to what an instrument should be, and have them made accordingly. In one exhibition of instruments, I have seen three different patterns of my polyptrite shown by various makers. The liberty thus taken is most unfair to the inventor, for his reputation rests upon the action of his instrument. If it have been so altered as to become dangerous, he is naturally blamed for having conceived and advised the use of it. I cannot give a better instance of the complaint I am now making, than by referring you to the engravings of my repositor given in the largest and most exhaustive treatise on inversion, recently published by Denucé, of Bordeaux. Without having seen my repositor, he has ventured to give illustrations of it, giving a totally wrong idea of its form and mode of action. A repositor such as he has given as mine could not be worse in shape; for, besides acting in an improper direction, it causes the cup to be applied to the fundus in such a way as to insure its slipping off. Instrument-makers in France are, I have no doubt, making repositors of this pattern, and selling them as mine; for Denucé does me the honour of referring to my "résultats très brillants." Another instance of detrimental change in my repositor occurred in this country. Dr. Bantock had supplied to him, instead of the India-rubber rings which I recommend, India-rubber bands quite unable to exercise sufficient elastic pressure to reinvert a uterus. The first thing, then, is, I repeat, to be sure you have the repositor, rings, and bandages, of the proper pattern.

Having diagnosed inversion, determine by touch the size of the fundus, and select a cup of proportionate size. It should be in diameter slightly less than that of the fundus; next apply the belt round the waist, and then the braces over the shoulders, and fasten them by the safety-pins to the belt. This should be done in such a way as to leave room to pass the tapes, to which the rings are attached, between the pin of the safety-pin and the belt. Now the cup of the repositor should be applied to the fundus uteri, and held firmly in position by an assistant while the rings are adjusted, two being taken in front and two behind (Fig. 4). The ends of the tapes

FIG. 4.



THE SIGMOID REPOSITOR APPLIED. A LINE OF PRESSURE. B.C. TRACTION LINES OF ELASTIC BANDS.

should next be passed between the safety-pins and the belt, some of the tape drawn through, and a knot made at its end to prevent it slipping back. Tension may be lastly exerted by drawing the tapes up through the pins, and fastening them at any point by tying a loop. This loop can be easily pulled out and retied, should more or less tension be required. Care must be taken to have the tension equally distributed; for, if the front bands be tighter than the back, there arises the fear of the cup being slipped back off the fundus; and the opposite may occur if the posterior bands be tighter than the front. The India-rubber bands passing to the front should be carefully laid outside the labia, and packed with cotton-wool. If the patient be restless, or complain of pain, morphine may be administered. She should be carefully watched, and the urine should be drawn by catheter when necessary. It is difficult to lay down any rules for tightening and loosening the tapes. This must be determined by the practitioner, who must judge by the existing tension, and the toler-

ance of it by the patient. In my last case, reinversion was accomplished without the tapes being touched after their first adjustment.

Reduction takes place by the cervical method. Newnham advised this mode of reinversion in 1818. He said: "It is wisest and best to endeavour to reinvert the uterus by returning first that portion of it which was last expelled from the os uteri." Pressing on the fundus causes counter vaginal traction on the cervix, making it unroll gradually until the internal os is reached, where a little delay is caused by its being less dilatable. When this point is passed, the body of the uterus soon opens, and admits the cup. The last step must take place rather suddenly, for all patients say they feel that something has "given way," and comparative comfort is the result.

When the inversion has been reduced, the sooner the cup is withdrawn the better, for the cervix immediately begins to close round the rod or stem, and the cup becomes firmly grasped in the uterine cavity. The best way of removing the little cup, is to tilt it on end, and bring it through the os as you would a button through a buttonhole. If it have been long retained, an anæsthetic will assist. It might be a good plan to have a hole made through the edge of the cup, through which a stout string might be passed, by which to make traction. Continuous elastic traction on this string would remove the most firmly grasped cup with certainty. The stem might be previously unscrewed from the cup.

When the cup has been removed, pass a thick sound into the uterus; and, by pressing the point of it forward, the rounded fundus will be felt through the abdominal walls. Being satisfied that complete reinversion has taken place, syringe out the uterine cavity with iodine water at 120° Fahr., which will cleanse its surface and make the whole organ contract.

I think, gentlemen, after considering these facts, you will come to the conclusion that every case of chronic inversion of the uterus can be cured by sustained elastic pressure exercised in the right direction; and I hope you will not think me too sanguine when I state my belief that the mutilation of a woman, by removing her uterus, will no longer be necessary in consequence of the impossibility of replacing this important organ when inverted.

AN ADDRESS
ON
CHOLERA.

Read before the Bath and Bristol Branch.

By W. B. BEATSON, M.D.,
Retired Surgeon-General, Indian Army.

Mr. President and Gentlemen,—When I was invited to read before you, on this occasion, a short paper calculated to give rise to a discussion on cholera, it was probably expected that I would offer for your consideration some new ideas on the etiology and treatment of that disorder, derived from my own personal experience and observation. If such an expectation have been entertained, I am afraid I must disappoint it by saying that, although I am an old Indian medical officer, although I have lived and practised during thirty years in parts of India where cholera was either endemic and ever present, occasional in violent epidemic outbursts, or conspicuous only by its absence; although I have seen and treated many cases of cholera, and have had it myself, I should never have arrived at any kind of conclusion as to the nature, prevention, and treatment of the disease, if my study of it had been bounded by the circumference of my own observation. The study of cholera can be pursued to advantage in no contracted field, nor by the light of any one man's researches; and the whole truth concerning it will, if ever brought to light, be the result of many investigations yet unmade.

It is now nearly five years since I have had anything to do with cholera, my last experience having been the outbreak among British troops which occurred in 1881 at Meean Meer, while I was Deputy Surgeon-General of the Lahore Division of the Army in India. I should but waste your time, were I now to give you a detailed history of that outbreak; I should do worse than waste your time, for I should lead you to look at one aspect only of a question which has many sides, and send you all away each one only convinced of the truth of his own preconceived opinions. This would be a very regrettable result, because we are all too much in the habit of blindly adopting the views of respected authorities, of framing theories and adjusting facts to support them; of quarrelling with other people who decline to accept our conclusions; of becoming, in short, partisans in pathology. Should this be considered an unjustifiable assertion, let me ask you to consider the present attitude towards each other of those members of our profession who have made cholera their special study, and the method of argument by which some of them endeavour to support their own particular views.

The nosologists of cholera may be broadly divided into two camps, I might say hostile camps; considering, to use the words of one of the latest writers on cholera, the warmth of spirit and vigorous intolerance which have been too often displayed by the propounders and advocates of certain theories.

The first and most influential camp contains all the leaders who believe that cholera is caused by a specific virus, which, obtaining entrance to the body from without, multiplies itself within, and is capable, when thrown off in the shape of exhalations and discharges, of causing an extension of the malady, so as to give rise to epidemic outbreaks. Of this form of belief, there are several phases. Some authorities think that cholera is directly communicable from person to person, by contact with the sick, or with their recent dejecta; some, that the fresh dejecta contain no poison until they have undergone changes dependent upon the media into which they pass; others, that the dejecta contain no poison, either actually or potentially, but that the virus is a kind of ferment, produced by an organism altogether extraneous to the body of the patient, and created by the organism only under certain favourable circumstances, seasonal and local.

All or most believe that cholera is largely dependent upon, and follows the chief lines of, human intercourse; that it is conveyed from one part of the world to another by travellers, sick or healthy, either as a *contagium vivum*, or by means of contaminated clothing or other fomites; that each epidemic is an importation from some infected locality; that cholera never arises spontaneously anywhere, and that some part of India is the centre from which it is diffused.

The second camp consists of all who doubt or deny the existence of a specific cholera-poison or cholera-producing organism, and believe that the disease depends on no definite entity, but is due to local influences, miasmatic, telluric, or atmospheric, the nature of which is at present undetermined. Of necessity, they disbelieve in the diffusion of cholera by human intercourse, by water-carriage, or by infected articles of food and fomites. They hold that successive epidemics have no relation to one another, and that the attempts often made to stay the spread of the disease by quarantine regulations, are generally either utterly useless, or do harm rather than good.

I have thus put before you the salient points of difference between the contagionist and non-contagionist parties. I do not appear as advocate or defender of either side. I think it is possible that each may be right to a certain extent, and that each is wrong only when it claims exclusive possession of the truth.

There are probably many in this assembly who hold decided opinions on the points in dispute. I ask them all to come to the discussion with open minds, to lay aside all preconceived ideas, and to determine, as far as possible, on which side lies the greatest amount of truth.

It must, I think, be admitted that all contagionist theories are imperfect deductions; because, while they are founded on fact, they are supported by partial considerations of evidence, all evidence in their favour being brought forward by their upholders, all that is contrary being subdued or explained away. The one fact on which all contagionist theories are founded is the undenied one, that there are some diseases that depend on a poison or specific virus which is communicable by contagion or infection. It is a reasonable induction that cholera may be such a disease, but it is not a proven fact. The pronounced contagionist assumes that it is a fact, and uses it as a foundation for his theory. He then produces evidence which goes to establish the truth of his doctrine, and considers that his case is proved. The result is very convincing till the other side of the question is considered, and the discovery made that while every theory is supported by a large amount of evidence, direct and circumstantial, it is opposed, as an impartial authority has observed, by a considerable number of obstinate facts. I will briefly state some of these theories, and a few of the opposing facts. It is asserted that cholera arises in India, and is carried over the world by means of human intercourse; but the apparent progress of cholera is from east to west, while human intercourse proceeds in all directions. When cholera breaks out at a great Indian fair, or concourse of pilgrims, and those pilgrims return to their homes, they do not spread the disease wherever they go; it accompanies them only in certain directions. When cholera appears in the cantonments of a British regiment in India, the regiment is at

once moved into a camp pitched in a district known to be generally free from cholera, and the disease ceases; if the regiment be prematurely recalled to its former quarters, the disease returns. Again, epidemic cholera is said to be always an importation; but cholera is often imported by the arrival of a sick person in a healthy district, without any epidemic result.

What are called sporadic cases frequently occur, which cannot be traced to importation, and are followed by no extension of the disease. Further, for some years past, means of importation have been greatly increased by the extension of the railway system in India, and by the connection of Europe with Asia by the Suez Canal. Cholera ought, therefore, to be more generally diffused in India, more frequent in Europe, than it was formerly; but it is not so.

Cholera has been said to be water-borne by rivers in India; but, when this theory was investigated by the light of facts, it was found that, in the outbreaks reported on, the apparent progress of the disease had been in many instances against stream.

Quarantine should, on the supposition that cholera is portable, be valuable as an excluding agent; but facts are against it. It has over and over again failed to stop the spread of the disease, and it is now very generally allowed to be useless. I do not, however, lay great stress upon this, because perfect quarantine is an impossibility.

As to the theory that cholera is directly communicable by contagion or infection, as small-pox, scarlatina, etc., are communicable, a great opposing fact is, that the attendants on the sick in cholera-hospitals, and those engaged in dealing with cholera-dejecta, are by no means frequently attacked by the disease. They are, of course, sometimes attacked, but not in greater proportion than are other persons in the same place not so employed.

I now come to a theory that there is a poison-virus or specific contagium, which causes cholera to be set up in the human system when taken into it. The great fact against this theory is, that no such entity has ever been proved to exist. We can carry small-pox on the point of a lancet, because we can always find it in the small-pox pustule. We cannot so carry cholera, because we do not know where to obtain it. It is, apparently, not contained in the excreta, notwithstanding the supposed proof that it is so, furnished by the celebrated Broad Street pump, and the accident reported by Macnamara, in which nineteen persons partook of water mingled with cholera-dejecta. In the first case it is obvious that, before cholera-dejecta could obtain entrance into the well, cholera-influences must have already existed in the neighbourhood, and that if the water were really contaminated with cholera-dejecta—which is not a certainty—it was also charged with other matters likely to be prejudicial to health. In the second case, in which nineteen persons in India partook of what may really be called cholera mixture, and five subsequently died at varying periods within seventy-two hours, it must be remembered that all were living in the presence of cholera-influences, and that fourteen out of the nineteen escaped without diarrhœa, cholera, or the slightest *malaise*. This experience chiefly proves that cholera-dejecta may be swallowed with impunity; the positive results in death are inconclusive, because, cholera being present at the time, the infection might have occurred in other ways.

An endeavour has lately been made by Dr. Koch of Berlin to prove that the cause of cholera is bacterial. In the course of a series of experiments conducted in India, Egypt, and Europe, Dr. Koch discovered a comma-shaped bacillus in the intestines of cholera subjects, and in the waters of places infected with cholera.

Now, to establish a bacterium as the cause of a disease, four conditions appear to be necessary. The bacterium must be found in the blood, or in the organic tissues of the subject, in connection with one specific disease and with no other; it must be a distinct organism, not springing from or convertible into another; and it must be capable of setting up its peculiar action of disease when transplanted. The comma-bacillus of Koch was found by him, not in the blood or organs, but in the dejecta, which are the last product of the choleraic process. It has been found in various morbid conditions, and in normal secretions, by other observers who doubt its true specific character. Pure cultivations of it have been swallowed without effect, by several experimentalists. Attempts to engraft cholera on human subjects, being inadmissible, have not, those of Dr. Ferran in Spain excepted, been made; on animals they seem to have generally failed, or to have ended in death from complicating causes. The comma-bacillus is believed to be destroyed, or retarded in development, by the acid secretion of the stomach. In experimenting on guinea-pigs, therefore, it has been found necessary to open the abdomen and inject the bacilli into the duodenum; sometimes to tie the ductus communis choledochus; sometimes to inject soda-solutions into the stomach, or alcohol, chloral, morphine, atropine, or opium, into the peritoneum, or subcutaneously, in order to paralyse peristaltic action. Many guinea-pigs have died after being subjected to such proceedings, but that they died of cholera may be doubted.

Dr. Koch himself remarks that the better the operations were performed, and the less extensive the manipulations, so much the less chance was there of the animals dying of cholera. Of eighteen treated by opening the abdomen and injecting the bacilli into the duodenum, thirteen died, of cholera of course. Of another set of nineteen simply fed with cholera-bacilli, guarded by alkaline solutions, only one died of cholera; and it was found, on *post mortem* examination, that this one had aborted immediately before infection. In the cases of animals so killed, the small intestine is found markedly reddened, and full of watery flaky fluid.

Such dejecta constitute one symptom only of cholera in the human being; do they, therefore, when formed in the intestine of the guinea-pig, prove its death by cholera? Should they not rather be interpreted as the results of intra-abdominal inflammation, excited by operative procedure?

Time will not allow me to say much more on the comma-bacillus; but, with regard to it, I ask you to notice the following points. One pathologist believes that he has established the bacillus as the true cause of cholera. His views are opposed by other observers, his facts are disputed or denied, and he replies that no other result could be expected; that his adversaries went to their work with predetermined conclusions, and judgment already decided. In effect, if not in words, he says that they did not know the things for which they had to look, and misinterpreted those which they found; and, lastly, that almost all their evidence has been overthrown by the unanswerable objections of another observer.

I desire to speak of the learned German professor and of his researches with the highest respect. I do not, of course, say that these are all the replies given by Dr. Koch to his opponents; I merely adduce some of them in proof of the controversial method by which the warfare of the two hostile camps is maintained.

Now, if you have followed my argument, I think you will be disposed to admit that there are good reasons against our enlisting under either the contagionist or the non-contagionist flag, and that we shall be wise if we stand aside for the present, and ask ourselves if there cannot be found a *modus vivendi* between the two parties, and a path along which they may march shoulder to shoulder, and in peace.

Such a path, I think, we may find if we incline a little to the party which doubts the existence of cholera as a separate entity, and hold in abeyance the belief in a specific cholera or poison-producing germ. We are, I think, too apt to look upon our diseases as self-existent entities, rather than as parts of ourselves. Cholera is so generally regarded as an entity, that it has acquired almost a personality. Cholera has a home; it dwells in Eastern Bengal; it takes its journeys, and marches across the world as a destroying angel; it slumbers, and it wakes again. Other diseases are similarly regarded as entities; but surely there are some which are merely perverted actions of the human organism having a tendency towards death; and is not cholera one of these? Surely there was a time when primæval man walked upon the earth in a state of savage health; when there was no overcrowding, no accumulation of filth, to produce epidemic disease. But, as man began to increase and multiply, and build cities to dwell in, conditions inimical to health arose, and specific diseases became developed, as the result, not of one, but of many, concomitant causes. May we not suppose that in such manner have arisen small-pox, leprosy, the sweating sickness, the black death, the plague, and, in later times, cholera? May we not also suppose that disease, which once originated in unwholesome surroundings, may again do so *de novo*? May we not thus account for sporadic cases of cholera, and for the epidemics which originate apparently without importation?

The acceptance of such views as these does not in any way oblige us to renounce belief in the production of a non-specific communicable poison or infection as the result of choleraic action. For it is quite conceivable that, under derangement of the vital chemistry of an organism, poisons of the nature of ptomaines, varying in kind and differing in degree of intensity, may be produced instead of healthy secretions.

Under such a supposition, I submit that the opposing facts of the general immunity of cholera-attendants, and of the well established instances in which the handling of linen soiled with cholera-dejecta has been shortly followed by the development of the disease, may be fairly reconciled. Further, if cholera is the outcome of many causes variously combined, one of them being such an uncertain quantity as the health-condition of the individual in which the disease originates, there is no longer reason to be astonished at its sometimes appearing, sometimes not appearing, under circumstances which do not seem to

vary from year to year, or at the search for a specific cause being always unattended by success.

Now, these are, I think, some very good reasons for inclining to non-contagionist doctrines, but there is yet one of still greater importance. It has, I know, been said that those of us who cannot altogether accept contagionist views desire to crush public opinion, to discourage investigation, to do nothing against cholera itself, and to keep international boards in ignorance, lest they should become troublesome by enforcing quarantine-regulations on travellers. The views I have suggested to you for consideration this evening have been described as nihilistic. I maintain that they are the very reverse. That which renders them most important is that they take us out of settled grooves of thought, and point directly to the only means we really possess of preventing epidemics of cholera, and of finally stamping out the disease.

And what is the method by which we are to attain an ending so desirable? Everyone, contagionist and non-contagionist, must reply, the maintenance of public health at its highest point by attention to the sanitary surroundings of individuals. The contagionist regards filth as the nidus in which the imported germ or poison festers; the non-contagionist, as one of the causes which, in conjunction with others, deteriorates health, and tends to originate in the human system that perverted action which we call cholera. Which is the wiser—to stand on guard against a foe that after all may not be coming, or to destroy the enemy already established within our gates?

During the last three years, cholera has appeared in Egypt and in Europe, imported, some say, from India. But in Egypt it began at Damietta, which is not in direct communication with India; in Europe, at places noted for defective sanitation. A thousand have fallen beside us, and ten thousand at our right hand, but it has not come nigh to us in England; because, it is said, of our careful attention of late years to sanitation. But have we done, and are we doing, all that should be done? We have a Pollution of Rivers Act and a Public Health Act, and we have local sanitary bodies to carry out the provisions of such Acts. Yet it is only lately we have heard of a river near London, once a pleasant stream, now a noxious sewer. Is this a solitary instance? Is the Lea the only filthy river in England, and is the Avon pure? Our sanitary authorities no doubt do their duty in establishing systems of town-drainage; but do they give sufficient attention to house-sanitation? Are they always ready to remedy defects brought to light by private individuals? Do they assist or thwart the endeavours of the sanitary associations which have lately been established with such good effect in some of our cities?

These are questions which you may well discuss, for they concern the future health of England. It may be said that sanitation is well attended to amongst us, that filth-diseases are less prevalent than they were, and that the average duration of human life is increasing. All this is true, but still we have rivers polluted with sewage; and in all old cities, such as Bath and Bristol, houses made unsanitary by imperfect drainage. It may be said that these things do not of themselves cause cholera, and that cholera has not been epidemic in England for years. Well, admit they do not cause cholera; but can it be doubted that they conduce towards it; that, other causes being added, the disease is likely to arise where they exist, and that they are evils which are yearly being added to by an increasing population? And has there really been no cholera in England for years? Do we never hear of cases of cholera called "nostras," and not Asiatic, because they do not present all the symptoms of complete and fatal cholera given in our text-books? I confess that I never hear of cholera nostras without thinking of the cases which commonly precede epidemic outbreaks in India, and are there called "suspicious." One of the last lessons I learnt in India was, that the suspicions aroused by such cases were very generally confirmed; and I have come to think that the difference between cholera nostras and cholera Asiatica is one of degree rather than of kind.

Now, this difference in name between cholera nostras and cholera Asiatica, or between cholera Asiatica and a suspicious case, is, I think, one of great practical importance. It is especially so in India, where the lives of hundred of soldiers hang upon the question of removal from quarters into camp. A suspicious case is one which presents some, only, of the symptoms of cholera, and does not perhaps end in death. Going into camp is to be avoided, if possible, because it is not only costly, but attended by its own special dangers of insolation, fever, and other diseases incidental to exposure to overfatigue, extreme heat, heavy rain and chill. Time is lost in discussing the suspicious cases, and lives are sacrificed because the move is not made soon enough. In England the case is different; we cannot move the population of a city, but those who are not called upon by duty to remain, may, if they desire to secure their own safety, depart. It is well, perhaps, that we should recognise cholera as "nostras," as a product of our own life habits; but not that we should call it "Asiatica," for that may imply that it comes to us only from without, and through the faults of other people. I ask you, therefore, whether it would not be well to reconsider the definition of cholera usually given in standard works on medicine.

Such definitions are too long for me to quote now, and I will only say that the definition of a disease ceases to be a definition when it is made to include a statement of a theory, the etiology, and semeiology of the disease and the history of a fatal case. The Royal College of Physicians has more concisely defined cholera as "an epidemic disease, characterised by vomiting and purging, with evacuations like rice-water, accompanied by cramps, and resulting in suppression of urine and collapse." But cholera is not always epidemic, is not invariably accompanied by all the symptoms detailed, and does not always result in suppression of urine and collapse. Such being the case, I would venture to suggest this amended definition: Cholera, a morbid action of the human system usually characterised by *malaise*, purging and vomiting of fluid, usually like rice-water, and having a tendency towards collapse and death.

I claim for this definition the virtue of simplicity. It is a reduction of a complex statement to its lowest terms. It declares no theory, it deals only with facts; it furnishes, I think, a complete key to the rational treatment of a patient threatened by or suffering from cholera—a key which may be used not only by a physician, but by any person of ordinary intelligence.

Some months ago, when the approach of cholera was dreaded in England, I was asked by a lady, living in an isolated part of the country, what she ought to do in the event of any of her household being attacked by the disease. Such a question is often asked, and not always satisfactorily answered, because the person consulted is wedded to a theory, or is perhaps polygamous in the matter of theories, and is wedded to so many, that he does not know which to favour most, or what kind of special treatment is really the best to recommend; but surely there is a plain practical answer.

The treatment of cholera is simple, if, bearing in mind and following my definition, we lay aside all theories, and confine ourselves to the one fact before us—the condition of the patient to whom we are called. We need not think about causes, when we have to deal with cases. Recurrence to theories will land us only in confusion and uncertainty. Special methods of treatment founded upon them are fallacious, and may do harm instead of good; all have been tried over and over again, and found wanting; all fancied specifics have failed.

The condition of the patient will be either one of *malaise*, or of collapse. In the first, his most urgent symptom will be profuse diarrhœa; in the second, this will have been succeeded by purging and vomiting of quantities of serous fluid, in consequence of which his blood has become so altered in quality that it circulates with difficulty, and no longer maintains the nutrition of the body.

Now, if there be any one point in the treatment of cholera on which a consensus of opinion may be said to exist, it is that, when cholera-influences are abroad, diarrhœa should always, if possible, be stopped. Diarrhœa may be preceded, perhaps, by many days of *malaise* and indigestion. These symptoms should be treated by careful regulation of the diet, by tonics, perhaps by the occasional administration of rhubarb and magnesia, combined with compound spirit of ammonia and aromatic tinctures; but aperients of any kind should be used with the utmost caution, and diarrhœa tending to be profuse and exhausting should be always stopped, if possible, by astringents and opiates, combined with warm stimulants. Nothing can be better for the purpose than the ordinary compound chalk mixture so combined, or a mixture of sulphur in ether-spirit of ammonia, and the tinctures of opium and catechu in equal parts. This is a most convenient preparation to carry about, and may be given in doses of one fluid drachm or less, according to age and the requirements of the case. If you thus treat cases of threatening cholera, keep them warm in bed, and do not neglect to nourish them with proper amounts of soup and stimulants, you will save many that would, if neglected, go on to a fatal issue. When the condition is that of collapse, all our efforts must be directed to counteract the tendency towards death. We must do our best to restore warmth, to promote the circulation of the blood and the nutrition of the body, to alleviate thirst, and to allay pain, cramp, and restlessness. Cover the patient with blankets, place him in bed near a fire, rub the body and limbs with dry ginger powder; give frequently, in small quantities, milk or milk and soda-water and good beef-tea. Do not deny water to quench thirst, but do not give it in large quantities, for fear of promoting vomiting. To relieve cramp, administer chloroform by inhalation, but do not carry it to full extent. Do not add alcoholic poison to the already

vitiated blood, by giving quantities of brandy, or paralyse the too fast failing heart with opium.

Attempts are made by some to check the serous purging and vomiting by the internal administration of astringents, such as acetate of lead and nitrate of silver. I do not believe that these substances have any power in this respect, or that they can be employed without interfering with the restorative treatment of which I have indicated the outlines, and by which alone we may hope sometimes to achieve success. Similar objections lie against all forms of medicinal treatment, whether mercurial, alkaline, acid, saline, or specific. In cholera-collapse, there is a tendency towards death from progressive disorganisation of the blood, and that we can only hope to overcome by supporting the powers of life.

THE REACTION OF THE GASTRIC SECRETION, AND ITS RELATION TO CHOLERA-INFECTION.

By MATTHEW HAY, M.D.,
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Immediately previous to Dr. E. Klein's departure to India in 1884, for the purpose of studying the genesis of cholera, a letter, signed E. K., appeared in *Nature* (July 17th, 1884), in which it was attempted to prove that Koch's statements relative to cholera were "in hopeless contradiction." The writer sums up these in three propositions: "(1) that the 'comma-shaped' bacillus is the cause of cholera; (2) that the alimentary canal is the exclusive organ of entrance of the cholera-virus; and (3) that the 'comma-shaped' bacillus is neutralised and killed by acid." He then proceeds to remark that "the first two propositions are assumptions, the third is based on direct experiment, and is perfectly in harmony with other observations. If, then, this third proposition be true, the other two cannot be true; that is to say, if it is true—and there can be no doubt about it—that the 'comma-shaped' bacillus succumbs to the action of acid, then it cannot be true that the 'comma-shaped' bacillus is the cholera-virus, nor that the alimentary canal is the sole entrance of the cholera-virus. How, we may ask, can the 'comma-shaped' bacillus pass unscathed the acid contents and the acid secretion of the stomach? To maintain, as Koch is reported to have done, that in all persons attacked by cholera the stomach must have been previously so deranged that its contents and secretions are not acid, must appear to everyone who has had any experience during a cholera-epidemic an untenable proposition. On the one hand, it is known that such a serious disorder of the gastric mucous membrane as the total absence of acidity is of comparatively rare occurrence, while, on the other, in every cholera-epidemic, numbers of persons become affected with the disease in whom such a gastric condition, antecedent to the affection, can with certainty be excluded." After reading E. K.'s communication, I at once wrote a short letter to the editor of *Nature*, which I desired him to publish; but, for some reason best known to the editor, the letter never appeared. The object of the letter was to point out that E. K. and Koch were wrong in assuming that the reaction of the gastric secretion is in the healthy person constantly and at all times acid. The recent publication in this Journal of a translation of Koch's opening address at the Conference on Cholera, held last year in Berlin, has reawakened my interest in the subject, more especially as I observe that he adverts to the gastric reaction. I, therefore, now propose to give my experience regarding this physiological question, and in much the same form as I did in my unpublished letter to *Nature*, though in greater detail. My observations were made almost entirely on cats.

In the course of a large number of experiments on the action of saline cathartics (*The Physiological Action of Saline Cathartics*, Edinburgh, 1884), I often found it necessary to kill the animal, eighteen to twenty-four hours, or more, after it had last been fed. In several instances, I took the opportunity of testing the reaction of the contents of the stomach; and I found it almost invariably to be alkaline, provided that the stomach contained no remnant of undigested food, and that the stomach had been for some time, an hour or two, empty, as was proved by the upper half, if not the whole, of the small intestine being likewise empty. The simple explanation of this is, that the digestive acid gastric secretion is, like other digestive secretions, poured out into the alimentary canal only when food, or food-like substances, are present. When these are not present, the mucous membrane of the stomach is bathed merely with the glairy alkaline mucous secretion which every mucous membrane appears to produce.

I next ascertained the effect of water on the reaction of the previously empty and alkaline stomach, by injecting water into the stomach of the living animal, and placing ligatures round the cardiac and pyloric orifices. The water was found, even after half an hour, to remain alkaline; that is, water—at least under the conditions of the experiment—has no excitant action on the glands which secrete the acid gastric juice.

Further, I observed, by a similar mode of experimenting, the effect of the solution of a neutral salt of sodium, as chloride of sodium and sulphate of sodium. In both cases, the saline solution acquired a well-marked alkaline reaction. Several experiments were made with the sulphate, some with a 10 per cent. solution, others with a 20 per cent. solution; but the result was always the same, even though the time which was allowed to elapse before killing the animal varied from one hour to three hours and a half. To give some notion of the degree of the alkalinity of the fluid, it was found in one case, where 50 cubic centimètres (under 2 ounces) of a 10 per cent. solution of sulphate of sodium were used, and the animal killed after one hour, that 0.77 cubic centimètre (11.88 minims) of the usual standard solution of oxalic acid (*vide British Pharmacopœia* appendix) were required to exactly neutralise the 55 cubic centimètres of fluid which were recovered from the stomach. One of the experiments with the sulphate of sodium solution was made on a rabbit, with a like result; though these animals are less suited for such experiments, since, even after prolonged fasting, their stomach does not become wholly emptied of digesta, which, of course, have an acid reaction. The food was, previously to the experiment, removed from the stomach, which was then well washed by gently syringing it with luke-warm water. But, as this involves a greater disturbance of natural conditions than in the case of the experiments on cats, the result is of less value. It may be of interest to mention that in the case of one cat, where a 10 per cent. solution of sulphate of soda had been injected, and the animal killed after three hours and a half, the fluid, which was removed from the stomach, though alkaline, digested fibrine with great facility after it was acidified. This appears to show that, in certain conditions of the stomach, the peptic ferment may be secreted without its being accompanied by acid. It is of still greater interest, because of greater importance in connection with my present object, to state that the fluids contained but the faintest trace of albumen, and gave no peptone reaction. Further, the gastric mucous membrane showed no signs of inflammatory reddening, unless when a moderately strong solution of chloride of sodium, or a highly concentrated solution of sulphate of sodium had been employed. The secretion which is poured out under the stimulus of the saline solution cannot, therefore, be regarded as merely an inflammatory effusion.

In some other experiments on cats, the saline solution was administered through the mouth by means of a thick flexible catheter; and no ligatures were applied to the alimentary canal. The animals were, therefore, in a perfectly normal condition. As the saline solution passes very quickly from the stomach into the small intestine, the cats were killed at periods within half an hour after the administration of the salt. In every case except one, the reaction of the portion of the saline solution found in the stomach was unequivocally alkaline.

All these experiments were, for the most part, made with another objec in view than the mere determination of the reaction of the gast . ecretion; but, after reading some of Koch's earlier reports on the cholera-bacillus, I made one or two experiments of a very simple kind, for the purpose of obtaining further confirmation of my previous results. I starved a cat for about eighteen to twenty hours, allowing it a little water, but no ordinary food, in order that the stomach might become quite free from food; I then killed it, and at once removed the stomach, taking care that by the method of killing it, and by the manner in which the stomach was removed, regurgitation of the alkaline contents of the duodenum through the pylorus was, as far as possible, prevented. The stomach was cut open lengthwise, and spread out, with its mucous surface uppermost, on a table. Care was taken that no blood was allowed to touch the surface of the mucous membrane, since the alkalinity of the blood might have masked the reaction of the secretion. In each case, the stomach was quite empty, except for the mucus which coated its walls. Thus spread out, each part of the mucous membrane, from the cardiac orifice to the pylorus, was carefully tested by means of sensitive litmus-paper, and everywhere it was found to possess a distinct alkaline reaction. It cannot, therefore, be doubted that, in the cat, the reaction of the stomach, when empty, or when filled only with water or with a saline solution, is alkaline; and that the reaction is the same in other animals, including man, under the same circumstances, appears to be a fairly reasonable induction. This was decidedly the conclusion at which I had arrived when I wrote to *Nature*, and which I then

stated. I am, therefore, pleased to find that Koch (BRITISH MEDICAL JOURNAL, January 9th, 1886, p. 64) refers to some recent experiments on men by Professor Ewald, which were evidently undertaken at Koch's solicitation, and which led to the same conclusion. Ewald observed that, when water was introduced into the stomach of a fasting man, the water had a neutral or alkaline reaction so long as it remained in the stomach. This he ascertained by removing portions of the water from time to time by means of a stomach-tube. Ewald's experiments have, therefore, the advantage over mine of being performed directly on man himself.

It is not to be supposed that I claim to be the first to have pointed out the fact that the stomach, when empty, commonly possesses an alkaline reaction. When I first noticed it, it appeared to me to be a novelty, since I did not remember to have seen it alluded to in any of the modern works on physiology, whether English or foreign. But I afterwards found it mentioned in some of the older and now forgotten, or at least little read, text-books. Hence I did not consider it necessary to publish the results of my observations until I observed its important relation to Koch's investigations, whose conclusions were to a considerable extent vitiated by his want of knowledge of this fact. I apprehend that the statement of the older physiologists is founded mainly on *post mortem* observations, made probably some time after death. If so, they are not very reliable, as the reaction is apt to undergo change when decomposition begins. None of these, however, make any mention of the effect of water or saline solutions. This is of great importance in connection with the inception of the cholera-bacillus. For if, as Koch pointed out very early in his investigations, acid solutions destroy the bacilli, then, if they be swallowed when the stomach contains food, they run the chance of being destroyed by the acid of the gastric contents. (I am aware that Dr. Klein has stated that a weak acid solution does not kill them ; but Koch's experiments apparently show that it is very difficult, if not impossible, for any of the bacilli to pass, without being killed, through the stomach when it contains acid digesta.) If, on the other hand, they be swallowed in water, as it is believed they generally are when infection occurs, and the stomach be previously empty, then the bacilli will assuredly pass through the stomach into the intestines, where, according to Koch, they find the suitable nidus, without being exposed to any deleterious influence. The same will happen even if they be swallowed in saline solutions, as mineral waters, etc. It is, therefore, not needful to assume, in considering the tenableness of Koch's theory of cholera-infection, that the secretion of the stomach must be rendered neutral or alkaline by disease—which, as E. K. rightly remarks, it rarely is—before the bacilli can pass unscathed into the intestines. Even in a perfectly healthy state, whenever the stomach becomes completely emptied of food, it is highly probable that the gastric secretion becomes neutral, and finally alkaline. So far as my experience on the lower animals extends, I have always found that the presence of the merest shred of undigested food in the stomach was enough, though many hours after a meal, to keep the reaction acid. So it is not likely that at any time in the course of the day, when meals follow each other in tolerably rapid succession, the reaction of the interior of the stomach is ever alkaline ; though it is to be remembered that, especially in persons with a good active digestion, the whole of a meal may, dependent on the nature of it, disappear completely from the stomach within two or three hours, or even less, as Beaumont's experiments on Alexis St. Martin have demonstrated. (In passing, I may remark that although, so far as I can find, Beaumont makes no distinct statement as to the reaction of the stomach when empty, yet several of his observations lead to the inference that the reaction is then neutral or alkaline. For example, he states that the stomach, when empty, did not pour out the usual gastric juice, but was bathed with a mucous secretion, which showed no acidity when tested.) But though in most individuals the gastric reaction may remain more or less acid throughout the whole day, when meals are taken with the usual intervals, it will, of course, be otherwise if the person fast for an unusually long period, say eight or nine hours, as occasionally happens. The reaction will also, as a rule, be acid in the morning, previous to breakfast, and after the long fast of the night. Hence there are enough opportunities given by the healthy to the choleraic bacilli to pass unharmed into the intestines, without calling in the aid of disease to render the gastric juice alkaline. Indeed, on the other hand, it is not unlikely that the presence of a little dyspepsia, with the usual sluggish digestion, may rather serve to ward off infection than otherwise.

Granting that Koch's view with regard to the mode of entrance of the cholera-germ into the body is correct—though many able investigators, both in this country and on the Continent, doubt not only the mode of entrance but even the specific action of the comma-bacillus—then the practical conclusion to be drawn from such experiments as I have described is that, in the time of a cholera visitation, when there is great liability to the pollution of water and other fluids with the choleraic bacillus, one should carefully avoid drinking water after a long fast, except some solid food have been previously taken, and should especially avoid doing so before breakfast. Of course, this precaution does not apply to water which has been boiled ; even here it may be advisable to exercise considerable caution, since the water, after being boiled and cooled, may have been placed in a vessel which has been rinsed with unboiled water. It is a prevalent belief among the laity, that one should not venture with an empty stomach into the neighbourhood of infectious cases, and it would now appear as if this belief were about to receive some scientific support.

These experiments of mine may be of some value to those who are engaged in the investigation of cholera, for they show that in the case of the cat at least, without the concurrent administration of alkalies, as practised by Koch on guinea-pigs, it may be possible to introduce the bacilli into the intestines by the mouth without their having to run the risk of being destroyed by the acid of the stomach. It is only necessary to make use of a fasting animal, with a stomach of the same type as that of the cat, provided that among this class of animals there can be found a species which, like man and the guinea-pig, is susceptible to the action of the cholera bacillus.

ABSTRACTS OF
THREE LECTURES
ON
THE BRAIN-MECHANISM OF SIGHT AND SMELL.

Delivered at the Royal College of Surgeons.

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LECTURE II.

ALL vertebrates exhibit a distinct tendency to body-segmentation. From head to tail, there is a repetition of similar structures. Vertebræ and spinal nerves follow one another in unbroken succession ; and not only do such axial structures serially recur, but other organs also tend to be repeated in numerical harmony with the vertebræ and nerves. In fishes, the muscles are disposed in myotomes, their fibres not passing the boundaries of the segment. In the embryo, the mesoblast splits into somites, from parts of each of which arise the bones, muscles, and other tissues of the segment. All these facts point irresistibly to the conclusion that the vertebrate ancestor was constructed of a series of similar segments, in each of which the same elements were to be found ; separate joints, as it were, each containing a sense-organ, with its afferent nerve and clump of central plexus, a group of efferent nerves with their muscles, its skeletal framework, and a piece of gut. At least, morphologists believe that the key to vertebrate structure is to be found in such a scheme. It does not follow that the ancestor was definitely segmented, or that all the elements belonging to each segment were contemporaneous. Serial repetition of similar structures was the goal towards which development tended.

According to this plan, each segment contained a sense-organ; and, as will be shown, there is ample evidence that, in this respect, the plan was actually carried out. In the lowest vertebrates, all the sense-organs were probably of equal value. Very soon, however, a division of labour took place. While the greater number of the sense-organs retained the common form, certain of those situate in the anterior extremity of the body became specialised. Of these, the first to advance along a new line was the eye; and so important an organ did this become, that its relation to the central system was extensively modified. Then the ear and nose assumed independent positions; and these three alone, unless the organs of taste also are derived from segmental organs, obtained a sufficient degree of development to secure their retention in higher vertebrates. There is, however, sufficient evidence to prove that in each of the other segments a sense-organ once existed ; for, leaving out of consideration the fact that in certain worms (the capitellidæ), the claim of which to find a place in the vertebrate pedigree is problematical, a sense-organ, in structure resembling those of

higher forms, is to be found in each segment. Such organs exist in the embryos of all bony fishes, while they persist throughout life in some (for example, *Gobius Esox*). They present the form of a bulb of hair-cells, on the same plan as taste-bulbs. As the organs of special sense diverged from these of common type, it became advantageous that all these common ones should be supplied by a single diametameric nerve, the nerve of the lateral line. The nerve extends from before backwards, apparently by delamination from the epiblast. In cartilaginous fishes, the nerve and its sense-organs extend no farther backwards than the gill-bearing region, in which their relations to the character of the surrounding water are especially important. The only vestige of this series which remains in man is the remnant of the nerve of the lateral line, which persists as the auricular branch of the vagus.

The ear is commonly regarded as derived from a member of this series, but the eye and nose are always excluded. The first and second nerves are treated as parts of the brain, and excluded from the segmental scheme; either because they, and the part of the brain with which they are connected, are regarded as homologous with the cephalic ganglia of invertebrates (occurring in a region into which segmentation does not extend); or because of their hollow outgrowth from the neural tube; or, lastly, because the retina and olfactory bulb contain elements which elsewhere are rightly considered to be comprised within the brain and spinal cord. The first of these reasons has been already discussed. The second appears, to the lecturer, to be of no morphological importance, for the whole central nervous system was at first solid, and only subsequently became hollowed out and lined with cilia (as Mr. Sedgewick has suggested), for the safer location of its cells and for convenience of respiration. It is no wonder that this hollowing out is extended into the optic nerve, which contains probably more fibres than all the spinal sensory nerves put together.

With regard to the structure of the retina and olfactory bulb, there is, in the first place, an entire homology between the two; for, although the cylindrical form of the olfactory bulb does not favour stratification, and the arrangement of its elements varies considerably in different animals, their resemblance to the structures found in the retina is unmistakable. The interruptions in the course of the nerve-filaments, which course centrally from the epithelial cells, is probably the same in the two cases. First, they are connected with bipolar cells (the "inner nuclei" of the retina and cells of the glomerular layer of the bulb), secondly, in a process-plexus (the molecular layer of the retina and stratum gelatinosum of the bulb), and, thirdly, with multipolar cells. Further, the lecturer is of opinion that every sensory nerve of the body, on its way to the central plexus, passes through the same series of interruptions; the spinal sensory nerve being connected first with a (primitively) bipolar cell of the spinal ganglion, upon which it depends for its nutrition. Secondly, they are broken up in the gelatinous substance of Rolando, from which again filaments are reassociated as the processes of the multipolar cells of the cord. There is no greater difference in size between the cells of the spinal ganglia and the bipolar cells of the retina and bulb, than there is between the nerve-fibres which depend upon these cells for their nutrition in the two cases respectively.

It is not because of any differences in the character of the epithelial cells with which the nerves are in the several cases united, that morphologists have introduced such a broad distinction between the first two sense-organs and the rest. The columnar and fusiform cells of the olfactory epithelium, the rods and cones of the retina, the cells of Corti and the cells of Deiters in the ear, make up couples which remarkably resemble one another. It is because they claim for the first two nerves that they are parts of the brain, that they draw the line, and only commence the segmental arrangement behind them. Professor Milnes Marshall has proved that the olfactory nerve arises, like any other, from the neural crest, but still considers its sense-organ, the nose, to be not a segmental sense-organ but a gill-cleft. Van Wijhe recognises that the origin of the first nerve throws it into the segmental series; but, as the second nerve does not likewise arise in any animal from the neural ridge, he supposes that a displacement has occurred, and that the optic nerve is really the first, an inference opposed to all that is known of the history and development of the nerve. Beard recognises the necessity of making the nose a segmental sense-organ, but still excludes the eye. It appears to the lecturer that nose, eye, and ear, must "swim in the same boat;" and that, while it is in a sense true that the olfactory and optic nerves are parts of the brain, the modification of the system by which this comes about is, after all, remarkably slight. Indeed, it is the other sense-organs which have undergone modification, while the nose and eye perpetuate an older and more primitive arrangement. It has already been shown that in its first inception the nervous system was wholly peripheral. Then a part of the plexus assumed a central position, the rest remaining in the vicinity of the sense-organs; of this latter portion all, except the bipolar cells of the spinal ganglia, has in the posterior segments drifted into the central system; while in the case of the first two segments, the older arrangement is still preserved.

ON THE SURGICAL TREATMENT OF FIBRO-MYOMA OF THE UTERUS.

Read before the Worcestershire and Herefordshire Branch.

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Having been requested to read a paper before this Branch, I propose to limit my remarks to the surgical treatment of fibro-myoma of the uterus. Of the frequency of uterine fibroids there can be little doubt; and, with increasing experience, the cases do not seem to diminish in number, but rather the reverse.

As we all know, very many, the majority, require no surgical treatment at all; they may remain stationary, without producing any symptoms, and no ill result follows; or they increase in size and bleed up to a certain stage, namely, about the menopause. After this period, they often subside with the functional retrogression of the sexual organs; and they may even disappear altogether. I shall not, however, refer further to this class, but to that very important one which demands surgical interference. Here a subdivision can be advantageously made: first, into those tumours which are treated from below, that is, *per vaginam;* and, secondly, those which can best, and perhaps only, be treated from above, that is, by abdominal section.

With the first subdivision of cases, the removal of a polypus by the écraseur is included, as this form of tumour is only an advanced stage of a submucous growth, having become pediculated by a process of squeezing exercised upon it by a contracting uterus. Submucous growths of large size will sometimes burst through their capsule, and be expelled in large masses *per vaginam.* A natural and complete cure is thus effected. I have seen probably half a dozen of such cases. In imitation of this process, art has been able to step in, and, by incising the capsule of the tumour, and perhaps the cervix uteri as well, has given an opportunity and an opening through which the uterus has been enabled to push out the offending mass. This can, in suitable cases, be aided by a process of enucleation. Some years ago, this form of treatment was ably advocated by Dr. Alfred Meadows, the first president of the new British Gynæcological Society. There are, however, some very fatal objections to this course being adopted, except in a very small minority of cases, and those of exceptional suitability. The smallest objection is that such attempts are not always successful; not successful, I mean, in the sense of not attaining the object aimed at; the chief objection is the great fatality that attends the attempts at enucleation. Such is easily understood. Very frequently some form of dilatation of the cervix has to be made, and this, with the hæmorrhage or other fluid present, gives rise to a fœtid state of the discharges. If we now make a fresh wound, that is, a perfectly raw surface, we at once open the door for the introduction and absorption of septic matters; in fact, we deliberately inoculate the patient with sepsis. This is bad enough, and dangerous enough; but if we further make, from time to time, during the progress of the treatment, attempts at enucleation, we make fresh raw surfaces each time, and so intensify the evils.

The treatment of these tumours by abdominal section has, within the last few years, attracted a very great deal of attention, and has been attended with very gratifying results. Two methods are open to the surgeon, each of which is good in suitable cases. I refer to, first, removal of the uterine appendages, and, secondly, to hysterectomy.

When I am asked, before an operation involving abdominal section, what I am going to do? I always say: "I do not know; I propose to make, in the first instance, merely an abdominal section;" and this will most probably result in one of three courses. 1. A simple exploratory operation, where, finding I cannot remove anything, I close the wound again, and the patient is none the worse. This becomes, with increasing experience, of course, less frequent. 2. Removal of the uterine appendages; when practicable, and appearing likely to answer the purpose. 3. Complete removal of the whole mass, or hysterectomy.

Removal of Uterine Appendages.—This operation should be practised whenever it can be done. It would be better to do it when the tumour is very small. The earlier the better; because, at this period in the history of the case, the operation is easier, the appendages being more easily reached; and its object is quite as much, if not more, the prevention of further growth, as the diminution in size of what is already there. At this time, it is an operation almost absolutely devoid of danger and difficulty, and leaves the patient with a very small scar, and perfectly able to enjoy life fully. When it is postponed until the tumour has become very large, difficulties arise. (*a*) The wound has often to be made of considerable size, even to the admitting the whole hand into the abdomen. This, though not adding materially to the danger, has a great influence on the after-comfort of the patient. (*b*) There is increased difficulty of removing the appendages; sometimes amounting to absolute impossibility, on account of their position behind or beneath a large tumour. It is, in this operation, quite essential for success that both ovaries and both tubes should be completely removed. I have myself found that to do it on one side is no good whatever. This experience occurred to me in a large tumour, where I was able to remove the right ovary and tube, but could not possibly get at the left side. The appendages were out of reach—in fact, deep down in the pelvis, beneath the tumour. The tumour continued to grow, and, some months afterwards, I performed hysterectomy, at which I found the left ovary and tube quite buried down in the pelvis. No trace of silk ligature or remnant of tube could be found on the right side. The rationale of the benefit to be derived from this operation is still a moot point. It would seem to depend on one or both of two causes: either (1) the diminution in the supply of blood, by the ligature of the broad ligament, and division of the spermatic artery; or (2) the suspension of the so-called ovarian influence, on which the functional activity of the uterus is dependent. Perhaps both factors have to do with the result attained, since it is necessary that both the tube and the ovary on each side should be completely removed.

The cases which are most likely to be benefited by this, which may be called the "minor" operation, are those myomata which give rise to hæmorrhage.

I have come to the conclusion that, as a general rule of practice, as soon as a myoma has been definitely diagnosed, and is increasing in size, or is causing hæmorrhage which is telling upon the health, removal of the appendages is a wise and justifiable proceeding to recommend.

Supravaginal Hysterectomy.—This is a much more serious undertaking. Of course it is very radical, and, when successful, there can be no doubt about the cure. I just now alluded to what I consider justifies the operation of removal of the appendages. I feel that very much more must be present before the surgeon could advise this much graver proceeding of hysterectomy. Subject to some modifications, I would say, if a patient under 40 or over 45 have a fibroid which is gradually though slowly (*a fortiori* quickly) increasing in size, giving rise to hæmorrhage, which tells on the health and strength, so that she is unable to do her duties in the world, causing pains which, as is sometimes the case, unfit her for her duties, or, by its increasing size, is beginning to exert injurious pressure on surrounding parts, as the rectum and bladder (the latter most frequently), that we are justified, in the presence of one or more of these disturbances to health, in recommending her to submit to an operation which will probably eventuate in the removal of the whole mass.

In reference to the operation, the first parts are similar in detail to ovariotomy. The incision has to be much longer, on account of the solid character of the tumour. A corkscrew, to pierce and drag out the tumour, is a great aid, and helps to minimise the length of the cut. As a rule, adhesions are not likely to be present, because there is not the same tendency to attacks of localised peritonitis, there being no abnormal fluid in close contiguity, as in many cystomata. I always pass a thick silk suture at the lower portion of the wound below the stump, and another immediately above the stump, so as to have these two sutures closely embracing the stump. It prevents the possibility of fluid running down the side of the stump, and effectually shuts off the peritoneal cavity. This is one of several details, the importance of attention to which I would accentuate, if success is to be attained. Another is the keeping of a sponge in the abdomen between the uterus and bladder; here fluid and blood may, during the operation, collect unobserved, and play hereafter an important part in an untoward result. Sponging out the cavity of the pelvis and abdomen, even though no fluid may appear to have collected, is important; and I now also frequently use a drainage-tube in addition. The arrangement of the stump with a clamp and pin is a matter that requires some little care and nicety, so that the wire-enclosed stump may lie comfortably in the lower angle of the wound. It is very necessary to attend to the proper tightening of the wire. If it be not tight enough, hæmorrhage will ensue after a time from a gradual shrinking of the stump; this, if the surgeon be at hand, is easily controlled by a half or a complete turn of the screw. I recently lost a case on the seventh day from this cause. If the wire be too tight, it is apt to cause very rapid destruction of the distal end of the stump, with too early separation of the slough. When this occurs, the proximal end of the stump sags down into the pelvis; the more readily, if the abdominal wall be thick or the tension great. At the end of four days, at which period I have known the clamp to separate, the exudation and lymph round the stump, which shuts off the peritoneal cavity, must, of necessity, be slight, and capable of being easily broken down; when, if such should occur from the efforts of coughing, straining, etc., the whole abdominal cavity is laid open, with intestine protruding, and the putrid stump at the bottom. This dangerous state has occurred twice to me. One of the patients died in consequence; the other recovered. One advantage of this particular kind of clamp is that we can regulate the tightness of the wire, which is soft and pliable; and we also have so admirable a command over hæmorrhage, if it have not been screwed tight enough.

Of late, I have been in the habit of using the drainage-tube more frequently than I used to do, and much more, I know, than many operators. I do it for the sake of security. I am astonished at the very large amount of blood and serum which may be drawn off after the removal of fibroids. Of course, it is readily understood that, at first, after the sudden removal of a large solid mass, a considerable disturbance has arisen in the balance of the local circulation in the pelvis, and that a condition of stasis is relieved by osmosis. In a recent case, the amount of fluid was very considerable, and there were next day two or three fairly large blood-clots; although I am quite sure that, on closing the wound, I left nothing behind either of blood or serum. I am at present inclined to drain every case, even though the cavity is considered to have been sponged perfectly dry; and this, on account of the excessive sanguineous oozing noticed in so many instances. Perhaps one reason for this large quantity of bloody serum may be that the careful sponging has wiped off the endothelium from the serous surface of the visceral and parietal peritoneum. I have recently used drainage-tubes longer than those generally sold, and think that an advantage is gained by knowing that the tube is long enough to go down into the most dependent part of the pelvis, where fluid would be sure to collect. When I have lost a case after drainage, I have always felt that it was most probably because the tube was not quite efficient. I have had some made in Birmingham 8 inches long, and they appear to be long enough to reach through the deepest pelvis and thickest abdominal wall to the most dependent spot. I sometimes insert the tube through the upper portion of the wound, instead of near to the stump. This I do to prevent any interference with the early and sound healing of that portion of the wound which is near the stump; and also that the track of the tube and the hole left by the removed clamp may not be in danger of coalescing. The hole left behind, soon after the clamp has come away, is wide and deep, a sort of bottomless pit, dreadful to look into and contemplate. You see putridity at the bottom, and know that the sides consist of only a few granulations, which intervene between life and almost certain death. To prevent the sagging down into the pelvis too soon, I have several times passed the suture which is immediately above the stump through a small portion of the uterus itself, just below the wire. This detail also helps in shutting off the peritoneal cavity. I noticed recently that Dr. Bantock has been doing the same thing.

Although the results of hysterectomy have improved in the last few years, very much in the same way as ovariotomy improved after it was taken up and carried out in a scientific manner, yet it does not seem likely that it will ever stand on an equality in its results with ovariotomy. There are many circumstances connected with the nature of the case, and with the operation itself, that tend to cause a larger mortality. The best treatment of the pedicle or stump, now quite settled for ovariotomy, is still a matter for consideration in hysterectomy. For a few years, when the ovarian clamp was discarded, it was thought best to treat the uterine stump by ligature, and drop it in. Success did not follow this practice, as in the sister operation; and, of late, recourse has again been had to the clamp, or extraperitoneal plan. Theoretically, the intraperitoneal method appears the most scientific, and various devices have been adopted to ensure its success: namely, tying the stump in segments by a number of ligatures; sewing the peritoneal edges together over the stump, so as to form a cap or covering over the raw surface; this is aided again by taking out a wedge-shaped piece from the stump on the distal side of the ligature, by the application of the actual cautery, and also by tying

the vessels in the stump separately. Hæmorrhage has proved a formidable danger in many instances, whether intra- or extra-peritoneal. The chief objections to the extra-peritoneal method are the greater liability to septic absorption, hæmorrhage, the too early separation of the clamp, and the much greater delay in the healing of the wound and subsequent convalescence. This latter objection, though not so important as the former ones, is yet a factor in the consideration.

As regards the causes of death, putting aside such unforeseen accidents as tetanus, hæmorrhage, too early separation of clamp, etc., I think nearly all the deaths will be found to be due to septicæmia in one of its many manifestations. The symptoms which are most prominent in individual cases vary exceedingly. In one patient, as Dr. Keith recently remarked, death seemed to commence immediately from the operation, and to go on uninterruptedly. I call to mind two cases as illustrating the inequality or irregularity of the symptoms.

CASE I.—Mrs. D. lived five days. The pulse and temperature were normal till a few hours before death. She had incessant vomiting and suspension of flatus from the time of operation. She was sure, almost to the last, that she was going on well "but for the sickness."

CASE II.—Miss H. had no vomiting, and flatus passed freely; but distension came on in forty-eight hours, with raised temperature and rapid pulse.

I think we shall, ere long, forego using the term "surgical fever," and apply to the condition long known under that head the name of septic fever, or some such word, having a precise pathological meaning. That there need be no pyrexia or fever after a surgical operation is often seen by all; I had an illustration of it last week. I removed a large myoma by hysterectomy, including the uterus, ovaries, and tubes. The patient has not had a symptom to cause the slightest anxiety, and her pulse and temperature have not once touched 100. Here was a case of sufficient magnitude to have caused considerable "surgical" fever; but as there was no septicæmia throughout, so there was no fever.

A CASE OF GASTRO-ENTEROSTOMY FOR CANCEROUS OBSTRUCTION OF THE PYLORUS.

BY THOMAS H. MORSE, F.R.C.S.Eng.,
Assistant-Surgeon to the Norfolk and Norwich Eye Infirmary; Assistant-Surgeon to the Norwich Jenny Lind Infirmary for Sick Children.

THE following is an account of a case of the above nature which has fallen to my lot to operate upon. I desire to publish it, as I believe it to be the first case of the kind which has occurred in this country. In the BRITISH MEDICAL JOURNAL for February 13th, I have been much interested in reading the account of Mr. A. E. Barker's operation, which was performed at University College Hospital on January 5th, 1886. My own operation was performed on January 4th, 1886, and was very similar in many respects, though I regret to say it was not attended by the same brilliant result, but, on the contrary, by a fatal termination.

The patient was under the care of Dr. Doyle, of this city, owing to whose kindness I had the opportunity of seeing the case, and recording the facts as follows. Mrs. W., aged 65, had for the past six months suffered from vomiting after meals; at first, only after a hearty meal; during the last fortnight, the interval between each attack had been only from one to two hours. No blood had ever been mixed with the vomit. She had been an extremely strong and healthy woman, and had kept up and about her house as usual till December 22nd, 1885. Up to this time, she lost flesh slightly; but from then up to the date of operation, this loss of flesh was much more marked. The bowels acted regularly up to December 25th, but, after this date, there was no further passage of motion from them.

On January 2nd, 1886, her condition was as follows. She was in bed, though quite able to sit up and move herself about; was somewhat emaciated, but still retained her usual robust look in the face; the tongue was slightly coated with white fur. The pulse, which was always remarkably slow, was only 35 per minute, though a very good and fairly strong one. The abdomen was flaccid and empty; in the middle line, just above the umbilicus, was a hard tumour, of the size of an orange, painless to touch, and freely movable; its situation could be distinctly diagnosed when the stomach was full, for this organ could be seen contracting and relaxing alternately; its peristaltic movements could be followed up to the tumour, and could then be seen to stop abruptly at its left border. The distended stomach tumour could be moved together, and the peristalsis again watche the altered position. On percussion, it became apparent that whole stomach was dilated to about double its natural size; when organ was empty, the tumour fell downwards, and lay on a level w and nearly touched, the anterior superior spine of the left ilium.

On January 4th, 1886, ether was given by Mr. Donald Day; Doyle assisted me. It was decided, contrary to my usual rule, no use the steam carbolic spray, in consequence of her feeble condit as I considered the prolonged exposure of any portion of the bowe its influence would not be advisable.

An incision was made very obliquely from above downwards, from left to right, about an inch above the umbilicus, between and five inches long. The tumour was then seen to be involving pyloric end of the stomach, limited abruptly by the origin of the denum; it was about the size of an orange, measuring horizont two inches, and vertically two and a half inches. The peritoneum smooth on the surface of the tumour, not infiltrated, and nowhere herent to other structures; the lesser omentum was full of li nodules, of the size of No. 7 shot; the great omentum, all along great curvature of the stomach, was also studded with small nod of the same size.

Under these circumstances, I felt that the removal of the tum would not extirpate the disease. I therefore commenced at once establish a communication between the stomach and jejunum. I had to decide as to the best method of approximating these two tions of intestine. This can be done by pushing the great oment to one side, and drawing the jejunum forward to the stomach; in way, the jejunum is made to encircle the transverse colon. other way, and the one which I adopted, was as follows. I first sep ated, between two ligatures, the great omentum from the great curvat of the stomach, opposite the centre of the organ, for a distance of tween two and three inches; the duodenum could then be s crossing the spine, and ending in the jejunum; the third inch of latter was taken up, and dragged forwards to the stomach through opening in the great omentum. Dr. Doyle held it against the stom whilst I attached it, before opening either viscus, just in front of line of separation of the great omentum. This I did with fine silk, a distance of an inch and a quarter, with seven sutures, which cluded only the serous and muscular coats.

A small incision was then made into the stomach, a third of an i anterior to the line of sutures, large enough to admit a No. 14 Ind rubber catheter, through which the contents of the stomach (whi amounted to a pint and a half) were drawn off, and were thus p vented from entering the peritoneal cavity. The incision in stomach was then enlarged to an inch in length, and a similar made in the jejunum; this latter bowel was completely empty. suturing of these posterior cut edges was then completed, according Czerny's method, as described in Billroth's *Clinical Surgery*—t is, this second row of sutures included only the serous and muscu coats, and emerged on the cut edges of the two viscera; when the were tightened, the cut edges of the two mucous membranes easi came into apposition; indeed, the mucous membrane caused some lit difficulty by its constant tendency to prolapse. At this stage of t operation, I endeavoured to thrust part of the contents of a tin Brand's essence into the lower end of the jejunum; in this I on partially succeeded.

I then proceeded to unite the anterior cut edges of the two visce This was done by ten more of the form of suture described by Bi roth as Gussenbauer's, which are the same in principle as Czerny's that is, their object is to unite the cut edges, and also the serous su faces of the two viscera, only, in this case, the two rows of sutur are combined to form one. Two or three more superficial sutures, each end of the incision, completed the task, and the result w what appeared to be a water-tight joint. After sponging out of t peritoneal cavity the small quantity of blood that had found its wa into it, the organs were replaced, and the wound united. A dressin of Gamgee's absorbent tissue was strapped over it, and a flanne binder applied over all. The operation lasted an hour and thirty-fi minutes. The patient rallied well from it, and in an hour seeme quite herself again. Six hours after the operation, she expressed he self as feeling rather thirsty, but otherwise comfortable. I gave her teaspoonful of Brand's essence of meat; this she swallowed witho its causing any pain. I ordered, also, ice to suck every half-hour. Th skin was warm; the pulse 48 per minute. I gave also an enema three ounces of beef-tea.

January 5th, 9 A.M.—During the night she suffered no pain, an slept well at intervals. Temperature 98.4°; pulse 48. I ordered he to take a tablespoonful of milk and a teaspoonful of Brand's essenc

very half-hour. She suffered no pain at all; was quite cheerful and nsible, though very weak; was not sick at all after the operation, it became gradually exhausted, and died thirty hours after the operaon. There was no sign of peritonitis. I was not permitted to make *post mortem* examination.

It may be objected that this is, in cases of cancer, at best merely palliative operation. In this respect, I may say that it is equally aluable with gastrostomy and colotomy, and other operations for the lief of obstruction from the same cause; and these we have no hesitaon in performing. If it can be undertaken earlier in the disease, I elieve its results will be favourable. I also think that it ought to done in less time than I took over it; and in this case, I should ot consider it such a dangerous operation. Whether the jejunum ould be approximated to the stomach by causing it to form a hernia rough the great omentum, as in my case, or, as in Mr. Barker's case, y causing it to encircle the transverse colon (as, from his description, gather it did), and so reach the anterior surface of the stomach, I am able to say.

I think that this operation will, in future, be found a valuable addion to surgery; and I believe that Professor Billroth has proposed that should take the place of pylorectomy.

DEATHS FROM ANÆSTHETICS IN 1885.

By ERNEST H. JACOB, M.A., M.D.
Assistant-Physician to the General Infirmary, Leeds.

HE following deaths occurring during narcosis by various anæsthetic gents have been recorded during the past year, or have otherwise me to my knowledge. With the view of estimating the number of iministrations covered by this list, I am glad to say that, through ie courtesy of the registrars and anæsthetists of St. Bartholomew's, . Thomas's, and the London Hospitals, the General Infirmary at eeds, and the Royal Infirmary, Liverpool, all accidents which have curred in these institutions are recorded, so that I include no small oportion of the surgical centres of England.

Locality.	Sex and Age.	Operation for	Manner of Death and *Post Mortem* Notes.
Salford Infirmary.	Boy	Necrosis of leg	—
Glasgow Western Infirmary.	Girl	Dressing stump	Respiration ceased. *Post mortem:* Extensive thrombosis of venous system.
Northallerton Hospital.	Female, 57	Removal of tumour	After 90 minutes, sat up, became convulsed, and fell back unconscious. Breathing went on 20 minutes, but no pulse. No *post mortem* examination.
Birmingham Workhouse.	Male, 40	Innominate aneurysm	Urgent dyspnœa on lying down, and stoppage of respiration after a few inhalations. Pulse beat for 10 minutes after. *Post mortem:* Large aneurysm of innominate.
Guy's Hospital.	Male, 24	Dislocation of humerus	Syncope. *Post mortem:* Slight disease of large vessels.
Middlesex Hospital.	Female, 53	—	*Post mortem.*—Enlargement of heart and liver, and disease of other organs.
Langley Moor	Male, 28	Paraphimosis	No *post mortem* examination.
Newcastle Infirmary.	Male, 53	Cancer of tongue	Syncope at end of operation.
Glasgow Royal Infirmary.	Male, 45	Ligature of femoral	Syncope at end of operation on giving a little additional chloroform. *Post mortem:* Heart diseased; aneurysm of mitral valve.
Charing Cross Hospital.	Female, 9	Inserting drainage-tube in hip	Syncope. Patient greatly emaciated; lungs congested.
Newcastle	Young man	—	Syncope after partial recovery of consciousness. No *post mortem* examination.
London Hospital.	Male, 56	Removal of tumour of upper jaw	Became cyanosed early, pulse stopped just as operation was completed. *Post mortem:* Some fibroid degeneration of heart, and congestion of bases of lungs.

The above list shows that the deaths from chloroform occurred during unusually severe list of operations, Nos. 2, 5, 7, and 10 only being r trivial surgical manipulations. So far as can be judged from the blished accounts (which in most cases are meagre), No. 3 seems be a death rather from the exhaustion of a prolonged operation than m the direct action of the anæsthetic, while in No. 4, the patient was so dangerous a condition, that a fatal result might have been expected at any moment. No. 12 again was a serious and prolonged operation, though there was not much hæmorrhage.

The list of deaths occurring during the administration of ether includes at least one remarkable case, which I will give in greater detail.

CASE I.—This occurred in the London Hospital. The patient, a man, aged 62, was narcotised in order to reduce a dislocated shoulder. He partially recovered, but the bag (Ormsby's inhaler) was again put on his face. In three minutes he began to look pale, his breathing was feeble; dusky pallor increased, in spite of artificial respiration.

At the *post mortem* examination, the lungs were emphysematous and congested, and there was bronchitis. The heart was flaccid and fatty, with adherent pericardium.

CASE II.—This case occurred in the practice of the Leeds Dispensary. A man, aged 58, suffering from empyema, took ether in order to have the pleura incised. For about seventeen minutes he breathed well, and was of good colour. The ether was then discontinued, as the narcosis was sufficient, and no more was given. About fifteen minutes afterwards, the pulse and breathing began to fail. He seemed to die in a sort of syncope. No *post mortem* examination was allowed.

CASE III.—A girl, aged 10, much emaciated, and looking very ill, was brought to a surgeon to be sounded for a calculus. When she had taken but a few inhalations, she was observed to be very pale, the pulse ceased, the breathing continued. The usual remedies—artificial respiration, galvanism, injections of brandy, etc.—were tried in vain. The girl appeared to be suffering from tubercular disease of the kidney, but there was no *post mortem* examination.

This completes the list of casualties under ether, a very satisfactorily small record, considering the general use of ether in our large surgical centres.

The first case is one of a large number, where the narcotisation and a small operation form the "last straw" to overweight a damaged heart and lungs.

No. 2 is difficult to explain, as at least fifteen minutes had elapsed since the patient had had any ether, which he had apparently taken very well. He was weak and emaciated, but able to walk.

No. 3 is the most remarkable case of the kind I have ever known. The patient took not more than a drachm of ether, and died in a precisely similar manner to that which generally obtains in the case of chloroform. The only case I can recall in any way resembling it is one reported some years ago, where a woman, about to have her breast removed for malignant disease, took three or four inspirations of ether from a frame-inhaler, became white in the face, and died. The question may be raised, whether this was not really a death in which fright or emotion played the principal part. It is difficult to conceive that a drachm of ether can be, under any circumstances, a fatal poison.

There have been no deaths recorded from the so-called methylene bichloride, or from mixtures of chloroform and ether, during the past year.

In conclusion, I wish to say a word on the question of publishing deaths of this kind. A gentleman holding the office of anæsthetist to a large hospital, to whom I wrote for information, expressed to me, most courteously indeed, his conviction that to publish deaths from anæsthetics was a "most pernicious custom," tending to bring trouble on young practitioners, in whose practice these accidents usually occurred. I cannot see that this need be, if no names or localities be mentioned in the report, and the details of the death be only published. Considering we are still in search of a perfect anæsthetic, it is of great consequence that all details of fatal cases should be made known; and I should be glad to publish in my yearly list such cases as are sent to me, in such a way as to avoid the recognition of the case by the public who may read the medical journals.

VIBURNUM PRUNIFOLIUM IN ABORTION.

By A. D. LEITH NAPIER, M.D.,
Vice-President of the Edinburgh Obstetrical Society; and Examiner in Midwifery, at University of Aberdeen.

WITH reference to Dr. Macfie Campbell's communication regarding the treatment of abortion, in the JOURNAL for February 27th, I wish to corroborate his observations, and, at the same time, to take exception to certain inferences contained in his paper.

I have prescribed viburnum prunifolium for fully three years. I fancy I was among the first to use it hereabouts, as, when prescribed, it could not be obtained without considerable delay in Edinburgh Being dissatisfied with the results of other preventitive treatments in

ome cases, and reading Lusk's recommendation (*Science and Art of Midwifery*, second edition, page 301), in which he refers to Jenk's paper in the *Transactions of the American Gynæcological Society*, I gave the drug a trial, and have since used it repeatedly. In one case of so-called "habitual abortion" it failed to do good. This lady had one healthy child, then five abortions, or premature labours, at different periods; then a child born living at five months and a half, which died. She was then treated with chlorate of potash and iodide of mercury, with iron alternately, and was delivered at six months and fourteen days of a very feeble living child, now a fine healthy boy, 6 years old. Next time, when pregnant, she was ordered viburnum, but aborted at the third month. She was again pregnant, was treated with viburnum, and aborted at the second month. Possibly there was a specific element in this case, judging from the one successful pregnancy; but I have not been able to establish it.

Another patient aborted twice after marriage; when pregnant for the third time, she was treated with chlorate of potash, and delivered, at term, of a healthy child. She next aborted at the second month, in spite of viburnum. Abortion was again threatened about four months ago, but passed off after taking viburnum; and she is now fully six months pregnant. A third case had recurrent monthly uterine contractions from the second to the seventh month. Small clots and quantities of blood passed several times. In this case, bromides, in combination with nepenthe, were found more effectual than viburnum. A fourth case derived benefit from viburnum, but markedly so when given in combination with nepenthe and belladonna. I might adduce many more such cases in the same strain. On the whole, my impression is distinctly in favour of the drug; yet I cannot believe it to be in every case "a sure arrester of uterine action."

With all courtesy, I must demur to the method in which Dr. Campbell's cases are recorded. Brevity excuses much, but accuracy is at times sacrificed thereby. In the first place, it is surely necessary to show that abortion was actually threatened ere we write of its arrest. Do uterine contractions never occur without separation of the decidua, or death of the fœtus? Do not very many women suffer severely from pains at each monthly period, and, in many cases, carry to term without any drug? What is meant by the os dilating? Case 1, in which abortion occurred, is the only case, except 2, where the os is referred to; in Case 1, "it continued to dilate." Now, dilatation of the os, unless it be the internal os that is meant, is by no means uncommon without abortion following. Scanzoni has recorded a case, now classical, in which not only was ordinary treatment employed, but the introduction of a sound and intra-uterine injection failed to bring about "the inevitable abortion." I have mentioned cases with a somewhat similar history. (*Transactions of the Edinburgh Obstetrical Society*, vol. ix, p. 109.)

Nor do "breaking of the waters" or hæmorrhages invariable end in abortion. The "flow of the waters" may be due to very active glandular secretions from the cervix; or even to the formation of, and rupture of amnio-chorial pouches, the "false bags of membranes." We often meet with the latter occurrence, one or two months before the termination of normal pregnancies. In early pregnancies I have also noted this, and observed that the pregnancy went smoothly on. Probably the fœtal sac has need of more room, or there is hydramnion in such cases. Hæmorrhages are too often regarded as causing miscarriage; if from the interior of the uterus, they are more likely (from disease of the membranes or death of the fœtus) the consequence than the cause; if from the cervix, there is in early pregnancy no necessary disturbance of the uterine contents. Abortion may come on in these cases, as has been pointed out by Barnes (*Obstet. Med. and Surg.*, vol. ii, p. 232), in consequence of the law, "when hæmorrhage sets in from any given point, there quickly follows an attraction of blood towards the point of escape."

Given a healthy uterus and a healthy fœtus, it is extremely difficult to dislodge the latter, except at a monthly period. Some women abort on the slightest provocation, although seemingly healthy. Others, as I have known, may undergo the most extraordinary exertions, jump high gates, dance, or run without inconvenience. Thus, in estimating the value of any drug as an arrester of uterine action, many side issues need consideration. At the same time, given, more especially in primiparæ, a gaping os with some part of the ovum protruding, attended by rhythmical uterine contractions and hæmorrhage, then, if viburnum, or anything else, arrest the progress of abortion, it is well that the profession should know it. Even with hæmorrhage and a patent os, if we cannot feel the ovum and the pains be irregular, while miscarriage is likely, it is by no means certain. I have seen, as must everyone with experience, many cases "settle" under most diverse treatment—sedatives, for example, opium or chloral; astringents, as gallic acid or acetate of lead, or, perhaps better than these, hamamelis; vascular sedatives, as bromid digitalis, antimony, or viburnum.

In typical abortion, the ovum is separated from the uterus, and hæm rhage follows; it may have caused the separation; the internal os first dilated, then the cervix, and lastly the os externum. Now, c viburnum be depended on after such a process has begun? I thi we must rather regard it as a preventive drug in "habitual" ab tion, if given with a view to regulate uterine action, than as an arres of the immediate causes of abortion. In my own practice, I have perienced doubt when to prefer it to chlorate of potash; I have co bined the drugs in some cases with good effect. In cases where suspect constitutional affection, I prefer mercury and iron, giv together, so that the former drug, while exercising its special fluence, may not unduly affect the red blood-corpuscles. Iron been looked on as an abortifacient; my experience contradi this.

As an example of the benefits of other means than virburnum, may mention that, ten years ago, I succeeded in bringing a pregnan to a successful termination at full time after ten successive m carriages.

DAMP AND DIPHTHERIA.

By H. NELSON HARDY, F.R.C.S.Ed.,
Divisional Surgeon, Metropolitan Police.

A SERIES of cases of diphtheria which has occurred in connecti with one of the Dulwich police-stations, seems to show that there good grounds for the belief that there is some special connection tween damp houses and the development of diphtheria; though oth unsanitary conditions, no doubt, powerfully contribute to prepar soil favourable to the spread of the disease.

The cases I am about to relate occurred, for the most part, in t persons of strong, able-bodied young men. There was no epidemic the disease in the neighbourhood at the time; indeed, inquiries ma of the sanitary authorities of the district showed that, with the exc tion of the police affected, the district was singularly free from t disease; and the one thing in common to all the patients was, th they were more or less intimately connected with a damp and u healthy station, their duty obliging some of them to live in it, a all of them to be in it for a considerable portion of each day. T station is an old dwelling-house, consisting of two storeys, not orig ally built for a police-station, but converted into one some years ag before sanitary considerations began to occupy so much attention they do now, and the water-closets and drains had never, previously this outbreak of diphtheria, been in a satisfactory state. Two fam lies belonging to the force had occupied the rooms not used as poli offices; namely, an inspector and his wife and family, having t rooms on the ground-floor, and one on the first-floor; and a mount constable and his wife and children, occupying the remainder of t upper rooms.

On December 24th, 1884, a constable, aged 19, who had been l than six months in the force, and had had no previous illness wh in it, had a pretty severe attack of diphtheria, was convalescent January 7th, 1885, and was then granted a month's sick leave, turning to duty on February 7th, 1885. On January 29th, 1885, t mounted constable, aged 30, already referred to as living in the upp rooms of the station, who had been twelve years in the force, and wh only illness had been an attack of diarrhœa, was attacked, had a p longed and very severe illness, was not convalescent till the beg ning of March, and was then granted a month's leave.

On February 20th, 1885, a constable, aged 25, who had been t years in the force without any previous illness, took diphtheria, h it slightly, was convalescent on March 2nd, and was then granted month's leave of absence.

On April 13th, 1885, a constable, aged 32, who had been six yea in the force, and had no illness of importance during that time, b whose duties rendered it necessary for him to spend more hours the station than most of the other men did, took the disease not ve severely; on April 28th he was convalescent, and was then grant the usual month's leave of absence.

After this, there was a lull for about six months, during which more cases appeared amongst those connected with the station; and was hoped that certain measures which had been taken to remedy t sanitary defects of the building, had proved successful in checking t spread of the disease. A supply of water having been laid on to t men's urinal for the first time, and a water-closet which ventilat into the men's part having been closed. I should add th the whole station i[illegible], and only used until a new one can

ot ready. A change had also taken place in the family occupying .e lower rooms of the station, a new inspector having come, and rought with him his newly married wife, a strong, healthy-looking oung woman from Essex. On November 28th, 1885, this young oman was taken ill with diphtheria, and had a moderately severe tack which lasted till December 13th. On examining the walls the two rooms on the ground floor, occupied as kitchen and tting-room by her and her husband, I found them damp for a conderable distance from the floor, varying from one to two feet, along ie outer wall of the house. No furniture could be left standing gainst this wall without becoming damp. Even in the kitchen, here a fire was constantly burning, and gas very often alight, as it as rather a dark room, the wall was constantly damp ; and the floorcloth covering the kitchen floor, on being turned up, was found to be mp and mouldy. I advised the authorities that these rooms were nfit for habitation, and the inspector and his wife were in consequence oved into the upper rooms, which the mounted constable and his mily had to leave and find lodgings elsewhere. On December 23rd, 885, this mounted constable, who still of course, was a good deal at ie station seeing to his horse, was taken ill with the disease for the cond time, not nearly so severely as the first time, and was conalescent on January 5th, 1886.

On January 8th, his youngest child, aged 3, had taken diphtheria, and as ill till January 22nd. Thus, out of a total of about forty persons mediately connected with the station (2 inspectors, 30 men, 2 wives ving at the station, 3 or perhaps 5 children, ditto), there have been, in ttle more than twelve months, no fewer than seven cases of diphtheria, ree of which happened after the graver sanitary defects of the building had been remedied, and the dampness alone remained perceptible the senses. I am far from saying that there may not be other deects which a thorough examination into the drainage and foundations the house would reveal ; but, in the present state of our knowledge the subject, the above facts seem worth recording.

CONTINUED FEVERS IN EGYPT

By W. H. MACNAMARA,
Surgeon-Major, Medical Staff Cairo

HE discussion, at the Royal Medical and Chirurgical Society, on nteric Fever, reported in the JOURNAL of February 13th, interested me eatly. During a considerable time I have been observing cases of ver at the Citadel Hospital, Cairo, which was used as a base hosital, and received sick from Suakin, far up the Nile, Suez, and from airo. The intestinal lesions seen in fatal cases of continued fevers ay be divided into four classes.

1. There were the usual lesions observed and described as characristic of enteric fever: tumefaction, ulceration, etc., of Peyer's atches.

2. Bodies, in some cases as large as almonds, and resembling lymhatic glands, were studded under the mucous membrane of the eum, ileo-cæcal valve, and upper part of the cæcum. Most of these ere in a broken-down ulcerated condition. In some cases, they were together broken down by ulceration and sloughing. Perforations ere very frequent. Peyer's patches, as well as the colon and rectum, ere normal.

3. In a few cases, there was a combination of the above lesions.

4. The usual lesions of the large intestine described as dysenteric, at is, thickening, softening, pigmentation, ulceration, etc., extendg to, and most marked in the rectum, were found combined with lass 1 or 2. These cases have nothing to do with malaria, as they ere observed in men who were not in any malarious place—for exmple, Cairo—where we do not see ague, except in men who contracted elsewhere, as well as in cases from Suakin, Suez, etc.

The first class of cases ran a pretty uniform course, with typical nteric symptoms. The second class seemed to be of longer duration ; missions not so marked in the third stage, greater tympanitis. Abominal tenderness was more extensive and more marked ; there was ore tendency to peritonitis, hæmorrhage, and perforation. The ools were very offensive in smell, often containing a little slime or lood. Ipecacuhana did not seem to be of much use.

In Classes 3 and 4, the symptoms seemed to correspond with what ould be expected in cases with the *post mortem* appearances combined s described above. Ordinary cases of dysentery, without any symtoms resembling enteric fever, are left out of consideration ; many uch cases were treated.

At present, I am having more regular and accurate observations of he fevers under consideration made, with a view to connect, if possible, more definitely the symptoms during life with the *post mortem* appearances. Meanwhile, the following questions suggest themselves.

1. Are Classes 1 and 2 distinct diseases ? 2. Is Class 3 a combination of 1 and 2 ? 3. Is Class 4 a combination of dysentery with Class 1 or 2 ? 4. Is Class 2 a form of dysentery or enteric fever, or is it a distinct disease ?

During the early part of the occupation of Cyprus, I saw a case as described in Class 2. During life, I called it enteric fever. After death I adhered to the same name ; but I remember that I was not very well satisfied with it. As to Dr. Squire's remark about scorbutic appearances, I have observed that, in places such as Suakin, where there is very little vegetation, men get scurvy occasionally, though they are supplied with vegetables. I remember that, when I was a young surgeon in India, one of my patients in hospital, with eight ounces of lime-juice marked daily on his diet-card, developed scurvy. On inquiry, he told me he never touched the lime-juice, and that he hated vegetables. Many a man gets on very well without eating vegetables, when he is surrounded by vegetation ; but gets scurvy, under similar circumstances, in the desert or at sea.

Many cases, coming from Suez and Suakin, were modified by malarial taint ; but I saw nothing which would lead me to wish for the term, typho-malarial.

Was it possible that the condensed water at Suakin became contaminated in distribution, and so spread enteric fever ? The young soldiers at Cairo undoubtedly suffer most from enteric fever. Since our occupation of Egypt, a large proportion of our young surgeons have had the disease, eight of whom died of it ; all, except one, being quite young. Not a single surgeon-major had the disease.

CLINICAL MEMORANDA.

MELANOSIS OFTEN NOT BLACK: MELANOTIC WHITLOW.

WHEN melanosis fungates, and when it affects the glands, we must not expect the larger growths to be of a black colour. The power of producing black pigment appears to be, in most persons, very limited. The original growth, beginning it may be in the rete of the skin, or in the choroid of the eye, is coal-black, but the later and larger growths are white, or show only here and there a pigmented streak. To make the diagnosis at these stages, it is necessary to look carefully at the skin near the margin of the fungus. Here a little coloured border may often be found, looking as if lunar caustic had been applied, which tells the tale.

Melanotic Whitlow.—There is a rare form of disease of the nail-bed which is malignant, and usually takes the type of melanotic sarcoma. It is generally attributed in the first instance to injury, and its diagnosis is always missed in the early stages. Because it resembles whitlow, and is usually so named at first, I prefer to give it that name. It is, however, from the beginning, malignant. Careful observation will find at the edge of the inflamed nail a little border of coal-black colour, and this, however slightly marked, must be allowed to make the diagnosis. I have seen at least half a dozen of these cases. Early amputation is demanded.

JONATHAN HUTCHINSON, F.R.S.,
Cavendish Square. Consulting Surgeon to the London Hospital.

OBSTETRIC MEMORANDA.

INVERSION OF THE UTERUS IMMEDIATELY FOLLOWING LABOUR.

ON February 21st, I was called to attend a patient, aged 32, pregnant for the first time. About 3 A.M. I found that the os had just commenced to dilate. The head was rather far down in the pelvic cavity, pressing on the anterior wall of the uterus ; but this condition is not unusual in primiparæ. Labour proceeded very satisfactorily, and a fine male child was born about noon. The cord was coiled once round its neck. I separated the child, and gave it to the nurse, and grasped the uterus externally, that being my usual procedure. About fifteen minutes later the patient complained of a pain in her left side, and I felt the uterus suddenly slip from my hand. Thinking the placenta was discharged, I placed my hand under the clothes to take it away, when I felt a hard substance, which I first thought was the head of a second child. On removing the clothes, I was horrified to find the uterus prolapsed and inverted, with the placenta still attached. I immediately separated the placenta, and endeavoured to return the uterus, which was then about the size of two large oranges. I placed a thin towel, previously well oiled, over the inverted surface, and pressed a large composite candle against the slight cup-shaped depres-

sion, but with no success. It became greatly congested from the constriction at the vaginal orifice, and in a very short time had reached the size of a fœtal head. I obtained the assistance of Mr. G. Revell, thinking that the administration of chloroform might enable me to reduce it; but the patient became all of a sudden completely collapsed, although I had given her large quantities of brandy. About half an hour afterwards she died. The hæmorrhage was very little before or after I had removed the placenta; in fact, I was astonished that there was so little. One small vessel sent out a few jets of blood, but quickly stopped. The placenta was attached well around the upper two-thirds of the internal uterine surface, and, when removed, the surface had the appearance of a granulating wound.

On questioning the patient's mother as to her previous health, I found that, at the age of 18, she had suffered from a swelling in the left side, which was about the size of a duck's egg. This broke some time afterwards, and discharged its contents, which, so far as I could make out, were of a purulent nature, into either the rectum or the vagina; but she was not sure which. Ever since then she had complained of pain in that side, particularly if she carried anything heavy.

Not being allowed to make a *post mortem* examination, I could not satisfy myself as to the cause of the inversion; but from the history one would think that she had had an abscess in the broad ligament, which weakened the uterine support.

H. Boyle Runnalls, M.R.C.S.Eng., Saltash.

STRYCHNINE IN UTERINE HÆMORRHAGE.

Though I have not made any trial of a course of strychnine for pregnant women, to prevent the occurrence of hæmorrhage in labour, I have for the past ten years been constantly in the habit of administering it to arrest *post partum* hæmorrhage.

My favourite combination to produce regular uterine contraction in these cases is a mixture containing fifteen minims of tincture of nux vomica, fifteen minims of tincture of opium, and half a drachm of ammoniated tincture of ergot. I have almost invariably had most satisfactory results with this dose. Nux vomica, through its alkaloid strychnine, has the direct and almost immediate effect of producing muscular contraction—especially strong in paralysed parts—and also of retarding the circulation; nor is it improbable that the exaltation of the nervous system produced by its administration renders the action of the ergot more prompt and effectual. The object I had in view in adding the opium was mainly to prevent irregular or spasmodic contraction of the uterus, and also to allay the excitement frequently present in these cases. I have found the preparation of ergot here mentioned particularly reliable, and its stimulant effect is of decided advantage. In abortions and miscarriages, I have also had satisfactory results from the administration of this mixture, given frequently and in smaller doses.

In future cases of known hæmorrhagic tendency, I intend to try the effect of a course of strychnine, and expect that benefit will be derived from this anticipatory treatment.

F. H. V. Grosholz, Towyn.

SURGICAL MEMORANDA.

ASEPTIC CATHETER FOR WASHING OUT THE BLADDER.

In his communication to the Journal of February 27th, Mr. J. W. Penny states that my "apparatus does not entirely guard against the admission of air, which may enter the bladder when urine ceases to pass from the end of the instrument, before the tap allowing the antiseptic solution to flow is turned on."

Mr. Penny must excuse my pointing out to him that, although the urine has ceased to flow from the end of the instrument, the catheter itself is quite full of urine. Every surgeon knows the reason why he presses his finger against the orifice of the catheter on withdrawing the instrument from the bladder, after the urine has ceased to flow.

I admit there is danger when the hand exercising pressure over the emptying bladder is too suddenly removed, or when the patient violently coughs or sneezes. In these cases, urine with air may regurgitate into the bladder; but, in ordinary cases, the bladder slowly contracts until its fluid contents are discharged, and there it remains until it is distended by urine from the ureters, or by fluid from another source. The contracting bladder, although it empties itself, cannot get rid of the urine in the tube of the catheter, which always remains full, even though urine has ceased to flow from the end of the instrument.

In my apparatus, the tap controlling the flow of the antiseptic solution may be turned on before the urine has ceased to flow, and thus danger in those cases referred to may be avoided.

In ordinary cases, after the bladder has been emptied, when the tap is turned on, the antiseptic solution drives out some of the urine from the catheter; and, if the orifice of the catheter be closed, the bladder is quickly distended with the antiseptic solution, without the admission of a particle of air. All this may be shown to be true by using experimentally a transparent glass catheter, like my instrument, but with an India-rubber bag attached to it to represent a bladder, the rest of the apparatus being unchanged. A catheter which conveys air into the bladder is not a reliable aseptic instrument; it will sooner or later fail.

I have frequently experimented with the closed pipette catheter, but have found it unsatisfactory, for the reason that, if it be bent on itself, or moved about, or turned upside down, some of the fluid in it will escape, and air naturally takes its place. In my instrument, on the other hand, the antiseptic solution is continually dripping from the eye, and washing the point of the catheter, which must be always full of the antiseptic solution; and air cannot, under any circumstances, enter the instrument, as long as the tap of the reservoir allows the antiseptic solution to flow through it.

Before using the apparatus, the catheter should lie in the reservoir of the antiseptic solution for a short time. The catheter should then be held with the eye end uppermost, and the tap turned on, until the antiseptic solution escapes, drop by drop, through the eye. The instrument is then dipped into an antiseptic oil, and passed into the bladder. If these precautions be attended to, the catheter is as nearly aseptic as it is possible to make it. In addition, it is a most convenient apparatus for washing out the bladder; its great advantage being, that the patient himself can wash out his bladder with ease and safety.

There is one precaution which should be observed; namely, the liquid in the reservoir should not be allowed to escape to the level of the tap, for fear of air getting access this way into the bladder. Those who have frequently used my apparatus do not find it "somewhat cumbersome, and calculated to alarm a timorous patient."

James Foulis, M.D., Edinburgh.

A VERY RADICAL CURE OF HYDROCELE.

I was once assured by a Madras civilian, with whom I travelled in the East, that one of the Nizams of Hyderabad, the grandfather, I think, of the present incumbent, was done to death by the rough and ready device of an ignorant native Hakim, whom he had consulted for hydrocele. The Hakim, here referred to, had a string tightly bound round his patient's scrotum, in view of cutting off all communication between it and the cavity of the abdomen, and with such effect that gangrene and death soon supervened. Similar instances of malapraxis have not, I believe, been unknown nearer home in the days of old.

William Curran, L.R.C.P.Ed.

THERAPEUTIC MEMORANDA.

TREATMENT OF PROFUSE HÆMOPTYSIS.

I should like to say at once that my experience with regard to the use of ergotine coincides exactly with that of Dr. West, as detailed in the Journal of January 16th, and I thoroughly agree with him as to why it fails in cases of profuse hæmoptysis. I have only found this remedy of use in those cases where, in all probability, the hæmoptysis would have ceased without its administration. On the other hand, I have so frequently seen it increase the hæmorrhage, that I have for some years discontinued its use, and trusted to remedies which lower vascular tension, such as nitrite of amyl, or preferably, glonoine, which, although rather longer in producing its physiological effects, continues its action for some hours, and also has this advantage, that it occasionally produces nausea and diarrhœa, both useful desiderata in such cases. These preparations have often proved of the greatest value.

Another remedy of great efficacy, which was not mentioned by Dr. West, is the internal administration of a good dose of cayenne pepper, half a teaspoonful in warm water. This comes under the class of drugs, which, as Dr. West says, create a temporary diversion of blood to other parts, and gives time for the formation of a blood-clot, and consequent cessation of bleeding from the blood-vessel. I first saw this remedy used about fifteen years ago, when I was attending a Scotch packman, who suffered at times from profuse hæmoptysis. He said he had used it, when occasion required, for some years; and I can testify to its efficacy. Many may think this a very heroic remedy

(and it certainly requires some fortitude on the part of the patient); but I have never seen any unpleasant effects result. Of late years, I have generally given good doses of capsicine in place of it, which may be given in the form of a pill; but this does not act so rapidly as the cayenne paper in water.

Another homely remedy, which I have seen used with success, has been a salt-and-water emetic; but this is not so certain as the former, although easier to swallow.

W. E. GREEN, M.R.C.S.Eng., L.S.A., Sandown.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ST. THOMAS'S HOSPITAL.

SIX CASES OF VARICOCELE TREATED BY SCROTAL INCISION AND LIGATURE OF THE VEINS.

(Under the care of Sir WILLIAM MAC CORMAC.)

WE are indebted for the notes of these cases to Mr. BERNARD RELTON, House-Surgeon.

CASE I.—F. W., aged 17, was admitted on July 9th, 1885. Six months before admission, he experienced pain in the left testicle after walking; but his attention was not drawn to the swelling till six weeks before admission, when he applied to enlist in the army, and was told he had a varicocele, and must be operated upon. On the left side of the scrotum were felt a number of thickened and tortuous veins, over which the skin of the scrotum moved freely. They were not painful to the touch.

July 13th. The patient having been placed under the influence of ether, Sir William Mac Cormac made an incision one inch long in the scrotum, and dissected down to the group of enlarged veins, as it lay in front of the left spermatic cord. The veins, being fully exposed, were easily isolated from the vas deferens. Two catgut ligatures were applied about half an inch apart, and the included veins divided between. There was scarcely any bleeding from the scrotal wound; it was closed by suture, and dressed with iodoform gauze under antiseptic precautions. It healed rapidly, without inflammatory reaction. No rise of temperature took place. The patient had retention of urine for two days. He was discharged on July 31st, eighteen days after the operation.

CASE II.—James W., aged 20, a schoolmaster, was admitted on July 18th, 1885. He complained of a swelling in the left side of the scrotum. A mass of thickened and tortuous veins could be felt extending from the testicle to the external ring. It was not tender, nor painful. The skin of the scrotum moved freely. He had been rejected at an examination on account of the varicose veins, and for this reason sought relief.

July 23rd. The patient having been placed under the influence of ether, Sir William Mac Cormac made an incision about one and a half inch in length over the swelling; carefully dissected down to and through the tunica vaginalis. The veins, being then exposed, were drawn out of the wound, ligatured in two places with catgut, divided between the ligatures, and the ends replaced. A catgut drain was put in, and the incision stitched up with catgut ligatures. Iodoform powder was applied to the wound, which was then dressed with iodoform gauze and salicylic wool.

On July 24th, the patient had retention of urine, which still continued on July 27th. The temperature had been 100° Fahr. on the previous evening.

On August 3rd, the patient was able to pass his urine; but, on the evening of August 5th, the temperature was 103° Fahr.; and there was a recurrence of the retention of urine, but no other symptoms. The wound had been dressed in the morning, and looked perfectly healthy. On August 9th, the temperature again rose to 100° Fahr.; but after this it was never above 99° Fahr.; and, on August 24th, the patient was discharged cured, after four weeks' treatment.

CASE III.—R. H., aged 17, a nursery gardener, was admitted on August 17th, 1885. The patient had not known that there was anything the matter with him until three weeks earlier, when he was refused for the army on account of varicocele. A well-marked plexus of dilated veins, about one and a half inch long, could be felt on the left side of the scrotum in front of the spermatic cord.

August 19th. The bunch of veins was dissected down upon and ligatured above and below, there being about three-quarters of an inch between the two ligatures. The portion included between the ligatures was excised. A small drainage-tube was introduced, the wound sutured, and dressed with iodoform gauze and salicylic wool.

On August 23rd, the wound was dressed under the carbolic spray, and found to be healing up well. The drainage-tube was removed, but the wound was still dressed antiseptically.

On August 27th, the wound was completely healed, there was no discharge, and the dressings were left off. He left hospital soon after, on September 4th, quite well.

In this case the wound healed very rapidly, and there was no rise of temperature, nor retention of urine.

CASE IV.—T. S., aged 17, was admitted on October 6th, 1885. At the age of fifteen years he applied for admission to the navy, but was refused on account of having varicocele. He also applied for admission to the militia, but was again refused. Wishing to enter the service, he determined to have his varicocele cured.

On admission, the patient was found to have a number of dilated sacciform veins in the left side of the scrotum; these filled when he stood up, or when pressure was applied over the abdominal ring; when he lay down, the swelling almost disappeared.

October 16th. The patient having been placed under the influence of ether, Sir William Mac Cormac made an incision about two inches long over the upper part of the scrotum, and dissected carefully down to the veins, which were then laid bare; they were ligatured above and below, and the intervening portion, about half an inch in length, was removed. The wound was sutured, and a split drainage-tube inserted, the carbolic acid spray being used during the operation.

On October 18th, there was some œdema of the prepuce, which was relieved by relaxing the bandages, which were rather tight.

On October 22nd, the wound was dressed under the spray; it had almost completely healed up, there were no inflammatory signs about the edges. The drainage-tube was removed, and the wound dressed with dry boracic lint.

On October 26th, ten days after the operation, the wound had quite healed. There was no rise of temperature at night, and there was no retention of urine.

CASE V.—W. F., aged 16, was admitted on October 27th, 1885. He had applied for admission to the Royal Navy, but was refused on account of varicocele. There were several dilated veins on the left side of the scrotum above the testicle, scarcely perceptible when the patient was lying down, but increasing in size and tortuosity when he stood up, and also increased by pressure at the external abdominal ring.

October 31st. The patient being placed under the influence of ether, Sir William Mac Cormac made an incision about two inches long, over the enlarged veins, and dissected through the various scrotal coverings. The packet of veins was exposed, and drawn out; a double ligature was applied in the same way as in the previous cases, and about an inch of the veins resected. During the operation, the testicle accidentally slipped out, but was immediately replaced. The operation was performed under the carbolic acid spray, and the wound was dressed in the same way as the previous cases. A drainage-tube was inserted, with a figure-of-8 bandage across the perinæum, over layers of iodoform gauze and salicylic wool.

On November 3rd, the wound was redressed. The edges were adherent, except at the insertion of the drainage-tube. The wound was perfectly aseptic and healthy looking. It was again dressed on November 16th, when it had quite healed. Dry boracic lint was applied. The temperature had continued quite normal from the date of the operation till November 14th, when it went up to 99.2° Fahr., but it was normal again the next morning. There was no retention of urine in this case, nor any unfavourable symptoms. Practically, he had perfectly recovered in a fortnight. He was discharged on November 22nd.

CASE VI.—T. P., aged 17, was admitted on November 2nd, 1885. The patient stated that he had first noticed a slight swelling in the left side of the scrotum, about a month earlier, but he had never suffered pain or inconvenience from it. He was refused admission to the army, on this account.

On admission, the patient was found to have a left varicocele, similar to, but larger than those in the previous cases.

November 7th. The lad having been put under the influence of ether, Sir William Mac Cormac made an incision over the bunch of veins; and, a double ligature being first applied, he resected the intervening portion. Strict antiseptic precautions were employed, and the wound was dressed with iodoform, iodoform gauze, and salicylic wool as before. In this case, a catgut drain was used instead of the India-rubber tube.

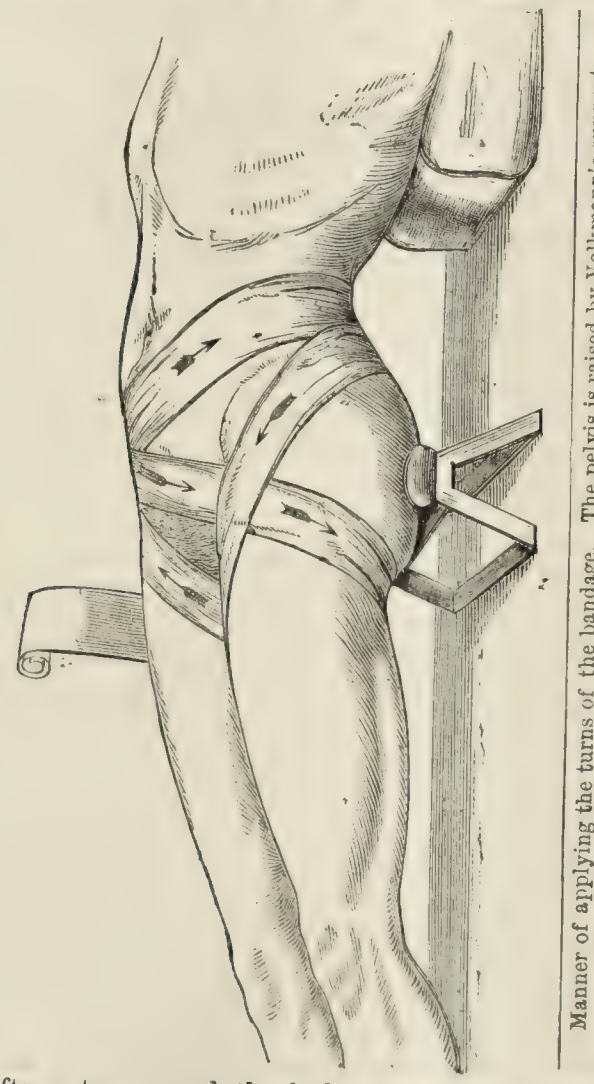
On November 9th, considerable pain, which kept him awake, was felt in the abdomen. The abdomen, however, moved freely with respiration, and there was no tenderness. He experienced shooting pains in the iliac fossa. The temperature was normal; and there had been no rise since the operation. The pulse was 88; the tongue was furred and moist. There was no retention of urine.

On November 10th, the temperature was 101.4° Fahr., but no other symptom was noted. The wound was dressed under spray on November 11th. The dressings were stained with blood; a drop or two of pus was observed along the track of the catgut drain, and slight swelling and tenderness over the upper part of the scrotum on the left side. The temperature was normal. On November 12th also, the temperature was normal.

November 19th. The wound was dressed without the spray, but it had not quite healed, the dressings being still slightly blood-stained. The wound had quite healed on November 21st, and the varicocele was cured. The patient was discharged on November 25th.

Remarks by Sir William Mac Cormac.—The method of treatment adopted in these six cases has produced an uniformly satisfactory result. A large mass of plastic material was formed in each around the divided ends of the veins, and their perfect obliteration was ensured. After the scrotal tissues had been divided, it was quite easy to separate the packet of veins from the vas deferens, and then to apply the ligatures. Where they were considerably elongated, a portion of the veins was excised. In four of these cases, there was no rise of temperature, and the wound rapidly healed without any reaction. In one, the temperature rose to 103°, and this was accompanied by retention, but the symptoms otherwise were quite favourable; while in another, the temperature on one occasion reached 101.4°, without any other symptom to occasion uneasiness.

Retention of urine occurred in two cases. The operation was performed antiseptically in all; and, by means of a pelvic support, a plan of cross bandaging over the perinæum could be readily applied, by which the antiseptic dressing was kept securely fastened at a point which is otherwise difficult to make safe against external influences. Th



Manner of applying the turns of the bandage. The pelvis is raised by Volkmann's support.

bandage, after a turn round the body, passes down obliquely across the left groin, then behind the left thigh, just below the fold of the nates, then obliquely upwards across the perinæum towards the right iliac spine, and around the body behind, and from the left iliac spine obliquely downwards across the perinæum and behind the gluteal fold on the right thigh, and so on. In thi way, the lower part of the dressing is firmly secured, while the anu is left quite free. It is easy to cover the scrotum, groins, and pubi region with subsequent turns of the bandage. The penis project through an opening in the dressing, and can be packed round, i necessary, with salicylic wool. A dressing of this kind realised a aseptic condition in all the cases; and the recovery was in most o them speedy, and in all complete.

The method of transfixing the scrotum by pins over which a figure-of-8 silk thread is wound, and dividing the veins subcutaneously between, is open to the objection that a suppurating, possibly septic tract, may surround each needle; and there is, besides, a chance o transfixing one of the veins.

I do not suggest that this open method should replace all others. I desire merely to record six cases in which it was successfully carried out with, I contend, a minimum of pain and disturbance.

I have, however, known one instance where symptoms of septicæmia declared themselves, and another where the cellular tissue of the scrotum and a small piece of scrotal skin sloughed. In both of these, final recovery took place; and in the latter, I believe the sloughing was caused by too forcible syringing, by which the carbolic lotion was driven into the scrotal cellular tissue. Such accidents as these have occurred after other methods of dealing with varicocele; but they are sufficiently serious to make one hesitate to pronounce too positively about the value of the method of open or direct ligature. In all the cases, the operation was one of *quasi* necessity, since the individuals had been refused admission to the public service which they desired to enter, until the varicocele was cured.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 9th, 1886.

George Pollock, F.R.C.S., President, in the Chair.

A Case of General Seborrhœa or "Harlequin" Fœtus. By John Bland Sutton, F.R.C.S.—The case was a typical example of what is usually known as the "harlequin" fœtus. Although the condition was a very rare one, it had received a variety of names; but as the term general seborrhœa expressed the pathology of the disease, and that of "harlequin" fœtus was an excellent clinical expression, both had been retained. Details of the microscopical characters of the skin were given, and an argument was furnished for regarding the affection as being due to abnormal formation of the vernix caseosa, which, instead of being shed into the amniotic fluid, formed concrete masses which adhered to the skin. The paper ended by an appendix containing references to all the recorded cases known to the author.—Dr. T. Colcott Fox wished to join issue with Mr. Sutton on one point, namely, how far it was justifiable to call this affection a seborrhœa. In his opinion, it was not a seborrhœa, but a disease of the skin alone. The cases which came under the class of seborrhœa did not by any means all die, but the disease which produced these "harlequin" fœtuses was invariably fatal. It was, in fact, a purely developmental novelty of the epidermis, as Kyber had pointed out in his elaborate monograph, in which the old scales of the epidermis remain on the surface, and gradually accumulate into a horny layer. Charles Robin had come to the same conclusion after a careful examination. It was possible there might be some fatty accumulation among the scales of the epidermis, but not much; in fact, the sebaceous follicles had generally atrophied, and Kyber indeed had thought his observations proved that the disease sometimes began before the development of the sebaceous glands. It was generally taught that ichthyosis did not come on till at least a few weeks after birth; but he had known a case in which the child had been born ichthyotic. The "alligator" fœtus, which had been often shown publicly, was possibly "harlequin," possibly ichthyotic. His own conclusion was that the two states were of the same nature; that the "harlequin" fœtus was a rare case of ichthyosis beginning early in fœtal life.—Dr. H. R. Crocker agreed in the main with Dr. Colcott Fox. No variety of seborrhœa was serious to the life of the patient; the skin below the sebum was generally quite healthy, but in this case it was very different. Hebra had remarked that there were no enlargements of the papillæ in the "harlequin" fœtus; in this case, however, the papillæ were greatly enlarged by long growths downwards. The epidermis was immensely thickened in its horny layers, and the hairs were lost in the sebum covering them, which he took to be epithelium and not fat, so that the old name of ichthyosis congenita he took to be appropriate to this case.—Dr. Charlewood Turner, on the strength of an ex-

amination which he had made of a similar "harlequin" fœtus some years ago, was disposed to agree with Dr. Fox and Dr. Crocker that the accumulation on the surface was of epithelial scales. The covering so formed was split by the tension of the matter within, as the bark of a tree was split by the growing trunk. That it was so formed was shown by the thinning of the matter at the cracks. The follicles he had found atrophied, and the true sebum extremely defective.—Dr. WALTER GRIFFITHS remarked that one theory of the origin of the liquor amnii was, that it was derived from the skin of the fœtus, and asked if any abnormality of it had been observed in this case.—Mr. SUTTON observed that he was quite prepared for much difference of opinion as to the nature of the skin and its covering in his specimen, for, out of the twenty cases of which he had collected notes, he had only found three observers who held exactly the same theory. His object had been merely to detail the results of his own examination, which showed a mixture of vernix caseosa and epidermis in the flakes on the surface, and especially on the scalp, where it looked as if it had certainly been plastered on to the skin, and it had been produced at a time when the sebaceous glands were particularly active, namely, between the fourth and eighth month. Of the liquor amnii he could give no information, as the child was born before the medical man reached the house.

On Cardiography, with special reference to the Relation of the Time of Duration of Ventricular Systole to that of Diastolic Interval. By PAUL M. CHAPMAN, M.D.—The author, after discussing previous works on the subject, especially that of Dr. A. H. Garrod, gave a table of measurements of the duration of ventricular systole and diastole in each cardiac revolution, for every increase of five beats in frequency per minute between 45 and 150 in the healthy state. He showed that in the human subject the duration of systole diminished by a constant quantity as the pulse-frequency increased, the constant diminution being .0085″ for every increase in frequency of five beats in the minute. He gave his table as one which might be safely used by future workers, as a basis of comparison for estimating departures in disease, while emphasising the fact that the duration of ventricular systole might vary, in health, from the measurements given in his table by a limit of ·02″; an increase being most common with the lower pulse-rates, a decrease at the higher. Aberrations extending beyond this limit must be considered abnormal. The influence of increase or of diminution of blood-pressure on the duration of ventricular systole was discussed. The importance of the rapid diminution in duration of systole providing the heart with a requisite amount of rest was pointed out, and it was remarked that a high pulse-frequency was not in all cases necessarily attended with rapid cardiac failure, though in some it must certainly quickly ensue. Marked departures from the relative duration of systole and diastole which should obtain in health were then noticed. The results of experiments with digitalis and convallaria majalis were given, and illustrative tracings shown. The instrument employed in making the observations was the air-containing cardiograph of Dr. Burdon Sanderson.—Dr. BROADBENT admitted that he would not follow Dr. Chapman into all the uses he claimed for the cardiograph. He had made some acquaintance, however, with the instrument before Dr. Garrod's experiments, and thought it of value in some cases. The relation of the systole to the diastole as measured by the cardiograph was very interesting, and of some prognostic importance. The gradual diminution of the difference in length between systole and diastole which Dr. Chapman had shown in his tables, agreed with his own observations; and with that he thought blood-pressure had much to do. In some forms of pyrexia, there was much less diminution of arterial pressure than in others; for example, in scarlet fever, the arteries were not relaxed, and the cardiac sounds did not run in the musical triple time, but as an even tic-tac, or even with a diastole shorter than the systole. The same was the case in acute albuminuria with a quickened pulse. There were some cases in which the first and second sounds of the heart were too near together, or precipitate, as he might say; and this symptom indicated heart-failure, as in diphtheria. There was nothing in the pulse so certain as this shortening of the systole. It was sometimes present in cases of dilatation of the heart, and was associated with an imperfect emptying of the ventricles, caused, as a rule, by the resistance in the arterial system being too strong to be overcome by the ventricular contraction, in which case it was very possible that the second sound might come before the ventricle had ceased to contract. For the cardiograph, he thought there were some uses, but it would need to be kept in check by the stethoscope.—Dr. HANSOM expressed great interest in the subject, and considered Dr. Chapman's tables of considerable importance. He had been in the habit of using the cardiograph at the London Hospital for many years; at first, that of Dr. Galabin, more lately Pond's; for he had found Marey's not portable enough. In illustration of its practical use, he quoted two cases. In the first, there was both mitral and aortic regurgitation, and the important question with a view to prognosis was, whether there was also mitral stenosis. There was a thrill to be felt at the apex, but the tracing of the cardiograph negatived the stenosis, and he accepted that as good evidence. Again, in the second case, there was mitral and aortic regurgitation, and a question of mitral stenosis arose, and, by means of the cardiograph, he had satisfied himself that it was there. The pertubation of the normal ratio of systole to diastole tended to one extreme in the case of mitral stenosis, and to the other in the case of combined aortic and mitral regurgitation; in the first case the diastolic interval was longer than normal, in the second case much shorter. The irregularity which attended aortic regurgitation might sometimes be increased by digitalis; the regurgitation might be thereby lengthened, so that a man might bleed to death from his brain into his left ventricle.—Dr. ANGEL MONEY had paid some attention to the instrument, and had taken 500 cardiograms, but had not thought them worth publication, as being of very little value. Between cardiograms taken from the same patient on the same day and under the same circumstances, he had found too much variation to lead him to consider them useful in diagnosis. For the first year of his experiments, he had thought that a diagnostic cardiogram accompanied mitral stenosis. But he had found himself mistaken, and was inclined to think that no physician would find the instrument of any assistance in diagnosis. It would furnish, however, a record of some points in the action of the myocardium, though, even there, he considered it as unable to give information as accurate or as complete as auscultation.—Dr. CHAPMAN remarked that much careful experiment was needed before the full use of the instrument could be understood. The too rapid generalisations drawn up Dr. Keate, of Cincinnati, had detracted from the reputation of the instrument. He had not himself dwelt upon its help in diagnosis, but in prognosis, and towards that he considered its record of the state of muscles and nerves more valuable than anything that could be reached by the ear.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, FDBRUARY 10TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Cyst of Vulva.—Dr. EDIS exhibited a cyst of the size of a bantam's egg, which he had removed from the vulvar aperture of a patient a few days previously. The patient had known of its existence for over two years. It caused considerable aching pain on standing and walking, and much inconvenience in coitus. The cyst had been punctured and cauterised, but without any beneficial result. For the last year or so, it had filled, and then burst, about every two or three months. —The PRESIDENT agreed with Dr. Edis in his advice that such cysts should be removed entirely. Merely laying them open led to most disappointing results by the formation of inveterate sinuses, which were sources of great discomfort to the patients.—Dr. BANTOCK expressed a similar opinion. Tapping did no good, for the cyst always refilled; when, however, the contents became purulent, aspiration in the acute stage of the inflammation usually effected a cure.—Dr. ROUTH and Dr. GRIGG made remarks.

Substance Expelled from Uterus post Partum.—Surgeon-Major HENSMAN desired the opinion of the Society on the following specimen. Mrs. A. B. was confined of her first child on October 27th, 1885. She was attended by a medical man of considerable experience, who stated that the labour was natural, easy, and without hæmorrhage. There had also been no hæmorrhage during the period of gestation. The placenta came away entire. She continued to do well until November 8th, when hæmorrhage occurred, and recurred on November 12th and 17th. On November 18th, the physician was called in in consultation, and, on examination, found a substance which was exhibited before the Society, lying at the os uteri, and cleared it out without any difficulty. He afterwards made a complete search in the uterus from os to fundus, and satisfied himself that there was nothing left in it. The hæmorrhage ceased, and did not recur, but the mischief had been done. There were vomiting, thready pulse, and collapse, and the woman died of exhaustion on December 6th.—Dr. EDIS thought, from the appearance of the specimen, together with the assurance that the placenta itself was entire at the time of its removal, that in all probability it was a case of placenta succenturiata, or development of a separate cotyledon. In any case where hæmorrhage occurred after labour, it was always well to make a careful examination in order to determine whether any portion of placenta or clots had been left behind.—Dr. GRIGG spoke to the same effect.—The PRESIDENT thought that the case narrated by Surgeon-Major Hensman was extremely instructive, and was just the kind of information necessary for all who were engaged in general practice.

It was impossible to make every practitioner a specialist, but in all specialisms there were certain points which should be taught and great emphasis laid on them in courses of general instruction. It ought to be a rule emphatically laid down that, if hæmorrhage continued after labour for any undue time, or if it were after somedays resumed, immediate examination of the uterus should be made.—Dr. FANCOURT BARNES regarded the specimen as being a portion of retained placenta. He had lately seen a case in the British Lying-in Hospital, where violent flooding suddenly appeared in a patient fourteen days after labour. He passed his finger into the uterus, and removed a hard piece of adherent placenta of the size of a walnut.—Dr. ROUTH thought that some misapprehension existed as to the danger of retained placenta *in utero*. If it were adherent, septicæmia did not result, the nutrition of the retained placenta went on, and no poisoning took place. He had in his mind one of many cases where it was retained until the twenty-eighth day. Hæmorrhage occurred, but no septicæmia. The same was the case with polypi or fibroids retained *in utero* in the unimpregnated state. Many foreign bodies could be retained within the uterus, not to speak of intra-uterine pessaries, without septicæmia. The secretions in the uterus appeared to be antiseptic; in the vagina, it was otherwise.—Dr. CHALMERS remarked that, while some placentæ were so compact and even on the surface, that the absence of a very small portion could be detected, yet others were frequently met with so lobulated and irregular, that he could not always satisfy himself that no part had been left behind in the uterus. It was contrary to his experience that loose tissue in the cavity of the uterus might not undergo putrefaction.—Dr. BANTOCK'S experience was the same as Dr. Routh's. He pointed out that the secretion of the uterus was alkaline, while that of the vagina was distinctly acid. This fact furnished an explanation of the phenomenon, that it was only when the substance was exposed to the chemical reaction of the two secretions, that decomposition took place.

Puerperal Eclampsia.—Dr. GRIGG exhibited the uterus and kidneys of a patient who had died from puerperal eclampsia. The pregnancy was about the eighth month. The membranes were ruptured, and about sixty ounces of liquor amnii expelled. The fits still continuing, the patient was bled to twenty ounces, and half a drachm of chloral, and the same amount of bromide of potassium, were given. The pulse increased in frequency, but no change took place either as regards the fits or the temperature, 105°. At the end of an hour, the bleeding was repeated to sixteen ounces, and a second half drachm of the chloral and bromide given. The fits ceased at once: the patient had only one transient convulsion on the afternoon of the next day. She never recovered consciousness, and died forty hours after the commencement of the fits. The os being very rigid, Barnes's dilators were used, and the child delivered by forceps. Dr. Grigg said that there had been nine cases during the last twelve months at Queen Charlotte's Hospital, and that the mortality had been very high. He had tried every form of treatment, but at times without success. For a time one kind of treatment seemed to succeed, and at another time a totally different kind of treatment gave results equally good; but there was a certain series of cases which seemed to defy all treatment, and yet the objective symptoms appeared to be identically the same.—Dr. ROUTH recommended turning the patient over on her belly. In a case in which he had adopted that course for the purpose of reducing a prolapsed umbilical cord, the convulsions had at once ceased, the pressure being thus removed from the kidneys.

Suppurating Ovary.—The PRESIDENT showed a specimen, which he had removed that day, of abscess of the ovary communicating with the bladder and rectum, which had arisen apparently in an attack of perimetritis after labour. The patient was in the last stage of exhaustion when the operation was performed.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 3RD, 1886.

J. B. POTTER, M.D., F.R.C.P., President, in the Chair.

Specimens.—The following specimens were shown: 1, Tubercular Disease of the Fallopian Tubes: Dr. W. S. A. GRIFFITH. 2, Pellets of Corrosive Sublimate: Dr. CHAMPNEYS for Dr. FLY SMITH. 3, Cancerous Uterus Exterpated by the Vagina: Dr. LEWERS. 4, A Calculating Ruler by Fixing the Precise Date of Labour: Dr. PLAYFAIR. 5, A Double Monster of the Syncephalic Iniops Variety: Dr. GODSON.

Sections of Parturient Uteri.—Dr. BARBOUR, of Edinburgh, showed a most interesting series of frozen sections, drawings, and diagrams, illustrating the anatomy of the first stage of labour, of the third stage of labour from four cases of Porro's operation, and of the condition at the close of labour from two cases of death *post partum*. He drew attention to the value of frozen sections, but said that allowance must be made for *post mortem* changes, and for those due to the posture in which the cadaver was frozen. The points of chief interest in the first group were the remarkable thickness of the lower segment of the uterus, the course of the ureters, and the disposition of the peritoneum and cellular tissue. The Porro preparations showed the contraction of the uterine wall and diminished area. The membranes were crumpled and partially detached, but the placenta was not separated. The placental site might, therefore, be diminished without the placenta being separated. He concluded that it was separated by detrusion. The absence of space into which it could bulge, the absence of hæmorrhage between the placenta and uterine wall, were against the mode of separation described by Bandelocque, Schultze and Ahlfeld. These sections bore out the description of the method of expulsion lucidly described years ago by Dr. Matthews Duncan. The chief point of interest demonstrated by the third group was the large amount of cellular tissue between the cervix and bladder.—Dr. MATTHEWS DUNCAN was astonished at the amount of good and original work which Dr. Barbour had laid before the Society. He referred to the length of time which had elapsed since William Hunter published his work on the gravid uterus, which was supposed to finish the subject. Frozen sections, or homalographic anatomy, had since done much to increase our knowledge, and now Dr. Barbour had passed from the anatomy of pregnancy to the anatomy of labour—a new field. Frozen sections could not be entirely depended upon to display the conditions during life, but they were of great value. Branne's plate of the anatomy of the second stage was of great value, but was notably misleading in some points, such as the position of the bowels, uterus, and peritoneum. Similar errors had been referred to by Dr. Barbour in his own sections.—Dr. W. A. DUNCAN was reluctant to adopt Barbour's theory of the detrusion of the placenta. He had a strong liking for the shrinking site theory, because it combined separation and arrest of hæmorrhage. Everything connected with flooding was of great importance, and, therefore, he hoped to see Dr. Barbour's views thoroughly sifted. One great fact he had given; that, with the site reduced to four inches in diameter, the placenta might remain attached.—Dr. CHAMPNEYS, while greatly admiring Dr. Barbour's work and beautiful specimens, dissented from some of the conclusions drawn from the Porro specimens. Illustrations drawn from them as to the physiology of the third stage of labour could only be accepted, when consonant with its clinical course. The flattened form of the uterus with the entirely adherent placenta seen in these preparations was contrary to the condition observed in nature; and where women had been examined by the introduction of the whole hand immediately after the birth of the child, the placenta had been found entirely detached. Again, he could not agree with Dr. Barbour that these preparations proved that, at the beginning of the third stage of labour, there was no uterine cavity; its shape proved that it did not alone contain the placenta lying flat against the uterine walls, as in these preparations. Lemser advocated the "detrusion" theory from experiments on pregnant rabbits, but it must be accepted with caution, as the similarity between them and the human female was only slight. Dr. Barbour did not appear to rest on Lemser's observations, but arrived at his conclusions by a process of elimination of the other theories. The mode in which the placenta presented at the os uteri was an indispensable test as to the correctness of views as to its mode of separation.—The PRESIDENT tendered the thanks of the Society to Dr. Barbour for his demonstration, and they were very cordially given; and Dr. BARBOUR replied.

A Case of Circumscribed Sarcoma of the Vagina and Uterus.—Dr. LEWIS read a paper on this case. The patient was a married woman, aged 50, and had eight children: she was admitted into the London Hospital on June 27th, 1885. She had had three attacks of flooding, unattended by pain, but each followed by fainting and vomiting, was losing flesh, and had a dirty coloured vaginal discharge. A lump now protruded from the vulva. She had had an attack of flooding nine years ago, then was regular for six years, and had another attack. The mass, on examination, was seen to be trilobed, and it was attached to the posterior vaginal wall by a broad pedicle. There was a second mass on the right side as large as a walnut. The uterus felt heavy, but was mobile. The growths were removed on July 2nd, and the patient died of septicæmia on the 7th. At the *post mortem* examination, three circumscribed growths were found in the uterus, and there were numerous small secondary growths in both lungs, but none elsewhere. Microscopic examination showed the growths to be mixed round-celled and spindle-celled sarcomata.—Dr. LEWERS thought that the uterine growths were probably the primary ones. There were no lung-symptoms during life.—Dr. GERVIS gave details of a case of vaginal sarcoma, upon which he had operated three times at lessening intervals, and which now again required operation. It was a small

round-celled sarcoma.—Dr. W. DUNCAN was doubtful whether cases of sarcoma of the uterus and vagina should be operated on at all, as a radical cure was improbable.—Dr. M. HANDFIELD-JONES mentioned the case of a girl aged 16, upon whom he had operated a year ago, who still remained in good health. He thought that, if the growths were removed early enough, there was a reasonable prospect that they would not recur.—Mr. KNOWSLEY THORNTON pointed out that it was often necessary to operate for the comfort of the patient, and could not think that the chance of recurrence was a ground for leaving the patient in misery; each operation would give her, at any rate, a period of health and hope. The recurrence at lessening intervals was familiar to surgeons, in all sarcomata, and hence the old name given by Sir James Paget to these growths, "recurrent fibroid."—Dr. ROUTH advocated the removal of these growths and the destruction of their site with strong caustics, such as nitric acid and bromine. He mentioned a case in which, after a third operation, there was no recurrence.—The PRESIDENT and Dr. HORROCKS also made remarks, and Dr. LEWERS replied.

At the close of the meeting, the PRESIDENT announced that, in future, the *Transactions* would be published in monthly or bi-monthly parts, but those Fellows who preferred it could still have the volume sent to them, as heretofore, at the end of the session.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 8TH, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

On a Case of Aneurysm of the Aorta, with Disseminated Sarcomatous Deposits.—Dr. W. H. WHITE read the notes of the case of a woman, aged 42, who died from the rupture of an aneurysm of the aorta. There was no history of syphilis nor rheumatism, and the only symptom complained of for a long time was severe epigastric pain, but later on, wasting and night-sweats were present. There had been no cough nor laryngeal symptoms of any kind, either affecting the voice, or seen by the laryngoscope. As the case advanced, the left jugular vein became very much distended, but there was no lividity of the face. The sac ultimately burst into the trachea, with immediately fatal result. At the necropsy, the omentum and the peritoneum generally were found studded over with little white nodules, which, examined microscopically, proved to be small round-celled sarcomata. The ovaries were also permeated with the growth, and in the uterus was found a fibroid undergoing a similar change.—Dr. F. DE HAVILLAND HALL also read a paper on a case of multiple aneurysm of the arch of the aorta, in a labourer, aged 36. In this case, the voice-affection was an early symptom, and it was the condition of his left vocal cord which gave rise to a suspicion of aneurysm. The patient also suffered from pains in his shoulder eighteen months ago, with dyspeptic symptoms. There was a history of a sore on the penis twenty years ago, but nothing as to secondary or tertiary symptoms. There was nothing abnormal in the breath-sounds. The apex of the heart was in the middle line, and the area of dulness was increased. Although no pulse was perceptible in the left axillary artery, the hand continued warm and well nourished. A trace of albumen was found in the urine. He was admitted into hospital, and put on low diet, with perfect rest and a mixture of iodide and bromide of potassium. He experienced some difficulty in drinking. At this time, the patient so little appreciated his position that he insisted on leaving the hospital and returning to work; and it was only a year later that he was readmitted, and ultimately died. At the *post mortem* examination, four well marked dilatations were found in the arch of the aorta, from the size of a pigeon's egg to that of a cricket-ball. The left pneumogastric was obliterated for two or three inches of its length; the recurrent nerve was also lost in the walls of the sac; and the subclavian artery was reduced to a fibrous cord.—Dr. THEODORE WILLIAMS recollected a similar case of multiple aneurysm, and asked whether stridulous voice and breathing were not tolerably constant symptoms.—Dr. ORD said that the existence of a murmur over the pulmonary orifice was often of service in diagnosing these cases. He agreed with Dr. Hall's suggestion, that the solidification of one aneurysm in the aorta would be apt and likely to cause a rise of blood-pressure, and so lead to the formation of others. He mentioned that, in his own experience, the vocal cord or cords were nottener in adduction than in the cadaveric position.—Dr. S. WEST asked what connexion, if any, Dr. White would suggest to have existed between the new growth and the aneurysm.—Dr. FINLAY said he could bear witness to the good effects of iodide of potassium in these cases.—Dr. WHITE said that he did not wish to suggest that there was any necessary relation between the new growth and the aneurysm.—Dr. HALL, in reply, explained that it had been shown by Dr. Semon that slight pressure on the recurrent nerve produced paralysis of the laryngeal abductors only; while greater pressure, causing paralysis of all the muscles, left the cords in the so-called cadaveric position.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 4TH, 1886.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Chronic Rheumatic Arthritis of the Hip-Joint.—Mr. W. ADAMS read a paper on this subject. The author described at length the structural changes occurring in the later stages of the affection, and suggested that all the old museum specimens showed that the cases might be arranged in three classes. 1. In one class, the bones were increased in density and weight. The femur showed no depression of the head, nor any absorption or alteration in the angle of the neck. Ring-like masses of bone were thrown out, and the articular cartilages were eroded, but the surface of exposed bone was not absorbed. Eburnation took place in the direction in which motion had been preserved. The outgrowths of bone were produced by ossification in the articular cartilage, as proved by the author in a paper read in 1851 (*Pathological Society's Transactions*, vol. iii), by ossification of the synovial fringes, and by outgrowths from the periosteum. 2. In another class, atrophic changes predominated, producing in the hip-joint a smaller head and depressed neck of the femur, the nodular outgrowths being less marked. 3. In a third class, the atrophic and hypertrophic conditions were combined. After expressing his belief in the causative influence of rheumatism and gout, the author proceeded to discuss the relation of these joint affections to locomotor ataxy and other nerve-diseases, and to contrast rheumatic arthritis with Charcot's disease.

Rheumatic Arthritis.	*Charcot's Disease.*
1. Changes chiefly hypertrophic.	1. Changes chiefly atrophic.
2. Commences in the soft tissues.	2. Commences in the bones.
3. Painful throughout its course.	3. Generally painless.
4. Pain confined to the joint.	4. Pains shoot through the limbs.
5. No febrile disturbance. No gastric or ocular symptoms.	5. All these are present.
6. Reflex symptoms present.	6. Reflex symptoms absent.
7. Limited mobility.	7. Flail-like mobility.
8. Progress slow and chronic.	8. Progress rapid and acute.
9. Patients often reach old age.	9. Patients seldom reach old age.

The influence of injury in the production of the disease was discussed; and the paper was concluded with remarks upon treatment, the value of local sweating by means of hot vapour being insisted on, coupled with shampooing and passive movement. The hot sulphur-springs of Luchon, in the Pyrenees, were especially commended.—Dr. BUZZARD observed that the results of ordinary treatment in chronic rheumatic arthritis were eminently unsatisfactory; the disease generally went from bad to worse. In some cases of joint-disease associated with locomotor ataxy, however, a remarkable regression of symptoms might take place, the patient recovering full use of a hitherto useless limb. In Charcot's disease, again, there was often a remarkable degree of hydrarthrosis of the joints, frequently extending far beyond the joints themselves; extreme weakness of ligaments, and a tendency to atrophy in the bones, were also to be noted. He thought it probable that, by the study of Charcot's disease, means would be found to explain the phenomena of rheumatic arthritis. If the disease were due to a central nerve-lesion, the tissues of the spinal cord might safely be eliminated. The results of sclerosis of almost every part of the cord were well known. Very many of the symptoms combined to indicate the medulla oblongata as the original seat of the mischief; the gastric and laryngeal crises, the heart-symptoms, and the sweating, all pointed to the probability that the centres for the vaso-motor system and for the osseous and articular system must be situated close to one another. In rheumatic fever, the acute affection of many joints, the high temperature, cardiac disturbance, and sweating, all served to illustrate this in a marked degree. He looked upon rheumatic fever as an acute affection of the medulla oblongata, and suggested that chronic rheumatic arthritis might possibly be due to a chronic form of the same lesion. He regarded Charcot's disease as a chronic affection of a certain part of the medulla, spreading to the vaso-motor centre, and causing changes in the nerves supplying the bones and joints.—Other members also spoke on the subject.

SUPERANNUATION.—Mr. John Henry Hutchins, late District Medical Officer, Medway Union, has obtained a superannuation allowance of £73 per annum.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 5TH, 1886.

W. B. HEMMING, M.R.C.S., President, in the Chair.

Cases and Specimens.—Mr. KEETLEY: a case of Extroversion of the Bladder, after an operation for its relief.—Mr. HURRY FENWICK: a series of Photographs of Extroversion of the Bladder.—Dr. CAMPBELL POPE: two large Urinary Calculi, passed *per urethram*.

Exploration of the Abdomen.—Mr. BRUCE CLARKE, in this paper, mainly considered the question of exploration of the abdomen as an operation undertaken for the relief of chronic or acute intestinal strangulation or obstruction. After alluding to the success which attended the opening of the abdomen in the hands of the ovariotomists, the author quoted cases to show that it was not the opening of the abdomen which was the source of danger; for a case of acute peritonitis which did not recover was benefited, and the pain was relieved, even though the patient succumbed at last to the effects of peritonitis. Such a condition was almost impossible to distinguish from true strangulation. It was the prolonged handling of the bowel which constituted the chief danger. Such handling was sometimes necessary, yet it added greatly to the severity of the operation, and had given rise to death on the operating-table. Even if the patient recovered from the immediate effects of the operation, and the strangulation were relieved, death frequently arose from the fact that the bowels were not permeable, and would not permit their contents to be evacuated naturally. Such a condition was well shown in simple peritonitis, where obstruction, the result of paralysis of the intestinal walls, existed without strangulation. The principal indication, then, for operative treatment, which should be undertaken as soon as medical remedies had had a fair trial, was the relief of the paralysis of the bowels; and the bowels should be handled to as small an extent as possible. So long as the bowels were distended, a careful examination must necessarily take up much time. It was, therefore, advisable to incise freely the first bit of bowel that would come out, so as to let out flatus and fluid as rapidly as possible, taking good care that no intestinal contents entered the peritoneal cavity. By this means, the abdomen was at once rendered easy to examine, and the paralysis caused by the distension was relieved. After this, the cæcum should first be examined to ascertain whether it were distended, so as to prove whether the obstruction were in the large or small intestine. If it were in the large intestine, it could be easily and rapidly found; if in the small intestine, it would probably lie not very far below the piece of intestine that had been opened, for the intestine just below the seat of obstruction was generally the most distended. If this proved to be the case, the wound in the bowel could be made an artificial anus; if not, it must be closed, and an artificial anus made close above the obstruction. If the obstruction were a tumour, it must be treated radically later on, if need be, when the immediate and serious danger from acute obstruction had passed away.—Mr. DORAN asked Mr. Clarke if he were in favour of aspiration. It was useful to tap the bowel with a morphine syringe in cases of great distension, after reduction, in hernia. This distension was due to paralysis of the gut, which, however, in some cases, was only partial and transitory, so that aspiration was seldom required after the removal of large abdominal tumours.—Mr. EDWARDS referred to the method of examining these cases by manual exploration of the rectum, and described a case under his own observation where this proceeding had been adopted for the diagnosis of obstruction, practically no reliance could be placed in it.—Mr. LLOYD asked Mr. Clarke if he were in favour of aspirating the intestine, in cases of great distention, preparatory to turning the patient over when lumbar colotomy was about to be performed. He related a case of this kind in which death occurred upon the operating table, owing, he believed, to the distension embarrassing the breathing and circulation.—Mr. LUNN considered that chronic abdominal cases were very difficult to diagnose. A woman came under his care who had suffered from chronic vomiting for thirteen years. A movable tumour was felt upon the left side. The patient died with symptoms of cancer. After death, a stricture of the transverse and descending colon was found, which was just large enough to admit a No. 8 catheter. He agreed with Mr. Clarke, that a prolonged operation was a source of great risk to the patient.—Dr. BALL said it was not possible to accept unreservedly Mr. Clarke's statement that, in acute cases of intesti al obstruction, the seat of the pain was a guide to the seat of origin of the trouble. It had been pointed out that obstruction in any part of the large intestine was apt to cause pain in the region of the cæcum, owing, no doubt, to distention of the part.—Dr. HERRINGHAM observed that pain in the right iliac fossa did not necessarily indicate disease there.—Mr. BENTON related a case of idiopathic peritonitis.—Mr. WHITMORE said that, in the recent correspondence in the pages of a medical journal upon the subject of chronic constipation, he had observed that no mention had been made of the connection between constipation and imperfect mastication. Fæcal accumulations were often primarily caused by patients bolting their food.—Dr. ALDERSON had treated several cases of obstruction of the bowel most successfully with injections of opium and oil.—The PRESIDENT mentioned a case which came under his notice fifty years ago. A friend of his hurriedly swallowed the pulp of an orange, and attended a dance on the same evening. Owing to the occurrence of acute pain, he was compelled to return early to his home. For five days, during which the patient suffered acute abdominal pain, nothing passed by the bowels. Mr. Hemming then determined to use crude mercury, the case having apparently become hopeless. Three doses of a quarter of a pound of mercury were given. After the third dose, the patient expressed the conviction that his bowels were about to act. They did act, and the whole pulp of the orange was subsequently found in the motion, almost unchanged.—Mr. HURRY FENWICK mentioned a case of perforation of the tip of the vermiform appendix, where the cause of the perforation was due to ulceration at the orifice of the diverticulum, setting up thrombosis of the main vein draining the entire appendix. From an examination of fifty bodies, he believed this to be the general cause of perforation in this part. He also described a case of cylindroma of the hepatic flexure of the colon, for which he had performed abdominal section. The pain was localised in the right iliac fossa, arising, doubtless, from the extreme distension of the cæcum.—Mr. CLARKE, in reply, said he had only dealt, in his paper, with cases requiring operative treatment, and he had not, therefore, considered fully the question of injections. Pain was a very misleading guide, and could not determine the precise situation of the disease. He quite endorsed a remark which had been made by Dr. Venn, about the untrustworthy nature of the temperature as a guide to the patient's condition. He thought that chloroform was a better anæsthetic than ether in cases of abdominal distention. He had never seen a single instance in which any advantage had followed the use of manual exploration of the rectum. Mr. Lunn's case was interesting, and Mr. Clarke agreed with him as to the difficulty of diagnosing cases of chronic obstruction.

A Case of Paralytic Deformity of the Foot.—Dr. HERRINGHAM and Mr. EDWARDS read notes of a girl, aged 17, who came with a hollow claw-foot, corns under the balls of the toes, in the outermost of which suppuration had occurred, producing a wound resembling a perforating ulcer, and anæsthesia of the outer half of the foot. The deformity was ascribed to paralysis of the interosei, in which no contraction could be obtained by faradic currents. The question was raised whether the ulcer could be fairly called perforating; the excessive pressure caused by the claw-foot was enough to account for suppuration in a corn; but the anæsthesia, though common in perforating ulcer, was not the usual result either of interosseous paralysis or of suppurating corns. The fact that it existed in the course of two nerves, the external saphenous and external plantar, not connected below the thigh, was against a peripheral nerve-disease. It was hoped that the ulcer might be due simply to pressure, and the anæsthesia to a local affection of the nerve-endings, due to the ulcer.—Mr. KEETLEY was inclined to regard the claw-foot, which sometimes developed in adolescents, rather as a primary contraction than as having its origin in paralysis. Such cases always had large corns or callosities beneath the heads of the metatarsal bones; though he had never seen them present any likeness to the perforating ulcer associated with tabes.—The discussion was continued by Mr. CLARKE, Dr. BELL, Mr. BAKER, Dr. KILNER, Mr. BENHAM, and the PRESIDENT. Dr. HERRINGHAM and Mr. EDWARDS replied.

Specimens.—Mr. DUNN showed the following pathological specimens. Chronic Suppuration of the Lung after Pneumonia; Tumour of the Broad Ligament and Ovary which caused complete Intestinal Obstruction; Perforation of the Appendix Vermiformis.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 17TH, 1886.

JAMES HARDIE, F.R.C.S.Eng., President, in the Chair.

Method of Treating Fractured Clavicle.—Mr. C. E. RICHMOND demonstrated an easy method of treating this injury. The position adopted was similar to the French one; the palm of the hand of the injured side being laid flat on the chest. The best position for adapting the ends of the fragments was first ascertained by abducting the elbow from or approximating it to the sternum. A piece of broad strapping was passed round both arm and body, to fix it in the required position. A piece of calico, twelve inches broad (more in a big adult) and in length sufficient to go twice round the body, was

torn longitudinally, so as to make a four-tailed bandage, leaving about the middle eighteen inches untorn. This centre part was then grooved round the elbow, and the two lengths of the band (A), that lay next the body, were taken one up in front of the chest, over the flat hand, and the other up behind. These were then knotted together behind the sound shoulder, the other ends being meanwhile held out of the way. The other two lengths (B) were taken round the arm and body in front and behind, and also knotted behind and below the sound shoulder. The (A) ends were then brought down, one in front and one behind, and knotted betwixt the fixed elbow and the body, and then cut off short. The (B) ends were then again brought round the body over everything, and finally knotted in the hollow above the fixed elbow. Wadding was then inserted under the knots to prevent them from galling, and the hand against the chest was secured to the length of bandage, passing over it by means of a strip of calico passed round both. The advantages claimed were these: 1. There was no necessity for special apparatus; 2. The arm was fixed in the most favourable position; 3. The fixing was permanent. The method had been used in numerous cases with the best results.

Traumatic Artificial Anus.—Mr. RICHMOND also showed a case of traumatic artificial anus in a boy, who had been wounded in the back by a red-hot iron wire.

Ovariotomy.—Dr. WALTER mentioned two cases of ovariotomy, in which convalescence was protracted by cystitis resulting from the use of the catheter.

Mal-union after Pott's Fracture.—Mr. JONES showed a lad, aged 16, who had sustained a Pott's fracture eleven years ago, which was followed by union with the bones still displaced. Owing to this, the foot was very deformed, and walking deficient. Correction of the deformity was effected by removing the very thick internal maleollus, and chiselling away the upper surface of the astragalus. Recovery took place with a movable joint, and the patient was now able to walk without difficulty.

The Medicinal Uses of Saccharine.—Dr. DRESCHFELD showed some preparations, and spoke of the therapeutic uses of this new sweet compound (benzoic sulphinide, or anhydro-ortho-sulphamin benzoic acid) obtained from coal-tar. This body was prepared by Dr. Fahlberg, of New York, and its physiological properties had been recently studied by Stutzer and Mosso. Saccharine was a white powder, of acid reaction, soluble in 500 parts of distilled water, and a little more soluble in alcohol and ether. It was intensely sweet, and a dilution of 1 in 10,000 had still a very sweet taste, very much like that of sugar, together with a peculiar bye taste like bitter almonds (solution of sugar lost its sweetness in a dilution of 1 in 250). Saccharine, when given internally or subcutaneously, was exuded completely by the urine in an unaltered state; it was, therefore, not decomposed in the body. Neither the saliva nor the fæces contained any traces, even after large doses. It had scarcely any retarding effect on the digestion of either proteids or hydrocarbons; in fact, given in small quantities, it increased the diastatic action of malt in the presence of sugar. It had no injurious effect if given even in large quantities (2 to 5 grammes) in man, and produced no appreciable alteration in the appetite. The urine showed no alteration during its administration either in specific gravity or quantity. The urea and sulphuric acid in the urine did not show any changes. The urine had, however, an intensely sweet taste, and did not undergo fermentation readily. Saccharine was slightly antiseptic. Beyond being a substitute for sugar, it possessed no therapeutic properties, except that, in two cases of acid dyspepsia, it relieved some of the troublesome symptoms. Its use was indicated in diabetes and obesity. In diabetic patients, it had no effect either on the quantity of urine or on the amount of sugar passed.

Oöphorectomy.—Dr. SINCLAIR mentioned a case in which one ovary was removed for the relief of a constant pain, which was exhausting the patient. The pain was in the left iliac region and left side of the pelvis, and had existed for fifteen years, that was, since puberty. No objective signs of ovarian or other disease could be made out. No treatment except the use of narcotics had given even temporary relief. It was resolved to make an exploratory incision. The left ovary was the only part found abnormal; its outer half looked like a ripe cherry. The ovary and tube were both removed. The patient made a perfect recovery, and had been quite free from pain since the operation; she had also menstruated normally.

DR. ALFRED MEADOWS has been appointed Consulting Physician-Accoucheur to the St. George's and St. James's Dispensary.

ST. JOHN'S HOSPITAL FOR SKIN-DISEASES.—The clinical demonstrations at this hospital are unavoidably postponed until after the second week in March.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, FEUBRARY 17TH, 1886.

ALEXADER OGSTON, M.D., President, in the Chair.

A Case of Epileptic Vertigo or Automatism.—A paper on this case, by Dr. AYMER of Bewie, was read by the Secretary. The patient, who was a robust, healthy-looking young man, aged 20, first came under observation in May, 1881. So far as could be ascertained, all his organs were normal. His illnesses had been those incidental to childhood, and the only point in his family-history bearing on his affection was, that an uncle had been several times in a lunatic asylum. In May, 1881, one night, after going to bed, he had what seemed to be an epileptic fit. The face was flushed, the breathing laboured; there were slight convulsive movements of the forearms and hands, and the pupils were dilated, but there was no foaming at the mouth, nor twitching of the muscles of the face. In two or three minutes the fits ceased, and the patient rose and walked towards the door. He was prevented from opening it; and, then, turning down the gas, he went back to bed. In a few minutes he regained consciousness, but had no recollection of what he had done. On being questioned, it was found that he had been subject to the affection for six months, during which he had had many attacks. They usually came on in the evening when dozing by the fireside, or soon after going to bed. He had often gone outside, posted letters, and done many extraordinary things while in this condition. At first, his companions had struggled with him to prevent his going out; but, as he felt bad effects from this, they desisted, and merely followed him. Bromide of potassium in fifteen-grain doses, afterwards reduced to ten grains, was given thrice daily for several months, during which period he had attacks on an average twice weekly. He went out at night frequently, always followed by a friend. So great was his dread of the attacks, that he often worked long after hours to avoid going to sleep in the early part of the night, when the attacks usually came on. In February. 1882, a specialist was consulted, who concurred in the diagnosis of epilepsy, and suggested the use of thirty grains of bromide of potassium, with half a drachm of aromatic spirits of ammonia thrice daily, and $\frac{1}{32}$ of a grain of phosphorus twice daily with meals; also, if there were a warning, the use of strong smelling-salts, and a ligature tightly applied to the wrist, or galvanism. He sometimes had a warning; and, if there were time, a wet handkerchief tied tightly round his wrist cut short the attack. His eyes were usually open; occasionally he spoke a little, but would not carry on a conversation, and sometimes he would catch up and carry on an air whistled in the street. The treatment proved eminently satisfactory. After the first week, the attacks diminished in frequency and duration; by the end of April, there was a very marked improvement; and in the middle of June, he was so much better—not having had an attack for six weeks—that he left home for a situation in a large town. In August, the medicines were stopped, as there had been no attack for three months. In April, 1883, he became a commercial traveller, and in less than a month he was again affected, the attacks being more of the true epileptic type, with loss of flesh, but without the automatic condition, and recurring six or eight times in the twenty-four hours. The same treatment was again resorted to, and the attacks gradually became less frequent, and again took on the automatic form. In July, two grains of oxide of zinc were substituted for the phosphorus, and this accelerated recovery, so that in August the medicine was stopped. Since that time (two and a half years ago), there had been only three very slight attacks, and his mental faculties and business capacity were quite unimpaired.

Progressive Muscular Atrophy.—Dr. RUXTON showed a male patient, aged 21, who had been suffering for three years from progressive muscular atrophy. The affection was most marked on the balls of the thumbs and great toes, in the muscles of the back of the forearms and legs, and in the masseters. For several months past, the affection had remained stationary. On both sides, the knee-jerk was increased, while the ankle-clonus was absent; and the intellectual powers were much diminished.

Sarcoma of Lung.—Dr. MACKENZIE BOOTH read notes of a case of sarcoma of the lung, and showed the excised organ, photographs of the chest, and microscopic sections. The patient was a lad, aged 19, who had never enjoyed good health, having repeatedly suffered from enlargement and suppuration of the glands of the neck and thigh. There was a marked history of bronchial affection. His mother, and two out of four brothers, died from bronchitis, at the ages of 45, 18, and 5 years respectively. The patient came to the dispensary in May, 1885, presenting symptoms of bronchitis, and shooting pains in the left side of the chest. The chief clinical features were severe dyspnœa;

dulness all over the right side of the chest; progressive enlargement of that side, and, to a less degree, of the left; complete absence of the vesicular murmur on that side: and failure to find fluid after repeated aspirations. There was displacement of the liver and heart. Most of the superficial lymphatic glands became enlarged; and painful nodular projections appeared at the junctions of the third, forth, fifth, and sixth cartilages with the sternum, and of the fourth and fifth with the ribs; and towards the end the patient's sufferings were augmented by total loss of sleep. He died on November 14th. On *post mortem* examination, the cartilages of the right side were found to be infiltrated with a dense white viscid fluid. The right lung did not collapse when the chest was opened, and was bound down all round by dense pleuritic adhesions. The alveolar structure was almost entirely destroyed; and the whole organ was as dense and hard as a piece of liver. Microscopic examination showed the organ to be infiltrated with a lympho-sarcoma.

Fœtus with Amniotic Membranes.—Dr. SCROGGIE showed a fœtus of five months, with the amniotic membranes entire, which had been expelled just at the crisis of an attack of croupous pneumonia, and which still retained the cast of the uterine cavity. The temperature at the time was 106° Fahr., and the patient afterwards made a good recovery.

Congenital Dislocation of the Hip: Operation.—Professor OGSTON showed a patient, who had been operated on for congenital dislocation of the hip-joint. The deformity was much improved, and the power of locomotion very good. The patient had gained an inch in height, and was in capital health.

Sarcoma of Humerus.—Dr. OGSTON showed a very large sarcomatous tumour of the humerus, and the patient from whom it was taken.

Cancer of Stomach: Operation.—Professor OGSTON remarked on a case of cancer of the stomach in which he had lately operated, as showing the benefit in such cases of opening the stomach, and so enabling the patient to be fed. The operation had been performed twelve days previously on a man aged 46, whose health had been failing for two years. Latterly, there had been inability to retain food, and the patient was being starved. An exploratory laparotomy was performed, and a diffuse nodular growth was found to infiltrate the whole organ. As the growth could not be removed so as to allow gastro-duodenostomy, a fistula was made into the intestine, and the patient fed by a tube. Since then, the patient's condition had been markedly improved, and his sufferings much diminished.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 19TH, 1886.

T. R. JESSOP, F.R.C.S., President, in the Chair.

Cardiac Disease.—Dr. GRIFFITH read a paper on a recent fatal cases of cardiac disease occurring in the infirmary, laying stress on the conditions causing left-sided hypertrophy in mitral disease.

Thrombus in Heart.—Dr. CHURTON showed microscopic sections from the upper part of the left ventricle of a heart, which contained an apex-thrombus. There was an extension of the clot from the apex to within an inch of the aortic valves, which was firmly adherent to the endocardium; and sections displaying the nature of the adhesion seemed to show that the first step in the formation of these thrombi was a localised endocarditis.

Lesion of Knee.—Mr. JESSOP showed a specimen of internal derangement of the knee-joint, where there was a fracture of the external semilunar cartilage.

Acute Intestinal Strangulation after Miscarriage.—Mr. JESSOP showed the intestine from a case of acute strangulation, following a miscarriage, when the bowel was obstructed by a band, having a very peculiar and complicated arrangement. There was evidence of old inflammatory changes round the right ovary. A broad band connected the right broad ligament to the cæcum. From this band, a second passed to a part of small intestine, about three feet from the cæcum. The lower three feet of the ileum had passed under this band. The symptoms came on immediately after labour.

Ulceration of Larynx in Scarlet Fever.—Dr. SPOTTISWOODE CAMERON showed the pharynx, larynx, and trachea of a case of scarlet fever, which showed deep ulceration, with exposure of the right arytenoid cartilage. Tracheotomy had been performed, which was followed by a considerable amount of emphysema.

Embolus of Basilar Artery.—Dr. C. CHADWICK showed a specimen of embolus of the basilar artery.

Visceral Displacement in a Fœtus.—Dr. JAMES ALLAN showed a fœtus in which the heart was displaced to the right. The intestines were all in the thoracic cavity, except the descending colon.

Rheumatoid Arthritis.—Dr. JAMES ALLAN exhibited a dissection of a hand affected with rheumatoid arthritis, showing the position of the extensor tendons, which had slipped from the knuckles to the interdigital spaces.

Necrosis of Skull after Injury.—Dr. JAMES ALLAN showed a skull showing an injury followed by prolonged necrosis. Owing to the thinning of the scalp, the sensation was that of depression of the inner table, which was intact.

Tumour of Lung.—Dr. ALLAN showed a tumour of vascular origin situated on the apex of the lung.

Sclerosis of Spinal Cord.—Dr. JACOB showed a series of microscopic sections illustrative of sclerosis of the spinal cord. Some of these were shown on the screen with a Lewis Wright's lantern-microscope belonging to the physiological department of the Yorkshire College, by Professor Birch, with good effect, the definition being that of a magnification of about fifty diameters. Dr. Jacob also showed some potato and plate-cultivations of micro-organisms, and a microscopic section of a case of rhinoscleroma (prepared by Dr. J. F. Payne), stained so as to show bacilli in the substance.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, FEBRUARY 18TH, 1886.

T. F. HOPGOOD, M.R.C.S., in the Chair.

Specimens.—Stomach and Œsophagus from a case of Chronic Gastritis: Dr. DRINKWATER.—Fœtus six weeks old: Dr. DRINKWATER.—Sarcoma of Femur: Mr. MAITLAND.

Amputation of Arm and Scapula for Sarcoma: Preliminary Ligature of the Axillary Artery.—Mr. MAITLAND showed this case for Mr. E. A. Maling. The patient had first noticed a swelling over the scapula seven months before admission to the infirmary, which was accompanied with a little pain on being handled. On admission, a tumour, about the size of a large orange, soft and fluctuating, occupied the infraspinal part of the scapula. It was aspirated, and several ounces of dark grumous blood removed. After aspiration, the tumour increased rapidly in size, extending itself chiefly towards the axilla and back of the humerus. The pain became very severe, and the patient could with difficulty move his arm. He also began to lose weight rapidly. Mr. Maling, having come to the conclusion that it was a soft sarcoma, decided to remove both the scapula and arm. The incision was commenced over the outer half of the clavicle, and carried over the side of the chest to a level with the lower angle of the scapula. The axillary artery was tied at its highest part, and the pectoral muscles divided. The outer third of the clavicle was then severed from the rest of the bone. Another incision was begun at the posterior and upper part of the scapula, and extended forwards and downwards to the axilla, and ended on a level with the anterior incision. The scapula was then gradually raised from its bed, its muscles were divided, and it was removed with the arm and the detached part of the clavicle. There was very little bleeding after the axillary artery was tied, the posterior and suprascapular vessels being the most troublesome. With the exception of a slight attack of bronchitis, the man did remarkably well. Three weeks after the operation, he was able to walk about, although antiseptics were still used. On examination of the tumour, it was found to consist of a large cavity, filled with dark blood, and extending from the spine of the scapula downwards to its lower angle, and forwards along the triceps to the humerus. The cavity was lined with bands the colour of the muscles, giving it much the appearance of the ventricles of the heart. Sections taken from different parts of the growth showed it to be a mixed-cell sarcoma, giant-cells and spindle-cells being found at one part; at another, the myxomatous type prevailed.

Enlarged Spleen in a Child Fifteen Months Old.—Dr. DRINKWATER showed this case.

Cancer of the Tongue.—Mr. WHITEHOUSE read a paper on this subject. After referring to the local origin of epithelioma, and showing from statistics how commonly it followed on "leucoplakia," caused chiefly by smoking, he proceeded to consider the operations which were in use for the removal of the tongue. He showed that most of the operations were really incomplete, on account of the non-interference with the glands; and, remembering the fact that recurrence chiefly took place in the glands, and was so common after operation, he urged that they should always be removed, whether enlarged or not. Kocher's method of removal seemed to be the most complete, and had shown better immediate and remote results than any other. The preliminary tracheotomy, with retention of the tube for breathing purposes until the wound in the mouth was healthy, removed the greatest danger, or, at any rate, greatly lessened it; namely, septic pneumonia. He had had three cases under observation; in all, the

tongue had been removed with the écraseur ; one died of septic pneumonia, and in the other two recurrence took place in the submaxillary glands within three months.

Abscess of Liver.—Mr. P. BLUMER showed a boy who had recovered from this disease after free antiseptic incision.

ACADEMY OF MEDICINE IN IRELAND.

SUBSECTION OF ANATOMY AND PHYSIOLOGY.

THURSDAY, FEBRUARY 11TH, 1886.

FRANCIS T. HEUSTON, M.D., in the Chair.

Introductory Remarks.—The CHAIRMAN said that, since it was not the habit to deliver an introductory address in this subsection, he would follow the example of his predecessor in the chair, particularly as the only subject which he thought of bringing forward was what Irish anatomists had done in Ireland, and that subject had been already dealt with by Sir Charles Cameron, President of the College of Surgeons, at the opening meeting of the surgical section.

The Pisi-uncinatus Muscle.—Dr. BROOKS exhibited the pisi-uncinatus muscle as one of exceptional rarity, which he had discovered in dissecting a hand.—Dr. FRAZER, following a remark about the tendinous band in the cat, and knowing what he did about the peculiar action of the larger felidæ, particularly the tiger, in striking not from the shoulder, but from the paw alone, suggested that there would possibly be found in those animals, more frequently than in man, at least a corresponding band of muscle to that exhibited. So, too, with the moles. He asked what other instances were recorded of the muscle in question.—Dr. BROOKS said he had found only three examples.

Abnormal Muscles in the Upper Arm.—The CHAIRMAN made a communication on a muscular anomaly of the right upper extremity (a drawing of which, by Mr. A. J. Cary, he exhibited), which consisted of two sets of muscular fibres, the lower of which passed from the latissimus dorsi across the first stage of the brachial artery, while the upper, taking origin from the cartilages of the sixth and seventh ribs, crossed the axilla and third stage of the axillary artery, to be attached with the former set of fibres into a broad triangular tendon, the external border of which passed over the biceps and pectoralis major to be attached into the deltoid, while, from its inferior angle, a tendon passed to the internal condyle of the humerus. Dr. Heuston considered the lower set of fibres to be an example of the *Achselbogen*, while he considered the upper fibres to be an example of the chondro-epitrochlearis, the tendon attached to the internal condyle being the proper tendon of those fibres.—Dr. FRAZER and Dr. BROOKS discussed the communication, and the Chairman replied.

Nerve-supply of the Short Muscles of the Thumb.—Dr. BROOKS made a communication on varieties in the nerve-supply of the short muscles of the thumb.—The CHAIRMAN had little doubt that Dr. Brooks had satisfactorily proved that the received idea as put forward in the text-books was wrong. Where it was found, in ten out of sixteen cases, that the nerve-supply of the outer head of the flexor brevis pollicis muscle was from the ulnar nerve, he could hardly regard so many cases as a run of anomalies, and he hoped, therefore, that Dr. Brooks would continue his investigations.—After some remarks by Dr. HENRY KENNEDY, Dr. FRAZER said the knowledge of animals, and of the nervous and arterial supplies, was in a transition state. What they had been in the habit of calling anomalies were now referable to the real causes in muscular anatomy, as being the representatives of things in other animals, and under other conditions, pointing to the existence of a law. The elucidation of that law was an important end, and the first step towards it was the record of a fact, while the next was the true interpretation of that fact.—Dr. BROOKS said the remarks made by Dr. Frazer recalled to his mind that, in dissecting the hand of a monkey (Macacus nemestrinus) he had found the outer head of the flexor brevis pollicis supplied partly by the median nerve, and partly by the deep branch of the ulnar nerve. Again, in dissecting both hands of a chimpanzee (in which animal the flexor brevis had no inner head), he found the outer head supplied by the median only.

LORD DERWENT has been re-elected President, and Sir Charles Legard, Bart., and Sir George Cayley, Bart., Vice-Presidents, of the Royal Northern Sea-Bathing Infirmary, Scarborough.

MEDICAL MAGISTRATE.—The Lord Chancellor has, on the recommendation of the Earl of Ducie, Lord-Lieutenant, appointed Dr. Paine, F.R.C.P.Lond., of Stroud, to the commission of the peace for the county of Gloucester.

REVIEWS AND NOTICES.

ARMY MEDICAL DEPARTMENT REPORT FOR THE YEAR 1883. Vol. XXV. Presented to both Houses of Parliament. London : 1885.

CONCLUDING NOTICE.

IN the two previous notices of the last published volume of Army Medical Reports, we laid before our readers the health-history, as officially given, of the British troops quartered during the year 1883 in the United Kingdom and the three Presidencies of India. In this concluding notice, we can only touch briefly on the sanitary condition of the troops quartered in a few of the eleven remaining foreign stations. The number of troops employed on duty in these stations is small by comparison with the number in the United Kingdom and India ; for since, out of the total of 161,383 troops at home and abroad in 1883, there were 137,863 stationed in India and the United Kingdom, there only remain 30,516 to be distributed among all the eleven remaining stations. No imperial troops are now stationed in Australasia. In the Dominion of Canada, in 1883, the average strength of the British troops was only 1,785 ; in the West Indies, 831; in Bermuda, 1,434 ; in Ceylon, 969 ; and in other stations, with the exception of the garrisons of Malta and Gibraltar, there is seen to be a marked diminution in the strength of the imperial troops quartered in them, on comparing their numbers with the strength of the forces in former years. When it is remembered that the British empire is calculated to comprise about nine millions of square miles of territory in various parts of the globe, and more than three hundred millions of inhabitants, the strength of the regular forces of the British Army wears a very diminutive aspect ; and with all the advantages derived from training and discipline, the troops would hardly be equal to the multifarious duties entrusted to them, were they not supplemented in many commands by local establishments and native levies.

Of the two principal Mediterranean garrisons, Gibraltar and Malta, the average strength of the troops was slightly in excess of the former, namely, 4,737, as compared with 4,611 in the latter station. In the remaining Mediterranean station of Cyprus, the average strength of the troops for the year was 506. The general health of the regiments quartered in Gibraltar was very favourable, the deaths during the year being only 27 in number, or in a ratio of 5.70 per 1,000. The number of admissions into hospital was large, namely, 4,240, or 895 per 1,000. Out of this number, 777 admissions were for primary syphilis, and 88 for secondary syphilis, while 585 other admissions were for gonorrhœa or its sequelæ. Venereal disease formed, therefore, one of the principal causes of admission into hospital. Twelve cases of enteric fever were admitted for treatment, and among these were 5 deaths. Injuries caused 387 admissions and 5 deaths. Among the deaths, one was due to a man jumping from a wall, and rupturing his stomach, by falling on his abdomen ; while, in another instance, fracture of the fourth cervical vertebra, with injury to the spinal cord, was found to have occurred, in consequence of a man taking a header into the sea, and striking his head against a rock.

In Malta, where the average annual number of the troops was 4,611, although the number of cases treated in hospital was less in proportion than they were at Gibraltar, the mortality was higher. The total number of admissions into hospital was 3,526, or 764.7 per 1,000 of the strength ; the number of deaths 40, or 8.68 per 1,000. Enteric fever caused 120 admissions during the year, and led to 17 deaths. This was much above the average of several previous years. On one occasion, when 21 cases were admitted to hospital in the course of a month, they nearly all came from one barracks, where it was discovered that two pipes had been broken, and the water had become contaminated. The medical officer in charge remarks that, on the pipes being mended, the disease ceased almost at once. The water was also suspected at Cottonera, where there were 64 admissions and 5 deaths in hospital ; but no satisfactory evidence of its impurity is recorded ; while at another station, where there were 5 admissions and 1 death, the disease was believed to have been contracted in the low parts of Malta to which the men had resorted. Primary and secondary syphilis caused 327 admissions, and gonorrhœa, or its sequelæ, 309 admissions into hospital. It is stated that the increase in prevalence of the primary form of the disease began in May, on the arrival of troops from Egypt, and continued during the whole of the summer months up to October, when it slackened, while some thought it was kept up by clandestine prostitution. Under the head of poisons, 32 admissions are recorded, alcohol causing 26, and delirium tremens 4 among them, but without fatal result ; while local injuries caused 435 admissions and 6 deaths. Among the deaths was

one due to an accident at football; a young soldier "ruptured the tendon of the transversalis muscle; peritonitis followed, and death ensued." In addition to the regular forces just referred to, the local corps of the Royal Malta Fencible Artillery, consisting of 20 officers, 344 non-commissioned officers and men, formed part of the garrison; and among these troops there were 234 admissions into hospital, or 680 per 1,000 of strength, with 3 deaths, or a proportion of 8.72 per 1,000. No case of primary syphilis from among these men was admitted into hospital, though there were 2 cases of secondary syphilis admitted.

In Cyprus, the state of health of the troops was remarkably good. The total number of admissions into hospital was 259 out of an average annual strength of 512 troops quartered there, being in the ratio of 505.8 per 1,000, while only 2 deaths occurred, a ratio of 3.91 per 1,000. It is remarked in the report that, with the exception of year 1882, there has been a marked and rapid improvement in health since the first occupation of the island in 1878, when the rates of sickness and mortality were exceedingly high. The increased sickness in 1882 was owing to the arrival of troops from Egypt, debilitated by the hardships of the recent campaign in that country, and with enteric fever prevalent among them. One case of phthisis pulmonalis is shown in the hospital return; this is said to be the first admission for the disease since the occupation of the island. It is stated that phthisis pulmonalis is almost unknown among the natives of Cyprus.

In North America, or, as it is now officially called, the Dominion of Canada, the only station in which imperial troops are quartered is Halifax. The average annual strength during the year 1883 was 92 officers, and 1,785 non-commissioned officers and men. There were 1,339 admissions into hospital during the year, and these were attended by 8 deaths; the admissions being in the rate of 750, and the deaths 4.48 per 1,000 of the strength. Two of the deaths resulted from pneumonia, 3 from phthisis, 1 from pyæmia, 1 from peritonitis, and 1 from delirium tremens. The sudden and daily variations of temperature to which the coast of Nova Scotia is liable, and the prevailing dampness of the atmosphere, cause rheumatic and neuralgic affections to be very common, and lead to many admissions for diseases of the respiratory system. Scarlet fever was prevalent among the children of the married soldiers, and there were two cases among the men. No case of small-pox occurred either among the troops or in the families.

The troops serving in the West Indies during the year under notice consisted of 831 white troops, and 1,087 black troops. The former comprised two batteries of Royal Artillery, an infantry battalion, departmental corps, and the white sergeants of the West India regiments; the latter, the coloured non-commissioned officers and men of the 1st and 2nd West India regiments, and the corps of military labourers. Of the white troops, there were 988 admissions to hospital, and among these 12 deaths occurred. The average number constantly sick was 55.82. These figures give the following annual rates per 1,000 of strength: of hospital-admissions, 1,189; of deaths, 14.44; and of constantly sick, 67.17. The rates of sickness and mortality were considerably above the corresponding rates of the preceding year, and the Principal Medical Officer states that the increase in the sick-rate was in great measure due to the prevalence of febrile affections among the newly arrived Royal Scots Regiment at Barbadoes and Trinidad. There were 250 admissions into hospital for continued fever, and most of the cases occurred among the men of the Royal Scots. None of these cases were attended with fatal results; but 16 men were left so debilitated that they had to be invalided to England. Two deaths occurred from enteric fever, and two from yellow fever; the former occurred at Barbadoes, the latter at Jamaica. There was one death among the officers from dysentery. Among the children, 26 cases of measles were admitted. No case of small-pox occurred either among the white troops and their families, or among the black troops. The admissions into hospital and the deaths among the black troops were not very much under those among the white troops. The hospital-admissions were 1,118, or 1028.5 per 1,000 of the strength; the deaths 10, or 9.20 per 1,000; the number constantly sick 66.28, or 61 per 1,000. Venereal diseases caused a large number of the admissions for hospital treatment, there having been 136 cases of primary and 30 of secondary syphilis, and 167 admissions for gonorrhœa and its sequelæ, among the black troops.

In Bermuda, two batteries of artillery, five companies of Royal Engineers, one regiment of infantry, the garrison staff and departmental corps, made up together an average annual strength of 1,434 troops. From these, there were 873 admissions into hospital, or 609 per 1,000; 7 deaths, or 4.87 per 1,000; while the average number constantly sick was 52.89, or 36.88 per 1,000 of the strength. Enteric fever caused 10 of the admissions, and 3 deaths. Among eruptive fevers were two cases of scarlet fever; no case of small-pox occurred. As in other commands, the proportion of admissions into hospital for venereal affections was a large one. Primary syphilis caused 116, and secondary syphilis 35, of the admissions. One of the 7 deaths during the year was the result of a suicidal gunshot-wound of the head, a sergeant of the Royal Irish Rifles having shot himself while under arrest.

The average annual strength of the troops stationed at the Cape of Good Hope and St. Helena, which are united into one command, was 2,850. Of this number, 1,752 were quartered in Natal, 923 in the Western District, Cape Colony, and 175 in St. Helena. The number of hospital admissions in the whole command was 1,856, or 651 per 1,000; the deaths 13, or 4.56 per 1,000; and the average number constantly sick 137.65, or 48.30 per 1,000 of the strength. These ratios show a considerable decrease in the rates of sickness and mortality in 1883, not only by comparison with those of the preceding year, but also with the average rates of the ten preceding years. The diminished mortality seems to have been especially due to the decrease in the number of cases of enteric fever. In 1882, in a strength of 3,944 troops, there were 240 cases of enteric fever, and 47 deaths; while, in the year under review, the number of cases was 31, and the number of deaths among them only 3. The cases which occurred in 1883 were generally of a milder type than those which were admitted into hospital in the year 1882. The Principal Medical Officer attributes the improvement in this respect to the fact that the troops were under much better sanitary influences in 1883 than they were in the preceding year. With the exception of the Zululand force, they were all fairly housed, and the barrack-accommodation, rations, and water-supply were good and well looked after. It was believed that, in many instances, if not in all of the cases that occurred in 1883, the origin of the disease was traceable to causes outside the regimental lines and beyond the control of the regimental authorities. As at other stations, there was a large number of admissions for venereal affections, the increase in the proportion of these diseases among the cases treated in hospital being very marked, as compared with the proportion in 1882. Primary syphilis caused 241 admissions, secondary syphilis 45 admissions, and gonorrhœa, with its sequelæ, 222 admissions. The admission-rate for all forms of venereal disease reached 172.2 per 1,000, being an increase of 63.4 on the corresponding rate in the year 1882. The Principal Medical Officer remarks that a Contagious Diseases Act was passed by the Colonial Government, but it had no practical effect, as no arrangements were made for separating diseased females, no inspection carried out, nor any establishment authorised for working the Act.

The strength of the officers in the command was 148, and there were 55 attacks of illness among them, and 3 deaths. The 3 deaths were due in one case to encephalitis, in another to bronchitis, and in the third to snake-bite. A second case of snake-bite occurred at Pinetown, said to have been inflicted by a "night adder;" but, a medical officer happening to be present, prompt measures were at once adopted to prevent absorption, and recovery ensued.

A case occurred, which indicates the advantage of men of all ranks in military service receiving practical instruction on the means to be adopted for resuscitating persons apparently drowned. An officer on horseback, trying to cross a stream in flood, was carried away, and at a distance of about a quarter of a mile from the spot was rescued from the water, in a state of insensibility, by a private soldier. The soldier was acquainted with the means to be employed in the resuscitation of the apparently drowned, at once put them into practice, and succeeded in restoring animation.

A source of annoyance to the troops in one part of the command, not often noticed in medical reports, is incidentally referred to by the Principal Medical Officer; namely, the annoyance caused by the excessive number of fleas. In describing the sanitary state of Natal, the Principal Medical Officer mentions that, with some very few exceptions, the troops in that part of the colony are housed in corrugated iron huts with earthern floors; and he observes that, at certain seasons of the year, the floors are infested with fleas in such numbers as to cause great torment to the men. He says that many plans have been tried to get rid of them, but without success.

The number of troops stationed at Hong Kong and the Straits Settlements was 1,713. The admissions into hospital numbered 2,339, or 1,365 per 1,000, and the deaths 12, or 7 per 1,000. The chief causes of sickness were climatic fevers. No case of enteric fever was recorded, but of other continued fevers 514 cases occurred, and of paroxysmal fevers 559, with 5 deaths. The larger proportion of these cases of fever took place in the Straits Settlements part of the command.

One condition of life to which British soldiers are exposed is almost

peculiar to the British service. In no other country do the troops of the land forces have to pass so much time at sea as do the men of the British army. Owing to the wide distribution of the British colonies and possessions, and the great distances by which they are separated from one another, a considerable number of the men of the army are constantly serving on board ship, either in going to foreign stations, or returning to England from them, or in moving from one foreign station to another. During the year 1883, 16,879 soldiers left Great Britain to proceed abroad; 8,330 made intercolonial voyages in changing one colonial station abroad for another; and 19,453 embarked at foreign dependencies for passage home to England. This number does not include 3,008 men who embarked as invalids to England. Thus, no less a number than 47,670 men of the British army made sea-voyages in 1883. The sanitary condition of the troopships and transports was generally reported by the medical officers to be satisfactory, and the statement is borne out by the fact that, with the exception of H.M.S. *Tyne*, in which a succession of cases of measles and scarlet fever occurred, there was no prevalence of infectious disorders in any of them. The only noticeable point among the cases under hospital treatment is, that there was an increase in the proportionate numbers of admissions for primary and secondary syphilis, as compared with the corresponding rates in 1882; and that this fact was more marked among the body of men proceeding abroad from England, than it was among the body of men returning from abroad homeward. Among the 16,879 men constituting the former body, there were 323 admissions into hospital for primary syphilis, and 35 for secondary, being respectively in the ratios of 232.6, and of 25.2 per 1,000 of the strength; among the 19,453 men of the latter body, there were 183 admissions for primary, and 17 for secondary syphilis, being in the ratios respectively of 158.2 and 14.7 per 1,000 of the strength. H.M.S. *Tyne* seems to have been particularly unfortunate, for 8 cases of measles occurred on board this ship, in taking troops from West Africa to Jamaica, in April, 1 case between Belize and Honduras, and 8 more cases on her voyage from Barbadoes to West Africa, in May and June; while 9 cases of scarlet fever occurred in the same ship in September and October, between St. Helena, Cape Town, and Mauritius. One severe instance of small-pox appeared on the *Calabria*, on its way from Alexandria to England, in March; but, under the measures adopted, the disease was limited to this single case. Three deaths occurred among the men from accidentally falling overboard, and one death among the officers was, no doubt, due to the same cause; in the case of the officer, no particulars of the occurrence were known. It was found on the voyage of the *Tyne* from Jamaica to Barbadoes, in March, that an officer had unaccountably disappeared, and the conclusion come to was that he had fallen asleep while sitting on the gunwale, and had dropped overboard. There was no reason to suspect suicide.

The Departmental Report under notice is not followed by an appendix of special papers and cases, which used to form an attractive part of these annual volumes.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

GLASS-LINED IRON PIPES.

Samples of the above invention, which, although not novel in idea, has now been presented to the public in a reliable form, were lately submitted to us, and the manufacturers allege: (1) that their pipes are the best and indeed the only means of supplying good water, in the same condition of purity as exists at its source; (2) that they are practically infrangible, either by violence or by the alternation of heat and cold, etc.; (3) that they are adaptable to numerous important ends in chemistry and the arts, whilst the cost, though somewhat more than that of ordinary leaden pipes, is not in excess of those with a tin lining often recommended.

We have formed a high opinion of these pipes; and our readers can judge for themselves, either at the Parkes Museum, or the works of the Company, 3, Dyer's Buildings, Holborn.

SAVORY AND MOORE'S MEAT-PEPTONE.

Messrs. Savory and Moore's meat-peptone is an admirable preparation for invalids. The contents of the small jar, containing about one ounce, will, when mixed with hot water and flavouring agents, make in a few minutes a pint and a half of delicious soup. When the teeth are decayed, or the digestion is impaired, it may be spread on bread and butter, or eaten in the form of a sandwich. In cases of great exhaustion, it is valuable as a restorative agent. We can cordially recommend it.

SAVORY AND MOORE'S PEPTONISING PELLETS.

The introduction of new preparations for making peptonised foods proceeds actively. It is a legitimate subject for investigation, and we are glad to find that it has received so much attention at the hands of some of our best known chemists. The pellets before us are intended mainly for preparing predigested food for rectal alimentation, and are admirably adapted for the purpose. A theory has been advanced of late that, in cases of dyspepsia and organic disease of the stomach, we should abandon the use of digestive ferments, and employ peptonised food only. This view deserves careful consideration, but, at the same time, we cannot help thinking that the day is far distant when we shall abandon the administration of pepsin. The great thing is to get a good preparation, and to give it in large doses. Messrs. Savory and Moore deserve credit for the attention which they have devoted to a complex and difficult investigation, and their successful product.

HOBSON'S SPRUCE BEER.

We have received from Mr. Joseph Hobson, of the Dantzic Brewery, Lees, specimens of spruce beer, prepared from selected malt. No. 1 is from a brewing just completed, and is free from alcohol; whilst No. 2 has been kept twelve months, and contains 2½ per cent. of spirit, formed during the process of natural fermentation. We have examined both preparations carefully, and are of opinion that they will be found useful, not only as beverages, but as medicinal agents. Mixed with mineral waters, they have advantages over many of the temperance drinks in common use. Taken with hot water at bed time, spruce is useful in the initial stages of coughs and colds. In cases of dyspepsia, the assimilation of starch is facilitated; whilst, for growing children, it may be a remedy of some usefulness.

PURE TEREBENE.

We have received from Messrs. Burroughs, Wellcome, and Co., specimens of their pure terebene. It is colourless, limpid, neutral in reaction, and absolutely free from any disagreeable taste or smell. When poured on paper, it evaporates completely, leaving no permanent stain. Used in the form of spray, it does not irritate, and may be taken well into the lungs without exciting cough. The dose is from five to twenty minims every three hours, and it will be found useful not only in chronic bronchitis and winter cough, but in many diseases of the bladder and urinary organs. It is a thoroughly reliable preparation.

PELLETIER'S QUININE-CAPSULES.

Messrs. Southall Brothers and Barclay, of Birmingham, have been appointed sole agents for the sale of these useful capsules in this country. It will be remembered that, about two or three years ago, it was discovered that the sulphate of quinine supplied to the Paris Hospital was intentionally adulterated to the extent of nearly half its bulk with an inert substance. A grave scandal was created, and it was officially determined that, in future, only the sulphate of quinine known as the "Trois Cachets" should be employed. Pelletier and Caventou were, we believe, the original discoverers and manufacturers of quinine, and the quinine now introduced is made according to their method. Each capsule bears the word "Pelletier;" and, on cutting it open, it will be found to contain a grain and a half of absolutely pure quinine. Adulteration is probably not carried on with us to the same extent that it is on the continent, but still the subject requires investigation.

SANITARY FLOORING.

The application of solid washable flooring to public institutions and private houses, makes continual progress. The opinion of modern sanitarians is entirely in favour of floorings which are free from dirt-traps, which our ordinary floors present at the intervals between each plank. The surfaces should be smooth and washable, and the flooring solid. Parquet-floorings fulfil these requirements; on them, for dwelling-rooms, loose carpets or rugs can be laid, if desired, and easily removed for the thorough cleansing, or they can be altogether dispensed with. The turpentine used in keeping the surfaces polished, is itself an oxidising agent. The highly artistic parquet-floorings of Bucher and Durrer (agents, Scheiller Brothers and Co., 23, New Broad Street, W.C.), have the advantage of remarkable cheapness, compared with the old-fashioned prices; and they fulfil, in an unusual degree, the requirements of solidity and artistic character.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 13th, 1886.

THE TRUTH ABOUT ALCOHOL.

THE temperance movement is one of the most notable phenomena of our time. In every town and village of our country total abstinence societies—whether Bands of Hope, Good Templar Lodges, or Rechabite tents—exist and flourish, and the United Kingdom Alliance is one of the most potent of existing organisations. We understand that in the New Parliament the teetotal party number forty, and that the advocates of local option have received a great accession of strength. It is a most significant fact that all the working men's representatives in the House of Commons are total abstainers. To those who can read this fact aright, it speaks not merely of hopeful augury for the future, but of the grim tragedy of the past. Working men alone have felt the full curse of intemperance, which has been the chief cause of their poverty and degradation; hence, no doubt, the attitude of their representatives.

The medical profession have a heavy responsibility in this matter, which they are not disposed to avoid, and which, moreover, they cannot avoid if they would. To a large extent, they are the court of appeal upon this question. They are familiar with scientific teaching upon alcohol, they see daily the fruits of intemperance, and they are ever watching the effects of alcohol both in health and in disease. The public look to us for guidance and instruction; our lightest word has often more weight than the most fervid oratory of temperance lecturers; and our attitude, whether negative or positive, has a powerful and far-reaching influence. On all these grounds, it is imperative upon the profession that their opinions on the alcohol question should be well weighed, firmly founded in unassailable truth, and free alike from the reproach of prejudice and of passion. On the one hand, we cannot be indifferent to a great moral movement, advocated undoubtedly, in many cases, from the purest patriotism and the highest Christian charity; nor, on the other hand, can we sanction the employment, even for the noblest ends, of a single questionable statement or argument, nor sacrifice a vestige of truth even at the holiest of shrines. No cause ever derived lasting benefit from error. Truth is great and will prevail, not merely because it is right that it should prevail, but because in the nature of things it must prevail. The advocates of temperance, who not rarely have more zeal than knowledge, would do well, therefore, to remember, that any unauthorised or questionable statement about the physiological action or therapeutic application of alcohol, is a serious injury to their cause, and tends to alienate from them the sympathies of the cultivated and reflective classes, whose opinion in the long run determines national opinion. It is, for example, frequently asserted on temperance platforms that alcohol is a poison. Now, all depends upon our definition of terms. A poison is usually defined as a substance which in small quantity injures health or destroys life. It is undoubtedly most true that an individual can poison himself with alcohol, and cases of alcoholic poisoning are unhappily all too common; but poisoning with sulphuric acid or with chlorate of potash is not unknown, yet no one dreams of styling these substances poisons, as popularly understood. If the quantity necessary to produce the fatal effect be regarded, sulphuric acid has a much better claim to the title of poison than alcohol, inasmuch as a dose of a teaspoonful has been known to destroy life, whereas it requires many times this quantity of alcohol to produce the slightest poisonous effect.

Again, it is frequently asserted from temperance platforms that moderate drinking in all degrees and in every instance is injurious to health; and it is occasionally even denied that alcohol possesses any virtue as a medicinal agent. Such views are opposed to all medical evidence; and it is much to be regretted that they should be rashly propounded, to the great injury of the cause which their advocates are anxious to serve. Enthusiasm for a high object is admirable, but when truth is violated, she never fails to punish the transgressor for her *læsa majestas*.

What, then, is the truth about alcohol? We think it admits of being stated with certainty and precision in its broad outlines, and that the minor details of the controversy hardly affect the main contention. We take it as conclusively proved, in the first place, that alcohol is not a necessary food, and that the most perfect physical and intellectual vigour is compatible with rigid total abstinence. We may go a step further, and confidently assert that people in perfect health are as a rule better without alcohol. The question may almost be regarded as finally settled, when a writer of Sir Henry Thompson's eminence speaks as follows. "I am of opinion that the habitual use of wine, beer, or spirits, is a dietetic error, say, for nineteen persons out of twenty. In other words, the great majority of the people, at any age or of either sex, will enjoy better health, both of body and mind, and will live longer, without any alcoholic drinks whatever, than with habitual indulgence in their use, even although such use be what is popularly understood as moderate' (*Food and Feeding*, page 98). In view of the great mass of evidence to this effect, we must own to feelings of surprise and disappointment at finding Sir William Roberts, in his recent work on *Dietetics and Dyspepsia*, throw out a somewhat obscure hint that, although a non-alcoholic regimen may be harmless to the individual, it may possibly affect the race injuriously in the course of two or more generations. We are most sceptical of the existence of any evidence to warrant this surmise. The evils of intemperance are manifest; the evils of total abstinence are unproved and improbable. The excellent health enjoyed by the great and increasing army of teetotallers, the returns of insurance and benefit societies, the example of abstaining nations, seem to us proof positive that total abstinence is at least harmless and safe. Alcohol may be accorded a place as a luxury; it certainly has a definite value as a medicine, but we think it most desirable, in the interests alike of truth and of national morality, that the medical profession should authoritatively and unambiguously declare that it is in no sense a necessity. It is on this point that the controversy really hinges, and we think the evidence regarding it is perfectly conclusive.

Secondly, we think we can affirm with equal confidence that, while alcohol possesses a certain and considerable medicinal value, its therapeutic range is gradually becoming more circumscribed. Time was, when it was the first suggestion and the last resort of the distressed practitioner. We are wiser now, less confident of its virtues, less ready to trust so potent a weapon to hands that may employ it in self-destruction. There are hospitals which have reduced their spirit-bills to one-half or one-fourth of their former amount, with at least no obvious injury to their inmates. There are diseases, once uniformly treated with alcohol, which we now know to run at least as favourable a course when it is withheld. Yet we think we speak the almost unanimous mind of the profession, when we say there are cases which hardly any well-trained medical man could treat without alcohol and keep his conscience clear. In pneumonia, for example, the benefit from it seems decisive. In typhus and typhoid fever, there are crises where the free use of alcohol seems literally to snatch the patient from the jaws of death. On the other hand, we deprecate most strongly the routine practice of deluging all such cases with stimulants, and urge that each case should be separately judged in view of its symptoms, alcohol being prescribed with the same deliberation and circumspection as opium or aconite. When we leave the acute pyrexial diseases, we are on less secure ground regarding the action of alcohol. It seems of value in many cases of phthisis, and especially in soothing the last stages of the malady; but the form of stimulant needs careful selection, and, not rarely, it is better omitted altogether.

The above cases will not seriously tax the judgment of the practitioner; but, with regard to patients suffering from simple debility, anorexia, etc., the decision regarding the use of alcohol is most anxious and difficult. It is beyond question that such cases often benefit decidedly by a little good spirit, or a glass of generous port or burgundy. Appetite and digestion are often thereby promoted, and sleep is sometimes induced to return. Yet these cases are just the chosen material of which inebriates are made, and the relief of dyspepsia or insomnia would be dearly purchased by running the gauntlet of intemperance. Everything depends upon the patient; and our course of action must be guided not merely by the nature of his ailment, but upon our estimate of his strength of will.

It is perverse to assert that every moderate drinker is a drunkard *in posse*, or that we must withhold alcohol in every case where there is the faintest possibility of it being abused; but the trained observer will learn to distinguish those cases where the risk of excess is so patent, as to outweigh the prospective advantage which might reasonably be hoped from this line of treatment. Two rules may be laid down with confidence. Alcohol should be rigidly prohibited in hysteria and in all forms of quasi-hysterical debility, and it should be still more strictly withheld in every case where there is an undoubted hereditary tendency to intemperance. A medical man may feel disposed to take the ground that he is accountable only for the conduct of the existing malady, and has no responsibility for the after-consequences of his treatment. With much respect for those who may differ from us on this point, but with great earnestness, we submit that to pull a patient through the crisis of pneumonia or typhus, unless under urgent circumstances, at the terrible cost of developing a clearly marked hereditary tendency to intemperance, is not calculated either to advance the honour of the medical profession or the best interests of humanity.

We urge the profession to realise their great responsibility and their immense influence upon this question. Their views should be deeply pondered, their words weighty and well-spoken. They must hold the balance between selfish indifferentism, and a zeal which not seldom borders on fanaticism. They must earnestly desire to know the truth, and proclaim it through good and through evil report. They must refuse to be coerced into abating one jot of their deliberate convictions at the bidding of any organisation; but they will, we think, learn to look with a more and more favourable eye upon a great moral movement which will not in all cases gain their adhesion, but which has a powerful claim upon their sympathy and respect.

THE CHEMICAL FORMATION OF HARD AND SOFT TISSUES.

It was long ago shown by Mr. Rainey, that when two solutions of gum Arabic, one containing potassic carbonate, and the other calcic chloride, were allowed to mix slowly and glass slides introduced into the apposed solutions, in the first place, a deposit of adherent spherules of carbonate of lime was formed on the surface of the glass; and, in the second place, when these spherules were removed, the glass was no longer smooth, but was covered with shallow depressions of a rounded form responding severally to the points of contact of the spherules. In the process of deposit, the first generated spherules were surrounded by others till groups were formed, the small spheres and granules gradually disappearing, and single large spheres being the ultimate result. Further, when such spheres were deposited on glass in the midst of the adhering colloid, the same attractive force which had determined their previous incorporation determined alike that of the adjoining molecules of the glass into the superincumbent spheres, small pits accordingly being thus excavated in the surface of the glass subjacent.

In a very interesting paper lately read before the Royal Microscopical Society by Dr. Ord, whose love of science is always tempting him somewhat aside from his purely busy professional pursuits, the above attractive subject is discussed with great ability. A deposit of ant-mud on glass, Dr. Ord incidentally learnt, had been found to eat away the surface-polish of the glass; and, to explain this, he instituted a series of experiments, of which a record is contained in his paper. In these experiments, glass slides coated with solid paraffin, in which letters had been inscribed, thus exposing the glass, were placed in gum-solutions like those already referred to. Slides of mother-of-pearl and ivory were similarly treated; and paraffin-coated slides with inscriptions were likewise covered over the inscribed area with a mixture of egg-albumen and glycerin, and drops of solutions of calcic chloride and potassic carbonate respectively allowed to diffuse into this mixture from opposite sides. A control-experiment was made in addition by placing a glass slide, coated and inscribed in like manner, in a mixture of pure glycerin and potassic carbonate alone. When examined a twelvemonth later, a very complete and deep etching of the exposed surfaces was found to have occurred in every case, with the exception of the last. These are Dr. Ord's inferences: "First, without the use of the acids or the alkalies which are known to be capable of dissolving glass, a glass surface may be eroded almost to opacity when placed in contact with carbonate of lime and a colloid. Secondly, the erosion so effected may be explained on the basis of Mr. Rainey's observations on molecular coalescence. Thirdly, in contact with glycerin and carbonate of potash, ivory

and mother-of-pearl may be eroded; although, as far as can be seen, no spherules of carbonate of lime are deposited." This last conclusion appears to have rather a wide application; and, in making it, Dr. Ord draws attention to Mr. Rainey's observations on "molecular disintegration" and "molecular coalescence," regarding these processes as capable of enabling us to follow in detail the building up of skeletal formations, and of adapting them to altered conditions of growth and repair. In bone, for example, the structure of the first Haversian systems is determined by the law of molecular coalescence, the earthy matters deposited in the colloid ground substance ceasing to show crystalline form, and being moulded into laminæ, in which an intimate combination exists between the organic and inorganic constituents; while, by the light of molecular disintegration, we can understand the formation of the absorption Haversian spaces as constituting a part of its remoulding and repair. Now it has been found, when spheres of carbonate of lime have been formed in a matrix of gum in the manner detailed above, and afterwards transferred to a fresh solution of gum of the same kind first used, that they lose their sharp outline, become visibly fibrous in structure, and gradually fade away. The advent of a new colloid, therefore, differing ever so little from the first, appears to have determined a complete disorganisation of the attractions that previously held the molecules together. These molecules are reft asunder for the time, to be subsequently gathered into new spherical combinations. It may indeed be fairly assumed that the colloid is changed by its prolonged contact with the crystalloid matter; for it can be shown most clearly that the colloid matrix of the spheres, whether it be collagenous or albuminous in its nature, soon undergoes alteration, assuming chemical properties more or less akin to those belonging to ripe epithelial structures and chitine; and we may easily, and also with reason conceive that a change of a somewhat analogous kind occurs in the matrix of bone as a part of its senescence. This transformation of an active into an inactive colloid, so to speak, must presently call for complete reorganisation; and consequently we soon find that, under the influence of new nutritive colloidal matter, the old superannuated colloid first yields up its crystalloids, and then gradually melts away, leaving a free field for fresh growth and organisation. The oldest and earliest formed parts of several adjacent Haversian systems are generally the first to be thus swept away by this process; and at the points where the disappearance is making progress, little masses of active protoplasm—the so-called osteoclasts—are to be found occupying the excavations in the eroded bone. In short, "we have here, before our eyes, the direct application of a new and active colloid to an old product of molecular coalescence, with the sequence of molecular disintegration." It accordingly becomes very probable, as Dr. Ord has laboured to show, that in the processes of formation and repair of the hard, and possibly also even of the soft animal-tissues, these subtle non-chemical agencies are more important factors than has hitherto been supposed.

CERTIFICATES IN PSYCHOLOGICAL MEDICINE.

It has always been a cardinal maxim with Englishmen to leave supply to private enterprise, at all events in the first instance. The individual or the humbler societies show the way; and if they can successfully grapple with and overcome the practical difficulties, the higher authorities may deign to adopt their practice and utilise their experience. It has long been a point calling for remark that, in the examination for all the more usual qualifications granted to medical practitioners, there is no requirement of any education in the study of mental disease; and in the few examinations where the "Theory and Practice of Medicine," in which the candidates are examined, avowedly includes psychological medicine, it is well-known that a few hours with a small text-book will be ample preparation for that part of it, and that time should be wasted under such circumstances in studying living examples of insanity is hardly likely. It is very easy to admit that examinations are never likely to bring out, in every case, the exact abilities or disabilities of those examined; but it should never be forgotten that examinations nevertheless have great power and most important functions in directing the lines of study of the candidates. The changes of late years have rendered that plain to all who care to observe. But these changes have done little or nothing towards making even the most elementary knowledge of the conditions of insanity necessary to the general body of medical students, or of providing any mark or badge whereby those who have paid attention to such subjects may be publicly and authoritatively distinguished from those who have not.

Considering the very serious legal powers in dealing with the insane, which are vested in every registered practitioner, that is a point which ought not any longer to be overlooked. The Royal College of Physicians of London has declined to deal with it. Under such circumstances, it is considered to be for the good both of the public and the profession that others should deal with it. The Medico-Psychological Association, which includes all the acknowledged leaders in that branch of medicine, decided at their last annual general meeting, after careful consideration, to take an important step, and to institute under their own superintendence and by their own authority, examinations for a certificate in psychological medicine, which are to be held twice a year in England, Scotland, and Ireland. The terms are plain and reasonable. The candidates must be registered practitioners, at least 25 years of age, and "must produce a certificate of having resided in an asylum (affording sufficient opportunity for the study of mental disorders) as clinical clerk or assistant medical officer for at least three months, or of having attended a course of lectures on insanity, and the practice of any asylum (where there is clinical teaching) for a like period." The first examination in England is to be held on March 29th and 30th, the second on November 30th and December 1st, at the Bethlem Royal Hospital; and candidates presenting themselves must give a fortnight's notice to Dr. Rayner, of Hanwell. The examinations in Scotland will be held in July and December. If the candidates satisfy the examiners, they will obtain a "certificate in psychological medicine of the Medico-Psychological Association of Great Britain and Ireland," and we cannot doubt that it will be of great service to them in establishing their position in the eyes of the public and their colleagues.

At the same time, we cannot admit that the matter should rest there. The Royal College of Physicians, on the testimony of Dr. Savage, one of its most distinguished Fellows, the President of the Medico-Psychological Association, offers no opposition to this movement; indeed, Sir Henry Pitman, the most experienced Registrar, strongly supports the scheme. But it is not consistent with the dignity of the Royal College that it should graciously devolve on others what ought to be its own duties, and stand aside to learn how easy they are or how difficult. So long as they make claim to grant the highest honours and hold the first authority,

they must lead, and not follow. A Government that leaves the important bills to private members gets little credit. To take a somewhat analogous case: the public may be said to have voted urgency for a better knowledge among medical men of sanitary science. In 1875, the University of Cambridge, recognising the justice of the claim, volunteered to take the responsibility of conducting a careful examination, and of issuing certificates in sanitary science. In the same year, the University of Edinburgh made Public Health or State Medicine one of the subjects for which degrees of Bachelor or Doctor of Science might be granted; and the University of Dublin instituted a certificate of qualification in State Medicine. The example has been followed by several other bodies with the best results, and the certificates have established for themselves a value that only time and experience can give. But the consent of the Royal College to grant "certificates of hygiene" was given but very lately; and the certificates have still to win for themselves the distinction they ought to carry. In the matter of insanity the public take an increasing interest, and may be at any time rather rudely startled to find how much legal power may go along with possibly considerable, if not almost complete ignorance. That the management of many of the serious initial difficulties should be entrusted in the main, as at present, to a little common sense, is a plan which is, to say the least of it, insufficient; and it would be both a wiser policy, and some proof of the capacity of government, not to leave the gaps in the preparation to be filled up by volunteers.

SURGEON-GENERAL BEATSON ON CHOLERA.

THE third ordinary meeting of the Bath and Bristol Branch was held at the Grand Pump Room Hotel, Bath, on January 28th. On this occasion, a paper was read by Surgeon-General Beatson on cholera, which is published at page 481. The author, at its outset, professed his inability to offer for the consideration of the meeting any new ideas on the etiology and treatment of the disease, derived from his own personal experience and observation; cholera being, in the opinion of the speaker, a disease the study of which can be pursued to advantage in no contracted field, nor by the light of any one man's researches. The truth about cholera, if ever brought to light, will be the result of many investigations yet unmade. Dr. Beatson passed in review, after the mode now prevailing among writers on cholera, all the theories that have been brought forward by physicians and sanitarians at home and abroad, on the origin and propagation of the disease, and expressed his dissatisfaction with them all, from the earliest to the latest, from the doctrine of a specific virus to the bacterial theory of Koch. Dr. Beatson, after commenting on the asperity of cholera controversialists, assured his hearers that he did not appear as the advocate or defender of any side, thinking it probable that there is some truth in all the different theories, "and that each is wrong only when it claims exclusive possession of the truth."

Like most Indian practitioners, Dr. Beatson is strongly of opinion that cholera is not a contagious disease, dwelling much on the fact that medical men and the attendants on the sick are not, in that country, more prone to be attacked by the disease than others, when it prevails in an epidemic form. While speaking with great respect of Professor Koch and his assistants, in common with other trustworthy pathologists, he evidently distrusts his methods of investigation and the conclusions drawn from them. "Not proven" is apparently his verdict on this part of the question.

It is evident that the author, like some others, regards so-called cholera nostras and Asiatic cholera as one and the same disease, the difference being one of degree only. He points to the similarity in symptoms between cholera nostras and the cases which are observed in India to be the precursors of an epidemic visitation.

In our estimation, the most valuable part of Surgeon-General Beatson's paper is that in which he dwells on the fact that the so-called "suspicious cases" occurring before and during an epidemic are indeed cases of cholera, although they may not present what are falsely called the only characteristic symptom of rice-water stools.

Dr. Beatson's preventive remedy is sanitation, and again sanitation. While acknowledging the progress made in this country in the direction of public health, he warns sanitarians that much requires to be done in the way of the purification of rivers, and, above all, a systematic carrying out of house-sanitation in our great cities.

YELLOW fever has again broken out on H.M.S. *Urgent*, at Port Royal, Jamaica, with fatal results, and the vessel has had to be removed to quarantine ground.

THE governors of the Birmingham and Midland Counties Hospital for Women have elected Dr. Saundby consulting physician to the hospital, in the place of the late Dr. T. P. Heslop.

THE PIMLICO POISONING CASE.

DR. TIDY, lecturer on forensic medicine at the London Hospital, and official analyst to the Home Office, has been engaged to make certain experiments and tests for the Treasury in connection with the Pimlico poisoning case.

LADY DUFFERIN'S FUND.

THE Countess of Dufferin has written a paper describing the objects of the fund for supplying female medical aid to the women of India, which is identified with her name, for the April number of the *Asiatic Quarterly Review*.

MEDICAL SOCIETY OF LONDON.

THE Annual Dinner of this Society took place at the Holborn Restaurant on Saturday evening last, Dr. Ord, President of the Society, in the chair. Mr. Brudenell Carter, the president for the ensuing year, was also present, together with Sir Joseph Fayrer, Sir Guyer Hunter, Dr. Potter, Dr. Bristowe, etc. A very agreeable and social evening was passed, and the usual toasts were cordially responded to.

REPEAL OF THE CARRIAGE-TAX.

WE understand that the Associated Chamber of Commerce have discussed the question of the immediate repeal of the carriage-tax, and that a final vote has been taken. The result of the vote was to carry the immediate repeal by fifty-six to ten, or a majority of forty-six. This has some interest for medical men.

THE DARENTH SMALL-POX HOSPITAL.

A DEPUTATION waited at the Local Government Board offices on Monday to see Mr. Chamberlain, to protest against the erection of a small-pox hospital at Darenth by the Metropolitan Asylums Board. The right hon. gentleman, being detained at the Cabinet Council, was unable to receive the members of the deputation. Their views, however, were laid before Mr. C. Courtney Boyle and Mr. Owen, who promised that they should be duly reported to the President of the Local Government Board.

CONGRESS OF HYDROLOGY AND CLIMATOLOGY.

An International Congress of Hydrology and Climatology has been founded by the Society of Sciences, Letters, and Arts, of Biarritz, and organised with the help of the Société d'Hydrologie Médicale de Paris, and the Société Météorologique de France. The Congress is to be, it is stated, opened at Biarritz on October 1st, 1886, under the honorary patronage of the Minister of Commerce, and the presidency of Dr. Durand-Fardel. The Congress will last eight days, from October 1st to the 8th. At the close, excursions will be made to the different thermal and sanitary stations in the Pyrenean district. Letters of application should be addressed to The Viscount De Chasteigner, Biarritz, or Dr. De Lavarenne, 21, Rue Chaptal, Paris. Had it come a little earlier in the season, many might have been induced to take a pleasant and not uninstructive trip under advantageous circumstances.

LECTURES ON THE HUMAN BRAIN.

A course of three lectures, on the Human Brain, will be delivered in the Theatre of Queen's College, Birmingham, as follows. 1, Wednesday, March 17th, the Anatomy of the Human Brain, and its relation to the Brain of Lower Animals, by Professor B. C. A. Windle. 2, Wednesday, March 24th, the Physiology of the Human Brain, by Professor J. B. Haycraft. 3, Wednesday, March 31st, the Pathology of the Human Brain, "Illusions, Delusions, and Hallucinations," by Mr. E. B. Whitcombe, Superintendent of the Borough Lunatic Asylum. The lectures will commence at 8 o'clock on each evening. Admission is free, by ticket, to be obtained for the course from Professor Windle, or for separate lectures from the several lecturers.

THE PASTEUR INTERNATIONAL HOSPITAL.

The committee appointed by the Academy of Sciences on Monday, March 1st, to report on a hydrophobia hospital, presented its report on Monday, March 8th. It proposes the creation of n "Institut Pasteur," for the treatment of Frenchmen and foreigners bitten by mad dogs and other animals. A public subscription is to be opened in France and abroad, and the committee of patronage is to consist of Admiral Jurien de la Gravière, MM. Bertrand, Vulpian, Marey, Paul Bert, Bichat, Charcot, Hervé-Mangon, de Freycinet (all members of the Academy of Sciences), and Camille Doucet, Wallon, the Vicomte Delaborde, MM. Jules Simon, Magnin, Governor of the Bank of France, Christophle, Governor of the Crédit Foncier, and Alphonse de Rothschild; and MM. Béclard, Brouardel, and Grancher, medical professors.

THE INTERNATIONAL CONGRESS IN AMERICA.

An influential and well-informed American correspondent writes to us: "The new codus, and homœopathic, eclectic, and other irregulars of every description, who have made a conspiracy to defeat the International Medical Congress in Washington in 1887, will be defeated. The meeting will take place and be a grand success, for the immense mass of the profession throughout the whole country still adhere to the Code of Ethics. And those few specialists and others, who choose to mingle in consultation with irregular quacks of every description, of course have a right to select their own companions; but they will not be allowed to occupy any official position in the Congress, neither will they have the power to prevent the success of the meeting."

THE TRAINING OF SANITARY INSPECTORS.

The efficiency of sanitary administration depends, to a very considerable extent, on having sanitary inspectors who are well acquainted with the duties which they have to perform under the medical officer of health. At the present time there is no organisation for teaching these men, though the Sanitary Institute of Great Britain, some years ago, established examinations, with the object of testing their knowledge. Several sanitary authorities now refuse to appoint men as sanitary i spectors (inspectors of nuisances), who have not obtained a certificate of having passed this examination, and the number of candidates at the examinations in the last two years shows a very marked increase. Partly to meet the wants of candidates for these examinations (which are held twice a year), and partly to give to persons who are already sanitary inspectors facilities for becoming better acquainted with their duties, the Council of the Parkes Museum of Hygiene has almost completed arrangements to hold a course of lectures for sanitary inspectors twice a year. Each course will consist of twelve lectures, and will comprise all the subjects required for the examination. The various subjects will be dealt with by specialists in each department; and as the lectures must be essentially practical, they will probably prove attractive to other persons than the members of the somewhat limited class for whom they are primarily designed. The catalogue of the extensive sanitary library belonging to the museum is almost complete, and, as it is a card-catalogue, is always available for use. Persons attending the course of lectures will be allowed to use the reading-room.

THE NATIONAL HEALTH SOCIETY.

The success of Dr. Schofield's course of lectures at the Paddington Baths, of which we spoke in the last number of the Journal, proves conclusively that the metropolitan public are ready to learn the laws of hygiene and the elements of physiology, even at the cost of several shillings for tickets for a course of lectures. It might be argued by a cynic, imperfectly acquainted with the system upon which the lectures were given, that the audience merely attended from curiosity, and went away with the consciousness of having heard something very wonderful and learned. A malevolent sceptic of this class would, of course, feel certain that nothing was understood and as little remembered. The examination which followed the lectures proved that the audience was thoroughly in earnest. Nearly eight hundred persons, chiefly shop-assistants, attended the lectures nightly. We have already alluded to the satisfaction with which Sir Spencer Wells spoke of the result of the examination. Thirty prizes and certificates were given, twenty-eight of these being awarded to women. Hence thirty persons at least have gained a fair knowledge of the rudiments of hygiene, physiology, minor surgery, and nursing. The thirty, however, do not represent by any means the total proportion of the audience who have come to the lectures and learnt something, and gone away and remembered what they heard. Many must have been prevented by the calls of business, domestic duties, fear of rejection, or even some individual distaste, from presenting themselves for examination. Still few, if any, of this majority can have failed to derive benefit from attending the lectures. In these democratic days nothing is more satisfactory, politically and socially, than this evidence that the people are ready to learn knowledge of high value to the citizens of a civilised state.

METROPOLITAN DEFENCES AGAINST INFECTIOUS DISEASES.

Mr. Shirley Murphy gave a very interesting lecture at the Parkes Museum of Hygiene on March 4th, in which he traced the development of the existing arrangements for preventing the importation and spread of infectious diseases in the metropolis. He pointed out that the right of the community, in its own defence, to restrict the liberty of a person suffering from an infectious disease, had been long recognised; and that, during the great epidemics of plague, the system had been made to include all persons living in the same house. The present system of removing patients by ambulances to special hospitals might be considered a substitute for the old, clumsy system of shutting up in the houses in which they dwelt, not only the patients, but all the other inhabitants. The difficulties and dangers of the present system were clearly shown, especially those attending the aggregation of cases of small-pox. Other details of sanitary work in the metropolis, including the machinery for preventing the importation of infectious diseases from foreign countries, were explained; the need of better mortuary accommodation was insisted on, and

he question of notification of disease was discussed. In conclusion, he lecturer expressed a strong opinion that the largest amount of good could only be obtained, when the whole administration for dealing with infectious disease was placed in the hands of a central metropolitan body which had for its primary object, not the relief of he poor (which is the ostensible duty of the Metropolitan Asylums Board), but the safeguarding of the public health. Dr. E. Seaton afterwards spoke at some length, urging that the great end of sanitary authorities should be to prevent the spread of infectious disease, not merely to isolate cases after they have occurred. He commented on he successful results obtained in Leicester, and quoted the system of compensation for disturbance there in vogue with approval. Sir Edmund Hay Currie, who was in the chair, fully concurred with the view that a single central sanitary authority for the metropolis was a necessity.

THE RADICAL TREATMENT OF HERNIAL SACS BY TORSION.

For the past twelve months, Mr. Richard Davy has been availing himself of the mechanically simple method of torsion of the hernial sac, so as to effect its complete obliteration. This plan, he urges, inevitably conducts the process of centripetal occlusion and consolidation to the structural neck of the sac; does away with the necessity of ligatures, obviates wounds of the peritoneal membrane, effectually excludes air, and presents the maximum amount of peritoneal superficies for agglutination and eventual plugging. Of course, no surgical treatment is invariably applicable to operative cases, but it is alleged that a wide field is open for this therapeutic agency in strangulated or non-strangulated herniæ, and opened or unopened sacs. Mr. Davy's fourth successful and successive case, (voluminous inguinal left hernia in a woman), is at present convalescent in the Westminster Hospital.

MEDICAL EDUCATION OF WOMEN.

Miss Jex-Blake, M.D., writes in the *Times* to announce that the Scottish Colleges of Physicians and Surgeons (of Edinburgh and Glasgow) have just decided to throw open to women their conjoint examinations and "triple qualification" in medicine, surgery, and midwifery. Everyone interested in the subject is no doubt aware that the Irish College of Physicians opened its examinations and diplomas to women, immediately after the passing of the Russell-Gurney Enabling Act in 1876, but it is not so generally known that the Irish College of Surgeons also opened its doors last year, and that at the latter College women are now freely admitted to all the medical classes, with separate arrangements for practical anatomy only. The University of London, the Royal University of Ireland, and the Victoria University, have also opened all their examinations and degrees to women. Medical education is now, therefore, available to women both in London and in Dublin, and she hopes that classes will within a few months be reopened in Edinburgh.

SELECT COMMITTEE ON CORPORATION SANITARY BILLS.

On February 26th Mr. Broadhurst, the Under-Secretary of the Home Department, moved, in accordance with the precedent of each of the last two sessions, that all private Bills promoted by municipal and other local authorities, by which it is proposed to create powers relating to police or sanitary regulations which deviate from, or are in extension of, or repugnant to, the general law, should be referred to a Select Committee of nine members, to be appointed by the Committee of Selection. After the inevitable dispute with the Irish members, who imagined that they would not be sufficiently represented on the Committee, Mr. Broadhurst's motion was agreed to, and on Tuesday last the Committee was nominated as follows:—Mr. James Campbell (Glasgow and Aberdeen Universities), Dr. Farquharson (West Aberdeenshire), Mr. Forwood (South-West Lancashire), Mr. Hastings (East Worcestershire), Mr. Mayne (Mid-Tipperary), Mr. Sclater-Booth (North Hants), Mr. Sexton (South Sligo), Mr. Henry West (Ipswich), and Mr. Stuart-Wortley (Sheffield). Inasmuch as the question of the position of medical men with regard to the compulsory notification of infectious disease will come before this Committee in connection with the proposals of several corporations, whose Bills will be referred to it, we may be allowed to express a hope that the Committee will decline to regard itself merely as the registrar of the decrees of Mr. Sclater Booth's Committee of 1882 on this important matter. The usefulness of the Select Committees of the last two years was largely discounted, by the fact that they regarded the decisions of the Committee of 1882 as akin to the laws of the Medes and Persians. Any evidence on the general questions which the Committee of 1882 was supposed to have settled, was declined by the Committees of 1884 and 1885, who chose to consider each Bill submitted to them absolutely *ad hoc*, and refused to go into the question of the general expediency or otherwise of the clauses which they had the power of passing or rejecting. It is to be hoped that the new Committee will take an independent view of the medico-sanitary aspects of the Bills which are to come before it.

OFFICIAL TREATMENT OF SCIENTIFIC INVESTIGATORS.

The following facts refer to the case of Mr. J. P. Laws, F.C.S., concerning whose discharge a question was asked by Mr. Thorold Rogers, M.P., in the House of Commons, on Tuesday, February 23rd, and of which no notice was taken by the daily papers. In the autumn of 1883, Mr. Laws was employed by the Medical Department of the Local Government Board to carry out certain investigations relating to disinfection, and more especially to the mode of action of certain disinfecting agents. The experiments were undertaken in accordance with a plan submitted by Dr. Burdon Sanderson to the Local Government Board about the same time, and were carried out by Mr. Laws under Dr. Sanderson's directions. In March, 1885, as much of the work as was completed was published in the fourteenth report of the Local Government Board. During this period, and up to Michaelmas, 1885, Mr. Laws received a grant from the Board, extra allowances being made to provide for the necessary expenses of the inquiry. Quite suddenly and unexpectedly, the grant was stopped by the late President of the Local Government Board; the only reason assigned being the inconvenience of carrying out such researches at Oxford. Mr. Laws has since continued his investigations, which, we understand, have led to new and important results, which he will no doubt in due time publish. The alleged reason for the withdrawal of the grant is, we need not say, inadequate; Mr. Laws has, at Oxford, the use of a laboratory specially adapted for work of the kind in which he has been engaged, fitted up with a view to his investigations by Sir Henry Acland. He has, moreover, the advantage of Dr. Burdon Sanderson's advice and co-operation.

VALUELESS CORONERS' INQUESTS.

Cases in which the coroner's inquiry is so carelessly conducted as to be more than useless, are of by no means infrequent occurrence in these latter days, and are the subject of frequent comment in our columns; but it is not often, perhaps, that three inquests are held in the space of two days in a comparatively small town, in which the results, so far as the public are concerned, are negative. Our attention has, however, been drawn lately to three inquests, of which this may be truly said. Two of them were cases of sudden death in single women, who had not been under medical treatment, and in neither was a *post mortem* examination made, the jury being satisfied in each case with the surmise of the medical man, who had been called in after death, that sudden stoppage of the heart's action had been the probable cause. If the result of the professional deliberations had been that either or both of the deceased had died from want of breath, we make no doubt that the jury would have returned a verdict accordingly; and we are not disposed to say that such a verdict would have been of less value than the one given. The third inquest opened up a very important question, which was, however, passed over by the coroner. In this case, a young woman being taken ill, her mother went to a druggist's and got

some pills and medicine for her; the druggist's assistant, after interrogating the mother, having diagnosed that the patient was suffering from cold and biliousness. Two pills and two doses of the medicine were duly administered, and were followed by purging, vomiting, pains in the abdomen, and ultimately by death, four days later. On *post mortem* examination, recent peritonitis was found, for which no cause could be found, except the action of cold during menstruation, aggravated by the violent purging induced by the treatment. The coroner contented himself with an expression of opinion that it seemed rather a pity for druggists to make up prescriptions for persons whom they had not seen, on the statement of one person going to them and explaining another person's case. It seems to us that it is quite time that druggists should be made to take the full responsibility for the results of their advice. It is, of course, quite impossible to prevent one person from advising another as to what medicine he should take, but, when an unqualified person undertakes the treatment of a case, he ought, in the event of a fatal result, and in the absence of a properly qualified practitioner, to be held responsible for the consequence. The following report, taken from a contemporary, offers another example—if more are needed—of the utter absurdity of coroners' inquests, as sometimes conducted. What possible good can result from an inquiry, when the verdict simply amounts to a confession of ignorance, to dissipate which no kind of effort is made? Supineness to this degree is rare, even in the annals of "crowners' quests." "DEATH OF A CHEMIST.—An inquiry has been held touching the death of William L. Mair, aged 26, chemist. Deceased, it appears, had been discharged from the services of Messrs. Inmans', New Bridge Street, for intemperance, and was in very bad circumtaances, sharing a room with a fellow lodger. Upon the latter returning to the lodgings a short time since, he was unable to wake deceased, who was subsequently found to be dead. By the bed were several bottles, one being a beer-bottle, another labelled concentrated essence of camphor, another being three-fourths full of methylated spirits, and a fourth being empty and apparently an unlabelled medicine bottle; and it was supposed that death was caused either by the essence of camphor, or by the methylated spirit. The jury being unable to say whether death resulted from poisoning, or from natural causes, returned a verdict of found dead in bed."

"IN ROBES."

A CORRESPONDENT writes: "The ceremony of laying the foundation-stone of the new Examination Hall of the Colleges of Surgeons and Physicians is now near at hand; and, as the presence of Her Majesty is an event of great rarity, suitable preparations are being made on the part of the medical authorities to celebrate the occasion in a manner becoming the representatives of a liberal and loyal profession. Official intimation has accordingly been given to the Fellows of the College of Physicians to appear in their robes, the better to emphasise the dignity of their position. The enactment of this sumptuary edict has, however, caused a feeling of embarrassment among the members of the exalted body of Fellows, for it is not exactly known what the robes in question are. Even those of them who rejoice in an academical degree are probably without any outward and visible signs thereof, which, in the language of Shakespeare, have disappeared, and 'left not a *rag* behind.' The uncertainty is even more painful for the Fellows of the College of Surgeons. Abroad, the use of ceremonial robes is more general. The examiners worry the candidates in scarlet robes and caps, which are impressive to a degree, and are exceedingly useful and ornamental on State occasions. Some time ago, one of these gentlemen, unable to find his carriage, walked a little distance along the quays to look for it; but, it being carnival time, the street-boys took him for a belated reveller, and formed a guard of honour, to his great distress and annoyance. The cab-drivers to whom he appealed only showed their appreciation of the situation by audible grins; and, had it not been for the intervention of a couple of policemen, who spoiled the fun, this gentleman's comfort might have been seriously compromised. A somewhat similar incident is reported to have occurred at Edinburgh on the occasion of the tercentenary celebration, where the university-staff was summoned to appear in gorgeous apparel. The result, though very effective as a spectacle, was rather startling to analyse. Scarcely two robes were alike, even among fellow-graduates. One gentleman, who had left matters until rather late, indisposed to pay the sum of £50 which a west-end robe-maker demanded for the garment (if it may be described as such), consulted his friends; and, acting on their advice he applied to a theatrical agent, who promptly attired him with a robe of red silk, which had created a great sensation when worn by a well known and popular actress as Portia. The sensation was scarcely less at Edinburgh; but the gentleman's satisfaction at his gorgeous array was disturbed by impertinent, if polite inquiries, as to the particular university and grade which conferred this gay and festive raiment. His only resource, indeed, was, with great dignity, to decline to 'condescend to gratify an impertinent curiosity.' In view of certain eventualities, it behoves all those who have been fortunate or shrewd enough to secure the honour of an invitation to the ceremony, to make the necessary arrangements for providing themselves with a wedding-garment, as otherwise the result cannot but be detrimental to their peace of mind. If Royalty continue to favour the public with its presence in the generous manner of the last few weeks, the individuals of which that public is composed will gradually awaken from ignorance of official etiquette, which years of deprivation of the sunshine of the royal presence have helped to engender." Probably a good many share the relative ignorance of our correspondent on the subject of the academical dress of Doctor of Medicine. A Doctor of Medicine of any university may be presumed to know the character of the robes to which he is entitled, although probably few possess them. The want of university-life for medical men has something to answer for, in respect to this ignorance of sumptuary regulations.

FIRES IN HOSPITALS.

THE number of fires which have occurred in hospitals and asylums during the last few years, probably mark an increase in the liability to this danger; but, even if this opinion be mistaken, the number of conflagrations of greater or less magnitude, which have been reported, ought to have had the effect of making hospital committees look very carefully into the existing means of extinguishing fires, and removing patients from burning wards. It is true that there are few buildings which are, by the nature of the work carried on in them, involving, as it does, sleepless watching, less likely to supply the conditions favourable to the nurture of an accidental spark into a serious conflagration; on the other hand, many of the old hospitals, in London and other towns, are built of most combustible materials; and, in all hospitals, a large preportion of the inmates would be unable to do anything to help themselves. If any catastrophe were to occur, it is certain that public opinion would not accept any excuses, but would hold the committee of management responsible. Under these circumstances, it is worth while to ask whether it would not be comparatively easy to organise a fire-company in every large hospital. In a few hospitals the porters are exercised, in an irregular way, in fire-drill; and fire-buckets, or some of the patent devices for putting out fires, are often seen hanging in conspicuous situations. Something more, however, appears to be needed. Why should not the assistance of students be enlisted? It would afford to them a fresh source of interest, a new bond of union, and opportunities for healthy and useful exercise; a company might be formed, under the direction of some energetic member of the hospital committee or of the secretary, an instructor obtained from the Fire Brigade, and after some proficiency had been attained, regular exercise-drills might be held once a fortnight or once a month; porters, and perhaps nurses also, could be drilled at the same time. By some such plan, a trained body could be quickly formed, and valuable practical experience attained, which would certainly be of great use should any emergency arise.

RECREATION IN WORK.

THE truest recreation for mind or body is to be found in change of work. The thesis might be illustrated by the habits of many, nay, most of those who have left an enduring name; but we need not go beyond the events of the last few months in search of an example; we have seen Mr. Gladstone and Professor Huxley turn aside from their engrossing labours, to engage in a lively discussion of a point in transcendental philosophy. Many members of the medical profession have, especially in past time, earned considerable reputation in other fields of work which have afforded relaxation for spare hours. Dr. Oliver Wendell Holmes has written with his usual clear insight and happy choice of illustrations on this matter, and Dr. Quain did well to advise the medical officers leaving Netley to think upon it. Science already owes many debts to medical officers of the public services serving abroad. Within the strict limits of medicine and pathology, much yet remains to be learnt, which they are well able to teach us. Leaving aside the subject of infectious diseases, and the relation in which micro-organisms stand to those diseases, a harvest which now seems ripe for the sickle, leisure hours may be usefully given to the study of meteorology, especially of climate, in relation to disease; to the distribution of disease, and its relation, on the one hand, to meteorological, geological, or geographical conditions, and, on the other, to the social peculiarities of nations and tribes. For the study of folk-lore, which is casting much fresh light on the habits and thoughts of primeval man, members of our profession possess peculiar advantages; they are most fortunately placed to learn customs and superstitions which have gathered round the death-bed, or the cradle of the newly born child. It is a shallow pate which will merely laugh at these things; they may appear absurd enough in the nineteenth century, but they all have some meaning, had we but the wit to understand it. Even in the England of to-day, traces remain; the lighted taper left with a corpse at night is the distinct survival of a very old and widely honoured superstition; and our wedding customs—the wedding-breakfast and the subsequent honeymoon, point clearly to the ancient marriage by capture. Apart from the general interest attaching to such subjects, the folk-lore regarding plants may afford valuable therapeutic suggestions, resulting in the introduction of such useful remedies as, if we may believe the story, salicin and its allies. Medicine is an engrossing profession; the strictly cognate sciences cover a wide field; and even within such boundaries, recreation in change of work may be found. The medical officers who leave Netley have received at least an elementary training in biology, and they are therefore in a position to choose a line of work in one or other department of the biological sciences which will, if systematically pursued, conduct to results of value directly or indirectly to themselves and the profession to which they belong.

THE RATING OF PUBLIC CHARITIES.

ON Saturday, March 6th, a conference of the authorities of public charities was held at the Treasurer's house at Guy's Hospital, to consider the best means of promoting the passing of an Act of Parliament to restore to public charities exemption from liability to local rates. The chair was occupied by Mr. E. Lushington, Treasurer of Guy's Hospital; and among those present were the Earl of Leven and Melville, Sir H. Peek, Hon. A. de Tatton Egerton, M.P., Major-General H. Kent, Lieutenant-Colonel Hamilton, M.P., Mr. O. V. Morgan, M.P., Mr. H. G. Allen, M.P., Professor Leone Levi, Mr. H. J. Trotter, M.P., Mr. H. L. W. Lawson, M.P., and others. The chairman said that, up to within the last twenty years, hospitals and kindred institutions were exempt from local as they were now exempt from imperial taxation; and he failed to see why, considering the great benefits that they conferred upon the district in which they were situated, they should now contribute towards the rates. He called attention to the fact that, although Guy's Hospital conferred an invaluable boon upon the inhabitants of the neighbourhood, yet it was rated to the poor to the extent of £1,400. Lord Leven and Melville proposed the following resolution: "That, in view of the present anomalous and oppressive practice of regarding public charities as liable to local and parochial rates, this meeting of representatives of charitable institutions is of opinion that the present exemption of public charities from income tax should be extended to all local rates." This was seconded by Mr. O. V. Morgan, who remarked that everyone recognised the fact that a great hardship was inflicted upon charitable institutions, especially those with limited means, by liability to pay local rates; and he thought there were few Members of Parliament who would not be prepared to support the proposal to obtain exemption. The resolution was eventually adopted. The Hon. A. de Tatton Egerton proposed the following: "That the representatives of public charities present at this meeting do pledge themselves to use their efforts to ensure the successful passing of the Bill to exempt their institutions from local taxation, and request the governors of hospitals and other charitable institutions to act with them and the members of the Legislature to promote the object in view." Professor Leone Levi, who seconded this, observed that hospitals rendered great service to the country, and it was not right to expect that they should pay local rates. After some discussion, the resolution was agreed to, and the proceedings terminated.

CHLOROFORM IN DENTAL EXTRACTION.

THE comment on the death under chloroform which we last week published expressed, in far too absolute terms, a conclusion as to the relative safety of chloroform compared with other anæsthetics. Experience seems to show that, for dental operations, nitrous oxide gas is, by reason of its remarkable immunity from fatal accidents, that which is to be preferred; but the comment in question, which by no means expresses even the editorial opinion on this subject, is certainly far too absolute in judgment on questions open to much doubt. It was by an unfortunate error substituted, at the last moment, for a paragraph of a different character, which pronounced no opinion on the relation of the anæsthetic employed in the case in question. W much regret that it should have appeared.

ALLEGED POISONING FROM AN "INFANT PRESERVATIVE."

MR. SIDNEY SMELT, deputy coroner for Manchester, held an adjourned inquest this week, on the body of an infant, aged six weeks, which was said to have died from the effects of a narcotic. The mother stated that the child had suffered from vomiting and bronchitis, and had wasted very much during the last three weeks. Late on the evening of February 17th, she gave it six drops of "Atkinson's Royal Infant Preservative," in order to quiet it. The nurse stated that it was restless during the night, and, appearing to be much worse next morning, she sent for the nearest medical man. Mr. H. S. Leigh, surgeon, stated that he saw the child at 9.45 on the morning of February 18th; its pupils were contracted to the size of a pin's head; it was covered with a cold and clammy sweat; it was breathing about six in the minute, and was apparently moribund. Mr. J. Westmorland, surgeon, stated that he saw it at 10.30 on the same morning, confirmed the evidence of Mr. Leigh, and believed it to be suffering from opium poisoning. Mr. H. Boutflower saw it at 11.30, when it was in a state of complete collapse, and evidently moribund; it lingered on till evening, when it died. The *post mortem* examination was made by Dr. Ashby, who stated that the body was extremely emaciated; the stomach contained an ounce and a half of a dirty yellow fluid; the intestines were empty; the lungs were gorged and emphysematous; the veins on the surface of the brain congested; there was thrombosis of the right renal vein, and hæmorrhage into the kidney; and there was also minute hæmorrhage into the spleen. An analysis of the contents of the stomach, and also of the bottle containing "Atkinson's Royal Infant Preservative," were made by Mr.

William Thomson, analytical chemist, who gave evidence to the effect that he could detect no opium or any alkaloid in the contents of the stomach; but the "infants' preservative" contained morphine equivalent to one drop of laudanum in 160; rather more than three drachms had been taken from the bottle, so that the most the infant could have had was equivalent to from one to two drops of laudanum. The Coroner, in summing up, stated that it had been given in evidence that, taking into consideration the weakly state of the infant, one or two drops of laudanum would be sufficient to produce fatal results. The jury brought in a verdict to the effect "that the child had died from the effects of a dose of an opiate."

CLINICAL MEETINGS.

THE last (for the present session) of the series of clinical meetings held by the East London and South Essex District of the Metropolitan Counties Branch, will take place in the library of the London Hospital, on Thursday, March 18th, at 8.30 p.m. Dr. Sansom will demonstrate a number of patients suffering from diseases of the circulatory system. These meetings have hitherto been very successful, as shown by the large attendance; and we trust that the meeting on Thursday will be equally so. We are asked to state that all qualified medical men will be cordially welcomed; and that tea and coffee will be provided before the meeting.

COMPLIMENTARY DINNER TO SIR WILLIAM ROBERTS.

ON Saturday evening, March 6th, Sir William Roberts was entertained by the members of the medical profession in Manchester at a banquet held at the Queen's Hotel. The chair was taken by Dr. Henry Simpson, the senior physician to the infirmary. Among the guests we noticed the following: Mr. Lund, Dr. George Buchanan, of the Local Government Board, Dr. Briggs of Burnley, Mr. Fred. Heath, Mr. A. W. Stocks, Dr. Leech, Dr. Ransome, Dr. Royle, Mr. Thomas Jones, Dr. Dreschfeld, Dr. Cullingworth, Dr. Lloyd-Roberts, Dr. Little, Dr. Glascott, and Dr. Thorburn. There was a large and enthusiastic gathering, the demand for tickets being in excess of the accommodation. After the usual loyal toasts, Dr. Simpson proposed the health of Sir William Roberts in a few feeling and well chosen words. In the course of his speech, he made special reference to his student-life at University College, where Sir Wiliiam early gave the earnest of a future brilliant career. Sir William Roberts responded in a short but highly humorous speech, and, after giving some interesting incidents of his student-days, he specially referred to the gratification he felt in seeing such a large muster of representative members of the profession, and to the friendly feeling and good accord which existed among the medical men in Manchester. Dr. Buchanan, of the Local Governmnet Board, proposed the health of the Chairman, with whom, and with Sir William Roberts, he was intimately associated in his student-life. Dr. Briggs (Burnley) then proposed the health of Mr. Lund, who replied, making reference to the various episodes of Sir William Roberts's extraordinarily successful career in Manchester. Songs and recitations from Dr. Dowse and Dr. Cullingworth brought a very pleasant evening to a close.

STARVING LONDON.

THERE can certainly be no doubt that the state of the labour-market and the weather has brought many more people face to face with starvation this winter, than for many years past. But still it may be doubted whether they have mastered the use of all weapons of defence against that deadly foe. A valiant vegetarian correspondent, who has never for eight years betrayed his dietary in prosperity or in adversity, writes to us to point out that in vegetarianism lies an escape from some of the pressure of poverty, inasmuch as the healthy vegetarian, in full exercise of his powers, can support himself on 5d. a day, which may suffice for three meals, such as shall thoroughly fit him for the duties of life. During an eight years' experience of a life of hard work, involving nine or ten, or even twelve hours' work a day, this slender tax has proved sufficient for nutrition. Some details of the mode of its application to the poorest classes are required; and it must not be forgotten that one of the main difficulties which has to be met is the clumsiness in cooking, and almost total absence of kitchen utensils, which obtains among the poor. If they have a frying-pan as well as a kettle, that is all that can be expected; and that increases their tendency to struggle after animal food, expensive though it may be, and, if they cannot get it, to fall back on dry bread with perhaps a dash of treacle, instead of the cheaper and more appetising preparations that can be made from greens, potatoes, lentils, oatmeal, arrowroot, rice, sago, and the like, which need a saucepan, or better still, a stock-pot. Important as it is that they should realise the worth of vegetables, it is almost more important that they should appreciate in the French fashion the value of a *pot au feu*, and not rank it contemptuously as "slops." There is a great field for instruction in this matter by penny dinners and public kitchens.

DEATH OF DR. STORRAR.

WE deeply regret to have to announce the death, on Wednesday last, of Dr. John Storrar; the cause of death was chronic bronchitis and emphysema. Dr. Storrar was among those who passed the first examination for medical degrees at the University of London, and he graduated in 1839, without any interval between the M.B. and M.D. The late Dr. John Taylor, of University College, graduated at the same time, and they were the first two M.D.'s of the University of London. Dr. Storrar was appointed to represent the University of London on the Medical Council at its first formation, and has been a member of the Council from that period to the present. His death, therefore, causes a vacancy in the General Medical Council, as well as in the Senate of the University of London. Dr. Storrar had been for many years secretary to Dr. Somerville, as Inspector of Anatomy. It can scarcely be said that Dr. Storrar ever engaged in private practice. He devoted his time and attention, very largely, to the interests of the University of London, and to the work of the General Medical Council, taking the deepest interest in the higher medical education. He was a staunch believer in the peculiar merits of the degrees of the University of London, and in its methods of examination, and aimed strenuously at maintaining them at the highest possible standard. On the General Medical Council, his knowledge of detail, and his strong affection for university influence, was often of great value in combating propositions which seemed to aim especially at the prodominance of the interests of corporations. Dr. Storrar was chairman of convocation of the University of London, from its first establishment, up till last year, when he was succeeded by Mr. Wood, LL.D. Although somewhat brusque in manner, he was a man of warm heart, and was universally respected for his honesty of purpose and public spirit. The Annual Committee of the University is being hastily summoned to consider the proper means of paying respect to his memory.

POPULUS VULT.

WE referred last week, March 6th, to a novel method of treating consumption, to which extraordinary publicity had been given by an article and letters published in a daily contemporary. The idea of endeavouring to cure consumption by introducing another micro-organism into the lungs there to fight it out with the bacillus, which is believed by Koch to produce the disease, appears to have originated with Professor Cantani; and anybody who is curious about the method will find it described in paragraphs published in this Journal on August 29th and November 28th, 1885. The theory appears to be founded on very slender grounds, and to rest, in fact, on a complete misapprehension of the nature of phthisis, and the mode of action of the micro-organisms which produce disease. It is true in a limited sense that certain bacteria can kill certain other bacteria; that is to say, one or other organism finding conditions very favourable for its development may

multiply so rapidly as to replace all others, just as one weed may drive all others out of a garden-bed; there is literally nothing more to go upon. A correspondent has sent us a communication in which he proposes to inject yeast into the blood in "acute septic diseases." But the height of absurdity is probably reached when we read a circular, professing to emanate from the English adapter of Professor Cantani's suggestion, the following paragraph:—"I have found it impossible," the circular runs, "to obtain the "Bacterium Termo" from any source, either in this country or in Italy, and have, therefore, been compelled to cultivate it for my own use." "It can be supplied to sufferers," the circular adds, "with proper instructions in return, for a fee of two guineas." Now the bacterium in question is perhaps the commonest and most universally distributed of all known micro-organisms; it is the pest of housekeepers and the bane of butchers; it is one of the chief agents of putrefaction; and will swarm in meat-broth kept in a warm place for a few hours. There is something inexpressibly comic in the idea of so many ounces of putrid broth sent home from the druggist in a stoppered bottle, of course, and carefully labelled—"The Inhalation to be used so many times a-day." Still, probably, the British public will be equal to swallowing a good many bacteria at various prices.

SCOTLAND.

PROFESSOR DONALDSON, of the University of Aberdeen, has been appointed, by the Queen, Principal of the University of St. Andrew's.

HONORARY DEGREES IN THE UNIVERSITY OF ABERDEEN.

THE Senators of the University of Aberdeen, at its meeting on Saturday last, conferred the honorary degree of LL.D. upon, amongst others, Patrick Manson, M.D., of Hong-Kong, China, who is well known for his researches on Filaria; Professor Stokes, of Cambridge, Burnett Lecturer in Aberdeen; and Sir Samuel Rowe, M.D., K.C.M.G., Governor-General of Sierra Leone.

ABERDEEN MEDICAL OFFICERSHIP OF HEALTH.

DR. THEODORE THOMSON, of the Metropolitan Asylums Board, is a candidate for this office. The Public Health Committee have resolved to recommend to the Town Council that the salary be £300. They suggest to take away part of the work allotted to the present Officer of Health and transfer it to another officer; hence the reduction of salary.

ABERDEEN SICK CHILDREN'S HOSPITAL.

THE annual meeting in connection with this institution was held on March 3rd, when the formal opening of the new wards took place. The buildings now afford accommodation for about 60 children as in-patients in the general wards, and 18 children in the infectious ward. It was reported that the total revenue for last year amounted to £711, while the expenditure had been £717. During the year, 180 children were treated in the wards of the hospital, and at the out-door department 874 received medical benefit.

ABERDEEN ROYAL INFIRMARY.

AT the quarterly meeting of the Court of the Managers of this institution, held on March 8th, it was resolved that the treatment of zymotic diseases in the infirmary, but not including typhoid fever, should, in the meantime, be discontinued at the earliest date practicable. It was reported that there was a considerable decrease in the subscriptions to the infirmary during the past year, in private donations, in general donations, and in the church collections, although there was a slight increase in the annual donations. It was noticed that there had been a very substantial reduction, £314, in the expenses for wines, spirits, and surgical instruments. Professor Struthers was thanked for his services as chairman of the Special Inquiry Committee.

GIFT TO EDINBURGH ROYAL INFIRMARY.

PORTRAITS in oil of the late Professors Sir James Simpson, Syme, and Sanders, have just been placed in the main corridor of the Edinburgh Royal Infirmary; they are the gift of Mr. H. McEwan, of Edinburgh, and were painted by Mr. J. M. Barclay, R.S.A., and were purchased at a recent sale of his works.

KNIGHTHOOD OF PROFESSOR TURNER.

THE profession will have observed, with pleasure, the knighthood conferred, by Her Majesty the Queen, on Professor Turner, of the University of Edinburgh. Especially will the thousands who have attended Professor Turner's classes rejoice in this acknowledgment of the value of his labours.

IMPORTATION OF SPANISH RAGS.

THE Scotch Board of Supervision have taken the same course as the Local Government Board in London, and have renewed the prohibition on the importation into Scotland of rags from Spain for a further period of two months from March 1st.

EXTIRPATION OF THE UTERUS FOR CANCER.

THIS operation was performed on January 22nd by Mr. J. Stuart Nairne, Surgeon to the Glasgow Samaritan Hospital for Women. The uterus was removed through the vagina, and Dr. Alex. Rankin, whose patient she is, has reported the favourable progress of the case.

BEQUESTS TO MEDICAL CHARITIES.

THE late Miss Christian Wardlaw Bardner, of Queen Anne Street, Dunfermline, has bequeathed the following legacies to medical charities: to the Royal Infirmary, Edinburgh, £500; the Edinburgh Medical Missionary Society, £300; Edinburgh Association for Incurables, £300; the Scottish National Institution for the Education of Imbecile Children, Larbert, £300.

DUNDEE ROYAL INFIRMARY.

AT the quarterly meeting of the governors of the Dundee Royal Infirmary, the chairman of the House Committee gave particulars of certain improvements and alterations which were proposed to be made on the buildings. Among other things, it was proposed to erect a mortuary apart from the main building, that the present mortuary should be converted into a dispensary, and that considerable alterations and additions should be made in the accommodation for nurses and servants. The work proposed is estimated to cost about £3,500. The directors have promised to consider the matter. A suggestion was also made that a lay chaplain should be appointed for the infirmary. The accounts of the Convalescent Home at Barnhill again show a deficit; the total income for 1885 was £1,069 16s. 10d., and the expenditure £1,245 10s. 5d., leaving a deficiency of over £175. It was decided to alter the by-laws, so that the directors might, if they thought fit, appoint qualified assistants in the medical and surgical departments.

IRELAND.

THEIR EXCELLENCIES the Lord Lieutenant and the Countess of Aberdeen, visited the Mater Misericordiæ and St. Vincent's Hospitals last week.

ST. MICHAEL'S HOSPITAL, KINGSTOWN.

A GRAND BALL, in aid of the funds of this Institution, was given last week in the Town Hall, and was well attended.

BEQUESTS.

MR. PATRICK A. SMITH, a Dublin solicitor, has bequeathed the following sums to Dublin hospitals, namely: to the Mater Misericordiæ

Hospital, £200; to St. Vincent's Hospital, Dublin, £200; to the Coombe Lying-in Hospital, £200; Mercer's Hospital, £200; to Sir Patrick Dun's Hospital, £200; to Baggot Street Hospital, £100; and to Jervis Street Hospital, £200; and the residue of his property subject to certain legacies and annuities, he has also left to the Mater Misericordiæ Hospital, to St. Vincent's Hospital, and to another excellent Dublin charity, in which the testator took much interest, namely, the Night Refuge.

THE CORPORATION OF CORK AND THE NORTH FEVER HOSPITAL.

LAST week, a deputation waited on the Town Council from the Trustees of the North Fever Hospital, to make the usual half-yearly application for a sum of £700 for the use of that institution, the Law and Finance Committee of the Corporation having recommended that £500 should be granted. A member of the deputation said that the last half year's presentment had left them still in debt; they had gradually been decreasing their indebtedness, and, if the Corporation only gave them a reasonable amount for the support of the institution, they hoped to get rid of the debt before long. They had greatly reduced the expenditure within the past year, but, on account of the nature of the institution, they were compelled to keep a very large staff, but the result of their labours was that fever had very much decreased within the last year or two in the city. After some discussion, a sum of £600 was granted. That the Corporation are very liberal towards the hospital, as compared with the citizens, can scarcely be doubted, when we learn that the private subscriptions for the past six months only amounted to £31. The Corporation is compelled to pay a sum towards the expenditure of the hospital, but that sum is only to be equal to one-half of the private subscriptions, so that for the past half-year the Corporation, instead of granting £500, need only have allowed about £16.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting of this College was held on Thursday, March 11th; Dr. Ogle, Vice-President, in the chair.

Certificates in hygiene were granted to Messrs. E. English and J. F. Williams.

A report was read from the Council relative to the proposals brought before the College by Dr. West for the appointment of Standing Committees for the consideration of questions (1) of medical education, (2) of professional interest, and (3) of public interest. The Council reported adversely to the proposed change, and pointed out that there was no difficulty at any time in obtaining a committee to consider any question of importance, and that such questions were more satisfactorily considered by a committee nominated *ad hoc* than they could be by any standing committee.

After considerable discussion, it was resolved that the report of the Council should be printed, along with the suggestions and explanations of Dr. West, and circulated among the Fellows; the debate on the subject being postponed to the next *Comitia*.

An important report was received from the Committee of Management of the conjoint examinations relative to changes which they consider advisable in the first examination. The principal changes are as follow: 1. Medical botany to be entirely omitted; 2. Candidates to have the option of taking the subject of materia medica and pharmacy either in the first or in the second examination. 3. The chemical part of the examination in materia medica to be transferred to the examination in chemistry; 4. Considerable modifications to be made in the synopses of chemistry and of materia medica. In the latter subject especially, the range has been greatly limited, but more stress will in future be laid upon the physiological action of drugs.

These proposed changes met with the approval of the College.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held on Thursday, March 11th.

A motion for a vote of condolence with Mrs. J. Cooper Forster and her family was passed unanimously.

It was directed that the Secretary do inform William Turnbull of his removal from being a Member of the College, in consequence of his conviction for manslaughter, and that the usual information be sent to the Registrar of the General Medical Council.

Mr. G. R. Wyatt was admitted a Fellow.

The report, dated the 3rd instant, of the committee on the mode of obtaining the Fellowship, was read.

Two methods of widening the basis upon which the Fellowship is obtained have been especially considered by the committee. By one of these the council would elect to the Fellowship, every year, a certain number, not exceeding ten, of Members of the College, of not less than twenty years' standing, who are distinguished by scientific or professional ability or by good service rendered to the profession or the public, and who are recommended by ten Members of the College, of whom at least half shall be also Fellows, none of the Fellows so recommending being members of the council. By the other method, Members of not less than fifteen years' standing would be exempted from the first professional examination for the Fellowship—that, namely, in Anatomy and Physiology, and would be required to pass only the second examination as defined in the regulations for the Fellowship.

Both methods were adopted, it being shown that the two were not incompatible.

The committee were of opinion that the Council should acquire the power of electing annually two persons, who shall be considered and named Honorary Fellows of the College, and who, whether Members of the College or not, should be persons who have rendered distinguished service in the advancement of surgery or the sciences allied to surgery. The Honorary Fellows should, in the opinion of the committee, be exempted from the payment of any fee, and should not have the right of voting for or becoming members of the council. This recommendation was adopted.

The first report of the committee on the question of Degrees in Medicine and Surgery was read, received, and entered on the minutes.

The report from the Committee of Management was read, the following resolution of that committee being adopted:—1. That Medical Botany be omitted both from the subjects of examination and from the curriculum of professional education; 2. That candidates be allowed the option of taking the subjects of Materia Medica and Pharmacy either as part of the first or as part of the second examination.

The President reported to the Council the arrangements made for the ceremony of laying the foundation stone of the New Examination Hall on the Embankment by Her Majesty the Queen, on the 24th inst., and also stated that, with the permission of the Council, which was given, he proposed to give a *conversazione* at the College during the summer.

Mr. T. Smith was elected a member of the committee of management, in the vacancy occasioned by the decease of Mr. Forster.

A letter of the 2nd instant was read, addressed to the President, from Dr. R. Collum, President of the Association of Members of the Royal College of Surgeons, enclosing a copy of a resolution, carried unanimously at a meeting of the Central Committee of the Association on the 26th ultimo, expressive of the intention of the Association to resist any proposal largely to increase the number of Honorary Fellows of the College.

The Council proceeded to the further consideration of Mr. Macnamara's motion postponed on January 14th. It was moved by Mr. Macnamara and seconded by Mr. T. Smith, in the following terms:

That the Fellows be requested to state, if in their opinion, it be desirable to extend to Members the right to vote at the Annual Elections of Fellows as members of Council. This resolution was lost.

Mr. Marshall gave notice that he would propose a resolution at the next meeting in reply to the resolution adopted by the Fellows and Members at the last General Meeting.

At the ceremony of opening the Examination Hall, Students will be represented by a guard of honour, consisting of the Volunteer Medical Ambulance Corps and the Medical Company of the Artists' Corps. Tickets will be sent to all Fellows and Members who have gained places by lot. A limited number of ladies will be admitted.

The Archbishop of Canterbury will open the proceedings by a prayer, and then an address from the Colleges will be read to Her Majesty. The choir of Savoy Chapel and a Military Band will be in attendance.

WESTMINSTER OPHTHALMIC HOSPITAL.—The report states that there is accommodation for fifty in-patients; but only fourteen free beds can now be occupied, owing to want of funds.

MEDICAL MAGISTRATES.—Dr. Dysart, of Portglenone, has been appointed to the Commission of the Peace for County Antrim.—Dr. Barbor, of Carlingford, has been appointed a Justice of the Peace for County Louth.

BRITISH MEDICAL ASSOCIATION.

PARLIAMENTARY BILLS COMMITTEE.

MEMORANDUM ON THE LUNACY ACTS AMENDMENT BILL. [H.L.]

THE following is the official memorandum explanatory of this Bill.

Principal Objects of the Bill.—The principal objects of the Lunacy Acts Amendment Bill are—

I. To furnish safeguards against the improper confinement of persons as lunatics.

II. To put a stop to the system of single patients, except in the case of lunatics so found by inquisition, and to prevent the establishment of any new licensed houses.

III. To give facilities for the medical treatment of persons who desire to submit to treatment, and of idiot and imbecile children.

IV. To enable public asylums to be provided for the reception of lunatics not paupers.

V. To give increased powers to the court for administering the property of lunatics.

VI. To make certain amendments in detail, with a view to a consolidation of the Lunacy Acts.

The Bill adopts in the main the recommendations made by the Report of the Select Committee on Lunacy Law in the year 1878.

Confinement of Persons as Lunatics.—I. The principle of the Scotch procedure has been adopted with somewhat fuller elaboration of details. The Bill provides (section two) for the appointment of special justices to make orders for the reception of lunatics not paupers, and (section three), except in cases of urgency, a person not a pauper is not to be confined as a lunatic without an order of a county court judge, stipendiary magistrate, or justice, to be obtained upon a petition presented, if possible, by a relative and accompanied by two medical certificates. Provision is made to secure privacy, and in order to give the county court judge, magistrate, or justice something more than "merely ministerial" functions in cases which require investigation, he is empowered, if he considers the statements in the medical certificates unsatisfactory, to make inquiries, and, if he thinks it necessary, to visit the alleged lunatic.

Urgency Orders.—In urgent cases (section four) a patient may be confined upon an order by a relative accompanied by one medical certificate; but in that case a petition for an order must be presented to a county court judge, stipendiary magistrate, or justice, within seven days, and the urgency order remains valid only for the seven days or so long as the petition is pending.

Disinterestedness of Medical Practitioners.—Sections six, seven, and eight are intended to secure that the medical certificate shall be signed by disinterested persons.

Officiating Clergyman and Overseer not to confine Paupers. Workhouses.—The power of an "officiating clergyman" and overseer to confine a pauper patient is taken away (section ten), and provision is made to prevent the improper confinement of lunatics in workhouses (section thirteen).

Reports on Patients. Payment of Medical Visitor.—A report upon every private patient (section twenty-one) is to be sent to the Commissioners in Lunacy within a month after the patient's reception as a lunatic, and a visit is to be made to the patient as soon as possible. If the patient is found to be improperly detained, he is to be discharged. Patients in hospitals and licensed houses beyond the immediate jurisdiction of the Commissioners are to be visited by the medical visitor appointed for the county or borough, and provision is made for his remuneration (section forty-four (3), (4)).

Orders for Reception to come to an End in Three Years if not Continued.—At the end of three years after the reception of a patient, and at the end of every subsequent year, a special report is to be made on his case (section twenty-two). If no report is made, the order for his detention comes to an end. If the report is not satisfactory the patient is to be visited, and if it is thought proper, discharged.

Medical Examination at Instance of any Person.—Any person may apply to the Commissioners for authority to have a patient medically examined with a view to his discharge if his detention should prove improper (section thirty).

Maintenance of Pauper Lunatic.—Encouragement is given to the relatives of a pauper lunatic to take charge of the lunatic by allowing the visitors of the asylum to pay for the lunatic's maintenance while under the care of his relatives (section thirty-two).

Lunatics in Religious and Charitable Establishments.—Power is given to the Commissioners to make inquiries as to persons who are treated as lunatics in charitable and religious establishments, and in the houses of persons who derive no profit from the charge (section thirty-three).

Single Patients.—II. After the passing of the Act, no order is to be made for the reception of a lunatic as a single patient unless he is a lunatic so found by inquisition (section twenty-six (1)).

The powers of the Commissioners over single patients (sections twenty-six, twenty-seven) and their powers of discharge and removal are enlarged (sections twenty-three, twenty-four).

Boarders in Hospitals and Licensed Houses.—No new license is to be granted for a house for the reception of lunatics (section forty-three).

III. Persons who, though of unsound mind, are desirous of submitting to medical treatment may be received as boarders in hospitals and licensed houses (section thirty-one).

Institutions for Imbeciles.—Institutions for the training of idiot and imbecile infants are recognised and exempted, under proper safeguards, from the general law as to lunatics (section thirty-four).

Private Patients in Public Asylums: Select Committee Report, p. vi.—IV. Persons not paupers may be received in county and borough asylums upon special terms, and the justices of counties and boroughs are authorised to provide accommodation for lunatics not being paupers either by enlarging existing asylums or by establishing new asylums (sections fifty-six, fifty-seven, fifty-eight).

Justices are also empowered to purchase licensed houses (section fifty-eight (2)).

Powers of Secretary of State enlarged.—Powers are conferred upon the Secretary of State to enforce proper provision being made in counties and boroughs for the accommodation of lunatics, including lunatics not paupers (sections sixty, sixty-one).

Committee of Estate only.—V. Power is given to the court to appoint a committee of the estate only of a person who, upon inquisition, is found capable of managing himself, but incapable of managing his affairs (section forty).

Administration of Property.—Although under the existing law a person may be deprived of his personal liberty upon an order signed by a relation and two medical certificates, there is no power (except in cases under two thousand pounds, or one hundred pounds a year) to protect and administer his property without the expensive procedure of an inquisition. This is amended by giving power to the Judge in Lunacy to exercise all the powers over the property of a person confined under order and certificates, or incapacitated by age and infirmity, which he could exercise upon inquisition found (section forty-one).

Miscellaneous Amendments.—VI. The Bill makes a large number of miscellaneous amendments, which the practical working of the Acts has shown to be desirable. Of these, the most important are:

a. As to the letters of patients (section thirty-eight).

b. Amendments as to licensed houses (section forty-four).

c. Amendments as to asylums (section sixty-five).

d. The provisions for the registration of hospitals where lunatics are received (sections forty-six to fifty-four).

e. Power to retake lunatics escaping into Ireland, Scotland, or England (sections sixty-six, sixty-seven, sixty-eight, sixty-nine).

Power has also been taken to amalgamate the lunacy departments, if it is found expedient to do so (section seventy-four).

A Bill consolidating the existing enactments, has been prepared and printed for convenience of reference as to the existing law, with a view to the ultimate incorporation with it of the Amendment Bill.

RECOMMENDATIONS OF THE SUBCOMMITTEE OF THE PARLIAMENTARY BILLS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION FOR ITS AMENDMENT.

ADOPTED MARCH 5TH AND 9TH, 1886.

[*Comments within Brackets.*]

THE Subcommittee desires to submit to the Right Hon. the Lord Chancellor the following suggestions, namely:

SECTION 3, SUBSECTION 1, PAGE 2, LINE 31, for "or" substitute "and," so that it is made clear that new orders, and by justices, etc., are not necessary for the present inmates of asylums.

SECTION 3, SUBSECTION 8, PAGE 3, LINE 39. *To omit the words "separately from the other;" and in Schedule, Form 8, page 48, line 8, to omit the words "Separately from any other practitioner."*

[The object of the suggestion is to secure perfect freedom of consultation and co-operation between the medical men who sign certificates of insanity.]

SECTION 3, SUBSECTION 9, PAGE 4, LINE 10. *To insert the word "registered" before the word "letter."*

SECTION 3, SUBSECTION 11, PAGE 4, LINE 21. *After the word "thereof" to add the following words, "And all documents and papers relating thereto shall be held to be privileged."*

SECTION 4, SUBSECTION 1, PAGE 6, LINE 15, after "may" to insert "notwithstanding that a petition has already been presented." This would provide for the more rapid placing under care of a patient with regard to whom a petition had been made under Section 3, should the necessity arise.

SECTION 5, SUBSECTION 6, PAGE 8, LINE 31, after "Justice" to insert "or the Visitors of any asylum in which the lunatic is, or is intended to be, placed." This would make the Subsection the same as at page 8, line 39 of Amended Bill of 1885.

The Visitors, who would know more of the case than the Justice, could then act in most cases where discharge of patients to care of their friends is thought desirable.

SECTION 7, SUBSECTION 4, PAGE 10, LINES 1 and 2. It is suggested to omit "under an order made on the application of;" and thus enable Governors of lunatic hospitals to apply for such orders of reception.

SECTION 8, SUBSECTION 5, PAGE 10, LINE 26. *After the word "faith" to add "And a person, who, in the manner required by this Act, receives and detains a person as of unsound mind, shall not be liable to any civil or criminal proceedings for receiving and detaining such person, if such reception and detention are done in good faith."*

[This suggestion is respectfully urged in order to provide the same protection to those medical men and others who receive and detain patients, in the manner required by the Act, as is provided in the Act for the medical men who sign the medical certificates of mental unsoundness of the very same patients. The character of some actions brought in recent years against the medical officers of public lunatic hospitals, indicates the necessity for protection of the kind here sought, and the inadequacy of the present law to afford such protection.]

SECTION 13, SUBSECTION 6, PAGE 11, LINE 38. *To omit the words "not being an officer of the workhouse;" and for "practitioner" read "practitioners;" and in line 39 for "examines" substitute the word "examine."*

SECTION 13, SUBSECTION 7, PAGE 11, LINE 41, and PAGE 12, LINE 6. It is suggested that the words "alleged" and "deemed" be so explained in the Act as to make it clear to whom they would apply; and in Subsection 8, page 12, line 15, to omit "for each day, or part of a day, after the first and before the notice is given, during which the lunatic remains in the workhouse."

At present the Subsection appears to expose the Medical Officer of a workhouse to ruinous damages for not acting in a case where he is in doubt as to the mental state of the pauper.

[The object of the change above suggested is to make it clear (the effect of the Subsection being matter of controversy) that the medical officer of a workhouse shall receive some remuneration for the examination or certification of an alleged lunatic in the workhouse (except in cases where he has contracted to perform every duty, and all the duties that may devolve upon him, in return for a fixed salary)].

SECTION 15, PAGE 13, LINE 1. *Schedule*, Form 9, page 51, line 4, after "practitioner" insert "and having personally examined."

There being only one medical certificate necessary in cases of paupers (not in workhouses), it is felt to be desirable that the present requirement that the Justice who signs the order of admission of a pauper patient to an asylum should personally examine the alleged lunatic, should not be discontinued under the new Act.

SECTION 16, SUBSECTION 3, PAGE 13, LINE 19. *To omit this Subsection, and to insert, after the word "misdemeanor," line 18, a new Section (16a), namely:*

"No action or prosecution under this Act shall take place except by order of the Commissioners, or by the direction of the Attorney-General or Public Prosecutor."

[This suggestion is submitted with the object of substituting for the provision in Subsection 3, of Section 16, a more general one, relating to both civil and criminal actions or prosecutions of any kind under the Act.]

The Subcommittee also desires to draw attention to the point that the number of authorities who may authorise such action or prosecution has been increased in the present Bill, and fears that the fact that, under the Bill, several different authorities may set the law in motion, will augment the possibility of vexatious or frivolous actions being brought, by tending to make practice and precedent unstable with regard to this matter.

SECTION 17, PAGE 13, LINE 24. It is suggested to omit the words "may be exercised," and at line 25, after the word "Commissioners," to insert "may, if they think it to be desirable, be exercised."

[This is suggested in order that trivial matters requiring alterations need not be referred to the Justice.

It is respectfully urged that if the effect of the Section should be that the present licensed houses cease to be licensed on the death, or disablement, or retirement of the present holder or holders of the licences, the actual effect in some cases would be to confiscate at an early date, and sooner or later in nearly all, or all, the greater part of the value of an asylum, this being an estate representing, in some cases, the earnings of a lifetime, or of more than one, and the provision made by men for their families and those dependent upon them. Large sums of money have been expended in buildings, and otherwise in connection with their establishments, by the proprietors of private asylums, and, in most cases, at the urgent request or pressure of the Commissioners in Lunacy. Most of this would be lost by the sudden closure of the asylums; and, where money had been borrowed to build the extensions required, the result might be confiscation of the entire value of the property as far as the licencee was, or his heirs were, concerned, and of everything he had had to leave for the support of his family.]

SECTION 22, PAGE 16.—*It is suggested (a) to omit this Section. (b) If the Section be not omitted, it is suggested, at page 17, line 19, to omit "a special report of the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the licensed house, or of the single patient, as to the mental and bodily condition of the patient with;" and on line 25, after the word "directed," to add "by the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the licensed house, or of the single patient."*

[These suggestions flow from the belief that except where the number of patients is small, the provisions of the Section would periodically necessitate a very large amount of extra routine work on the part of the medical superintendent, and thus for a time completely absorb his whole attention, to the detriment of his other numerous and important duties. And in the very large asylums it would seem to be impossible to thoroughly carry out the provisions of this Section within the space of time allowed by the Bill. Imperfectly recovered lunatics will constitute a serious danger to the community when at large, and the tendency of the Section will certainly be to set many persons at liberty before recovery has become sufficiently established. And it is thought to be extremely desirable that the signing and making of *all* reports or certificates required under the Act, or under this section of it, should be protected in like manner as is the signing of certain certificates in Section 8, Subsections 4 and 5, page 10.]

SECTION 20, SUBSECTION 2, PAGE 14, LINE 20. It is suggested to omit the words "anyone of the persons who would have been entitled under this Act to present a petition for an order for reception of the patient, or if there is no such person, or no such person willing to act," and substitute the words "the person who made the last payments for his maintenance, or who is liable for, or who is the chief guarantor of, the payments for such maintenance."

As it stands, it is almost inevitable that the subsection would occasionally place the power to discharge a patient in the hands of undesirable persons.

SECTION 23, SUBSECTION 4, PAGE 18, LINE 40. After the word "house," to add "on a report to the Lord Chancellor, a copy of which shall be sent to the person in charge of the patient, and to the person who pays for his maintenance."

SECTION 26, SUBSECTION 1, PAGE 19, LINE 33.—*It is suggested that this Subsection be omitted.*

[The provision that, except in the case of lunatics so found by inquisition, no order shall be made for the reception of a lunatic as a single patient, would, in some cases, lead to grave inconveniences and hardships; as in the treatment of the early stages of insanity in those cases where the patient cannot be properly treated at home, but is not in a state which makes treatment in an asylum necessary. And the same remarks apply to a considerable number of single patients who, being insane, are but slightly so, and who enjoy a large amount of liberty in domestic life. And, if patients are permitted to become voluntary boarders in asylums, it is suggested that they be also permitted to reside with a medical man on the same footing. Many such patients have not sufficient means to render it desirable that they be made lunatics so found by inquisition, and thus secure the right to become single patients. The section would involve loss to a considerable number of medical men who receive single patients.]

SECTION 27, PAGE 20, LINE 16.—*After the word "lunatic," to add words making it clear that the Section does not apply to any person receiving a fixed salary for temporarily taking charge of a lunatic at home or in apartments hired by the patient's friends.*

SECTION 30, PAGE 21.—It is suggested, at line 21, for the words "undertake to pay and discharge," to substitute "give satisfactory security for the payment and discharge of."

Further, it is suggested to add to this Section the same provisions with regard to the medical persons who sign the certificates, under this Section, as are made in Section 7, subsection 3, page 9.

It is to be anticipated that under this Section vexatious and wholly unnecessary proceedings will sometimes be instituted, and that it is likely to lead to the discharge of persons who are in an unfit state for discharge.

SECTION 31, PAGE 21.—It is suggested to omit subsection 2. And in subsection 5, page 22, line 5, for "twenty-four hours' notice," to substitute "three clear days' written notice," and to make the same alteration at subsection 8, page 22, lines 17, 18; and on page 22, to omit line 21.

[These suggestions would preserve to persons, who are boarders, the advantages of the Section, and would enable other arrangements to be made when a boarder was about to use the power of self-discharge to his own disadvantage during a recurrence of mental disturbance, excitement, morbid impulse or propensity. Unless the notice is a written one, any statement by a boarder—made in a fit of irritability or petulance—that he would leave, might afterwards be made the basis of a demand for damages, for detention after the expiry of an asserted "twenty-four hours' notice."]

SECTION 32, PAGE 22.—It is suggested that, after the word "confined," the words "for more than two years" be added.

SECTIONS 38 AND 39.—It is suggested that these Sections be omitted.

Should they not be entirely omitted, it is suggested to omit Section 39 and all of Section 38 after the word "be," page 27, line 2.

[The correspondence of patients in asylums is thought to be already duly protected, inasmuch as all letters to certain persons and authorities must be forwarded, unopened, and any letter written by a private patient, and not forwarded to the person to whom it is addressed, must be endorsed to that effect, and laid before the Visiting Commissioners, Committee, or Visitors, as the case may be, on their next visit.]

SECTION 43, PAGE 30, LINE 2. *The Subcommittee decided to call the attention of the Lord Chancellor to the wording of this Section, which appears to be inconsistent with the wording of the Memorandum, number* 2, *page* 1, *and paragraph* 3, *of Memorandum* 2, *on page* 2; *and that he be requested either to omit the words "to any person or persons;" or, if it be intended to make the licence dependent upon the person, in that case, to consider the propriety of granting due compensation to the person or persons whose property would thus be confiscated without compensation.*

[It is not quite clear that the Section has the same bearing as the object stated in the Memorandum on pages 1 and 2; namely, "to prevent the establishment of any new licensed houses."]

SECTION 44, SUBSECTION 9, PAGE 31, LINE 11. *It is suggested that this Subsection be omitted. The Subcommittee would respectfully urge that the licensed houses affected by this Subsection be dealt with as regards pauper patients on the same terms as it is proposed to deal with them as regards private patients, in the preceding Sections of the Act.*

[The accommodation provided by private asylums for pauper lunatics has, from time to time, met a temporary public want, and can only be utilised when there is not room in the County asylums.]

SECTION 54, PAGE 35, LINE 10. It is suggested to add a Subsection that for each registered lunatic hospital a medical superintendent should be appointed, whose time should be devoted to the work of his appointment.

SECTIONS 66-7-8. It is suggested that jurisdiction should be extended so that the "leave of absence," at present obtainable in appropriate cases, may be granted, permitting the patient to reside temporarily in any part of the United Kingdom.

SECTION 73, SUBSECTION 1, PAGE 41. It is suggested that this Subsection be omitted. It is submitted that the provisions at present made by law are adequate to ensure the proper sending of documents; and it would not be feasible to secure in all cases that the oath of one witness should be available for the purpose of proving that each document is "properly addressed and put into the post in due time."

SCHEDULE, PAGE 45, FORM 2, LINE 19. To add "and in what way?"

SCHEDULE, PAGE 45, FORM 2, LINE 20. To add "and in what way?"

SCHEDULE. FORM 5, PAGE 48, LINES 14 and 15. *The Subcommittee suggests that it is desirable to omit the words "I am not acquainted with the contents of any other medical certificate relating to the mental condition of the said C. D. made within the last seven days."*

[By the Bill it is proposed, and the Subcommittee thinks rightly, to permit previous consultation between the medical men signing the certificate in question. In some cases, one of the medical men would know the substance of the medical certificate signed by his fellow-consultant in the case, and, seemingly, could not well sign the above declaration.]

SECTION 20, SUBSECTION 3, PAGE 14, LINE 27, and in SECTION 24, SUBSECTION 3, PAGE 19, LINE 21, and in SECTION 72, SUBSECTION 1, PAGE 41, LINE 16, it is suggested to omit "for each day or part of a day during which the default continues." And in SECTION 72, SUBSECTIONS 2 and 3, for "fifty," to read "ten."

The object is to lessen the severity of the punitive clauses; which would bear hardly on breaches of the Act due to inadvertence.

THE ILLNESS AND DEATH OF MR. COOPER FORSTER.

As Mr. Cooper Forster's last illness was one of some obscurity, and, apart from his personality and its melancholy ending, was one of professional interest, we give the following details respecting it.

Dr. Wilks writes: Three possible causes for Mr. Cooper Forster's illness were discussed by his medical attendants, and the *post mortem* examination did not satisfactorily determine which of them, or any other, was the efficient one.

Mr. Cooper Forster left London for Cannes on January 21st, and remained there till February 11th, when he went to Nice, and, four days later, proceeded to Mentone. On Tuesday, February 23rd, he returned homeward. At the beginning of February, he began to feel unwell, lost his appetite, and could not take his accustomed walks. These symptoms continued till about a week before he returned to London, when his appetite failed altogether. He determined then to come straight home. He could not secure a *coupé lit*, and was forced to travel by a crowded train. He was able to lie down, owing to the kindness of fellow-passengers; but took no more than a little soda-water during the cold journey of thirty-six hours. When he arrived home, his servant was struck by his death-like appearance, and his extreme weakness. He was put to bed, and some brandy given him. When I saw him, he had a most haggard look, spoke in a whisper, as if suffering from the most extreme exhaustion. After a few hours, he became very feverish, his tongue parched and hard, and his temperature 103°. This temperature was reached each successive afternoon, and falling two degrees in the morning. His loathing for food was extreme, and most of what he took he rejected. Dr. Habershon then saw him, and was unremitting in his attention until the end. No maculæ appeared, and no diarrhœa. He passed a very restless night, and on the following day could still take but little food. Dr. Habershon suggested some effervescing quinine, but he refused a second dose. We were first in hopes that his loss of appetite from foreign living was the sole cause of his illness, but we subsequently believed that he must have been the victim of typhoid fever. Sir J. Paget and Mr. Hutchinson discovered no cause for blood-poisoning, but the latter thought that a chronic skin-eruption from which the patient suffered was important. There was a painful spot in the left arm, which he attributed to a sprain in fishing. On the third day, he took his food, stimulants, and quinine better, and we believed we saw an improvement. On the fourth day, he continued to take a fair amount of nourishment, but in the evening became more prostrate, with a pulse more feeble, and gradually sank.

Dr. James Anderson and Mr. J. Hutchinson, jun., made the *post mortem* examination. They found the organs congested, as is usually the case in those dead of blood-diseases, and they thought the kidneys were not quite sound. These organs acted most efficiently during life. There was no disease of the intestines. This fact excludes the question of typhoid—unless, indeed, it may exist without the usual phenomena in persons of advancing age. In these, Peyer's patches are inactive or atrophied, a reason given by Dr. Tweedie why typhoid fever does not affect aged persons. If the theory be true that Peyer's glands first receive the germs, and then develop it until they become the infective source of other diseases, it might even then be a question whether the system would be completely proof against the effects of the typhoid poison, even if these glands no longer existed. If so, it might kill without the usual intestinal lesion, just as scarlatina may prove fatal without a rash, or variola without pustulation. In typhoid, however, the anatomical basis is supposed to lie in the intestines, and, with our present views, the possibility of its existence without this must be rejected.

As regards Mr. Forster's illness having been due to a subacute gastritis, brought about by unpalatable food, there is much to be said in its favour. The capability of producing a febrile condition is set at

rest by the observation of Sir J. Paget, when we talked it over in consultation. Sir J. Paget had a relative, a clergyman, working hard in the east end of London, and, forgetful of the necessity of eating good food, he became so much impoverished that he was obliged to desist from his labours, but, by care and feeding, soon regained his health. During the time of his illness, the temperature of the body was much above normal. One is aware that, in children, the fever accompanying gastro-intestinal disorder is very high, and to this complaint the name gastric fever was formerly appropriately given. The term is now discarded, as it was constantly substituted for the more specific term typhoid ; nevertheless, there is much need of the expression, since the fever is the most marked symptom, and the gastric disturbance not sufficiently defined to allow an anatomical name. Our patient might be said, then, to have gastric fever, brought about much in the same way as in children—by improper diet. He had not travelled during youth, and, when of late years he had gone abroad, he had, on the two occasions, suffered much from the living. I met him once at Cologne, and he was then ill, suffering from gastro-intestinal disturbance, and looking very haggard. I prescribed for him, and he hurried home. On the other occasion, his son-in-law informs me, he became very ill, and lost flesh. He was naturally a good feeder, and liked good things ; the foreign cookery was not to his taste, and he could rarely obtain a meal to his order.

Everyone must have known friends, if he have not suffered in his own person, affected by strange viands. In spite of the variety of dishes, the perpetual iteration of the same sauces to accompany what the *menu* may please to call fish, flesh, and fowl, produces at last absolute disgust, until the appetite altogether fails, the tongue becomes coated, and a change of residence is absolutely necessary. In Mr. Forster's case, there were two precedents exhibiting the ill effects of foreign diet. In the last and fatal instance, he remained abroad until he absolutely ate nothing, fell into a state of inanition, and then took a journey of thirty-six hours in the bitterest weather. It may be remembered, too, that his character was such as likely to make him suffer more than those of a placid disposition. Although an amiable man, and good-natured to an extreme, so that he was never so happy as when he was regaling his friends around him, he was imperious. In an English hotel, his presence was soon known to host and waiters, and his dinner and wines were at his dictation, and not theirs ; or on a railway journey, station-master and guards soon found that they had a passenger to be respected. But in a foreign land he had to succumb. Often he could not get his meals *à la carte*, but was forced to sit down to the filthy *table d'hote*, and, against his will, to be thrust into the last seat of a crowded railway carriage. He was thus liable to be in constant opposition, instead of accommodating himself to the novel surroundings. All these circumstances must be taken into consideration in discussing the cause of our friend's death. From what I know of him, I believe that the inanition caused by want of accustomed food, and the annoyance of strange customs, were sufficient to account for his fatal illness.

The following additional memoranda as to Mr. Cooper Forster's illness have been forwarded to us by Mr. Jonathan Hutchinson.

The death, after a very short illness of an obscure nature, of one so highly esteemed and widely friended as Mr. Cooper Forster, has naturally excited much and painful interest in professional circles. I had written out the following memoranda for my own use, but am induced by Dr. Wilks to offer them, with a few modifications, as an appendix to his own more valuable report. Dr. Wilks saw much more of our mutual friend during his last week of life than I did, and the case was essentially a medical one. Anything that I can add must be taken as of value only in reference to the dermatological part of the case. It will be seen that, even with the negative light afforded by the necropsy, the illness remains one which it is difficult, if not impossible, to name. All will probably agree that, whatever the original malady was, the unfortunate journey home much hastened its fatal progress ; but on other points opinions will doubtless differ widely. The case is, in itself, an important one, and, apart from the personality of its subject, deserves to be placed on record in detail.

On Wednesday evening, February 24th, I received a telegram from my friend at Dovercourt, asking at what time he could see me in the morning. He gave no address at Dovercourt, and his message implied that he intended to call on me. I at once sent a reply to his residence in Upper Grosvenor Street, saying that I would call on him if he would let me know when he reached home. To this I had no answer, and consequently I did not call to see him till the afternoon. He had never opened my letter, having felt too ill to do so.

On Thursday, February 25th, I called and saw him in bed ; Dr. Wilks having seen him, before I did, on the same morning. He told me that he had an eruption. He took off his night-shirt, and showed me an eruption of brown papules on his chest and back. They were from the size of half-peas to that of sixpences, slightly raised and well margined. Some of them were rather smooth in the middle, but none actually glossy. One on the right shoulder was larger than the rest, as big as a halfpenny, and considerably raised in the centre. Most of them were rather thicker in the middle than at the margins, and shelved down gradually. He had few or none on the abdomen and limbs. He told me that the eruption had first been noticed on his chest, before he left home for Cannes, on January 21st. This would have been about six weeks ago. He said that, while at Cannes and Nice, he had been losing flesh and strength, had had a poor appetite, and had been "dreadfully constipated." He had travelled home alone, and I understood that his motive was to get advice as to his eruption, about which he was very anxious. He said that he had suffered much in his journey home, and had not been able to take any food. He looked very ill, but was perfectly clear in his mind. He left his bed for my inspection of the eruption. I examined his throat, and found no sores on the tonsils, but was struck with the red colour of all parts of his mouth, tongue, cheeks, palate, and fauces. I thought that his mouth must feel sore, but he assured me that it did not. It was not at this time dry, but simply very red. Dr. Wilks afterwards told me that it had been dry in the morning. He had been standing out of bed for a few moments for my inspection. The light was very bad—that of a foggy afternoon—with a chamber-candle. I suggested that his eruption looked a little like lichen planus. To this he replied that he had felt sure that I should call it "lichen planus." It will be observed by dermatologists that it did not closely conform to that disorder. I asked him whether he had worn any new vests ; and he told me that he had ; and that, when the papules were first noticed, he thought they must be due to the irritation of his vest, and had it changed. The spots, however, did not disappear, but continued to come out. At the time of my visit, he had not used the thermometer. I had not one with me. His pulse was then 110, at which he expressed surprise, and said it had never before been more than 80 ; and that he had "had neither rigor nor fever, but only felt desperately weak." He promised to use the thermometer in the evening, when he expected a visit from Dr. Wilks. I advised him that, as no diagnosis could be made, he had better do nothing, but keep quiet, and take light food. He had had some soup, but said that he had not the least appetite. I was to see him again by better daylight next morning.

On Friday morning, it was a dense fog, and I deferred my visit till the afternoon. On calling then, it was still very dark, and I arranged to meet Dr. Wilks next morning, and did not go upstairs.

On Saturday morning, I met Dr. Wilks and Dr. Habershon. They had just been in his room, and, as they suspected fever, and as it seemed desirable to let our patient rest as much as possible, we agreed that I should not trouble him by further examination then, but that we should all meet on the next morning.

On Sunday morning, Sir James Paget was kind enough to join Dr. Wilks and Dr. Habershon and myself in consultation.

Mr. Forster was looking much worse than when I had seen him on Thursday afternoon. He was much more prostrate, and his tongue and mouth were so dry that he could scarcely speak so as to be understood ; yet he was perfectly himself, and quite acute in his remarks. The eruption on his chest and back was less conspicuous, but essentially the same as on Thursday. Some of the smaller spots on the upper part of the abdomen had been suspected as those of typhoid fever, but there was really no definite distinction between them and others on his chest, of the kind already described. He had taken an aperient, which had acted. He had been sick once or twice. He was too ill for us to make any very minute inspection of the skin. He complained of pain in the left arm, which appeared to be sensitive to the slightest pressure on the humerus, just about the insertion of the deltoid ; there was nothing positive. He flinched whenever the bone was pressed, but no enlargement of it could be distinguished. We did not examine it much, on account of his great debility. His mouth was everywhere quite dry, and sticky mucus hung about the pillars of the fauces. We all thought him very ill, and likely to die, but there was no reason to expect such a rapid termination as that which followed. After this consultation on Sunday morning, I did not see him again, as it was deemed a medical case, but he was visited two or three times daily by his friends and colleagues, Dr. Wilks and Dr. Habershon. From what they have told me, I believe that he rapidly grew weaker, in spite of the free use of brandy, quinine, and fluid food. His intellect remained quite clear. His temperature was never (excepting

once, when it was 103° Fahr.) more than 102° Fahr. ; and his pulse often not 100°. His tongue remained dry.

On Monday morning, he looked more depressed, and the unfavourable prognosis which we had all formed on Sunday was strengthened. At the evening visit on Monday, he was so weak that his pulse flickered, and Dr. Wilks made a hypodermic injection of brandy. He was now clearly sinking. He died about four the next morning.

The *post mortem* on Thursday was chiefly of interest, in that it quite put aside the suspicion as to typhoid fever. The small intestines were most carefully examined, and there was no trace of disease. The most conspicuous condition found was acute hæmorrhagic congestion of both kidneys. There was some serous fluid in both pleural cavities, and congestion of the lower and posterior parts of the lungs. These conditions had probably developed during the last few hours of life. No jaundice had been noticed during life, but there was, at the necropsy, yellow staining of all viscera, which suggested its commencement. The heart was healthy.

I am sorry that I cannot give a more exact account of the eruption than I have done. My first inspection of it was by candle-light in a fog, and, as I expected to have other opportunities, I did not keep him long uncovered. I believe that there were a few spots on the forearms, and Dr. Habershon told me that he had noticed one which was scaling. The spots were certainly not the smooth glossy ones of lichen planus, nor did they observe the rule as to uniformity of size.

It seems certain that Mr. Forster was in his usual health when he left for the Continent. Of this, I have been assured by several who saw him just before he started. Whilst away, he failed in appetite and strength, used to complain of being weary, and was occasionally sick. That he was not very ill, even when he started on his return journey, may be assumed from the fact that he elected to travel alone. His reason for hurrying home was, as I understood him, not that he felt very ill, but that he was anxious about his eruption, and did not wish to consult anyone abroad.

That his journey did him great harm, there can be no doubt. It was performed in extreme discomfort. He was unable to take food or to sleep, and the weather was very cold. When he reached his home, he looked like "a man stricken for death," and could only just manage to get upstairs.

The one only objective symptom up to this date had been the eruption on his chest and back. This had begun before he left England, but had increased during his stay at Cannes. I cannot escape the conviction that this eruption was an important part of his illness. It was a very peculiar one. It was almost limited to his chest and shoulders. I think there was none on his lower extremities, and very few and very small spots on his abdomen. It had developed slowly, and there had been no glandular swellings, and no sore-throat.

Next to the rash, the most conspicuous local condition was the red and dry mouth. His tongue (on Sunday) did not show, as is often seen, a dry streak in the middle, but was as dry as it could possibly be in every part, rough and red. Yet he would not admit that his mouth was sore.

His temperatures were never very high (102° Fahr.) ; his pulse did not quicken or fail in power at first, at all in keeping with his appearance of prostration. It was only within twelve hours of death that his pulse materially failed. He had noticed this himself, and told me that it had never been more than 80. My impression is, that the case was one in which a patient, in whom a condition allied to lichen planus was developing, was subjected to cold and fatigue, in a long journey, with the result of inducing local congestions, and of greatly intensifying the constitutional disturbance which now and then attends that disease. Hebra, at first, taught that lichen ruber was always fatal, and only changed his opinion when he found the good results which followed the use of arsenic. Death, however, usually occurred after an illness of some months or a year, and after the skin had become very extensively involved. Some cases of pemphigus are attended, from the first, by great prostration, and many would end speedily in death were it not for arsenic. In such, however, the extent of skin affected is always very much greater than it was in Mr. Forster's case. The redness and dryness of the mouth suggested that acute stomatitis might be about to develop, and that the case might be allied to certain rare affections, in which a very sore mouth is coincident with a skin-eruption, and there is a definite tendency to death from prostration.

If it be suggested that some poison (fever or other) was received during his stay in France, it must be replied that the eruption was undoubtedly present before he left home.

As to the real cause of acute pemphigus or of lichen planus, we know nothing. That they probably concern the nervous system, rather than the blood, may be inferred from the manner in which arsenic cures them.

Of cases in which a sore mouth was coincident with a skin-eruption, and either ended fatally or threatened to do so, I have seen five or six examples. Four were in men about Mr. Forster's age, and two of these died at the end of five months. The eruption on the skin in these was mixed, being like pemphigus in part, and in part papular, with a tendency to papillary growth. In another case (which recovered), only a few papules showed themselves on the backs of the hands. If Mr. Forster's case be one of this class, it is to be noted that the eruption preceded the stomatitis, and that both were insignificant in comparison with the constitutional depression. Indeed, it cannot be said that Mr. Forster ever had stomatitis ; his mouth was simply congested and dry.

That the eruption was in some connection with the constitutional disturbance, is a conclusion favoured by the facts of his stay at Cannes. As early as February 4th, he had complained of weakness after a walk, and had vomited, and from this date he had lost flesh and strength. His eruption had begun to show itself before this, and was increasing as his loss of health increased.

The necropsy was made by Dr. James Anderson and my eldest son, none of Mr. Forster's more intimate friends feeling able to be present. They were not told more than that the case was supposed to be one of typhoid fever, and hence the omission to examine the arm. Excepting at the visit on Sunday, however, the arm had not attracted any attention ; nor had any further complaint of pain in it or elsewhere been made. The following are their notes of the *post mortem* examination, as written out at the time. "Body, bile-stained; abdomen slightly distended ; yellowish from decomposition ; subcutaneous fat considerable. Lungs extremely œdematous and congested ; left base almost airless ; effusion about 15 ounces into left pleural cavity; a few ounces into the right one. Heart, flesh fairly nourished; valves healthy. No effusion into pericardial cavity. Endocardium very bile-stained. Abdomen : dense adhesions of omentum and of liver to anterior abdominal-walls. Tag of omentum adherent and in front of cæcum to abdominal-wall (just above inguinal ring), not recent. Some old adhesions between parts of small intestine. Considerable old inflammation in neighbourhood of gall-duct, with some recent retro-peritoneal hæmorrhage. Foramen of Winslow closed. Nothing abnormal was found in small or large intestine, except that the wall of the latter was much sodden, but showed no ulceration. Kidneys, large ; capsule stripped easily, and surface showed irregular congestion and hæmorrhages, with a few cysts containing blood-stained fluid. On section, the cortex was soft, breaking down at points, and studded with numerous pin-point hæmorrhages and a few as large as a pea. Pyramids congested. Changes most marked in right kidney. Liver, bile-stained and fatty ; no hæmorrhages ; no evidence of distension of ducts ; no calculi in gall-bladder. Spleen large, dark, and of medium consistence. (Signed) JAMES ANDERSON, M.D. ; JONATHAN HUTCHINSON, JUN., F.R.C.S.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THE Council wishes to collect facts in reference to the symptoms, pathology, and treatment of exophthalmic goître. The meeting to be held on May 6th will be specially devoted to this purpose. Communications, whether written or *viva voce*, which bear upon any or all of the following topics, will be acceptable.

1. Cases in which a necropsy was obtained. 2. Cases in which any definite cause could be assigned for the affection. 3. Abortive cases, that is, cases in which the usual symptoms were present for a short time, and in a slight form, and then disappeared. Are such cases common ? 4. Cases which have ended in recovery. 5. Cases which have been kept under observation for long periods. 6. Cases which appeared to be definitely benefited by treatment. Do many cases get well when untreated, and if so, what is the duration of the disease in them ? 7. Cases in which the exophthalmos was such as to threaten the safety of the eye, or to destroy it. What are the best measures of treatment with regard to this special danger? 8. Cases in which symmetrical exophthalmos has been observed without the other symptoms of Grave's disease. 9. In what order do the following symptoms usually appear and disappear :—(*a.*) Palpitation and throbbing of carotids ; (*b.*) Enlargement of the thyroid ; (*c.*) Proptosis ; (*d.*) Graefe's lid sign ? 10. Does Graefe's lid sign occur when there is no proptosis ? Is it equally developed on the two sides ? Does it ever accompany prominence of the eyeball due to other causes ? Does it occur in hypermetropia, or myopia, or in healthy persons ? Do such drugs as cocaine, eserine, atropine, produce anything like Graefe's sign ? 11. Is the enlargement

of the thyroid usually equal on the two sides? 12. In conjunction with what other diseases is exophthalmic goître found? Does it occur often in several members of the same family? 13. This disease occurring most frequently in women, is any relation between it and derangement of the reproductive system observable? 14. Family histories of cases of the disease. 15. Has any similar condition been observed in any of the lower animals? Those who make oral communications will be restricted to a quarter of an hour, and will be expected to supply a written report of their remarks. Those who make oral communication of facts will not thereby be debarred from subsequently taking part in the discussion.

ORGANISATION OF MEDICAL CHARITY.

THE medical subcommittee appointed by the Charity Organisation Society in 1884, to consider the question of assisting in the organisation of medical charities, and the prevention of their abuse by unsuitable persons presenting themselves as patients, has issued its first detailed report. Beside lay persons may be mentioned that the chairman of this committee is Dr. G. B. Longstaff, and that it has for its honorary consultive members:—R. Barwell, F.R.C.S., Dr. Gulliver, Dr. W. P. Herringham, J. Holm, F.R.C.S., and Dr. J. S. Sharkey. The report deals especially with two departments of the working of the committee, the first being the co-operation of hospitals and dispensaries, and the second, the supply of surgical apparatus. We shall to-day notice especially their report of the first of these questions. Their first year has, they say, necessarily been occupied in obtaining an accurate knowledge of the different methods in which the out-patient departments of the metropolitan hospitals are conducted; and the fact that the Medical Secretary has paid during the past eighteen months 406 visits to 71 hospitals and dispensaries is a sufficient indication of the labour which this has entailed. It has been found, they report, that nearly every hospital has of late years attempted some change in its system of administration. Either inquiries are instituted as to the social position of applicants for relief; or the number of new patients to be treated in one day is limited; or there is a preliminary inspection of the patients, with a view to the admission of those only whose complaints are comparatively serious; or a small payment is required for drugs, and if it be not paid, the Charity Organization Committee is asked to ascertain whether the patient is in such an impoverished state that he cannot pay it; or, best of all, there is strict registration of patients, and a small charge for treatment. Inquiry has in several instances led to a reduction in the number of patients, more particularly in the special departments of hospitals, and on this account, owing to the complaints of physicians and surgeons, it has been discontinued.

Changes introduced into Hospital Management.—All these changes would, they point out, imply that the hospital authorities themselves recognise a need of reform, but fear to adopt measures of too radical a nature, lest they should render their hospital odious to their clients, and thus incur the disapprobation of their supporters—the public. The question is so complicated, and the conditions of medical work are so various, that no single and decided opinion can be given as to what reform should be made and how it should be carried out. But the following suggestion, which was submitted to the Council by the Medical Secretary in July, 1884, is put forward.

Linking of Provident Dispensaries to Hospitals.—One of the most important steps towards any improvement would be the linking of Provident Dispensaries to General Hospitals. Then, if members of the Provident Dispensary required either consultative advice or hospital treatment, they would be referred to the out-patient department or to the wards of the hospital. On the other hand, out-patients at the hospital, if, on inquiry, they were found to be able to pay the fee at a Provident Dispensary, would, after the first treatment, be drafted to the dispensary, and would not be eligible for further relief from the hospital. It would be to the interest of the hospital to supervise the management of the dispensary, so that the medical staff should have brought before them all cases of clinical importance; indeed, all the cases at the dispensary should become available for the use of the hospital school; and to make students acquainted with practice at the homes of the patients, one or two of them might accompany the dispensary doctor in his visits, and act as assistants or dressers. This would be a great advantage. The system of apprenticeship is no longer in vogue; and many qualified medical men, and some even of our best assistant physicians and surgeons, who have passed through a long hospital course, find themselves strangely at a loss on paying their first visits to the homes of patients. It is a new experience to them. And they sometimes prescribe remedies that are quite unattainable outside the hospital; while with a larger experience in general practice, some alternative treatment, within the reach of the patient, would have suggested itself. They are glad to learn that the Metropolitan Provident Medical Association have determined to make proposals to one or two hospitals with a view to the adoption of a scheme somewhat similar to this.

Co-operation between Hospitals and General Charity.—The frequent visits which have been paid to the hospitals have also proved that co-operation between them and the Charity Organization Society would secure the greatest possible benefit to the poor. Through the kind intervention of the ward sisters and the surgeons of one or two hospitals, the District Committees of the Society were asked to help the families of some of the patients, or to aid the patients themselves on their leaving the hospital. Excluding the surgical-aid cases, 63 were so sent; and of these 33 were relieved; 18 were for various reasons unassisted; 3 resided beyond the area dealt with by the Society; 5 were Poor-law cases; 3 could not be found at the address given; 1 was for inquiry only, through a provincial society.

Short notes are given of illustrative cases in which excellent work of aid was done by the officers of this Committee. The work of this Committee deserves to be widely known in the Provinces as well as in London.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medical person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE.—Additional replies are earnestly requested on the schedule issued with the JOURNAL of May 9th, 1885. Copies of the schedule may be had at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The inquiry-papers, to be subsequently issued, will

be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the International Inquiry paper on the Geographical Distribution of certain diseases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary.—J. MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held on Thursday, March 18th, at 8.30 P.M., at the London Hospital. A demonstration of patients suffering from Diseases of the Circulatory System will be given by Dr. Sansom, Physician to the Hospital.—JOSEPH W. HUNT, 101, Queen's Road, Dalston, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above districts will be held at the Grand Hotel, Brighton, on Wednesday, March 24th. Mr. Hodgson will preside. Communications with respect to papers should be sent to the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting will be held at the Harp Hotel, Dover, on Thursday, March 25th, at 3 P.M., Dr. Charles Parsons in the chair. The dinner will take place at 5 P.M., at the Harp Hotel. All members of the South-Eastern Branch are entitled to attend these meetings, and to introduce professional friends. All gentlemen purposing to dine are particularly requested to inform Dr. Parsons by Tuesday, the 23rd instant, that proper arrangements may be made. *Agenda:* 3 P.M., Dr. Bowles will open a discussion on The Prognosis of Heart-Valve Disease, of Five Years' Standing. The above subject has been chosen by the Collective Investigation Committee for Discussion during the present year. It is hoped that all members will bring short notes of any cases they may have, especially in reference to the nature and position of the valvular murmurs when they first came under observation. Mr. A. G. Osborn and Dr. John Ormsby: Cystic Omental, Simulating Ovarian Disease; Laparotomy, Drainage, and Result. Dr. T. Eastes: Three Cases of Visceral Abscess. The readers of papers are requested to bring with them brief summaries for insertion in the Minutes and Journal.—W. J. TYSON, Honorary District Secretary, 10, Langhorne Gardens, Folkestone.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The March meeting of the Branch will be held on the 17th instant, at 198, Union Street, at 8 o'clock P.M. Business—1. Cases of Meningitis following Disease of the Middle Ear, by Dr. Michie, Cove. 2. Demonstration of the Practice of Retinoscopy for ascertaining Errors of Refraction, by Dr. Mackenzie Davidson, Aberdeen. 3. Case of Epithelioma of the Vulva treated by means of Paquelin's Thermo-cautery, by Dr. Barclay, Banff. 4. Exhibition of Specimens: (1) Skeleton of Extra-uterine Fœtus of Eight Months, by Dr. Michie; (2) New Traction-Forceps, by Professor Stevenson; (3) Patient with Hemichorea and Partial Hemiplegia after Acute Rheumatism, by Dr. Mackenzie Booth.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

BORDER COUNTIES BRANCH.—The spring meeting will be held at Dumfries early in April, when a discussion on Brain-Surgery will be introduced by Dr. Thomson, of Dumfries. Drs. Campbell and Eaton will also read papers. Intimations of communications or specimens should be sent to the undersigned. Further information will be given later on.—H. A. LEDIARD, Honorary Secretary, Carlisle.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

A MEETING of this district was held at the Board-room of the Great Northern Central Hospital, on Thursday, February 25th, 1886, at 8.30 P.M. The chair was taken by Dr. DICKSON, President of the Branch.

Papers.—The following papers were read.

1. Mr. W. Spencer Watson: The Treatment of Nasal Polypi and Chronic Rhinitis.
2. Dr. Fancourt Barnes: Case of Uterine Myoma, treated by Oöphorectomy.
3. Dr. R. W. Burnet: Case of Cerebral Syphilis: Fits: and Recovery.
4. Dr. E. C. Beale: Isolated Tubercular Ulceration in the Mouth.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

AN ordinary meeting of this Branch was held at 198, Union Street, Aberdeen, on February 17th: Professor OGSTON, President, in the Chair.

Papers.—The following papers were read.

1. Dr. Aymer (Bervie): Case of Epileptic Vertigo or Automatism.
2. Dr. Ruxton: Case of Progressive Muscular Atrophy (patient shown).
3. Dr. Mackenzie Booth: Case of Sarcoma of the Lung.
4. Dr. Scroggie showed a Fœtus of five months, with Amniotic Membranes.
5. Dr. Ogston showed a patient operated on for Congenital Dislocation of the Hip-joint and a large Sarcoma of the Humerus; and commented on a Case of Operation for Cancer of the Stomach.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Contagious Properties of Phthisis.—Dysentery Cured by Ergot.—Use of Trouvé's Electric Explorer in the Extraction of Bullets.—Preventive Tracheotomy.—Tænia Expelled by the Mouth.—General News.

AT a recent meeting of the Société Médicale des Hôpitaux, M. Valin read the report on the contagious properties of tuberculosis. The Society sent a list of questions to 10,000 medical men, and received 123 answers. Those who answered were classified as follows: 57 believed in contagion; 57 disbelieved it; 7 gave doubtful replies, and 2 were incomprehensible. Of 439 cases forwarded, 213 supported the hypothesis of contagion, and 226 were against the theory. The 213 cases favourable to the theory were as follows: 107 were husbands and wives, 71 near relations, 18 the offspring of phthisical parents, 16 were distant relations. In one, the disease was said to have been transmitted from a master to his dog. Heredity is an important factor in the propagation of tubercle. Tuberculosis is, the report states, more frequently inherited from the mother than from the father. Inherited tuberculosis is manifested sooner than when contracted from proximity with the contagious principle. It is difficult to ascertain what is the exact proportion of the cases due to contagion; it is roughly estimated to be one in ten among the well-fed classes; among the poor classes it is much greater. Data are at hand which indicate that phthisis has been imported into isolated localities and islands by inhabitants from neighbouring countries where the disease existed.

M. Boisseau de Rocher publishes, in the *Progrès Médical* of March 6th, notes on a case of dysentery successfully treated by ergot of rye. The patient, a strong man, aged 44, was, on the second day of the attack, in such a prostrate condition that death was feared. Calomel was given; thirty-six hours subsequently, stomatitis appeared, and the stools were not improved. The pulse was rapid. The general condition was slightly improved by giving the patient alcohol. Ergot was then administered. The number of stools was reduced to two a day; they were free from blood, and were diarrhœal in character, rather than dysenteric. Twenty-four hours later, the patient ceased to have dysenteric stools, and his recovery was rapid and complete.

M. Richet and M. Verneuil have lately used Trouvé's electric explorer with success for detecting and removing encysted bullets. In M. Richet's case, the ball, a revolver-bullet, was in the knee; in M. Verneuil's case, the ball was found resting in the sacrum. In the latter case, the patient, a soldier, had been shot in 1870.

At one of the last meetings of the Paris Surgical Society, a discussion took place on the utility of preventive tracheotomy. M. Monod maintained that, when the posterior region of the mouth is operated on, and a portion of the pharynx is excised, washing out the wound with antiseptic solution cannot prevent the infectious products proceeding from the buccal cavity from penetrating into the bronchial tubes; pneumonia may result, and cause death. M. Monod quoted from German authors, Langenbeck and Kocher, who entertain the same views on the utility of preventive tracheotomy. M. Monod believed that the danger of cold air passing directly into the bronchial tubes through the cannula is greatly exaggerated; also that the actual danger can be greatly modified by simple and easy precautions. The danger resulting from incompletely disinfecting the area operated on is much greater. It is impossible to obtain an aseptic condition, unless the dressing protect the entire wounded surface and the upper part of the pharynx. This essential condition M. Monod obtained, in an operation for an epithelioma, at the back of the buccal cavity and extended into the pharynx, by performing tracheotomy. The patient recovered rapidly, and the operator attributes this complete success to the beneficial effect of preventive tracheotomy. M. Verneuil condemned preventive tracheotomy except in operations extending to the pharynx. M. Marchand observed that it was precisely in such cases that M. Monod recommended it, when the lateral walls of the pharynx are included in the area operated on.

Consecutive pneumonia is the principal danger to be feared, and is also a source of anxiety in operations on the base of the tongue. M. Marchand lost a patient after performing a similar operation, and he was convinced that if he had practised preventive tracheotomy, the patient would have lived. M. Trélat stated, that when Langenbeck's statistics were drawn up, antiseptic surgery was not practised. If recent statistics show a lower rate of mortality resulting from similar operations, it must not be concluded that preventive tracheotomy is the cause, but that the improvement is due to the antiseptic precautions observed, and the use of the œsophageal sound proposed by Krishaber. M. Trélat counselled preventive tracheotomy only when the surface operated on extended over a considerable area, and the epiglottis, also the upper part of the pharynx, are exposed to view; under such circumstances, œdema of the glottis is a constant danger and would cause death from asphyxia. M. Polaillon had operated four times on the lateral walls of the pharynx without any lung-complications resulting; two died from secondary hæmorrhage. M. Duprés had never performed tracheotomy as a preventive measure, nor did he believe in the dangerous effect of the septic products feared by his colleagues. M. Després practised preventive tracheotomy only on patients with cancer of the mouth, when they would otherwise die asphyxiated. M. Tenier would not fear the arrival of cold air in the bronchi, but the presence of air which had not filtered through the upper respiratory organs. M. Le Fort believed that cold air was a source of danger. M. Tenier asked how M. Le Fort explained the fact that frequently adults, tracheotomised, went about for years with a cannula in their throat. M. Le Fort answered that they grew accustomed to their condition.

Dr. E. Martel, surgeon *en chef* at the Hôtel Dieu Hospital, Saint Malo, publishes in the *Gazette des Hôpitaux* an instance of tænia, expelled by the mouth. The patient was a maiden lady, aged 86. During five years she had been accustomed to eat raw meat, rubbed into a coarse powder. One day she had a slight attack of indigestion, after having drank a glass of milk and some red wine; whilst vomiting, she felt something in her mouth, which she quickly removed. It was a tænia, about twenty-seven inches long; it was apparently sterile. Ten days later, the patient expelled with a motion a tænia nearly four feet long, full of characteristic ova. A third fragment, nearly two feet long, was expelled by the anus. There were no symptoms indicative of the presence of the parasite. The patient complained of feeling a constant necessity to pass urine, and increasing thirst; but this condition was more probably the result of old age and the heat of the weather.

M. Pasteur has given £4 to the fund for carrying out M. Verneuil's scheme for creating laboratories and stations where phthisis may be studied. The editor of the *Petit Journal* has given £20, and the subscribers to the journal, £40.

M. Peyron, Director of the Assistance Publique, is preparing a scheme for organising several homes for tuberculous children, where they will benefit by living in a suitable climate, and from receiving every care and attention. Different seaside and mountainous localities will be tested, before any definite building arrangements are made. M. Labord proposes that M. Peyron's scheme should be amalgamated with M. Verneuil's idea.

News comes from Milan, that *La Perseveranza* has opened a subscription for funds towards defraying the expenses of a Paris International Hospital, where M. Pasteur will treat patients threatened with hydrophobia. The sum has reached £280.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

Newcastle Infirmary.—Newcastle Dispensary.—Sick Children's Hospital: Munificent Offer of a New Hospital.—The Newcastle Clinical Society.—Death of Dr. Morris.

THE Infirmary, Dispensary, and Children's Hospital have lately had their annual meetings of governors; in each case, the reports show a very large increase in the amount of work done. At the Infirmary, nearly 7,000 more patients have been treated than in the previous year, increase occurring in every department. During the past year, the Infirmary has undergone extension and improvement. A new temporary wing has been added to the male surgical department, containing two wards, and capable of accommodating fifty patients; the old convalescent-room and two adjoining wards have been thrown into one, and given to the children; while the ward lately devoted to children has been given over to the female department. The report is a very highly satisfactory one, so far as the medical department is concerned, the death-rate of all the cases being only six per cent., that of major amputations being only two per cent. The condition of the Infirmary finances seems to be the only unsatisfactory item in the report, the expenditure being greater than the income by £5,000. The annual subscriptions have been stationary, or nearly so, for the last twenty-five years; the amount of work done, and the consequent increase of expenditure, has steadily progressed. The report makes a strong appeal for more generous support. The question of a new infirmary must soon be raised, the present building cannot be extended much further, and it is not large enough to satisfy the increasing demands made upon it. Its present site is only a good one because it is in the centre of the town; but, with a cattle-market on three sides, and a railway on the other, with trains running day and night, it cannot be said to be a very fitting place for the treatment of suffering humanity.

At the annual meeting of the governors of the Dispensary, Dr. Beatley, the Resident Medical Officer, submitted his report of the medical work. Nearly 3,000 more cases received treatment at this institution last year than in 1884, there being an increase in casuals and in those patients attended at home, but not in the cases treated by the honorary medical staff. The increase is largely due to the prevalence of a severe epidemic of measles during the first six months of the year, no fewer than 1,062 cases of this disease having received medical attendance, with a mortality of 10.1 per cent. The high death-rate is accounted for by the severity of the epidemic, and the serious nature of the complications. In concluding his report, Dr. Beatley pays a high compliment to the work done amongst the dispensary patients by the city nurses—a body of trained nurses, maintained by the Cathedral Nurse and Loan Society, for work amongst the distressed poor of this city.

The annual report of the Sick Children's Hospital showed that institution to be in a flourishing condition; more cases had been treated during the year than during any previous year, and there is a good balance to the credit of the institution. At the annual meeting of governors, Mr. John Fleming made a splendid and munificent offer to the meeting—namely, that he would build and furnish ready for use a new hospital, capable of accommodating from sixty to eighty patients. The present hospital has twenty-four beds, and is situated in an unhealthy locality, having no garden or playground for convalescent children; neither is it large enough to satisfy the numerous applicants for admission. Mr. Fleming's princely offer was gratefully accepted, and will supply a long-felt want.

At the February meeting of the Newcastle-upon-Tyne Clinical Society, Dr. Limont read a paper on Pelvic Peritonitis, and showed two pathological specimens of the results of the disease; one showed a stricture of the rectum, caused by tight constriction by a band of organised lymph. Colotomy was performed, but with unsuccessful result. The other showed general matting together of all the pelvic viscera. Dr. Limont also showed a small Polypus, which he had removed from the cervix uteri. Mr. Black showed an uterine Polypus, which he had removed; and also an uterine intramural myoma, which had separated and come away spontaneously after parturition. The annual banquet of the Society was held on February 19th, 1886. Amongst the visitors were: the Sheriff; Dr. Stainthorpe, President of the North of England Branch of the British Medical Association; Surgeon-Major Fraser; Dr. Napier; Surgeon-Major Cook; Dr. Ellis; and several other visitors. A very enjoyable evening was spent.

I have much regret in announcing the death of Dr. Morris, of Chester-le-Street. Deceased was well known and much liked; he was an exceedingly good surgeon. He was a member of the Newcastle Pathological Society, at the meetings of which he was one of the most frequent exhibitors of interesting cases and specimens. He died after a very short illness (only five days), the cause being, I understand, enteritis, caused by exposure to cold.

DONATIONS AND BEQUESTS.—Mr. William Beale, of Stoke Newington, has bequeathed £105 to the Stamford Hill, Stoke Newington, etc., Dispensary.—The Trustees of Prison Charities have given £105 to the Metropolitan Convalescent Institution.—"S. B." has given £100 to the Evelina Hospital for Sick Children.—Mr. W. Hodgson has given £100 to the West End Hospital for Nervous Diseases, Welbeck Street.—The Gloucester Infirmary has received £100, less duty, under the will of Mr. Alfred Brown, of Newnham.

THE BRITISH LYING-IN HOSPITAL.—The annual report refers with satisfaction to the work of the past year. Out of a total number of 822 cases, there has been only one death. The governors had sanctioned a system of admitting a few paying patients in order to utilise a portion of the hospital premises, and that partial introduction of the paying-patient system would in no way intrench upon the funds of the institution or interfere with its benevolent work.

CORRESPONDENCE.

To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications chiefly by reason of their unnecessary length.

SINGLE LUNATIC PATIENTS.

Sir,—The concluding sentence in your leading article upon the new Lunacy Bill expresses a fear that it is possible that the power to receive single patients would be taken from medical men, and that the proposal was open to many objections. May I venture to point out some of the objections that occur to me? And, firstly, let me say that I have turned to your issue of April 11th, 1885, and find amongst the extracts from the Lunacy Acts Amendment Bill, under the letter "C," "clauses referring to medical men receiving a single patient;" from which I infer that it was not the intention of the framers of that Bill to withdraw this permission, and I am not aware of any reasons that have since been made public why such permission should be taken away.

The objections that occur to me are these. 1. By depriving medical men of this privilege, a class of patients, insane indeed, and in urgent need of supervision and control, but not in any way dangerous to themselves or others, would be forced into asylums to their great mental detriment, with the probable effect of so aggravating the gravity of the case as to render incurable what would have been cured, had they been spared the shock of association with worse types of insanity. 2. There would be no alternative in any case between treatment at home, well known to be useless generally, and impossible in many instances, and removal to an asylum; whereas now, a sojourn of a few weeks or months in the house of a medical man, frequently allows a patient to return to his or her own avocations, recovered, without having to incur the stigma—popular prejudice though it be, yet very real—of having been confined as a lunatic in an asylum. 3. There would inevitably be an increase, expected and dreaded by the late Lord Shaftesbury, in the number of cases of lunacy that would be concealed under the guise of nervous patients, and an additional incitement to keep a patient at his home until the time for effecting a cure by treatment had passed by. 4. The powers of supervision and inspection, under the new Act, by the Commissioners in Lunacy, would be, as they have been in the past, amply sufficient to protect the insane against abuse of the law; and the fact that such abuses have very seldom occurred, speaks well for the medical profession, and the way in which the duties of the Commissioners have been carried out.—Faithfully yours,

18, Clifton Gardens, W. Edward East.

*** This subject has already engaged the attention of the Parliamentary Bills Committee, who have made representations to the Lord Chancellor on the matter; but we think the question is worthy of the attention of all our Branches, and of the various medical corporations, as well as of medical men individually. The prohibition of the reception of single patients, under certificates, in the private houses and under the individual care of medical men, would, we believe, operate most injuriously for the cure of patients requiring early and separate treatment, and most cruelly and harshly to themselves and their families. We are not aware of any medical authority in favour of this oppressive and mischievous enactment. The proposed clause (altogether new) runs thus:—"Section 26 (1). After the passing of the Act, except in the case of lunatics so found by inquisition, no order shall be made for the reception of a lunatic as a single patient." The attention of medical men should be directed to this clause, and, if, as we believe, the general sense of the profession and the public is opposed to so ill-conceived a relegation of all cases, except those of the very rich, to an asylum, energetic means should be taken, individually and collectively, to address the Lord Chancellor on the subject, and subsequently, if the provision be not withdrawn, to bring the ends of the proposed change under notice in the two Houses of Parliament. The clause appears to be conceived mainly in the interests of and to save trouble to the Commissioners.

THE MEDICAL AND SANITARY ADMINISTRATION OF EGYPT.

Sir,—In an editorial annotation in the Journal of February 20th last, I notice the following remark: "Ignorance and mismanagement characterise the present state of the medical and sanitary administration of Egypt." This very damaging statement, if it came from a private individual, would call for no remark; but backed as it is by the authority of the Editor of the British Medical Journal, I feel constrained to offer a remonstrance, and to inquire from what local source proceeded the information thus endorsed.

It is the fashion to call Egypt an Augean stable; but is sanitary England so free from insanitary motes, that an Englishman can afford to sling stones? Rich London, no doubt, is well sewered in part; but at what a cost! How is poor Egypt—bound down and fettered as she is by insatiable and all-powerful bondholders. who exact their pound of interest to the uttermost farthing—to find the money for similar works? But if the greater portion of London is well sewered, what about Whitechapel and Mile End? Are they perfect? Are Birmingham, Liverpool, Dublin, Aberdeen, and other large British towns, free from reproach? To say nothing of Bombay, Poona, Madras, and a hundred other Indian cities.

After a year's experience of Egypt, I do not despair of seeing sanitary improvement eventually; but give us time, and, above all, do not lend your powerful aid to the furtherance of intrigues, got up after the manner of the country, for some reason quite different from the apparent one.—Yours truly, H. R. Greene,

Cairo. Inspector-General, Sanitary Department of Egypt.

PELVIC HÆMATOCELE.

Sir,—I should like to indicate one or two points in Dr. Imlach's article on this subject where I differ from him very materially, and where I think my special experience may give considerable weight to the opinions I can express.

Dr. Imlach is mistaken when he says that no surgeon will consent to Bernutz's contention, that blood not encysted should not be regarded as a hæmatocele. I, for one, entirely agree with his view. I completely accept the division of hæmatoceles into extraperitoneal and intraperitoneal, as Bernutz does, although the intraperitoneal hæmatocele does not really deserve the name. In my own experience of intraperitoneal hæmatoceles, amounting to something like fifty-three or fifty-four cases, where I have verified the condition either by *post mortem* examinations or *ante mortem* abdominal section, the only cause of the condition was the rupture of a tubal pregnancy. I do not mean to say that this is the only possible cause, but it is the only cause which has occurred in my experience. The condition is altogether different from that of the extraperitoneal or purely encysted hæmatocele, both in its origin, in its course, and in the treatment required for it. Here, therefore, I differ entirely from Dr. Imlach.

"A more common mistake, it seems to me, consists in calling all pelvic hæmatoceles cases of tubal pregnancy after rupture, and no case ought to be admitted as tubal pregnancy unless a fœtus is found." Dr. Imlach forgets that there is another structure the finding of which is quite as decisive, and, indeed, far more decisive, of the occurrence of a ruptured tubal pregnancy than the finding of the fœtus, and that is the placenta. The fœtus, in the majority of such instances, either becomes dissolved—a not unlikely circumstance, seeing that the tissues are so gelatinous in the tenth week—or it is not found in operations upon the living body. But the placenta can always be found, and has been found in every one of my instances. Dr. Imlach cannot, of course, be alluding to *post mortem* examinations: he must be alluding to cases of operation. I cannot find that anyone but myself has operated upon these cases, and, therefore, I conclude Dr. Imlach has been alluding to me. Dr. Imlach is mistaken if he think that sufficient care has not been exercised in all of these cases properly to recognise the condition as really that of tubal pregnancy.

Dr. Imlach says, towards the conclusion of his paper, "Opening the abdominal cavity and draining the accumulated blood is open to like objections, and I am surprised to find this method adopted. The only treatment by which a case of the disease can be insured is laparotomy with the removal of the uterine appendages." It is not evident from what precedes this sentence, that Dr. Imlach has any clear

idea of the difference between the extraperitoneal and the intraperitoneal variety, and the importance of recognising the difference. In my own practice, and amongst the cases where the operation has been performed upon the living patient for intraperitoneal hæmatocele, the ruptured tube has, of course, been tied and removed; but I never dreamt of removing the tube on the other side, nor have I found any reason to regret my leaving it alone. In cases of true hæmatocele, I cannot imagine what Dr. Imlach could possibly urge as a reason for removal of the appendages. By true hæmatocele, of course, I mean effusion of blood into the broad ligament forming an extraperitoneal hæmic cyst; and it is clear that it must be of this variety alone that Dr. Imlach is speaking when he advises removal of the appendages, for he objects, as I have already shown by a quotation, to Bernutz's idea, that an intraperitoneal accumulation of blood should be regarded as a hæmatocele. Of the extraperitoneal (pelvic encysted) hæmatoceles, I think the great majority get perfectly well if left alone; they require interference only when they begin to suppurate, and, in the suppurating cases, I have found that by far the best treatment is to open the abdomen, to open and empty the cyst, and stitch the cyst-wall to the peritoneal wound, in this way giving the freest drainage to the cavity.

Dr. Imlach may be surprised to learn that I have operated on thirty-two suppurating pelvic hæmatoceles in this way, not only with recovery in every case, but with complete and permanent cure; and many cases of similar proceedings are now recorded in foreign literature. It seems to me that this proceeding is a reasonable one, because everyone must have seen cases where the abscesses have opened into the rectum and into the bladder, even into the peritoneum, and round the folds of the pelvic fascia, above the brim of the pelvis, giving rise to sinuses which last for years, and often never heal at all. The proposal to remove the uterine appendages because a woman happens to have a hæmatocele is certainly astonishing, and one against which I certainly must lodge my protest. Such a proceeding could be justified only after repeated effusions ending in suppuration.—I am, etc.,

LAWSON TAIT.

EMMET'S OPERATION.

SIR,—In the JOURNAL for February 27th, I submitted a necessary correction of certain statements made by Dr. Playfair concerning his operation which had misled Dr. Graily Hewitt. That correction was based upon precise facts and dates. To these, Dr. Playfair replies in your last issue by a discursive letter, which fails altogether to justify his statements. To show this, it is enough to read my letter and Dr. Playfair's consecutively.—I am, etc.,

ROBERT BARNES.

15, Harley Street.

THE GENERAL MEDICAL COUNCIL, AND THE DISCIPLINE OF MEDICAL STUDENTS.

SIR,—With the object of finding out what check the General Medical Council exerts over the discipline of medical students, I addressed that body in the first week in February, to inquire if they had power, in cases of serious misconduct on the part of medical students, to remove the names of such students from the *Students' Register*. I have received a reply, dated February 5th, 1886, stating that the General Medical Council have no such power.

It seems to me that such a power is needed, so as to enable some independent authority to deprive students, committing certain offences against discipline, of the opportunity of entering the medical profession. No profession is so handicapped as is medicine by the almost complete absence of collegiate life and accurate discipline amongst its students. Medicine has suffered enormously by the manner in which its students, for several of the most impressionable years of their life, are kept wholly uncared for in a social sense. One of the most serious questions to my mind, which needs to be dealt with in our profession, is how to give the student such social surroundings as will fit him for the battle of life.

We cannot acquit the teachers of most medical schools of the greatest remissness in this respect.

How can we make our citadel secure, when the guards that hold the gates utterly neglect their duties in a social sense? It is high time that the parents and guardians of students be wakened up to the risk their boys run in entering on the unguarded, unprotected life the medical student leads in our great cities. Literally, no man cares for him; and it is a mere chance if the boy weather the storm and reach the haven of his degree. This question of the collegiate and social life of the student is, I think, only in its commencement.—Yours,

G. J. H. EVATT, M.D., Surgeon-Major.

Royal Military Academy, Woolwich.

ETIOLOGY OF RICKETS.

SIR,—As the etiology of rickets is one of the subjects for Collective Investigation at the present time, it may interest your readers to know that this disease is very prevalent in the town of Bergamo. In the course of a visit of two days, in October last, I must have seen at least six or eight extreme cases of deformity caused by rickets; and, moreover, there is a special institution at Bergamo for the treatment of rachitic persons.

It would be very desirable to obtain further information on this head, as it may throw some light on the causes of a disease, about which opinions seem to be much divided.—I am, your obedient servant,

HENRY TAYLOR.

Guildford.

POST-GRADUATE COURSE FOR MEDICAL MEN IN TOWN.

SIR,—"I. V. R. C.'s" suggestion is most valuable, and the objections to it not insuperable. The details could be worked out by the gentlemen who take it up, and I am strongly of opinion that it would meet with the hearty co-operation and assistance of such of their colleagues on the staff of the various hospitals as may not be directly interested. There is not now time to organise it properly for April, I fear, but it might be put in train at once for an autumn session.

The names of the lecturers and demonstrators, and the various courses, times, hospitals and other places of meeting, should be brought prominently before the profession, by means of advertisements in the medical papers, and I believe there would be such an immediate response, as to ensure at least a financial success. Most certainly, I should gladly and humbly join such a class myself.—Yours truly,

M.D., F.R.C.P.

REGISTRATION OF SANITARY CERTIFICATES.

SIR,—A movement is at present being organised to endeavour to induce the Medical Council to register sanitary science certificates.

Sanitary authorities refer to the *Medical Register*, to ascertain the qualifications of candidates for any vacancy as medical officer of health. The absence of the qualification in the *Medical Register* would naturally lead them to infer that the examination for these certificates was not sound. With respect to the Sanitary Science Examination of the Cambridge University, I can answer that it is thoroughly efficient, extending over four days; and doubtless other similar certificates granted by the different licensing bodies are good.

May I, therefore, beg all gentlemen holding sanitary science certificates, and who wish to join us in our endeavour to have them registered, to kindly communicate with Mr. H. Fotherby, St. George's Infirmary, Fulham Road, S.W., or with your obedient servant,

JOSEPH SMITH, M.R.C.S., etc.,
Sanit. Sci. Cert. Camb.

12, Thornton Avenue, Streatham Hill, S.W.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, March 8th, 1886.

Drugs for Irish Dispensaries.—In answer to Mr. A. O'CONNOR, Mr. J. MORLEY said: Of course, sir, the Local Government Board consider it a matter of much importance that boards of guardians should procure medicines of good quality, and, by means of reports from their inspectors and their medical officers, and by bringing the subject under the guardians' notice when necessary, they endeavour to secure that the supplies are good and sufficient. Beyond this, however, they have no control, as it rests with the guardians to enter into the necessary contracts. I am informed that, in 1870, an effort was made to establish a central depôt for these supplies, but obstacles were found to exist in carrying out the arrangement, and the order on the subject was rescinded.

Tuesday, March 9th.

Lunatic Asylum Officers.—In answer to Mr. CORBETT, Mr. MORLEY said: The liberality of the scale of pensions for officers and servants in lunatic asylums in England is rather understated in the first paragraph of my hon. friend's question. I believe that, as a matter of fact, these fortunate persons are treated in respect of pension pretty much on the same footing as Her Majesty's Judges, and far better than permanent Under-Secretaries of State. In Ireland, these officers and servants are pensioned on the lines of the Civil Service Superannuation Act. In Scotland, I understand they have no pen-

ions at all. I do not think it would be possible to induce Parliament to sanction again such terms as have been given in England. My hon. friend further asks that all appointments in lunatic asylums in Ireland should be treated exceptionally, under the provisions of Clause 4 of the Superannuation Act. Looking, however, to the analogy of the public service generally, I feel it would be difficult to make a case that would satisfy the Treasury of the sufficiency of the claim. I should explain that the Treasury contribution to public lunatic asylums, both in England and Ireland, is at the rate of 4s. per head per week.

OBITUARY.

JOHN COOPER FORSTER, M.B. Lond., F.R.C.S. Eng.,

Ex-President of the Royal College of Surgeons, Formerly Surgeon to Guy's Hospital.

This distinguished surgeon, whose somewhat sudden death in his sixty-third year we have to deplore, was the son of the late Mr. Forster, a prosperous and much respected practitioner, resident for many years in the South of London.

Mr. J. Cooper Forster was educated at King's College. In 1839 he entered the Medical School of Guy's Hospital, and a few years later became House-Surgeon to Mr. Aston Key, after he had taken the diploma of Member of the College of Surgeons in 1844. In 1847 he took the degree of M.B. Lond., obtaining the second place with the medal in Honours for Surgery. In 1849 he gained the diploma of F.R.C.S. by examination. He shortly afterwards became Demonstrator of Anatomy in the Guy's Hospital Medical School, and in 1855 was appointed Assistant-Surgeon to the Hospital. He lectured on anatomy for ten or eleven winter sessions, until in 1868 he took his share of the lectures on Surgery, and continued to deliver that course until 1875. He became full Surgeon to the Hospital in 1870 upon the promotion of Mr. Hilton to the Consulting Staff, and retained that office until his retirement in 1881. He soon gained distinction as a neat and careful operator; and his many good social qualities and excellent teaching powers earned him just popularity amongst the students.

Besides the offices he filled at Guy's Hospital, he was for many years Surgeon to the Royal Hospital for Children and Women in the Waterloo Road, and held many other honorary appointments. The painful events of 1879 and 1880 at Guy's Hospital, respecting the nursing and internal management of that institution, which caused Dr. Habershon and Mr. Forster, the senior members on the acting medical and surgical staff respectively, to resign their positions, are still fresh in the minds of most of our readers. More than 400 Guy's men at once subscribed to a testimonial fund, which enabled the Committee to present each of the two above-named gentlemen, on March 25th, 1881, with a handsome silver epergne, and an album containing the names of the subscribers. We know that this testimony of regard from his former colleagues and pupils was always most highly esteemed by Mr. Forster.

Among his earliest contributions to medical literature was his "Description of the Operation of Gastrotomy," done at Dr. Habershon's suggestion, and published in the *Guy's Hospital Reports*, 3rd series, vol. iv. The paper relates the first gastrostomy, as it would now be termed, that was ever performed in this country. The patient was a man aged 47, suffering from the united torments of pain and hunger caused by cancer of the œsophagus. "Sanctioned by the presence of the medical and surgical staff, I performed the operation, there being no experience in British surgery to guide me." Thus spoke the author in his memoir upon what is now a classical case. The operation took place on March 26th, 1858; the patient experienced great relief from the feeling of starvation, but sank from exhaustion within forty-five hours. This procedure indicated that Mr. Forster could be a bold surgeon, and was not averse to new operative work when it was necessary. He contributed very largely to the same *Reports*. Amongst his most interesting monographs contained in the archives of his hospital were papers on Intestinal Obstruction, or Modified Obturator Hernia, on Syphilis, on Hydrophobia, on Colloid Cancer of the Large Intestine, on Acupressure, and on Torsion. Mr. Forster also wrote several articles for two of our contemporaries, and exhibited some remarkable tumours at the Pathological Society; he likewise contributed cases to the Clinical Society. In 1860 appeared his work on *The Surgical Diseases of Children*, a publication of high merit.

Mr. Forster was closely connected during the latter part of his career with the Royal College of Surgeons. In 1875, he was elected a member of the Council, and was re-elected in 1883 by a large majority at the head of the poll. He became Examiner in 1875, Vice-President in 1882, and President in 1884. At the close of his Presidency in July last, he retired definitively from practice. He was for many years officially connected with the two social clubs that exist amongst the graduates of the University of London, and was always a warm advocate of the University.

He was an ardent oarsman, and was probably as well acquainted as any member of the profession with most of the upper reaches of the Thames. He was also, of late years especially, a keen cultivator of the craft that Isaak Walton loved to follow. Mr. Forster was married, in 1850, to Miss Hammond, a lady of great musical talent, by whom he had a large family. His widow and one son and three daughters survive him. Few surgeons have had the painful necessity of performing a serious operation on one of their own children; this sad lot happened to Mr. Forster, who performed tracheotomy on one of his sons for diphtheritic throat. The case, as also that of another son suffering from the same disease, was unfortunately fatal.

Mr. Forster's striking personal appearance was probably as well and widely known as that of any metropolitan surgeon. One who knew him well in his early manhood says that he was then tall and slim, with a head covered with dark crisp curly hair; and that, as he stood in his boating-flannel by the riverside, his appearance was most striking.

He was always in affluent circumstances, had an open confiding nature, was generous and sociable to a degree, and much given to hospitality. He naturally attracted to himself troops of friends, by whom for many a long year to come the hearty grasp of his welcoming hand and his genial smile will be affectionately remembered.

The funeral took place at Kensal Green Cemetery on Saturday last, and, notwithstanding the inclemency of the weather, was numerously attended. Wreaths of beautiful flowers almost hid the coffin from view. The service was impressively read by the Rev. E. Sheppard, M.A., Subdean of the Chapels Royal. Amongst those present with the relations of the deceased were Dr. Habershon and Dr. Wilks; Mr. H. Power, and Mr. J. Wood, the Vice-Presidents of the Royal College of Surgeons; Messrs. Birkett, Timothy Holmes, Jonathan Hutchinson, Bryant, Durham, Heath, Croft, and R. Davy; Dr. Bristowe, Dr. Goodhart, Dr. Graily Hewitt, Messrs. Howse, Davies-Colley, E. R. Ray, G. Eastes, F. Durham, T. Joyce, and Mr. Trimmer, with nearly all the officials of the Royal College of Surgeons.

Full details of the last illness of Mr. Forster will be found in our editorial columns.

JOHN CAWOOD WORDSWORTH, F.R.C.S. Eng.,

Consulting Surgeon to the Royal London Ophthalmic Hospital, etc.

In the subject of our notice, there has been lost to the profession a man who, in his quiet unassuming way, had done much for the advancement of its knowledge, and, firm in his honesty of purpose, and freedom from the arts of those who "creep and climb into the fold," was, to all who knew him intimately, an admirable example of the genuine "dignity and reputation of the profession." With all the modesty of true merit, Mr. Wordsworth was unobtrusive almost to a fault; and overshadowed as his life had been for many years by a sense of physical weakness, and, of late especially, by a growing conviction that he also would be removed prematurely by the like heart-failure which had proved fatal to his two brothers, it happened, doubtless, that he was to some extent disqualified for attracting all the notice he deserved.

Among those, however, with whom he was closely associated—his colleagues, contemporaries, and pupils at the London Hospital, his colleagues in the East (when doing good service in Smyrna and in the Crimea), his colleagues and pupils at the Ophthalmic Hospital—were well known the ability, accurate observation, sound judgment, practical skill, and, not least admirable of all in these our days, the honesty, the candour, and the loyalty to his professional brethren which were his attributes.

With his patients, and in private life, he was especially attractive by reason of his gentleness (how often now-a-days mistaken for feebleness!), his thoughtful consideration for others, his sympathetic nature, his geniality, and withal his keen but quiet sense of humour—qualities which always invited, and never disappointed, the fullest and most implicit confidence.

John Cawood Wordsworth was born in 1823, at Manchester, where his father, the Rev. William Wordsworth (sprung from a collateral branch of the Poet's family in Yorkshire), was then a curate.

In 1840 he was apprenticed to a well-known general practitioner of Manchester, Mr. John Jesse; and to the end of his days he never ceased to acknowledge the benefits he derived from his association

with that gentleman, and to advocate the advantage to any one intended for the medical profession of a well-ordered apprenticeship, with its early initiation in the routine and the so-called "little expedients" of general practice. Having entered at the London Hospital, he became an earnest and diligent student, and for two years acted as House-Surgeon. So unremitting was he in his devotion to his duties, that not long after completing his qualifications, his health began to suffer, and his constitution (to quote a good expression of his father) not being town-tempered, threatened to break down. Acting upon the advice of Dr. Pereira, and some other of the authorities of the time, he determined to go to Madeira; but accident took him to the West Indies, where he settled in practice at St. Kitt's. At the end of two or three years, however, his health being apparently thoroughly restored, he returned to London, and in 1849 was elected Demonstrator of Anatomy and Assistant-Surgeon to the London Hospital, and became a little later one of the Assistant-Surgeons to the Royal London Ophthalmic Hospital in Moorfields.

In 1855, obtaining leave of absence from the governors of his hospital, he answered to Mr. Sidney Herbert's call for volunteers in aid of the overtaxed military medical staff in the East, and went as surgeon to the civil hospital in Smyrna. Situated too far from the scene of active operations, the Smyrna Hospital offered but little opportunity for surgical practice; and Mr. Wordsworth, with some of his colleagues, proceeded to the Crimea, where he arrived just in time to render good service "in the front," to those wounded in the attack on the Redan. For three months, during the following winter, he was attached to the "Castle Hospital" on the heights above Balaclava; and there his sound surgical knowledge, ready resource, and untiring devotion to duty found ample opening for exercise, and ready and grateful recognition. The Crimean medal, with Sebastopol clasp, and the Turkish medal, were awarded to him for these services at the termination of the campaign. Returning to Smyrna in the spring of 1856, he married a daughter of M. Chasseaud of that place, and came back to his old house in Finsbury Square.

In 1859, wishing to devote himself especially to ophthalmic surgery, he resigned his appointment at the London Hospital, and removed first to Queen Anne Street, and, a few years later, to Harley Street. As full Surgeon to the Ophthalmic Hospital, he continued to utilise the vast material afforded by that institution until, "compulsorily retired" by inexorable Time, he became consulting surgeon in 1883, having endeared himself, during his thirty-one years of service, to all who came into contact with him, by his many lovable qualities. At the time of his death, he was a vice-president of the Medical Society of London, and of the Ophthalmological Society.

It has been stated above that "his health was apparently thoroughly restored," during his stay in the West Indies. The improvement, probably, was more apparent than real. Some permanent defect in his blood-making power had, not unlikely, resulted from the lung-mischief, which at that time threatened his destruction, and was slowly, but surely, impairing his nutrition. It was not less than 15 years ago that marked symptoms of a feeble heart first showed themselves; and these, being aggravated (perhaps caused?) by the effect of repeated attacks, more or less insidious and occasionally severe, of rheumatic gout, soon left but little room for doubt that he was to be the victim of cardiac muscular degeneration. And it was in this way that the end came; with frequently recurring paroxysms of angina pectoris, all borne "without one fretful word," and at the last, happily, with a painless pericardial effusion.

Mr. Wordsworth died on February 22nd, leaving a widow with one son, who is also a surgeon.

WILLIAM PEARSE, M.R.C.S.Eng., Plymouth.

Mr. Pearse, who was a native of Camelford, obtained the licence of the Society of Apothecaries in 1820, and the membership of the Royal College of Surgeons in 1821. In the latter year, he entered in practice in Bodmin, where he removed for a few years. From Bodmin he removed to Launceston, where, in partnership with the late Dr. Henry Pethick, he practised for twenty years, removing to Plymouth in 1849, where he continued to reside down to the day of his decease. Deeply impressed with the evils which he saw around him as resulting from the use of alcohol, he, fifty years ago, became a total abstainer, and he never ceased during this long period to seek to promote the spread of total abstinence. He treated fevers and allied diseases by milk and simple sustenance during the period when medical and popular opinion strongly favoured alcohol. In this practice he was in harmony with his brother-in-law, the late Mr. Henry Mudge, surgeon, of Bodmin.

Forty or fifty years ago, before the days of the cheap press, information was diffused by lectures more than it is at the present day. To these gentlemen Mr. Pearse's house at Launceston was always open. Among many others were James Teare, styled the apostle of temperance; John Cassell, a temperance lecturer, who afterwards founded the great publishing house; Ackland, of the Anti-Corn-Law League; and John Silk Buckingham, who lectured on Palestine, India, etc. Through the continuance of an useful life, he enjoyed in an uncommon degree the esteem and respect of all who had the pleasure of knowing him, for it may be truly said, he never made an enemy nor lost a friend.

JOHN BISHOP, M.D.

We regret to announce the death of Dr. John Bishop, extra assistant surgeon in the Edinburgh Royal Infirmary, at Cannes, last Saturday. Dr. Bishop was born in Sheffield, and educated there. He went through his curriculum of medicine in Edinburgh University, and graduated M.B. and C.M. there in 1870. After this, he acted as house-surgeon in the wards of Mr. Lister, and as house-physician in the wards of Dr. Grainger Stewart. He was then appointed by Mr. Lister to be his private assistant, which appointment he occupied until Mr. Lister went to London, and during it he was closely associated with Mr. Lister in the investigation and development of the system of antiseptic surgery. In connection with this important subject, he wrote his graduation-thesis for M.D., and obtained for its merit a gold medal in 1873. Subsequently, Dr. Bishop was appointed assistant-surgeon to Edinburgh Royal Infirmary, and the duties of that post he discharged with conscientious zeal and ability until his health broke down, subsequently to an attack of erysipelas. For two years, he was unable for work of any kind. It was, however, hoped that rest and change of scene would restore him to health; but all has proved in vain, and to-day the profession is poorer by the loss of a man who brought to the exercise of his duties in it ability, integrity, and great kindliness of disposition. Dr. Bishop was married some years ago to the well known traveller and writer, Miss Bird, by whom he is survived.

RAPHAEL WOOLMAN READ, F.R.C.S.

Mr. Raphael Woolman Read, F.R.C.S., Deputy Inspector-General of Army Hospitals, died on Monday at his residence, the Close, Salisbury. Mr. Read studied medicine at St. George's Hospital, and became a Licentiate and Member of the Society of Apothecaries in 1841, a Fellow of the Royal College of Surgeons (England) in 1857, and a Fellow of the Royal College of Physicians (Edinburgh) in 1859. He was appointed an assistant-surgeon in the Army Medical Department in 1844, became a surgeon in 1855, surgeon-major in 1864, honorary deputy inspector-general in 1869, and was placed on half-pay in the same year. Mr. Read was a magistrate for the city of Salisbury, and contributed papers on "Revaccination in the Army" and "Radical Cure of Hydrocele," etc.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PRACTITIONERS AND THE PATIENTS OF A SICK NEIGHBOUR.

Neighbour asks:—When a medical man is prevented by illness from attending to his private practice, how should neighbouring practitioners act towards him as regards attendance on, and fees received from, patients who have formerly been attended by him, and who, but for his illness, would in all probability have sent for him again?

*** In the absence of an essential point of detail in our correspondent's note of inquiry, namely, whether during illness the medical man entrusted the care of his practice to any one or more of the neighbouring practitioners as his officiating friend, or *locum tenens*, we are unable to do more than quote the following rule bearing on the subject, from the new edition of the *Code of Medical Ethics*, page 67, sect. v, rule 3: "When during sickness, affliction, or absence from home, a practitioner entrusts the care of his practice to a professional friend, the latter should not make any charge to the former, or to the patients, for his services, but should in all things be the *locum tenens* of the absentee. If, however, the attendance be protracted, and the labour proportionate, a fitting acknowledgment should, if circumstances admit, be made."

DEATH-CERTIFICATES FOR STILL-BORN CHILDREN.

Sir,—I am anxious to discover what is the duty of a medical practitioner, as regards giving a death-certificate in the case of a stillborn child, born before the medical man's arrival; also what is his duty in a case where the child dies soon after its birth, but before the medical man's arrival. The usual plan is, I believe, for the medical man to give a certificate, except in cases where he has a suspicion of foul play, or where the child has been overlaid. It seems to me that the plan is objectionable; for, on the one hand, his suspicion may not be aroused when there has been foul play; on the other hand, by extreme caution he may offend his patient when everything has been straightforward. The clerk

refuses to bury anyone without a certificate. The medical man, therefore, seems to be the person on whom the responsibility falls, and most unfairly. Would the medical man be right in refusing to give a certificate in every case; and, if he did so, what would become of the child?

I should be glad if your correspondents could give me information on this point, and also if they could tell me whether there is any law compelling the parents to register the birth of a stillborn child.—I am, yours truly,

CHARLES DONKIN.

*** So far from there being any law compelling parents to register the birth of a stillborn child, the exact opposite is the case, for the registrar is expressly forbidden to record the birth or death of a stillborn child. If the child be born alive, but die before the arrival of the medical man, it is clear that the latter cannot certify the death in the usual manner, as he never attended the deceased but he can state the facts as told to him, and his opinion as to the probable cause of death, or refuse to give any certificate at all, at his option. In either case, the responsibility will rest entirely with the registrar, and not with the medical man. It is quite competent for the registrar to accept the statements of the midwife or other informant as to the death, without a medical certificate of the cause of death. Where there are grounds for suspecting foul play, the fear of offending the patient ought not to deter the medical man from his obvious duty of bringing the facts under the notice of the coroner. The mode of burial of a child that has been born alive is outside the province of the medical man and should be left to the undertaker and the cemetery authorities.

IS AN APOTHECARY A SURGEON?

SIR,—Would you kindly tell me, in the columns of your JOURNAL, if a man who only holds the qualification of L.S.A. is entitled to put up "Surgeon" on the door of his open retail chemist's shop, and also to put "Surgeon" on his bill-forms, labels, advertisements, etc.? The people in the neighbourhood call him in, under the impression (I have heard it from more than one) that he is a surgeon, and one of my patients, whom this L.S.A. attended formerly, tells me that he should never have consulted him did he think he was not a surgeon. I have been told, on apparently good authority, that one of the judges said, some years ago, that "if a man's name appears on the *Register*, he can call himself what he likes." Surely, this cannot be the case. If it be so, the law is indeed defective. Your opinion on the above subject would greatly oblige me.—I am, sir, yours, etc., M.B.

*** According to legal opinion, a licentiate of the Society of Apothecaries is not, as such, entitled to describe himself as "Surgeon." The legally correct designation of a licentiate of the Society is "Apothecary." The title "Apothecary," however, has fallen into disuse, and for many years past medical as well as surgical practitioners have been in the habit of describing themselves as "Surgeon," and we are not aware that there is anything in the Medical Act of 1858 to prevent their doing so.

UNQUALIFIED ASSISTANTS.

NOTICES the omission of one point of great significance. In the districts where unqualified assistants most abound, there also quacks, herbalists, etc., are most flourishing. The unqualified assistant is the expression of the existence of this unfair competition. If Parliament make unqualified assistants' practice illegal, it must, in justice to the public and the practitioner, forbid every kind of unqualified practice.

R. E. MACKINTOSH.—The impression left upon our mind after a careful examination of our correspondent's letters to the president of the Elgin St. Andrew's Lodge of Odd Fellows, relative to his unsought appointment of medical officer, together with his explanatory communication to ourselves, is that, in our opinion, his line of conduct throughout the matter in question has been professionally correct, and in accord with the principles of medical ethics.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL SERVICE.

WITH reference to a paragraph which appeared in the JOURNAL of February 20th, page 367, we are informed that the trained nursing sisters who have been sent to the Nursing Hospital at Canterbury, have been ordered there in the usual course of service, as they have been distributed over all the other military hospitals by the Director-General in due course, and that there has been no imputation whatever of any persons having suffered from improper nursing.

VOLUNTEER AMBULANCE CORPS.—The Volunteer Ambulance Corps, which is under the instruction of Surgeon Pearce, M.B., Artists' R.V., will receive an address on Army Medical Administration from Surgeon-Major Evatt, M.D., A.M.S., in the anatomical theatre, St. Mary's Hospital, on Friday, March 19th, at 7.30 P.M. All who are interested in the subject are invited.

PENSIONS FOR INJURIES IN THE ROYAL NAVY.

SIR,—Can you inform me what principle guides the Admiralty in granting hurt-pensions? There are now numerous officers on the active list in receipts of pensions granted for injuries which do not prevent them from serving on, and so increasing their ordinary pensions. But there is the case of a medical officer, who, in 1882, was turned out of the service with a double scrotal hernia, one of which was received in an immediate act of duty. This officer recorded the injury most fully in his official journal and quarterly reports. But not being able to find any precedent for so doing, failed to grant himself a hurt-certificate. The Admiralty jumped at the loop-hole. In spite of the records in the officer's journal and quarterly report, they doubted his word, they denied the existence of any official record of the injury, and they turned him out of the service, awarding no hurt-pension for these grievous afflictions. They then qualified this act of injustice by a most magnificent sop. They forced him to assume an honorary title, the meaning of which is utterly unintelligible to the public, its assumption utterly useless to the recipient, and its cost to the donors that of the penful of ink used in writing the words. All these facts can be vouched for by, yours obediently, INQUIRENS.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

	From	To
Dep. Surg.-General R. A. Chapple	Madras	York.
,, ,, A. M. Tippetts	York	Barbadoes.
Surgeon-Major T. Murtagh	—	Plymouth.
,, L. Corban, M.D.	—	Dublin.
,, H. C. Collier	Glasgow	Berwick.
,, J. A. Anderson, M.D.	York	Bermuda.
,, A. H. L'Estrange	Curragh	Madras.
,, D. Leckie, M.B.	Bengal	Glasgow.
,, R. Exham	Bengal	Cork.
,, R. H. Robinson	Bombay	Dublin.
,, R. H. Quill, M.B.	—	Chatham.
Surgeon F. W. Trevor, M.B.	Egypt	Aldershot.
,, H. Scott, M.B.	—	Curragh.
,, G. Laffan, M.D.	York	Leeds.
,, P. J. Dempsey, M.D.	Bengal	Dublin.
,, A. S. W. Young	Devonport	Newport.
,, C. B. Hill	Bengal	Portsmouth.
,, T. Dorman, M.D.	Bengal	Aldershot.
,, H. Martin, M.B.	York	Sunderland.
,, R. D. Donaldson, M.D.	Bengal	Dublin.
,, A. H. Burlton	Bengal	Dover.
,, G. K. S. Bigg	Bengal	Dover.
,, H. L. Battersby	Bengal	Portsmouth.
,, A. Asbury	Dublin	Fermoy.
,, A. Peterkin, M.B.	Dover	Shorncliffe.
,, J. R. Dodd, M.B.	Dover	Canterbury.
,, J. Battersby, M.B.	—	Dublin.
,, A. H. Morgan	Fermoy	Buttevant.
,, T. Moynihan	Dublin	Curragh.
,, A. M. Davies	Egypt	Devonport.
,, W. L. Reade	Bengal	Devonport.
,, F. W. Reid, M.B.	Demerara	Jamaica.
,, N. Manders	Chatham	Bengal.
,, R. S. F. Henderson, M.B.	Portsmouth	Bengal.
,, S. Butterworth	Dover	Bengal.
,, C. O'Donel, M.D.	Portsmouth	Bengal.
,, C. A. Lane, M.B.	Glasgow	Bengal.
,, P. C. H. Gordon	Gosport	Madras.
,, H. Carr, M.D.	York	Bengal.
,, H. V. Dillon	Devonport	Madras.
,, H. T. Baylor	Colchester	Madras.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

CONSULTATION IN THE CASE OF A LUNATIC PAUPER.

SIR,—I was asked by the inspector of poor of the parish for which I am medical officer to see, along with the medical gentleman who has charge of the case, a non-resident lunatic pauper belonging to my parish, with the view of having her removed to an asylum. As I had frequently treated the patient before, I advised a week's trial at home. At the end of that time, she was fairly well, and was soon herself again. To what fee am I entitled in this case? For consultation, or only for a visit?—Yours, etc., MEDICAL OFFICER.

*** We are somewhat perplexed as to the answer we should give to our correspondent's letter, as he does not tell us how far he had to travel, the time occupied therein, or, generally, other particulars which are essential to advise him thereon. We would suggest that he should send in a claim for £1 1s.

VACCINATION OFFICERS' ASSOCIATION.—The Vaccination Officers' Association has completed the second year of its existence, and has seventy-two members. Five general meetings and six committee meetings have been held during the year, and the following subjects brought forward for discussion: How to secure the Vaccination of Children born in Public Institutions; Recent Events in Opposition to the Vaccination Acts; Duties devolving on Vaccination Officers during Epidemics of Small-pox; Certificates of Postponement of Vaccination. Papers have been read by Dr. Cory, "On some Medical Facts relating to Vaccination, on which it is desirable Vaccination-Officers should have more extended knowledge;" and by Surgeon-Major Pringle, M.D., "On State Vaccination." The paper read by Dr. Cory is, by his kind permission, now being published by the Association, and will undoubtedly prove to vaccination-officers a most

useful and valuable reference. The report should prove satisfactory to every member of the Association, and to those interested in their duties and efforts. In the coming year, it may be hoped that a still larger interest may be taken, and greater support given to those who are most earnestly using their endeavours towards more efficient uniformity of action in the working of the Vaccination Acts. No greater proof of interest in these duties could be given than the fact of their devoting the spare time at their command in efforts which, it is hoped, will enable them more thoroughly to discharge the duties of the important trust reposed in them as public servants.

THERE has been a sharp contest for the appointment of medical officer of health in Fulham, an appointment which lies with the vestry. The selected candidates were Dr. R. J. Lee, a member of the vestry, Dr. Cooney, and Dr. Egan, two local practitioners, Dr. Egan being a churchwarden of the parish. The choice fell upon Dr. Egan by twenty-nine votes, against twenty-five for Dr. Cooney. In his previous ballot, Dr. R. J. Lee received ten votes. The whole contest seemed to have turned very much upon the question of the local popularity of the respective candidates. The salary is £150 a year.

POOR-LAW MEDICAL RELIEF.—At a conference held in connection with the Metropolitan Provident Medical Association, at which a paper was read by Miss F. Davenport-Hill on "Our System of Poor-law Medical Relief," the following resolution was proposed by Mr. F. D. Mocatta, seconded by Mr. John Lowles, and adopted: "That this conference wishes to draw the attention of the metropolitan boards of guardians to the injury done to provident institutions and to the self-respect and independence of the working classes by a lax administration of poor-law medical relief."

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 4th, 1886.

Andrews, Charles, M.R.C.S., 92, Hammersmith Road, W.
Shaw, Arthur Crokat, Norfolk Road, N.W.
Snow, Lionel Mason, 122, King Henry's Road, N.W.
Soy, Edward, 72, South Lambeth Road, S.W.
Vernon, Arthur Heygate, 26, Macaulay Road, Clapham.

The following gentleman also on the same day passed the Primary Examination.

Priestley, Percy, Sheffield School of Medicine.

MEDICAL VACANCIES.

The following vacancies are announced.

BOOTLE MATERNITY AND DISPENSARY FOR WOMEN AND CHILDREN.—Honorary Assistant-Physician. Applications by March 16th.

BOROUGH OF HALIFAX.—Borough Analyst. Applications by March 18th to Keighley Walton, Town Clerk, Halifax.

BRISTOL ROYAL INFIRMARY.—House-Surgeon. Applications by March 13th, to the Secretary.

CARDIFF UNION.—Vaccination Officer. Salary, £140. Applications by March 20th to A. J. Harris, Clerk, Cardiff.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £100 per annum. Applications by March 24th to Mr. J. Ostell, 14, Bank, Carlisle.

COUNTY OF SOUTHAMPTON.—Public Analyst. Applications by March 30th to the Clerk of the Peace, County Hall, Winchester.

DENTAL HOSPITAL, Exeter.—Two Surgeon Administrators of Anæsthetics. Applications by March 16th to H. B. Mason.

DEVON AND EXETER HOSPITAL.—Surgeon. Applications by March 16th.

DEVON COUNTY ASYLUM.—Junior Assistant Medical Officer. Salary, £120. Applications by March 18th to T. E. Drake, Solicitor, Exeter.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Application by March 18th to the Secretary.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100. Applications by April 7th.

GASCOYNE DISTRICT, Western Australia.—Medical Officer. Public salary, £200 per annum. Applications to the Assistant Private Secretary, Colonial Office, S.W.

GENERAL HOSPITAL, Birmingham.—Resident Registrar and Pathologist. Salary, £100 per annum. Applications by March 27th to H. Fox.

GREENHOUGH DISTRICT, Western Australia.—Medical Officer. Public salary, £100 per annum. Applications to the Assistant Private Secretary, Colonial Office, S.W.

GREENWICH UNION.—Medical Officer. Salary, £120 per annum. Applications by March 17th, to S. Saw, Clerk.

GUEST HOSPITAL, Dudley.—Resident Medical Officer. Salary, £120. Applications to E. Poole, Secretary, before March 19th.

LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Applications by April 6th to T. A. Wykes.

LISNASKEA UNION, Maguiresbridge Dispensary District.—Medical Officer. Salary, £95 per annum. Applications to Mr. E. Law.

LYMINGTON UNION.—Three Medical Officers. Applications to Edwin Jackman.

NORFOLK AND NORWICH HOSPITAL, Norwich.—Assistant to House-Surgeon. Applications by March 17th to H. Chester.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, E.—Resident Clinical Assistant and Registrar. Salary, £60. Applications by March 22nd.

PARISH OF ST. GEORGE-IN-THE-EAST.—Assistant Medical Officer. Salary, £120 per annum. Applications by March 19th to John Richard Browne, Guardian Offices, Old Gravel Lane, E.

ROEBOURNE DISTRICT, Western Australia.—Medical Officer. Public salary, £200 per annum. Applications to the Asisstant Private Secretary, Colonial Office, S.W.

SHEFFIELD GENERAL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by April 5th to G. H. Day.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £80 per annum. Applications by April 5th to G. H. Day.

SHILLELAGH UNION.—Medical Officer for Workhouse Infirmary and Fever Hospital. Salary, £90 per annum, with £10 as Consulting Sanitary Officer. Applications to Clerk of Union. Election on March 19th.

ST. LUKE'S HOSPITAL.—Resident Clinical Assistant. Applications to the Secretary.

ST. PETER'S HOSPITAL, Henrietta Street.—House-Surgeon. Honorarium, £26 5s. per annum. Applications by March 27th.

UNIVERSITY OF MELBOURNE.—Chair of Chemistry. Salary, £750 per annum. Applications to Robert Murray Smith, Victoria Office, 8, Victoria Chambers, Westminster.

WAREFORD ASYLUM, Oxford.—Assistant Medical Officer. Salary, £120 per annum. Applications by March 13th, to the Medical Superintendent.

WEST NORFOLK AND LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, £100. Applications by March 13th.

MEDICAL APPOINTMENTS.

BLUMER, F. Milnes, B.A., M.B., appointed Medical Officer of Health for the Borough of Stafford.

EDMOND, G. M., M.D., appointed Physician to the Aberdeen Dispensary.

GORDON, John, M.B., C.M., appointed Physician to the Aberdeen Dispensary.

WADE, A. B., M.B., C.M., M.R.C.S.Eng., appointed Assistant-Surgeon to the Royal South Hants Infirmary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

EAST—GARMAN.—At St. Stephen's, North Bow, E., by the Rev. T. R. Lawrence, Vicar, Arthur James East, second son of Joseph East, Esq., of The Limes, East Ham, Essex, to Martha, second daughter of Dr. H. V. Garman, of Kent House, Bow Road.

PIGEON—GRINDLEY.—March 9th, at St. Anne's, Highgate Rise, N., by the Rev. C. J. Ackland, M.A., assisted by the Rev. C. C. Buss, M.A., Henry Walter Pigeon, M.A., M.B., B.C., F.R.C.S., of Albion Street, Hull, son of Colonel Pigeon, of Bristol, to Nellizzie, second daughter of the late R. Dutton Grindley, Esq., of Highgate, N.

DEATH.

BROWN.—On March 5th, at his residence, Mitton Grange, Stourport, George Gwynne Brown, M.R.C.S.Eng., L.S.A., in his 76th year.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Mr. Edmund Owen: Boy with Reproduction of Upper End of Femur after Furneaux Jordan's Amputation. Mr. Startin: Case of General Xanthelasma, Diffuse Scleroderma, Angioma, and other cases and specimens. Dr. C. T. Williams: A Case of Mediastinal Tumour.

TUESDAY.—Pathological Society, 8.30 P.M. Dr. Goodhart and Dr. Hale White: Trabeculated Skull in an Infant. Dr. Percy Kidd: Diffused Symmetrical Cirrhosis of Lungs. Dr. Hadden: 1. Tumour of Stomach; 2. Single Cyst of Liver (card). Sir W. Mac Cormac: Tumour of Palate. Mr. R. Williams: Acute Nephritis in Lambs. Dr. Handford (Nottingham): 1. Unusual Case of Ante Mortem Digestion of Stomach; 2. Right Sided Ulcerative Endocarditis (card); 3. Acute Intestinal Obstruction Due to a Band (card). 4. Thrombosis of Left Posterior Cerebral Artery (card); 5. (For Mr. E. Powell) Congenital (?) Atrophy of Right Kidney (card). Mr. F. T. Paul (Liverpool): 1. Congenital Adenosarcoma of Kidney; 2. Calcification of Arteries. Dr. G. N. Pitt: Hydatid of Liver Embedded in a Syphilitic Deposit. Dr. Sainsbury: Pyonephrosis from Valvular Obstruction of Ureter. Dr. Pasteur: Aortic Aneurysm with Mitral Stenosis (card). Mr. Fenwick: Post Trigonal Pouch Containing Stone (card). Mr. Shattock: Lumbo-sacral Meningo-Myelocele Cured by Morton's Treatment (card). Mr. Ballance: Fracture of Thyroid Cartilage (card).

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. G. R. Turner: A Case of Compound Fracture of the Patella. Mr. Edmund Owen: Sprained Joints.—Parkes Museum of Hygiene, 8 P.M. Captain M. P. Wolff: The Rational Alimentation of the Labouring Classes.

FRIDAY.—Society of Medical Officers of Health, 7.30 P.M. Report of Council. Dr. Louis Parkes: The Sanitary Condition of Poor Districts in the Metropolis, with Especial Reference to their Water-Closet Accommodation. Meeting of Council at 7 P.M.

PERATION DAYS AT THE LONDON HOSPITALS.

ONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

ESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

EDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

HURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

RIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

TURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

ARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

Y'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

NG'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

NDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

DDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

IVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

STMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

MMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

THORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

RRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

RRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

BLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

APPOINTMENTS ON EMIGRANT-SHIPS.

T. G. P. ASKS how an appointment under Government to emigrants on board ship could be tried for or obtained.

STAINING OF THE SKIN BY SUPPOSED USE OF OXIDE OF SILVER INTERNALLY.

A MEMBER asks: Can you inform me if there be any known means of neutralising the dark hue of the skin in an old case of epilepsy treated as above?

ANSWERS.

A MEMBER.—Medicines charged for at a moderate price; services gratuitously.

PLASTER CASTS.—The best kind of cast for orthopædic purposes is that devised by Mr. Anthony Bowlby, Surgical Registrar to St. Bartholomew's Hospital. See his article, "A New Material for Casts and Models," JOURNAL, vol. ii, 1882, p. 783.

ARMLEY (Leeds).—It is, we suppose, quite understood that Mr. H. A. Allbutt and Dr. Clifford Allbutt are two entirely distinct persons.

QUERIST.—If Querist be well up in practical chemistry, and know his drugs well, he ought to be able to pass the first L.R.C.P.Lond. without the aid of a coach. For physics, he might read Everett's text-book; any of the smaller books on chemistry will do; perhaps Roscoe is as good as any other. Botany is no longer one of the subjects. Brunton's new book is certainly sufficient for the other subjects.

MR. R. KIMPTON.—The treatise in question is, we believe, not translated into English.

WHOLE-MEAL BREAD.

MR. J. LARDNER GREEN thinks that reliable information as to whole-meal bread may be found in a small pamphlet on that subject written by Mr. Rathmel Wilson, and published by Messrs. Brown and Co., Booksellers, of Salisbury.

PRACTICE IN CYPRUS.

M.D.'s advice to "Emigrant" is to try to obtain a colonial surgeoncy in the island, without which he must be prepared to wait for several years before he could get together a practice, even in one of the larger towns. The colonial surgeon is well paid, and can support himself whilst learning the Cypriot Greek, and making himself acquainted with the native diseases.

M.D. paid a visit to Cyprus in 1884, partly with the idea of settling there, and he came to the conclusion that, without a Government appointment, practice was impossible. The only practitioner whom he knew attempt it, gave it up after a few months' trial. It would be impossible here to fully describe the climate, but he considers it one of the finest in the Mediterranean. In conclusion, he refers "Emigrant" to Sir Samuel Baker's work on Cyprus, which will afford him a great deal of interesting information.

NUMBNESS AND COLDNESS OF FINGERS AND FEET.

IN answer to M.D., C. A. G. suggests cold sponging over the whole surface of the body, followed by hard rubbing, every morning, along with such exercise (light dumb-bells) as the state of the heart will permit.

FIRST AID TO THE WOUNDED.

LECTURER will find the titles of several works in the BRITISH MEDICAL JOURNAL for January 16th, page 139. They can be procured through any medical bookseller.

NOTES, LETTERS, ETC.

CHLOROFORM IN DENTAL EXTRACTION.

DR. E. DAVIES.—The selection of anæsthetics in dental and other operations is a matter for the individual judgment of the administrator. Whatever may be the apparent balance of evidence, the conclusion must be considered to be still *sub judice*, and we entirely disapprove of the absolute statements made in the note in question, which found its way into our columns under circumstances which we elsewhere explain. We greatly regret the circumstance, and have taken steps accordingly. A death from misadventure under an anæsthetic duly administered, as was the case here, involves no kind of reflection upon the administrator.

SEWAGE-FARMS.

SIR,—Your correspondent, "S. F.," has drawn his inferences from imperfect sources. If he will refer to the *Proceedings of the International Medical Congress*, vol. iv, pages 562 to 567, he will find some propositions which were not in any way disproved at that congress, and which were based upon observations drawn from a very extended area; namely, the effects upon a very large number of persons living close to and occupied upon a sewage-farm, of five hundred acres in extent.

Let me give you the figures as to death-rates which have been published by Dr. Philpot, the Medical Officer for this borough of Croydon, taking the last three years. I extract them from the published records, which are open to all the world. The death-rate for the borough in 1883 was 14.84; in 1884, 16.47; in 1885, 16.84. The borough has two sewage-farms, one of nearly six hundred acres to the west of it, and coming within 900 yards of its borders, with a large population close to it; the other is the Norwood Sewage Farm in question, of less than 60 acres in extent. Do the figures show any sign of diminished vitality, such as the utilisation of a sewage of 70,000 would produce, if it did promote so-called "sewage-farm throats?'

The information as to the health of the district to the west of the town corresponds with that from the east; the figures are lower than those in the borough. I have them, though not before me at this moment, for the past three years, but figures are published in my paper as to earlier periods. Let me now give the figures as published by Dr. Philpot regarding the district close to the Norwood Sewage Farm (namely, the South Norwood district) for the last three years:—1883, 12.82: 1884, 16.72; 1885, 14.68; average, 14.72; the zymotic cases are relatively small also.

It does seem a great pity that efforts should be made to discredit the utilisation of sewage by ways which alone can get rid of the evils of storage, which

can stop the growth of disease-germs, and which can, at the same time, assist the country by giving it an immense return in the way of food-supplies of the very character which all large towns are wanting at this time more than anything else, namely, milk and vegetables. The utilisation of sewage must take place in its fresh state, and, therefore, in close neighbourhood to its production. The quantity of produce must compare with the quantity of sewage, and the produce must be such as people who produce sewage can consume, namely, milk, cabbages, and such like.

The causes of the throats mentioned by your correspondents are in the local conditions of the houses occupied by the complainants, and not in the products of the Norwood Sewage-Farm.—I am, sir, your obedient servant,

Duppas House, Croydon. ALFRED CARPENTER.

PHOTOGRAPHY IN PATHOLOGY.

HAVE only just now seen the article in the JOURNAL of January 23rd on photography in pathology, in the concluding paragraphs of which regret is expressed that some ready photo-engraving process is not available for the multiplication of photographs of the macroscopic and microscopic appearances of morbid specimens.

I have for some years past practised microscopic photography with fair success, but have been frequently deterred from publishing my results by the difficulty of reproduction by any process giving sufficiently fine details and half-tones without involving a large outlay. In my search for such a process, I have had experience of most of those which are worked on anything like a large scale; and, while many of them leave nothing to be desired as regards their results, their expense is so great as to be quite prohibitory, except under special circumstances.

Some time since, however, I was fortunate enough to hear of the photo-engraving process of Römmler and Jonas, of Dresden, and I sent these gentlemen a negative, from which they made me proofs which were quite equal in every way to the best work of the gelatine and carbon processes, and at a wonderfully low price. These proofs were printed by them for me in colour, giving an excellent representation of the logwood stain used in the microscopic preparation. The "grain" in their process is so fine as to require careful scrutiny for its detection; and, in fact, at the ordinary distance from the eye, it cannot be distinguished in its effect from silver printing. The work of Messrs. Römmler and Jonas well deserves a trial at the hands of those who require an accurate and faithful reproduction of their work at a moderate rate.

56, Merrion Square South, Dublin. RICHARD A. HAYES, M.D.

THE HOME OF REST, MALVERN WELLS.

ON behalf of the committee, will you allow me space to direct the attention of the profession, especially the medical officers of hospitals, etc., to the advantage of the above home for convalescent female patients, and those requiring rest and change? To those of small means, I feel sure, such a home only requires to be known to become a great boon. The home is situated on the slope of the Malvern Hills, and possesses the advantage of a dry bracing air, pure water; and delightful views, and the moderate charges place the Home within reach of all. Further particulars can be gained from the advertisement in the JOURNAL for March 6th. THELWELL PIKE, M.D.

Malvern.

RURAL SUPERSTITION.

IN answer to your suggestion in the JOURNAL for February 27th, I send a few words about a curious superstition in North Wales. Herpes zoster goes here by the name of the Eagle's Disease (Clwyf yr Eryr). The remedy for it is considered to be the inunction of the saliva of a person who has at one time eaten eagles' flesh, or whose ancestors have done so. The saliva must be obtained the first thing in the morning before the eagle-eater has broken fast. I have just heard of a woman who, having this unusual medical qualification, makes by it a comfortable addition to her wages. My original informant as to this widely spread superstition was a Welsh minister, who added: "I attribute the cure, myself, not to the person having eaten eagles' flesh, but to the fact that human spittle, before the night's fast is broken, is a violent poison. It poisons the disease." STUDENT.

ACUTE TONSILLITIS AND RHEUMATISM.

IN your JOURNAL for February 6th, Mr. Cameron, of Liverpool, states that he has not seen in the text-books any allusion to the co-relation of acute tonsillitis with rheumatism. May I call his attention to the fact that, as long ago as 1878, Mr. Lennox Browne, in his book on *The Throat and its Diseases*, said (page 132): "Indeed, so close is the relationship between tonsillitis and rheumatism, that, in order to complete the picture of the etiology of the former affection, one cannot do better than quote almost *verbatim* the concise account of the predisposing and exciting causes of acute rheumatism given by Dr. F. T. Roberts, merely changing the name of the disease." As the book referred to has long been out of print, Mr. Cameron may have been unable to refer to it. I may mention, however, that a second edition of this work is expected shortly.

ALFRED S. GUBB.

PASTEUR ON HYDROPHOBIA.

IN your notice of M. Pasteur's communication on hydrophobia to the Academy of Science at its sitting on March 1st, you seem to be in error in saying that the girl Louise Pelletier was brought to the laboratory six days after being bitten. She was bitten on October 3rd, and was only brought to M. Pasteur on November 9th, thirty-six days afterwards; hence his reluctance to treat the case. H. MACNICOL.

Lagganbuie, Dalmally, N.B.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Suckling, Birmingham; Dr. Churton, Leeds; The Honorary Secretary of the Harveian Society, London; Mr. J. Jones, Leeds; Mr. H. A. Allbutt, Leeds; Mr. J. W. Taylor, Birmingham; Dr. Joseph Rogers, London; Surgeon-Ma or Hodder, Newry; Medical Officer; M.D., F.R.C.S.; Mr. W. S. Ellick, Dublin; Mr. H. R. Greene, Cairo; Mr. H. Johnston, Glasgow; Mr. J. U. Green, Woodbridge; Mr. A. W. Mayo Robson, Leeds; Dr. Hawthorne, Dromore, co. Down; Our Aberdeen Correspondent; Dr. H. Handford, Nottingham; Dr. G. Vincent, Manchester; Mr B. C. A. Windle, Birmingham; Mr. A. B. Wade, Southampton; Dr. Bucknill, Rugby; Mr. C. O. Elkeston, London; Dr. Orange, Broadmoor; Dr. Henry Barnes, Carlisle; Thesis; Dr. Murrell, London; Mr. J. Mackenzie Booth, Aberdeen; Mr. T. Lambert Hall, Dilw Leominster; Dr. C. H. Cattle, Nottingham; Dr. J. Brydon, Hawick; Dr. I son, Berne; Dr. Hill, Grantchester; Dr. Lucas, Neemuch; Mr. Thomas Pea Plymouth; Dr. E. W. Hope, Liverpool; Dr. J. Magee Finny, Dublin; Mr. V liam Cox, Winchcombe; Dr. Thomas, Crowthorne; Mr. F. M. Corner, Londo Deputy Surgeon-General Green, Northallerton; Dr. J. Fourness-Brice, N York; Mr. Robert Bell, Glasgow; Mr. Jonathan Hutchinson, London; Mr. J. H. Wood, Boston; Messrs. J. Beal and Sons, Brighton; Dr. J. Shives, Liv sedge; Dr. Donald MacAlister, Cambridge; Arabian Coffee Compa Limited; Dr. H. M. Hardcastle, Newcastle-on-Tyne; Dr. Rickards, Birmi ham; Dr. Macauley, Montana, United States; Dr. R. Low, Glasgow; Mr. K. Lewis, London; Mr. G. Thomas, London; The Treasurer of Guy's H pital; Dr. W. Cooper, Aberdeen; S. H. U.; Mr. Percy Howard May, Po ton-le-Fylde; Mr. N. E. Davies, Sherborne; Mr. W. Turner, Poole; Mr. Pearce, London; Dr. C. Gowan, Newtown; Dr. F. Goodchild, London; Dr. Barnes, London; Dr. E. Symes Thompson, London; Mr. G. S. Johns London; Messrs. Ward, Lock, and Co., London; Mr. J. Erskine, Glasgo Mr. L. Stephens, Emsworth; Dr. Thornton, London; Dr. W. M. Campb Liverpool; Dr. Mackie, Turvey; Mr. J. Stuart Nairne, Glasgow; The Edi of the *Chemist and Druggist*; Mr. R. Kimpton, London; Mr. A. H. Boy Pill; Mr. Peter Fischer, Buda-Pesth; Mr. D. A. Fraser, Burnham; Dr. E. Greves, Bournemouth; Dr. Burdon-Sanderson, Oxford; Mr. H. Macnic Dalmally; Mr. T. Jenner Verrall, Brighton; Dr. Saundby, Birmingham; M James Donnet, Bognor; Mr. J. Brindley James, London; Mr. J. R. Lun London; Mr. William Marriott, London; Dr. A. Sheen, Cardiff; Mr. C. Cass London; Our Liverpool Correspondent; Our Manchester Correspondent; O Dublin Correspondent; Dr. W. Shaw, Maidstone; Mr. A. E. Lloyd, Rhy Mr. E. White Wallis, London; Mr. A. Dell, Cardiff; Messrs. Squire a Sons, London; Dr. F. Barnes, London; Mr. E. Cresswell Baber, Brighto Inquirer; Our Edinburgh Correspondent; Our Paris Corresponden Messrs. J. Jackson and Co., London; Dr. T. Marshall, London; Dr. J. Hug lings Jackson, London; Dr. F. Knight, Liverpool; Mr. R. Davy, London; M Lawson Tait, Birmingham; Mr. W. E. Shorland, Bristol; Mr. J. F. Forest London; Dr. L. Lewis, Philadelphia; Messrs. Burroughs, Wellcome, and Co Mr. J. Finey, Southsea; Mr. J. Aitcheson, Newcastle-on-Tyne; Dr. T. Orchard, Manchester; Mr. E. East, London; Dr. T. J. Lavers, London; Mr. W. Pigeon, Hull; Lieutenant-Colonel E. Montefiore, London; Mr. A. Kin Morgan, Bournemouth; Mr. J. F. Little, Ben Rhydding; Dr. J. Lindsa Porteous, Kirkcaldy; Dr. F. H. Daly, Hackney; Mr. George Eastes, Lo don; Brigade-Surgeon R. J. W. Orton, Newcastle-under-Lyme; Mr. J. de Z. Marshall, Hawkhurst; Mr. A. Ledlie, Belfast; Mr. W. F. Haslam, Bi mingham; Dr. A. Hill Hassall, San Remo, Italy; Dr. G. Hewitt, London; D R. M'Lean, Anstruther; Dr. W. Dawson, Malvern; Mr. Davies, Swanse M.B.; Dr. Tatham, Salford; Mr. Glover, Derrington; Dr. Huggard, Davos Plat Dr. A. Stewart, Birkenhead; Mr. P. Hooker, Midhurst; Dr. Imlach, Live pool; Dr. Ashby, Manchester; Mr. A. Chapman, London; Dr. J. W. Moo Dublin; Dr. Norman Kerr, London, etc.

BOOKS, ETC., RECEIVED.

A Manual of Midwifery. By A. L. Galabin, M.A., M.D., F.R.C.P. Illustrat London: J. and A. Churchill. 1886.

Essays on the Reconstruction of Central London. Westgate Prize Esasys. L don: George Bell and Sons. 1886.

Select Extra Tropical Plants. New Edition. By Baron F. Von Mueller, M.I K.C.M.G., F.R.S., Government Botanist for Victoria. Melbourne: Jo Ferres. 1885.

Elements of Materia Medica and Pharmacy. By Alfred W. Gerrard. Lond H. K. Lewis. 1886.

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THE GULSTONIAN LECTURES,

ON

SPASM IN CHRONIC NERVE-DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

By SEYMOUR J. SHARKEY, M.B., F.R.C.P.,
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Lecture I.

Mr. President and Gentlemen,—When I was informed that I had been nominated to fill the honourable position of Gulstonian Lecturer for 1886, I consulted the records of the College, in order that I might acquaint myself with the conditions attaching to the lectureship. I found that they were few in number, and that the main object which Dr. Gulston had in view was to secure, not only an annual dissertation on certain diseases, but also a practical demonstration of their pathological anatomy. It seemed to be incumbent, therefore, upon the lecturer, to choose a subject which he could illustrate, however imperfectly, from his own experience; and I selected that class of chronic diseases which have this, at least, in common, that they are associated with muscular spasm. To you, who know the wide range of knowledge and the ample experience which would be required to treat such a subject exhaustively, this proposal must appear pretentious to the last degree. I am fully aware, however, that the limited time at my disposal, and still more the limited knowledge I possess, make an exhaustive consideration of it impossible. I merely propose to take a general view of chronic nerve-disease in its association with muscular spasm, and to consider how far our present knowledge of pathology enables us to understand the phenomena which present themselves.[1]

By spasm is meant excessive muscular contraction; and, if we confine our attention to those muscles which are under the control of the will, excessive contraction is that which occurs in defiance of the will, or which, although commencing as a voluntary act, transgresses the limits which the will would impose upon it.

There is great variety in the spasmodic affections which have been observed in man, and to which descriptive names have been given. Thus, "tonic" spasm indicates persistent muscular contraction, a tetanic condition of a muscle, or of groups of muscles, in which the individual waves of contraction overtake each other, and are fused into one. "Clonic" spasm is a term applied to conditions in which the individual waves succeed each other less rapidly and often quite irregularly, giving rise to a great variety of intermittent spasms. The "co-ordinated spasms," form another class, in which groups of muscles are the seat of clonic contractions, which are co-ordinated in such a manner as to produce some regularly recurring though involuntary movement. It is unnecessary to proceed further in explanation of the many forms of pathological contraction of muscle, which are embraced under the term spasm; they will be referred to again in connection with the diseases which they accompany.

In health, as a rule, contraction of striated muscles depends on impulses transmitted to them through the nervous system, and travelling down motor nerves; and the same may be said of that which is the product of disease; so that the motor nervous mechanisms afford a suitable basis, in connection with which we may survey our present knowledge of the conditions which give rise to spasm. It is convenient, and I might almost venture to say scientific, to divide the motor mechanisms into a cerebral system and a spinal system; the latter forming a groundwork on which the former is superposed, comparatively late in the history of the development of the individual, and probably of the species. It might be thought that, considering the importance of the cortical centres of the hemispheres, of the central ganglia, and of the cerebellum, the term cerebral systems would be more appropriate than cerebral system. But it is better, at any rate in considering spasmodic diseases, to embrace them all under one head. For our present knowledge of anatomy, physiology, and pathology, does not justify us in concluding that there is any efferent motor connection between the brain and the spinal cord except the pyramidal tract, direct and crossed, diseases of which give rise to chronic muscular spasm. Evidence in support of this view will appear in subsequent portions of these lectures.

The terms "cerebral system" and "spinal system" are intended to be anatomically exhaustive, and to comprehend all possible nerve-mechanisms by which spasm is produced. There should be no room for any further division of the subject. But our ignorance, especially of the finer molecular changes which accompany not only abnormal but normal neuro-muscular conditions, during action and inaction, necessitates some reference to those spasms which are called functional, and which will, we may hope, with advancing knowledge, become amenable to a more accurate classification. The divisions of the subject, then, as now proposed, are (1) spasm in connection with cerebral motor mechanisms; (2) in connection with spinal mechanisms; (3) functional spasm.

1. Spasm in connection with Cerebral Motor Mechanisms.

The nerve-fibres, which bring the voluntary muscles of the body under the control of the will originate, so far as we know, in the central portions of the cortex. Experiments on living animals first yielded the clue to this discovery in man, and pathological evidence has abundantly corroborated the facts derived from this source. On an occasion like the present, it will not be thought a presumption if I refer to my own observations upon this point. In a paper published in the *Lancet* of September 29th, October 6th and 13th, 1883, I recorded six cases of cortical lesions all occupying the region in question, and all accompanied by motor paralysis, which occupied the face, arm, and leg, according to the localisation of the disease. It is unnecessary at present to enter into much detail on this subject. The two ascending convolutions which form the boundaries of the fissure of Rolando, the superior parietal lobule, the paracentral lobule, and probably some of the parts immediately adjacent to these, constitute the motor area of the cortex (Fig. 1). All we know about it, as regards voluntary

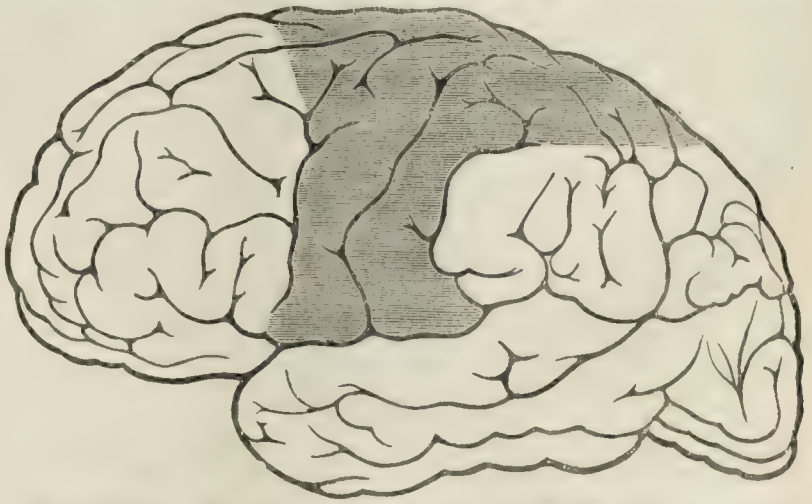


Fig. 1.—Diagram showing the position of the Motor Area of the Cortex on the External Surface of the Brain.

muscular acts is, that the "way out" of the cortex for voluntary impulses passes through it. Some of the motor fibres are connected with processes of large ganglionic cells, which form a very striking feature of this region of the brain, and which resemble the cells of the anterior cornua of the spinal cord. The centres which are in connection with the leg occupy the upper part, those which are in connection with the arm the middle, while the lower portions near the fissure of Sylvius preside over the muscles of the face and tongue. During a part of the very long course which the fibres coming from the motor area pursue, the bundles on their way to the spinal centres for the face, arm, and leg, remain distinct. Thus, passing from the cortex through the white substance of the hemispheres, they converge to the internal capsule, and occupy the knee and anterior two-thirds of its posterior segment, which lie between the optic thalamus and the lenticular nucleus (Fig. 2). In the capsule, the nerves for the face- and tongue-centres occupy the knee, the fibres for the arm come next, and those for the leg lie posteriorly. The knowledge of their relative positions in the internal capsule, which is a somewhat recent acquirement, is of great interest, because it probably affords at least part of the explanation of a long observed clinical fact; namely, that, in hemiplegia in connection with disease of the central ganglia, the arm is usually more paralysed than the leg. For hæmorrhages from the branches of the lenticulo-striate and lenticulo-optic arteries would, from their position, press more upon the anterior, than upon the posterior division of the motor segment of the capsule.

Leaving the internal capsule, the fibres under consideration pass to the superficial part (basis) of the crus (Fig. 3), and there occupy its

[1] I am indebted to my friend, Dr. Theodore Acland, for many of the microscopic preparations from which drawings have been made, and to Mr. Shattock, Mr. Burgess, and Mr. Lapidge, for most of the drawings.

median portion, and are so placed that the fibres presiding over the face are situated internally, those over the leg externally, and those in connection with the arm centrally.

Arrived at the pyramids, in the medulla oblongata, the fibres going to the spinal motor centres for the body and limbs decussate, those for the face and tongue having already done so a little higher up. It has been estimated that about 91 to 97 per cent. decussate; but the number probably varies within wide limits, so much so, that there is good reason for thinking that in some cases complete decussation, in others none at all, takes place. Flechsig has also shown that, in the same spinal cord, the two

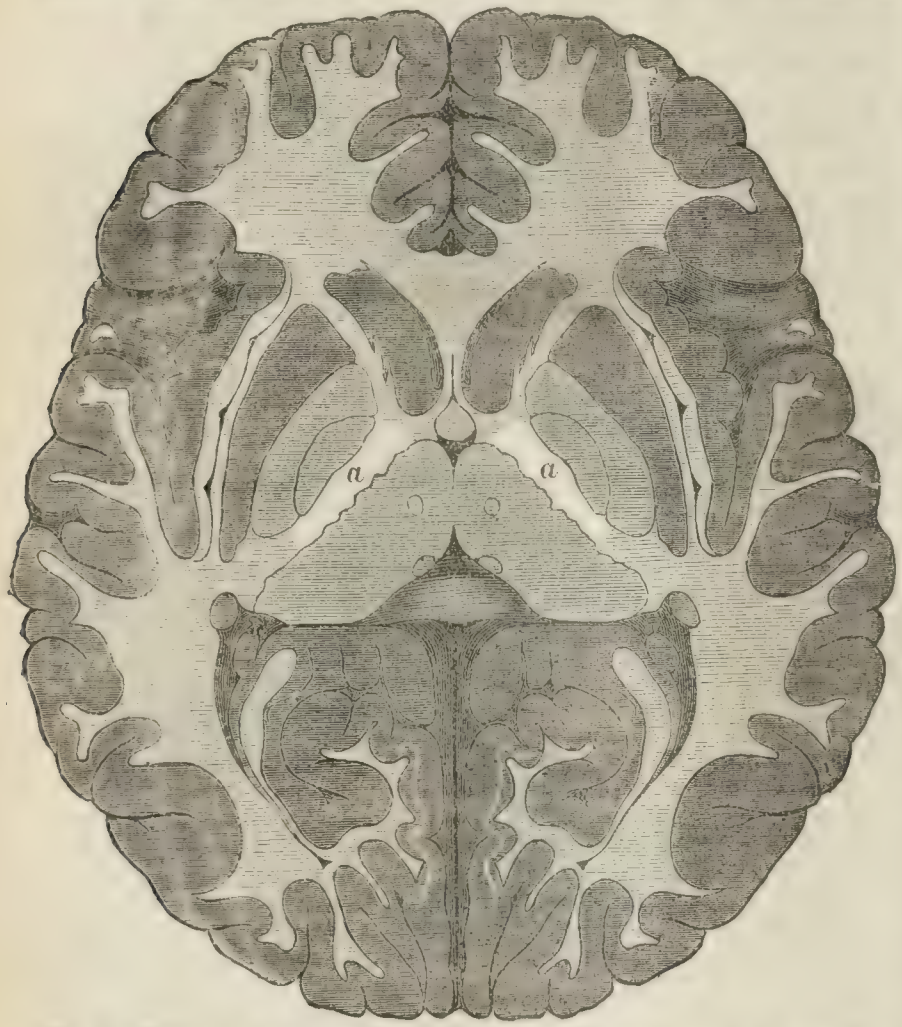


Fig. 2.—Horizontal Section of Brain (Flechsig). Diagram showing the position of the Motor Strands (*a a* unshaded) in the Internal Capsule.

sides may be unsymmetrical in this respect. Some observers suppose that decussation of fibres of the pyramidal tract occurs in the cord; but nothing is known for certain with reference to this point. That part of the pyramidal tract which crosses at the decussation of the

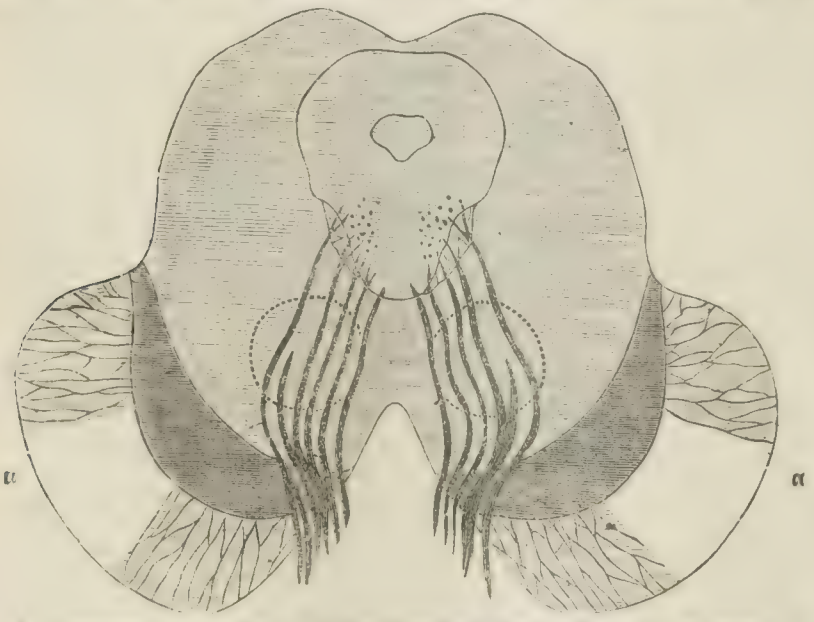


Fig. 3.—Diagram representing a Vertical Section through the Crura Cerebri: *a a* —unshaded areæ—show the position of the Motor Fibres from the Motor area of the Cortex.

pyramids (the crossed pyramidal tract) occupies the posterior part of the opposite lateral column in the cord, being separated from the surface of the latter by the direct cerebellar tract. The fibres which do not decussate (direct pyramidal tract) pass down the cord on the same side, occupying a narrow strip along the margin of the anterior fissure. (Fig. 4). The fibres of the pyramidal tract finally form connections

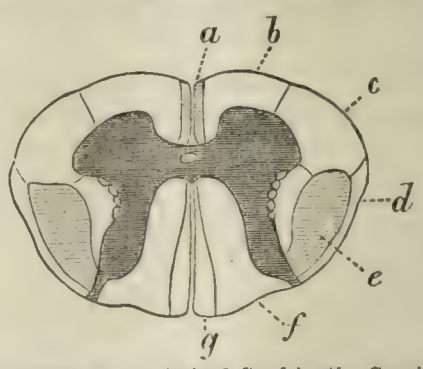


Fig. 4.—Diagram of a Section of the Spinal Cord in the Cervical region (Flechsig) *a*, Direct Pyramidal Tract. *b c*, Antero-lateral Column. *d*, Direct Cerebellar Tract. *e*, Crossed Pyramidal Tract. *f*, Columns of Burdach. *g*, Columns of Goll.

with the multipolar cells in the anterior cornua of the cord, either directly or through the intermediation of other nerve-cells.

It is a well known fact that nerve-fibres in general depend for their integrity upon connections with ganglionic cells, and that, when these are severed, the fibres degenerate. Thus, the motor fibres of the cord depend upon the cells in the anterior cornua; the sensory fibres upon cells in the ganglia on the posterior spinal roots; while the healthy nutrition of the fibres of the pyramidal tract is dependent upon the cells in the motor convolutions. If their connection with the latter be anywhere interrupted, or if the cells themselves be destroyed, degeneration occurs in the whole tract below. When this has taken place, tonic spasm supervenes in the muscles, which are, in health, under the control of these fibres. But, between fully developed spasm and the earlier slighter indications of its presence, there are many gradations. Taking, for instance, what is perhaps the commonest condition which gives rise to these events—namely, destruction by a sudden hæmorrhage of the motor portion of the internal capsule—it is often some months before well marked spasm is observed; but, in the meantime, there are phenomena which foretell its coming. The most striking and frequent of these is the increased knee-jerk, which a tap on the patellar tendon elicits. The knee-jerk may be diminished for some time after the apoplectic attack; but, if the fibres of the pyramidal tract have been interrupted, it soon becomes exaggerated. What are termed ankle-clonus and knee-clonus (phenomena which it is unnecessary to describe before an assembly like the present) soon appear, or may do so; for they are not necessarily present where the disease is slight. Charcot reports a case where ankle-clonus appeared eight days after the hemiplegic attack, and late rigidity began within three weeks; and another, in which it set in in one month, and late rigidity in two. Pitres gives cases in which clonus was observed in from eleven to fifteen hours. But, in any case, it may be said that increased tendon-reflexes and clonus precede rigidity; and, in many cases of chronic disease of the lateral columns of the cord, they are to be found a very long time before rigidity, or the latter may not set in at all before death occurs. Sometimes, one tap on the patellar tendon gives rise to a succession of knee-jerks, and like phenomena may appear in the other limb, or in muscles still further removed. Brissaud asserts that even the non-paralysed side is not healthy, but presents in a certain degree these phenomena, which he terms "latent contracture." To what cause are these increased tendon-reflexes to be referred?

Muscular tone is that condition of tension in healthy muscle which is, no doubt, due to nerve-impulses proceeding from the cells in the anterior cornua of the spinal cord. A certain number of observers have come to the conclusion that the knee-jerk and other tendon-contractions are local phenomena, due to direct contraction of the muscle, which is temporarily put upon the stretch by tapping its tendon. Its increase is due to the increased tension which results from severance of the spinal centres from the cerebral motor centres, which exercise a controlling power over those below, this severance producing increased muscular irritability. But for the tendon-phenomena to take place at all, the reflex arc producing tension must be intact.

Other authorities have convinced themselves, by equally careful observations, that the tendon phenomena are true reflex neuro-muscular acts. The objection to this conclusion, which appears insuperable to their opponents, is that the latent period is much too short for a

reflex act. But surely it is not legitimate to bind all reflex acts by the exact laws which appear to govern skin-reflexes. It is probable that conduction in nerves does not take place at precisely the same rate in every reflex arc in the body, nor even that the time required to reflect the afferent impulse on to the efferent nerve is uniformly the same. This will depend upon the purpose for which the muscular act is excited, and the speed with which it needs to follow upon the stimulus which evokes it. Now there are, as has been proved, nerve-endings in muscles and tendons; and it is not improbable that the slight stretching of the latter, which is produced by the action of antagonists, gives rise, by means of a reflex act, to the steadying action, which is always aroused by the contraction of opponents. This would require great sensitiveness on the part of the reflex arc; for, considering the suddenness of many muscular acts, the steadying contraction of the muscles not directly producing the movement would require to be almost equally sudden. If the muscular act which follows a tap on the patellar tendon be a purely local phenomenon, due to "myotatic irritability," it is difficult to explain those cases in which contraction of muscles in the opposite leg, or even in the arm, occurs. Gowers states that the latent interval for the knee-jerk is $\frac{1}{25}$ to $\frac{1}{30}$ second, and that physiological data require that it should be $\frac{1}{15}$ sec. if it be a true reflex. But what will be said of the following equally legitimate argument? The interval for the knee-jerk is $\frac{1}{21}$ sec. Dr. de Watteville and Dr. Waller have found the interval for the jaw-jerk to be $\frac{1}{50}$ sec., which is only half the interval required for the knee-jerk. Therefore, the phenomena are not produced in a similar manner. Dr. de Watteville says that Dr. Waller has determined the latency of the closure of the eyelids to the stimulus of a strong light to be $\frac{1}{20}$ sec., the shortest true reflex known. This differs much less from the interval for the knee-jerk ($\frac{1}{21}$—$\frac{1}{30}$ sec.) than the latter differs from the jaw-jerk ($\frac{1}{50}$ sec.).

We know too little about the various reflexes which occur in the body to consider it as proved whether tendon-phenomena are reflex or not, but it is at any rate satisfactory to feel that, for all practical purposes at the bedside, either theory is equally applicable. For the key-note to both is integrity of the reflex arc, and changes in the latter are necessarily accompanied by changes in the tendon-phenomena.

Let us assume, provisionally, that the knee-jerk and other allied contractions are reflex. Why are they increased in disease which interrupts the continuity of the pyramidal tract, or destroys the motor cells in which its fibres originate?

Probably the reason is, not that the descending sclerosis produces irritability of the cells in the anterior cornu, but, as Hughlings Jackson says, that the suppression of the functions of the pyramidal tract gives rise to "permitted hyperphysiological activity," the spinal centres being "let go." This view is strongly supported by those cases of congenital absence of the whole or a part of the motor centres in the brain, which are accompanied by contracture of the limbs similar to that which occurs in lesions of the pyramidal tract resulting from disease; for, in these cases, the pyramidal tract has been proved to be deficient. This was the condition found by me in a case which I shall relate presently. The pyramidal tract is not developed until very late, and is not even complete at birth; and, in the cases of congenital disease referred to, it is not developed at all, or only in part. Even in disease which occurs in adult life and produces descending sclerosis, if the cord be examined after many years, the process of atrophy has long been completed, the nerve-fibres have disappeared, and nothing remains but a quiescent cicatrix. This was so in another case which I shall relate. In such conditions, no active process is going on to produce contracture; there is merely destruction of the pyramidal strands. Again, the exhaustion following upon the motor discharge in epilepsy, may give rise to temporary increase in the knee-jerk, or to ankle-clonus; and the same may be said of that suppression of function produced by the slighter degrees of chloroform-narcosis. In short, the excessive tendon-reflexes and contractions which result from descending sclerosis are merely evidences of abolition of the function of the cerebral motor tract, which, in health, controls the action of the spinal ganglia.

Objections have been made to this view on the ground that sudden disease, such as cerebral hæmorrhage, which destroys the fibres of the internal capsule, does not give rise to the phenomena in question immediately, but only after the lapse of a certain time. The cases recorded by Pitres, in which ankle-clonus was observed to supervene in a few hours, prove that this delay is not an invariable rule; and, even if it were, it would not be unreasonable to suppose that cells, which have long been under the control of others, should require a certain time before they learn to exert a power to which they have hitherto been unaccustomed.

We may therefore look upon increased tendon-reflexes, clonus, and contracture, as degrees of independent neuro-muscular action, originating in the spinal centres, which have run riot owing to the diminution or annihilation of the inhibitory functions of the pyramidal tract.

But, it may be further asked, does the appearance of one or all of these phenomena prove that there is gross and tangible disease of the cerebral motor cells or fibres? The answer is, decidedly not. In the *Lancet* for November 7th, 1885, Dr. Angel Money records his experience of "Reflex Actions, Knee-jerks, and Muscular Irritability in Typhoid Fever, Phthisis, and other continuous Fevers;" and he shows that all the phenomena, except tonic spasms, are found in these conditions; but even contracture may occur in fevers. I have myself seen it in typhoid fever, and Dr. Murchison mentions its occurrence in typhus and relapsing fevers as well. Speaking of the former, he remarks: "Contraction and rigidity of certain muscles are observed more rarely, and only in severe cases. The fingers may be tightly clenched, or the forearm flexed, or, in rare cases, there is trismus or strabismus. In twelve cases, I have observed tonic spasms of many different muscles. Twice I have seen the legs and thighs so bent that the knees almost touched the chin." A man, suffering from extreme debility and anæmia, came lately to my out-patient room, and the house-physician called my attention to the fact that he had not only very excessive knee-jerks, but as marked knee- and ankle-clonus as I ever saw. He was sent into the hospital; and, after two days' rest in bed, I was unable to elicit even the slightest clonus. Such cases as these, together with others in which recovery has occurred, justify the verdict which Dr. Donkin gives in *Brain*, October, 1885. "It seems clear," he says, "at present that we must bear in mind that we have not done with spastic paraplegia by calling it lateral sclerosis, remembering the cases which recover, whether they are quite obviously functional or not, but must believe with Friedreich, Wilks, and others, that the symptoms may occur under various forms of disorder or disease of the nervous system."

My own impression is, that the condition which most frequently gives rise to these abnormal muscular conditions in connection with the spinal centres, is partial or complete suppression of nerve-impulses, passing from the cerebral motor centres down the pyramidal tract; and this may occur under a considerable variety of circumstances. But, accepting the fact that contracture of muscles, accompanying or succeeding a phase where tendon-reflexes are exaggerated, is most typically seen and is most characteristic in gross disease of the motor convolutions and pyramidal tract, let us consider some concrete instances of it. Two facts must be remembered, however; and these are, first, that when contracture is well developed, it may prevent us from eliciting ankle- and knee-clonus, or tendon-reflexes; and, secondly, that contracture sometimes passes off, the muscles at the same time undergoing rapid atrophy, and the reflexes being abolished. This occurs when disease of the lateral column extends to the cells of the anterior cornu.

Case of Embolism of the Sylvian Artery, which resulted in Absorption of a large part of the Right Hemisphere of the Brain, and which was followed by Paralysis and Rigidity of Limbs.—The complete history of the patient's illness, and of the *post mortem* examination, is recorded in the *Transactions of the Royal Medical and Chirurgical Society* for 1884, and I shall not enter into much detail now. The case is an instance of extensive destruction of the cortex and central ganglia on one side, producing descending degeneration in the cord, together with the symptoms which are characteristic of that condition.

E. J., aged 34, was admitted into Guy's Hospital on March 8th, 1876, under the care of Dr. Pavy. She had never had any serious illness, and, though married ten years, had had no children. Suddenly she was attacked with giddiness, faintness, and sickness, and had an epileptiform seizure. After four days, she recovered consciousness, and found she was paralysed on the left side, and had no sensation on that side of her body. On admission, she was found to have ordinary complete hemiplegia and hemianæsthesia on the left side. She had, in addition, a systolic murmur, audible all over the cardiac area. About four months after the commencement of her illness, she left Guy's Hospital with the left arm almost useless, but with very fair power in the leg. She had completely recovered from the hemianæsthesia.

Seven years later, on May 7th, 1883, the patient, aged 41, was admitted into St. Thomas's Hospital, under the care of Dr. John Harley, with aortic disease and bronchitis. Dr. Hadden, the registrar, made the following note. "The fingers of the left hand are partially flexed on the palm, and decidedly stiff. The skin over the backs of the fingers is whiter and more glistening than it is on the right hand. The grasp on the left is feeble, and there is rigidity of the flexors of the forearm and arm. The tendon reflexes are very brisk in the left, but are hardly obtainable in the right arm. The left leg is somewhat

rigid, the patellar tendon-reflex brisk, and there is slight ankle-clonus. The tongue is protruded straight. Slight paresis is observed in the muscles on the left side of the face. There is no loss of sensation. On casual examination at the bedside, the left eye appears to be sound, and there is no hemianopia or colour-blindness. Tested with a watch, hearing is found to be sharp, and equal on the two sides." The patient died somewhat suddenly on May 17th.

The husband informed me that, from the period of her attack, seven years before her death, she had been weak-minded and queer, doing unaccountable things, such as she had never done before, but that she remained a good-tempered, hard-working, and affectionate wife. On *post mortem* examination, marked aortic disease (ulcerative endocarditis) was found, and there was great cardiac hypertrophy, the heart weighing 17¼ oz. The lungs were hyperæmic and œdematous at the base, and the lower portion of the right was semi-solid. The liver showed slight congestion in the centres of the lobules ("nutmeg"). The kidneys weighed 11 oz., the capsule was thick and adherent, the substance very firm, and the surface granular. The spleen was hard, and its capsule thick.

In the right hemisphere of the brain, the parts supplied by the middle cerebral artery were extremely wasted, and many of the convolutions had entirely disappeared. The central ganglia, too, were so much affected, that the measurement from their intraventricular aspect to the outer surface of the convolutions of the island of Reil on the right, was not much more than one-third of that on the left. Descending degeneration of the lateral column, and also of the column of Türck, could be seen in the spinal cord; and the alteration in both these strands of fibres was situated on the side opposite the diseased hemisphere.

This case, the brain of which is now shown, together with drawings of microscopic sections of the spinal cord (Figs. 5, 6, 7), is of interest, not only because of the long time the patient lived after such extensive destruction of one hemisphere, but also because it is an instance of total decussation of the pyramidal tract. It will be seen on examination of the sections of the cord, that the left half is very much smaller than the right, and that the white substance bordering on the anterior fissure, the column of Türck, is decidedly smaller on the left than on the right; that is to say, there is no direct pyramidal tract, but the whole of the fibres from the right hemisphere appear to have crossed, and to have gone, some into the left lateral column, some into the left column of Türck.

On microscopic examination of the sclerosed tracts, there is seen simply diminution in the number of white fibres, and increase in the density of the neuroglia in the affected lateral column. Apart from the irregularity which exists in the columns of Türck, there is very little structural difference to be made out in them. The softening, which produced hemiplegia and subsequent rigidity in this instance, involved the cortex, central ganglia, and internal capsule.

Lesions need not, however, be so extensive, in order to give rise to paralysis with rigidity. Destruction of a portion of the motor convolutions, or of the subcortical fibres connected with them, or of that part of the internal capsule through which the motor strands pass, produces the same phenomena. Cases of softening of portions of the cerebral cortex, of long standing, do not often come under the observation of pathologists in the *post mortem* rooms of general hospitals; or, if they do, I have been singularly unfortunate in not meeting with them. A girl about eleven years of age, who was under my care as an out-patient at St. Thomas's Hospital, had had a very severe burn on the right side of the head when she was two years old. The scar occupied the greater part of the parietal region, and it was perfectly destitute of hair. I got no very clear details of the symptoms which succeeded this accident, except that she lost power all down the left side, a condition from which she had never recovered. Since then she had been subject to epileptic fits, in which the left side was convulsed; but she did not lose consciousness. The arm, when I saw her, was rigidly contracted, the leg being much less affected, and the deep reflexes were excessive all down the left side. Now, although the actual state of things was not demonstrated by a *post mortem* examination, it is pretty certain that the burn caused superficial disease of the parts situated immediately below and within the cranium, and destruction of a portion of the motor cortex, with descending degeneration of the pyramidal tract, was the result.

Case of Perforating Tuberculosis of the Skull, with Cerebral Symptoms.—In *Brain*, April, 1885, Dr. Edmunds describes a case, which affords a good instance of descending degeneration and rigidity from a limited cortical lesion. The patient was a boy of 14, of a delicate family. Eighteen months before admission into St. Thomas's Home, he had suffered from what was supposed to be tubercular peritonitis; and at the same time an abscess, accompanied by much headache, formed in the region of the left parietal bone. About six months later h complained, occasionally, of numbness in the right arm and hand, an two days before admission he had his first fit. He felt giddy, fell, b came unconscious, foamed at the mouth, bit his tongue, and passe urine involuntarily. Both legs were convulsed, the right arm flexe and the right hand clenched. He was admitted into St. Thomas Home on September 3rd, 1884. An abscess was found situated ov the left parietal bone. The grasp of the right hand was much weak than that of the left, and there was very slightly deficient power i the right leg and right side of face. Sensation was everywhere norma but double optic neuritis was present. I saw the patient with D Edmunds at this time, and subsequently the abscess was laid freel open, and a piece of dead bone removed, so that the dura mater wa exposed, and the pulsations of the brain could be seen. After this h had two fits, much like the one already mentioned. The discharg from the opening in the skull gradually diminished, and the scal covered over the edges of the wound, so that when he left the hospit there was a defect in the skull and scalp, through which the dura mate could be seen. A silver plate was made to protect this. On Februar 4th, 1885, he left the Home, the chief symptom of disease which h presented being partial paralysis of the right arm and hand: whe tested with the dynamometer, the right hand only marked 20, the le 70.

In the *Lancet*, for September 27th, 1884, my colleague, Dr. Rei published his "Observations on the Relation of the Principal Fissur and Convolutions of the Cerebrum to the Outer Surface of the Scalp. Before the patient left the Home, Dr. Edmunds got Dr. Reid's assis ance in determining the position of the lesion by surface marking The boy's head was shaved, and the fissures marked upon the smoot surface, and the opening in the skull was found to be half an inch i front of the middle of the fissure of Rolando. But, as it was know

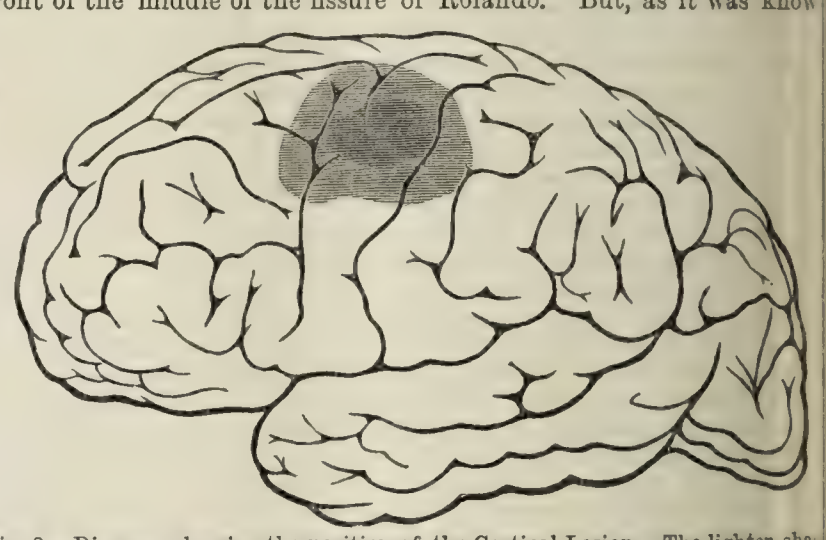


Fig. 8.—Diagram showing the position of the Cortical Lesion. The lighter sha ing represents the Area of Adhesion between the Dura Mater and the Arach noid; the darker area, the Superficial Destruction of the Cortex.

that the disease extended backwards along the dura mater for a shor distance behind the opening, the conclusion drawn was that th middle of the ascending frontal and ascending parietal convolution was the part affected. The account I am about to give of the pos *mortem* examination shows how accurate this localisation was. Th patient returned to the Home on September 11th, 1885, looking ver ill and emaciated, and with a sinus on the right side and back of th neck, connected with an evident angular curvature of the spine. Hi right arm was flexed at the elbow, and could not be completely ex tended. He died of exhaustion on November 12th, 1885, the en being accelerated by diarrhœa, which was scarcely controllable. A the *post mortem* examination, relics of past peritonitis were found, an old and recent tubercular affection of the lungs. There was a chroni abscess in relation with caries of the lower cervical vertebræ, th disease which had produced the angular curvature. There wa chronic thickening of the membranes of the cord in this region, bu no evident disease of the cord itself. Dr. Edmunds was good enough to hand over to me the brain and spinal cord for careful examination The following is an account of the condition of things which I found after hardening the specimens in spirit.

The dura mater, which was thickened and adherent over a portion of the left parietal convolutions, was gently peeled off, and that par of the cortex which was so far invaded by disease that it could not b separated from the dura mater, but was torn during its removal, i marked in Fig. 8. The lighter shading represents very slight super ficial abrasion, and the darker central part shows where the disease ha sunk deeper into the grey matter. The area marked in the figur

neasured an inch and a half vertically, and the same horizontally. The position which it occupied was the upper half of the middle third of the ascending frontal and parietal convolutions, together with a mall portion of the posterior extremity of the middle and of the uperior frontal convolutions. On making a horizontal section hrough the basal ganglia and the internal capsule, a slight discoloration could be seen in the latter just behind its knee. On making a ertical section through the ascending frontal convolution, and raversing the centre of the diseased area, the destruction of cortex vas seen to be quite superficial, and no degeneration was made out n the subcortical white matter. The cord was examined high up in he cervical region, above the seat of the chronic meningitis which resulted from the disease of the cervical vertebræ. The sections show hat the right half is much smaller than the left, the diminution in ize being apparent, not only in the lateral column, but also in the olumn of Türck. Under the microscope, the connective tissue in he right lateral column is seen to be denser than that in the left, nd the nerve-fibres appear to be here and there less numerous.

Hospitals where old people congregate afford the best opportunities or *post mortem* examination of persons whose brain is the seat of oftening originating long before death. Charcot has given his experience at the Salpêtrière, and he says (*Lectures on the Localisation of Cerebral and Spinal Diseases*, translated by Walter Baugh Hadden, M.D. 1883. New Sydenham Society, p. 141): "In these cases, the esion presented itself under the form of yellow softening (*plaques aunes*), more or less extensive in area, involving, to a variable depth, he subjacent white matter, and occupying the most diverse regions f the surface of the hemisphere. It is expressly mentioned in all he observations that the softening had not affected the central masses: ptic thalami, caudate and lenticular nuclei, and internal capsule. My observations may be divided into two groups.

"The first includes the cases in which permanent hemiplegia had not xisted during life, and in which secondary degeneration was found at he necropsy to be absent. In all, the convolutions supplied by the ylvian artery, and particularly the ascending frontal and parietal, emained intact. The yellow softening was situated in one of the ollowing regions, namely, some part of the sphenoidal lobes, the obulus quadratus, the cuneus, one or both occipital lobes in their ntirety, some part of the anterior two-thirds of the frontal lobes.

"In all cases of the second group, there had been, on the other hand, ermanent hemiplegia and well marked secondary sclerosis. The eature common to these cases is that the lesions invariably involved, o a greater or less extent, one or other of the ascending frontal and arietal convolutions, principally in their upper half, and often both t the same time. In addition, the regions nearest to the frontal and arietal convolutions were very frequently involved."

In most instances, destruction of a portion of the pyramidal tract n one side gives rise to paralysis and spasm on the opposite side of he body only; but occasionally, spasm of the muscles on the same ide as the lesion follows later in the history of the case. This is robably due to sclerosis appearing in the opposite lateral column, as Pitres has shown that it often does, and Mr. Sherrington has hown that it occurs in dogs which have had one pyramidal tract experimentally injured. But, although this is probably the cause of most ases of bilateral spasm from unilateral lesion, the possibility of the resence of a bilateral lesion must be borne in mind. In the *Révue le Médecine* for May 1883, Émile Demange records a case of the kind here a bilateral lesion was found in the brain *post mortem*.

Leaving affections of the cortical and subcortical portions of the yramidal tract, let us pass to a consideration of the symptoms which ccompany diseases of it as it traverses the basal ganglia, crura erebri, pons Varolii and medulla oblongata.

It is needless, before an audience like the present, to recount cases f hemiplegia followed by rigidity, which result from destruction of he internal capsule by hæmorrhage or softening. Such examples of isease are of common occurrence, and well known to all. I shall ather give an account of a series of cases which are less frequently met with, and which made a considerable impression upon me from wo points of view:

1. Because they seem to throw considerable light on the rigidity nd tetanic seizures which are observed in tumours of the cerebellum;

2. Because I failed to recognise the position of the disease in the rain during life, though a reconsideration of the symptoms leads me o think that others might have succeeded.

Case in which a Tubercular Mass occupied both Optic Thalami, roducing Paralysis, Tumours, and Rigidity of the Limbs.—F. P., ged 4, was admitted into St. Thomas's Hospital under Mr. ydney Jones, in August, 1878; and, on the 22nd of the following October, excision of the left astragalus was performed. The child did very well, and was bright and playful until January 28th, 1879, when tremors of the left arm and leg were noticed. They were rhythmical to-and-fro movements, of short excursion, occurring only when the limbs were used voluntarily. There was very little loss of power, no affection of speech, deglutition, or respiration; and the tongue, face, and eyes all moved normally.

On March 5th, the child was still bright and lively, though pale; and it was noticed that the tremors were more marked on some days than on others. The left side of the face and the right hand had also begun to show similar tremors when used. The patient was sent out of the hospital, but was readmitted under Mr. Sydney Jones on July 8th, 1879, because the ankle and general condition were said to be worse. He had gone gradually down-hill, had become very drowsy, passed his evacuations in bed, and was more tremulous. On readmission, his face was pale, and a large dilated vein coursed transversely across the right upper eyelid. He was always asleep unless roused, and would even fall asleep while eating ravenously. His appetite was good, but he never asked for food. He complained of no pain, but appeared to have general hyperæsthesia of the skin. He was very irritable and peevish, crying out loudly when disturbed or contradicted. There were now rhythmical tremors of the right upper extremity, which were excited by voluntary efforts, and resembled those which used to affect the left side; the latter had ceased, and given place to rigid contraction. The elbow was flexed, and the hand clenched so tightly that the finger nails had produced ulcers in the palm. The hand was pronated, and the rigidity was constant. The mouth appeared natural when at rest, but when the child laughed or cried it was drawn up to the right. There was no squint; the pupils were large, and acted to light; the tongue was protruded straight, but was tremulous, and speech was slow. There was no deafness, but the ophthalmoscope revealed double optic neuritis.

There was no vomiting or dysphagia; the bowels were very confined, and the evacuations passed in bed. The pulse was 114, respiration 24, and the temperature varied between 99.4° Fahr., and 101° Fahr. The viscera appeared to be healthy. Until October 8th, the symptoms already described became worse. The right hand, arm, and leg trembled violently when used, and the left leg became perfectly rigid. The patient was very drowsy, and seemed to suffer from some headache; but he was never sick, and his appetite was good. His head was slightly retracted.

On October 8th, he seemed much worse; he vomited three times, took his food badly, and the temperature rose to 103.2° Fahr. Subsequently he became more and more drowsy, his right eyelid drooped, the pupils became unequal, and repeated attacks of general rigidity (sometimes accompanied with foaming at the mouth) supervened, and he died on October 15th.

On *post mortem* examination, I found an acute recent basilar meningitis. Besides this affection, which was, no doubt, the immediate cause of death, a large caseous tubercular mass was seen, involving both optic thalami, and almost completely obliterating the third ventricle (Fig. 9). The right optic thalamus was the more completely disorganised of the two. The specimen which I now show was hardened in alcohol; and, on section, it was then seen that on the left side the internal capsule, though pressed upon by the new growth, was clearly defined, and looked fairly natural, while that on the right was unrecognisable. The tubercular mass was confined to the optic thalami, and did not involve either nucleus of the corpus striatum. A very small caseous tubercle was also found on the internal aspect of the left occipital lobe, but the rest of the organs were healthy.

It is well known that diseases of the optic thalami and corpora striata are not accompanied by any such symptons as were present in this case, unless the internal capsule is involved, and the paralysis, tremors, and rigidity of limbs, must be attributed to the invasion of this strand of fibres, proceeding from the motor convolutions; while the convulsions of the last week were the result of the recent meningitis. This case has been already recorded by Dr. Bristowe, in *Brain*, vol. vi, p. 167.

Case of Large Caseous Tubercle of the Pons Varolii, producing Persistent Rigidity of the Neck, Back, Arms, and Legs.—C. C., aged 2, was admitted into St. Thomas's Hospital, under the care of Dr. Ord, on October 4th, and died on November 7th, 1881. The mother was attending Brompton Hospital at the time, and she had lost one of her three children from consumption.

The patient was healthy until three months ago, when he began to have diarrhœa, and to lose flesh, but had no vomiting. A week before he came in, he had two convulsive fits. He had had pain in the head, and had been very fretful and drowsy.

On admission, the child lay in a dull and listless condition, taking but little notice of anything, and only crying when disturbed. The

head was drawn strongly backwards, and kept stiffly in that pssition. The back was likewise rigid. The arms were flexed, and the legs and feet extended, all being quite rigid. Patellar reflex was very brisk. There was no loss of sensation; deglutition appeared to be imperfectly performed. The pupils were dilated, but equal; and Mr. Nettleship pronounced the fundus of both eyes to be natural. Pulse 120. Loud rhonchi were heard over both lungs. The urine was free from albumen.

During the rest of his life, he became more and more drowsy, and had varying degrees of hyperæsthesia, but never loss of sensation. Rigidity of neck, trunk, and limbs continued without intermission, though it varied considerably in degree. Slight left internal strabismus, and partial paralysis of the right facial nerve came on; and deglutition was more and more difficult, the food running out at the corners of the mouth. The fundus of the eyes was repeatedly examined, even as late as November 6th, but no changes were found. The temperature, with very rare exceptions, was normal.

On *post mortem* examination, I found the cerebro-spinal fluid much increased, and the lateral ventricles moderately distended with serum. There was slight basal meningitis, but the hemispheres were free from tubercular disease. In the cerebellum and pons were large greenish tubercular masses of rather irregular outline, that in the latter being in the position marked in the figure. It occupied almost the entire extent of that division of the brain (Fig. 10), having only a thin

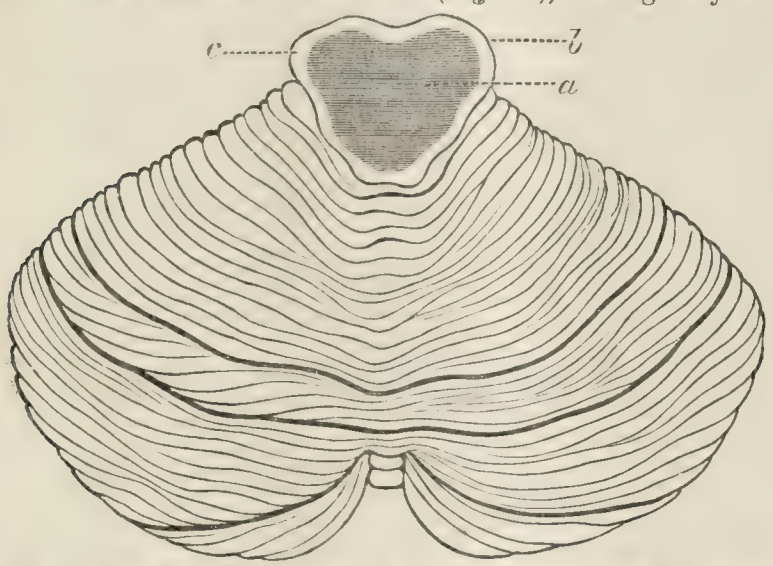


Fig. 10.—Diagram showing the position of a Tubercular Mass (*a*) as seen in a vertical section through the Pons (*b*). The Rim (*c*) represents the unaffected Nerve Substance.

sheet of white matter around it. Longitudinally, it extended the whole length of the pons, but seemed to stop short of the medulla oblongata. Unfortunately, no microscopic examination of the spinal cord was made. The lungs were thickly studded with miliary tubercles, but the other organs appeared to be healthy. The masses in the cerebellum were all situated superficially in the cortex, and did not extend deeply into the substance of the organ.

In this instance, again, the muscular rigidity must be referred to pressure exerted by the tumour upon the fibres of the pyramidal tracts in the pons; for tumours situated in the superficial parts of the cerebellar cortex are of pretty frequent occurrence, and are not found to give rise to any such symptoms. I shall presently relate a case in proof of this assertion.

Case in which a Tubercular Mass occupied the Aqueduct of Sylvius, and produced Tremors, Paralysis, and Spasmodic Contraction of Muscles.—E. B., aged 7, was admitted into St. Thomas's Hospital under the care of Dr. Bristowe, on August 2nd, 1882, and died on November 30th in the same year.

His family-history was unimportant, and the child himself had never suffered from fits, or from any serious illness, except from a blow on the head, which he received at the age of four, and which laid him up for a month. From this he perfectly recovered, and it was not until the end of May, 1882, that his present illness began. Having gone to bed quite well one night, he awoke next morning, throwing himself about; and he was found to have lost power in all his limbs, but most markedly in the right arm and leg, and he was unable to walk properly. He was said not to have vomited or lost consciousness. His speech was affected from the beginning, and his eyes about one week after the commencement of his illness. He was becoming weaker and thinner every day; and the tremors in his limbs, which were noticed at first, were becoming steadily worse. His bowels were confined, and he had lost control over his bladder; he was very drowsy, but his memory was good. He had all along been free from headache, vomiting, and convulsions.

On admission, the child was found to be rather thin and drowsy. He lay apathetically in bed, but could be easily roused if spoken to. He had weakness in the arms and legs, and, when he walked, his legs seemed to drag. The most striking peculiarity in his condition was, however, the tremor with which all his movements were accompanied. The head, neck, jaws, trunk, arms, and legs, were all similarly affected. When he used his hands and arms the tremors in them were marked, of rather short excursion, sometimes in the direction of movement, and sometimes at right angles to it. The jaws trembled when he used them, and speech was slow and drawling. The tongue was protruded straight, and, when he smiled, the mouth was drawn somewhat to the right; hearing was normal. All the muscles of the eyeballs were more or less weakened. There was ptosis on both sides, and the internal rectus of the right eye was markedly affected. The superior and inferior recti on right were likewise weak, as were the muscles of the left eye, though not so weak as those on the opposite side. Both pupils acted well to light and to accommodation, the right being a little larger than the left; no anæsthesia was present. The patellar and plantar reflexes were normal, and there was no ankle-clonus. The temperature was natural, and all the organs, except the brain, appeared to be healthy. During the rest of his life the tremors gradually increased, paralysis became more marked, and attacks of spasmodic contraction of the muscles of the limbs and trunk occurred from time to time. On some occasions, the legs were noticed to remain for a while rigidly extended. The patellar and plantar reflexes became exaggerated. The patient grew more and more drowsy, and passed his evacuations in bed. The temperature presented only occasional slight elevations until November 26th, four days before death, when it rose to 101.2° Fahr.; and it subsequently reached 103.8° Fahr. on the 29th, the day before death.

Throughout the patient's illness there was a singular absence of headache, vomiting, and optic neuritis. Though frequently examined, the fundus of the eye presented no abnormal appearances until November 26th, when there was thought to be neuritis. After death, Dr. Edmunds found distinct microscopic evidences of this condition. Another curious point was, that the tremors were now and then either greatly diminished or absent for a day or two, and then returned with all their former intensity.

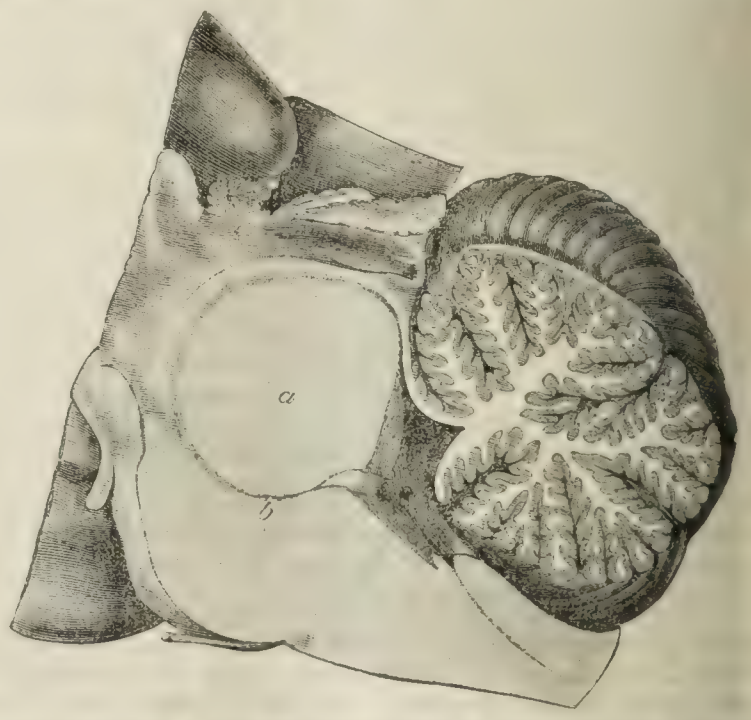


Fig. 11.—Drawing of a large Tubercular Mass (*a*) occupying the Aqueduct of Sylvius, and by its pressure producing a Cup-like depression in the Pons (*b*). The Section is Vertical and Longitudinal.

Necropsy.—The body was much emaciated, and rigor mortis was present only in the lower extremities. The spleen and lungs contained a few tubercles, and those in the spleen were caseous. All the other organs were healthy, with the exception of the brain. Its surface was sticky, and the veins were gorged with blood. At the base, in the interpeduncular space, the membranes were opaque, and there was fluid in the optic sheath. Miliary tubercles were present in the Sylvian fissures, and the ventricles were moderately distended. There was a large caseous mass in the region of the corpora quadrigemina, which was round in shape, and as large as a medium-sized marble,

and which is well displayed in the preparation before you (Fig. 11). It lay as if wedged in the aqueduct of Sylvius, which was enormously distended. On the upper surface of the tumour were the thinned and flattened corpora quadrigemina, while its lower rounded margin rested upon the upper surface of the pons and crura cerebri. Here it occupied a cup-like cavity, which its downward pressure had produced. No other important structures were injured by the tumour.

In this case, the usual phenomena of pressure upon the fibres of the pyramidal tract are again well represented. Paralysis and tremors occurred first; then attacks of rigidity. Had the child lived longer, and the growth of the tubercular mass progressed, the pressure exerted by it upon the pons and crus cerebri would, no doubt, have produced the final stage of persistent rigidity. The recent tubercular meningitis cannot be said to have produced the tetanic seizures, as the latter occurred months before the patient's death. This case and the next which I shall relate have already been published by Dr. Bristowe in *Brain*, vol. vi, p. 167.

Case of Tubercular Mass occupying the Left Lobe of the Cerebellum, and pressing upon and producing Softening of the Pons and Medulla: Persistent Rigidity of Limbs.—A. G. J., aged 4, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on December 30th, 1878, and died on August 6th, 1879. He had been a healthy child until three months previously, when he was ill with measles and whooping-cough. He began to have fits, which occurred about once a day at first, and then twice a day. He had also been suffering from severe pain in his head, occasional vomiting, and for about two months his mother had noticed that he squinted. The father was said to be asthmatic, and the mother had a weak chest, but their two other children were healthy.

On admission, the patient seemed to be a sensible child, but quite blind. The pupils were widely and equally dilated, and contracted slightly to light. When lying in bed, he could move his arms and legs, but the former were tremulous and ataxic. When placed upon the ground, the patient laughed hysterically, but could not stand, though he could move his legs forwards when supported. The limbs appeared to be equally affected on the two sides. The mouth dropped slightly on the right side, and the tongue was protruded to the right. The pulse was 140, and regular; respirations were easy. The patient passed all his evacuations in bed. There was well marked optic neuritis in both eyes, the outline of the discs being irregular and blurred, the veins large, the arteries small, and the whole presenting a streaky appearance. Between the time of admission and his death the patient had many fits, in which he was unconscious; the legs remaining rigidly extended, and the arms being flexed, and then extended several times in succession. A certain amount of left facial paralysis developed, so that the patient could not close the eye of that side, and the left external rectus was partially paralysed. His arms became more tremulous, the right being more affected than the left; his speech was very drawling. He remained for long fairly intelligent, had no deafness, and was not much troubled with headache or vomiting. From February onwards the arms and legs became persistently rigid, although the degree of rigidity varied. Finally, the child became emaciated to the last degree, and lay perfectly still, taking food well when it was offered him, but showing very few signs of life. He died on August 6th.

Post Mortem Examination.—There was little evidence of important pathological changes in any of the viscera except the brain. The head was very large, all the sutures were separated, and the bones were movable. There was no subarachnoid fluid, but the ventricles were greatly distended, and the substance of the hemispheres reduced to a thin, soft sheet of nerve-substance. The left lobe of the cerebellum was entirely occupied by a firm tumour, of the size of a tangerine orange, yellowish-green in colour, semi-transparent, and consisting of closely placed, concentric layers. The relics of cerebellar tissue remaining on its surface were soft, as was the neighbouring part of the posterior cerebral lobe. The tumour was adherent to the tentorium cerebelli, and the pons and medulla were pressed upon by it, and somewhat softened. The right lobe of the cerebellum was healthy. Another small tubercular mass was found in the grey matter on the orbital surface of the right frontal lobe.

In this case, again, persistent rigidity was the result of pressure which the tumour exercised on the medulla oblongata and the pyramidal tracts which run in it. For it will be shown presently that, without such pressure, tumours of the cerebellum do not produce such phenomena, and that distension of the ventricles with fluid is not sufficient to explain them.

These four cases appear to me to be of great interest as representing diseases affecting a certain portion of the brain, and capable of being localised during life. The region referred to extends from the basal ganglia to the medulla oblongata, commencing at that spot where the pyramidal tracts begin to converge as they pass between the central ganglia, and occupying further on the pons and medulla oblongata, where the pyramidal tracts lie in close contact. If the motor tracts be affected simultaneously, or quickly one after the other, in the way about to be mentioned, the disease is likely to be situated between the basal ganglia above and the medulla below, and is, in all probability, a tumour. The earliest symptoms referable to the pyramidal tract are tremors; then come paralysis and rigid contraction, which is finally permanent; and besides these, there may occur from time to time attacks of tetanic spasms, affecting most of the muscles of the body. The phenomena of chronic spasm are due to gradual pressure on the motor tracts, proceeding from the central convolutions of the brain; and the fact that both sides of the body are attacked, indicates that the disease is situated at a part where the pyamidal tracts are in close proximity to each other. If the case be seen early, probably all these symptoms, tremors, paralysis, and rigid contraction, will occur before the end; but if the patient do not come under observation until late, only some of them may be observed. Thus, in the case where the optic thalami were gradually invaded, and in the case of cerebellar tumour pressing from above on the medulla, all occurred; whereas, in the case of the large tubercular mass almost completely occupying the pons, only the later stage of persistent rigidity was seen. In determining the exact seat of the tumour, whether in the optic thalami, corpora striata, pons, or cerebellum, we must consider the other symptoms referable to the special nerves involved, which arise at different levels along the base of the brain, and also whether there are, or have been, symptoms which suggest cerebellar disease. Moreover, optic neuritis is very constant, and early in its appearance in cerebellar disease, and often late when the tumour is higher up.

I would not have it understood that all tumours in these positions give rise to the phenomena described, for soft succulent ones often do not; but if the symptoms I have pictured be present, the disease is probably a hard slowly growing tumour in the area mentioned. In all the cases just related, the tumour was a large tubercular mass; and the early stage of such tumours is shown in a specimen on the table, which was taken from the body of a baby who presented no obvious symptoms of cerebral disease. A caseous nodule can be seen (Fig. 12) occupying the lower third of the external segment of the lenticular nucleus. In a drawing of a microscopic section of this mass, a large vessel is seen, and close by the vessel lies a colony of well stained tubercule-bacilli. (Fig. 13.)

But, interesting as this series of cases is from the point of view already considered, they are still more so in their bearing upon the question of the functions of the cerebellum, and its relation to muscular spasm. In the *Lancet* for 1880, vol. i, p. 122, Dr. Hughlings Jackson has written "On Tumours of the Cerebellum," and speaks of "cerebellar rigidity." "I suppose," says he, "the cerebellar rigidity to be owing to unantagonised cerebral influx (rigidity in hemiplegia being owing to unantagonised cerebellar influx), and the tetanus-like seizures to be owing to cerebellar discharges analogous to those cerebral discharges which produce unilaterally beginning (epileptiform) convulsions. But there is the obvious objection that the two symptoms, with the cerebellar disease, may be owing to interference with the corpora quadrigemina (electrical excitation of which produces tetanus-like states), or to interference with the medulla oblongata."

Further on, in the same volume of the *Lancet*, p. 522, Stephen Mackenzie has a paper on the same subject, in which he expresses the opinion, that "the reeling gait and tonic spasms are both expressions of disorder of the locomotory apparatus, of which the cerebellum is the chief governing centre." In comparing the tetanus-like seizures with tetanus, he goes so far as to say, "the range of the two is so much alike as to afford the strongest reasons for the belief that tetanus is an affection of the cerebellum."

Now, if the same rigid contractions and the same tetanic seizures occur in disease of other parts at the base of the brain, they cannot be held to be characteristic of cerebellar disease.

Hughlings Jackson says: "This universal rigidity, as a condition arising from cerebellar disease, I have seen only when the tumour has been in the middle lobe," and again: "In the case of extensive rigidity and tetanus-like seizures, the tumour has been of the middle lobe, and has been large." These remarks really furnish a clue to the matter. I would put the case thus: a tumour of the cerebellum does not produce contractures and tetanic seizures, unless it be in such a position and of such a size as to produce pressure on the pons Varolii or medulla oblongata.

The following case illustrates this point well, and shows that tumours may be present in the lateral lobes, or in the central lobe,

and that great distension of the lateral ventricles may exist, without these muscular contractions making their appearance.

Case of Tubercular Masses, both in the Central and Lateral Lobes of the Cerebellum, unaccompanied by Tetanic Spasms.—E. C., aged 10 years, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on September 13th, and died on December 5th, 1877. At the age of 7, the patient had a fit, lasting for about two hours, in which her eyes were fixed and her hands clenched. Ever since that time she had been becoming blind. The only other illness she had had was "low fever," two years before admission. About five months before coming to St. Thomas's, she had been suddenly seized with very severe pain in the head and vomiting, which lasted, off and on, for a day and a half. These attacks recurred from time to time for five weeks, during which her sight became worse and worse, but she never had convulsions. On examination, it was found that she could not distinguish light from darkness, and that she had atrophy of the optic discs. She had no deafness, and was very intelligent, and able to give a great deal of information about her illness. Her head was somewhat hydrocephalic in shape, and the forehead prominent. She kept it fixed, and said it hurt her to let it drop backwards. When seated, the legs appeared to be quite strong, and it was impossible to detect any weakness in them when one tried to flex or extend them against her will. When held by the hands, she could walk pretty well, but when she was left to stand alone, she quickly lost her balance. The same occurred when she tried to walk, and she seemed to have considerable inco-ordination of the legs. There was a tendency to fall to the right side, though she was said previously to have usually fallen to the left. When standing up and made to lean a little backwards, she did not fall, but ran backwards.

During the rest of her life she had frequent attacks of severe pain in the head, accompanied by vomiting, and a feeling of great giddiness. Her temperature remained normal, and she had no tetanic spasms or contractures. She was found dead in bed on the morning of December 5th. At the necropsy, there was no evidence of meningitis, but the ventricles of the brain were distended with clear fluid, twelve ounces being removed and measured. The convolutions were flattened, and the whole extent of them collapsed when the ventricles were emptied. The optic nerves were markedly atrophied. The lateral lobes of the cerebellum were both very soft and swollen, and the left was adherent to the dura mater. There were several tumours, both in the central and in the left lobe, which appeared to be tubercular masses with the centres broken down. Their size varied from that of a pea to that of a medium sized marble; their circumference consisted of a pale, rosy grey, semi-translucent, hard tissue, and their centres of a puriform fluid. The other organs were healthy.

In the class of cases which I have been discussing, tremors and paralysis are probably due to slight interference with the functions of the fibres of the pyramidal tracts, persistent rigidity to still greater interference, while the attacks of tetanic spasms may resemble the convulsions which are observed in connection with cortical tumours of the brain. In the case of cerebral tumours, the pressure is exerted upon the cortical grey matter; in the cerebellar cases, upon the grey matter in the floor of the fourth ventricle, and not upon that of the cerebellum itself, for I have seen cases in which the central lobe of the cerebellum has been completely destroyed by tumours, but in which no pressure was exerted upon the medulla oblongata, and no rigidity was observed during life.

It is interesting to note, in relation to this question, that Nothnagel has found that irritation of these parts is particularly liable to produce convulsions; so much so, that he has supposed a special convulsive centre (Krampfcentrum) to exist in the pons, which is readily brought into action, either directly or reflexly, by stimulation of a spot in the fourth ventricle. I have said that the tetanic spasms "may" be due to pressure on the grey matter of the floor of the fourth ventricle, because they are capable of another explanation; they may, in fact, be the result of varying pressure upon the pyramidal tracts. In the next lecture, I shall relate a case where a tumour pressing upon the cord from without produced similar spasmodic attacks; and they are also seen in other diseases affecting the lateral columns of the cord.

Foster, in his work on *Physiology*, says: "We must consider the cerebellum as an important organ of co-ordination, though we are unable at present to define its functions more exactly." This probably represents our knowledge of the functions of the cerebellum, and it is in keeping with pathological experience; and I do not think we are justified in considering that disease of it produces spasmodic contraction of muscles, except indirectly, by pressure upon underlying structures.

ABSTRACTS OF THREE LECTURES ON THE BRAIN-MECHANISM OF SIGHT AND SMELL.

Delivered at the Royal College of Surgeons.

By ALEXANDER HILL, M.D., M.R.C.S.,
Hunterian Professor to the College; Fellow of Downing College; Demonstrator of Anatomy to the University of Cambridge.

Lecture III.—The Relation of the Olfactory and Optic Nerves to the Central Grey Tube and Cerebral Cortex.

In the scheme of the central nervous system submitted in the two preceding lectures, the neural axis was represented as exhibiting an uniform plan of structure throughout its whole extent. The large cells of which the peripheral nerves are the axis-cylinder processes, accumulate at the point of exit of these nerves; in the same way, the small-celled tissue with which the sensory nerves, after breaking up in the gelatinous substance of Rolando, terminate, exhibits a similar segmental arrangement. The key to the constitution of the system is to be found in its metameric division. Most anatomists are willing to concede this proposition for the whole of the neural axis behind the optic thalamus. At this level, however, a complete alteration in the plan of the system is supposed to occur. On the one hand, two nerves, the olfactory and optic, are left without primary centres in the neural tube; on the other hand, a mass of small-celled grey matter, the optic thalamus, directly continuous with that surrounding the aqueduct of Sylvius, and developed in the same relation to the primitive neural canal, as the rest of the æsthesodic portion of the central tube, is excluded from it. No motor nerves arising from the mid-brain, small-celled plexus only should be formed from its wall. It is impossible to determine the amount of this plexus needed to constitute the primary centres of these two large nerves, for there is no evidence to show that a sensory nerve is connected with only one cell of the neural axis; rather does it seem that the sensory fibre, after its division, is brought into connection with as many cells of the plexus as may be needed for the distribution of its impulses to their appropriate motor apparatus. It is not on account of its structure, its connections, or its mode of growth, that the optic thalamus has been severed from the rest of the grey tube, but because physiologists require centres intermediate between the cortex and the cord, to carry out a certain class of reflex actions. The optic thalamus is therefore allied with the corpus striatum to form a subordinate *bureau*, in which the messages from the front may be submitted to an official censorship before being forwarded to the cortex, and the mandates of the will be put into proper form for transmission to the seat of action. The two ganglia so allied are developed from different cerebral vesicles, and have very different phylogenetic records; but this is overlooked in the desire to satisfy what the lecturer can only term the pernicious doctrine of "centres." Not physiologists only, but also anatomists, have come to regard the nervous system as consisting of a series of centres of ascending grades of authority; societies of cells, differing from one another in structure, but bound together for a common object. It is almost a revelation to find, after submitting the central nervous system to section-cutter and microscope, that, from filum terminale to lamina terminalis, no collection of cells, which could be regarded as a centre in this sense, is to be found. There is no reason for separating the optic thalamus from the remainder of the central grey tube.

Turning now to the two nerves which are left without primary centres, the lecturer explained, with the aid of diagrams, how it is easily to be seen (at any rate, in the brains of ungulates) that the optic nerve grasps the posterior end of the thalamus very much in the same way as the auditory nerve its æsthesodic portion of the medulla oblongata.

The route by which the olfactory nerve reaches its primary centre in the anterior end of the thalamus is a circuitous one. The fibres from the olfactory bulb stream centralwards in three divisions; of these, the inner is inconsiderable. The middle, a thick bundle, grooves the head of the nucleus caudatus as it curves inwards to the anterior commissure. This commissure is not wholly made up of ol-

ctory fibres, since it is found in animals devoid of smell. Like the ptic chiasma, it is taken advantage of by crossing fibres of the great rain, its size varying inversely as that of the corpus callosum. By is root, the fibres of the olfactory nerve reach the extremity of the mporo-sphenoidal lobe, presenting, in their decussation, a close alogy to the optic nerves. The outer, larger, and more important root, ing on the under surface of the brain, passes backwards into the riform lobe. Here it divides into two parts, an outer thin expan-on, which spreads over the surface of the lobe, and an inner thicker rtion, which, passing to the inner side of the lobe, tucks itself under the edge of the cortex-mantle. Omitting, for the moment, ıy account of the relation of these fibres to the hippocampus, the cturer stated that the olfactory nerve was to be traced through the mbria, posterior pillars, body, and anterior pillars of the fornix, into ıe corpus mammillare (corpora albicantia), in which it turns up as ıe bundle of Vicq d'Azyr, into the anterior end of the optic thala-us. The anatomical connections of this root were explained, and s functional continuity was proved by an appeal to what might be rmed one of nature's experiments. In all aquatic mammalia, the nse of smell is either deficient or absent. In the porpoise, it is mpletely abrogated. The olfactory bulb is reduced to a mere cord, ıd all the other portions of the olfactory tract just indicated show a rresponding want of development. The cross section of the body the fornix of a specimen examined, with a view to deciding this uestion, was less than one ninth as great as that of an ox brain of ıe same weight. It contained only those fibres termed by Huxley precommissural."

Returning to the hippocampus, the lecturer stated it as his belief ıat the special structures here attached to the folded-over edge of ıe cortex, the cord of large multipolar cells and its cap of fascia ntata, that is to say, are portions of the olfactory bulb. The micro-opic appearances of the cells of the fascia dentata are precisely milar to those of the cells of the glomerular layer of the bulb. In ıe porpoise brains as yet examined, of which none, unfortunately, ere in good condition for the purpose, no fascia dentata could be und. The edge of the cortex was simply folded over, and the pos-rior pillars of the fornix spread out into the medullary lining of the ntricle, without forming a true corpus fimbriatum.

Relation of the Cerebral Cortex to the Central Grey Tube.—In the all of the neural tube, where it is dilated at its anterior end to form ıe primary cerebral vesicles, a second layer of grey matter is de-loped on the outer side of the sheath of white fibres. This may be nveniently referred to as the peripheral grey tube. As the key to ıe central grey tube was to be found in its segmentation, the ques-on arises as to whether the outer tube is similarly divided up into eas; and if so, what is the relation of its segments to those of the ntral tube? There is no reason for believing that any sensory nerve-res end directly in the cerebral cortex, or motor fibres take origin ere, to pass to their destination without interruption in the central ey tube. On the other hand, there is abundant evidence that the eas into which the lower tube is divided are represented in the gher one. Experimental stimulation and ablation of cortical areas, well as pathological observation, have thrown much light upon this bject. The evidence with regard to cortical localisation, submitted this lecture, was obtained from the comparison of the brains of imals endowed with different degrees of motor and sensory develop-ent. It was shown that all mammals might be divided into two asses; the hunting and the hunted. Herbivora depend for safety the eye, their sense of smell being of little use in helping them to cape from the neighbourhood of their foes; carnivora seek their ey with the nose, it being of little consequence, apparently, as may inferred from the habits of young dogs, and from the strong smell the carnivorous quarters of the Zoological Gardens, whether or ot their own bodies emit a powerful odour. More common, however, ıan exceptional—sensory development, is marked deficiency; and, mongst other brains, the otter's was pointed out as that of an animal which the sense of smell is reduced to a minimum.

It was shown how the development of the temporo-sphenoidal lobe aries as the sense of smell; that of the postero-internal part of the cipital lobe, as the sense of sight. The location of the other senses ay, in like manner, be discovered by observing the brains of ani-als in which they are unusually well or badly developed. The neral result arrived at confirms, in the main, the allocations of ex-erimental physiologists.

The lecturer then proceeded to show how, while the first nerve has s secondary centre in the temporo-sphenoidal lobe, the area for the cond nerve lies above and behind this, and such others as have ready been determined occupy a reversed position from behind for-ards on the cerebrum. This is only to be explained by supposing that the great brain has in its growth twisted over in a single spiral coil.

Although, in such a plastic tissue, developmental markings are soon obliterated, observations of the changes in form of the fœtal brain entirely confirm this conclusion. At first, the cerebral hemisphere is directed forwards, the foramen of Monro leading into the back of its cavity. Then, first of external markings, the rhinal fissure appears, separating the pyriform lobe from the rest of the hemisphere. Being attached at its anterior end, the olfactory nerve soon asserts a traction on the growing brain, causing its outer wall to sink in as the fossa of Sylvius, which later on is closed over, and reduced to the fissure of Sylvius. The foramen of Monro enters now the lateral ventricle near the front. In certain stages of its growth, the cerebrum has all the appearance of a coil. Only in this way, too, the lecturer contended, can the circuitous route of the olfactory nerve be explained. Arising from the neural ridge of the first vesicle, it is at first pushed down forwards by the budding cerebral hemisphere. Becoming then adherent to the hemisphere, it is lifted up again, and carried round with it over the upper margin of the foramen of Monro. The advantage of this twisting over is to be found in the globular form afforded to the brain. One may conjure up a ludicrous picture of what a man's head would be like, were space no object, and all the secondary centres of the cortex arranged, as in an alligator, in a rectilinear series.

SUDDEN DEATH FROM HÆMORRHAGE INTO THE ABDOMINAL CAVITY DURING MENSTRUATION.

By EDMUND J. PENNY, M.R.C.S.Eng., etc.,
Berkhamstead, Herts.

At 4 A.M. on November 11th, 1885, I was summoned to R. E. T., aged 27, a resident of Hayes, Middlesex, who was said to be very ill. Within ten minutes I arrived at the house, and found that life was extinct, with all the signs of collapse present. Her husband stated that she had always enjoyed good health, and was the mother of two children. She was perfectly well until about 7 on the previous evening, when she complained to him of pain in the region of the stomach, which she attributed to the fact that she was menstruating at the time, and said she thought she would go to bed. She gradually grew worse, was extremely restless, complained of pain in her chest, and of difficulty of breathing; but refused to allow medical aid to be summoned, as she said she would be better in the morning.

Shortly before 4 A.M., her condition becoming more serious, my attendance was requested; but the patient had already died during her husband's short absence.

A necropsy was made on November 13th, by Mr. E. J. Parrott and myself. The body was well nourished. Rigor mortis was present. The surface was unusually blanched. There were well marked blood-stains to be seen at the external genitals. The lungs were found to be healthy; the pleura was normal, and the pleural cavity contained its natural quantity of serum. The pericardium was natural, with the usual amount of fluid. The muscular tissue of the heart was healthy. The ventricles were contracted; there was a small clot of fibrin in the left ventricular cavity. The valves were healthy. After the thoracic viscera were removed, the diaphragm was seen to bulge upwards in an unusual manner, particularly on the right side. On opening the abdominal cavity, a large quantity of dark fluid blood immediately escaped, and the whole of the right side of the abdominal cavity was found to be full of fluid and semi-coagulated blood; while the right iliac fossa was occupied by a tolerably firm clot, of the size of a fœtal head. The viscera were carefully removed and examined, and were found to be healthy, with no trace of lesion. The aorta and its principal branches were also minutely examined, and found to be everywhere healthy, nor could any lesion be discovered in the veins. On removing the large clot from the right iliac fossa, and tracing it onwards, it was found to lead to the right ovary; and a small but firm clot, at least an inch in length, was discovered attached to the outer surface of that organ. Two ruptured Graafian vesicles were also seen, to one of which an ovum was adherent; and, in the neighbourhood of these, several small blood-vessels were found to be distended with clot, one of them being distinctly ruptured; and it was to this site that the clot above-mentioned was found to be adherent. The left ovary also showed signs of activity having taken place previously to death; and on its surface were seen small blood-vessels filled with clot, whilst an ovum was also attached to it. The uterus, which was not removed, appeared to be normal.

The occurrence of hæmorrhage into the abdominal cavity, due to the rupture of a Graafian follicle during menstruation, is undoubtedly rare; but it is, notwithstanding, admitted by various writers on Obstetrics, and notably Dr. Graily Hewitt. Hæmorrhage, in this case, evidently took place very slowly, occupying at least nine hours, while the quantity of blood extravasated was enormous.

It seemed as if the whole body had been drained into the abdominal cavity; and the facts above stated, to our minds, so clearly indicated the ovaries as the seat of the hæmorrhage, that I had no hesitation in stating such to be the cause of death at the coroner's inquest.

A SIMPLE METHOD OF ARTIFICIAL RESPIRATION.

By JOHN ARTHUR FRANCIS, L.S.A.

The desideratum at which we aim in artificial respiration, is to obtain a method of as simple a character as possible, combined with the maximum of efficiency. In cases of drowning, especially, many lives would doubtless be saved, which are now sacrificed, were the first comers aware of a method requiring no previous practice, and which could be understood from, say, a short paragraph in a newspaper, or a moment's conversation with a friend, without practical illustration. The usual course for bystanders to pursue seems to be to loosen the clothes about the neck, and to vigorously rub the hands whilst someone fetches a policemen, who in his turn sends for a medical man. Upon his arrival, the patient is found to be a very fair subject for an undertaker.

In a short note to the British Medical Journal in 1884, I drew attention to a method of extreme simplicity, which has been very successful in my hands in many cases of apparently still-born children, and in one very alarming case of chloroform-poisoning. I have great belief that the same means would prove equally efficacious in cases of drowning, both in children and in adults.

The main indications in artificial respiration are, apparently, (1) to loosen clothing, braces, etc., so as to allow free movement of the chest, and prevent constriction of the neck; (2) to bring the trachea, larynx, and pharynx as nearly as is anatomically possible into a straight line with the openings of the mouth and nose; (3) to obtain as deep an inspiration as possible by elevating the ribs and depressing the diaphragm; and (4) to get a deep expiration.

Now, although the accepted modes of restoring respiration have proved very successful in the hands of medical men, the trained staff of the Humane Society, and, doubtless, many policemen, etc., yet I think they are almost unknown to the general public, who have not attended ambulance lectures. What we require is, that an efficacious method should be as well known and as easily learnt as the fact that a poultice is a proper application for a boil.

What I claim for my improvement is, that it would soon be understood by the laity, and that it fulfils the last three indications mentioned above more thoroughly than the present accepted methods.

I remember, in two cases of drowning where I was sent for, watching a couple of policemen attempt the Marshall Hall proceeding. As the subjects had been submerged for eight and four hours respectively, I did not interfere. In both cases, the chin was on the chest, and the mouth and nose obstructed by the arm in the semiprone position. This appeared to me a thing to be avoided. The Sylvester mode, adopted by the Royal Humane Society, is an improvement; but I think that the bundle of clothes under the neck is a mistake, as it is apt to slip up and throw the head forwards; and that the proceeding to procure inspiration acts in no way on the diaphragm, whilst a great deal of expansion of the chest is lost by not making use of the weight of the arms and ribs, combined with an extended spine.

Howard's is a still further improvement. The bundle under the back extends the spine and raises the ribs and sternum, at the same time that the intestines gravitate from the diaphragm, and tend to cause inspiration by depressing that muscle through the alteration of the pressure in the lungs. But, in this case, the advantage of a good deep expiration, which seems to me of nearly equal importance, following the admission of air into the chest, is lost or rendered less by the bundle of clothes, which keeps the ribs permanently raised. His plan of kneeling across the abdomen, and springing backwards with the hands on the thorax, though apparently very successful in experienced hands, seems to present elements of danger, should it be undertaken by a heavy, clumsy, and inexperienced man.

Now, I believe that my method combines all the advantages of the above in a greater degree, without the disadvantages attending them; and also possesses the required simplicity. It is, merely, the body having been laid on the back, with clothes loosened and the mouth and nose wiped, for two bystanders to pass a narrow lever of a kind under the body at the level of the waist, and raise it till the ti of the fingers and the toes of the subject alone touch the groun count fifteen rapidly; then lower the body flat to the ground, a press the elbows to the sides hard; count fifteen again; then raise t body again for the same length of time; and so on, alternately raisi and lowering. The head, arms, and legs are to be allowed to dan down quite freely when the body is raised. A child can easily manipulated by one person with a hand under each loin. For adult, the best way is for two persons to grasp each other's right ha under the body, and then raise it. A stout walking-stick or u brella would be efficacious, where the operators were too weak to l up the patient with one clasped hand. To join both left and rig hands with those of another person, would probably form too great plane for the body to rest on, except in the case of a very t patient, and prevent the full extension of the spine.

With regard to the tongue in suspended animation, I am inclin to believe that the danger of the tongue obstructing the entrance air to the lungs is somewhat exaggerated; at least, in children I ha never observed any necessity for interfering with that organ, and t air has apparently passed through the nose in preference to the mout and that quite freely. Although, of course, medical men would u their own discretion in such a matter, according to the exigencies the case, yet I think it would be wiser for ambulance books, etc., n to instruct the public to pull out the tongue. An ignorant pers would probably interfere greatly with the attempt at artificial respir tion, would very likely close up the mouth by holding the tong against the upper jaw, and finish the case by obstructing the nostr with the palm of his hand.

Of course, in addition to my method of respiration, other aids a not to be neglected for restoring the circulation, such as hot bran and water, when the patient can swallow, etc.

It seems to me that the position of the body, when raised as d scribed, mechanically puts upon the stretch all the muscles of inspi tion, except the external intercostals, and that the position of t ribs, sternum, and clavicles, allows their weight to aid considerably the expansion of the thoracic cavity. The intestines and abdomin viscera also gravitate towards the pelvis, and would doubtless dra down the diaphragm.

PELVIC TUMOUR COMPLICATING PREGNANCY.

By JOHN W. TAYLOR, F.R.C.S.Eng.,
Surgeon to the Birmingham and Midland Hospital for Women.

The signs and symptoms attendant on the case of pelvic tumou described by Dr. Horrocks in the Journal of March 6th, are so ve similar to those which we have often found in Birmingham to associated with distension of the Fallopian tube, that I may, perhap be pardoned for suggesting the possibility of the presence of this co dition in the case which he has published.

If acutely distended, the tube may be of almost solid hardnes although, when examination is repeated, there will probably be four a time or times when there is some elasticity or semifluctuation, ind cating the probable presence of fluid. The tumour is generally int mately adherent to the back of the uterus, and can be traced from i posterior surface towards one or both sides, according as one or bo tubes may be involved. It is decidedly tender to touch, and feels, c hasty examination, very like a retroflexed uterus. It is more like to be mistaken either for this or for a myomatous outgrowth (su peritoneal fibroid) than for any other condition. Because it is adhere to the uterus, it moves rather rigidly with that viscus, and does n disappear on the use of the uterine sound, as a simple non-adhere flexion of the uterus may do. It is generally accompanied by pai increased before and during menstruation; although, for some reas or other, it is not always the side affected that is the chief seat pain. Sexual intercourse is usually painful; but all symptoms ma be in abeyance when the condition is one of hydrosalpinx, and is chron and stationary.

When confined to one side, it forms no bar to the occurrence pregnancy. I have had until recently a case under my care, in whi the signs of a distended tube have existed for nearly two years. Th symptoms have been but slight, and consequently no operation h been performed. The patient is now about six months pregnant; an the tube, although somewhat larger in size than before the pregnanc has not at present occasioned any serious inconvenience or difficult It is a question, however, which only increased experience can dete mine, whether this condition, when existing during pregnancy an labour, does not expose the patient to rather serious risk.

Hæmorrhage is not a very common symptom of tubal occlusion and tension, but, when present, is apt to be severe, and, when accompanied by signs so nearly resembling nodular myoma of the uterus, may be specially misleading. I operated on a case presenting these features on December 10th of last year. Excessive menstruation had existed for four years, and latterly the patient had been "scarcely ever free" from hæmorrhage. If absent for a few days, it was brought on again by the slightest exertion, and invariably by sexual intercourse. On two occasions, it had been so severe that the surgeon attending her had considered it necessary to plug the vagina. On examination, a resilient rather egg-shaped tumour was found high up behind and to the right of the uterus, feeling as if part of the uterus itself.

On operation, both tubes were found to be acutely distended and adherent behind the fundus of the uterus. The ovaries were cystic. The appendages on each side were carefully separated from their adhesions, and removed, and are now in the museum of the Queen's College.

Since the operation, the hæmorrhage has been much less, but menstruation has not as yet entirely ceased.

While fully recognising that conclusions drawn from the description of a case are not, *prima facie*, likely to be so reliable as those from personal observation, my chief purpose will be attained if I succeed in drawing attention to the fact that chronic hydrosalpinx, both by signs and by symptoms, may occasionally closely simulate nodular myoma of the uterus, and need differential diagnosis from that affection.

URE TEREBENE IN THE TREATMENT OF WINTER-COUGH.

By C. W. SUCKLING, M.D.(Lond.), M.R.C.P.,
Co-Professor of Materia Medica and Therapeutics to the Queen's College, Birmingham.

Upon seeing, in the British Medical Journal for December 12th, 1885, Dr. Murrell's eulogistic account of the action of pure terebene in winter-cough, under which name, I presume, he includes all cases of chronic bronchitis and emphysema, also cases of chronic phthisis, but not those cases depending upon heart-disease, I determined to give the drug a trial in the Birmingham Workhouse Infirmary, where a great number of such cases are met with during the winter months. I had for some years previously frequently ordered terebene inhalations for the relief of urgent dyspnœa in these cases, but had never administered the drug internally. I accordingly prescribed pure terebene, obtained from Messrs. Southall and Co., the well known Birmingham chemists, in 100 cases, giving five drops every four hours, increasing the dose to ten drops in a day or two, with the following results.

Of the 100 cases, 94 were cases of chronic bronchitis, and 6 of chronic phthisis. Of the cases of chronic bronchitis, 68 were relieved; and 4 of the cases of phthisis, that is, 72 per cent. of all the cases were benefited. Several of the cases were "greatly" relieved. Twenty-eight patients were not relieved; 11 complained of nausea, 11 of headache, 10 of thirst, 2 of vertigo, 2 were purged, 1 complained of a burning sensation at the stomach, and 1 that he was always passing the urine. The symptom most constantly relieved was dyspnœa. The few patients benefited all said that the medicine eased their breathing, but many asked for medicine in addition to ease the cough.

I compared the above results with those obtained previously by our routine method of treatment, which consists in prescribing a mixture of ammonia and senega (℞ Ammoniæ carbonatis gr. iij; tincturæ scillæ ♏xv; tincturæ camphoræ co. ♏xv; infusum senegæ ad ℥j), with the occasional addition of a few grains of iodide of potassium if expectoration were difficult, and of a small quantity of lobelia if dyspnœa were marked, many cases also being given cod-liver oil, the latter being, in my opinion, one of the most useful of all drugs in the treatment of chronic bronchitis. I collected the prescription papers of 100 cases that had been treated during the last few weeks before I commenced the terebene treatment. Of the 100 cases, 32 were discharged well, the chest being perfectly clear; 68 were discharged relieved, and 4 left the infirmary unrelieved. None of them complained of any ill effects of the remedies used.

The great majority of the cases treated in the infirmary were old people, who had suffered from bronchitis for years. Of course, the entire admission, from their wretched homes, of these patients, into warm wards, with good food and nursing, will account for a great deal of the relief given, but this holds good in the case of the terebene as with the other drugs given.

I feel obliged to conclude, from my experience with terebene: (1) that it greatly relieves the dyspnœa of chronic bronchitis; (2) that it is very variable in its action, the same specimen causing good results in some, bad symptoms in other patients; (3) that it is by no means a specific for chronic bronchitis.

RUPTURE OF THE HEART.

By OGILVIE GRANT, M.B.,
Visiting Physician to the Northern Infirmary, Inverness.

The case of rupture of the heart, which occurred in the Salop County Infirmary, and was reported in the Journal of February 13th, closely resembles, in most respects, a case which came under my observation in the year 1883, and which I have not yet reported.

About that time, I made a *post mortem* examination on two cases of rupture of the left ventricle of the heart. The first of these cases was described in the *Lancet* of 1883; and I may say that the peculiar feature of this case was that the rupture occurred during night, when the patient was in bed, and probably asleep, and did not occur after some violent exertion, the time in which rupture of the heart is stated usually to take place.

The other case was that of a gentleman, about 50 years of age, who complained, in the morning, of a slight pain in the chest. A medical man was sent for, who carefully examined the heart and lungs, and found them sound and healthy. A few hours afterwards, when the patient commenced to eat a light dinner, he suddenly fell down and at once expired. Next day I made a *post mortem* examination, and found, on opening the cavity of the chest, that the lungs were not visible, having been pushed aside by a greatly distended pericardium, which, when opened, was found to be filled with large clots of blood. Having removed the clots, and exposed the heart, the surface of which was fatty, I found a rent on the surface of the left ventricle; this opening communicated directly with the left ventricle; the edges were irregular and friable. The valves were healthy and competent, and there was no atheroma present. From this superficial examination, I came to the conclusion that the rupture was due to fatty degeneration of the heart; but, on microscopic examination, I could detect no such degeneration. I then forwarded a small piece of the wall of the left ventricle, cut as close as possible to the rupture, to Professor Hamilton, of the University of Aberdeen, who very kindly examined it, and informed me that the piece I sent exhibited no signs of fatty degeneration. Thus the precise cause of the rupture appears to be obscure. Possibly the rupture was due to a degeneration of the muscle, and was limited to the fibres which actually ruptured.

From this and similar cases, I think it appears that rupture of the heart does not take place so often after severe exertion as it was supposed to do. This is not to be wondered at, considering that the heart is never at rest, and that the fibres, so to speak, may be ruptured as readily by an irregular or slight contraction as by a violent one; and also it appears that some points in the pathology of rupture of the heart require to be worked out.

The Interhospital Football Challenge-cup.—The interhospital matches seemed this year likely to come to a deadlock in the semi-final ties. Guy's Hospital, being drawn against St. Thomas's, played three matches before it could be decided which was the stronger hospital. In the first match, each side scored twelve points. At the second trial, the sides played out time without either side scoring an advantage. The third match took place on March 10th, and was watched by some thousands of spectators amidst the greatest excitement. For some time, neither side appeared to have the advantage, and there was a prospect of another undecided match. But soon it became evident that the Guy's team had greatly improved in their play, and, in spite of some very fine defence on the part of their opponents, a "touch-down" and a "try" obtained by Coombe were scored before half-time. On changing sides, the Guy's team, encouraged by their success, again pressed their opponents, and, after another "touch-down," Marriott, the Captain, secured a second "try" for Guy's, but no goal resulted from the kick. The St. Thomas's team struggled hard to score after this, but were again forced back, and Russell gained a "try" right between the posts. From this, Cruikshank kicked an easy goal, and when time was called, Guy's were left winners by a goal, two tries, and two touch-downs (forty-seven points) to nothing.

Dr. William Collingridge, Medical Officer of Health, has been appointed by the Port Sanitary Committee public analyst to the Port of London.

GYNÆCOLOGICAL MEMORANDA.

THE DIAGNOSIS OF CANCER OF THE UTERUS.

THE following case of cancer of the uterus is of interest as regards its rapid course, the unusually early age of the patient, and the little help afforded in the diagnosis by microscopic examination.

M. T., aged 24, was admitted into the Nottingham General Hospital under my care on April 7th, 1885. Her family-history was good. Menstruation commenced at the age of 12, the flow lasted four days, and recurred every month. She was married at 15 ; had and had two children, both of whom died before they were six months old. Since then, she had had two miscarriages at about the third month ; the last five years go, since which time she had been regular. She first noticed a fœtid vaginal discharge about six weeks before admission, and a little later saw Dr. Truman at the Nottingham General Dispensary, who diagnosed cancer of the womb. She never had any rash on the skin or falling out of the hair, and had no syphilitic eruption. On vaginal examination, the cervix was found indurated, enlarged, ragged, and excavated so as to admit the index-finger for about three-fourths of an inch. The uterus was somewhat restricted in movement, but the fundus was not enlarged. The patient was also seen by Mr. Wright, the senior surgeon, who confirmed the diagnosis of cancer. The examination caused a little hæmorrhage. I removed a small fragment of the growth, which, upon microscopic examination, was found to consist chiefly of large round cells, with a single large nucleus, but no flat or irregularly shaped cells. The tissue was pervaded by the mycelium of a filamentous fungus (one of the hyphomycetes).

The patient left the hospital, and died eighteen weeks later, six months from the first symptoms. No *post mortem* examination was made.

The diagnosis was between cancer, sarcoma, and syphilis. The ravages of the latter may be very extensive, but are stated to be limited to primary ulcers taking on a phagedænic character. There was no evidence of syphilis in this case. Sarcoma is said almost invariably to take its origin from the lining membrane of the body of the uterus, and not to commence in the cervix. The microscopic examination of the portion removed did not suffice to determine the exact nature of the growth. The fragment was necessarily small, was infiltrated with inflammatory materials, and consisted in large part of vascular granulations. These latter cover the surface of ulcerating new growths, are an important source of the hæmorrhage, and, in many cases, differ very little in structure from healthy granulation-tissue ; though, in others, "cell-nests," or other characteristic structures, may be found. For these reasons, I have come to the conclusion, after many trials, that negative results of the microscopic examination of scrapings or small fragments by no means disprove the malignant nature of the growth.

H. HANDFORD, M.D., M.R.C.P.,
Physician to the Nottingham General Hospital.

PATHOLOGICAL MEMORANDA.

MALTHUS'S LAW AND TUMOUR-GROWTH.

MALTHUS'S law of population-increase by geometrical progression applies to the growth of tumours. The larger they have become, the more rapid is their rate of progress. It is a process of cell-multiplication ; and the more numerous the cells, the greater the result of their doubling. It is important to remember this law, since it may help us: first, in prognosis ; secondly, in emphasising the importance of early treatment ; and, thirdly, as showing the occasional advantage of methods of treatment which diminish bulk and retard growth, although there may be no hope of cure.

The Malthusian law is often remarkably illustrated in cases of rodent ulcer, which advance very slowly at first, and very rapidly later on.

JONATHAN HUTCHINSON.

THERAPEUTIC MEMORANDA.

THE USES OF VIBURNUM PRUNIFOLIUM.

I AM much pleased to see that Dr. Macfie Campbell has brought before your readers the value of this drug in the treatment of cases of threatened abortion, and am happy to be able to give additional corroborative testimony.

A note on this subject by Dr. Roe, of Beachville, Illinois, in the *American Therapeutic Gazette*, January, 1883, first attracted my attention. Since that time, I have used the drug in every case occurring in my practice, and with so much success, that I now approach the treatment of such cases with far greater confidence than formerly.

I have not kept notes, but at least twenty cases have been so treated, and in quite two-thirds the result has been satisfactory. The failures have always been due to some imprudence on the part of the patient, or to other cause beyond the control of the medicine.

Only a few days ago, I received a most grateful letter from the husband of a patient, saying that his wife had been safely delivered of a healthy child at full term on the previous evening. This lady was visiting Sandown, and on August 31st had a serious attempt at abortion, but, thanks to repeated doses of viburnum, was able to proceed home, a distance of over eighty miles, including several changes, and a short sea-passage, on September 2nd. She had never previously gone beyond the fourth month of pregnancy.

I have always used the fluid extract prepared by Parke Davis and Co. I first give one teaspoonful in water every hour until the urgent symptoms subside, and then prescribe it three times a day until the patient has recovered. It is always well to order a few doses to be taken about the time when the periods are due in the ordinary course, for at such times these patients appear more than usually liable to abortion.

Unfortunately, the remedy has both an unpleasant smell and taste ; therefore, if an equally reliable solid extract can be procured, it would be better given in the form of a pill. At the same time, it must be borne in mind that the liquid extract is more easily and quickly absorbed.

W. E. GREEN, M.R.C.S.Eng. and L.S.A., Sandown.

BELLADONNA-INHALATION IN ACUTE BRONCHITIS.

THE article on Respiratory Therapeutics in the JOURNAL of March 6th opens up a successful method of treating a class of diseases common to our climate, and one which, I think, when more commonly known will be more frequently used.

In acute bronchitis, I believe the dyspnœa is caused more by the contraction of the muscular tissue of the air-cells due to the irritation caused by the bronchial inflammation, than by the viscid mucus secreted ; and, acting on this belief in a case I had occasion to treat a few days ago, where the dyspnœa seemed likely to terminate life, I gave a grain of extract of belladonna in half an ounce of water, by means of a Dr. Seigel's inhaler. After the patient had inhaled this solution for a few minutes, the breathing became quiet and easy ; and before the half-ounce was exhausted, the patient was asleep. By repeating this remedy every few hours, with a stimulating system of treatment by the mouth, the patient, an old lady aged 75, soon passed the dangerous stage, and is now recovering.

I have often used this method of treatment in asthma with magical effect, and can strongly recommend its trial in the early state of acute bronchitis, as I have found it marvellously successful. It has the advantage of the ordinary bronchitis-kettle, that it moistens the air of the sick-room, and administers a powerful remedy at the same time.

NATHANIEL EDWARD DAVIES, Sherborne.

TOXICOLOGICAL MEMORANDA.

POISONING BY ESSENCE OF CAMPHOR : RECOVERY.

I WAS called at 10 P.M. on February 23rd, 1886, to see a young gentleman, aged 19, "in a fit." I found him on the floor in convulsions, his face and neck dusky, and foam flying from his mouth. The pulse was full, and the pupils dilated. The shirt was immediately loosed, and cold effusion used, with the result that the convulsions ceased, and he became quieter. After five minutes, retching began, and the small quantity of fluid that came up smelt strongly of camphor. Ten minutes later, or a quarter of an hour from the time I first saw him, I got him up, and, by dint of firmness, persuaded him to go up to his room, undressed him, and put him to bed. There he expressed himself as quite comfortable, and only sleepy. I ascertained that my patient, who is a teetotaller, had a cold in the head, for which he had sought advice of a druggist, who recommended essence of camphor. A half-ounce of Rubini's essence was given him ; and, about 7.30, he saturated a large lump of sugar, spilling a little of the camphor in the process. Not content with this, he took, at 8.30, about the same quantity in water, went to the smoke-room, and smoked two pipes of tobacco. At 9.30, he began to feel giddy, and to be losing his self-control, and talked incoherently and excitedly, ran upstairs, and fell on the floor "in a fit." Two other members of the family had thirteen drops between them, and there remained in the bottle exactly eighty drops, so that two-and-a-half drachms have to be accounted

; and I conclude that my patient must have taken almost two chms, if not quite—a large dose from which to recover so rapidly. h the exception of a bad headache, my patient was quite well the t morning, and ate a good breakfast, but his cold was no better.

n interesting point in this case was that, from 9.30, when the onous action of the camphor began to assert itself, until 11.30, n he really first regained consciousness, he was entirely uncon- us of all that he did or said ; and yet, he resented the application he cold water both by speech and action; answered my questions lligently, as to pain, etc.; walked upstairs, and assisted in prepar- himself for bed ; and, when there, said he was comfortable. In morning, he assured me that he had not been cognisant of my t. Another point is, that no one suspected the harmless domestic edy; and that, until the retching began, the patient was, to all earances, suffering from an epileptic seizure. Anyhow, my patient red me that he will never again play with essence of camphor, and lly aware of his narrow escape from death.

EDWARD EAST, M.R.C.S.Eng.,18, Clifton Gardens, W.

CASE OF POISONING BY PARAFFIN-OIL.

As called to a girl, aged 15½ years, at 8.15 P.M., and was informed she had taken a good drink of paraffin oil in mistake for ginger- nearly an hour previously. The quantity was estimated at nearly a pint, the girl, having put the neck of the bottle into her mouth, not detect the mistake until she had swallowed this. After the e of fifteen or twenty minutes, her friends gave her some salt and er, and she vomited. The following was her condition at the time ay arrival. The surface of the body and the extremities were cold, face pale and anxious ; the pulse feeble, but regular, 132 per ute ; respiration sighing ; and she complained bitterly of pain in throat and in the epigastric and the left hypochondriac regions. ve her an emetic of sulphate of zinc, and she vomited freely. I gave her some chalk suspended in milk, whilst hot water bottles the bed were being prepared. The emetic was repeated, and she n vomited freely. She was now placed in bed, rolled up in kets, and with hot water bottles to her feet and sides. She was ectly conscious throughout. At 9 P.M., the pulse was 120, re- ation sighing, temperature 98.6° Fahr. The pain was less severe. complained of thirst and chilly sensations. At 11 P.M., reaction thoroughly set in. The pulse was 104, stronger and fuller. The ace of the body was warm. The axillary temperature was 99.6° r. Pain was less severe in the throat and the left hypochondrium, still severe in the epigastric region. The type of respiration was tered, and during the past two hours she had vomited several s.

ne passed a restless night, being troubled with an insatiable thirst, which she was given milk and a solution of carbonate of magnesia, upon which she was kept several days, in fact, as long as the ing respiration and the abdominal pain continued. The tonsils ained permanently enlarged, and were subsequently excised ; but he was a strumous girl, it is probable that they were enlarged re the accident.

EMARKS.—The severity of the symptoms in this case, as com- d with most cases of paraffin-poisoning, is my reason for publish- it. The only explanation I can give is that it was taken on an ty stomach.

GEORGE VINCENT, M.D., M.R.C.S.,
Late House-Surgeon to the Worksop General Infirmary.

SURGICAL MEMORANDA.

SUTURE OF NERVES IN RECENT INJURIES.

REGINALD HARRISON'S instructive case (JOURNAL, March 6th), ving the importance of suturing divided nerves in recent injuries, nds me of a somewhat similar case which occurred in my practice months ago.

F., a plumber's assistant, aged 18, presented himself with a transverse cut an inch or so above the anterior annular liga- t ; and, in addition to the tendons *in situ*, the ulnar and median es were found completely severed. The tendons and nerves were red with a catgut ligature ; and the wound closed, but did not kindly. It, however, granulated in course of a few weeks, and t the same time motion and sensation gradually returned ; but, ne progress was deemed slow, the application of a mild continuous nt was tried, and from this time the improvement was marked rapid. The patient was able to return to his usual work about weeks after the accident.

A. KINSEY MORGAN, M.R.C.S.Eng., etc., Bournemouth.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.

CASE OF HYDROSALPINX.

(Under the care of Mr. JOHN W. TAYLOR.)

MRS. A. C., aged 24, was first seen on September 9th, 1885. She had been married thirteen months, and had never been pregnant. She had suffered from rheumatic fever one year before marriage, and had been weak ever since, but very much worse during the last five months. Her condition at this date was as follows ; menstruation was scanty and irregular, the interval being from three to five weeks in duration. Severe pain was complained of on the left side of the abdomen and pelvis, which became much worse before and during the menstrual periods. For a long time there had been loss of appetite, sleeplessness from pain, and latterly, dyspareunia. Her temperature was 99° Fahr. On vaginal examination, nothing abnormal could be elicited beyond general pelvic tenderness, and a rather infantile condition of the uterus.

Two weeks later, on September 23rd, her condition was noted as unimproved. Her temperature remained slightly raised (99° Fahr.). She was sick, and there was probably some active pelvic peritonitis. On examination, "a swelling is felt, very tender to touch, high up behind the uterus, probably tubal."

On September 30th she was better, her appetite and sleep had improved, and her temperature was subnormal.

From October 2nd to October 7th she menstruated, the pain during menstruation being unaltered.

On October 14th she was again examined, when nothing definite could be elicited, except general pelvic tenderness.

With rest in bed, and the use of vaginal injections of hot water, her condition improved, until her next menstruation (from October 31st), which was attended by great pain in the abdomen and left hip, and with bilious vomiting. The pain in the abdomen was said to be of a bearing-down character, but not much reliance can be placed in the use of this term by any woman who has never had children.

On November 11th, she was examined, when the tender distended tube could again be felt high up behind the uterus, and the definite diagnosis was then made of "hydrosalpinx of one side, which empties and refills."

Operation was advised and explained, as the only chance of a thorough cure for the symptoms. She wished to remain at home until Christmas had passed, and, therefore, was not admitted as an in-patient to the hospital until January, 1886.

On January 19th, the operation was performed by Mr. Tait. The abdomen was opened in the middle line. The appendages on the right side were brought up to the surface entire. The right Fallopian tube was acutely distended with clear watery fluid, which spurted from a small pin-hole opening near the position of the fimbriated extremity, where the occlusion was either really incomplete, or completed by so delicate a film as to give way to the slightest touch. There was no inflammation or thickening of the broad ligament, and no adhesions to the ovary, which was quite distinct from the tube ; the occlusion of the fimbriated end of the tube being, therefore, entirely tubal, that is, not tubo-ovarian, as is more generally the case. A separate tense little cyst was found beyond the apparent limit of the tube, being connected to the latter by a fibrous cord. This may have originated in the so-called "hydatid of Morgagni," but appeared to be more an accidental result of the adhesions than of any special significance. The appendages on the right side were tied and removed. Those on the left were brought up to the surface; but, on finding both tube and ovary quite normal in appearance, Mr. Tait, with our mutual concurrence, did not remove them, but replaced them in the pelvis, as far as possible from the stump of the opposite side. The abdominal incision was closed, and the patient made a good recovery.

REMARKS BY MR. JOHN W. TAYLOR.—The case is an interesting one, from the facts (1) that it was a simple uncomplicated case of occlusion and distension of the Fallopian tube of one side, no other structure being involved ; (2) that it shows the possibility, in favourable cases, of very exact diagnosis before an operation is performed ; and (3) that it was at a small opening at the distal end of the tube (and not through the uterus) that the contents of the tube occasionally escaped.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 12TH, 1886.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Hernia Cerebri successfully Treated by Closing the Opening in the Skull with a Silver Plate.—Dr. RODERICK MACLAREN (Carlisle) read an account of this case. A man, A. N., aged 26, was admitted to the Cumberland Infirmary on March 25th, 1885, with a compound fracture of the skull inflicted three days before. For six days after his admission, his condition grew progressively worse. He became deeply comatose, passed motions involuntarily, and had frequent convulsive attacks. The scalp-wound was then enlarged, and all fragments of bone removed; they were ten in number, some being deep in the brain-substance. The aperture left in the skull was three inches long, and varied in breadth from one inch above to half an inch below; it was three-quarters of an inch in front of, and parallel to the left temporal ridge, and its lower end was at the supra-orbital ridge. Some brain which had protruded was removed, and some diffluent brain gently syringed away. While he was being put under chloroform, it was noticed that the right side was paralysed. An attempt was made to make the wound aseptic; this failed. From this time his condition improved; he gradually became less comatose, convulsions ceased, and in about a fortnight he understood what was said to him, though he did not speak. By this time, hernia cerebri had again occurred, and Dr. Maclaren removed it, placing a silver plate (a rolled out florin) inside the skull, so as to block the opening. This was done on April 14th; by May 3rd, the hernia cerebri again existed, owing to the plate slipping to one side within the skull. The protrusion was cut off, and this time the plate was so secured with suture-wire, that it could not be thrust to one side. The scalp was liberated by two incisions parallel to the wound, and sutured over the plate. The plate was left in for two months; no protrusion occurred when it was removed, and the wound soon healed. He was discharged from the hospital on September 5th. His condition was slight dragging of the right leg, absolute paralysis of the right arm, and slight want of expression on the right side of the face. His speech was well restored, though he was sometimes at a loss for a word, and much given to repeat the same expressions. During the latter part of his stay in the hospital, he had two fits, and he had had several since, mostly at night, and always with an aura. The paper pointed out the very small amount of local irritation caused by the plate, and that it did not exercise any pressure on the brain, but merely replaced the normal case; and that the result was a substantial reason for trying it again in a similar condition.—The PRESIDENT thought congratulations were due to Dr. Maclaren on the result of his treatment. Cases of the kind were difficult to treat. The plan adopted was novel; but he (the President) was not disposed to think that it was very superior to that of external pressure by thick sheet-lead. The hernia should be kept down by pressure. He had a great objection to the slicing away of brain-tissue, although the symptoms following such an operation were not generally very prominent. He would ask Dr. Maclaren why he had sliced away the protruding brain; why had he not instead thereof applied something like powdered oxide of zinc, which withered up the parts.—Mr. GOLDING-BIRD had had two cases; one five or six years ago, in which, after trephining, the patient had done well, although he had had hernia cerebri as large as a walnut. Tannic acid being applied, the protrusion withered, and he was now quite well. On the other hand, another patient, a boy, had hernia cerebri after an accident, with no objective symptoms of paralysis, nor change of any kind in his sight or mental condition. Tannic acid being applied to the hernia, he had cerebritis, and died; and it was afterwards found that he had sloughing of the protruding brain, which sloughing extended to the lateral ventricle. In a third case, an abscess was evacuated, an antiseptic lotion applied to the hernia cerebri under external pressure, and the patient in the main recovered, though he had some slight paralytic symptoms. If in Dr. Maclaren's case pressure, external to the skull, had been applied to the tumour, Mr. Golding-Bird believed the patient would have done as well. He would ask, if eventually the patient quite recovered his mental functions.—Mr. PEARCE GOULD had treated one case of small protrusion by external pressure with lint, without making any impression on it. Although part of a motor tract was protruding, there were no paralytic symptoms One day, the patient had a fit. Mr. Gould then shaved off the hernia, and opened an abscess in the brain beneath. The boy recovered, although he had at first slight paralysis of the face on the opposite side. It must not be forgotten that hernia cer was of various kinds. In his own case, whilst suppuration was g on in the brain beneath, pressure on the hernia failed to do g One should not look so much to the external application as to condition of the brain below, on which he thought the result of treatment rather depended.—Dr. MACLAREN, in his reply, said in his case external pressure of various kinds had been tried, and the brain, in spite of it all, protruded. The brain, in protruding, opened out by the inflammation of its substance; so that, when it sliced off, not so much of real brain-tissue was removed as one woul first suppose. A parallel case was that of fungating testicle. man's intellectual faculties had never been of a brilliant character, his language was Gaelic, so that it was difficult to judge if his me functions were impaired.

Some Chronic Nervous Sequelæ of Small-pox, especially as affec the Speech. (Illustrated by living specimens).—Dr. T. WHIPHAM Dr. A. T. MYERS contributed a paper on this subject, an abstract which will be published in our next issue.—Dr. HUGHLINGS JACKS referring to a case he had exhibited that evening, said his patient the peculiarity of speech after small-pox, together with slight affect of the muscles of the hand. Similar troubles of articulation occurre other patients who had not had fevers. He thought that opt neuritis from or after cerebral hæmorrhage was very rare, and not sure that he had ever seen a case. Many years ago he had corded what he then thought to be an example, but believed that it was a case of hæmorrhage from a glioma. Tumour was no question in the case of Dr. Bristowe's patient. As Mr. Brudenell Ca had suggested to him, the clot was, in effect, a tumour; like a tumo it was a "foreign body." The long existence of lateral deviation the eyes was a noteworthy feature in the case.—Dr. S. MACKEN had seen several cases of the kind, particularly after the epidemi small-pox in 1870-71. There was the same monosyllabic speech; and same symptom with tremors existed in some cases of malarial pois ing. In certain cases he had described in *Brain*, cases of ante polio-myelitis, the affection was in the anterior multipolar cells of spinal cord; but if such lesion were to occur higher up, in the med oblongata, it would give rise to such symptoms as those suffered Dr. Whipham's patients.—Dr. T. BARLOW described the case o woman, aged 25, who had small-pox, and, a week after leaving hospital, had ataxy of the lower and upper limbs, a dazed and obt mental condition, a voice high-pitched and a little nasal, optic n ritis, a little deafness, and vague pain about the head. After th weeks, she was improving, and then passed out of sight. He rem bered another case of nervous sequelæ, that of a man with paralysi the serratus magnus, coming on in the convalescent period of the illn but perhaps due to peripheral neuritis. He had also seen a cas fatal myelitis coming on in the course of measles. It was that o healthy young policeman, who, on the third or fourth day after the r came out, had paraplegia, with retention of urine and ascend paralysis. His brain remained clear, but he died three days aft wards. The changes in the cord were most marked, similar to th of an early stage of anterior polio-myelitis. There were certain quelæ due to anæmic conditions, and others which came on in exanthematic period. The "rash," it might then perhaps be sa came out at the nervous centres. One ought to ascertain the ex period at which the nervous symptoms began. In small-pox, wh the delirium was often so great, there must be great perturbati probably mostly of the circulation in the nervous centres.—Dr. S MOUR TAYLOR mentioned the case of a young man at St. Thom Hospital, under the care of Dr. Bristowe, who had to be again tau to speak after small-pox. He had the same kind of halting speech the patients exhibited that evening, but was improving when he the hospital.—Dr. WHIPHAM, in replying, said that Dr. Bristow case was known to him and to Dr. Myers, but they had not thou it exactly parallel with their own cases.

Case of Baruria in a Woman.—Dr. SAMUEL WEST read details of t case. A woman, aged 39, complained, after catching cold, of pains a aching in her limbs, which became severe enough, after a week, to ma her keep her bed. When admitted, these pains continued, but there v swelling of joints. The temperature was 100°, and she perspired free but the sweat did not smell sour. The urine was of specific gravity 10 and gave copious crystals of nitrate of urea, with nitric acid. Her ap tite had been for some days almost absent, and in the hospital she to but little milk or beef-tea. For two days the condition of the urine v the same, and the percentage of urea 5.1. This percentage gradua fell to normal, and, as it did so, all the patient's symptoms dis peared. The case was regarded as one of baruria. The account of cases given by Grant was summarised and compared with the pres case, and reference was made to other authors, by some of whom

tence of the affection was questioned, while by others it was not rred to. Some of the published cases were referred to, and a some- t similar case, the result of overfeeding and constipation, was ribed, in which similar symptoms were associated with a high per- age of urea, and disappeared when the percentage returned to normal.

ecrosis of the Lower Jaw from the Medicinal Use of Phosphorus.—Hutchinson read brief notes of the case. The patient was a lady, 65, who was seen by Mr. Hutchinson in November last, when whole lower half of the face was enlarged, and several sinuses ed externally. Bare discoloured bone was exposed in the mouth g the whole length of the alveolus. There was also a large deposit ew shell. The discharge was profuse and fœtid in the extreme. o the origin of the necrosis, which resembled that due to phos- us, it was elicited from the patient that she had "been taking phorus for the last two years," and had "quite renovated her n thereby;" the truth being that, save for a few intervals, she during the time named been taking three Kirby's pills daily, containing one-thirty-third of a grain of phosphorus. The con- n of the patient being much reduced, operation was deferred, ling improvement in her general health, until the present month, n, after consultation with Sir James Paget, Mr. Hutchinson re- ed about four inches of dead bone, without having to resort to ng instruments, although he feared at first that this would ecessary. The patient made an excellent recovery. Mr. Hutchin- remarked that Kirby's phosphorus pills were in very extensive but that this was the first case that he had seen in which jaw- se could be traced to the medical use of phosphorus. The patient carious teeth, and inflammation of the jaw had begun in connec- with one of them, and probably about six or nine months after aking of the pills commenced.—The President thought the case rkable and unusual. It was possible that Mr. Hutchinson's ex- ation of the cause of the disease was correct, but necrosis of the r and of the lower jaw was met with quite unconnected with phorus. He himself had seen two such cases within the last two ; one had disease of the upper, the other of the lower, jaw. patients were well-to-do women. One died from pneumonia; other was five months advanced in pregnancy when seen. She her full time, was safely confined, and then came again to Mr. nt, who removed the necrosed bone from the lower jaw. In these cases, the necrosis was exactly like that due to phosphorus; but, ite of careful investigation, no scrap of evidence could be found to ect either case with phosphorus.—Dr. Bristowe said, from his stigations, he could quite believe that phosphorus taken constantly, y Mr. Hutchinson's patient, might produce inflammation and sis of the jaw.—Dr. S. Coupland asked if albuminuria had been ed in Mr. Hutchinson's case, as phosphorus produced fatty de- ation of the kidney.—Mr. Hutchinson, in reply, said there was bumen in the urine when the lady came under his care. She wards quite recovered.

ving Specimens.—The following were exhibited: Mr. Bernard : A patient with extreme Lateral Curvature of the Spine (pre- ly exhibited) after three months' treatment; 2. Sister of the e, with Lateral Curvature of the Spine in the earliest stage.—Victor Horsley: Congenital Track in the Raphé of the Scro- —Dr. Hughlings Jackson: Affection of Articulation, a sequel nall-pox.—Dr. Whipham: Two similar cases.—Mr. T. Cooke: rimary Epithelioma of the Tonsil; 2. Cyst on the Back of the t (Ganglion).

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, March 16th, 1886.

J. Syer Bristowe, M.D., F.R.S., President, in the Chair.

fantile Trabeculated Skulls.—Dr. Goodhart showed a specimen rabeculated skull from an infant six months old. The child died the injection of Morton's fluid into a spina bifida. There were branous opercula in the skull, through which the convolutions be seen. The skull was made up of arches of bone, the inter- between which were filled by membrane or very thin bone. io-tabes was, of course, very evident. There was no evidence of lis or of rickets. Dr. Goodhart expressed the opinion that the tion was due to malformation, and was not related to such o-tabes as was due to rickets of syphilis. It seemed as if ossifica- had started at the ordinary centres, but had advanced very slowly e peripheries.—Dr. Hale White showed a similar specimen. hild was admitted into Guy's Hospital at the age of three months. sented a large congenital tumour, projecting upwards from the ior part of the head. Cerebro-spinal fluid was drawn off by punc- on two occasions; the child sank and died. At the necropsy, a transverse depression was seen to cross the skull from ear to ear; the frontal bones were widely separated, and their opposite borders were indented; the interval was filled up by membrane; the other bones of the skull were so firmly united, that in some places the sutures could hardly be made out. The two parietal bones were close together, and the separation between the frontal bones did not extend between them. The bones of the base were unaltered, but all the bones of the vertex were remarkably thin, being about the thickness of an egg-shell. The parietal, and that part of the occipital bone in front of the foramen magnum, for the most part retained their membranous condition, but going across the membrane in all directions were trabeculæ of osseous tissue; the average width of these was one-sixth of an inch, and they formed sharp prominent ridges on the interior of the skull. The smallest trabeculæ were the merest sprinkling of osseous substance in the membrane, which was thus cut up into a number of areas, some rounded, some polygonal, and ranging in size from a mere point to a threepenny-piece. The dura mater followed these ridges accurately; seen from the exterior, the transparent membranous areas, bounded by trabeculæ, were very evident, but there were no ridges. On the petrous portion of the temporal bone, the superior and posterior semicircular canals were most evident. There was no flattening of the convolutions of the brain; the ventricles were not dilated; it was impossible to say whence the fluid came, and also to say what was the cause of the peculiar condition of skull.—Mr. Shattock had seen a skull exactly identical with Dr. Goodhart's specimen in a case of hydrocephalus, coming on after injection of a spina bifida with Morton's fluid. He considered that the trabeculated condition was due to atrophic changes caused by increased pressure in hydrocephalic skulls, the thin areas corresponding to the convolutions, and the thicker ridges to the sulci. He had seen the same condition in several other cases of hydrocephalus.—Dr. Dyce Duckworth referred to a similar condition of skull in a child who had died in St. Bartholomew's Hospital, with chronic hydrocephalus. The skull presented well marked cranio-tabes. There were no signs of congenital syphilis nor of rickets.—Mr. R. W. Parker thought Mr. Shattock's explanation would be satisfactory, were it not that the condition occurred congenitally, as had been shown by Bednär. The condition did occur in hydrocephalus, no doubt, but not invariably. In his opinion, hydrocephalus only exaggerated a congenital condition. Elsässer had described cranio-tabes as the form of rickets which occurred in suckling children, and he was inclined to agree that it was a very early stage of rickets. Cranio-tabes in the later members of large families was very common; and, if these infants were watched, the ordinary signs of rickets might also be seen to develop. A condition similar to that described by Dr. Goodhart occurred in cases of hydrocephalus in animals, as might be observed in specimens in the Museum of the Royal College of Surgeons.—The President thought the form of the skull in Dr. Hale White's case made it very highly probable that the fluid was within the ventricles.—Dr. Goodhart, in reply, said that, in his case, there was no hydrocephalus. There was evidence that bone was forming in the membrane, and that, if the child had lived, the membranes would have become completely ossified.—Dr. Hale White said that increased intracranial pressure in infants caused separation of the bones, and not atrophy.

Diffuse Symmetrical Pulmonary Cirrhosis.—Dr. Percy Kidd showed a specimen of bilateral pulmonary cirrhosis. The patient, a woman aged 37, was admitted suffering from marked shortness of breath, cough, and slight general dropsy. Her illness began twelve months previously with retching and vomiting, cough, expectoration, shortness of breath, and gradual wasting. Her appetite had been failing all along, and for three months she had suffered from palpitation. Dropsy came on a week before admission. Physical examination gave evidence of bronchitis with slight consolidation of the right apex, hypertrophy and dilatation of the heart without any murmur, a pulse of high tension, thickened arteries, and albuminuria. The anasarca gradually increased, the dyspnœa became more urgent, and the patient sank eleven days after admission. At the necropsy, slight recent pleuritic adhesions were found at both apices. Both lungs presented exactly similar changes, being emphysematous and traversed by numerous greyish fibroid strands throughout, the upper and lower parts being equally affected. In the lower lobe of the left lung there were two encapsulated firm caseous nodules, and one similar nodule in the upper lobe of the opposite lung. No miliary tubercles or other nodules were seen. The bronchi in places were very slightly dilated. There was hypertrophy with dilatation of both sides of the heart, but no valvular disease. The aorta was atheromatous throughout, and there was extensive arterial sclerosis. The kidneys were not small; they were tough, and the capsules were adherent, leaving a granular sur-

face on removal; the cortex was not wasted. The liver presented the nutmeg aspect. The spleen was small and tough; the other organs were healthy. Microscopic examination showed that the earliest changes in the lung were bronchial and peribronchial, the larger arteries and veins being also much thickened. In the later stages, the process extended to the alveolar walls, and gave rise to large tracts of cirrhosis. The caseous nodules consisted of groups of alveoli, filled with a finely granular material encapsuled by connective tissue, and not containing giant-cells, epithelioid cells, miliary tubercles, nor tubercle-bacilli. The kidneys showed thickening of the adventitia of the larger arteries and veins, and some slight cirrhosis, mostly subcapsular. Dr. Kidd attributed the condition of the lungs to a chronic bronchitis and peribronchitis, leading to pulmonary cirrhosis, such as would result from inhalation of irritating particles; the history, however, afforded no evidence on this head. The question of syphilitic disease, and of an obsolete tuberculous process were discussed, but the evidence in favour of either, especially the latter, was thought to be very slight. Attention was directed to the rarity of cirrhosis, symmetrically distributed throughout both lungs, as distinguished from the more common localised fibroid disease of the organ.—Dr. GOODHART referred to a series of cases which he had brought forward during the discussion on visceral syphilis. The specimen shown belonged to the same class, and his conviction grew, though a demonstrative proof could not yet be given, that the pulmonary disease was syphilitic.—Dr. GREEN thought the uniform distribution of the lesion made it more probable that it was, as Dr. Percy Kidd suggested, a fibrosis secondary to chronic bronchitis, but admitted that the appearances were very unusual.—Mr. F. T. PAUL said he had several times seen this condition associated with other changes of undoubtedly syphilitic origin.—Dr. PERCY KIDD, in reply, reiterated his opinion that the evidence was insufficient to answer the question.

Tumour of Stomach.—Dr. W. B. HADDEN showed a tumour of the stomach which had caused the death of a woman aged 53. She had been out of health for six months, and, when admitted, presented signs of pleuro-pneumonia with pyrexia. There had been no vomiting. A tumour could be felt in the epigastrium, which subsequently shifted its position somewhat, and the diagnosis was further complicated by the existence of a second tumour in the hypogastrium, which, however, was found at the necropsy to be an uterine fibroid with a long pedicle. On the anterior wall of the stomach was a globular tumour which was hollow, and freely communicated with the cavity of the stomach. In the apex of the left lung was a pus-containing cavity; the lower lobe was hepatised. The growth in the stomach was a lympho-sarcoma of peculiar structure, presenting a papillary or alveolar arrangement.

Tumour of Palate.—A tumour of the soft palate was exhibited by Sir W. Mac Cormac. The patient was a woman, aged 30, who found her voice grow thick, and that her power of swallowing was impaired about six weeks before admission. The tumour then perceived gradually increased, and when removed, was of the size of a tangerine-orange; it sprang from the left side of the palate. It was firm and elastic; the mucous membrane over it was quite smooth, except at one point, where superficial ulceration had occurred; the glands at the angle of the jaw were enlarged. A preliminary tracheotomy was performed, and the operation was attended, as had been anticipated, by free hæmorrhage. The wound in the trachea was closed after the removal was complete. The tumour consisted of hyaline connective tissue, traversed by irregular branching groups of round cells. Mr. Shattock, who had made the microscopic examination, considered the growth to be a cylindroma. In conclusion, Sir Wm. Mac Cormac referred to the comparative rarity of palatine tumours, and quoted cases published by Mr. Treves, and in a Paris graduation thesis, from the practice of Professor Verneuil, by a French medical man. The description given by the last-mentioned writer agreed very closely in all points with the conditions observed in the specimen shown.—Mr. ANTHONY BOWLBY pointed out the close resemblance the sections bore to the section from a case of cylindroma of the popliteal space shown by Mr. Butlin some years ago.—Mr. BUTLIN agreed that the growth was not an adeno-sarcoma, but a transformed round-celled sarcoma.—Mr. F. T. PAUL said that he had observed three tumours having this structure, springing from the tonsil, the inside of the cheek, and the inside of the lip respectively. He regarded them as having the same structure as the adeno-sarcoma or adeno-myxoma of the tonsils.—Dr. FELIX SEMON had been surprised to find, on examination of the literature, how exceedingly rare tumours of the soft palate of any kind were.—Mr. SHATTOCK said that he could not agree with Mr. Paul in thinking that the tumour was an adeno-sarcoma.—Mr. ROGER WILLIAMS had seen several encapsuled tumours immediately beneath the mucous membranes of the mouth, having a similar structure.

Ante mortem Digestion of Stomach.—Dr. HANDFORD showed a specimen of extensive destruction of the stomach. The patient, a n aged 23, had just passed from the militia into the army. The illn which caused his death began very suddenly; he felt dizzy, exp enced severe pain in the belly, and fell; vomiting occurred twice, he was at once admitted to hospital. When first seen, soon aft wards, the abdomen was flat; the fauces were covered with slou and the patient complained of intense abdominal pain relieved pressure. The sloughing condition of the throat improved in a days; but, while this was occurring, he vomited blood, and pas blood *per anum*. He sank and died in a few days. The necro was made five hours after death. Covering the left lobe of the li was an extensible friable blood-clot weighing 13½ ounces. Beneat was an irregular cavity, into which the liver and spleen project The cavity was, in fact, the stomach, but its walls had disappea over large areas, and adhesions had been formed to the organs and the abdominal walls. No history of poisoning could be obtain He thought it probable that the case was an example of *ante mor* digestion, secondary to extensive thrombosis.—The PRESIDENT served that the case was most remarkable. He asked Dr. Handf to state the extent of the adhesions, and whether they appeared to old or recent.—Dr. HANDFORD explained that the upper part of abdomen was occupied by a large cavity, bounded below by the tra verse colon and the great omentum, on the left by the spleen and inflammatory mass around it, and on the right by the liver. A tures, which were found to be the pylorus and the œsophageal op ing, could be seen in the cavity.—Dr. PAYNE inquired whether analysis of the contents of the cavity had been made, as it seeme be highly probable that the lesions were due to some corrosive pois If it were a case of digestion of the stomach before death, it unique; the history of sudden onset in a man in at least compa tively good health put the case in an entirely different category f the cases previously described as due to *ante mortem* digestion.— HALE WHITE pointed out that the cavity described exactly co sponded with the lesser cavity of the peritoneum; it was poss that the foramen of Winslow had become closed, and that the c tents of the stomach had been extravasated after death into the ca thus formed.—Dr. HANDFORD was inclined to fall in with the s gestion that the process had been at least started by some corro poison, but there was no evidence on the point. It was to be rem bered that the man had vomited several times, and had survived s days. An inquest had been held, and, although the medical evide was to the effect that death had probably been caused by some rosive poison, the coroner did not think it necessary to have analysis made. The existence of peritoneal adhesions negatived Hale White's suggestion.

Congenital Adeno-sarcoma of the Kidney.—Mr. F. T. PAUL sho specimens from a case of tumour of the kidney, reported by Mr. P in the *Liverpool Medico-Chirurgical Journal*, 1885. The patient of internal strangulation. The tumour, with the remains of kidney, weighed 2 lbs. The new growth consisted of trabecula rounded cells, with delicate connective tissue, in which were gro of tubes lined with epithelium resembling the tubes of the fo kidney. Every gradation could be traced from these tubules to solid trabeculæ. The connective tissue contained some cells, wh were probably striated muscle-cells in a very early stage. He showed other tumours, which he had described at the meeting of British Medical Association in Liverpool in 1883. He believed t all the congenital tumours of the kidney were properly classe teratomata.

Calcification of Arteries.—Mr. F. T. PAUL also made some rem on senile calcareous degeneration of arteries. He considered that disease commenced as a simple calcareous degeneration, but that a later stage, a more complex process occurred, and the harder areas came to have a true osseous structure. Many of the old ca reous plates were fringed with true osseous tissues, by which accidental fractures were repaired. He considered that the step the process were, (1) calcareous degeneration; (2) irritation ab these plates, from fracture or other injury, leading to inflamma proliferation; (3) ossification in this young proliferating tissue. paper was illustrated by microscopic specimens from the poste tibial artery, and by drawings.

Card Specimens.—Dr. HADDEN: Simple Cyst of Liver.—Dr. H FORD (Nottingham): 1. Ulcerative Endocarditis of the Right S 2. Acute Intestinal Obstruction due to a Band; 3. Thrombosi Left Posterior Cerebral Artery; 4. (for Mr. E. POWELL) Congen (?) Atrophy of Right Kidney.—Dr. PASTEUR: Aortic Aneurysm, v Mitral Stenosis.—Mr. HURRY FENWICK: Post-trigonal Pouch taining Calculus.—Mr. SHATTOCK: Lumbo-sacral Meningo-myelo

d by Morton's Treatment.—Mr. BALLANCE: Fracture of Thyroid ilage.—Dr. PAYNE (for Dr. JACOBS, of Leeds): Tumour of ger.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 15TH, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

CLINICAL EVENING.

se of Reproduction of Upper End of Femur after Jordan's Opera-—Mr. EDMUND OWEN showed a boy, aged 6, who had been itted for long standing hip-disease on the left side. An abscess formed in the knee of the same side, and another in the right t, which were both opened. The wound in the knee did badly, the hip-mischief became more pronounced, so that ultimately it decided to amputate at the hip by Jordan's method. The opera- was successfully carried out, but in this case the periosteum was ped from the bone and left in. At this time the boy's liver was mously enlarged, and his urine was solid with albumen. As soon came round somewhat from the operation he was put on tonics, treated to a liberal dietary, and plenty of fresh air and sunlight, his condition rapidly improved, the liver becoming smaller and albumen less. The result as regarded the hip was very satisfactory, having reformed from the periosteum, with the result of leaving mp which would be very useful for the purposes of an artificial .—Mr. OWEN was of opinion that this operation had many advan- over the old-fashioned method by transfixion, having a better more useful stump, involving less mutilation, and finally allowing eration in the various steps of the operation.—Mr. B. JESSETT ght that the marked improvement which immediately followed val of scrofulous disease was a most interesting feature.—Mr. IARD DAVY said that at Westminster Hospital they had been very ssful with their cases of amputation at the hip, the last six hav- ll been successful. He handed round a femur which had been ved for chronic periostitis, and expressed his opinion that the re- al of the periosteum would have been a matter of some difficulty. e PRESIDENT mentioned the case of a collier, on whom amputa- at the hip-joint was performed for the first time in England y years ago, and who followed his surgeon to the grave fifty years .

cision of Hip-Joint.—Mr. WALTER PYE called attention to a boy had already been before the Society as a case of successful ex- of the hip-joint for acute destructive arthritis. The boy could walk and run with very little discomfort or difficulty.

se of Mediastinal Tumour.—Dr. C. T. WILLIAMS showed the pre- ion from a man, aged 43, who came under his care in December, with dyspnœa, pain in the chest and the left arm, and loss of t. The left chest was completely dull on percussion, the heart- ls were clearly heard all over it, and the breathing-sounds were . The pulse in the left axilla was feeble. His expectoration inged with blood, and there was some dysphagia. The left vocal was fixed, and the voice stridulous. The left pupil was larger the right. He left the hospital on January 1st, but he returned e 19th, and died on February 9th. At the *post mortem* examina- the left pleural cavity contained a quantity of clear serum, and ediastinum was filled with a new growth, which displaced the , compressed the aorta, and encircled the œsophagus, on the ior surface of which was an ulcer, of the size of a shilling. The ardium was also involved.—Dr. DE HAVILLAND HALL, in refer- to the position of the vocal cord, mentioned that he had taken pinion of Dr. Semon, who was also of opinion that the most was the cadaveric position. Possibly Dr. Ord's results were ned as a result of examining the larynx before the voice had e affected.—Dr. S. WEST alluded to the difficulty that existed in guishing between these tumours and pleural effusions. Further, were not unfrequently pulsatile, and so resembled aneurysms.— INLAY advocated the employment of a fine syringe as a means of ng at an absolute diagnosis, and this view was confirmed by Dr. L MONEY, who said that he very frequently had recourse to it.— VILLIAMS, in reply, said he remembered a case where the use of ringe had been the cause of a wrong diagnosis. The presence of our was not inconsistent with that of fluid, and *vice versâ*.

se of Leprosy.—Dr. CROCKER showed a young man, aged 22, born ombay, who came to England at 16 years of age. After a t cold, the characteristic symptoms had made their appearance. anded round drawings of this and other cases, and showed speci- of the leprosy-bacillus under the microscope.

se of General Xanthelasma, Diffuse Scleroderma, Angioma, etc.—TARTIN showed drawings of cases of the above, and read notes of cases.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MARCH 11TH, 1886.

JONATHAN HUTCHINSON, F.R.S., F.R.C.S., Vice-President, in the Chair.

Deposit in the Cornea.—Mr. LANG showed a patient, in whom corneal opacities appeared to be due to the presence of granules of a foreign body in the cornea. Eserine had been used in the treatment of an antecedent corneal ulcer, and six grains of quinine had been given daily. Mr. Lang entertained the opinion that the granules in the cornea were quinine, chiefly on the ground that the opacity was fluorescent to oblique illumination.—Mr. TWEEDY, while agreeing that the opacities had a very peculiar fluorescent aspect, questioned whether this was due to quinine; he had been in the habit of using pure (English) sulphate of quinine, as a lotion in intractable ulceration for at least twelve years, and had never seen such an opacity produced.—Mr. NETTLESHIP said the appearances in the case were certainly very peculiar, and unlike all ordinary cases of opacity.—Mr. MCHARDY, while agreeing with Mr. Nettleship, added that, though he had frequently used quinine and eserine simultaneously, he had never seen any such deposit.

Panas's Solution.—Mr. EDGAR BROWN, referring to a statement made at the last meeting, by Mr. Brudenell Carter, on the authority of an analysis made by Messrs. Corbyn, to the effect that the solution recommended by M. Panas contained no mercury, said that a careful examination, showed that the fluid in question did contain mercury, though probably not in solution, but in a state of fine suspension.

Model of Movements of Eyes.—Mr. ADAMS FROST exhibited a model demonstrating the movements of the eyes. The eyes were represented by two wooden spheres, each movable in all directions round its centre by means of a double gimble-joint. The muscles were represented by cords, having points of attachment and lines of traction exactly similar to those of the natural muscles. The cords were acted upon by rotating three drums, upon which they were wound. The upper of these controlled the rotation of the lateral recti in one direction, producing conjugate movement to the right, and in the other to the left. This drum was divided in its centre, so that, if its two halves were rotated in opposite directions, convergence or divergence was produced. The second drum acted upon both superior or both inferior recti, according to the direction in which it was turned; while the lowest acted upon the superior or inferior obliqui in the same way. Any of the natural movements could be produced by combinations of these movements. The ingenious suggestion to divide the uppermost drum to produce convergence or divergence, was due to Mr. Paxton, of Messrs. Pickard, Curry, and Paxton.

Report on Sympathetic Ophthalmitis.—The Report of the Committee on Sympathetic Ophthalmitis was read by Mr. NETTLESHIP. It was based on a detailed analysis of about 200 cases of sympathetic ophthalmitis, collected by the Committee as bearing upon certain points in its nature and treatment. About 80 of these were contributed by members of the Society, to whom a circular had been sent; the rest were from published sources. In respect to excision of the exciting eye, the conclusion arrived at was that whilst its removal, soon after the onset of the sympathetic inflammation, had not been proved to have any marked effect on the progress of the sympathetic disease, it certainly did not increase the severity of it. Comparing equal numbers of cases in which the exciting eye was, and was not, removed (soon after the onset of the sympathetic disease), the proportion in which the disease was fatal to sight was much greater in the latter group than in the former. The apparent value of this evidence in favour of early excision, however, was somewhat diminished by evidence of another kind, which tended to show that the excess of recoveries after excision was partly due to the natural mildness of the disease in that group, and the excess of losses when excision was not done, to its natural severity. In respect to mercury, the conclusion was tentatively arrived at that the drug had probably little, if any, effect; of fifty cases which recovered completely, and were treated locally in much the same way, mercury was administered to exactly one-half. The effect of operation (iridectomy) on the sympathising eye performed early in the disease was thought to be less unfavourable than was commonly held. In a small series of cases, an iridectomy had been performed on the exciting eye soon after the sympathetic inflammation had set in, and in nearly all with a favourable result to both eyes. The important question was next considered, whether sympathetic ophthalmitis could be set up by an eye in which no perforation had ever taken place. After a very careful and thorough examination of cases, the Committee had come to the conclusion that the occurrence of the disease without perforation of

the exciter, if known at all, was, at any rate, extremely rare. In reply to questions as to the longest and shortest intervals, respectively, between the lesion of the exciting eye and the onset of sympathetic disease, only about a dozen cases were found in which an interval of more than a year occurred, unbroken by recurrences of inflammation in the exciting eye; and only eighteen in which the interval was a month or less. The longest interval where the exciter had been wounded was twenty years, the shortest nine days. There seemed to be reason for believing that the length of the interval was not without influence on the severity of the sympathetic ophthalmitis; the proportion of cases in which blindness ensued being considerably greater when the disease had set in after a long than after a short interval. Consideration was then given to all the cases (about thirty) in which sympathetic ophthalmitis was known to have set in after excision of the exciting eye, in five cases after as much as from four to eight weeks; in all cases, the exciting eye had been wounded, and had been left long enough to undergo changes capable of setting up the disease; and the conclusion was drawn that, in these cases, the sympathetic attack was due to the influence of the wounded eye, and not to the operation for its removal. The prognosis in these cases was shown to be much better than in ordinary cases, as more than half recovered entirely. After reference to certain anomalous cases happening many years after excision, and to others where iritis followed the removal of the exciter within a day or two of the injury, the report concluded with a notice of the cases of so-called uncomplicated sympathetic neuritis. It had been found that these cases differed much amongst themselves, and probably could not all be ascribed to the same cause, nor be taken as pointing to transmission along the optic nerves; whilst the papillitis which often occurred early, and remained late, in ordinary cases of sympathetic ophthalmitis, was far from proving that mode of transmission, since the same papillitis was commonly seen in cases of idiopathic serous iritis, even when only one eye suffered. The statements and conclusions in the report were illustrated by illustrative cases, and verified by numerous references.—The PRESIDENT observed that the report not only showed that much labour had been expended, but that excellent judgment had been used.—A vote of thanks to the Committee was adopted unanimously.

Double Optic Neuritis in Cerebral Hæmorrhage.—Dr. BRISTOWE read a paper on a case of cerebral hæmorrhage, with double optic neuritis. A musician, aged 55. was first seen on January 19th. It appeared that he had suffered from headache for one year, and dimness of sight for six months; but there had been no paralysis, double vision, or fits. At 10.30 P.M., after supper, on December 26th, 1885, loss of consciousnes and right hemiplegia suddenly occurred. The patient remained drowsy and stupid, took but little notice of his surroundings, and passed his evacuations into the bed. The arm and leg were absolutely paralysed; the plantar reflex on the right side was diminished. There was no clonus, and the knee-jerks were not exaggerated. There were complete hemi-analgesia and hemi-anæsthesia, but the special senses could not be investigated. The temperature was 97.4°; the pulse 90°, and strong; there was no albuminuria. For ten days the patient became no worse; then he became more drowsy, and absolutely speechless. Some stiffness of the right arm came on. The head and eyes, though turned to the left, could be moved to the right. Mr. Nettleship examined the eyes on January 30th, and found papillo-retinitis, with hæmorrhages. Dr. Bristowe then considered the case to be one of cerebral tumour. The patient gradually became worse, and died comatose on February 12th. At the necropsy, the spinal cord and membranes of the brain were healthy. The arteries were atheromatous. A blood-stained area, of the size of a threepenny-piece, was seen on the surface of the posterior part of the left optic thalamus; this was the external evidence of a large cavity, of the size of a pigeon's-egg, containing a partly decolourised clot in the optic thalamus. The hæmorrhage had ruptured the posterior limb of the interal capsule, and extended into the white matter of the temporo-sphenoidal lobe. The lenticular nucleus was also damaged at its posterior part. The heart weighed 17½ ounces, being much hypertrophied; the kidneys were healthy. Dr. Bristowe remarked on the unusual position of the hæmorrhage, and the rarity of the association of such optic neuritis with simple cerebral hæmorrhage.—Dr. HUGHLINGS JACKSON said that Dr. Bristowe had described a condition which must be exceedingly uncommon. There was a liability to error, in that hæmorrhage might occur from cerebral tumour. On the other hand, a large blood-clot might be regarded as a foreign body. The fact that there was conjugate deviation of the eyes and head for from five to six weeks was remarkable, for this symptom was usually transitory.—Dr. SHARKEY said there was no evidence of glioma in the tissue around the clot. The hypertrophy of the heart was unexplained. There was no doubt of the extreme rarity of optic neuritis associated wi ordinary cases of hæmorrhage, which usually occurred in the anteri portions of the internal capsule. In the present case there was ru ture, and not mere pressure on the posterior third of the posteri segment of the internal capsule, and thus the optic radiations Gratiolet were also damaged. He suggested that an explanation of t occurrence might be found in the unusual position of the hæmorrha damaging at the same time both sensory and motor paths.

Primary Glaucoma in Relation to Age.—Mr. PRIESTLEY SMITH re a paper on this subject. With the help of members of the Societ he had collected one thousand cases of primary glaucoma, and h classified them according to the age at which the disease began, t sex of the patient, and the type of the glaucoma. From these cas calculations had been made, with the help of life-tables, to show wh the distribution would be if persons of both sexes and all ages we equally numerous. These represented the relative liability of perso of different ages and the two sexes. The results shown in a series tables and charts led to the following conclusions. 1. Primary gla coma is extremely rare in childhood and youth. 2. Its frequency i creases, slowly at first, then more rapidly up to the sixth decad between 60 and 70 it is about as as frequent as between 50 and 6 after 70, its frequency declines. 3. Cases beginning after 50 are abo twice as numerous as cases beginning before 50. 4. Females suffer rather larger number than males. 5. The non-congestive form commoner in males than in females. 6. The congestive forms a much commoner in females than in males. 7. The liability is e tremely slight in childhood and youth; at least one hundred times l in the second decade than in the seventh. 8. The liability continua increases up to the seventh decade; between 60 and 70, it is at le twice as great as between 40 and 50. 9. After 70 years of age, t liability appears to diminish, but the statistics cannot be relied upo for very old people are less able to come up for treatment than th who are younger. Figures were quoted from the Manchester E Hospital Reports in proof of this assertion. 10. The liability females is rather greater than that of males. 11. The extra liabili of females pertains to the whole of life, except, perhaps, to the perio before 30 and after 70, concerning which the data are insufficient generalisation. 12. The extra liability of females relates to the congesti forms of the disease, not to the non-congestive. These results were a plied by the writer as a test of the theory of glaucoma arrived at other means. This first investigation, eight years ago, had led to t inference that change of form in the crystalline lens was concern in producing glaucoma. A further inquiry had shown that the le continued to increase in size throughout life. The present inquiry w undertaken to ascertain whether the liability at different periods life was such as to confirm the pathological theory to be tested, whi was that, as age advanced, the lens steadily encroached on the spa in which it lay, the structures surrounding it attaining their f dimensions early in life. The margin of the lens was thus brou into closer and broader relation with the ciliary processes, and lessen the depth of the anterior chamber—changes which, though ordinar compatible with the integrity of the eye, involved an increasing l bility to glaucoma. The highly vascular processes varied much size according to the quantity of blood in their vessels; and, if t space available for such variations were unduly encroached on, th were restricted in the direction inwards, and were forced to expa forwards; in so doing, they pressed forward the base of the iris, a narrowed the angle of the anterior chamber, causing obstruction of t filtration-channels, and thus glaucoma. Evidence on these points h been published by the author in previous papers. He then proceed to discuss the several predisposing and exciting causes of the disea and showed that the analysis of his statistics gave strong support the theory connecting the increasing liability to glaucoma with t continuous growth of the lens. He concluded by drawing an analo between an acute glaucoma and a strangulated hernia. The lat was a condition, mechanical in its origin, which for a long period time might have no serious consequence, but which might at its v outset, or at any later time, under a slight constriction, be transform into one of acute and dangerous strangulation, with intense engor ment of vessels and outpouring of serum in the directions of least sistance. In the eye threatened by glaucoma, there was an unfor nate relation of parts, which, though not itself a disease, might le through a little further encroachment upon the already narrow space, to one of the most formidable of ocular disorders, involvi stoppage of the intra-ocular currents, strangulation of the circulati and escape of serum into the transparent media and the conjuncti Just as the taxis would occasionally remedy the displacement, and t minate the danger in the one case, so, in a few instances, would eser reopen the outlets, and relieve the tension in the other; but just as

igulated hernia it was generally necessary to at once relieve the triction with the knife, so in most cases of acute glaucoma, the means of cure was to promptly unlock the eye by iridectomy.

ntral Blepharoraphy.—Dr. ARGYLL ROBERTSON read a paper on operation of central blepharoraphy after enucleation. Many ents were unable to afford the expense of an artificial eye, or were le to replace artificial eyes, or else the resulting conjunctival y was unfitted for the adaptation of an artificial eye. In these , considerable deformity and discomfort were liable to arise in ection with the conjunctival sac; papillomatous growths might , or the upper lid fall in and the lower one gravitate downward, ng the conjunctival sac exposed to various irritations. To pre- these consequences, Mr. Streatfeild, about twelve years ago, re- mended the removal of the conjunctival sac by dissections and tics after enucleation. Dr. Argyll Robertson considered that a ral blepharoraphy would prove simpler, and quite as effective in enting the evil consequences of enucleation. The lower lid was ped with a pair of stout forceps held parallel to the edge of the and the conjunctival covering of the free edge of the lid dis- d off with a cataract-knife to the extent of five or six millimètres, sponding to the centre of the lid, care being taken not to damage roots of the eyelashes. The upper lid was treated in the same and both were brought together by means of a horsehair ligature. drainage was needed. Healing took place readily by first inten- and on the fourth or fifth day the ligature might be removed. operation could also be employed for long standing spasmodic pion of the upper eyelid. In this affection, the tarsal cartilage a faulty curvature. After the eyelid had been kept by the central haroraphy in its natural position for some time, the tarsal car- e regained its normal curvature, and the adhesions might be led. Dr. Robertson had operated on two such cases with very ssful results.—Dr. BRAILEY said the latter operation had been rmed for some years past in cases of corneal opacity.—Mr. J. EDY had employed a kind of peripheral blepharoraphy, leaving a al fissure through which vision was possible, in cases of painful s of the cornea, and in ectropion of the lower eyelid due to s about the orbit. He mentioned the case of a lady who had had peripheral operation performed five years ago, and who refused to the adhesions broken down, because she felt contented in her nt state.

rd-Specimens.—Dr. E. CLARKE: Rare Form of Vitreous Opacities Case of High Myopia.—Mr. HARTRIDGE: 1. Double Glaucoma in l aged 15; 2. Congenital Small Lenses in a Girl whose sister also the same peculiarity.—Mr. BRUDENELL CARTER: A Spiral Peri- r.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

THURSDAY, FEBRUARY 25TH, 1886.

ALTER DICKSON, M.D., President of the Branch, in the Chair.

eatment of Nasal Polypi and Chronic Rhinitis.—Mr. SPENCER SON read a paper on this subject. He pointed out that (1) the recognition of the growths, (2) the use of cucaine, (3) the us operations now performed with the aid of anterior rhinoscopy, (4) the use of improved instruments, gave better results than erly; but that the after-treatment by the application of the ric cautery or liquid caustics, and the use of ivory or vulcanite , worn at intervals for some months after operation, were im- nt auxiliaries to treatment. A new lever-forceps, with a slender , so curved as to allow the movements of the blade to be fol- l by the eye of the operator, was exhibited; it had been made by rs. Wright, of Bond Street. It was very useful for removing pi high up under the middle turbinated bone, and in any tion too narrow to admit larger instruments. The anosmia iated with polypus was sometimes due to hypertrophic thicken- of the middle turbinated body, which then required partial val; but the use of nasal plugs sometimes sufficed to reopen the ge between the respiratory and the olfactory channels. After pressure by polypi, the olfactory region became so altered the anosmia could not be cured. In regard to the causation of pi, Mr. Watson thought that chronic rhinitis, with its associated uction to the current of air, was quite sufficient. He did not ve that necrotic ethmoiditis existed in any but a small minority, any cases of polypus. He thought, however, that hypertrophy he turbinated bodies was very frequently associated with polypus.

se of Fibro-myoma of the Uterus.—Dr. FANCOURT BARNES ibed this case. The patient was a married woman, aged 30, who had one child four years previously. When admitted, on August 20th, 1885, into the Chelsea Hospital for Women, the patient had a fibro-myoma of the uterus, filling the brim of the pelvis and rising into the abdomen, as high as the umbilicus. On vaginal examination, the tumour was found to be submucous, and to involve the whole of the uterine wall. The sound entered the uterus to a distance of 4 inches. The os uteri was patulous, and the finger, passed into it, could detect the myomatous growth beneath the uterine mucous membrane. From September 1st until December 1885, the patient was treated by ergot and ergotin; but the menorrhagia was in no way diminished, and the tumour was increasing in size. In addition, the patient was daily losing strength, and becoming more anæmic. She was sent to the Convalescent Hospital for three weeks, at the beginning of December. On re-admission into the Hospital for Women, the tumour was rapidly increasing in size, and the general condition was worse. Dr. Fancourt Barnes, therefore, on January 7th, 1886, made an incision, 1½ inches in length, in the middle line, just above the pubes, through which the ovaries were drawn, ligatured, and removed. The left ovary contained a Graafian follicle, which burst whilst it was being drawn through the abdominal wound. The right ovary contained a small cyst. The abdominal wound was united by silk ligatures. The operation was performed under carbolic spray, and with ordinary antiseptic precautions. The temperature rose on the second day after the operation to 100°, after which it remained normal. The pulse continued normal throughout. Convalescence went on without interruption. Since the operation, the patient had passed through two menstrual periods without pains, and with, on the first occasion, slight hæmorrhagic discharge for one day; on the second occasion with no hæmorrhagic discharge. The uterus had returned to its normal size; the sound passed 2½ inches. The patient gained flesh and strength, and left the Hospital on February 18th. Dr. Fancourt Barnes thought this case afforded a good example of what could be done surgically in uterine myomata; the important point being the proper selection of cases for the operation.

Cerebral Syphilis: Fits: Recovery.—Dr. R. W. BURNET read the notes of this case, and exhibited the patient. The patient, a man aged 33, was admitted into the Great Northern Central Hospital on September 30th, 1885, complaining of "fits," and of severe pains in the head. There was no special wasting of the muscles, but his grasp with the left hand was comparatively feeble; his pupils reacted to light, and there was no squint. The lungs were free, but there was a systolic *bruit* heard in the third left interspace. The left arm and leg were colder than the right; muscular sense and cutaneous sensibility were deficient on the left side. Patellar reflex was exaggerated; there was no ankle-clonus. Smell and taste were unimpaired; but hearing was defective in the left ear. Sight was fairly good. Mr. Marcus Gunn examined the eyes, and reported that the eyeballs appeared normal; the left pupil was larger than the right; both acted to light, and with convergence, but the left was always larger. The papilla in the right eye was greatly swollen, and its boundaries obliterated; in its vicinity several flame-shaped hæmorrhages and white patches were seen; the veins were greatly distended; the arteries were much occluded. The left eye was much in the same condition, but the swelling was less. The patient stated that seventeen years ago he had venereal sore, with some uretheal discharge, and swelling of glands in the groin, without suppuration. There was no history of rash, sore throat, or other symptoms. About thirteen months before his admission he was suddenly seized, while at work, with a fit; and he had the fits very frequently, sometimes daily, since that time. The fits began with slight twitching of the extensive muscles of the forearm or leg, and slight jumping of the hand or foot, or both—but always on the left side. The spasms increased, till the whole left side, including the face, was in a state of clonic spasm. The forearm was flexed on the arm, and the wrist on the forearm; the fingers were flexed, but the first was not clenched. The leg remained extended, and the spasms were limited to the front of the thigh and the leg. After a fit, the affected parts were left cold and paralysed. This had lasted two hours, and sometimes days had elapsed before he had much control over the left foot. The man had been treated as an out-patient, with bromide and iodide of potassium, but without effect. During the first week after his admission he had nine fits. He was ordered mercurial inunction, and iodide of potassium in seven-grain doses. After October 6th, he had no more fits, and very much less twitching. He improved in general health, and gained weight. On November 2nd, the swelling of the papilla was much less, and the white patches had nearly disappeared. On November 3rd, he was made an out-patient. He still attended, and was taking from ten to fifteen grains of iodide of potassium three times daily. He could read with ease, and had had no fits, but had still occasional twitchings.

Isolated Tubercular Ulceration in Mouth.—Dr. E. Clifford Beale described this case. J. McC., aged 42, a stonemason, who had always enjoyed fair health, with the exception of a chronic winter cough, began to complain, shortly after Christmas, 1885, of a sore throat and difficulty of swallowing, the pain being referred to the right side of the fauces. A slightly painful glandular swelling under the jaw on the same side was noticed at the same time. An irregularly rounded patch, of the size of a sixpence, with raised cord-like edges, and a finely granular surface, was found on the mucous membrane between the last lower molar tooth on the right side, and the right anterior pillar of the fauces. This patch, although in close relation to the tooth, did not appear to have been in any way irritated by it. It bore all the characteristics of a partially healed tubercular ulcer, as seen on other mucous surfaces. No evidences of tubercle or syphilis could be traced elsewhere in the patient, with the exception of a few hard nodules under and in the skin of the front of the neck. These had existed for a long time without perceptible change. Two sisters had died of phthisis at 19 and 23 years of age respectively, but there were no symptoms or physical signs of the disease in the patient himself.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

Thursday, January 28th, 1886.

J. G. S. Coghill, M.D., and afterwards J. Williamson, M.D., in the Chair.

The Etiology of Phthisis.—Dr. Isambard Owen, Secretary of the Collective Investigation Committee of the British Medical Association who was present by request of the district), opened a discussion on this subject. He remarked on the uniform general distribution of the disease; pointing out its customary infrequency in elevated plateaux, and the exceptional immunity of Iceland, Egypt, the interior of South Africa, the Gold Coast, and some other parts. He remarked on the varying insusceptibilities of race, on the immunity of the Peruvian Indians and of the Chinese, which Dr. Coghill corroborated, and on the peculiar susceptibility of negroes away from Africa. He exhibited a copy of Mr. Haviland's map, showing the distribution of phthisis in England and Wales, its especial prevalence in Lancashire, Derbyshire, and parts of Wales, and the comparative immunity of certain counties; but he dissented from Mr. Haviland's conclusions that phthisis was induced by exposure to sea-winds and residence on high rocky ground, as being insufficiently warranted by the facts. He gave a short account of Dr. Buchanan's observations and his investigations in the south-east of England, and quoted his conclusions connecting prevalence of phthisis with dampness of soil. He showed also Dr. Bowditch's map of the distribution of phthisis in Massachusetts, and quoted his conclusions to similar effect; also the corroborative conclusions of Dr. Gros, of Berne. He alluded to the prevalent belief that phthisis was in some way counteracted by the prevalence of ague in a district, and quoted some remarkable observations in support of this view, to which an additional observation was added by Mr. Meeres, from his experience of Sandown. He alluded to the influence of confined air, of occupations, and of alcohol, in the production of the disease; and, in reference to the latter, quoted some figures from his observations in St. George's Hospital, showing that 50 per cent. of the phthisical patients, whose cases were recorded by him, might be regarded, on their own showing, as excessive drinkers, averaging more than four pints of beer, or their equivalent, daily, though in the general run of hospital cases this class did not exceed 33½ per cent.; while the temperate class, among the general run, was as much as 41½ per cent., and among the phthisical but 23 per cent. He pointed out that, in the same record, the inability to eat fat, commonly ascribed to the phthisical, appeared in them hardly more often than in the generality of patients.—Dr. R. Robertson read a paper on Family-History in Relation to Phthisis. He said that the significance of family-history in relation to phthisis pulmonalis had, by recent advances in the knowledge of the disease, been much extended, so that, instead of considering family influence as some indefinable structural or physiological peculiarity, as heretofore, it was now necessary, in addition to an inherited predisposition, to consider also the possibility of actual transmission of the disease itself, either from parent to offspring *in utero* by means of the placento-fœtal circulation, or, by direct communication from an affected person to an unaffected person of the same family through intimate association. Yet even the transmission of a predisposition to the disease was not undisputed at the present time. Hence, in this relation only, the general proposition that pulmonary phthisis occurred very markedly in families, was undisputed. Hence it seemed that something more was needed in this part of the etiological inquiry of the Collective Investigation Committee than questions which had been abundantly answered in insurance returns, and by special investigations of medical men of large experience in pulmonary phthisis. Questions which suggested themselves in relation to the influence of family-history were the following: 1. How far is pulmonary phthisis in the parent the antecedent of, not only pulmonary phthisis, but also of other tubercular and non-tubercular maladies in their children? 2. With what frequency do morbid conditions, other than pulmonary phthisis, occur in the parent as antecedent to that disease in the children? 3. What the factor, if constitutional and not specific, in hereditary liability to this disease? 4. What evidence is obtainable of the doctrine of placento-fœtal infection? 5. What are the conditions of body and surroundings favourable to communication of this disease between members of the same family? 6. How far is "family liability" in this case explainable by increased risk of communication?—Dr. Williamson said that the discovery of the tubercle-bacillus had remarkably revived the interest in the causation of phthisis; and, in view of this, it became a duty both to revise and to increase the store of facts. The Collective Investigation Committee had acted wisely in seeking information from medical men who could personally vouch for the facts they recorded, and it was an error to suppose that such data could be forestalled by statistics compiled in hospitals or by insurance companies. With regard to heredity, it seemed clear that something was often transmitted by phthisical parents to their offspring, although it was difficult to say whether it consisted in more than a proclivity to the disease; an intermediate stage between perfect health and the development of the bacillus. The exact relation of the bacillus to this condition was an important question in the causation of phthisis. It was doubtful whether much value should be attached to family history in phthisis, other than so far as regards strictly parental influence. Probably the greatest interest of the moment was felt in the possibility of contagion. Opportunities constantly offered for studying this question in health-resorts, but his experience in the Undercliff had afforded him no proof in favour of such a theory. The most difficult branch of the present inquiry would be that respecting the state of the thoracic organs previously to the development of phthisis. This was eminently a subject for the family practitioner, whose long and intimate relations might be expected to reveal some valuable facts.—Mr. Meeres remarked that he had never met with a case that could be traced to infection, nor did he think hereditary influence so inevitably fatal as intimated by the last speaker. As to infection, in one case, a lady was for three years laid up with phthisis, surrounded by a household consisting of a husband, six children, and two, sometimes three, servants; surely, a sufficiently long period to communicate disease to anyone susceptible of it, and a sufficient number of persons to furnish one or more susceptible. In another case, a large family inherited phthisis from their father, and three of them died from the disease between fourteen and twenty-three years of age; but all of them at such long intervals, and in such different localities, as to preclude all idea of infection. Probably the hereditary predisposition was about equal in the children of both families, as the case of the first married one was pronounced by other medical men besides Mr. Meeres to be already suffering from incipient phthisis, when he was sent to the south of Spain, and subsequently to Australia, where he lived a very open-air life for twelve years, and was now living free from all pulmonary symptoms at sixty years of age. The others improved their selves by emigrating, and living outdoor lives in more favourable circumstances. The second family, being of the labouring class, and therefore unable to choose their mode of life, lost more than half their number by this fatal heritage. As to the effects of alcoholic beverages, he would state that he first practised in a country town in Staffordshire where phthisis was very prevalent; but the greater number (nearly all) of the cases were those of young women from 15 to 25 years of age, who worked at a silk-mill. None of those were intemperate. Few ever tasted strong drink of any kind whatever.—Dr. Sinclair Coghill pointed out how desirable it was that the lines of inquiry laid down by the Investigation Committee should be narrowed as much as possible, and expressed in the most definite terms, and in related series. The statistical mode of investigation was that most open to fallacy. The Investigation Committee should satisfy themselves, not so much to elicit opinions, as to obtain simple definite statements of facts. The facts should be interpreted, and the opinions and conclusions should be deduced from them by a body of practised and unprejudiced examiners. With reference to the influence of Koch's discovery on the etiology of phthisis, it was necessary to bear in mind that bodies identical with the so-called tubercle-bacillus were found in the joints, glands, and tissues, of apparently healthy individuals of a particular type of constitution; so that it was not improbable that the bacilli in question indicated rather a diathesis of

chexia, and not a morbid condition—it might be a potential, but t an essential, pathogenic element. One important result, however, Koch's experiments was, that we were now able to distinguish th almost absolute precision one variety of phthisis of a specific d contagious character; the latter quality, however, of so low a gree of infective intensity as to render it of much less clinical signi- ance than was at first suggested. Koch's discovery had had much re importance in connection with prophylaxis and prognosis, than, yet, in therapeutics. Dr. Sinclair Coghill thought it would be as ll to retain the old distinctions between predisposing and exciting ses, in connection with the study of the etiology of phthisis. The edisposing causes ranged themselves under the heads of general and rticular. The former, anomalous in character and operation, were ose which operated more or less in favouring the onset of any dis- se, and included every influence which lowered the general health d enfeebled the resisting powers of the constitution or vitality. ne particular predisposing causes were those referable mainly to ecial constitutional tendencies on the part of the individual, either herited or acquired, such as, for instance, the strumous diathesis or philitic cachexia. Such particular predisposing causes determined inly the special form of the pathogenic response to the exciting use. For instance, if three individuals of healthy, strumous, and philitic constitution respectively were exposed to exciting causes ich produced pneumonia, they would behave, so to speak, in a thological sense very differently. The lung in the healthy indi- lual would probably clear up, and leave no morbid state behind; in e syphilitic person, a gumma might develop in the affected portion of e lung, and give rise to a series of characteristic morbid phenomena, ite different in course and result from those in the third individual, o would incur the grave risk of having a tubercular degeneration tiated in the diseased pulmonary tissue—a true tubercular phthisis in which the bacilli already located in his tissues would give a ecific morbid variety and character.—Dr. OWEN, in replying, and in nking the members of the Branch for the courtesy with which they d listened to his paper, remarked that he thought the hereditary ture of phthisis was not so obvious as was commonly assumed; for at, the general death-rate of phthisis in this country would neces- ily involve the average occurrence of more than one phthisical tient among each individual's near relatives. He considered that e subject could only be properly worked out by family practitioners, d trusted that the inquiry initiated by the Collective Investigation mmittee would not fail through want of workers.

REVIEWS AND NOTICES.

ACTURES AND DISLOCATIONS. By T. PICKERING PICK, F.R.C.S. Eng., Surgeon to St. George's Hospital, etc. London: Cassell and Co. 1885.

a work upon these important subjects, we look for a more than ially practical treatise, and for something which shall be more rough than the limited accounts which general text-books on sur- y can find room for. Clearness and practical teaching on so chanical a subject seem to be the first essentials, and we expect the cher to give the results of his own experience rather than compile opinions of others. We are, therefore, not surprised that the hor before us should fear that he might have been somewhat dog- tic, because he has wished to argue from his own experience only. e work is intended to be a clinical manual for students and prac- oners, and it is one of a valuable series, which is likely to form, en completed, perhaps the most important encyclopædia of medi- e and surgery in the English language. It must, therefore, stand verer trial of criticism than many works; and we look at the five ndred pages as likely to contain a fairly exhaustive, but at all events horoughly practical, treatise on the subject. These manuals are ical, and the author states, in his preface, that his object has been make the work essentially clinical; and he has sought to present a cise and practical treatise on the causes, signs, and treatment of various common fractures and dislocations. To what extent has been successful?

We cannot help noticing, first of all, the absence of much that is ntially practical. In the introduction, we do not find any general structions how to examine a patient who may be the subject of these cial injuries. In the accounts of the various fractures and dislo- tions, we find no clear directions how to examine the limb or part ured. Both for students and practitioners, one would have ex- ted this to have been very clearly and definitely done in what pro- poses to be a practical work. We are compelled to notice in the style a want of force and downrightness, which the subject would well allow of. It is deficient in that practical character which appeals forcibly to the common sense of the student, and in which American surgeons set us a good example. And the author hardly does justice to his own large experience, when he gives rather freely what "some surgeons" do in particular cases. We should have been glad to have seen more definitely stated his own opinions, and the reasons for them.

There is a form of treatment, very largely adopted now, and which bears the approval and strong recommendation of some of the leaders in surgery, which may be called the immediate fixation of a fractured limb. The author says: "Many surgeons adopt the plan of putting up the fractured thigh at once in some immovable apparatus, as plaster-of-Paris, pasteboard, or leather. Except with children, I have had no experience in this plan of treatment," etc. But, it is rather to be expected that an author, writing on the practical treatment of fractures, would have obtained the personal experience which could be found by following cases thus treated in some of our large London hospitals. His remarks upon this subject are completed with: "Very good results *have been said to have been obtained* by its adoption." (The italics are ours.) Is this a satisfactory treatment of the matter?

We notice what we must consider an omission, which is peculiar. There appears to be no mention of fractures of the skull. The face, the trunk, and the limbs are given, but not the skull; and there is no reason found for this omission either in the preface or in the text.

And now, after confessing to disappointment in many aspects of the work—disappointment which is more marked as we look at some of the recognised authors who treat of the same subject, we readily acknowledge that the author has conscientiously worked out much that will be of use to students and practitioners; and many of the older forms of treatment find a supporter in Mr. PICK. The pistol-splint, which has been much abused lately for its ill-doings in Colles's fracture, is here referred to as the splint "perhaps more generally employed than any other, and, in most cases, its use appears to be followed with good results."

There are many good sketches of pathological specimens from the Museum of St. George's Hospital; but these might with advantage have been increased in number. In fact, the drawings generally are too scanty for such a work; and, when we look at some of the surgical text-books, we cannot help being struck with their superiority in this and in other respects. A drawing, however diagrammatic, of the appearance of the limb after Colles's fracture, might have been expected. Diagrams, too, showing the stages of reduction of dislocation by manipulation, are to be expected in such a work, and would be a real help to the student and practitioner; and he finds them in a text-book of surgery, but not in this special manual. In fact, the total number of woodcuts does not exceed what we find in such a text-book, and the usefulness is certainly not so great. We hardly think the student will find sufficient reason to study this larger special work, when more practical information is to be obtained from the general text-books on surgery with which he has to be familiar. Nor do we find that the practitioner or hospital surgeon will have new ideas or methods of treatment brought before him, or old ones more clearly or forcibly enunciated; or clinical cases, or the results of the author's experience, at all specially available for teaching purposes. We wish we could speak more favourably of the work.

NATIONAL AID SOCIETY.—The report of the Princess of Wales's branch of the National Aid Society, which has been sent to us by desire of Her Royal Highness, contains a complete account of the branch society's work in the Soudan and Egypt from its formation a year ago. A general meeting of the branch society was held on February 17th, to consider the final report, and to decide upon the best way of disposing of the surplus fund. Two schemes were laid before the committee: first, to invest the surplus in the name of the Princess of Wales, to form a fund to be used whenever needed for the assistance of British soldiers and sailors in time of war; and, secondly, to distribute the surplus fund among various military and naval charities. Ultimately, the Queen, the Princess of Wales, and a large majority of the subcommittees throughout the country, being in favour of the first course, it was decided to adopt it. It appears from the statement of Lady Rosebery, the honorary treasurer of the branch society, that the total sum received was £22,871, of which £16,670 has been expended on the objects of the society. The surplus to be invested, therefore, will amount to about £6,000; but the exact sum, when determined, will be duly notified.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

UBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 20th, 1886.

THE LONG WINTER.

WITHIN the memory of the present generation, there has never been a winter of such unusual length as that which has not yet closed, unless the east wind gives way to the west before these lines are published. It is true that in 1855, 1860, 1870, and 1880 the winters were very cold; but though the "Crimean winter" lasted into March, the ice on the Serpentine remaining but partially thawed till the middle of April, that winter began late. The other winters were marked more by the severity of the frost than by their length. But "winter," as a current word in the English language, is employed to express not so much the season between the December solstice and Lady-day, as the dark time of the year from November to the end of March. By a long winter, the Englishman understands a protracted period during which, not necessarily hard frost, but bad weather of any kind prevails. We have had months of rain, wind, sleet, fog or frost, sometimes separate, often combined; therefore, we rightly say that this winter has been long.

In a medical sense, the popular use of the word "winter" is sound. The astronomical divisions of time are artificial. The change from the typical weather of one season to that of the next is often a matter of weeks, and the cold of winter invariably recurs, more or less, after a spell of warm weather. Even the poet, always a lover of typical forms, admits that winter lingering chills the lap of spring. The hygienic and clinical aspects of the uncertainty of the seasons are self-evident, yet strange superstitions influence the habits of many otherwise sensible Englishmen. Fires and great coats are still left off on a particular day in many families. The real May gives the lie to its ideal year after year; yet some of our most prosaic fellow-countrymen persist in feeling surprised when that month happens to be, on the whole, cold, as usual. These persistent superstitions involve the frequent wilful exposure of children to cold weather, and the bad English custom of beginning out-door "fixtures" early in the technical spring, as well as the infatuated zeal with which the responsible and experienced walk out without great-coats, or sit in cold rooms directly that period comes. To expose children to extreme risks, in order that they may look well in pretty spring fashions, is clearly a crime. In early spring, athletics may do no harm to the players, but the "fixtures" for matches where these noble sports are played imply the exposure of several thousand youths, young men, young women (in spring costumes, of course), and middle-aged or old ex-athletes to perilous east winds and pelting showers. To stand on the banks of the Thames for three hours awaiting the University crews tries the soundest constitution, yet the weakest annually put themselves to this test.

The public often jest at the practitioner during a cold season, and speak about "doctors doing a roaring trade." In the first place, it is questionable whether the druggists rather than the practitioners do not gain by this weather. A West End druggist, a few winters ago, informed a physician that colds and coughs were "good solid illnesses," which brought much money to the chemists. He further admitted that the local practitioners often lost patients, servants being sent direct to the chemists for cough-mixtures, without any medical consultation. Secondly, the general public, when they taunt the doctor, do not bear in mind the intolerable discomforts from which he suffers in bad weather. Night-calls are too well known to us. A summons out of a warm dining-room, when the jaded and hungry physician is just sitting down to a meal, is yet more fatiguing and dangerous. He is precisely in that condition which predisposes to acute pulmonary diseases. There are less recognised evils attendant on wintry weather. The difficulty which many experience in keeping their hands clean and warm is often considerable. The hands chap and look unsightly, getting dirty after a few miuutes' exposure. Refined patients have a great repugnance to dirty hands, and do not always make allowance for weather. A cold hand is most disagreeable to a patient; it causes more pain when a tender spot is touched, and, in some parts of the body, it produces muscular contractions to an extent which may render diagnosis impossible. A common, avoidable cause of cold hands, is the practice rife amongst young practitioners of wearing elegant new gloves of very tight fit. This makes the hands not only cold, but numb, and thereby greatly interferes with tactile sensibility. Exercise is a far better method for keeping the hands warm than riding in a carriage covered with furs. After the latter condition, the hands may become cold in a few minutes, through standing or sitting in a cold room before seeing the patient.

Lastly, the winter of 1885-6 may be defended on certain grounds. Its severity has put people on their guard. Old persons have remained indoors, and pedestrians have kept to their great-coats. The heavy rains towards the end of the year forced many careless people to buy good boots and warm socks, which have served them in good stead through the colder, though drier, weather which yet prevails. There have been no six weeks of sun and south-west wind, bringing out leaves and buds destined to be nipped by protracted frosts. The east-winds have appeared when expected, although with an unusual amount of actually low temperature. The prevailing depression in British society is due to political and social, rather than to climatic influences. A comparative study of bills of mortality will be of high interest, when this long winter has come to its close.

THE TRANSMISSION OF TUBERCULOSIS.

DR. DIDAMA, of Syracuse, New York, has lately brought together and collated the opinions of the most eminent pathologists on the vexed question, as to whether tuberculosis is inherited as such, or whether it is transmitted and acquired subsequently to birth. It is urged (Klein) that, since tuberculosis is a tissue-disease, and not a disease of the blood, it is very probably transmitted by the semen or from the ovum; and Ziegler thinks it possible for the bacilli to pass from a tuberculous parent directly to the fœtus *in utero*, although the latter observer admits that no evidence of this is forthcoming. Opinions are very divided as to the identity of the bacilli in the

uberculosis of animals and that of man. It is urged on the one and, that the bacilli in the affection as seen in animals is smaller an that found in human beings, and that its location, development, d appearance are different; but Cheyne considers them to be identical, d infers therefrom that, as tubercles are often found in the bovine etus in embryo, a similar contamination may take place in the man fœtus. Other observers, however, deny that a single well thenticated case of tuberculosis in the human embryo has ever been und, and maintain that the specific disease cannot be inherited. he most that a tuberculous parent can do, according to this view, is transmit tissues with enfeebled powers of resistance, the develop- ent or not of tubercle being dependent on the subsequent environ- ent of the child. According to some statistics published by Walshe, ars ago, of the family-history of patients at the Brompton Hospital, ly 26 per cent. had tuberculous parents. Could the parents of e remaining 74 per cent. have transmitted to their children a sease which they themselves did not possess? Is not the observa- on of Dr. Lambert more to the point when, alluding to his ex- rience as medical adviser to an insurance company, he says, "men ho are poorly nourished, men whose weight is not in proportion to eir height, die of consumption much more rapidly than those who ve a better nourishment, irrespectively of the fact of consumption pearing as a factor in their family-history?"

A mysterious tendency, which is always fruitless without bacilli, is necessary to account for any of the facts of phthisis, and there is good reason for believing that it exists. That the children of uberculous parents become more uniformly tuberculous themselves an is the case with the children, equally weak constitutionally, of unken or syphilitic parents, is easily accounted for by their in- ctive surroundings. That the weakly babe in the arms, sucking e impoverished if not poisonous milk of a diseased mother, should ore readily become phthisical, is only what one would anticipate; d the same causes are at work throughout its home-life.

Dr. Didama's conclusions are that tuberculosis is not and cannot inherited, nor can any special tendency or diathesis be so transmitted. d hygienic conditions favour the taking and development of the sease, especially in persons of low vitality; but there must be undance of bacilli and deficient powers of resistance for infection take place. The treatment based on these assumptions would be remove the children of tuberculous parents from their vitiated rroundings, and place them under conditions favourable to a healthy ysical constitution; while, if there be any syphilitic taint, prolonged ecific treatment should be resorted to, not only to remove the isting inherited disease, but to strengthen against tuberculosis, ich is liable and likely to be superadded.

MEDICAL FEES UNDER THE LABOURERS' (IRELAND) ACT.

ME important matters to medical officers of health and dispensary edical men in Ireland, in connection with the question of their re- uneration for services rendered in compliance with the provisions the above Act, have again cropped up.

In our last two annual retrospects (pages 1307, 1884; and 1225, 85) we gave particulars of the test-case of Dr. Rogers *versus* the uardians of the Youghal Union; in which, after several trials, it was ally decided by the High Court of Appeal, that the medical officer health, when directed by the sanitary authority, is entitled to reasonable extra remuneration for his services for each house inspected and reported on. This decision established the liability of the sanitary authority to pay for every certificate furnished it by the medical officer of health. Dr. Rogers claimed remuneration at the rate of two guineas a day for the six days he was employed, and £8 2s. for car-hire. It was admitted at the Nisi Prius Court, that the sum claimed was reasonable, if the plaintiff, by reason of his being medical officer of health for the district, were not bound to render the services gratuitously. Judgment was given, as we have said, in favour of Dr. Rogers, and for the full amount which he claimed; and it was also laid down that the performance of such duty by the medical officer of health was optional, and not *ex suo officio* compulsory, as it had not been legally imposed upon him.

The question as to the amount of what is to be considered as "reasonable remuneration" in each individual case still remains unsettled, and, if disputed, can only be fixed by the county court. In the Mountmellick Union, lately, Dr. Hanrahan, of the Castletown Dispensary District, has declined to accept the fee of five shillings offered him for each inspection. The board of guardians of the Waterford Union having passed a resolution fixing the same fee, five shillings, as remuneration to their medical officers for each visit and report, as directed by the Labourers' Act, five of these gentlemen forwarded a courteous memorial to the board, declining to accept any fee less than half-a-guinea for such services. They also reminded the board that, in accordance with an order from it, they had performed the specified duty since October 1883 without having received any remuneration; and they requested they might be liberally dealt with, taking into consideration the special hardships of their case. At an adjourned meeting of the board held on February 17th, the question was considered, along with that of the remuneration of the clerk of the union and of the engineer, for their services under the same Act. We regret to say that, by a majority of twelve to seven, it was decided to pay the medical officers only five shillings for each certificate used, the resolution to be retrospective, while the clerk and engineer were given ten shillings for each cottage.

We trust that the medical officers will bring this matter before the county court. Apart from the "shabbiness," as one of the guardians called it, of the five shilling fee, it does not appear reasonable that a professional man, who may have to travel miles over the country on this duty, should be placed on a much worse footing as regards remuneration than the person who discharges his duty as clerk of the union "in comfort by the fireside." We agree with Alderman Clampett that five shillings was a miserable offer, when the laymen (who appear to have fixed their own remuneration) were getting ten shillings. And we are further of opinion that it has been settled, that the board of guardians are bound to pay the medical officers for each and every report and inspection made, whether the certificate was used or not.

But a much more important matter is the introduction of a bill by some of the "Nationalist" Members to amend the Labourers' Dwellings Act. This bill was read a second time on March 1st, and one of its objects is to make the inspection of the labourers' cottages compulsory on the medical officer. At present, as we have said, the medical officer of health may decline the duty; and it was stated that, in consequence of such refusal, in some instances, certain building schemes had fallen through. We would, however, wish to point out a most serious omission in the Bill. No provision appears to be made in it for the

payment of the medical officer, for what must necessarily be in many districts an irksome and laborious duty. We trust a most strenuous opposition will be made against compelling a body of officers to discharge additional duties to those which they were appointed to perform when elected, without providing "reasonable extra remuneration" therefor. And we have every reason to believe that the statement reported to have been made by the hon. member who introduced the Bill, namely, "that it was necessary to compel the medical officers to do this duty, because, from sympathy with the landlord class, they were unwilling to work the Act," is a libel on the profession, and has no foundation in fact.

Since writing the above, we are pleased to observe that in Committee on this Bill on last Monday night, the Chief Secretary for Ireland made an addition to clause 4, by which the medical officer of health shall be entitled to remuneration at a scale to be fixed by the Board of Guardians, and approved by the Local Government Board. We may express the hope that the Local Government Board will sanction no scale of payment less than half a guinea for each inspection. Little, we fear, is to be expected from most boards of guardians; for, judging from the cases of disputed fees, etc., that now occur almost weekly, the persons at present constituting the majority on these boards seem indisposed to pay the medical men employed in their service even their legitimate dues.

THE Academy of Medicine has voted 10,000 francs to the Pasteur Institution.

DR. GERVIS has been appointed one of the consulting physicians to the Royal Maternity Charity.

THE Austrian Minister of Commerce has directed that, in consequence of cholera increasing in Venice, all Italian merchandise arriving at the Austrian frontier shall undergo seven days' observation. Ancona is included.

THE death of M. Bochefontaine, Director at M. Vulpian's laboratory, and *Chef de Clinique* at the Hôtel Dieu, is announced. M. Bochefontaine last year made experiments on himself to ascertain the contagious properties of cholera-dejecta. His name is well known in medical scientific circles, and our Paris correspondent has frequently referred to his researches.

IT will be seen that the Government have confirmed, by the answer given to Dr. Foster in the House of Commons, the information which we were recently able to give, that a Medical Bill is being drafted, and will shortly be introduced, to amend the Medical Act of 1858. It will contain provisions to give direct representation of the medical profession in the Medical Council.

THE death-rate at Salford last week was equal to an annual rate of 34.4 per 1,000, against 30.9 in the preceding week. Only 10 of the 139 deaths were referred to infectious diseases; but, as might be expected, a very large proportion (not fewer than 50) of the deaths were due to acute lung-diseases.

WE regret to learn that Dr. Imlach is suffering from an attack of pneumonia, and, in consequence thereof, the special meeting of the Liverpool Medical Institution, summoned for March 17th, to consider the question of the report of the Committee on Laparotomy, was postponed.

MR. STANSFELD'S resolution for an absolute repeal of the Contagious Diseases Act was passed this week in the House of Commons without a division; the division taking place only on the question of the fixed Government subvention of lock hospitals and wards. This also was negatived by a large majority, it being understood that the Government would continue in principle to support such hospitals or wards without being bound to any particular plan or details. On this latter amendment medical votes were divided, Dr. Cameron, Dr. Foster, and Mr. Pickersgill voting with the Government, Sir Trevor Lawrence, Sir Guyer Hunter, and Dr. Farquharson voting in favour of the amendment.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting of the Central Committee of the Association of Members of the Royal College of Surgeons, held on Saturday, the 13th instant, a Subcommittee was empowered to communicate with the Association of Fellows upon the subjects of the reform and the charters of the said College. At the same meeting, a vote of condolence with Mrs. Cooper Forster was passed unanimously, in memory of the courteous manner in which the late President of the College received a deputation from the Association in January of the past year.

THE THERMAL WATERS OF BATH.

SOME interesting statistics were given as to the number of bathers in the Corporation bathing establishment at Bath, on the occasion of a recent public inquiry, by Mr. S. J. Smith, C.E., of the Local Government Board. It was then stated, by the chairman of the Baths Committee, that the aggregate number of bathers was 56,290 in 1881; 61,803 in 1882; 59,936 in 1883; 72,993 in 1884; and 80,013 in 1885. The gross receipts from the baths were about £5,000 a year. The bathing accommodation was stated to be unequal to the demand, and there were complaints of the absence of appliances used in Continental bathing-places. The Corporation propose, therefore, to spend £23,000 in improving their establishments, and have asked for a loan for this amount from the Government.

MORPHINOMANIA NOT HYPNOTISM.

THE French girl condemned for theft, and subsequently believed to be in a state of hypnotism (see JOURNAL, January 23rd), has been examined by MM. Charcot, Brouardel, and Moltet, who give the following judgment. "Suggestion" was not an influence leading the girl to steal, when she was suffering from hunger and misery; neither did it impel her to go to the office and make an appeal against her sentence; but another condition resulting from taking morphine rendered her irresponsible for her acts. Annette Gaudry suffered from hysteria; her long nervous attacks reduced her to despair, and she flew to morphine "to get a little comfort." She has been acquitted.

VICARIOUS GENEROSITY.

"A LADY of quality," a peeress to wit, sent her butler to a well known physician, a man who, were we at liberty to mention his name, would be generally recognised as one of the busiest men in London, with the request that the patient might be examined and prescribed for, gratuitously, of course. "My good man," said the physician, "as you are my lady's butler, you are not a suitable person to be treated at the hospital where I see poor patients for nothing; in my own consulting-room, my time is too valuable; here is a guinea, go and see my junior colleague, Dr. ——; he is not so busy as I am, and will be able to advise you for that fee." Her ladyship, it is interesting and instructive to learn, repaid the guinea next morning. The moral is plain. The profession as a whole does so much charitable work, that many people seem to expect that every member is to give his time and labour at any time and any place, and to any extent which may be most convenient to the patient or his friends. Quite a large enough proportion of the people who go to hospitals have no right to gratuitous advice, and it is asking rather too much of even the most

tient and long-suffering to expect that a still more well-to-do class, o fastidious to go to hospitals, should be allowed to invade private nsulting-rooms during the morning hours, which are dedicated to munerative labour. No other profession has such claims made on If the butler had been in some legal difficulty, would the family wyer have been expected to advise him gratis? We trow not.

THE NEW EXAMINATION-HALL OF THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

HE Queen will lay the foundation-stone of the new Examination-all of the Colleges of Physicians and Surgeons, on the Thames nbankment, on March 24th, about eleven in the forenoon. The oir of the Savoy Chapel will attend, and the Archbishop of Canter-ry will offer up prayer. The presidents of the two Colleges will ortly address Her Majesty. A tent to contain about 1,000 persons being prepared. Fellows and Members of both Colleges, in equal mbers, will be provided with standing-room, and some students ll also be present. There will be four rows of seats. The front row forty-six seats will be reserved for ladies only; the second row for stinguished visitors invited by both Colleges; the third and fourth ws for the Council and senior Fellows of each College. The 400 nding-places allotted to each College will be distributed to the llows and Members who apply for tickets. If a larger number apply an the 800, the selection will be made by drawing lots. Ladies ll appear in morning dress, and gentlemen either in morning dress in official robes or academic costume. The preparations for the cere-ony are approaching completion, and there is every reason to look rward to a most effective and successful spectacle. Something will, course, depend on the weather, but that uncertainty gives a "local lour" to the event, and the Queen's proverbial good fortune in this spect may be trusted not again to desert her. The *genius loci* will invoked for the first time, and every participant in the ceremony ll have some direct connection with the profession, with the excep-n of the Archbishop of Canterbury and the other clergy, who, ng with the choir of the Chapel Royal, Savoy, will take part in e religious ceremonial. The guard of honour will be appropriately rnished by the Volunteer Medical Corps, which consists chiefly of edical students trained to ambulance work, and the guests will be arshalled to their places by stewards deputed by the medical schools d corporations. The chief difficulty with which the Colleges have d to contend, has been in the selection of guests from among the ry numerous applicants. The authorities of both Colleges may be sted to make the selection in a liberal spirit, remembering that the nour which the Queen is paying them is a token of her appreciation the good work done through good report and through evil report, sunshine and in shade, by every rank and grade in the profession. is probable that some special honour will be conferred upon the esident of the Rayal College of Surgeons in connection with the ent.

THE PASTEUR INSTITUTE.

the French Chamber, on Monday night, a Bill was introduced, and gency voted, for including in the Budget for 1887 a charge of 200,000 ncs (£8,000) for the proposed Pasteur Institute. A report was also d to the Municipal Council, from the Committee charged to ex-ine the proposal for the co-operation of the municipality in its tablishment. The Committee unanimously recommend such co-eration, but do not profess to give any judgment, from a scientific int of view, on the method of Professor Pasteur; their favourable port is simply based upon statistical facts.

HYDROPHOBIA IN PARIS.

UR Paris correspondent writes:—M. Goubaux has recently read before society a report on a cat and dog refuge established at Arcueil by e Society for the Protection of Animals. He considers this refuge, and certain similar establishments belonging to the Society, as dangerous centres of hydrophobia, and proposes that they should be suppressed. Last week, a policeman was terribly bitten on the left hand by a rabid dog. The animal had wounded several other dogs, when the policeman throttled it, and held it prisoner until it was shot. He nearly fainted from loss of blood, and was immediately conveyed to the Tenon Hospital, where M. Pasteur visited him. It is feared that the bitten hand will have to be amputated. M. Pasteur was present a few days ago at a meeting of the Agricultural Society of France, where he commented on the special danger of bites on the face from mad dogs. One of his patients, a child, already treated and cured, had been bitten on the soft part of the palate. M. Pasteur also mentioned the case of Louise Pelletier. He observed that, when the patient is in the second stage of the disease, the period that precedes death, the bitten part becomes the seat of peculiar sensations. A Russian lady felt a pricking sensation in a finger which had been bitten. The surgeon knew the signification of this symptom, and sent her immediately to M. Pasteur, who cured her. M. Pasteur regrets that the parents of Louise Pelletier, who had been bitten on the head, did not tell him that she had complained of headache. Had he recommenced the treatment at that moment, the child might have been saved; but, as the headache was less the next morning, the parents took no heed of it. M. Pasteur has received a telegram from Smolensk, saying that twenty persons have been bitten by a mad wolf. He has telegraphed back to send them to Paris. Unless the patient's clothes have been bitten and lacerated, M. Pasteur does not apply his treatment. Under these circumstances, the wounded person is not in the slightest danger; the virus cannot penetrate into the wound, even if the arm be injured and bruised. In some of these instances, M. Pasteur ascertained the rabid condition of the dogs, by inoculating rabbits and guinea-pigs with mucous substance taken from the dead bodies of the dogs. M. Emile Monestier, editor of the *Petit National*, is being treated by M. Pasteur, having been bitten by a stray dog.

CREMATION AT WOKING.

THE fourth cremation under the auspices of the Cremation Society took place last week at the Society's crematorium at Woking. The body was that of a young gentleman, aged 22, who had died of bronchitis. The remains were placed in an elm coffin, with the name and age of the deceased upon a silver plate, and arrived in the grounds of the crematorium at half-past nine. A number of wreaths sent by relatives and friends were placed upon the coffin, which was carried by the bearers into the crematory building, and placed upon trestles in front of the mortuary-chamber. The religious services had been held on Thursday at a church in Kensington. When the coffin was in position, the wreath and flowers, with the exception of one wreath, which, for special reasons, it was desired should be consumed with the body, were removed, and the bearers withdrew. The coffin was then slid upon the rollers into the mortuary-chamber. The process occupied considerably more than the usual time, on account of the coffin having been constructed of solid elm, instead of light pine, or wicker-work. In two hours, however, the body was entirely consumed, and the ashes were gathered up and placed in an urn, which was taken away in charge of a relative of the deceased. The whole ceremony was conducted with great decorum and dispatch.

AMALGAMATION OF HYGIENIC SOCIETIES.

POPULAR interest in hygiene is of comparatively recent growth; and it was, perhaps, inevitable that at first there should be some waste of labour and energy, owing to want of concentration of effort. The possibility of effecting this concentration has for some years occupied the attention of the most active workers in the cause of sanitary reform, and the first-fruits of the movement are to be seen in a proposal formally put forward by the Councils of the Parkes Museum

and the Sanitary Institute of Great Britain, for an amalgamation of these two bodies. Both bodies were founded ten years ago, and, by their continued growth in importance and in number of members, have proved their right to a permanent place among institutions designed to ameliorate the condition of the people. The two institutions are complementary the one to the other. The Sanitary Institute holds an annual congress and exhibition in some town, and publishes a volume of *Transactions*. The Parkes Museum maintains a permanent collection of apparatus designed to supply a want much felt by teachers of hygiene, who before its foundation had little opportunity for giving practical demonstrations, and has brought together a library of books on hygiene which is every day increasing in importance. In the Parkes Museum, also, lectures on hygiene, popular or technical, are given, as a rule, twice a month during the winter session; while the Sanitary Institute holds examinations and grants certificates of competency to local surveyors and inspectors of nuisances. If the members of the two existing institutions agree, as there is every reason to hope and believe, to the scheme elaborated by the Councils, then the new institution will seek a Royal Charter. The great advantages which are likely to accrue from this amalgamation appear to be generally recognised; the two institutions already share the services of the same secretary and occupy the same premises. Though their methods are different, their objects are the same; by formally combining, both will be strengthened, and their power for good increased.

ABUSE OF HOSPITALS.

A THOUGHTFUL working man writes to us:—"There can be no doubt that the hospitals and medical charities are to some extent abused by persons obtaining gratuitous aid who are well able to pay for all they require. These are, however, frequently attracted more by the reputation of particular institutions than a desire to avoid payment. Nor is it easy to find a remedy. A mechanical wage limit certainly does not furnish one, as the means of a family are quite as much regulated by its necessities and inner circumstances as by the wages received. Nor is it likely that an extended system of inquiry into the means and positions of all patients could be carried out. Unless such inquiry be thorough, it is worse than useless; to make it efficient would involve a very heavy expense, and it is questionable if this could be taken from funds contributed by benevolent persons for the purposes of medical charity. Again, such inquiries are, as a rule, made in a blundering and suspicious fashion, and often do harm to, and affect the credit of, distressed and deserving persons. Experience, indeed, proves such inquiries to be often injurious, generally useless, and always unpopular. This is apparent from the fact that an attempt to carry out some such system by the London Charity Organization Society provoked strong opposition from two societies conspicuous for their support of the hospitals, namely, the London Society of Compositors, and the Saturday Hospital Fund. Theoretically, the establishment of provident dispensaries seems to be a true remedy; but even in this direction, abuses are apt to arise in practice. One source of weakness in such institutions is the difficulty of getting the class for whom they are intended to join them, and how to prevent those well able to pay ordinary fees from coming in. Sometimes it is found the members of provident dispensaries are not drawn from the out-patient departments, but from the practice of the neighbouring general practitioner, and thus persons are placed within the pale of 'charity' who had previously remained outside. Again, it is obviously impossible for a provident dispensary to accept persons referred to them from the hospitals, and who are already sick, at a provident contribution of '1d. or 1½d. per week.' Such a system would transfer the burden of the hospitals to the provident dispensary, without a corresponding transfer of funds, and would inevitably break down. Probably the true remedy will be found by united action among the whole of the general practitioners in localities of not too large an area, on the basis of giving special terms to those who are undoubtedly unable to pay ordinary fees. The present abuses are due quite as much to want of organisation in the profession as among the people."

KING'S COLLEGE HOSPITAL.

A PUBLIC meeting, in support of King's College Hospital, which is greatly in need of funds, and presided over by the Lord Mayor, was held at the Mansion House on Friday, March 12th. There was a large attendance, among those present being the Duke of Cambridge, the Archbishop of Canterbury, the Bishop of London, Lord Grimthorpe, Mr. J. G. Hubbard, M.P.; Mr. W. H. Smith, M.P.; Dr. Priestley, etc. The Lord Mayor briefly dwelt upon the great need there was for funds, and said that, unless help were forthcoming at once some of the wards would have to be closed, and the number of beds reduced. The Duke of Cambridge, the president of the institution, stated that last year the income was £11,389, and the expenditure £16,421, being a deficit of £5,032. The deficit of 1884 was £6,668, of 1883, £2,839; of 1882, £2,769; and of 1881, £8,000. The donations and subscriptions had never been equal to the requirements of the hospital, and they must now look to the generosity of the public to give them that which would enable the hospital to continue its philanthropic functions. The Archbishop of Canterbury, in seconding a resolution, pointed out that, in the midst of all its financial needs, the hospital had maintained 2,000 in-patients, with 169 beds in daily occupation, and 17,000 out-patients, of whom 7,500 were suffering from accidents. It was a free hospital, and that fact showed how great was the struggle needed to maintain a place which was wholly unendowed. The management of the institution was the very best possible. The hospital was of the greatest service to medical science. It had an admirable school of medicine, than which none could boast greater names than Sir William Bowman, Dr. George Johnson, Mr. Wood and Sir Joseph Lister, by whom valuable contributions had been made to medical science during recent years. The failure of legacies, which had sunk from an average of £6,000 to £1,000, accounted for the straits in which the institution was at present placed and what was necessary was, to at once obtain £10,000 to meet present needs, and to raise a capital of £100,000, to place it beyond the possibility of similar straits in future. The Bishop of London moved the second resolution, which was carried: "That the need to which King's College Hospital has been reduced by the failure, during the recent years, of legacies, and by other exceptional causes, demands the prompt and liberal assistance of the public." A vote of thanks to the chairman closed the proceedings.

DEATHS UNDER ANÆSTHETICS.

AN inquest is reported in the *Huddersfield Weekly Chronicle* of March 6th, on a man, aged 47, who had suffered an injury to his knee from an accident, the knee being very swollen and painful; and it was suggested by the senior house-surgeon that he should be examined under chloroform, in order to ascertain the exact nature of the injury and the necessary treatment. The anæsthetic was administered by another house-surgeon. Deceased came under the influence in about four minutes, when the breathing suddenly stopped. Artificial respiration was employed, and the usual restoratives, for two hours, but without success. A *post mortem* examination was made, and the heart was found to be in a state of marked fatty degeneration. The cause of death was paralysis of the heart. The deceased had a good regular pulse, and stated that he had always been a strong healthy man. Only the usual quantity of chloroform was administered, and the administrator had given chloroform over five hundred times and was most careful. The jury returned a verdict in accordance with the medical evidence, and, as a rider, expressed the opinion that the use of chloroform was necessary in the case, and that it was duly and properly administered.—The same coroner, Mr. W. Barstow, held an inquest on Saturday evening, at Lockwood, on the case of a man aged 50. The patient was suffering from severe inflammation of the bowels due to obstruction, and an operation was determined on a

e only chance of life. Deceased and his wife both gave consent to e operation. There were five medical men present and two highly ined nurses. The ether was carefully administered to the deceased bed, after there had been a medical examination. The patient, wever, had not taken more than three or four inhalations, when he l back, breathed once or twice, and died. He inhaled the ether thout the slightest hesitation or discomfort, and the pulse suddenly led at the very commencement of the anæsthetisation. It was not nsidered that the death could be considered to be a death from ner. Mr. Hall's account of the *post mortem* examination said: "there s considerable purulent effusion in the peritoneal cavity; the intes- es were adherent to the abdominal walls from recently effused lymph, . At the lower part of the descending colon was a malignant mass, the size of a small cocoa-nut, blocking the intestinal canal, etc. In right ventricle of the heart was a fibrinous clot, attached to the cuspid valve." The sudden failure of the heart's action was be- ved to be induced by the feebleness of the circulation, and the dical witnesses did not consider that the deceased died from the effects the ether, for he was not under its influence. They would have l to have given him very much more before they could have com- nced the operation, and he had not taken sufficient to produce a al result. The jury agreed upon the following verdict: "That the eased died from natural causes, namely, the sudden failure of the rt's action, induced by the feebleness of the circulation dependent on acute intestinal obstruction, such death taking place during an empt to administer ether for the purpose of performing an opera- n to relieve such obstruction." The coroner expressed the opinion t all that medical skill could do had been done for the deceased, l the jury agreed with his statement.

COMPULSORY NOTIFICATION OF DISEASE.

a recent full meeting of the Carlisle Town Council, a discussion k place upon the clauses in the Corporation Bill requiring the mpulsory notification of infectious diseases. The memorial of the lical men opposing the proposal was read, and it was suggested t the clause relating to medical men should be deleted, leaving the igation upon the householder alone. The medical officer of health l that, if they withdrew the clause relating to medical men, they had ter withdraw the clauses altogether, as, according to experience where, the system would not work. He mentioned that he had en no part in introducing these clauses into the Bill, and had not n been consulted on the matter. The Council decided, with only r dissentients, to withdraw the clauses altogether, and trust to the lical men to help them voluntarily. Dr. Barnes, in a communica- addressed to Mr. Ernest Hart, as Chairman of the Parliamentary s Committee, says: "We are all very grateful for the valuable you have given us in the matter."

NOTIFICATION OF INFECTIOUS DISEASE.

RANKIN (Sunderland) sends us details of an interesting case ch was made a cause of prosecution under the Infectious Disease of 1885 for the borough of Sunderland, wherein he informs us he , last week, mulcted in the sum of about £4. He says: "On uary 8th, a message was left at the surgery for me to call the owing day to see a Mrs. L. On January 9th I saw Mrs. L., found her in bed, and in answer to my inquiries, I found had been out of sorts for over a month, but able to be out of bed most of the day. Upon examination, I found a sort of papular tion over the back and chest, which, she stated, had been some e there. The papules were, in general, less than a threepenny e, slightly raised in the middle, and thinning towards the edges. e of them were considerably larger than others, even as large as a penny, and of a brownish colour. The temperature taken in the a was 102°, the tongue foul and coated. She complained of head- ; the mind seemed clear. I may here state that she is of a nervous disposition, and not a strong person at best, the pulse being 90° and weak. I saw her on the 12th, the assistant seeing her on the 11th; the tongue was clean and rather red, as well as the sides of the mouth; temperature 101°; she expressed herself as being a little better. She was seen by the assistant on the 14th. I saw her again on the 15th; temperature 103°; tongue, dry and clean. She complained of being worse. I suspected fever or blood-poisoning, and, as she was living in a house where there were offices, I resolved to draw the medical officer of health's attention to the house, although I was by no means satisfied that we had a real case of fever. As the house was close to the Health Office, and a considerable distance from my house, I made out the certificate of notification that night, the 15th; and as the case was not well marked, I took the certificate along with me the following morning, the 16th, with the intention of delivering it myself at the Health Office, and of giving an explanation of the case; but the husband being in the house during my visit, and it being a little out of my way, I gave him the certificate, telling him to take it at once to the Health Office, which I believe he did. This I deemed sooner and better than by post, as any explanation that might be required could at once be given, and he could be furnished with the necessary disinfectants at the same time. I again visited her on the 17th; she seemed rather better, the tongue being moist, temperature 102°. On the 18th, the temperature was about the same. She informed me she had been out of bed, and as she seemed to be improving, I did not see her till the 20th; the temperature was then 101°. On the 24th, she was still improving, the temperature being 100°. I saw her now and again up till the beginning of February; I then ceased visiting her, as she seemed much better, although by no means strong. The husband and the daughter, eight years of age, slept in the same room; neither of them have been affected, nor anyone in the building. The case was reported as typhus fever." Mr. Rankin feels acutely the indignity and discomfort to which he has been subjected in the discharge of what he regards as his duty to his patient and to the public, and pertinently asks, "Is there no redress?"

SALARY, ONE SHILLING A DAY.

ACCORDING to the *Vratch*, Dr. A. P. V., who had studied in the University of Kazan, and received at the time a Governmental stipend, has been subsequently appointed by the Crown a town-physician (*gorodskoi vratch*) to Zoslov, with a salary of sixteen roubles (£1 10s.) a month—that is, a shilling a day. In that economical way the Crown obtains from him professional services in two town hospitals. Dr. A. P. V. actually does exist on this money, and is not able to supplement it from private practice, since the latter is in the hands of eight other practitioners residing in the town, which numbers 8,000 inhabitants.

THE KING OF SERVIA AS A MEDICAL EXPERT.

"WHEREAS it is irrefutably proved by science that the so-called antiseptic treatment of wounds yields more beneficial results than all other methods, We are pleased to order that henceforward the said antiseptic plan of treatment be solely employed in all hospitals of Our Kingdom, and that corrosive sublimate and iodoform be used until Our further dispositions." The above is taken, not from *Punch* or any other comic journal, but from an ukas graciously issued by his Servian Majesty on December 12th. One cannot help asking, how the antiseptic King may know of what is "irrefutably proved" by medical science, and what not? His Majesty's efficiency as a medical expert remains to be demonstrated. However it may be, the royal medical ukas is there, and a Servian Lawson Tait or Keith may now be in danger in case of disobedience to the antiseptic proclivities of his sovereign. The head of another rather larger country is an enthusiastic admirer of homœopathy, and accordingly obtrudes himself, with his favourite "doctrines" and charlatans patronised by him, upon his scientific medical subjects, and annoys them with silly demands to undertake

"comparative experiments," etc. Certainly, we most willingly recognise that everybody has an indisputable right to make himself appear absurd; but we must protest against exercising that right to such an extent as to interfere with freedom of scientific investigation.

LOCAL GOVERNMENT AND THE DISTRESS.

AMONGST the reforms of local government which were sketched in Mr. Ernest Hart's address to the Sanitary Institute last September, was the "definite rupture of the two kinds of municipal assistance to the individual, now known by the names of indoor relief and outdoor relief." Mr. Hart contended that, while the latter was a fair object for the consideration of the local primary authority, the former was a matter more affecting the county at large, and could, therefore, be relegated to the county authority. The evils of the existing system are well seen in the letter which the President of the Local Government Board has just addressed to boards of guardians throughout the country with reference to the prevailing distress. Mr. Chamberlain, admitting the severity of the depression, and being anxious to help honest people to keep out of the workhouse, rejects the labour-test of stone-picking and oakum-breaking, and falls back upon a recommendation that the guardians should confer with the local authorities, and endeavour to arrange with the latter for the execution of works on which unskilled labour may be immediately employed. Such works might, he thinks, be of the following kinds, among others: *a*, spade-husbandry on sewage-farms; *b*, laying out of open spaces, recreation-grounds, new cemeteries, or disused burial-grounds; *c*, cleansing of streets not usually undertaken by local authorities; *d*, laying out and paving of new streets, etc.; *e*, paving of unpaved streets, and making of footpaths in country roads; *f*, providing or extending sewerage-works and works of water-supply. To the particular suggestions of Mr. Chamberlain we can, of course, offer no sort of objection, as anything that gives employment to the vast army of the unemployed, must just now be accepted with alacrity. But they illustrate very strongly the soundness of the view that for each local area there should be one authority, and only one. The guardians, upon whom would otherwise fall the burden of the impoverished and out-of-work, are enjoined to endeavour to prevail upon another authority, which has no direct responsibilities to the poor, to undertake works which it may possibly regard as unnecessary or supererogatory, but which, contrary to its own judgment, it is urged to set about, in order to relieve the anxieties of the guardians. Almost every subject that crops up in Parliament, is, now-a-days, glossed over or evaded, because it is supposed to form part of the large question of local government reform, which the Government have for long had under consideration, but upon which they have never yet declared themselves. It is earnestly to be hoped that, if the present distress have no other result, it may serve to direct attention to the evils of divided municipal authority. Whilst this board has been recommending, and that board has been considering, people have been starving, and nothing whatever has been done to alleviate their distress, present or prospective.

SCOTLAND.

REFORM IN THE SCOTCH UNIVERSITIES.

IN consequence of the intention to bring forward in the present Parliament a new measure dealing with the subject of reform in the Scotch Universities, the Secretary of State for Scotland has invited information from various quarters, so as to learn the views of all those interested in the matter. Amongst those appealed to was the Glasgow University Council Association; and the memorial presented by them to the Scotch Secretary in reply to his request has now been made public. The document enters very fully into the question of University reform. Throughout, it is moderate in tone, and makes perfectly clear what are the alterations the Association deems absolutely necessary. Briefly, these may be said to be a change in the constitution of the University Court as it at present exists, and the removal of the present monopoly of teaching enjoyed by the Professoriate. As the Association represents about 900 Glasgow graduates, and as there seems complete unanimity amongst them as to the direction in which University reform should go, their views must carry some weight with those who have to frame the lines on which the new University Bill will be drawn.

EDINBURGH UNIVERSITY MEDICAL STAFF CORPS.

THE Secretary of State for War has at length approved of the formation of a volunteer bearer company at Edinburgh, and Mr. C. W. Cathcart, F.R.C.S. (Eng.), who has taken so much trouble and interest in the matter, has received due notice of the fact from the Horse Guards. For the past two years such a company has existed and been trained in Edinburgh, and consists of 100 students of medicine, so that this is the official recognition of an already existent organised corps. It is proposed to form a "lay," or non-medical volunteer company in Edinburgh as well, who will be trained for service in the field along with the medical corps. The Universities of Aberdeen and Glasgow possess similar organisations to that of Edinburgh, and we trust they will soon receive like official recognition and encouragement.

ABERDEEN ROYAL INFIRMARY.

THE Committee of Management of this Institution have resolved to recommend to the managers that the limit of service of its medical officers be restricted to fifteen years, except in the case of university professors engaged in clinical or pathological teaching, whose services it may be deemed necessary to retain; that the fees paid by the students for admission to the Infirmary (other than fees paid for clinical lectures) should belong to the hospital; that the number of resident medical officers be increased to four, but that they receive no honorarium. As to the increase of the staff, consideration was delayed until it be determined how many beds are to be provided for by the new scheme of hospital construction.

UNIVERSITY OF ST. ANDREW'S.

AMONG the names of those upon whom the authorities of St. Andrew's University recently conferred the degree of LL.D., we have pleasure in noticing that of Alexander Keiller, M.D., F.R.C.P.E., F.R.S.E., until recently Lecturer on Midwifery and Diseases of Women in the Edinburgh Royal College of Surgeons. Dr. Keiller has been long and honourably connected with the University of St. Andrew's. In it, he graduated as M.D. fully fifty years ago; for many years he has been an examiner for its degrees in medicine, and is now senior on the Board of Examiners. The many hundreds of practitioners in all parts of the British dominions who have been pupils of Dr. Keiller's will be glad to see that his services have been recognised by his alma mater and will wish him many years to wear his honours.

THE NEW SCOTCH EDUCATION CODE.

WHATEVER the recent controversy on overpressure in our public schools may have proved, it showed that the possibility of it under existing rules was continually present. We are glad to see that the recent changes recommended by the education department in the Scotch code have recognised this defect, and their adoption must materially lessen any risk on this head. Without specifying the changes in detail, we may say that their general tendency is to restrict the load of subjects falling on children of tender years, and, by substituting collective for individual examination in the lowest standards, to remove those exacting demands which, in individual cases, often proved injurious. It is satisfactory to find that the overpressure controversy has not been lost on those who have had the drawing up of these new regulations; and this more ameliorating code of education should meet with general approval, inasmuch as by it the dangers to

ch the young in many of our public schools were previously osed have now been very much diminished, if they have not been irely removed.

SUNDAY DRINKING IN SCOTLAND.

s return ordered by the House of Commons of all the convictions persons arrested for drunkenness on Sunday in Scotland has ap-ed, and deals with the period extending from September, 1884, to tember of last year. The figures given include thirty-four counties thirty-seven burghs, and they take in a population of 3,735,573 ons, of whom 2,125,975 are resident in the counties, and 1,609,598 he burghs. Altogether, there were 2,243 convictions, of which were in the former, and 1,944 in the latter; the proportion in the nties being thus 0.14 per 1,000, and in the burghs 1.20. When come to individual towns, we find Greenock, with its population of 84 persons, having a record of 240 Sunday convictions, or about per 1,000; while Glasgow has a rate per 1,000 of 1.57, Leith 1.44, nburgh 0.78, and Dundee 0.45. If the return be looked into ely, it will be found that its figures do not all rest on the same s, and consequently are not in every particular reliable. Thus, a rence of opinion exists as to the exact hour when the Sunday fo purposes of the return is held to commence; and, in some places, day drinking is dealt with as a breach of the peace, and, as such, xcluded from the returns. At the same time, the figures are a able contribution to the vexed question of Sunday drinking; and bring out clearly the strong proportion in which it is present in sely crowded centres, in comparison with the less populated rural ricts.

THE PRESERVATION OF FISH.

R since the establishment of the Scotch Fishery Board, it has re-ised the importance of the duties entrusted to its care; and its nt annual reports show that its members are fully alive to the ssity of doing all in their power to increase the harvest of the , and improve the supply of fish available for food-supplies. We e from time to time drawn attention in our pages to the work e by the Board; and we observe that now their attention is being cted to a point that has always seemed to us of the greatest im-ance, namely, the best means of preserving fish, so as to make n available for general use, should a few days elapse between their ure and the time they can be placed in the market. It is notorious while, no doubt, in some parts of our coasts the supplies of fish ecent years have completely failed, in other parts the captures are plentiful as ever, but that vast quantities of them have been royed or carried to the manure-heap instead of reaching the in-rial classes for food, simply because present arrangements of traffic the want of any suitable preserving method have made it impos-to forward them to our large towns for consumption. We are to see that Professor Cossar Ewart, of the Fishery Board, is mov-in this matter, and bringing it to the notice of the fishermen. facts he has brought forward speak very strongly in favour of cic acid as a preservative agent likely to prove useful; but whether employed, or the more complicated Sahlström process, or that vn as Roosen's method be adopted, there can be no doubt that it step in the right direction to try and make available amongst our population a cheap food-supply that is at present, owing to diable causes, practically wasted, and that at a time when, in our res of industry, thousands are suffering starvation from lack of

AYRSHIRE MEDICAL CLUB.

formation of an Ayrshire Medical Club was discussed at a public ing of the medical practitioners of Ayrshire, recently held at Kil-nock, when among those present were: Drs. D. and W. A. Mac-J. C. M'Vail, W. M'Alister, and J. Rankin, Kilmarnock; R. rskine, A. Black Morrison, W. Moore, W. John Lawrie, Ayr; Ralley, Ayr District Asylum; Alexander, senr., Dundonald; R. B. Robertson and R. Allan, Ardrossan; W. Frew, Galston; J. Thomson, Irvine; R. S. Dunlop, Kilmaurs; T. C. Dunlop, Newmilns; Robertson, Girvan; Moyes, Largs; More, West Kilbride, etc. Apologies for absence were also received from a number of other medical men. Dr. Macleod, senr., was called upon to preside. On the motion of the chairman, seconded by Dr. Erskine, it was unanimously resolved to form an Ayrshire Medical Club. The rules for the management of the club were submitted, and, after being duly considered, were adopted. Dr. Ronald, of Ayr, was elected President, and Dr. Robertson, of Ardrossan, Vice-President for the ensuing year. Dr. Moore, of Ayr, was appointed Secretary and Treasurer. At the conclusion of the business-meeting, the members dined together, Dr. Macleod, senr., being in the chair, and Dr. Alexander acting as croupier. After a sumptuous and excellently served repast, the usual loyal toasts were submitted and duly honoured.

IRELAND.

Mr. Joseph Pratt, J.P., late medical officer of the Market Hill Dispensary district, has been presented by the Dispensary Committee of Management, and other friends, with an illuminated address and valuable presentation. He has also obtained, from the Armagh Board of Guardians, a superannuation allowance for his long and faithful public services.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The Council of this college has resolved to confer its Honorary Fellowship upon Sir James Paget, Bart., F.R.S.; Sir Joseph Lister, Bart., F.R.S.; Professor Huxley, Pres.R.S.; and M. Pasteur.

THE DUBLIN HOSPITALS COMMISSION.

The final sitting of the Commission for the reception of evidence was held last Saturday. Professor Gerald Yeo, of King's College, and Mr. Reginald Harrison, of Liverpool, were examined, and gave much useful information.

MR. J. E. KENNY, M.P.

The Board of Guardians of the North Dublin Union have been good enough to grant to Mr. Joseph E. Kenny, M.P., one of the medical officers of the Union Workhouse Hospital, "a general leave for the remainder of the Parliamentary session," to attend his duties at Westminster whenever there is "the necessity" for his doing so. The leave was given "on the understanding that if from any causes the Board should hereafter consider it advantageous to the interests of the poor and to the discipline of the house to rescind this leave, that it can be rescinded if the Board shall so direct." During Mr. Kenny's absence, his duties in the workhouse will be performed by Mr. J. O. Carroll.

THE CITY OF DUBLIN HOSPITAL.

Although this hospital has been in existence about fifty years, it has not hitherto been the custom, as in some similar institutions, to hold an annual general meeting of its supporters. The first of such meetings, however, took place last Saturday, and was well attended. The annual report was read, and submitted for any criticism that might be offered; and votes of thanks were passed to the subscribers to the hospital, and to the ladies and gentlemen who took so active a part in the late bazaar, which realised a nett sum of over £2,000 for the hospital. Warm praise was bestowed by the various speakers on the management of the hospital. The Right Hon. Lord Justice Fitzgibbon, who occupied the chair, speaking of the limited field from which the hospital received support, said that it had, however, a magnificent endowment, for which it had every reason to be proud and to b thankful; and that was the staff of medical and surgical gentlemen attached to the hospital, who gave their services without any mone

recompense whatever. The only return sought for by the medical and surgical officers of the institution was the privilege and the duty of independently carrying on the great school of surgery and medicine associated with the institution. Reference was made by several of the speakers to the success of the nursing institution worked in connection with the hospital, although financially distinct from it; and to the great benefit it had been in many ways to the hospital, and as a training school. The institution has a staff of thirty trained nurses and probationers under the lady-superintendent of the hospital; and there is a large and increasing demand for its nurses for cases of sickness or of operation occurring in private families.

THE DUBLIN SANITARY ASSOCIATION.

THE inaugural address at the late Annual General Meeting of this Association was an important pronouncement on the sanitary condition of the city by the Registrar-General for Ireland, Dr. Grimshaw. The formation of the Association, he said, was stimulated by the terror inspired by the small-pox epidemic of 1871-72, which caused the death of 1,647 people in Dublin, and reduced thousands to poverty. He traced its organisation and growth, and claimed for the association the merit of having had the Artisans' Dwellings Act of 1875 extended to Ireland, and of the subsequent formation of the now well-known and successful Dublin Artisans' Dwellings Company. The issue of a Royal Commission in 1878 to inquire into the question of the high death-rate of Dublin, was also due to the Association; and Dr. Grimshaw showed how the city had already reaped some of the benefits of that inquiry, and how many of the most important sanitary defects it pointed out were being removed. The latest action in the same direction taken by the Association, was the successful effort it made to have the inquiry of the Royal Commission on the Housing of the Working Classes extended to Ireland. Having thus given a survey of the work done by the Association during its first fourteen years of existence, Dr. Grimshaw referred to some things that remained to be done, namely, the removal of private slaughter-houses and of manure yards from within the city; the enforcement of cleanliness in cowsheds and dairies, and the prevention of nuisance from offensive trades carried on within the city. The most gigantic nuisance in Dublin, although not believed the most dangerous one, still, he said, "exists in full and increasing force—namely, the filthy Liffey." He feared the abatement of this fresh nuisance was a long way off. But the one great crying sanitary evil, which he believed exceeded all others in its destructiveness to health, was the condition of the tenement houses. It could not, he thought, be too often repeated and too strongly insisted on, that until the dwellings of the working classes are thoroughly reformed in almost every way we shall find but small improvement in the public health, and but little advance in morality and piety. Until the working classes are thoroughly discontented with the conditions under which they live in the old tenement houses of Dublin, we cannot expect improvement. This might mainly be effected by endeavouring to encourage the people themselves to desire a better state of things. In doing this work, the sister association—the Dublin Ladies' Sanitary Association, now in its fifth year—was performing a noble part, by visiting the homes of the working classes, and instructing the inmates in domestic sanitation. Dr. Grimshaw concluded as follows:—"One of the highest death-rates in the civilised world is to be found in Dublin. This is owing, not so much to the prevalence of epidemics, as to the constant waste of life from constitutional diseases, dependent upon widespread sanitary defects, especially bad housing of the poor. Ill-health produces poverty, poverty produces crime, and so long as this vicious circle exists, we need not expect anything but social chaos. To remedy these evils is the desire of the Dublin Sanitary Association, and therefore I claim for it the support of all who love cleanliness, happiness, prosperity, morality, and godliness."

PARLIAMENTARY BILLS COMMITTEE.

THE following letter has been addressed to the Lord Chancellor, t the Chairman of the Parliamentary Bills Committee of the Briti Medical Association, with the memorandum of suggestions drawn u by the Parliamentary Bills Committee on the Lunacy Acts Amen ment Bill.

TO THE RIGHT HONOURABLE THE LORD CHANCELLOR.

MY LORD,—The Subcommittee of the Parliamentary Bills Committ of the British Medical Association, appointed to consider the pr visions of the Lunacy Acts Amendment Bill, 1886, has drawn up memorandum subjoined hereto, and embodying a number of sugge tions which the Subcommittee has adopted, which are now mo respectfully brought before your lordship, and are submitted to yo lordship's favourable consideration. Appended to the more importa of the suggestions are a few comments, explaining some of the reaso which influenced the Subcommittee in arriving at the conclusions o which the several suggestions are based.

It is particularly desired to draw the attention of your lordship several of the suggestions, namely (1) those which relate to the exte sion to those who take charge of insane patients, of the protecti given under the Act to the practitioners who sign certificates insanity; (2) those relating to single patients; and (3) those whi concern private asylums.

1. Under the first head, it is submitted that recent trials, in whic actions have been brought against the medical officers of public lunat hospitals, show that the protection at present granted by law is inad quate to provide the safeguards that may reasonably be expecte with respect to vexatious actions against those who take charge insane patients, whether in private or in public asylums.

2. With regard to single patients, the recommendations made a supported by a commentary which, perhaps, it is unnecessary state at greater length in this place.

3. With respect to private asylums, the operation of the 43rd a 44th Sections would have a most prejudicial immediate effect upo those engaged in that department of practice; and it is deferential submitted that, while the indirect effect of the operation of the A as a whole will be at once to discredit and damage private asylum and, at no distant date, to lead to the closure of many of them; if, addition to that, the Act should be interpreted to limit by law t licenses to the present holders of them, the actual effect would be of strongly confiscatory nature, and, in many cases, at an early, or com paratively early, date. And it is submitted that, should this be t effect of the Act (as would follow on that interpretation of it), t question of due compensation to the proprietors is one which, it hoped, will commend itself to your lordship, and to the Houses Parliament.

4. It is also desired to draw attention to the operation of Section 3 under which any lunatic under care in an asylum, etc., may be e amined, and, if two medical certificates are secured, may be discharg on the application of any person; and to point out that the Sectio would place power in the hands of those who might act under mi conception or delusion, or from unworthy or vindictive motives, an in all likelihood, would lead to discharges of insane persons under ci cumstances that would render its operation a fertile cause of actio at law for alleged improper detention.—I have the honour to be yo lordship's faithful servant, ERNEST HART,

March, 1886. Chairman of the Parliamentary Bills Committee.

ERRATUM.—In the "Recommendations of the Subcommittee the Parliamentary Bills Committee," published on page 516, t second paragraph in the second column, commencing "It is respec fully urged," was accidentally misplaced. It should have follow the paragraph commencing "It is not quite clear," in the first colu of page 517.

THE HOSPITALS ASSOCIATION.

THE fifth general meeting of the Hospitals Association was held in t rooms of the Social Science Association, at Adam Street, Adelphi, on We nesday evening, Sir Andrew Clark occupying the chair.—Dr. GEORGE V POTTER, M.D., read a paper entitled, "Is the Nursing at the Lond Hospitals Sectarian?" and, after referring to certain correspondenc which had taken place in the Press, and especially to a letter signed " Life Governor," which expressed great surprise at a statement ma to the effect that the University College Hospital did not receive a probationers who were not members of the Church of England, t lecturer went on to say that "A Life Governor" was not the on one who was surprised at this strange revelation. Further lett

peared confirmatory of this complaint, and expressing indignation at the injury done to a large number of unoffending persons the action of the hospital authorities, which was aggravated by fact that University College was, fundamentally and ostentatiously, a non-sectarian institution. All religious denominations ntributed to the support of the University College Hospital, and ace it became a duty to inquire if the managers of the Sunday nd could not do something to check the wilfulness of an institution ich had evidently taken the bit between its teeth. Dr. Hoare, ing on behalf of the managers of University College Hospital, l made inquiries as to the course taken by twenty other hosals relative to attendance at Divine service; and, in replies reved from nineteen, it was shown that only three were unsectarian, l in two cases it was specifically stated that the nurses must be mbers of the Church of England. All experienced persons would nit that the present was not a time for placing difficulties in the y of hospitals; and institutions dependent upon the voluntary pport of the public should labour to deserve the confidence of the ple, and do away with such unjust and baneful restrictions. The turer then gave the result of an inquiry instituted by some of the mbers of the Hospitals Association into the religious aspect of the sing question in the metropolis. A number of questions e addressed to all known London hospitals, and about fifty wers had been received from these, together with a considerable mber from the country. The replies in every case but one denced a frank desire to give all the information asked , and, with the exception of University College Hospital l the Lock (which declined information) not one makes a mbership of the Church of England a condition of admission to its sing appointments. The results, he said, were most satisfactory, those who had always regarded hospitals as places of good deeds, ere religion was a ministering angel, and not a militant theologian, y still so regard them, while it was one of the first duties of every nd of these philanthropic and noble institutions to keep them as removed as possible from religious as from all other strife.

discussion followed, and Mr. NEWTON N. NIXON, secretary of iversity College Hospital, defended the action of that institution, explained the particular circumstances by which its acts were erned. He read a copy of a letter he had sent to the Press, in ch it was stated that, although the hospital nursing was done by tract by the sisters of All Saints', the leading principle of the col- was "religious toleration." The committee had no power to trol the contractors in these matters, but a special clause in the sing contract guarded against proselytism.

Ir. HOLMES, of St. George's, Miss MANSON, of St. Bartholomew's spital, Mr. RYAN, and Dr. GLOVER, took part in the discussion; Sir ANDREW CLARK, in conclusion, said Dr. Potter had done good vice by bringing the subject before them in so able and clear a nner, and that, from the results of his labours, it must be satisory to know there was no ground for the apprehension which l got abroad that sectarianism was cherished in the hospitals; sequently, the public might with every confidence liberally support se worthy institutions.

THE ST. JOHN AMBULANCE ASSOCIATION.

Saturday, March 13th, Her Excellency the Countess of Aberdeen nded a meeting of the Dublin Centre, and presented the medals and certificates awarded to the successful pupils of the Centre at recent examination. One hundred and twenty-four certificates sixty medallions were obtained during the past year, twenty of former and nineteen of the latter being awarded to members of Metropolitan Police. The utility of the instruction to this body nen was shown by some examples given in the report of the year's k of the Centre, which was read by the Honorary Secretary, Dr. J. las Pratt. The Report expressed regret that, although nearly two dred of the Metropolitan Police had obtained certificates, up to present the Association had been entirely unable to instruct the al Irish Constabulary, because the authorities of that force would allow lectures to be given to its members. Another class of men were instructed all over England, but not yet in Ireland, were railway officials. With the exception of the Great Southern and stern Railway of Ireland, none of the authorities of the other Irish ways had as yet allowed classes to be formed for their officials

he President of the Centre, Mr. DAVIES, K.J.J., stated that in land, Australia, New Zealand, and other countries, the Associahad enrolled beyond a million of members. In Ireland, its work chiefly confined to Dublin, but a centre had been established in terford, and there were a few detached classes in other places. India, all the railway officials received instruction; and the Mahratta police, 1,500 strong, the finest body of native police in India, had thrown aside the prejudices of caste, and taken up the work of the Association zealously. Mr. Davies then presented to Her Excellency Mr. Edward C. Thompson, surgeon to the Tyrone County Infirmary, to whom the medal of St. John had been awarded by the Lord Prior and Chapter of the Venerable English Langue of the Order, for having risked his life to save that of a child suffering from diphtheria. Until the institution of this medal (which may be worn by the members of both services in uniform) in 1874, there was no reward in the empire for saving life on land. After it had been conferred a few times, the Queen was pleased to alter the rules pertaining to the Albert Medal, hitherto only given for saving life at sea, and to make it available for services in the cause of humanity on land also, and the presentation of it has in most cases followed that of the medal of St. John. Mr. Thompson has, however, already had the Albert Medal conferred on him for the same act of bravery, as was reported in the BRITISH MEDICAL JOURNAL at the time.

HER EXCELLENCY, in decorating Mr. Thompson with the medal, said she was gratified to have the privilege of doing so, and was sure that the ladies and gentlemen present would allow her to be the mouthpiece of expressing their admiration of his conduct, and of conveying to him their heartfelt good-wishes for his future.

Mr. Thompson is the first recipient in Ireland of the St. John Medal.

DEATH OF DR. AUSTIN FLINT.

IT is with deep regret, which will be widespread throughout the members of this Association, that we hear of the death of Dr. Austin Flint, of New York, the eminent physician who had been selected to deliver the address in Medicine at the next annual meeting of the British Medical Association, to be held in Brighton. The death is recorded as having been the result of an apoplectic attack. Dr. Austin Flint was a well known and ever welcome guest at the meetings of our Association, and was regarded in England and throughout Europe as one of the most eminent representatives of our professional brethren in America.

By seniority, as well as by attainments, position, and personal character, Dr. Austin Flint occupied an exceptional position in his own country and here. He had also been nominated as President of the International Medical Congress at its next meeting in the United States, a post which would have taxed all his tact, skill, and influence to fill successfully under the difficult circumstances.

A physician of great clinical experience, a Professor of Medicine at Bellevue Hospital College, and a writer of singular sagacity and moderation, Dr. Austin Flint united in an unusual degree the conditions which are necessary for a professional leader. His personal presence was dignified, his character amiable, although not without a touch of austere quietude which added influence to his opinions and conclusions. Without remarkable oratorical gifts, and although not identified with any notable advances in medicine or achievements in science, his writings and his lectures showed him to be well abreast of the latest achievements in every department of medicine, and well able to exercise a sound and unbiassed judgment in determining their value. In the rather stormy discussions which have from time to time agitated the medical world across the Atlantic, he maintained a strong attitude of personal integrity, and was looked upon as a champion of the best principles of professional ethics, while avoiding the acrimonious spirit into which these discussions are unhappily apt to degenerate. To him, more than to anyone, the profession looked for the attainment of a satisfactory solution and a dignified compromise, in respect to the discussions which are still going on concerning the organisation of the future International Medical Congress; and there was reason to hope that the position which had been assigned to him, and which he had accepted, at the next meeting of the British Medical Association, would have afforded him an opportunity of explaining the actual position of affairs in such a manner as might have led to an amicable and conclusive settlement of doubts and difficulties.

All our associates will deeply lament the sudden and unexpected loss of so eminent an honorary member as Dr. Austin Flint, and they will especially deplore the stroke of fate which removes him from amongst us at a moment when his presence was anticipated to fulfil for the first time the functions of a transatlantic orator, receiving the highest honour which it is in the power of the British Medical Association to offer, and bringing to our meetings that sense of universal brotherhood in medicine which would have been derived from the fulfilment of the duty which he had accepted. The medical profession in England will join with our brethren across the Atlantic in a common feeling of sorrow at the loss of this eminent man.

REPORT OF THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

THE monthly committee meeting of this society was held on Wednesday, March 10th, there being present, Sir T. Spencer Wells, Bart., Mr. Ernest Hart, Mr. Major Greenwood, Mr. E. Bartlett, Mr. S. W. Sibley, and Mr. E. Noble Smith. It was stated that a claim for £200 life assurance on the death of Dr. C. J. Workman had been paid, the practice being to satisfy such claims at the earliest time compatible with legal security. During the months of January and February, a sum of £182 5s. had been paid to 20 claimants, many of the claims being short ones, traceable to the severity of the weather. Among the causes of illness (all of which were fully verified and certified), were rheumatic iritis, fever, accidents (2), rheumatism (4), bronchitis (6), pharyngitis, gastric catarrh, jaundice, and blood-poisoning. Notwithstanding a considerable increase in the membership, the sickness was stated to be less than in the corresponding period of last year, and much less than that allowed for in the data on which the Society's tables were calculated. During the two months, eighteen new members had been accepted, and a large number of gentlemen had lately applied for particulars and proposal forms. The investment of a further £1,000, at a remunerative rate of interest, was announced, and arrangements were in progress for an additional £1,000. It was stated that, after paying all claims, the Society had accumulated in two years a reserve fund of over £10,000, which now stood to the credit of its members, and in the names of its trustees. During this time, a total of 740 proposals had been received. Full particulars of the society, copies of the last annual report, and proposal forms and tables of rates will be forwarded on application to the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, London, S.W.

THE CHOLERA.

ITALY.

THREE cases of cholera, two of them fatal, are reported from Candia Polese, near Rovigno, in Istria. Eleven cases and seven deaths are also reported from the neighbourhood of Padua. The Venice newspapers assert that the cholera was recently brought to their city by the *Orestes* steamship, from Trieste, and the *Lesbian*, from Greece.

TOULON.

WHEN the cholera appeared at Toulon, in June, 1884, there were loud official denials of the statement that it had been brought by a Cochin-China transport, on board of which there had been a fatal case during the passage. The medical inspectors and the speakers at the Faculty of Medicine insisted that England was the culprit, in having allowed quarantine regulations in Egypt to be relaxed, and some nameless English vessel was alleged to have brought the infection from Egypt to Toulon. The Toulon people never doubted for an instant that the Cochin-China transport was the offender, and they have consequently been vehemently protesting against the landing of troops from Tonquin at their port. M. Lockroy, Minister of Commerce, went down to reason with them, and his medical inspector scolded them as unpatriotic, but they would not be pacified.

The result is that, according to a report now published, elaborate precautions are to be taken. There is to be quarantine in Tonquin before starting, clothing is to be disinfected during the passage, the landing is to be on certain of the uninhabited Hyères Isles; and only after a second quarantine of six days will the healthy soldiers, with entirely new clothing, be landed at Toulon.

LONDON SANITARY PROTECTION ASSOCIATION.—The result of inspections during the last year showed 5 per cent. to be in perfect order, and 9½ per cent. (in addition) in fairly good order; whilst in 60 per cent. foul air was escaping directly into the houses, and in 21 per cent. sewage was partly retained underground by leakage or choking of pipes. It was reported that smoke rockets had been used with success, and that the water test to drains had been applied wherever possible, as being the most satisfactory, though not suitable for old drains. The financial report showed the receipts to be £2,422, and expenditure £1,949, leaving a balance of £473, with outstanding claims of £200. Allusion was made to the loss sustained by the death of Professor Fleming Jenkin, the founder of the association.

A PAUPER LUNATIC.—A pauper lunatic at the Banstead Asylum, named Eliza Harrison, has become entitled, through a decision of the Chancery Court, to a considerable legacy, and the Edmonton Board of Guardians—to which union she belongs—have directed their clerk to take the necessary steps to obtain the money.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law the Association, who shall be recommended as eligible by any thr members, may be elected a member *by the Council* or by any recognis *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, a October 20th, 1886. Candidates for election by the Council of t Association must send in their forms of application to the Gene Secretary, not later than twenty-one days before each meetin namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply the secretary of the Branch. No member can be elected by a Bran Council, unless his name has been inserted in the circular summo ing the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST.

Memoranda on the above, and forms for recording individual cas may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as earl date as possible, as the printing of the Tables is in progress.

The greater part of the "Old Age" form may be filled in by a non-medi person, if necessary.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. T Committee will be glad to receive the names of gentlemen willing engage in joint investigation of any of the following points in r lation to the origin of cases of Phthisis;—(*a*) The influence residence and occupation; (*b*) the previous state of the patien thoracic organs and general health; (*c*) heredity and communicatio Full particulars will be sent on application.

THE CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE. Additional replies are earnestly requested on the schedule issued wi the JOURNAL of May 9th, 1885. Copies of the schedule may be h at once on application.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examinati of cases in which the lesion has existed for an unusual length of ti without producing serious symptoms; THE EXTREME DURATION INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has pr posed these two subjects for future inquiry, and has referred them the Branches of the Association, in accordance with its regulation with a view to preliminary discussion during the present year. A rangements have also been entered into with the Section of Medici of the Annual Meeting of 1886 to hold a discussion upon "Cases which Disease of the Heart-Valves has been known to exist for u wards of five years without causing serious symptoms;" and with t Section of Public Health to hold a discussion on "The Duration Infectiousness." The inquiry-papers, to be subsequently issued, w be based upon the information afforded in these Branch and gener discussions.

Application for forms, memoranda, or further information, may made to any of the Honorary Local Secretaries, or to the Secretary the Collective Investigation Committee, 161a, Strand, W.C.

*** *The* COMMITTEE *earnestly requests* EARLY *replies to the Intern tional Inquiry paper on the Geographical Distribution of certain d eases, at present being circulated in the Branches of the Association.*

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading pap or exhibiting specimens are requested to communicate with the Honorary Secreta —J. MAITLAND, M.B., Honorary Secretary, Madras.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held the Railway Hotel, Taunton, on Thursday, April 15th, at 5 o'clock; dinner 5.30. Discussion: Do you consider the Antiseptic Dressing of Wounds Adv tageous in Country Practice? Election of a representative of the Branch on t Council.—W. M. KELLY, M.D., Honorary Secretary, Taunton.

H-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting will be the Harp Hotel, Dover, on Thursday, March 25th, at 3 P.M., Dr. Charles s in the chair. The dinner will take place at 5 P.M., at the Harp Hotel. mbers of the South-Eastern Branch are entitled to attend these meetings. introduce professional friends. All gentlemen purposing to dine are par- ly requested to inform Dr. Parsons by Tuesday, the 23rd instant, that arrangements may be made. *Agenda:* 3 P.M., Dr. Bowles will open a dis- on The Prognosis of Heart-Valve Disease, of Five Years' Standing. The ubject has been chosen by the Collective Investigation Committee for Dis- during the present year. It is hoped that all members will bring short f any cases they may have, especially in reference to the nature and posi- the valvular murmurs when they first came under observation. Mr. A. G. and Dr. John Ormsby: Cystic Omental, Simulating Ovarian Disease; tomy, Drainage, and Result. Dr. T. Eastes: Three Cases of Visceral Ab- The readers of papers are requested to bring with them brief summaries ertion in the Minutes and Journal.—W. J. TYSON, Honorary District ry, 10, Langhorne Gardens, Folkestone.

H-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint g of the above districts will be held at the Grand Hotel, Brighton, on sday, March 24th. Mr. Hodgson will preside. Meeting at 3.30 P.M. at 5.30 P.M.; charge, 6s., exclusive of wine. Communications: Dr. Edgar hank: On Micro-organisms and Disease (with specimens, etc.). Dr. On the Management of Incomplete Abortion. Dr. Mackey: A case of a (with remarks). Dr. Ewart: Two Cases; 1. Hæmaturia; 2. Simulating rm of Measles.—T. JENNER VERRALL, Honorary Secretary.

H-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting will be the Red Lion Hotel, Dorking, on Thursday, March 25th, at 3.30 P.M. A. n Brock, Esq., of Dorking, in the chair. Business: To consider a com- tion received from the President of the East Anglian Branch (Essex Dis- elative to the formation of a Medical Defence Fund in connection with the Medical Association. The following papers have been promised. 1. Dr. oodhart. 2. Dr. T. F. Pearse: The Period of Incubation and the Duration tion of the Principal Zymotic Diseases. 3. Dr. John Watters: On Pur- 4. Mr. W. A. Berridge: A Case of Cystitis; Notes of an Easy Method of g Out the Bladder.—A. ARTHUR NAPPER, Honorary Secretary, Broad Oak, gh, Surrey.

T AND BRISTOL BRANCH.—The fourth ordinary meeting of the session will l at the Museum and Library, Bristol, on Wednesday evening, March 24th, past seven o'clock; E. C. Board, Esq., President. The Council will present eport upon "Medical Advertising." The following communications are d. 1. On Pelvic Abscess, founded on One Hundred Cases: A. E. Aust ce, M.D. 2. A case of Intussusception: C. Elliott, M.D. 3. On Endo- s: W. J. Tivy. 4. The Localisation of a Cerebral Lesion: H. WALDO, 5. The Removal of Tumours of the Bladder, with Cases: J. Greig Smith, E. MARKHAM SKERRITT and R. J. H. SCOTT, Honorary Secretaries, Clifton.

ER COUNTIES BRANCH.—The spring meeting will be held at the Com- Hotel, Dumfries, on Friday, April 9th. The chair will be taken by the nt at 3 P.M. Dr. Thomson, of Dumfries, will introduce a discussion on urgery. Dr. Campbell Garland will read notes of Four Abdominal f interest. Dr. Eaton (Cleator Moor) will read Illustrations of the Origin ain Zymotic Diseases in an isolated house. Intimations of papers and ens should be sent to the undersigned. Dinner at the hotel, 5s. a head, .—HENRY A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

UTH-EASTERN BRANCH: EAST SURREY DISTRICT.

ETING of this district was held at the Queen's Hotel, Upper ood, on Thursday, March 11th, at 4 P.M.; H. G. PLIMMER, Esq., er Norwood, in the chair.

etary.—The Honorary Secretary, Dr. J. H. Stowers, having ed after six years of service, several members testified to the sal regret felt at losing so valuable an officer, under whose gement the district meetings had been most successfully con-

neral vote of thanks was given to Dr. Stowers.

COLES, of Croydon, proposed, and Dr. HOLMAN, of Reigate, ed, a resolution that Dr. P. T. Duncan, of Croydon, be elected ary Secretary; which resolution was carried unanimously.

ers.—The following papers were read:—

Dr. William Duncan read a paper "On the Commoner Accidents ing Parturition; their Immediate and Remote Effects and their ment." This included lacerations of the cervix, vagina, and um, and *post partum* hæmorrhage, and was followed by an ani- discussion.

Dr. Buckston Browne read a paper "On the Treatment of Prostatic ion of Urine," drawing attention to the subject of "urethral " as a cause of fever and suppression of urine, and to the neces- r careful use of the catheter and antiseptic irrigation of the r. Mr. Browne showed several specimens of catheters, and his elicited considerable discussion.

Paris Academy gives yearly the Vernois prize of 800 francs for the best work on Hygiene.

ITARY INSTITUTE OF GREAT BRITAIN.—The Autumn Con- nd Health Exhibition of this institute will be held in the city k in September next.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Syphilis transmitted by an Eustachian Catheter.—Rheumatic Nodules.—The Properties of Hydrofluoric Acid.—Absinthine as a Tonic.—Aphonia after administering Morphine.—Manure-heaps and their relation with Diphtheria.—An Epidemic of Erysipelas.—Micro-organisms and Mineral Salts.—Protection from Phthisis.

A STRONG man, aged 58, consulted M. Lancereaux at the Pitié Hospital for an eruption which began to appear a month ago, and eventually invaded the limbs, trunk, and head. This eruption presented the characteristic features of syphilis. The occipital and submaxillary glands were congested. The patient did not present any indication of primary syphilis. He was deaf, and had consulted an aurist on September 13th. A catheter was then passed into the Eustachian tube; the operation was repeated, when the patient's nose bled. M. Lancereaux, remembering former cases of contagion under similar circumstances, immediately recognised the possibility of contamination from the bougie. Infection must have taken place the first time the bougie was passed. On the second occasion, there was probably a chancre, which explained the bleeding from the nose.

M. Guyot, at a recent meeting of the Société Médicale des Hôpitaux, showed a patient suffering from rheumatism. In the cellular tissue and in some muscles were small tumours, resembling gummata, but in reality rheumatic nodules. Specific treatment failed to have the slightest effect, but salicylate of sodium produced a decided improvement. The nodules, which then soon diminished, had developed rapidly. Rheumatic nodules are to be distinguished from gummata by their rapid evolution, by a slight redness of the skin, and by the violent pain which accompanies the first symptoms of their appearance. There is also another variety of tumour resembling gumma, which appear in syphilitic patients who are treated with iodide of potassium. They are generally seated beneath the skin; there is slight redness, also some pain; they disappear when the use of the iodide is discontinued.

In an article entitled Les Applications Nouvelles à la Thérapeutique, published in the *Journal de Médecine de Paris*, March 7th, it is stated that hydrofluoric acid is a powerful antiseptic and antifermentative. Its use in pulmonary tuberculosis, diphtheria, and for dressing bad wounds and sores, has been very beneficial. It has to be used with care, especially if the patient be liable to asthma, hæmoptysis, or emphysema. M. J. Bergeron finds that inhalations of this acid are of great service in treating diphtheria. M. Dujardin-Beaumetz has made careful investigations in a factory where this acid is used for engraving on glass, and has obtained data indicating that not only hydrofluoric vapours are not unhealthy, but that they have a favourable action on the workpeople who have pulmonary affections. In a series of experiments made by MM. Dujardin-Beaumetz and Chévie, it was observed that an infinitesimal quantity of this acid arrested fermentation.

Dr. Ferdinand Roux gives globules containing five centigrammes of the active principle of absinthine. He has observed that this substance increases a flagging appetite, and creates one when absent. It also removes constipation.

Dr. Trevelot, of Charleville, publishes in the March number of the *Journal de Médecine et Chirurgie*, a note on certain effects of morphine. A youth, aged 19, had several attacks of delirium tremens daily. Dr. Trevelot injected under his skin from 15 milligrammes to 2 centigrammes of morphine. After each injection, the patient became calmer, the limbs ceased to move and contract, but he was aphonic. This condition lasted for an hour, and reappeared after subsequent injections. The patient became insane, and is now under treatment in an asylum.

M. Ferraud, in an article published in the *Lyon Médical* for March, traces some relation between manure-heaps and epidemics of diphtheria, a disease more frequent in rural districts than in towns and cities. Statistics in Scotland and Prussia show that the rate of mortality from diphtheria is highest in rural districts. In Lyons, the outskirts and surrounding country suffer most. Manure-heaps do not exist in the urban districts, but are plentiful in the suburbs and adjacent country. These heaps consist of various obnoxious and infectious kinds of residue. Klebs, of Zurich, has observed the deadly influence of these manure-heaps. He states that diphtheria, on one occasion, appeared on the day following a general street-cleaning. It

may safely be concluded that the accumulation of dirt and refuse, known as manure-heaps, are formidable factors in the etiology of diseases among rural populations. M. Ferraud urges that the authorities in agricultural districts should enlighten the peasants on this subject. Manure should be kept in closed wells made of stone and glazed with bitumen, so constructed that all fluid filters away from the solid matter.

At the beginning of the year, erysipelas was very frequent in Switzerland, in the cantons of Vaud and Fribourg. During this epidemic of erysipelas, people disposed to contract the disease had several attacks. The immunity enjoyed by children was the more remarkable, because there were several among them attacked with scrofula, ophthalmia, rhinitis, and the sequelæ of whooping-cough. Yet there was not a single case of erysipelas coexistent with vaccination. During the epidemic, it was observed that paronychia was prevalent, especially in the houses where erysipelas appeared. Puerperal fever also prevailed.

At a recent meeting of the Biological Society, M. Galippe stated that the existing theories for explaining the formation of crystals in the economy do not appear to him satisfactory. The probability that micro-organisms have some influence on the formation of these salts presented itself to his mind. M. Galippe began his researches by studying the dental tartar. The author has already arrived at important results, which he has made known to the Biological Society. The dental tartar always contains micro-organisms. These germs were sown and cultivated; the result was always identical. M. Galippe concludes that probably these micro-organisms are factors in the formation of dental tartar. The same phenomena doubtless operate in the formation of salivary calculi. In the centre of these calculi there is always some foreign body, such as a hair or a fish-bone. M. Galippe does not believe that the foreign body is a centre of crystallisation, but that micro-organisms are carried along with it into the salivary canal; there, by a chemical action, they become agents in the formation of a deposit of mineral salt. M. Galippe also met with micro-organisms in biliary and vesical calculi. M. Brown-Séquard asked M. Galippe why he considered these micro-organisms to be factors in the formation of the calculi, rather than supposing them to be simply imbedded. M. Galippe replied that it had been ascertained some time since that micro-organisms have a chemical action. It is by their influence that nitrogen is fixed in the earth. There are other micro-organisms which change sulphates into sulphides. M. Laborde asked if these micro-organisms had been found living. M. Galippe replied that he had produced artificial cultivations.

The Conseil d'Hygiène et de Salubrité at the last meeting adopted the following decisions. As the sputum of tuberculous patients contains the most active agent of transmission of tuberculosis, it ought not to be thrown on the floor or ground, nor allowed to cling to linen. Patients should use spittoons containing sawdust, which should be emptied at least once a day, and washed with boiling water. The sawdust should be burnt in the fire. These rules should be rigorously observed in schools, workshops, barracks, and hospitals. When a hired room has been inhabited a long time by a phthisical patient, it should be disinfected, more especially if death occur. The room, bed, and bedding should be disinfected by sulphur, according to preceding directions issued by the Conseil. The clothes of phthisical patients should not be used, until they have been washed and disinfected by overheated steam.

UNITED STATES.

[FROM A CORRESPONDENT.]

Illegal Practitioners in the United States.—Cucaine in Nymphomania.—Posterior Spinal Sclerosis.—Hysteria in a Male.—Oxalate of Cerium as a Gastric Sedative.—Anasarca of Malarial Origin.—Chaulmoogra Oil in Eczema.—Dangers of Corrosive Sublimate Dressings.—Craving for Lime.—Peculiarities of Malaria in Children.—Aniline Oil as a Local Anæsthetic.—A Rebellious Corn.—Electrode Coverings.

THE time was, not very long ago, when Philadelphia had a very bad reputation from a medical standpoint, there being many worthless colleges, issuing bogus diplomas; at last the public, usually very lethargic on such subjects, became sensible of this iniquitous practice, and Buchanan's and Payn's diploma-mills were suppressed. Since that time this city, in common with nearly all the other cities of the country, has been infested with a horde of irregular practitioners who have been preying on the public. Nearly all of our States have laws very similar in their essential points to that of Pennsylvania, which provides that, in order that a man may be legally qualified to pr medicine, he must register his name with the Prothonotary Court in the county in which he proposes to practise. That he be eligible for registration, he must either possess a diploma fr regularly chartered medical college, or he must make an affidavi he has been in the continuous practice of medicine for ten years vious to the passage of the Act. This Act was passed in 1881, until very recently, no effort has been made to enforce it in this though in other States, notably in Illinois and New York, many secutions have been made under the law. About one year ago "Committee on Hygiene and the Relations of the Profession t Public" of the Philadelphia County Medical Society determin organise a crusade against "irregulars." Public indifferenc popular sympathy were serious obstacles in their way, but, a delay of nearly a year, they succeeded with their first case; an the time this letter reaches you, they will have arrested and menced proceedings against two more "irregulars." They me push ahead; and, at a recent crowded meeting of the Society, were promised ample moral and financial support, so that, in a time, Philadelphia will be relieved of the stigma that has bee tached to her fair professional fame, of being a harbour and refu illegal and irregular practitioners.

Professor Parvin has been recently exhibiting to his class, a Jeafferson Medical College, a case of pronounced nymphomania masturbation, where the most satisfactory results have followe application of a solution of cucaine to the clitoris and vagina; is the first case, Dr. Parvin thinks, where this drug has be used.

Professor Da Costa alleges that he has seen marked improveme posterior spinal sclerosis from the long-continued use of the follo formula. ℞ Hydrarg. bichlor. gr.ss, ammonii chlorid. gr.xl, aqu. M. One teaspoonful one hour after meals.

Dr. Eastman, of Mississippi, relates an interesting case of hys in a man who had not spoken above a whisper for two years, and simulated a variety of diseases. Dr. Eastman gave him a s "tongue-lashing," under the influence of which he became very frightened, and admitted the imposture.

Dr. W. R. Chittick, of Michigan, calls attention to the great of oxalate of cerium as a gastric sedative. He thinks it is superi either bismuth, hydrocyanic acid, bicarbonate of soda, or calo but it must be given in larger doses than is usually set dow books. He generally orders from ten to twenty grains every three, or four hours, until relief is obtained.

Dr. Joseph Mullone, of Indiana, has had most excellent resul severe anasarca, of malarial origin, from the use of the follo ℞ Compound spirits of juniper Oj, sulphate of iron ℥ii, aceta potassium ℥ss, fluid extract of digitalis ℥ij, syrup of squills ℥ss. One tablespoonful thrice daily. In severe cases, the patient drink also a cold infusion of elder-root.

Dr. W. L. Chew, of Louisiana, reports a case of chronic univ squamous eczema, cured by chaulmoogra oil, that has resiste other remedies. It was used in the form of an ointment. ℞ Cl moogra oil ℥ij, glycerine ℥iv. M. To be rubbed over the body limbs, and the cold shower-bath applied three or four times a day

That the use of corrosive sublimate as an antiseptic dressing i without risk, several published cases testify; and now Dr. H. Ke of New York, adds another case to the list. After the removal o uterus, the vagina was washed out with a 1 to 4,000 solution of rosive sublimate, which had also been used during the operation. the second day, there were diarrhœa and tenesmus, bloody stool small pulse of 156, great thirst, and restlessness. The patient pa bloody urine containing hyaline, granular, and epithelial casts, renal epithelium; the day after, she died. Dr. Keller thinks corrosive sublimate should never be used as a disinfectant in cach or anæmic individuals, or in those suffering from renal disease.

Dr. Darby, of Pennsylvania, relates the case of a child who afflicted with rickets, and could not walk. It craved lime so m that it would eat plaster off the wall. Lacto-phosphate of lime given, and the child stopped eating plaster, and improved.

Dr. J. P. Kingsley, of Missouri, thus sums up the peculiaritie malaria in children: the absence of the chill and sweating st the slight periodic fever, which may be detected by the thermon only; the frequent or periodic pains in the head or epigastric reg indigestion, accompanied with nausea, vomiting, or diarrhœa; the quent accompaniment of tonsillitis, pharyngitis, or bronchitis; periodicity of the coughing spells, which occur most frequentl night; the necessity of examining the spleen by palpation and cussion; and of giving quinine to confirm diagnosis in doubtful c

Dr. Govan, of New York, states that he has successfully used an

a local anæsthetic, when laying open whitlows, and performing minor operations. There was no pain, even when cutting down bone, if the finger had first been dipped for a short time into

R. C. Newton, of the United States Army, relates the history of lious corn, for the relief of which he unavailingly tried a host edies; finally, he had resort to liquor potassæ, as recommended chsen, and, after applying it twice a day for four months, the isappeared.

Massey, of Philadelphia, suggests the use of absorbent cotton ubstitute for the sponge covers ordinarily employed in rheophore or points. The cotton is easily applied; it holds enough re to conduct properly; it is clean, and cannot convey disease ne to another.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

al Finance.—The Ophthalmic Institution.—Philosophical ty.—Students' Union.—The Value of the Smoke Test.—City tality.

who are interested in the matter of hospital finance, will find deal of information as to the means of support of the medical es of Scotland, in a paper that has recently appeared in the f a local newspaper, and has also been reprinted for general ution. The author is a strong supporter of the voluntary of hospital maintenance against the plan of imposing a tax; and, to illustrate his views, he applies the working of the lan to our Glasgow Royal and Western Infirmaries, and makes ery good case in favour of retaining the old system of voluntary utions. I think, too, that his suggestions as to an improved l of collecting subscriptions, and his hints as to how new ls of income might be opened up, are well worth attention, but rry to see such strong expressions of approval of the system of ing patients by subscriber's letter. It is essentially a bad plan, ould be done away with. A person's recommendation for ad- n should be his state of health, and his suitability for in-door ent. The present arrangement is an unfair tax on the revenues charity.

report read this week at the meeting of the supporters of the w Ophthalmic Institution is a very good illustration of what a hospital can accomplish with care and economy under the ary system. In this period of commercial depression, the excess of expenditure over income (amounting to £120) was met by drawing on the balance brought forward from more rous years, and the charity is at present quite free from debt, s a reserve in hand. A very striking feature about the in- , that about two-thirds of it is derived from the contributions working-classes. This is as it should be, and it would be satis- if more of our charities could say the same. The out-patients ar at the ophthalmic institution numbered 2,900, and the ents 380, while the total cost of the maintenance of the charity out £1,200.

he Philosophical and Medico-Chirurgical Societies, Dr. Barr d papers embodying the results of his inquiries into the effects sounds on the organ of hearing, in the case of boiler-makers lers who work among noisy surroundings. The facts he has t out are only what might be expected from continuous noise n a delicate structure like the human ear; but the extent to which ve hearing proceeds under these abnormal conditions is brought re fully, when we learn that the hearing-power of boiler-makers about 9¾ per cent., as compared with the normal standard of . Dr. Barr's graphic description of the influences that bring his state of matters in the case of the "holders-on," or men rk inside of boilers, readily explains this unfortunate result of anced industrial civilisation. Dr. Barr suggests as a remedy venting this defective hearing, the wearing of an India-rubber cushion or plug. At present, I am sorry our workmen are ring to dulness in trade, suffering from any plethora of the f which Dr. Barr writes; but they should not neglect the very te advice he offers them.

le same meeting of the Philosophical Society, Dr. Glaister gave account of some Australian aborigines, who are being exhibited w in Glasgow. After describing the differences in physical ers between them and more highly civilised races, he found o describe shortly some of their peculiar laws, especially as marriage, these latter being so framed as to prevent too close rriages among individual members of the tribe.

The election of members to serve on the Student's Representative Council took place last week. Some difference of opinion exists as to the site on which the proposed Union should stand, the University authorities being anxious that it should be built on ground near the University and the property of the College, while a section of the students think that it would serve its purpose better if more centrally placed in the city itself. I do not know if there has been any effort made to test the opinion of the general body of the students on the matter, but the University authorities are already taking steps to ascertain if the vacant portion of ground close to the Professors' houses, and bordering on the University avenue, could not be made available for the erection of the new building.

Our local museum at Kelvingrove Park is to be shortly enriched by the addition of a "mummy rat," whose history is of some interest in connection with house-sanitation, and the value of the smoke-test for drains. Some time ago, an outbreak of typhus fever took place in one of the Glasgow Industrial Schools, nearly sixty cases being removed to the hospital at Belvedere. Government ordered an inquiry into the sanitary condition of the school. This was undertaken by our local authorities, and the application of the smoke-test led to the discovery of a large rat, "reduced by length of time to the form of a mummy," firmly embedded in a hole in a lead soil-pipe inside the building. Owing to there being no trap in the connection between the sewer and the drain at the bottom of the building, the animal simply walked in, dived through the U-trap, descended the lead soil-pipe, and, having eaten a hole through it, gave entrance to the foul gases of the sewer. These had been for some time making their way into the sleeping apartments of the school, and no doubt caused that condition of low health among the inmates, which culminated in the attack of typhus fever, which spread so rapidly, about seventy children suffering from it.

The death-rate for the fortnight ending February 27th was 28 per 1,000. The slight excess of deaths this year from diseases of the lungs, as compared with last year, is met by a very low mortality from infectious diseases. There is just now considerable freedom from this class of cases, as shown by the hospital returns from Belvedere, where there are only 176 cases, as compared with 328 at the corresponding period of last year.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications, chiefly by reason of their unnecessary length.

POSTGRADUATE COURSE FOR MEDICAL MEN IN LONDON.

Sir,—I feel bound to add my testimony to the usefulness and necessity of your correspondent's ("I.V.R.C.") plan of a post-graduate course, particularly for medical practitioners in the country. I am sure there are numbers of men who, since they first qualified, have never had a chance of having a good "rub up" in the various branches of our calling, and who have only a very imperfect idea or knowledge of the numberless improvements and advances in scientific medicine and surgery, that have taken place during the past few years especially. If a class of qualified men could be formed twice yearly in London, such would be a great boon to a number of men earnestly seeking after knowledge, and wishing to keep themselves abreast of scientific improvements and discoveries, and also a manifest advantage to the sick confided to their care in their different spheres of work. I do not, however, agree with your correspondent, that the collateral branches of our calling should be prominently taken up by the class, such as higher physiology, chemistry, sanitary matters, etc.; such would take up too much time to be embraced in a limited course, and, moreover, can be studied at home. I think the course should embrace simply medicine, surgery (with special attention to diseases of women and children, and operative midwifery), and practical pharmacy.

I believe there are few men in country practice who would not be benefitted by such a course of special teaching, and very few who would be ashamed to acknowledge it. Postgraduate classes are regularly held in Berlin and other continental cities. Trusting they may become so in London, I am, sir, yours faithfully,

Bedfordshire. F.R.C.S.I.

SIR,—I fully concur with your correspondent "I. V. R. C.," respecting the urgent necessity for a postgraduate course for medical men, as proposed in his letter appearing in the JOURNAL of the 6th inst. But I feel it due to myself to invite the attention of your correspondent, and that of your numerous readers, to an article signed by myself which appeared in the *Student's Journal and Hospital Gazette* of April 5th, 1884, in which I suggested and warmly advocated the establishment of a Postgraduate Medical School. I feel confident that "I. V. R. C." cannot feel in the least aggrieved at my claiming the originality of this idea; the dates speak for themselves. For my part, I feel gratified to find my views thus endorsed by the opinion of another, formed, I have not the least doubt, entirely *suâ sponte;* but on one point I emphatically differ from him, as reference to my above-named article will show.

In the same, I said that advanced students who wish to perfect themselves in certain branches of professional knowledge, or practitioners who wish "to keep pace with the new theories or discoveries of the day, would be thankful for the existence of some school of medicine similar to the Polyclinic and Postgraduate Medical Colleges at New York, where none enter but men who have gone through their curriculum, and who are thus enabled to study specialties without having to wander from pillar to post, as is still the case here." I venture to submit that a *special* institution, *exclusively* devoted to this higher department of medical tuition, would prove a far more eligible and practicable *modus operandi* than "I. V. R. C.'s" plan of relying entirely on being able to carry it out on sufferance in the wards of the various existing London hospitals. Of course, their co-operation might prove of immense auxillary service to such a scheme; but it is plain that a "Polyclinic," as a teaching centre, is vital to its ultimate success.

I avail myself of this opportunity for ventilating another suggestion of my own, the establishment of a Joint Medical Club, exclusively restricted to actual Medical Practitioners or qualified men, and to advanced students awaiting qualification. With respect to its details of organisation, interior economy, &c., I beg to refer to the *Student's Journal and Hospital Gazette* of this week. I venture to add the further suggestion, that such an institution might prove a most valuable adjunct to a Postgraduate College.—I remain, Sir, yours sincerely, J. BRINDLEY JAMES, M.R.C.S.Eng.

SINGLE LUNATIC PATIENTS.

SIR,—Will you permit me to endorse every word of Mr. East's letter, as to the very mischievous clause respecting single lunatic patients in the Lord Chancellor's Bill?

That it should be contemplated for one moment that legally there should be no means of treating those whose malady renders them unfit to be at home, but by consignment to an asylum, is most monstrous. Very many can be, and are, most happily and efficiently treated in private.

For the sake of their friends and themselves, it is often necessary that patients should be removed from home; many, again, have no friends able or willing properly to take care of them; but that in either case, therefore, they must be in an asylum, by no means follows. Certainly, ensure that the treatment be proper; insist, for instance, that the home to which the patient is sent, its members and surroundings generally, be not such as shall shock his susceptibilities; that due precaution can be, and is made for his safety, and for outdoor exercise; and give the Commissioners power to order his transfer to an asylum if they deem it necessary; but do not make "single case" illegal.

This concerns so intimately the profession, and, even more, the public, that I cannot but feel that a special meeting of the Association should be convened to consider it, and to petition Parliament, if the recommendations of the Committee seem not to be regarded by the Lords, next week.—I am, sir, your obedient servant,

Brooke House, Upper Clapton. J. O. ADAMS.

THE DISINFECTION OF PHTHISICAL SPUTUM.

SIR,—In the paper of Dr. Handford on "The Disinfection of Phthisical Sputum" in the BRITISH MEDICAL JOURNAL of March 6th, the following remarks occur: "Attempts have been made to destroy the tubercle-bacilli in the lungs by the inhalation of antiseptic vapours and atomised fluids. For this purpose, creasote, iodine, carbolic acid, eucalyptus oil, sanitas, etc., have been used; but Dr. Hassall (*The Inhalation-Treatment of Diseases of the Organs of Respiration, including Consumption*) has shown that the quantity of the antiseptic that enters the lung is so infinitesimal as to be quite incapable of destroying the tubercle-bacilli, much less their spores. This applies not only to the oro nasal inhalers, but also to the method of inhalation by the vapour of hot water, and to the inhalation of fl atomised by the steam-jet."

These remarks convey but a very imperfect idea of what may accomplished in the way of introducing medicaments into the lu by inhalation. By means of some of the simple forms of appar described by me in my work on Inhalation, a great variety of med ments may be introduced into the lungs in almost any quantity sired, and to a greater extent, indeed, in some cases than would either prudent or safe. The same object may likewise be accomplis in a most satisfactory manner, by means of the inhaler recently scribed and figured by me.

Trusting that you will find room for this necessary addition to Handford's remarks, I remain, your obedient servant,

San Remo. ARTHUR H. HASSALL, M.I

SMOKE-ABATEMENT.

SIR,—With reference to the article appearing in your issu February 15th, may I be allowed to say that, while fully conf ing the correctness of your observations upon Mr. Teale's lecture at Royal Institution, I think it might well be added that there general impression that a very large proportion—sometimes state be as high as nine-tenths—of the heat generated by the combustio coal in open domestic firegrates, goes up the chimney and is This conclusion is natural, when one regards the volume of flame smoke that intermittently rise from the fire, and disappear in chimney. But it is overlooked that a large proportion of the generated is delivered by direct radiation from the fire into the ap ment; and it follows, of course, that the maximum positive loss convection in the products of combustion which are passed up chimney, is limited by the remainder of heat not radiated.

So far from any such proportion as 90 per cent. of heat lost by chimney, it was demonstrated by the results of the extensive serie tests, instituted by the Smoke Abatement Committee, that the portion of the total heat of combustion of the fuel exported thro the chimney did not exceed 43 per cent., or less than one-half of hypothetical loss.

But it does not follow that this 43 per cent. of heat is wasted. it is serviceable in effecting the ventilation of the apartment; a fr tion which can only be properly maintained, taking chimneys as t are, by supporting a temperature in the chimney higher than temperature in the apartment; and there can hardly be a sim mode of effecting the circulation than by mixing the air of the r with the gaseous products as they rise from the fire, giving passag the mixed current of the chimney. Warming and ventilation m or ought, to be effected simultaneously, and this can only be done suitably distributing the heat. By the smoke-abatement tests, it proved that the ascending gaseous products carried with them thirt times their own volume of air.

Reverting to the radiation of heat into the room, it is much m active coming from a bright fire than from a subdued slow-burn fire. It is known that the radiation of heat increases in an exc ingly high ratio with the temperature of the radiating body. He is a powerful argument for a brightly burning fire. In a sl combustion grate, having a solid bottom, the rate of combustion slower than in a grate having an open bottom-grid; and, so fa comparison could be carried between stoves of different design detail, it was not found that close-bottomed and comparatively combustion grates, taken generally, were more efficient than grid-bottom grates; while, as smoke-preventers, they were decide less effective.

The results of the tests made, under the auspices of the Sm Abatement Institution, by me, at the International Health Exhibit 1884, confirm the results of those previously conducted for the Sm Abatement Committee. Mr. Pridgin Teale's grate was one of t tested; but he did not attend at the test, although invited. results of the test were not better than those of some other grate I am, etc, D. K. CLARK,

Testing Engineer to the National Smoke Abatement Institution

VACCINATION.—The Local Government Board have awarded to T. Palmer Stephens, of Emsworth, Hants, as Public Vaccinator the No. 1 District of the Westbourne Union, a grant of £7 16s. efficient vaccination; also, as Public Vaccinator for the No. 3 Dist of the Havant Union, a grant of £4 12s., both for the sixth time succession. The Guardians of the Havant Union have voted Mr. Palmer Stephens a cheque for £20 and their thanks, for his ex services and attention to the poor during the epidemic of enteric fe at Emsworth, during the autumn of 1885.

MEDICO-LEGAL AND MEDICO-ETHICAL.

LIBEL BY LUNACY CERTIFICATE.

ıe Court of Appeal, lately, before Lord Esher, Master of the . and Lords Justices Lindley and Lopes, the appeal in the of Cave *v.* Torre was heard. This was an action brought by rgyman against his brother-in-law, to recover damages for nd false imprisonment. The libel complained of was a state- made by the defendant that the plaintiff was of unsound mind, ıe statement was made in an order signed by him for the re- of the plaintiff to a lunatic asylum. The alleged false impri- nt related to the same matter. The defendant alleged that at me in question the plaintiff was of unsound mind, and, besides ng the justification, further set up that he had reasonable and ble cause for believing and did believe that the plaintiff was a of unsound mind, and a proper person to be taken charge of etained under care and treatment, and that the statement was without malice and in accordance with the statutes relating to atter. Mr. Justice Field ordered the defendant "within seven o deliver to the plaintiff particulars in writing, with dates, of the able and probable cause referred to in the statement of defence," hat in default the paragraph be struck out. On appeal, the onal Court were divided in opinion, Mr. Justice Stephen being irming the order, and Mr. Justice Grove being for reversing it, efusing to direct particulars to be given. The order of Mr. ıe Field therefore stood. The defendant appealed. Mr. R. G. appeared for the appellant; and Mr. Boxall appeared for the iff in support of the order for particulars. The Court allowed peal. The Master of the Rolls said that if the plaintiff had any round of complaint it was that his liberty had been interfered But he added a foolish claim in respect of a libel. To that the lant put in a plea incorrect in form, and which contained imma- allegations. As to the claim for false imprisonment, the only ication for putting the plaintiff into confinement was that he was atic, and that it was right and proper that he should be placed charge and treatment. That was the defence, and the defendant justify on that ground, and it was immaterial whether he had able and probable cause for thinking that the plaintiff was a c. Particulars could not be directed to be given, as it would be ng particulars to be given of the evidence to support the above pecific facts. Then as to the alleged libel, the defendant said that true. If the libel were general, particulars might be ordered; he justification here consisted in one fact—namely, that the iff was a lunatic. The allegation of reasonable and pro- cause was an immaterial allegation, and it was a good r to an application for particulars to say that the plaintiff t have particulars of something which the defendant was not to prove. The matter of reasonable and probable cause was rt of the case. The case also came within the doctrine laid down e Court of Appeal in "Lord Salisbury *v.* Nugent" (L. R. 9, , 23), where particulars of undue influence in a probate action refused, and in "Hankinson *v.* Barningham" (L. R., 9 P. D., 62), particulars of an allegation of unsound mind were refused in a te action. The appeal must be allowed, and the plaintiff must ıe costs here and below, the costs to be the defendant's costs in vent. The Lord Justices concurred, holding that the aver- of reasonable and probable cause was an immaterial aver- and, therefore, no particulars in respect to it ought to be d.

ATH *v.* THE NORTH-EASTERN RAILWAY COMPANY.

peal from a decision of the Court of Appeal, reversing a judgment e Queen's Bench Division, by which the verdict for the re- ents was set aside, and a new trial ordered, was heard in the of Lords before the Lord Chancellor, Lord Watson, Lord Bram- and Lord Fitzgerald, on March 12th and 15th.

present action was brought by the appellant, who is a doctor of ine and surgery of the University of Heidelberg, and a licentiate Apothecaries' Company of London, practising in Sunderland, st the North-Eastern Railway Company, to recover damages for leged malicious prosecution. The matter arose out of a claim rward by one Michael M'Mann, a general dealer in Sunderland, pect of personal injuries which he alleged he had sustained in an nt which occurred on the respondents' line of railway on Sep- r 10th, 1880. The claim of M'Mann was settled by the respon- paying him the sum of £725 and £300 costs.

lgment was affirmed, and appeal dismissed with costs.

NOMINATION OF MEDICAL MEN AS OVERSEERS.

SIR,—Having retired from practice, still residing in the same village, I have been put upon the list and nominated for overseer. I protested against it last year; this year, when the day of nomination came, I made up my mind to attend, and to my astonishment, I found that my name was first on the list for the year. I objected, and was informed by the assistant overseer that, if I was not in practice, I was eligible, and should have to serve if elected. I was referred to an overseer's manual, which confirmed what he stated. I see that barristers not practising are liable, but this I think must be an error about medical men, or the Section 35 of the Medical Act of 1858 is useless. I shall be glad of your opinion.—I am, yours faithfully,

AN M.R.C.S.ENG. AND L.S.A.LOND. OF THIRTY YEARS' STANDING.

P.S.—It was Owen's *Manual for Overseers*, published 1875 or 1878, he referred to.

*** The words of Section 35 of the Medical Act, 1858, are clear, and exempt all persons who are registered, if they choose to claim their exemption. The assistant overseer probably had in his mind the Statute, 18 Geo. II, c. 15, s. 10, freemen of the Company and Corporation of Surgeons, "so long as they are in practice, no longer." But the Medical Act, being later, must be taken to have superseded that provision.

MEDICAL ETHICS IN JAMAICA.

SIR,—A is a resident medical officer in a certain country district, B. holds a similar position in an adjoining district. A. has attended C.'s wife in illnesses consequent on pregnancy several times, and has been the medical attendant on C. and his family. B. is engaged for the *accouchement*. A. is not informed of the arrangement either by B. or C. B. was quite aware of A.'s attendance. Should B. have accepted the engagement without communicating with A.? B. is resident nineteen miles from C. You will greatly oblige by stating the procedure B. should have adopted when requested to attend.—Yours truly,

Jamaica. L.M.Glas. and Edin.

*** In responding to our correspondent's request, we may remark that, although "B. and C.," in acting as they did, were, strictly speaking, within their right, and, it may be, within the letter of medico-ethical law, they nevertheless failed to carry out its true spirit.

Assuming, moreover, that there was no just or reasonable cause for C. to discontinue A.'s professional services, B., before accepting the obstetric engagement, would have acted wisely, and in the true spirit of professional brotherhood, in suggesting to C. the advisability of retaining the services of her old medical attendant in her approaching *accouchement*, and, at the same time, have courteously apprised A. of the request made to him by C.

DISPOSAL OF DEAD BODIES OF CHILDREN.

R. LATIMER GREENE.—Your three questions may all be included in a single answer. The decision of the judge appears to us to be absolutely wrong. If wrapping the body of an infant in an apron, and placing the bundle in a drawer out of sight, do not constitute a secret disposition of it, we are at a loss to know how to describe it. The judge appears to have disbelieved the mother's evidence; but, on the assumption that she knew all about it, the mother ought to have been also put into the dock charged with the offence of concealment of birth. Sect. 60 of 24 and 25 Vict., cap. 100, seems very explicit on this point. It runs: "If any woman shall be delivered of a child, *every person* who shall by any secret disposition of the dead body of the said child, whether such child died before, at, or after its birth, endeavour to conceal the birth thereof, shall be guilty of a misdemeanour . . ." The italics are our own. The decision will, no doubt, bear much fruit in increasing the already existing difficulties in the detection of child murder.

UNQUALIFIED ASSISTANTS.

SIR,—Kindly allow me a few lines to reply to some of the strictures *re* the above subject which have appeared in your issues of February 27th and March 6th. Mr. Alfred Smart says: "Dr. Gisburn was resident, and his name was on the plate; whereas, in Mr. Allbutt's case, the name of Mr. Bowell was on the door." Now Mr. Bowell always lived away from Dr. Gisburn's house, and resided in his own house, on which was the same plate, with his name only on it, not his employer's name. Dr. Gisburn was so often incapable of work, that Mr. Bowell was oftener employed and was better known than Dr. Gisburn. Mr. Bowell, too, was thoroughly respected by all the consultants of Leeds as a man of honour and integrity. In fact, when Dr. Gisburn died, Mrs. Gisburn consulted a member of the Council of the British Medical Association, as to the value of the practice which she was offering for sale. He said: "£1,000 if Bowell goes along with it, nothing without." One of the hospital surgeons also advised Mr. Bowell to buy his employer's practice, and get a medical gentleman to act as partner. This latter advice, however, has not been acted upon. Mr. Bowell is my assistant at a good salary, and the practice is mine.

I may inform Dr. J. P. Wills that no one regards Mr. Bowell as a properly qualified medical man. He is well known to be unqualified, but as he is respected, people employ him, knowing that he is only acting for me.

"J. B. F." is mistaken if he think we keep a shop for "cheap doctoring." If he think the Hunslet fees at 3s. 6d. per visit, with medicine, "cheap," I hope that he can live out of his cheaper fees of 1s. 6d. and 2s. 6d. I can assure him we have in Leeds M.D.'s and F.R.C.S.'s who boast of being "cheaper" than others.

With regard to "T. A. C.," I may tell him that all my remarks as to "first-class practices" and "students unqualified" in Leeds are true. I can give the names, if necessary. Let me also tell him that so many dirty tricks have been played by qualified assistants in getting hold of their master's practices by mean and underhand ways, that few medical men will care to entrust their practices to qualified men until a higher code of honour prevails among qualified assistants. I am severe here in my remarks; but, unfortunately, I am true. There are men of honour (qualified assistants), and there are men who hold high degrees in medicine and surgery who are "sharpers." If we can get the men of honour, well and good; they are worth any salary; but if we get educated and qualified rogues into our practices and homes, woe betide us.

I am astonished no Leeds medical man has taken up the cudgels in defence

of his poor maligned brothers of the town. Why not? It is because my shots have hit the mark, the cap fits. No, sir, the whole affair has been got up by envious men, little thinking that their victim could both bark and bite. I leave such now to defend themselves, merely informing them that those dishonest patients who have been influenced by them not to pay me because Mr. Bowell attended them, will ere long seek some dodge to evade payment even when attended by qualified men themselves. In justice, I ask the insertion of this letter.—I am, sir, yours, etc, H. ARTHUR ALLBUTT, M.R.C.P.E.
24, Park Square, Leeds.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 18th, 1886.

LUNACY ACTS AMENDMENT BILL.

ON the motion for going into Committee on this Bill, the Earl of SELBORNE urged upon their lordships the necessity of taking care to avoid doing anything which would interfere with the treatment of curable cases of lunacy, and, in reference to private asylums, supported the opinion of the late Lord Shaftesbury, that they should not be entirely abolished, for the reason that many persons sent patients to these houses who would not send them to public institutions. He objected to the 26th Clause, which declared that, after the passing of the Act, no one should be received into private asylums, and expressed some doubt as to whether, in the enormous public asylums of the country, the system of superintendence was not satisfactory. To a great extent, in these institutions, the servants and attendants had things pretty much in their own hands; in fact, he looked upon these large asylums as more for chronic cases, which could not be cured, than for those that could be cured. He pointed to the necessity of compensating owners of private institutions, whose businesses would be injuriously affected by the Bill, and whose interests in perpetuity would be converted into life-interests. In this matter, they should not move too hastily, and should not anticipate unduly the result of experiments yet untried.

The LORD CHANCELLOR declared that he had no desire to proceed in this matter either unjustly or rashly; but he was somewhat more penetrated than his noble and learned friend with the evils of the system under which it was possible for one person to detain another in confinement, having a direct pecuniary interest in doing so. He believed it lay at the real root of any reform in the lunacy laws that they should get rid of this system. When they once got rid of it, everything else was comparatively easy; and he had less confidence than his noble friend in the desirability of any other method of getting rid of the existing evils. He agreed that it would be impossible to suddenly interfere with the existing system and abolish it; the only difference between himself and his noble friend being as to the extent to which it might be necessary to wait, what should be done in the meantime, and what arrangements should be made. He informed their lordships that he had received innumerable letters on this subject, from people who had dealt with all sorts of questions, but he had not received a single communication from a member of the public complaining of the provisions in the Bill which would tend to the extinction of private asylums. Letters on the subject had come exclusively from those interested in private asylums. The arguments against this extinction, therefore, came from those who had an interest in the maintenance of these houses, and not from the public. He had great respect for the opinion of Lord Shaftesbury, but did not think they could make certain of the extinction of the asylums that his lordship would have liked to see extinguished, consistently with the life of those asylums he would have desired to see live. He (the Lord Chancellor) desired to introduce in the Bill provisions which would lead to the ultimate extinction of these private asylums, but was not wedded to the particular form of those provisions. If it were thought that they went too far, he should be ready to assent to their limitation; but they must provide later, if not sooner, for the ultimate extinction of these places. With regard to the clause to which his noble and learned friend had drawn attention, he had prepared an amendment to it, by which the license of a private asylum could, in the event of the death or resignation of the proprietor, be transferred for a certain number of years, to give time for accommodation to be afforded elsewhere for the patients. This would be done even in those cases where there could be no claim made for compensation. He had no objection to compensating vested interests, so long as that compensation was reasonable in extent; but he thought it would be better, instead of giving pecuniary compensation, to give power for the continuance of the asylums by transferees for such number of years as their lordships might think right. Of course, he should allow the vested interest in a private asylum to belong t person and his descendants for ever. The system he prop would leave an asylum to come to an end some day or other. would make the extinction more gradual than would the pre clauses of the Bill. With regard to the keeping of single patient would propose that power for such maintenance should be given Judge in Chambers.

Lord CRANBROOK pointed out that there was a certain sens shame or of reticence in having a relative in a weak state of m and yet this Bill provided for nothing but a public inquiry. If State were to take charge of every one who was of weak mind, how rich his relatives might be, and however able to keep him in pr custody, the State should provide the asylums and not call upon counties to do so. He certainly thought the expense of maintai these asylums should fall upon the State; moreover, he was of opi that society would suffer the greatest injury if the private asyl were abolished.

Lord GRIMTHORPE declared that there was not a scra evidence that anything wrong was done in the private asylu but, if the allegations on the subject were true, the m should be dealt with in the proper way—that was to say, by ha stricter supervision; he suggested that they should lop out objectionable clause, and then institute a proper inquiry into treatment in private asylums.

The Bishop of PETERBOROUGH held that the publicity which w attend admission to asylums would prevent many cures. They w also, in a public asylum, lose all that close individualisation and for each case which was of so much importance. If the rich and poor were put together, there would be a danger that the rich pa would absorb more care and attention than was given to the patient.

Lord ASHBOURNE considered the Bill a valuable one, and expre a hope that it would not be jeopardised by its provision for abo ing private asylums. He did not think the effect of this vision would be to benefit private patients. If the Bill were passe hoped the Government would take care that such clauses as suitable would be extended to Ireland.

After a few observations from EARL BEAUCHAMP,

The LORD CHANCELLOR stated that it was intended to exten Ireland any clause which might be applicable to that country.

Their lordships then went into committee on the Bill.

On the motion of the LORD CHANCELLOR, the following sections added after Clause 4 :—

1. A person who, before the commencement of this Act, has si or done any act with a view to sign an order for the reception person as a lunatic, or a medical certificate that a person is of sound mind; and a person who, in the manner required by this presents a petition for any such order, or signs or does any act a view to sign an urgency order, or any such medical certificat aforesaid, shall not be liable to any civil or criminal proceeding such person has acted in good faith, and with reasonable care.

2. If any proceedings are taken against any person for signin doing any act with a view to sign any such order or certificat presenting any such petition as in the preceding subsection n tioned, on the ground that such person did not act in good fait with reasonable care, such proceedings may, upon summary app tion to a judge of the High Court, be stayed if the judge is sati that there is no reasonable ground for alleging want of good fait reasonable care.

On the motion of the LORD CHANCELLOR, the clauses of a cor versial character, including Clause 22, Clause 26, and Clause 44 postponed. The Bill ultimately passed through Committee.

HOUSE OF COMMONS.—Tuesday, March 16, 1886.

Small-pox at Woodside.—In answer to Mr. HUNTER, Mr. TREVEL said: Three cases of small-pox have been reported to the Boar Supervision as having occurred at Woodside, at the works of Mes Pirie, where 2,000 workmen were employed. These patients h been working on various qualities of rags drawn from different sou A previous attack of small-pox in April, 1885, is not shown to h originated in Messrs. Pirie's works. The medical officer of the B of Supervision reports that the suspected rags came from England Scotland, and not from the Continent. I have recently approve an order issued by the Board of Supervision prohibiting the impo tion of rags from Spain for some months, and have received var recommendations as to the necessity of further legislation, which have my careful consideration.

al Act of 1858.—In answer to Dr. BALTHAZAR FOSTER, Sir YFAIR said: A Bill is being drafted, and I hope will shortly be ced, to amend the Medical Act of 1858. It will contain pro- to give direct representation to the medical profession on the Medical Council.

gious Diseases Acts.—Mr. STANSFELD, on rising to call atten- the Contagious Diseases Acts, 1866-1869, said that he intended a resolution to the effect that, in the opinion of the House, s ought to be repealed. Those Acts were passed in silence, and t say, even by stealth. Had it not been for the rapid way in hey were smuggled through Parliament, they never could have acted, and he was certain that if their nature had been known ountry at large it would have been impossible for any Govern- o have pressed them upon the House. He contended that delay in their abolition was impossible. The subject had been ed by a succession of inquiries, and it had been adjudged by Parliament and by the country at large. He now asked the rliament for a decisive and final conclusion at their hands. cts were objectionable on moral, on constitutional, and also on grounds, and he was exceedingly glad that public opinion ne round to that view. The Criminal Law Amendment Act an outcome of the movement, and that measure had already successful in a large degree in coping with criminal vice. In on, the right hon. gentleman said that when they had turned nds to the better and true belief that vice was capable of ion, and that law and government ought to be on the side of nd not on the side of vice, they would all be conscious of a lief, and of a sustaining and well grounded hope; and he be- hat a general raising of the moral health of the community the spirit of true manliness would abide with them, and be stification and reward.—Mr. CAMPBELL-BANNERMAN, speak- behalf of the Government, accepted the motion, but argued in favour of the necessity—which he admitted—being dealt local effort, and intimated that the Government would con- heir subventions to the local hospitals.—Sir J. KENNAWAY o add, at the end of the resolution, an amendment to the effect provision should be made for the continued maintenance of -accommodation for women voluntarily seeking admission.— EASE seconded the amendment; and, after some remarks from ESTON and Sir W. CROSSMAN, Lord G. HAMILTON pointed out ace the suspension of the Acts, disease had increased to an g extent, and hoped the Government would continue the main- of the hospitals.— Mr. GLADSTONE, however, opposed the ent, because he thought it would be better to leave the matter t was, without pledging the Government to any particular f action.—Sir M. HICKS-BEACH appealed to the Government o continue the maintenance of the hospitals, or to empower the horities to do so.—Mr. CAMPBELL-BANNERMAN said it was ntion of the Government to continue their subsidies to the spitals.—Mr. W. H. SMITH feared that the local authorities ecline to take over the hospitals so long as the Acts continued —Mr. MITCHELL HENRY and Mr. JOICEY also made some re- and, on a division, the amendment was negatived by 245 to the resolution was agreed to.

VAL AND MILITARY MEDICAL SERVICES.

y Assistant-Surgeon ANDREW HARVEY, of the 1st Volunteer Battalion e of Connaught's Light Infantry (late the 1st Cornwall Volunteers), has is commission, which bears date September 4th, 1864.

ES TOMLINS has been appointed Acting Surgeon to the 2nd Renfrewshire nteers.

JOHN FRASER, M.D., of the 3rd Volunteer Battalion of the South ire Regiment (formerly the 4th Stafford Volunteers), has been granted ary rank of Surgeon-Major.

itution of previous regulations on the subject, a warrant has recently d from the War Office which decrees that, if recommended by command- , a step of rank will be granted, while serving, to every surgeon who has fifteen years in the Army, Royal Navy, Royal Marines, or the Auxiliary ilitia, Volunteers, and Yeomanry Cavalry). Subject, also, to similar dations, a step of honorary rank (if not already granted) will be awarded s retiring after fifteen years' service.

M. ARCHER, M.B., has been appointed Acting-Surgeon to the 1st nd Carnarvonshire Artillery Volunteers.

Surgeon-General A. J. GREER has resigned the commission as Major, as held since June 27th, 1885, in the 1st Volunteer Battalion of the f Wales's Own Yorkshire Regiment (formerly the 1st North Riding of Volunteers).

NATION.—Mr. S. A. Jolly, of Puddletown, Dorset, has re- Government grant for successful vaccination.

OBITUARY.

THOMAS DARBY, F.R.C.S.I., Bray, Co. Wicklow.

WE have to announce, with regret, the death of this estimable and esteemed practitioner, at his residence in Bray, on March 10th, at the age of 77 years. Mr. Darby was a typical representative of the highest class of practitioners. Living in the centre of a district inhabited by the best county families, he became as trusted and valued as their counsellor and friend as he was as their physician; and, from his kindness and attention to the poor, he was as much beloved by them as by the rich. During the past few years, Mr. Darby suffered from chronic bronchitis, which, however, did not prevent him from seeing his patients. Unfortunately, during the recent severe weather, an acute attack supervened; and although he made a slight rally on Sunday week, which inspired his friends with some hope, it proved illusory. Until his health prevented him, Mr. Darby was a frequent attendant at the meetings of the Dublin Medical Societies, and was a well-known figure at many of the annual meetings of the Association. He was fond of speaking at these meetings, and, although he generally enunciated opinions not in accord with modern teaching, his experience was considerable, and no one hearing him failed to respect the earnestness and evident love of his profession shown by the fine-looking, kindly old gentleman who addressed them. Mr. Darby took warm interest in everything that tended to advance the interests of his professional brethren. He was one of the first to assist in forming the Dublin branch of the Association, and was a member of its Council for some years. He was also an ex-president of the Irish Medical Association, of the Medical Officers of Health Association, and of the Obstetrical Society of Dublin. In his early life, he was an assistant in the Medical School of the University of Dublin to the eminent Professor of Anatomy, Dr. Macartney; and, subsequently, he was for a long period of years medical officer of the Rathdown Union Workhouse and Fever Hospital. But few of Mr. Darby's contemporaries among the profession in Dublin now survive. Some of those who do, joined in paying a last tribute of affection to a worthy and excellent man, by attending the funeral, which took place at Mount Jerome on March 13th.

BENJAMIN H. STAMERS, M.D.Edin., L.R.C.S.Edin.

SPANISH TOWN has lost one of its old residents in Benjamin H. Stamers, M.D., L.R.C.S.Edin., who died on February 19th, aged 55. Dr. Stamers was born at Turk's Island, but at an early aged removed to Bermuda, which he subsequently left for Europe, to prosecute the necessary studies for his profession. After obtaining his diploma and degrees in Edinburgh as M.D. and L.R.C.S., he served in Malta, at the time of the Crimean war, on the medical staff of the portion of the army stationed there. He went next to Canada, where he also took the diploma of M.D. He joined the Medical Service of this Island in 1870, but relinquished his connection with it in 1879. Having been prevailed upon to go to Colon and Panama, he here contracted the malarial fever of the Isthmus, and returned with a shattered and enfeebled frame, from which he never thoroughly recovered. Dr. Stamers was much esteemed and respected by all classes of the community in which he lived. The deceased leaves a widow and a large family.

JOHN CHRISTIE, M.B., C.M.Abdn.

DR. CHRISTIE, who is the only son of Professor Christie, of Aberdeen, died suddenly on January 24th, 1886, in Melbourne, Victoria. He graduated in medicine in Aberdeen only about a year ago, and, suffering somewhat from asthma, he became surgeon of an emigrant ship, and went out to Victoria, in the hope that a change of climate would do him good. He seems to have been fairly well out there, but on January 24th he died suddenly. Mr. Christie was an unassuming, kindly gentleman, who took a deep interest in the Volunteer movement, and in fact was an ardent volunteer during his undergraduate-ship, when he was very popular with his fellow students.

INDIA AND THE COLONIES.

INDIA.

MEDICAL AID TO INDIAN WOMEN.—It has been decided to establish in Chittur a branch of the National Association for supplying medical aid to the women of India, and funds are being raised. The Committee propose, according to the amount of their funds, to entertain one or

two female medical practitioners possessing the qualifications of a hospital assistant, and certificated midwives. They would be available to answer calls to other parts of the district as often as possible. It would be their duty to instruct other women who may be willing to learn. Endeavours would be made to establish houses for the different classes, in which women could live with their friends while under treatment, who could not obtain sufficient attendance at their own homes.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—At the Hilary Term Examination for the Degree of Bachelor of Medicine (M.B.), held on Monday, February 22nd, and following days, the successful candidates passed in order of merit, as follow.

Robert H. Todd, Marcus J. Eustace, Stephen E. Bouchier-Hayes, Alexander M. D'Evelyn and Alfred J. MacNally (equal), Edward A. C. Bayler, George Faris, Samuel Simpson, Patrick C. Pounden, Phineas S. Abraham, F.R.C.S.I., George B. White, F.R.C.S.I.

At the Examination for the Degree of Bachelor of Surgery (B.Ch.), held on Monday, March 1st, and following days, the successful candidates were arranged as below.

Robert H. Todd, Henry C. Earl, Benjamin D. Dickson, William I. Donaldson, Alexander M. D'Evelyn and James C. Weir (equal), Louis M. McIntosh, Richard C. Bolton and Ross V. B. Smyth (equal), Robert T. Lewis.

At the Spring Commencements, held according to custom on Shrove Tuesday, March 9th, 1886, in the Examination Hall of Trinity College, the following degrees in Medicine and Surgery were conferred by the University Caput, in the presence of the Senate.

Bachelors of Surgery.—Richard C. E. Bolton, Alexander M'N. D'Evelyn, Benjamin D. Dickson, William I. Donaldson, Henry C. Earl, Alexander Findlater, Robert T. Lewis, Ross V. B. Smyth, James C. Weir.

Bachelors of Medicine.—Phineas S. Abraham, Alexander M'N. D'Evelyn, Henry C. Earl, George Faris, Richard B. M'Causland, Alfred J. M'Nally, George B. White.

Doctors of Medicine.—P. S. Abraham, A. Findlater, Thomas N. Flood, Thomas R. Gillespie, Hugh F. Oldham, R. V. B. Smyth.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, March 11th, 1886.

Benson, Henry Thomas, Aberynant, Llanidloes.
Clarke, William, St. Paul's Square, Burton-on-Trent.
Kearney, James, 13, Treagothnau Road, Clapham.
Swyer, Robert, 224, Brick Lane, Bethnal Green, E.

MEDICAL VACANCIES.

The following vacancies are announced.

BEDMINSTER UNION.—Medical Officer. Salary, £40, and extras. Applications by March 22nd to H. O. B. Donoghue, Flax Bourton, Bristol.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon. Salary, £120. Applications by April 2nd to the Secretary.

CARDIFF UNION.—Vaccination Officer. Salary, £140. Applications by March 20th to A. J. Harris, Clerk, Cardiff.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £100 per annum. Applications by March 24th to Mr. J. Ostell, 14, Bank, Carlisle.

COUNTY OF SOUTHAMPTON.—Public Analyst. Applications by March 30th to the Clerk of the Peace, County Hall, Winchester.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Gratuity, £20. Applications by April 6th to T. Storrar Smith, 24, Finsbury Circus, E.C.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by April 7th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100. Applications by April 7th.

GENERAL HOSPITAL, Birmingham.—Resident Registrar and Pathologist. Salary, £100 per annum. Applications by March 27th to H. Fox.

HULME DISPENSARY, Hulme, Manchester.—Honorary Physician. Applications by March 30th to Dr. A. Wahltuch.

LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Applications by April 6th to T. A. Wykes.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, E.—Resident Clinical Assistant and Registrar. Salary, £60. Applications by March 22nd.

RICHMOND UNION, Surrey.—Medical Officer for Workhouse. Salary, £125. Applications by March 27th to A. J. Wood, 17, The Green, Richmond.

ROYAL SOUTH LONDON DISPENSARY, St. George's Road, Lambeth.—Surgeon. Honorarium, £20. Applications by March 31st to the Resident Medical Officer.

SHEFFIELD GENERAL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by April 5th to G. H. Day.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £80 per annum. Applications by April 5th to G. H. Day.

SHIPSTON-ON-STOUR UNION.—Medical Officer. Salary, £47. Applications to J. E. Hiron, Clerk.

ST. PETER'S HOSPITAL, Henrietta Street.—House-Surgeon. Honor £26 5s. per annum. Applications by March 27th.

ST. THOMAS UNION.—Four Medical Officers and Public Vaccinators. cations to J. Champion, St. Thomas, near Exeter.

UNIVERSITY OF MELBOURNE.—Chair of Chemistry. Salary, £750 per a Applications to Robert Murray Smith, Victoria Office, 8, Victoria Cha Westminster.

MEDICAL APPOINTMENTS.

ALLINSON, H. Calthrop, M.R.C.S.Eng., appointed Honorary Surgeon to th Norfolk and Lynn Hospital, *vice* S. M. W. Wilson, resigned.

CAMPBELL, W. Macfie, M.D., M.R.C.S., appointed Consulting Surgeon Northern Hospital, Liverpool.

CUMBERBATCH, A. E., M.B., F.R.C.S., appointed Aural Surgeon to the N Hospital for the Paralysed and Epileptic, Queen Square.

EGAN, Francis, M.D., appointed Medical Officer of Health to the Par Fulham.

EWART, Charles, appointed House-Surgeon to the Royal Hants County Ho Winchester.

FORSTER, T. F., M.R.C.S., L.R.C.P.Lond., L.S.A., appointed Senior Hou geon to the Carlisle Dispensary, *vice* J. Macdonald, M.B., resigned.

GARDNER, H. W., appointed Assistant House-Surgeon to the Liverpool Infi

GRIFFITHS, Herbert T., M.D., appointed Visiting Physician to the Seaman pital Society, Greenwich.

HANDFIELD-JONES, Montagu, M.B., M.R.C.P., appointed Physician to the Lying-in Hospital, Endell Street, St. Giles.

HARRIES, Arthur J., M.D., late Senior Assistant Physician, appointed Ph to St. John's Hospital for Diseases of the Skin, *vice* James Startin.

HENDERSON, John, M.A., M.B., C.M.Edin., appointed Medical Officer and Vaccinator for the Hutton Buscel District, Scarborough Union, *vi* Ramsey, deceased.

HEYWOOD, T. Walmsley, M.R.C.S., L.K.Q.C.P.I., appointed House-Surg the District Infirmary, Ashton-under-Lyne.

HESLOP, William J., L.K.Q.C.P.I., L.R.C.S.Edin., appointed Surgeon Hulme Dispensary, Manchester, *vice* John B. Dreaper, M.R.C.S.E signed.

HOPE, E. W., M.D., L.R.C.P., Assistant Medical Officer of Health for t and Port, appointed Lecturer on Public Health at University College, pool.

MACDONALD, J., M.A., M.B.Edin.. appointed Medical Officer to the Stanw trict of the Carlisle Union, *vice* G. Murphy, M.R.C.S., resigned.

MALET, Henry, B.A., M.D., B.Ch.(Dublin), appointed Physician to the hampton and Staffordshire General Hospital, Wolverhampton.

MARSH, N. Percy, M.B.Lond., M.R.C.S., appointed Assistant Honorary Officer to the Infirmary for Children, Liverpool.

MAYNARD, Frederic P., M.B., M.R.C.S., L.R.C.P.Lond., appointed Hou geon to the Infirmary, Newcastle-on-Tyne, *vice* G. W. Ridley, M.B., M. resigned.

POWELL, H. A., M.A.Oxon., M.R.C.S.Eng., appointed Honorary Medical Of the All Saints' Home for Women and Children, Beckenham.

SEARLE, Richard Burford, M.R.C.S.Eng., L.S.A.Lond., L.R.C.P.Lond., ap Medical Officer and Public Vaccinator to the Penzance Union, Cornwall

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is which should be forwarded in stamps with the announcements.

BIRTHS.

HARRISON.—On March 16th, at 13, Sandringham Gardens, Ealing, W., the R. Charlton Harrison, M.R.C.S., L.R.C.P., of a daughter.

WEBB.—March 14th, at Cheadle, Stoke-on-Trent, the wife of H. Langley M.R.C.S.E., of a son.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Bowreman Jesset Cases of Amputation of the Penis by Mr. Pearce Gould's Modifie Thiersch's Operation for Epithelioma. Mr. Pearce Gould: Alveolar A causing Death.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Heb of Tuberculosis of the Skin. Dr. Theodore Williams and Mr. Godle Cases of Bronchiectasis treated by Paracentesis, with Remarks on t of Operation.

WEDNESDAY.—British Gynæcological Society, 8.30 P.M. Specimens shown by Dr. Macnaughton Jones, Dr. Blake, Dr. Fancourt Barn others. Dr. Bedford Fenwick: Intra-abdominal Tumours as a Cardiac Degeneration. Dr. Blake: Hamamelis in Venous Stasis.—H Society. Dr. Lewers: The Operative Treatment of Malignant Diseas Cervix Uteri. Mr. Toulmin: A Case of Recurrent Vomiting.—Neur Society, 8.30 P.M. The President (Dr. Hughlings Jackson) will de Inaugural Address.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Clutton: A Case o ular Ulceration of the Palate. Dr. Longhurst: A Case of P Aneurysm in a Patient the subject of Locomotor Ataxy, cured by P Dr. Stephen Mackenzie: On the Connection between Erythema N and Rheumatism. Mr. Meredith: A Case of Acute Intestinal Obst following upon Ovariotomy. Dr. Handford (Nottingham); Myxoe in a Boy, aged 14 (living specimen).—Quekett Microscopical Clu Papers by Messrs. Michael, Morland, and Nelson.

'PERATION DAYS AT THE LONDON HOSPITALS.

)NDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

ESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

:DNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

URSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

'DAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

'URDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

RING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, Th., 1.30; Dental, M. W. F., 9.

S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, ., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

)ON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 0; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

)LESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 0; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; ., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 0; Orthopædic, M., 2.30; Dental, Tu. F., 9.

GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., ., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., Dental, Tu. S., 9; Th., 1.

MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. , 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

HOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; ., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; n, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

ERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, , 2.30; Dental, W., 10.30.

MINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. , 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

UNICATIONS respecting editorial matters should be addressed to the Editor, , Strand, W.C., London; those concerning business matters, non-delivery he JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, nd, W.C., London.

ler to avoid delay, it is particularly requested that all letters on the editorial ness of the JOURNAL be addressed to the Editor at the office of the JOURNAL, not to his private house.

ORS desiring reprints of their articles published in the BRITISH MEDICAL RNAL, are requested to communicate beforehand with the Manager, 161A, nd, W.C.

SPONDENTS who wish notice to be taken of their communications, should enticate them with their names—of course not necessarily for publication.

SPONDENTS not answered, are requested to look to the Notices to Corredents of the following week.

: HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of th if they will, on forwarding their Annual and other Reports, favour us *Duplicate Copies.*

NNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

VARIX OF THE VULVA.

INQUIRENS asks for hints as to the best procedure in the treatment of varix of the vulva. He has a patient who is about six months advanced in her third pregnancy, and whose right labium is the seat of a varicose swelling of the size of a large orange. It never subsides entirely, though it is diminished on rising in the morning. In the ordinary text-books, varix of the vulva is apparently dismissed in a somewhat contemptuous manner, with the remark that the treatment is "rest." Does this imply that an active healthy woman is to be kept in bed for many weeks prior to her confinement? Inquirens asks if there be no better plan.

IMMUNITY FROM DISEASE.

THESIS asks for reference to any work, or chapter in any work, or magazine article, etc., on the subject of Immunity from Disease.

THE SUFFOCATION OF INFANTS.

DR. C. H. CATTLE, (Nottingham) writes:—I was recently at an inquest on the death of an infant, aged six weeks. The evidence of the parents was that they had left the child sleeping in bed after they had got up, and an hour afterwards the mother, on going to look at it, found it on its face, livid and dead. When last seen alive, the baby was sleeping on its back, with the face turned to one side. The parents are respectable people, and there is no reason to doubt their veracity. The *post mortem* examination pointed clearly to suffocation as the cause of death. A discussion took place among the jury as to whether a baby, at the early age of six weeks, hampered by long clothing, would have power to move into the position indicated, and suffocate itself. One of them suggested that a fit of coughing would give it sufficient involuntary impetus; and I thought the suggestion feasible. I am anxious to elicit professional opinion on this point, because such a story might easily be trumped up to account for an ordinary case of overlying, or even more culpable conduct.

A "BAD LIFE."

MR. A. H. BOYS (Pill, Somerset) writes:—I should like to have the opinion of some members as to whether they think I ought to pass the following case into a club. J. A., aged 19, has a good family-history, has always enjoyed good health, appears now in perfect health, but has a pulse of 140; the heart's action is violent, but I can hear no murmur. He has come to me several times, and I have always rejected him.

TREATMENT OF EPILEPSY.

EXOR asks:—Have not even more unlooked-for results been obtained in the surgical treatment of epilepsy by excision of the superior sympathetic ganglia of the neck? Can J. W. inform me how many patients have been treated by this operation (so interesting from a physiological point of view), and also where I can read an account of the results?

THE BRITON GENERAL AND MEDICAL LIFE ASSOCIATION.

I AM unfortunately a policy-holder in the Briton Medical and General Life Association, 427, Strand, and my next premium is due in April. Will you, or anyone else who may know more about these affairs than I do, give me advice as to whether I ought to pay my next premium when due, or let it lapse? I see that the judge has ordered a valuation of all the assets by two firms of accountants, the results to be submitted to the court as soon as made; this will take two or three months. In the meantime, the secretary asks that the premiums may be paid as usual into what is called a "Suspense Fund." If the affairs of the association are to be wound up, I am anxious to get a share of what is left after the lawyers have done with it; still I do not want to send good money after bad.—Yours truly, C.

*** A claim under a winding-up, in respect of a policy of insurance, will not, we believe, be affected by non-payment of the premiums due subsequently to the presentation of the petition, on which an order is afterwards made. Inasmuch, however, as the premiums falling due in the interval between the presentation of the petition and the order, will have eventually to be paid before "C." can prove on his policy (the value of the policy being estimated at the date of the winding-up order, not the date of the presentation of the petition), we do not see any advantage in not paying the premiums, as it is carried to a separate account.

ANSWERS.

DR. H. G. BROOKE.—If you will send us a copy of the paper, we shall call attention to whatever is new or important in the method of treatment referred to.

HOME FOR EPILEPTIC LADY.

M.B. DESIRES to express his thanks to those of his medical brethren who kindly wrote in answer to his query in the BRITISH MEDICAL JOURNAL of March 6th, and to announce that he has made a selection.

SURGEONS TO THE COASTGUARD.

IN reply to X. Y. Z., Mr. J. U. GREEN (Alderton, Woodbridge) writes that he should send his application, with testimonials, and, if his name do not appear in the *Register*, the certificate of registration, to the Medical Director-General, Admiralty, Whitehall, S.W. The application should be written on foolscap paper.

SANITARY SCIENCE CERTIFICATES.

DR. WM. WOODWARD (Worcester).—There is no single book which contains all that is required by candidates for sanitary science certificates. The nearest approaches to such a work are Parkes's *Practical Hygiene*, edited by De Chaumont, and Willoughby's *Manual of Public Health*. The regulations of the Sanitary Science examination of the University of Cambridge contain a very full list of the books required, and also of books of reference.

EPILEPSY IN DOGS.

IN answer to "J. W.," regarding epilepsy in animals, C. J. R. M. writes as follows. Going home one night last winter, I came upon a man holding his dog (a Sussex spaniel) in what seemed to me to be an epileptic fit. The dog was frothing at the mouth, and was in a state of rigidity, interspersed with spasmodic movements. As I had been reading up about epilepsy and its cause (anæmia of the brain or otherwise), the idea struck me to hold the dog up by its tail, which I did, after telling the man that it was a "certain cure," with the result that the

jerks soon ceased, and the dog apparently recovered, his master carrying him away. I never heard anything more of the dog, but this fact seems to point to anæmia of the brain as its probable cause, and that the gravitation of the blood to the brain brought about the cure.

WHAT ENTITLES A PUBLIC VACCINATOR TO A GRANT?

A MEMBER will find the whole subject discussed in the instructions which were sent him on his appointment. Provided the reports of the inspectors are favourable, awards are made where duly approved contracts are in force, where the vaccinator has complied with the requirements of the statutes, regulations, and the contract, and where the results of the vaccination are up to a certain standard of merit, and providing the vaccinator has held his office for at least one year, and is actually in office at the time of the inspection.

CHARGE OF WEAK-MINDED PERSONS.

INQUIRER.—Any person can take charge of one weak-minded girl without a licence, and, provided she be below the age of 16, without order or certificates. Above that age, in the present state of the law, an order and certificates are necessary, as in the case of lunatics; and where two such people are received, a licence is required.

TRAVEL IN THE RIVIERA.

J. S. F. says "A Member of S. W. Branch" will find *Winter Resorts on the Riviera*, by C. B. Black (Stanford, Charing Cross), 1884 edition, a cheap and reliable handbook for the Riviera.

SUPPOSITORIES WITH SOAP.

SPES writes, in reference to "A Country Surgeon's" query (JOURNAL, February 20th) the following suggestion, which he has found very successful. Carefully weigh the extract of nux vomica, and take a note of the weight. Dry over a sand or water-bath, using a gentle heat, and then reduce to fine powder. Take the quantity of extract in powder required for the suppositories (allowing for the loss of moisture), mix with the soap, heat gently, and pour into the mould in the usual way. The evaporation should be carried on slowly, or the extract will be spoilt. A sand or water-bath is better than the application of the flame of a spirit-lamp to the evaporating dish, because by this means the extract will be scorched. It must also be remembered that the dry extract is relatively stronger than the moist, hence the care required in weighing, and allowing for the loss of moisture.

CLIMATE AT INDIANAPOLIS.

IN reply to Mr. David J. Browne, Dr. Louis Lewis (Philadelphia) writes that he has ascertained from Dr. C. Taylor, who has practised in Indianapolis, that the climate of that city is neither prejudicial nor conspicuously advantageous to consumptives. People die there, as almost everywhere, of tuberculosis. Sudden changes of temperature not unfrequently occur, but they are seldom extreme. On the whole, the climate may be considered a very wholesome one; but for consumptives, or those with a tuberculous tendency, it cannot be compared with those sections of the United States celebrated for climatic advantages.

NOTES, LETTERS, ETC.

LEAD-POISONING AT SHEFFIELD.

A REPORT has been furnished to the Health Committee of the borough of Sheffield by Dr. Sinclair White, the medical officer of health, of investigations made by him consequent upon the report of several cases of chronic lead-poisoning, for which there was no apparent cause. He finds that the cases have all occurred in the higher districts of the town, which are supplied from reservoirs that collect water from the moorlands at Redmires, and that this water contains a certain amount of free acid, attributable to the oxidation of iron pyrites, or to the decomposition of vegetable peat or heath. Water drawn from the street-pipes, which are of iron, was found free from lead; but after passing through the lead service-pipes to houses, traces of lead were found in some instances to the extent of seven-tenths of a grain per gallon, and this was undoubtedly attributable to the action of the acid upon the lead pipes. One-tenth of a grain per gallon is considered dangerous to human health. Dr. Sinclair White has found that contact with Derbyshire limestone removes the acid from the water, and suggests that broken limestone should be placed in the conduits bringing the water to the town.

SMOKE ABATEMENT.

IF Mr. Pridgin Teale will refer to the *Engineer* of February 12th, he will find some criticisms on his "economiser," which will enlighten him as to the value of his invention, and the benefits that are likely to accrue from the use of it.

EX FUMO DARE LUCEM.

ERRATA.—In the JOURNAL of February 27th, page 392, col. 2, line 25 from bottom, for "dextrigyrate" read "dextro-gyrate."—In the JOURNAL for March 13th, page 485, column 1, line 16 from bottom, for "tested" read "tasted."—In the second line of the notice of "Hobson's Spruce Beer," page 503, column 2, for "Lees" read "Leeds."

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. A. Arthur Napper, Cranleigh; The Director-General of the Medical Department of the Navy; The Secretary of the National Hospital for the Paralysed and Epileptic; Dr. Edwards, Philadelphia; Mr. F. Cresswell, Winchmore Hill; Dr. A. M. McAldowie, Stoke-on-Trent; J. W. A.; Dr. W. H. Dobie, Chester; The Secretary of the Parkes Museum; Mr. H. J. Amphlett, London; Mr. E. White Wallis, London; Mr. R. N. Hartley, Leeds; Mr. J. F. Pink, London; Mr. T. Wilson Aird, London; Mr. A. H. Boys, Pill; Mr. W. Elder, Kirkcaldy; Dr. E. D. Tomlinson, Beverley; Dr. J. O. Adams, London; Dr. Collingridge, Greenwich; Mr. A. W. Mayo Robson, Leeds; Dr. Graily Hewitt, London; Mr. Vesey Fitzgerald, Birmingham; Mr. Walter Pearce, London; Mr. F. H. Moore, Leicester; Dr. A. M. Edge, Manchester; Dr. Markham Skerritt, Clifton; Mr. Cameron, Hendon; Mr. F. W. Passmore, London; Dr. H. Barnes, Carlisle; Our Aberdeen Correspondent; Dr. W. Galletly, Elgin; Mr. A. C. Dixey, Bourton-on-the-Water; Surgeon-Major Evatt Woolwich; Mr. J. Edmunds, London; Dr. R. Colthurst, Clifton; Dr. Robb Glasgow; Dr. Dabbs, Shanklin; Dr. R. J. Anderson, Galway; Surgeon-Major N. Alcock, Ballybrack; Mr. W. J. Penny, Clifton; Dr. F. Dale, Scarborough; Dr. Maxwell, Woolwich; Mr. Vincent Jackson, Wolverhampton; Dr. W. A. Duncan, London; Mr. R. H. Lovell, Sydney; Mr. F. P. Maynard, Newcastle-upon-Tyne; Mr. Thomas Partridge, Stroud; Mr. J. H. Mawson, Thornton; Dr. W. Morrison, Ballarat Dr. W. Wilson, Pendleton; Mr. F. Clark, Sevenoaks; Mr. W. Watson Cheyne, London; Mr. N. P. Marsh, Liverpool; Mr. H. C. Burdett, London; Dr. M. Calman, Oporto; Dr. W. R. Huggard, Davos Platz; Dr. W. S. Playfair, London; Dr. P. T. Duncan, Croydon; Dr. J. Rogers, London; Mr. R. T. Cobbold, Dedham; Mr. C. H. Butlin, Camborne; Mr. F. A. Floyer, London; Mr. H. F. H. Newington, Ticehurst; Mr. J. C. Mackay, St. Columb; Mr. Treves, London; Mr. R. C. Chicken, Nottingham; Dr. W. Philson, Cheltenham; Dr. T. N. Orchard, Pendleton; Mr. Lawson Tait, Birmingham; Dr. Rogers, London; Messrs. Burroughs, Wellcome, and Co., London; Mr. J. Pratt, Markethill; Mr. J. D. Hamilton, Lower Sydenham; Mr. H. Terry, Northampton; Dr. Kelly, Taunton; Dr. Jacob, Leeds; Mr. Edmund Owen, London; Our Dublin Correspondent; Our Paris Correspondent; Dr. J. Henderson, Hutton Buscel; Mr. H. C. Allinson, Lynn; Dr. Sheen, Cardiff; Mr. Verrall, Brighton; Surgeon-Major T. W. Orwin, Exeter; The Right Hon. G. O. Trevelyan, London; Mr. Barker, London; Mr. G. Eastes, London; Dr. R. Lord, London; Mr. A. J. Brodie, Colorado, U.S.A.; Mr. A. E. Maylard, Glasgow; Mr. F. G. Whitham, London; Mr. St. V. Mercier, London; Dr. J. W. Moore, Dublin; Mr. L. Loydon, York; Our Glasgow Correspondent; Mr. J. Davies, Denbigh; Mr. C. W. H. Lindsay, Halifax, Nova Scotia; Dr. C. B. Ball, Dublin; Mr. J. Rankine, Sunderland; Our Edinburgh Correspondent; Dr. Corry, Hoyland-Nether, near Barnsley; Mr. E. H. Armitage, Hulme; Mr. M. G. Biggs, London; Mr. C. A. Lees, London; Dr. Carter, Liverpool; Dr. N. Kerr, London; Mr. Thomson, Ampthill; Mr. H. T. Batchelor, Queenstown, Cape Colony; Mr. Jones, Rotherham; Dr. Tatham, Salford; Mr. Richard Davies, Bath; Surgeon-Major W. L. Gubbins, Allahabad, India; Dr. James Oliver, London; Dr. Campbell, Liverpool; Dr. Dawson Burns, London; Mr. Harold Palmer, Newtown; Mr. F. Vicars, London; Mr. H. T. Stokes, London; Dr. Jardet, London; Dr. Idelson, Berne; Mr. H. Thompson, Hull; Dr. Rose, London; The Honorary Secretary of the Hunterian Society; Dr. H. Dalton, Harrogate; Dr. Styrap, Shrewsbury; Messrs. J. Hobson and Co., Leeds; Dr. E. F. S. Green, South Norwood; Mr. W. A. Ellis, London; Mr. Simeon Snell, Sheffield; Surgeon C. H. Swayne, Bombay; Dr. J. H. Cameron, Toronto; Dr. S. R. Macphail, Carlisle; Mr. W. P. Terry, Winchester; Dr. M. Hay, Aberdeen; Mr. G. R. Karop, London; Mr. M. H. Miller, Leek; Mr. T. D. Paradise, Leigh; Dr. D. Monte, London; Dr. R. Liveing, London; Brigade-Surgeon E. Bonavia, Etawah, N.W.P., India; etc.

BOOKS, ETC., RECEIVED.

A Practical Treatise on the Sputum; with special reference to the Diagnosis, Prognosis, and Therapeusis of Diseases of the Throat and Lungs. By G. Mackenzie, M.D. London and Edinburgh: W. and A. K. Johnston. 1886.

All But: a Chronicle of Laxenford Life. By Pen Oliver, F.R.C.S. (Illustrated.) London: Kegan, Paul, Trench, and Co. 1886.

Physiology and Pathology of the Breast. By Charles Creighton. (Illustrated.) London: H. K. Lewis. 1886.

The Science and Practice of Surgery. With 1,090 Illustrations on Wood. By Frederick James Gant, F.R.C.S. Third Edition. Vols. I and II. London: Bailliére, Tindall, and Cox. 1886.

A Manual of Surgery. In treatises by various authors. (In three volumes.) Edited by Frederick Treves, F.R.C.S. Vols. I, II, and III. (Illustrated.) London: Cassell and Co. 1886.

Mind your Eyes! Advice to the Short-sighted, by their Fellow-Sufferer. Francisque Sarcey. Translated by R. E. Dudgeon, M.D. London: Baillie Tindall, and Cox. 1886.

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THE GULSTONIAN LECTURES,

ON

ASM IN CHRONIC NERVE-DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

By SEYMOUR J. SHARKEY, M.B., F.R.C.P.,
istant-Physician and Joint-Lecturer on Pathology at St. Thomas's Hospital.

Lecture II.

y first lecture, I considered the part played by chronic diseases, h injure the intracranial portion of the pyramidal tract, in the uction of spasm. It was pointed out that the results are similar, her the lesion is situated in the motor area of the cortex, in the al ganglia, in the crus, pons, or medulla, provided that the func- of the fibres of the pyramidal tract be interrupted.

point which is of great importance, and which will be again re- l to when we come to a consideration of functional spasm, is that congenital defects of portions of the central nervous system s capable as destructive diseases of producing paralysis of limbs, npanied by spasm.

se of Congenital Spastic Hemiplegia.—In the *Medico-Chirurgical isactions*, vol. lxvi, 1883, I published "a case of Asymmetry of the n," and discussed the bearing of the anatomical peculiarities of specimen on the question of the connection between the optic s and certain definite areas of the cerebral cortex. But the case o a good example of the disease called congenital spastic hemi- a, and for this reason I refer to it here. E. A. was admitted St. Thomas's Hospital, under the care of Mr. Mason, owing to ies received by the fall of a house; and she died of the results of accident. I never saw her until I performed the *post mortem* ination upon her; and no account was obtained during her life- of the abnormality in her right arm and leg, nor of the state of mind and special senses. After death, her father informed me his daughter had always been healthy up to the time of the ent, which proved fatal in a few weeks; that she had never suf- from fits or other nervous affections; that from her very birth ad had a small and stiff right arm; and that she had always left-handed and a little lame. He had never noticed any mental ency; and she had never complained of her sight, hearing, or senses. No peculiarity in her eyes, speech, or aspect was no- during her stay in the hospital; but the sister of the ward said she struck her as being intellectually dull, even for a person in osition in life.

the *post mortem* examination, both the right arm and leg were to be smaller than their fellows, though they were otherwise ally formed; and the muscles examined presented the rich brown r of health. The right wrist measured 4¾ inches, the left 5⅜ s; the right forearm 6½ inches, the left 8 inches. The circum- ce of the left leg, round the calf, exceeded that of the right by one The heart, lungs, and other viscera were healthy, with the excep- of the kidneys and the bladder, which were in a state of acute in- nation. The skull and the membranes of the brain were normal, ere the intracranial blood-vessels, nor was there any marked ality of the latter on the two sides.

need not enter into the minute details which I have given in the referred to, but I may simply state that both the history of the nt and the anatomical peculiarities of the brain, showed that it a case of malformation of one portion of the left hemisphere, and t of development of the remainder. The most striking character- of the specimen which is here shown (Figs. 14, 15, 16, 17), were: e general arrest of development of the left hemisphere, including notor convolutions; 2, the small size of the corresponding crus ri and anterior pyramid; 3, the absence of the angular gyrus, superior temporosphenoidal convolutions, together with the fusion me of the other convolutions of the left temporosphenoidal lobe; ne small size of the optic tract, optic thalamus, and corpora ulata on the same side. The spinal cord was subsequently ex- ed, and, throughout its whole length, it was seen that the right al column was smaller than the left, and the left column of k smaller than the right. (Fig. 18.)

ese differences were most marked in the upper regions of the cord, became less and less so towards the lumbar enlargement. The microscope showed that in those parts where reduction in size was evident, even to the naked eye, the nerve-fibres were fewer in number, and the tissues a little denser than in health; and the general impression left upon the observer's mind was that there was an absence of nerve-fibres, and consequent undue prominence of the connective tissue.

In this case, there was clearly congenital absence of part of the motor convolutions, and of the corresponding pyramidal tract; and, clinically, paralysis with spasm was observed. Such a combination seems to prove that the mere absence of the controlling impulses which in healthy subjects traverse the pyramidal tract, is capable of giving rise to a spastic condition of the limbs.

Congenital defects similar to that which has just been described may be bilateral, and produce a condition about which a good deal has been written, and which is termed "infantile spasmodic paralysis," or "spastic paraplegia of infancy." Dr. Hadden, writing on this disease in *Brain*, vol. vi, 1884, says, "the lower extremities are more or less flexed at the hip- and knee-joints, the thighs are rigid and adducted, the knees in contact, the legs inclined outwards, and the heels often drawn up from the ground by the contraction of the gastrocnemii." Figs. 19 and 20[1] represent a well marked, but not extreme, case of the kind, which was under Mr. Clutton's care in St. Thomas's Hospital. The child was an idiot, as many of them are Dr. Ross has proved, by *post mortem* evidence, that defects in the development of the brain can produce this condition. In *Brain*, vol. i, p 477, he records a case of the disease in which he found at the *post mortem* examination a congenital defect in the motor convolutions on both sides, and absence of the large pyramidal cells normally existing in them. He found the same condition of the spinal cord as was present in my case of congenital spastic hemiplegia, namely, absence of a certain amount of the lateral columns, but no other abnormality.

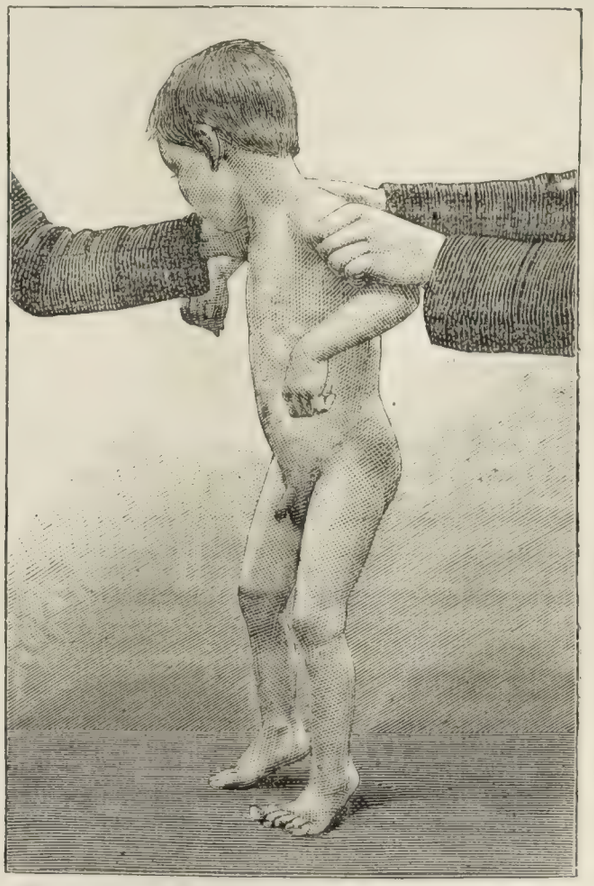


Fig. 20.—From a photograph of a slight case of congenital spastic paralysis.

Whether all cases of congenital paralysis and spasm of the limbs be due to arrest of development of portions of the brain is at present uncertain, but it is not at all improbable that intra-uterine disease of parts already formed may be the explanation of some.

Contracture, or fixed spasm, is a comparatively frequent result of cerebral lesions which interrupt permanently the voluntary impulses proceeding from the cortex. But, in addition, mobile spasms have been observed in great variety, either after hemiplegia or independently

[1] The numbered figures which are referred to in the text were shown when the lectures were delivered, but only a certain number are reproduced here.

of it. Sometimes they attend voluntary movements only, sometimes they are involuntary and continuous; but, in all of them, the retention of a large amount of voluntary control over the limbs affected is a striking feature.

In addition to the mobile spasm, there is often a certain degree of fixed spasm, though a marked degree of the latter would be incompatible with the development of the former. Continuous movements of the hands and toes have been termed athetosis. The following is a case of the kind which I reported in *Brain* for April, 1885. It is a good example of this condition, though rare because of the number of muscles affected, and because the movements appeared after many years on the opposite side of the body.

G., aged 24, came under my care as an out-patient at St. Thomas's Hospital on March 26th, 1884. Until the patient was three years old, he was quite healthy; he was then suddenly attacked with loss of power all down the left side, accompanied by repeated and prolonged convulsions. As far as he knew, the movements of the limbs and face on the left side gradually followed the loss of power, and had gone on increasing ever since; at any rate, they had done so as long as he could remember. When between four and five years of age, he was taken to Great Ormond Street Hospital, where his parents were told that the movements were so slight, that he would get over them. About three years ago, weakness and movements came on in the right leg, and he went to Guy's Hospital, where he was told that nothing could be done for him. He then consulted a homœopathic chemist, who gave him "strengthening medicine," and his right leg became strong again, and the movements in it ceased in three months. A month ago, the weakness and movements recommenced in the right leg, and they gradually increased. The arm was said to be free from them. The patient had never had any other severe illness, had not suffered from headaches, and had done his work well as a carpenter until the last six months. During this time, the movements of the left hand had been so bad, that he had been unable to hold the nails with accuracy, though he could hammer well enough with his right arm. He said he had never had any defect of sight or hearing.

On rough examination, vision seemed normal, and he heard the tick of a watch a long way off. There were movements of the greater part of the muscles on the left side of the body, and they ceased during sleep; there was no anæsthesia. The tongue moved a little irregularly, as it did in chorea; speech was drawling. The muscles, both of the left and of the right side of the face, contracted too strongly when the patient attempted to speak, so that a kind of grimace resulted, in which the lines at both angles of the mouth and the naso-labial furrows were very deeply marked. There were spasmodic, more or less regular, movements of the neck to the left, and the shoulder was rhythmically raised, and jerked slightly forwards and backwards. One could see the serrations of the left serratus magnus contracting rhythmically. The abdominal muscles were harder on the left side than on the right, but there were no evident movements in them. There were slight spasmodic movements in the left arm, but they were only slight. The hand, on the contrary, was markedly affected. There was constantly more or less rhythmical flexion and extension of the fingers, mainly at the metacarpo-phalangeal joints, with irregular flexion and extension of the phalangeal joints, and occasional separation of the fingers. In the left leg there were similar slight movements of the muscles, with marked movements of the toes, and most marked of the great toe. They were tremulous flexions and extensions, but the flexor longus pollicis was constantly contracted, so that the great toe was always riding over the others, and its proximal phalanx was usually at right angles to the metatarsal bone. In the right foot, the movements were similar, but not so marked. In the right hand only the little finger moved, and that so slightly, that the patient had not noticed it. The grasp of the right hand, though stronger than that of the left, appeared to be deficient in power; the patient said, however, that he had never noticed that it was weak. There was neither atrophy nor hypertrophy of the muscles of the limbs. The patellar reflex was unnaturally brisk on both sides, but there was no ankle-clonus. The patient seemed very intelligent, and said that his memory and mental power were very good. The fundus of the eyes and fields of vision were normal. The urine contained no albumen.

The next case is one of fixed, combined with mobile spasm, and also differs from that which I have just described in this, that there was no history of hemiplegia or monoplegia, preceding the onset of the muscular contraction.

Case of Mobile and Persistent Muscular Spasm of the Upper Extremity.—E. F., aged 11, came to St. Thomas's Hospital as an out-patient, under me, in June, 1884. She was a very well made, intelligent, lively child, and in these respects was said to resemble the rest of her family. When she was 9 months old, the mother noticed that she held her left arm behind her back, and did not use it proper Ever since, the arm had been becoming gradually more distorted a useless. On examination, it was found that the left arm was r undersized, or atrophied, but that it was the seat of extreme dist tion, which rendered it perfectly useless. The forearm was excessiv pronated, so that the palm of the hand looked outwards, and t wrist was flexed; the metacarpo-phalangeal joints were extended, t proximal phalangeal joints hyperextended, and the peripheral flex The elbow-joint was flexed, and looked unshapely. The metacar phalangeal joint of the thumb was flexed, and the phalangeal jo hyperextended; and the thumb, as a whole, was turned inwards wards the palm. All the parts described were rigidly fixed in th positions, apparently by the spasmodic action of muscles. But spasm could, with difficulty, be overcome, and then the limb assun quite a new appearance. Thus, if pronation were rectified and t elbow bent, the wrist at once became extended, all the fingers flex and the thumb was turned into the palm of the hand beneath the This state of affairs was only retained by keeping the elbow-joint flex and forcibly overcoming the tendency to excessive pronation. soon as the latter was allowed to assert itself, the whole limb at o returned to the original position. Sensation was unaffected. Kilner, who tested the electric condition of the affected parts, ported that the muscles reacted normally to the induced curre and presented very slight reaction of degeneration when the const current was used.

On giving chloroform, the distortion almost entirely disappear the muscles were flaccid, and the tissues of the elbow-joint appea very lax. The child had attended the Orthopædic Hospital for year without deriving any benefit, but electricity had not been tri Dr. Kilner was good enough to undertake treatment by this mea but, though he continued it for weeks, the condition underwent no provement.



FIG. 21A.—Case of spastic paralysis of the left arm and hand, showing the position assumed when the wrist was extended.

Later in the year, on August 24th, 1885, I took her to have abnormality photographed, and I then found that certain alterati had occurred in the condition of the hand and arm. The m marked change was that they were never still; in fact, the case mi



FIG. 21B.—Showing position assumed when the wrist was flexed.

then have been called one of athetosis of the left upper extremi The arm, when left alone, usually occupied a position midway tween the perpendicular line of the body and a horizontal line dra through the left shoulder-joint, and the latter was extended, the f arm pronated, the wrist flexed, and the fingers flexed at the peri ral phalangeal joint, and hyperextended at the proximal. Suc degree of hyperextension now existed in the metacarpo-phalang

of the thumb, that partial luxation had been produced. The
l generally liked to hold the hand across the front of the body,
the fingers a little flexed. Irregular clonic jerks affected the
le arm from the shoulder, and the fingers were in more or less
tant movement when left to themselves. There were occasional
it jerks of the left angle of the mouth, but the leg appeared free
any abnormality. The child asserted that she had always had
movements, though I certainly did not notice them when I first
her.

gs. 21, A and B, represent the condition of things in January,
.

obile spasms do not always assume the characters which are de-
ed under the term "athetosis." Movements resembling, more or
those of chorea, disseminated sclerosis, ataxy, and paralysis
ns, likewise occur.

n June 11th, 1885, a woman, aged 60, came to my out-patient
, complaining of loss of power all down her left side; her face,
and leg were all weak, and there was a considerable degree of
anæsthesia. This condition had slowly developed in the course of
months. Though she had had rheumatic fever twice, there was
parent disease of her heart or other viscera, but her arteries were
what hard. By November, moderate hemiplegic rigidity had
loped, and, in addition, continuous movements exactly resembling
of paralysis agitans.

is unnecessary to describe the various forms of mobile spasm
h are seen at the bedside. Dr. Gowers has given an account of
siderable number, in a paper which is contained in the fifty-ninth
me of the *Transactions* of the Royal Medical and Chirurgical
ty; and Charcot and others have also recorded cases. What
erns us more on the present occasion, is the question of their
ology. Can they be attributed to any lesion constant either in its
re or in its position? The answer to this must be in the negative;
we have to confess at the same time that our knowledge of this
of spasm is very deficient. Gowers, in the paper already referred
ecords a case of "posthemiplegic inco-ordination," in which he
d, at the *post mortem* examination, one lesion only, and that was
atricial induration confined to the optic thalamus, and unaccom-
ed by any pathological changes in the spinal cord. Weir Mitchell
d the seat of the lesion in two cases in the corpora striata. In the
e de Médecine for May, 1883, Emile Demange records the *post*
em examination in nearly a dozen cases of posthemiplegic mobile
n; and among these is a case of hemiathetosis, in which there
extensive softening of the convolutions, but no disease of the
al ganglia. In most of the cases, the lesion or lesions were in
central ganglia, sometimes involving the internal capsule, and
times not. Hence it seems to me that we must agree with
ange, when he says that these movements may occur from disease
ny part of the motor tract in the brain; and he adds that the
ty of movement does not depend upon the seat of the lesion, but
r upon the condition of the motor tract below the lesion.

l the varieties of mobile spasm seem to result from a mixture, in
ing proportions, of paralysis, spasm, and irritation; and their
lopment depends upon lesions which interfere with the perfect
ions of the motor centres and fibres, but which do not com-
ly interrupt them. That such a condition of incomplete de-
tion is competent to give rise to movements of the kind under
deration, is well shown by a case which I published in the
et, in a paper on Cerebral Localisation already referred to. The
nt was a woman, aged 46, who was admitted into St. Thomas's
ital on July 20th, 1878, and died on July 21st, 1879. She was
ing from chronic renal disease, and on January 18th, 1879, she
lained of being unable to keep her left arm still. The move-
s both of the arm and leg soon became violent and disorderly.
n asked to put her left hand to her face, she did so hesitatingly,
with a series of jerks which had no constant rhythm or direction.
same occurred on voluntary movement of the leg, while the right
and leg were moved slowly and naturally. The jerking move-
s gradually subsided until, on January 30th, the leg was freely
normally moved, while the left arm was almost completely para-
; and, although it recovered some degree of power, it remained
edly paralysed to the end of her life. After death, the middle
of the ascending parietal convolution on the right was softened,
aken, and of an orange colour. It is clear, in this instance, that
voluntary movements of the limb occurred at the time when the
al grey matter was in the early stages of softening; and that
ceased when paralysis resulted from its complete disorganisation.

concluding the consideration of spasm in connection with diseases
e intracranial portions of the voluntary motor path, it is neces-
to refer to a statement which I made in my first lecture; namely, that "our present knowledge of anatomy, physiology, and pathology, does not justify us in concluding that there is any efferent motor connection between the brain and the spinal cord, except the pyramidal tract, direct and crossed, disease of which gives rise to chronic muscular spasm. Evidence in support of this view will appear in subsequent portions of these lectures."

In saying this, I wished to exclude the cerebellum and the central ganglia from consideration, since any rigidity or spasmodic contraction of muscles which arises in connection with diseases of the areas they occupy seems to depend upon involvement of the pyramidal tract, which passes close by them. Evidence has already been supplied in support of this view, as far as the cerebellum is concerned. Let me now record a case which shows that destruction of the central ganglia produces no spasm, so long as the neighbouring internal capsule is intact.

C. B., aged 39, had an attack of right hemiplegia ten years before death, and another somewhat later. He died of carcinoma of the cæcum, having long recovered completely from all paralytic symptoms. At the *post mortem* examination, I found that the hemispheres were free from disease. On exposing the ventricles, it was at once seen that the left caudate nucleus was very much shrunken, and of a yellowish hue. Both optic thalami and the right nucleus caudatus looked healthy. The left crus cerebri was small and discoloured along its inner third, and the left side of the pons Varolii was evidently flattened. Nothing abnormal was noticed in the crus cerebelli on either side, and the pyramids in the medulla oblongata were equal and natural. No descending degeneration was to be discovered in the spinal cord with the naked eye.

The brain was then set aside to harden in alcohol, before any further examination was made. A series of horizontal sections through the hemispheres and central ganglia showed that there was hardly anything left of the nucleus caudatus, or of the nucleus lenticularis on the left side, but there were no evident changes in either division of the internal capsule. The optic thalamus was a little smaller than its fellow on the opposite side, while all the central ganglia on the right were healthy. (Fig. 22). A vertical section through the crura cerebri showed very marked atrophy of the left as compared with the right. A similar diminution in size was observable in the left half of the pons (Fig. 23); but the pyramids, and all other divisions of the medulla oblongata, were healthy and symmetrical.

This case shows that disease so severe as to result in almost total obliteration of the corpus striatum, may produce hemiplegia, which passes off without leaving rigidity, paralysis, or any other symptom behind. And, secondly, it proves, as far as any single case can prove, that the efferent fibres of the corpus striatum do not pass down further than the pons Varolii or medulla oblongata.

The continuous degeneration of the lateral column through the whole length of the spinal cord in cerebral lesions shows that the fibres are not interrupted by entering ganglionic centres, but pass straight to their several destinations in the anterior cornua. It will be readily understood that, if disease destroy them at any level in the spinal cord, degeneration will occur in them below, and give rise to symptoms of hyperphysiological activity of the spinal centres with which they are connected, similar to those which occur when the disease is intracranial. In the latter case, all the spinal centres which are under voluntary control are affected; in the former, only a certain number, more or less numerous according as the lesion is situated high up or low down in the cord. There is this difference, too, that, in cerebral disease, the rule is to find the contracture unilateral, in lesions of the cord bilateral. But this is merely because the pyramidal tracts in that part of the brain where they are most liable to be interrupted by disease, lie at some distance from each other; whereas, in the spinal cord they are so close together as usually to be involved in the same pathological changes. The symptoms, however, of disease of the lateral columns of the cord are the same, whether it follow cerebral or spinal lesions. The affections of these columns are either primary or secondary, and the symptoms differ slightly accordingly. Thus, if a primary chronic inflammation attack them, as in primary lateral sclerosis, or disseminated sclerosis, paresis of the corresponding muscles is an early symptom; and tremors of the limbs when moved, increased tendon-reflexes, and clonus soon follow. In addition to these, transitory involuntary contractions, and longer, though still intermitting, spasms occur, and finally culminate in persistent rigidity. When the latter has fairly set in, the muscles can only be loosed from their slavery by a process which condemns them to perpetual inaction. Their masters, the cells in the anterior cornua, may be attacked, and die; but the muscles perish with them, and the tendon-reflexes and other signs of their activity disappear for ever. But the lateral columns are more often affected secondarily than primarily, and then

the symptoms which culminate in spasm follow those which characterise the original disease. Thus we often see cases of myelitis run their course to destruction of a portion of the spinal cord, and rigid contracture of the limbs then supervenes.

Such disease occurs more frequently in parts below the cervical region than in those above it, and consequently the legs are more often the seat of rigidity than the arms.

But matters are not always so simple as this, for a lesion of the lateral columns may be combined with that of some other tract of fibres; and a combination of symptoms then presents itself, some being attributable to disease of one tract, and some to disease of the other. If we are to draw correct conclusions with regard to the localisation of diseases of the spinal cord, and their progress, we must never lose sight of the phenomena which characterise the healthy action of the nervous system. Physiology is the only safe guide for the diagnosis of the positions occupied by disease. Again, although pressure upon the pyramidal fibres interrupts their functional activity, the symptoms are very different according to the manner in which the pressure is applied, whether from without or from within the cord. As time will not permit me to enter into detail upon all those diseases of the spinal cord which give rise to spasm, I shall try and illustrate from my own experience the two points to which I have specially referred; namely, first, the difference in the results of pressure applied upon the cord from without and from within; and secondly, the modification which occurs in the symptoms of disease of the lateral columns, when it is combined with disease of other parts of the cord.

The following case is a good instance of pressure on the spinal cord from without, giving rise to interference with the function of the lateral columns, and to extreme contracture of the lower limbs.

Case of Tumour (Myxoma) on a Spinal Nerve, which pressed upon the Cord, and produced Paralysis and Spasmodic Contraction of the Lower Limbs.—A. J., aged 24, blacksmith, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on April 20th, 1876. His family-history was unimportant, and, until his present illness began, he had always enjoyed good health. He had drunk freely both beer and spirits. He was in the habit of lifting heavy weights, and had occasionally "ricked" his back, but had never suffered from any serious injury. In August, 1875, he began to feel a sensation of weakness in the loins, but he had no actual pain. This was followed in November, 1875, by a certain degree of weakness in walking, which slowly increased, so that he became unable to walk at all two months before admission. During this period, he suffered from cramp, with slight loss of power in his left arm, and from occasional attacks of sharp shooting pains and cramp in his legs. He had had no loss of sensation or numbness anywhere.

On admission, he was found to have marked paraplegia, but no loss of sensation. He suffered from cramps, and his legs at times were flexed involuntarily. He had incomplete control over his evacuations. His left hand and arm were not as powerful as his right. All his organs appeared to be healthy, and he had no albumen or pus in his urine. Somewhat later, painful contraction of the adductor muscles of the thighs used to come on and last for hours; and he had slight numbness as high as the umbilicus. When these attacks of spasm supervened in the muscles of the leg, pain and similar cramps were experienced in the left arm. The remainder of his life was very painful. His legs became gradually more and more permanently and rigidly flexed and adducted, and bed-sores developed over the internal aspects of the knees, where they were forced against each other, as well as over the sacrum and trochanters. Sensation, however, rather improved than deteriorated. Finally, incontinence of the evacuations, cystitis, and hectic fever set in; and the patient died on August 17th, four months after admission, and one year from the date of his first symptoms.

Post Mortem Examination.—Most of the organs were found to be perfectly healthy, the urinary tract and spinal cord alone presenting evidences of disease. The pelves of the kidneys and the ureters were inflamed, and the kidneys were large and succulent. On one of the anterior spinal nerves, which originated just at the termination of the cervical enlargement, was a tumour about as large as a medium-sized marble. It was firm, pale in colour, and covered with a perfectly smooth fibrous sheath. The nerve was lost in its substance, but the tumour was free from adhesions with the spinal cord and all the surrounding structures. It was wedged in between the bones forming the spinal canal on the one hand, and the anterior surface of the spinal cord on the other, so that the latter was flattened by it anteriorly and slightly laterally. The tumour was a myxoma.

The motor phenomena which characterised this patient's history were paralysis, attacks of tetanic spasms, and, finally, persistent rigidity of the legs. Making allowance for the position at which the pressu was applied to the spinal cord, namely, below the origin of the nerves su plying the arms, the occurrence of tetanic spasms in the legs from tin to time reminds us forcibly of similar but more extensive spasms whi occur when the disease occupies the base of the brain, or the cer bellum; and, I think, gives support to the conclusions which we drawn as to the part played by the cerebellum in their productio A point which should be specially noted in this case is this, that wh the pains and tetanic spasms occurred, pain and spasm were likewi felt in parts supplied by the nerve on which the tumour was situate These attacks of spasm in the legs, which were intermittent, appe then to have been produced by changes occurring in the tumour, whi also showed their presence by increased pressure on the nerves for t arm which it involved. The same intermittence was observed in th spasmodic attacks produced by the tumours which occupied the ba of the brain, and the same thing occurs when a tumour presses upo the cerebral cortex. We may conclude, therefore, that in all su cases the convulsions are due primarily to alteration in the conditio of the tumour, though we cannot say in what the alteration consist

The case I shall relate next is a good instance of the results of pre sure on the cord applied from within by central tumours. The disea is a very rare one, and the specimen I show is so beautiful an examp of it, that I have endeavoured to work out the histological chang which it has produced in the cord as minutely as possible, in ord to see how far they explain the clinical phenomena observed duri life.

C. W., aged 50, waiter, was admitted into St. Thomas's Hospit under the care of Dr. Stone, on January 24th, 1885, and died March 18th, 1885. His family-history was unimportant; he had wife and five children, all strong and well. He had enjoyed the be of health since he was a child, and had never had syphilis. His i ness commenced somewhat suddenly, with pain in the back, eighte months before admission. Partial loss of power and sensation in bo his arms and hands soon followed, together with tremulousness attempting to use them. It was not until three months before comi to the Hospital that his legs became affected. Since then, he h had numbness and pricking sensations, loss of power, and a sensati of coldness in them. On walking, the ground felt soft. His bow had been irregular, and he had had some difficulty in passing urin his appetite had been poor; he slept fairly well.

On admission, he was a healthy looking man, and complained loss of power, numbness, and formication in his legs, together with i continence of urine. On examination, no angular curvature or mark rigidity of spine was discovered; but some tenderness, without pr minence, was found about the lower cervical and upper dorsal v tebræ. The legs were almost completely paralysed and anæsthet but there was no wasting of muscles, no rigidity, and no tremors. T tendon-reflexes were much exaggerated, and there was ankle-clonus both legs. The patient could use his hands and arms fairly well, b they were numb and tremulous, and the grasp was weak. There w no ocular paralysis. Urine was retained, and the bowels confine Pulse was 84; temperature normal; tongue slightly furred. The uri was of specific gravity 1030; no albumen, faintly acid. The abdomen w natural; hepatic and splenic dulness was normal. The lungs were res nant, and the breathing healthy, nor was there anything abnormal d tected on examination of the heart. He continued in much the sa condition for some weeks, complaining a good deal of pain in the ba high up, and of occasional pains in the legs. The muscular power a sensation underwent but slight variations in the upper and lower e tremities, though he complained sometimes of twitchings. The te perature was generally normal, but now and then somewhat raise Incontinence of urine set in about February 5th, and it became alk line and phosphatic, and contained albumen.

On February 24th, it was noted that there was tenderness in t lower dorsal and lumbar regions of the spine, and that complete ana thesia existed below the level of the middle of the chest.

On March 12th, the legs were completely powerless, and the rig leg œdematous. The patellar and plantar reflexes were very brisk ankle-clonus was marked, but there was no knee-clonus. Sensation touch and of pain, in lower extremities, was abolished; sensation heat was retained. There was no control over the bladder or rectu In the centre of the sacral region was a large horse-shoe shaped be sore, with a red granulating surface, and a smaller one was formi over the right hip. The urine was alkaline, and contained pus a mucus.

On March 14th, the patient took his tea at 5 P.M., and seemed be in his usual condition. Soon after 6 P.M., when the sister ca to him, he was found to be unconscious. At 6 P.M., his eyes w shut, and he was breathing heavily, and when asked how he was,

he was "as usual." The pupils acted to light. His tongue was ruded to the left, his left cheek was flaccid, and his left arm erless. His head and eyes turned to the right. The pulse and heart-ads were very feeble, but there was no murmur. He altered but e after this, and died on March 18th.

he following is an account of the *post mortem* examination, which ade twelve hours after death. Body emaciated. Over the sacral on in the middle line, a large superficial bed-sore was seen, and e were several smaller ones in the neighbourhood. The peritoneum, cardium, and right pleura, were healthy; the left pleura was ywhere firmly adherent to the thoracic wall. The lungs were in-ely congested and œdematous, otherwise healthy. The heart eared normal in size; the valves on the right side were natural, e on the left a little thickened, but competent. Along the line of chment of the mitral valve to the wall of the heart, on its auricular ct, was a series of papilliform elevations, such as are often found his position in cases of endocarditis. There appeared to be little o coagulum upon their surface. The spleen was large, weighing ounces, and contained several large pyramidal infarcts, which e still soft, and had a very clearly defined white margin.

he bladder, ureters, and the pelves of the kidneys were inflamed, presented some phosphatic deposits upon their surface. The neys were somewhat large, succulent, and showed evidence of early purative nephritis. The capsule peeled off easily, and below it e seen, in large numbers, minute white dots, which felt gritty n touched with the point of the knife. In one kidney was a small rct, opaque yellowish white in colour, with a red margin. The ght of the kidneys was 10¼ ounces.

he liver was somewhat large, and very heavy, weighing 70½ ounces. pyloric end of the stomach was attached by slight adhesions to gall-bladder. The latter was completely filled by a large gall-e. Its walls appeared to be fairly healthy, except at the extreme dus. The latter was thickened by new growth, and projected as rd nodule in the small indentation, through which the healthy -bladder often projects on the upper surface of the liver. From nodulated fundus, as a centre, grew a large mass of carcinoma the substance of the right lobe of the liver. The line which ted its growth farthest away from the gall-bladder was curved, in its neighbourhood the luxuriant new growth bulged upon the ace of the organ. That portion which was nearest to the gall-lder was depressed and harder, giving one the impression that it older than the peripheral growth. Large vessels coursed over surface of the mass. One or two very minute islands of new wth were seen here and there in the liver-substance at a distance.

he stomach and intestines were healthy, and no focus of new wth was found which could have given rise to that in the liver as condary product. The spinal column, as seen from the interior he body, seemed to be perfectly natural; nor, on removing the erior portion of it, and taking away the spinal cord, did it present traces of disease.

n removing the brain, the greater bulk of the right hemisphere, compared with the left, was very striking; to the finger it felt , especially in the lower part of the parietal region, and in the poro-sphenoidal lobe. On making a horizontal section, so as to se all the central ganglia to view, it was seen that the whole of the us striatum—both the nucleus caudatus and nucleus lenticularis as softened, and broke up under a stream of water. The internal external capsules, the convolutions of the island of Reil, and r convolutions adjacent to them, were in a similar condition. The t middle cerebral artery was found to be completely blocked, just ond the spot where the first few vessels are given off to the central glia.

n examination of the spinal cord, it was found that the dura mater healthy. At the junction of the lower dorsal and upper lumbar ons, was a softened area about one inch in length, and involving arently the whole thickness of the cord. It was rather deep red olour, with a pale yellowish island at one spot, which, with its per coloured periphery, was very suggestive of infarction, as it is n in other organs. Higher up, about the middle of the dorsal ion, the anterior spinal artery was interrupted in its course, and rounded by a long superficial hæmorrhage of a brownish-red colour. cervical enlargement, especially in its upper part, seemed to be normous dimensions, retaining, nevertheless, the natural shape he cord. On pressing with the finger, it was found to be very over an area one to two inches in length. On making a transverse ion through the cord in the upper cervical region, where there was feeling of increased density, the central canal was found to be h enlarged, and to contain blood, partially coagulated. Where canal opened out into the fourth ventricle, it appeared to be healthy. When a section was made through the enlarged and hardened portion of the cord, a most curious appearance presented itself. A very narrow and even rim of apparently healthy white matter surrounded, as with a sheath, a dense reddish-grey mass, of oval outline. In the centre of this mass was a hollow space, which presented a very marked resemblance in shape to the central grey matter of the spinal cord, and which contained blood. On teasing out a portion of this new growth in the fresh state, it was found to consist mainly of spindle-cells, and of cells with many long fine processes, such as one sees in gliomata.

In the first of these two cases of spinal tumour, where the pressure was exerted upon the cord from without, death occurred in twelve months from the appearance of the first symptoms. The latter were, in order of time, weakness of the legs in walking; increasing weakness of legs, accompanied by cramp and shooting pains; paraplegia, cramp, and involuntary flexing of legs; slight numbness and long continued attacks of muscular spasm in the lower extremities; and, finally, persistent rigidity. In the second case, the symptoms, due to pressure alone, which was exerted upon the cord from within in the cervical region, continued for fifteen months uncomplicated by other disease; they were, simply, partial loss of power and sensation in the arms and hands, and some tremor in them when used. This was the condition of the arms when the patient was admitted into the hospital; and it was little altered even at the time of his death, which occurred twenty months after the appearance of the first symptoms. During the last five months of life, fresh symptoms arose in relation with hæmorrhage and softening in the dorsal region of the cord—accidents which are very liable to occur in cases of gliomata; and the accident which finally proved fatal was embolism of the right middle cerebral artery, giving rise to left hemiplegia.

When a tumour grows in the spinal canal outside the cord, it may produce but few symptoms until it presses the cord against the resisting walls of the canal; but, after this has taken place, the course of the disease is naturally very rapid, as the cord is quickly flattened by the constantly increasing demands for growing space which are made by the tumour. When a tumour arises, on the other hand, within the spinal cord, it disturbs its functions even from the very commencement; but, as the nerve-substance appears to be elastic, and to allow a good deal of gradual stretching without serious interference with its functions, a tumour may go on growing for a long time before it produces striking pathological phenomena, either by pushing the cord against the bony walls of the spinal canal, or by exhausting the elasticity of the membranes which envelope it. These remarks only apply to gliomata and such non-malignant tumours as exert pressure on surrounding tissues, but do not invade them. The description which I now give of the microscopic appearances of the spinal cord and of the tumour in the present case, shows that a state of things is produced by the disease which fully explains the chronicity of some of these cases, and the trivial symptoms which present themselves.

The tumour is situated almost entirely in the cervical region, and mainly in the cervical enlargement. In the middle of the latter, the mass assumes its largest proportions, and the enveloping sheath of nerve-tissue is comparatively smaller than in any other region of the cord (Fig. 24).

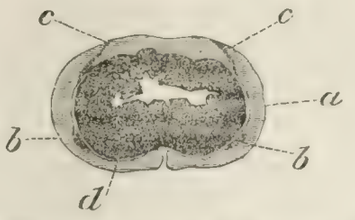


FIG. 24.—Transverse section (natural size) of spinal cord in a case of central glioma. *a*. Rim representing spinal cord. *b*. Anterior cornu. *c*. Posterior cornu. *d*. Central tumour.

When examined with the microscope, the greater part, both of the white and of the grey matter, can be readily recognised, though pressure has produced some alterations in them. On holding up a stained transverse section to the light, one observes in its anterior third a small oval area which is more transparent than the parts around; it is situated in the white rim, and lies upon the tumour. Under a low power, this proves to be the anterior cornu, containing the usual multipolar cells (Fig. 26). Symmetrically placed upon the opposite side of the tumour is a similar oval mass, which is the other anterior cornu. The cells are not healthy on either side, but are pigmented, and more or less elongated by pressure (Fig. 28); but, considering the pathological conditions to which they have been subjected, they are singu-

larly well preserved. The anterior roots can be traced from the cornua through the white substance to the periphery of the cord, and the posterior cornua extend backwards along the margin of the tumour. The lateral, posterior, and anterior columns of white fibres are all present, and show but slight pathological alterations (Fig. 27); there is no marked sclerosis anywhere. The same may be said of the whole extent of the cord which is occupied by the main bulk of the tumour. The latter becomes smaller and smaller in the lower cervical region, and is no longer evident as a mass in the lower dorsal region. Here, however, considerable hæmorrhage and softening have occurred (Fig. 25); and to these changes the later symptoms in the case may be referred, when the legs became paralysed, and increase of the tendon-reflexes and ankle-clonus appeared.

As the tumour becomes smaller, and finally ceases to be recognised as such in the dorsal region, it is probable that the changes present in the cord there represent the early stages of its growth. They occupy the left half of the posterior columns and the left lateral column, and consist of a peculiar thickening of the neuroglia, which is transformed into a hyaline substance (Fig. 37). The nerve-fibres in its meshes are at first but little altered, then they become swollen; the vessels are much thickened, and their walls assume the same glassy appearance as the neuroglia. In the cervical region, the central canal cannot be recognised; but in the lower parts of the cord, where the growth is early, it can be seen pushed to the right.

As to the tumour itself, it consists of numbers of islands of new growth situated around large blood-vessels as centres, and starting from them. The vessels have the thickened hyaline walls already referred to, and numbers of fibrillæ can be seen issuing from them. The new growth is richly nucleated, and has a very definite radiate arrangement round each centre. On examining very fine sections under high powers, the new tissue is seen to consist of meshworks of very delicate fibrils, and bundles of fibrils, in which are situated the nuclei. It may, therefore, be put down as a glioma. (Figs. 29 and 30.)

In Virchow's *Archives* for 1884 a very similar case is recorded by Dr. Reisinger, and an abstract of all the cases to be found in medical literature is added. They amount to twenty in all. It is very curious that, in Dr. Reisinger's case, the earliest changes were seen, as in mine, in the posterior columns near the central canal.

The minute anatomy of the specimen I show here explains why the symptoms in cases of central tumour of the cord may be so slight and extend over such long periods of time, and why spastic conditions are not readily induced, as they are when pressure is applied from without. For, even when the disease is so extreme that the substance of the cord forms merely a narrow ring round it, the nerve-tissue presents very slight pathological changes.

I shall now relate a case which illustrates the modification which occurs in the symptoms of disease of the lateral columns, when it is combined with disease of other parts of the cord.

Case of Primary Disease of the Lateral Columns, accompanied by similar changes in other parts of the Central Nervous System.—M. H., aged 53, whose occupation was pulling down old houses, was admitted into St. Thomas's Hospital, under the care of Dr. Ord, on November 10th, 1884, and died on December 2nd, 1884. There was no history of nerve-disease in his family. He had always enjoyed fair health, though troubled with indigestion and bilious attacks. The only definite illness he had had was ague at the age of 23. He had never had syphilis. Before his present illness began, he had been in the habit of drinking five or six pints of beer daily, but no spirits; he also smoked a good deal, about half an ounce of tobacco a day. His occupation necessitated pretty constant exposure to cold and wet, and he had had several falls, but had never had any symptoms of importance after them. About seven years before admission to St. Thomas's, he had had great anxiety about money matters, and was up night and day for about a month. He then got out of sorts, and presently noticed that the toes of both feet were becoming numb, and the legs somewhat stiff; this, together with weakness, produced difficulty in walking, and the right leg began to drag. He was quite unable to walk in the dark, or with his eyes shut, or to turn round quickly. The difficulty in walking had steadily increased, and both legs had become equally affected. Six months ago, total inability to get about made him take to his bed, the numbness increased, and he began to be troubled with jerking of the legs; the arms also got somewhat stiff. He noticed that, although he could grasp large objects well, he could not pick up small ones, such as pins. He had burning pains in the legs and shoulders, and shooting pains in the back and abdomen. During his whole illness, he had suffered from indigestion and constipation; his legs had become thinner, and he had lost weight. His sight, which used to be very good, had gradually become dim, so that he could only read print when it was held very close to hi His hearing had remained good. The right foot and ankle had be swollen for a short time a year previously, but none of his otl joints had been affected. He had lost all sexual desire, and for f years had had some trouble with his urine, sometimes having ret tion, at others continuous dribbling. He had never had any di culty in speaking or in swallowing.

On admission, the patient was an emaciated man, complaining inability to walk, dimness of sight, and shooting pains in the l and thighs. Although unable to stand, he moved his legs freely bed, and there appeared to be no loss of power in them, but there w some rigidity. The arms showed no loss of power; the grasp w strong with both hands, but there were slight tremors in the rig arm when he used it. The muscles of the face were stiff and trem lous when strongly contracted. There was partial loss of control ov the bladder, but none over the rectum. Sensation was impaired the lower extremities, but not markedly; the patellar reflex was a sent, and there was no ankle or knee-clonus. Plantar reflex was bri on both sides, the cremasteric absent. The lower abdominal refl was slight on both sides, the epigastric absent. The right pupil w larger than the left, and both acted to light and to accommodatio There was no oculo-motor paralysis or colour-blindness; he had slig lateral nystagmus. There was well marked atrophy of both dis most marked on the inner side.

There was no affection of speech or of hearing, but the sense smell was much impaired. The radial vessels were somewh thickened, the bowels constipated. The abdominal and thora viscera were free from serious disease. The urine had specific gravi 1025, was alkaline, and contained phosphates, but no albumen.

During the rest of his life, little alteration occurred in the sy ptoms which have been described, but cystitis with high temperatu set in. He was also attacked with swelling, redness, and œdema the metatarso-phalangeal joints on both sides and of the ankle-joint and finally got bed-sores, and died on December 2nd.

The following is the account of the *post mortem* examination, whi I made on December 3rd. The body wasthat of a well nourished, gr haired, old man. The legs were thin, and proportionately thinner th the arms. Both heels were black, as if from commencing gangrene. T external malleolus on the left side, as well as the sacrum, was in a simil condition. The ankle and knee-joints were quite healthy. The hea lungs, liver, and spleen presented no evidences of disease. The kidne were healthy, but the bladder was evidently inflamed, as it contained thr or four ounces of flaky, purulent fluid, and its mucous membrane w of a deep purple colour. The intestines, pancreas, and suprarena were all free from disease. The sheath of the spinal cord was di tended with clear fluid, so that, when the latter escaped, the cord w seen to occupy but a small part of the tube formed by the dura mate There was no undue vascularity, nor anything remarkable on extern examination. On making transverse sections of the cord from belo upwards, it was found that in the lower part of the lumbar regio there were no abnormal appearances. But in the upper lumbar regio three tracts of degeneration were visible. Two of them were in th lateral columns, which were symmetrically affected; the third co sisted of the columns of Goll, which together formed a triangular are The diseased parts were transparent, and had the colour of glu The degeneration could be followed in all three tracts as far as th medulla oblongata, but there it became less and less evident, and cou not be seen at all in the upper part of the medulla and pons Varoli The disease in the lateral columns appeared to be superficially sit ated, and was more extensive in the upper than in the lower regio of the cord. It occupied a larger area on the surface of the later columns, but penetrated less deeply into them than is usually th case in descending degenerations. It was impossible to say, from naked-eye inspection, whether the columns of Goll were the onl parts of the posterior columns which were diseased, or whether th degeneration affected those of Burdach as well. The cord was firm and, with the exception of the regions already referred to, it a peared to be healthy.

The only morbid appearances discovered in the brain were found i the optic nerves. They were both pale and flattened, and evidentl the seat of degeneration. The corpora geniculata, corpora quadr gemina, optic thalami, and supposed cortical centres of vision, were a normal in appearance. There were symmetrical ivory exostoses o the fourth and fifth ribs on each side in the posterior third of the length, but they were not so situated that they could press upo either nerves or vessels.

The symptoms in this case which point to lateral sclerosis a weakness of the limbs, tremulousness, jerkings, and rigidity; whil numbness, pains, loss of sexual desire, difficulty with the evacuation

ness of sight, and absence of the patellar reflex, indicate more nsive disease.

n microscopical examination, the spinal cord proves to be the seat ery widespread changes; and yet the parts affected are so con- t throughout, that the affection cannot be looked upon as an in- riminate one, but must be placed among the more complicated bined system-diseases. It will be seen by reference to Fig. 33 the regions affected are (1) the lateral columns; (2) the posterior mns; (3) the direct pyramidal tracts; (4) the anterior root-zones; (5) in a minor degree, the grey matter of the anterior cornu.

ut it will also be observed that, in the neighbourhood of the grey ter everywhere, a zone remains healthy, and, in addition, a super- l tract of fibres situated between the crossed pyramidal and cere- ar tracts posteriorly, and the anterior root-zones anteriorly, is un- red. The pathological changes throughout the diseased areæ are same, and must be considered to be those of chronic inflammation ting mainly the nerve-fibres, and in a far less degree the neur- a; in other words, they represent a form of chronic myelitis. In regions referred to are seen increase in the nuclei of the neuroglia, in the white corpuscles within the vessels, hyaline swelling he neuroglia, distension of the neurilemma, and disintegration of white substance of Schwann (Figs. 34, 35, 36).

otor phenomena were those which were most strikingly affected ng life, and sensory changes were far less marked. The pyramidal ts, direct and crossed, and the anterior root-zones, are undoubtedly or regions, while the columns of Goll are afferent, and connect res below with centres higher up; hence the disease is principally affection of the motor systems of fibres. The escape of the small rficial area in the lateral column from pathological changes is ex- lingly interesting, and marks it out as a tract containing some icular set of nerves. Gowers first called attention to this small t of fibres which appear to be afferent, and to degenerate centri- lly. Several other writers have also mentioned it, among them Hadden, and Dr. Howard Tooth has a paper on it in the *St. Bar- omew's Hospital Reports* for 1885, vol. xxi.

he medulla oblongata, pons Varolii, crura cerebri, motor convolu- s, anterior crural and optic nerves, and the triceps femoris muscle, were examined microscopically. The optic nerves were found to be phied, and there was an excess of nuclei in the anterior crural ve and in the triceps femoris; but with these exceptions, all the ts examined were free from disease.

have detailed this case, rather than one of the more usual ones, re chronic affections are confined to less extensive systems of ve-fibres, in order to show that disease is a very complex process, ever much we may endeavour to simplify our notions of it, and wise to point out in how modified a form disease of the pyramidal ts presents itself, if there be in addition pathological changes in er regions of the cord.

Before leaving the subject which I have thus far been illustrating, ely, the relation between diseases of the cerebral motor system the production of chronic muscular spasm, a few words must be ed in answer to the question, Does spasm ever result from afferent uli reflected on to efferent fibres in the cerebral centres, or from ases of the commissures? If we limit the term cerebral centres to grey matter of the hemispheres and central ganglia, I know of no loubted instances of reflex spasm in connection with them. Con- sions, which may be due to such causes, do not come hin the scope of the present lectures; and had I the time to treat them, I should shrink from casting a shadow upon ground which been so brilliantly illuminated by the genius of Hughlings kson. Several cases of tumours of the corpus callosum have come ler my notice, and they have been published by Dr. Bristowe in *rin*, vol. vii. I cannot do better than quote the words of so dis- guished a physician and pathologist in describing the symptoms ich were observed in them The chief characteristic features were:

'1. Their ingravescent character, a character which they possessed common with other cases of cerebral tumour.

'2. The gradual coming on of hemiplegia for the most part re- bling in its distribution the paralytic symptoms usually attending morrhage into one of the hemispheres, or softening due to em- ism.

'3. The association with the paralysis of one side of vague hemiplegic nptoms of the other.

'4. The supervention of stupidity, associated for the most part with reme drowsiness, a puzzled inquiring look when awake, a difficulty getting food down the throat, and cessation of speech.

'5. The absence of implication of the oculo-motor nerves, and of ect implication of other cerebral nerves; and lastly, death by na."

From beginning to end of these cases, no muscular spasm occurred.

In the few remarks which the time at my disposal has allowed me to make on diseases of the pyramidal tract, and the part played by it in the production of spasm, I have tried to point out how numerous and varied the clinical phenomena may be, according to the level at which the pathological conditions occur, according to the method of attack—whether from within or from without—and according to the presence or absence of disease of other portions of the central nervous system.

I must now leave this division of my subject, and pass on, in the last lecture, to a consideration of the spinal motor system, and to so-called functional spasm.

TWO LECTURES
ON
TUMOURS OF THE LARYNX; THEIR PATHOLOGY, SYMPTOMS, AND TREATMENT, WITH ILLUSTRATIVE CASES.

Selected from a Course of Lectures delivered during the Winter Session of 1885-86 at the Glasgow Royal Infirmary.

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Lecture I.

Gentlemen,—The cases and specimens which form a text to my lecture to-day illustrate the differences between two classes of tumours of the larynx, the benign and the malignant. These may be separated from one another by their histological distinctions, and by their clinical characteristics.

In pre-laryngoscopic times, the diagnosis of a tumour in the larynx was limited to those cases in which the growth occupied the upper part of the laryngeal cavity, so as to be either visible to the eye when the tongue was depressed, or within reach of the finger. Isolated cases of laryngeal polypus were recorded, even as far back as the middle of the eighteenth century; but at that time, and for many years subsequently, the diagnosis of such tumours was most uncertain. It was only towards the middle of the present century that the diagnosis of these diseases became exact, and that attempts were made to extirpate laryngeal growths by the mouth; although one hundred years previously, it is true, Kaderik performed for the first time, successfully, the endolaryngeal operation. I will not attempt even briefly to trace the gradual development which has taken place during the last half century, in the diagnosis and treatment of the diseases we are now considering; but I think I may say, with confidence, that, whereas new formations in the larynx were formerly supposed to be of rare occurrence, and beyond the reach of the surgeon, they are now not only readily recognised during the life of the patient, but they may be successfully removed by surgical appliances. In fact, there is probably no other class of diseases in which the advantages of laryngoscopic examination have been more clearly demonstrated. Not only are tumours now known to occur more frequently than was formerly supposed, but there is even a tendency on the part of practitioners to believe that they prevail more commonly than is, on reference to statistics, actually found to be the case. You will find in practice that they constitute only a small proportion of the chronic maladies of the larynx, certainly not more than two or two and a half per cent.; so that, although the diagnosis of the individual case may be of the utmost importance to the patient, the number of cases which you will meet with in general practice is comparatively small.

Before proceeding further, I must request you to note clearly the characteristics which separate tumours from growths of inflammatory origin. In the former, the neoplasm has a tendency to persist and increase; while the latter tend always to disappear, to develop into a higher state, or to reproduce the tissue of their matrix. Tumours obey the laws which regulate the nutrition of normal tissues; but at the same time they have an independent life, or they may grow at

the expense of the tissue in which they are implanted; and, from the fact that they do not contain nerves, the regulation or control of their nutrition differs from that of other parts. It is in this isolation, as regards the life of tumours, that the difficulty of explaining their etiology really lies.

Not only does every constructive act require that nutritive material be brought to the tissues, but the tissues themselves require to possess a formative power, without the agency of which the nutritive material would remain unorganised. If cells are to increase numerically or in size, or if they are to develop into a higher state, they must possess nutritive and formative excitability. Besides this, there must be some normal check to the indefinite growth of proliferating cells. Should this check become inoperative, or inadequate to control the productive energy of the proliferating cells, or should the formative excitability of the part be unduly increased, a tumour may result. This abnormal growth of certain elements may either arise from an alteration in the resisting power of the surrounding parts, or it may be a consequence of disturbance of intrinsic conditions. In tissues not undergoing rapid changes of growth or development, the nutritive and formative energy must be in a state of balance with those forces which inhibit it. If this inhibitory force be disturbed, then the cells grow and multiply unduly. When the cell-proliferation is associated with increased functional activity, the condition which we describe under the term hypertrophy results; but, if the function of the part be not increased, then a tumour probably forms. In other words, hypertrophy is the consequence of increased functional activity, calling for increased nutritive activity; whereas, in tumours, the formative activity originates, independently of other causes, in the proliferating cells themselves.

The etiology of tumours is a question which is exceedingly involved, and one upon which little real light has up to the present been thrown. What is the effective cause of the production of a tumour? It is not possible at present to give a definite answer to such a question. In many cases, the cause is not apparent; and in others, the connection between the new formation and its alleged cause is remote.

Chronic catarrh of the laryngeal mucous membrane is one of the most fruitful causes of benign growths in the larynx; but probably both hyperæmia and chronic catarrh are blamed more frequently than they deserve. May they not be, in many cases, the result rather than the cause of tumour? The etiological conditions of inflammatory processes and what has been called the tumour-dyscrasia are closely related to one another, especially in some forms of chronic inflammation and sarcomatous growth. In fact, it is very difficult to draw a line between the etiology of some forms of chronic inflammation and the production of tumours. I am quite willing to admit that mechanical irritation of the laryngeal mucous membrane, either as a consequence of over-use of the voice or from other sources, may act as a predisposing cause to tumours, either malignant or benign. Those individuals who, from their profession, require to over-exert their vocal organs, such as clergymen, public speakers, schoolmasters, etc., are very prone to the diseases I am now discussing. As in other parts of the body, so also in the larynx, long continued irritation may lead to the development of a tumour. Such causes of tumours have long been accepted; but it is also known that growths may form with absolutely healthy surroundings; or continued irritation and chronic inflammation may be present, and is present in multitudes of individuals, without leading to any new formation. Laryngeal growths may be congenital; and Dr. Arthur Edis has reported, in the *Transactions of the Obstetrical Society*, a case in which a child died from suffocation thirty-six hours after birth; and, on *post mortem* examination, a cyst, of the size of a hazel-nut, was found to occupy the larynx. The influence of sex is of importance. Men, from the fact that they are more exposed to vicissitudes of weather, irritating gases, and from the circumstance that, as a rule, greater demands are made upon their vocal organs, are more apt to be affected than women. The influence of age is of some importance also. Middle life—that is to say, between 30 and 50—is the period at which growths are most apt to form, if we exclude cases of cancer, which are most likely to appear in persons of advanced life.

The question of heredity is difficult to prove, but what is attributed to inheritance in the production of tumours in other parts of the body should, I think, be admitted in cases of tumours in the larynx. Syphilis and tuberculosis, only in so far as they lead to chronic hyperæmia and catarrh, may be regarded as predisposing causes of tumours. These diseases generally, however, particularly the latter, lead to the death of the patient long before the catarrh has become sufficiently chronic to produce true tumours. Associated with tuberculosis, inflammatory new formations frequently develop, but these do not interest us at present.

In considering the pathology and symptoms of neoplasms of t larynx, I shall divide them into two important classes: first, benig and second, malignant tumours. And I shall illustrate the subject several specimens of malignant diseases, some of which have been cised during the life of the patient, while others have been procur from the *post mortem* room.

There is nothing in reference to tumours of more importance, a which excites more interest and attention on the part of the medi attendant, than the qualities which may be included under the ter malignant and benign. Not only does a malignant tumour, prope so-called, produce grave constitutional disturbance, but from the ve first it is associated with danger to the life of the individual. rapid growth, its tendency to be multiple, its return after excisio and in many cases the facility with which the surrounding tissue a glands become involved in the neoplasm, all point to an unfavourab prognosis; and if the features which I have just indicated be as ciated with secondary formations in neighbouring or in distant part then the inevitable issue of the case is probably close at hand.

When I speak of a malignant tumour, I use the term only in clinical sense. Many surgeons still employ the terms "malignant and "cancerous" as if they were synonymous, whereas you know th malignancy is not characteristic of cancers only, but is equally pr nounced in the sarcomatous growths. When you speak of a cance you mean a tumour of definite histological structure. A tumour m endanger the life of the host, by reason of its situation, without bein in the strict sense of the term, malignant; a malignant tumour m threaten life by exciting a general malady, the symptoms of whi are anæmia, emaciation, profuse sweating, hæmorrhage, diarrhœa, etc which ultimately cause death. To take an illustration from tumou in other parts of the body, an uterine fibroid, which is essentially its structure an innocent growth, may cause death as a consequen of persistent hæmorrhage, or a fibroma in the brain may cost t patient his life from interference with the function of nerve centre upon which it may accidentally press. Likewise in the larynx innocent growth, such as a papilloma or myxoma, may kill purely reason of its situation. If, however, it be removed, the patient is once relieved, and the danger of recurrence is comparatively sma Roughly speaking, tumours are malignant in proportion to the va cularity of the soil in which they grow, to the number of mobile cel present in their interior and around them, to the richness of the lymphatic supply, and to their departure in structure from the ty of a normal tissue.

The symptoms indicative of the presence of a tumour depend up four circumstances—the nature, the situation, the extent of the ne formation, and the intensity of the inflammation excited by its pr sence. The most important symptoms are interference with phon tion, cough, pain, hæmorrhage, and obstruction to respiration, or deglutition.

I will now take up these symptoms separately, but, in doing so, desire to impress upon you the fact that the interference with functio is only a vague indication of the nature of the disease; it is upon laryngoscopic inspection that the diagnosis must rest.

Phonation is more or less interfered with in all cases, and in son aphonia may be the only symptom present. The voice may be altere in various ways, according to circumstances; in some cases it ma only be changed in tone and in quality, in others it may present t characters described as "Punch voice," it may be reduced to hoarse whisper, or it may be entirely lost. Interference with norm phonation, as a symptom, depends more upon the seat of the tumo than upon its size. In one of the cases which I will show you to-da there is a large adenoma, occupying the upper third of the larynx such an extent that tracheotomy required to be performed; but stil as you will observe presently, the voice is not greatly altered. Th depends upon the circumstance that the tumour is situated ant riorly and the vocal cords are not encroached upon. In anoth case, where the tumour was not a tenth of the size of the o I have just mentioned to you, the patient suffered from comple aphonia, and this is easily explained by the fact that the growt was situated on the margin of the right vocal cord. You wil therefore, understand that a very small growth in one situation ma cause more marked interference with the voice, than a tumour much greater size occupying another part of the laryngeal cavity. As general rule, sessile growths of the vocal cords produce more disturban than pedunculated ones, which hang in the larynx above the cord The latter may, however, during inspiration, fall between the cord and if phonation be attempted thereafter, it is found to be impossibl Growths situated below the cords may cause aphonia, by interferen with the force of the current of expired air, especially if they pedunculated; but, if sessile, subcordal tumours, when limited in siz

dom cause loss of voice. The cases which I show you to-day will monstrate fully the points I have just mentioned.

Cough is not a constant symptom, but as a rule the patient has an controllable desire to clear his throat. Should an attack of catarrh ur, cough may become very distressing, and be accompanied by asm of the larynx. Sometimes portions of the growth may be ex-ctorated, and even the entire tumour may be detached during a roxysm of coughing.

In non-malignant growths, pain and dysphagia are seldom pro-unced features; whereas, in the early, but especially in the latter ges of malignant disease, both these symptoms are generally present. cancer of the larynx, the pain is, as a rule, limited to the larynx ring the early stage; but when the growth has increased in bulk, e pain radiates to the ear, forehead, and orbit of the affected side, obably on account of irritation of the sensory fibres of the superior yngeal nerve, which irritation may be reflected along the auricular anch of the vagus. It is not unfrequent, however, in cases of nign tumours, for the patient to complain of discomfort and dis-reeable sensations, although not amounting to actual pain. The ling of the presence of a foreign body, and the constant desire to t rid of it, may be the only discomfort of which the patient com-ins.

Hæmorrhage arising from the presence of a tumour is almost patho-nomic of cancer, especially when large in amount. It may be due erosion of the walls of small blood-vessels from necrosis of the mour-tissue, in which instance the hæmorrhage is usually copious. ually, however, the quantity of blood lost is small, and only ap-ars in the expectoration as streaks on the surface of the muco-rulent secretion.

Hæmoptysis from the bronchial tubes or lung may occur in the urse of the disease from violent coughing, but the quantity of blood t is seldom great, unless in malignant disease.

In a considerable percentage of cases, difficulty of respiration is sent, but dyspnœa of a serious nature is less common than dis-rbance of phonation. In some cases, however, the difficulty in eathing suddenly becomes so urgent, that tracheotomy is required. is dyspnœa may be due to three causes: to mechanical obstruction m the presence of the growth, to spasm of the laryngeal muscles a consequence of local irritation, or to an infiltration of the olar tissue of the larynx with serous effusion. A growth may upy the larynx for a considerable time, even for years, without ding to any serious impediment to respiration, when suddenly, thout any apparent cause, the patient is seized with a dangerous plication, spasm of the glottis. In such cases, the stridor and dys-œa are often considerable, but the spasm seldom leads to a fatal issue. hen the growth is situated high in the larynx, and especially when e epiglottis is involved, deglutition is apt to be interfered with. hen pedunculated tumours exist, the dyspnœa may be transitory d paroxysmal; and even when there is a large tumour in the ynx, such as there is in two of the cases which I will show you day, the obstruction to respiration may be very marked at one ne, while at another breathing may be comparatively free.

Before considering the pathology, diagnosis, and treatment of neo-asms in the larynx, I will ask your attention for a few minutes to e cases which I have brought from the ward. I shall, in the first ce, demonstrate to you three cases of benign tumours, and after-rds I will show you two in which the characters of malignancy e only too distinctly marked.

The first case is one of a large adenoma occupying the upper part the cavity of the larynx. The patient, P. L., aged 62, first com-ined of the sense of a foreign body in his throat about Christmas, 84, that is to say, about a year ago. At that time, there s no interference with speech, but, two months subsequently, the ice became slightly altered. From the time he first became aware at there was something the matter with his throat, the sense of e existence of a foreign body has steadily increased; but, even when mitted to the hospital at the end of September, speech was tolerably stinct, although altered in tone and quality. In the course of his ness, he has not at any time complained of pain or cough, nor is ere any history of blood being observed in the expectoration. When e head is held in a natural position, there is not much obstruction respiration, but when it is turned to the left side, or thrown back-rds, the patient suffers from great dyspnœa. This is also the case en he lies in bed. About two months before admission, he began to ffer from difficulty in swallowing, but this symptom has at no time en really troublesome. On laryngoscopic examination, a tumour is nd to occupy the upper part of the larynx on the left side. It is tached to the interarytenoid fold, to the left aryteno-epiglottidean fold, and to the base of the epiglottis. It extends downwards into the cavity for a considerable distance, but on account of its size, a view even of the right vocal cord is prevented. The surface of the tumour is regular, and covered with congested and œdematous mucous membrane. To the finger or the probe it feels hard, and firmly fixed in its position; but, as far as can be ascertained, it does not involve the œsophagus or the pharynx. There is no ulceration. Shortly after the patient was admitted to the hospital, the obstruction to respiration became so marked, that it was found necessary to perform tracheotomy. Since the operation, the œdema and hyperæmia of the mucous membrane have disappeared, and the entrance for the passage of air to the lungs has become thereby so increased, that the patient can now breathe freely, even when the tracheal tube is closed.

Before making any comments upon this case, I will show you a young woman, who was sent to me from Helensburgh, and from whom I removed about a week ago a small tumour which was attached to the right vocal cord. I have placed a section of it under a microscope, and you may examine it for yourselves after the lecture. The history of this case is as follows. The patient is aged 27; her occupation that of a school-teacher, so that she requires to overexert her voice for several hours daily. In June, 1883, she became suddenly aphonic, and the complete loss of voice continued for about six weeks. Since that time, the voice has always remained rough and indistinct, so much so, that it necessitated her giving up her occupation. There is no cough, pain, expectoration, or dysphagia, nor was she even aware of the existence of a foreign body in her larynx, until she was apprised of the fact by me. On inspection by the laryngoscope, a small irregularly shaped tumour, of the size of a large pea, was found adhering to the margin of the right vocal cord, a little in front of its centre; and during attempted phonation, it was found to prevent complete approximation of the vocal ligaments. After the patient had been in the hospital for a few days, I removed the tumour by means of Morell Mackenzie's spoon-shaped cutting-forceps, and dismissed her two days afterwards, with directions to return for examination in a week or so, as I observed that the base of the tumour would require further treatment before a cure could be expected. On examining the case this morning, I found that, on the site of the tumour, there was a small granulating surface occupying an area equal to one-fifteenth of a square inch, and slightly elevated above the plane of the surrounding tissue.

Now, suppose that this case were left alone, and no further treatment adopted, the probability is that, within the next few months, the tumour would re-form, and the patient be in as bad a state as ever. What I propose to do now is to pass an electric cautery into the larynx, and with it destroy the little mass of granulations which I have just described to you. This is very easily done by the instrument I now show you; it is one of the most convenient contrivances for cauterising laryngeal growths. It is constructed, as you will observe, so that different electrodes or burners may be attached to the handle of the instrument, according as it is desired to cauterise the front, back, or sides of the cavity. The handle is connected with a secondary battery, and the circuit may be completed by pressing the little ivory knob. The cautery is introduced, and the electrode is brought into contact with the part to be destroyed; and when this has been done satisfactorily, the knob is pressed, the circuit completed, the electrode raised to a white heat, and retained in position for a second or two. Before applying the cautery to the larynx, it is well to spray the parts with a 5 per cent. solution of cucaine; by doing so, the sensibility of the mucous membrane is impaired, and manipulation is facilitated. Before the patient was brought here, I sprayed the larynx several times, at intervals of about five minutes, with a 5 per cent. solution of the hydrochlorate of cucaine; and now, as you will observe, the sensation of the larynx is so impaired that I may introduce instruments into the cavity without causing any disturbance. I will show you this case again in the course of a week, when you will find, I trust, that the voice is completely restored. At the present time, it is very much improved from what it was when she was admitted into the infirmary; in fact, it is almost normal. What I have done to-day is not so much for the purpose of improving the voice, as to prevent the possibility of the tumour recurring.

The next case is that of a woman, Mrs. McP., aged 48, from whom I removed a papilloma some time ago. I have brought her here, so that you may see how completely the voice may be restored after an endolaryngeal operation. The tumour was of considerable size, and led to complete aphonia, from the fact that it materially interfered with the approximation of the vocal ligaments. The growth was very soft in consistency, but, after its removal the patient made a rapid recovery, the voice was completely restored, and there is till the present time no evidence of recurrence.

These three cases illustrate to you the symptoms, course, and treatment adopted in benign tumours of the larynx. In the first case, the growth occupies the upper third of the cavity, and the most pronounced symptoms are difficulty in deglutition, and in breathing, simply as a consequence of the local obstruction. The interference with phonation is by no means marked. In the second and third cases, even although the neoplasms were much smaller in size than in the first case, yet on account of their situation, close to or between the vocal cords, aphonia was a marked symptom in both instances. In the second case, the tumour was situated on the margin of the right cord; and, in the third case, it rested upon the upper surface of the cord, and penetrated the mucous membrane of the ventricle, so that occasionally, during deep inspiration, it protruded and became entangled between the vocal ligaments.

I think I have now convinced you, by what you have seen, that, from the subjective symptoms alone, you cannot judge of the nature or situation of a laryngeal growth. It is only by a laryngoscopic examination that you can form a correct opinion on these points. These three cases illustrate the more common benign growths of the larynx; but, besides these, there are one or two others, to which I would like shortly to refer.

The following innocent growths are met with in the larynx—papillomata, fibromata, lipomata, ecchondroses, adenomata, myxomata, and cysts. You will observe that I have classified the growths according to their histological structure, and the first I wish to describe to you are the papillomata.

I have placed them first in order because they are of most frequent occurrence, and perhaps the larynx, of all parts of the body, is their commonest seat, especially during early life. In this situation, they are generally combined with adenomata. As regards their histological structure, they are composed of connective tissue, which serves as a support to blood-vessels, and capillaries, the surface being covered with epithelium. These tumours are simply enlarged papillæ, at least in their simpler form, but in many instances they are combined with cysts, with hypertrophies, or with development of gland-tissues. In the larynx, they vary in size from a millet-seed to a walnut. Their most common situation is on the anterior two-thirds of the true cords, on the false cords, and on the aryteno-epiglottidean folds. They are generally adherent to the mucous membrane by a broad base, but may also be fixed by a pedicle. In many instances, they are multiple.

A few days ago, I saw a patient who had several tumours of this kind, but all small in size. There was one on the right anterior pillar of the fauces, another on the posterior wall of the pharynx, a third at the base of the epiglottis, and a fourth on the true vocal cords. This was an example of what might be described by French laryngoscopists under the term "polypoid diathesis;" for not only were warts present in the upper air-passages, but the patient had several on other parts of the body. I have placed under the microscope a section of the papilloma removed from the larynx of Mrs. McP., and you will be able to see for yourselves the structure of such formations. Papillomata vary, however, a good deal in appearance. In some instances they are large in size, with a cauliflower appearance, and present a mass of primary and secondary granulations, which show a tendency to spread. These vegetations are longer and more distinct from one another than in carcinoma or in epithelioma. And whereas in cancer the mucous membrane and the submucous cellular tissue are invaded by the morbid growth, in the papillomata the epithelial proliferation does not extend beyond the basement-membrane.

The specimen which I now hold in my hand is an example of a papilloma involving the upper part of the larynx and pharynx. The patient from whom it was removed suffered greatly from dysphagia, and, for some time previous to his death, he was unable to swallow even fluid food. The voice, however, was not much interfered with. You will observe, on examining the specimen, that the growth is attached to the back part of the arytenoid cartilages by a broad base, which, however, permits pretty free movement of the tumour; when removed, the tumour was about the size of a pigeon's egg, distinctly lobulated, and presented a papillomatous appearance; but now, from the action of the preserving fluid, it has diminished in bulk. The important point which I desire to demonstrate by this specimen is, that a very large tumour may occupy the upper part of the larynx without necessarily causing either aphonia or dyspnœa.

Fibromata, or fibrous polypi of the larynx, spring from the connective tissue of the mucous membrane, and are much slower in growth than the tumours I have just been describing; and, when removed, they show no tendency to recur. They are not so common as the papillomata, but may simulate them in appearance by taking on a papillomatous form. They are usually sharply defined, smooth on the surface, hemispherical, pyriform, or globular in shape, paler in colour than the mucous membrane, and vary in consistency according to the texture of their component tissue; but, as a rule, they are hard, dense, and fibrous. On section you may see bundles of fibres, interlacing in every direction; and, if divided with a knife, some of the fasciculi may be seen in longitudinal, others in cross section. The vessels are not very abundant, except, perhaps, in the portions of the tumour where the connective tissue is loose. These growths are almost always single, and usually occupy the centre of the ligamentous portion of the cords, but they may arise from other portions of the larynx. If pedunculated, the growth is usually less vascular and softer in consistency than the pedicle. Their size is very variable, but they seldom exceed that of a large bean.

Lipomata are simple circumscribed masses of adipose tissue, with an independent vitality from the rest of the organism. In the larynx, they are extremely rare, only four cases having been recorded, namely, by Bruns, Tobold, Schrötter, and Wagner. In one case recorded by Bruns, the tumour grew from the posterior laryngeal wall, but such growths are, from their rare occurrence, of so little importance, that I shall not occupy your time by discussing the cases which have been published.

Growths built up on the type of cartilage sometimes arise from the pre-existing cartilages of the larynx, and should properly be named ecchondroses, as distinguished from enchondromata properly so called, which never arise from pre-existing cartilaginous tissue. These outgrowths arise from the cricoid and thyroid cartilages, and grow inwards towards the cavity of the larynx, where they appear as lobulated circumscribed nodules, or as smooth and diffuse swellings.

The adenomata are constructed after the type of secreting glands, and in various parts of the body assume characters according to the tissue in which they are developed. Adenomata must be carefully distinguished from simple hypertrophy of the glands, commonly associated with chronic catarrhal laryngitis. These hypertrophies, although they may resemble tumours in appearance, should be properly classed amongst the inflammatory new formations. The distinctions between hyperplasiæ arising from local irritation and true adenomata are that, in tumours, the gland-tissue is unable to perform any physiological function; and, further, the elements of the tumour do not bear a proper relationship to the surrounding tissue; whereas, in growths of inflammatory origin, there is, as a rule, in the early stage, an increase in the physiological activity of the gland-tissue, and the development always takes place where glands normally exist. I think it worth while directing your attention to these points, because I find that there is considerable confusion in the minds of some as to the nature of those little tumour-like bodies which form as a consequence of local catarrh. They are found as little nodular or papillary outgrowths, which may assume a polypoid form; in other instances, the ducts of the glands become obstructed, and lead to the formation of small retention cysts. In the development of such growths, the first change is a hyperplasia of the submucous connective tissue, followed by a development of epithelium and gland-tissue. If we exclude these inflammatory neoplasms from our classification of tumours, and place them amongst the hypertrophies, then I think I may safely say that the adenomata are rarely met with in the larynx. The case which I have shown you to-day is, therefore, all the more interesting on that account. On microscopic examination of a portion of the tumour removed for diagnostic purposes, I find that it presents the following structure.

The tumour is constructed upon the type of a compound racemose gland, closely resembling salivary gland-tissue in appearance. The cells do not stain well with logwood, are very granular in appearance, and large in size, but at no part of the sections I have examined under the microscope can I discover any tendency to destruction of the membrana propria. The nuclei are large, but not very pronounced. The acini are regular in size, and the basement-membrane is exceedingly delicate, so that they lie closely together. This structure was shown throughout all the sections examined.

The most frequent seats of origin of adenomata are the base of the epiglottis, the aryteno-epiglottidean folds, or the mucous membrane covering the posterior aspect of the cavity; that is to say, they most commonly develop in situations where glandular structures are normally abundant. They are generally lobulated or globular in form, and may be pedunculated, or, as in the case I have shown you, sessile. The mucous membrane covering them is, as a rule, normal in appearance, but the blood-vessels may be injected with blood, and so impart to the surface a deep red colour. They may cause sudden and complete obstruction from their liability to œdematous infiltration, especially if the larynx become inflamed. This was the reason why, in the case of L., I performed tracheotomy so early.

Myxomata are growths composed of mucous intercellular substance, which are embedded stellate anastomosing cells and blood-vessels. It is difficult to separate them pathologically from fibromata which ve become œdematous; and it is a remarkable fact that, while these owths are frequently met with in the nasal fossa, they seldom form nours in the larynx. They consist of a capsule covered with ucous membrane, and including within it gelatinous material, which, microscopic examination, is found to be made up of a hyaline ostance, interlacing cells, and a fine reticulum of connective tissue. ave placed under the microscope the section of a tumour of this ss. They are clinically non-malignant growths, and, when comtely removed, rarely recur; but, if imperfectly excised, they may levelop with fresh vigour. It is not necessary for me to make any ther remarks, as these growths are of very rare occurrence, and do t present any features of special interest.

In this lecture, I have limited myself to the discussion of tumours ich are in their clinical manifestations usually benign; but it is well bear in mind that some of these tumours may present occasionally idences of malignancy. I will demonstrate to you at the next ture malignant tumours; and, in doing so, I shall direct your ention to some cases and specimens which illustrate the more imtant facts relating to such growths, as the cancers and sarcomata.

ABSTRACTS OF
SIX LECTURES
ON THE
NTESTINAL CANAL AND PERITONEUM IN THE MAMMALIA.

Delivered at the Royal College of Surgeons.

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Lectures I, II, and III.

ese lectures are founded upon the systematic examination of the dominal viscera of nearly 200 different species of mammals. For e greater part of the material, I am indebted to the kindness of r. Beddard, the prosector to the Zoological Society, and for the rest Professor Stewart, for permission to make use of the valuable col-tion of undissected animals contained in the College stores. In the rger number of instances, the animals were injected before dissection; d, by the skilful aid of Mr. Ockenden, the prosector's assistant at e Zoological Gardens, I was able to obtain very perfect injections in en so large animals as the rhinoceros and hippopotamus.

The present work appeared to be justified by the fact that little has en written upon the abdominal viscera as they are disposed *in situ*, d still less has been contributed upon the subject of the peritoneum d its folds and fossæ in the mammalia. The descriptions of the omach and intestine in the lower animals deal almost exclusively ith the parts as they appear when separated from all their normal tachments. From such descriptions, the disposition of some porons of the intestine, notably of the colon, can hardly be deduced; d the same may be said of the mutual relations of one segment of e bowel and another.

It is hoped that these lectures will supplement the admirable count of the abdominal viscera of mammals, given some years ago by rofessor Flower from this chair.

So far as I am aware, no attempt has yet been made to follow the ages of evolution by a reference to the intestinal canal. It will, hower, I believe, be evident from the account that follows, that the order d progress of mammalian descent can be illustrated in a very striking anner by the anatomy of the intestinal canal. Illustrations bearing on this subject have so far been mainly derived from data having ference to the skeleton and teeth. It is obvious that these parts of e body, as being little sensitive to casual change, must afford invalule evidence upon all questions that affect the descent of the mamalia, and, so far as fossil-specimens are concerned, they alone can ford material for speculation. But inasmuch as the evolution of the imal species is largely dependent upon the food-environment, it ould be expected that the alimentary canal should provide important ata in respect to this subject. This canal is certainly highly organed, is, no doubt, sensitive to change, and is susceptible of rapid specialisation. But the characteristics that follow therefrom are not difficult to recognise and to eliminate; and there then remain more rudimentary characteristics, which appear to me to be of the utmost value, and to speak with no uncertain voice.

In the present account, I shall avoid mere details of description, and shall deal principally with such facts as serve to illustrate these important questions.

Development of the Alimentary Canal in Mammals.—The first appearance is that of a simple straight tube, suspended by a vertical median fold. This tube becomes differentiated. The upper part dilates, and forms the stomach; the next portion increases rapidly, and forms a large loop with a narrow pedicle. This loop becomes the small intestine, and the ascending and transverse parts of the colon. The part below retains its connection with the median line, and becomes the descending colon and rectum. The connecting fold of peritoneum is named from above down the meso-gaster, the mesentery, the meso-colon, and the meso-rectum.

The parts of the alimentary canal, brought together at the pedicle or narrow stem of the great loop, are the duodenum and the transverse colon; and the close association of these two parts is never lost in the mammalian intestine in any case, or under any complications. Between these two closely allied parts runs the superior mesenteric artery. Two very important changes now take place: the gut above the pedicle just named forms a second loop—the future duodenum; and the great primary intestinal coil becomes twisted upon itself, so that the right side of the mesentery becomes the left, and the commencement of the colon is carried across the end of the duodenum. By reason of this twisting, the meso-duodenum and early part of the meso-colon are bent upon themselves, and thus is produced a remarkable vertical fold of peritoneum, that connects the duodenal bend with the meso-colon. This fold may be called the duodenal fold. It is present in all mammals that show the turning in the primary loop. It becomes faint in the higher primates, and is practically lost in man, where, however, it is met with as the fold of peritoneum that bounds the fossa duodeno-jejunalis. Finally, the spleen develops in the meso-gaster, and from a pouch of the meso-gaster below the spleen, the rudimentary great omentum is produced. In man, the meso-duodenum is lost; the true mesentery also disappears, and is replaced by a membrane with new attachments, to which, however, the term mesentery is always applied; the great omentum becomes complex, and the median meso-colon is lost.

The main features in the disposition of the alimentary canal in animals below man are the following: the meso-duodenum and duodenal fold are retained, the real mesentery and descending meso-colon are retained, the rest of the colon remains free, and the great omentum is comparatively simple.

Types of Intestine.—It has been many times pointed out, by comparative anatomists, that it is unsafe to surmise the function of an organ from its structure; and this observation is substantially illustrated by the alimentary canal. In the single family of the marsupials, the same simple globular stomach is found in the carnivorous dasyure, the leaf-eating phalanger, and the insectivorous bandicoot. If it be assumed that an ample or complex cæcum is an essential in the intestine of herbivora, then it is not difficult to point to certain herbivorous animals who have no cæca, as, for example, the hippopotamus.

Eliminating exceptional characters, and taking the average in a large series of cases, the following types of intestine may be stated.

The Carnivore's Intestine.—The stomach is quite simple, the duodenum is comparatively short. The intestine is short, and the colon is especially abbreviated. The cæcum is small, simple, and conical. The colon is peculiarly simple, and not sacculated.

The Herbivore's Intestine.—The stomach is complex. When of simple outward appearance, it may contain an elaborate gland, as in the wombat and beaver. The duodenum is long. The intestine is extensive, and the colon is especially lengthened and sacculated. The cæcum is large and capacious. The colon is usually complex.

The intestine of man is based rather upon the former than the latter type; and it remains for those who maintain that man should be a pure vegetarian, to explain the disposition of the canal in this usually omnivorous animal.

The Amphibia.—In the amphibia, the intestinal canal is disposed in the simplest manner, in the form of a single loop, suspended by a vertical median mesentery. The stomach is vertical and tube-like. There is no distinct duodenum, and the colon, as recognised in mammals, is not differentiated. Two arteries supply the stomach—one, the posterior gastric, follows the lesser curvature, and corresponds to the gastric artery of mammals; the other, the anterior gastric, runs to the greater curvature, passes in front of the pylorus, and occupies a dis-

tinct fold of peritoneum. This vessel obviously corresponds to the gastro-epiploica dextra of mammals. Now, the latter artery is very constant in the higher animals, and with one exception always runs, as in man, behind the pyloric end of the stomach. The exception is most notable. In the marsupials, this artery runs, as in the amphibia, in front of the pyloric end, and carries with it a separate fold of peritoneum, just as it does in the frog or toad. In the amphibia, the whole intestinal canal and stomach is supplied from a single trunk, the cœliaco-mesenteric. In the triton, there are inferior mesenteric arteries. In the duck-bill there is also a single artery for the abdominal viscera, the cœliaco-mesenteric. In the echidna there is the same trunk, with the addition of an inferior mesenteric artery. This artery is absent in the marsupials, and some edentates, but is present in nearly all mammals above the last named.

The Monotremes.—The alimentary canal is simple. The bend of the colon over the duodenum is marked. There is a simple cæcum. There is but little specialisation of the stomach. The vascular supply is very rudimentary, and the intestines are comparatively short. The echidna, viewed according to its intestinal canal alone, stands above the ornithorynchus.

The Edentata, from the present point of view, occupy a very peculiar position. Some of them show a fairly advanced development, while others should occupy a position below the monotremes. In the two-toed ant-eater, the intestinal canal forms a simple loop as in the amphibia; there is no turn in the colon, no distinct duodenum. The mesentery is narrow, as in the amphibia, not wide, as in all the higher mammals. The colon present two so-called cæca. I would venture to maintain that these are not mammalian cæca, but correspond to the double cæca of some birds. The mammalian cæcum is always single; it is, without any exception, connected to the ileum with a fold, the ileo-cæcal fold, and occupies a position in the general intestinal tube nearer to the stomach than the false cæca occupy. These false cæca are nearer to the anus than the true cæcum, and, like the cæca of some birds, they have no folds. False cæca are met with in certain armadilloes, and again in the hyrax. In the last named animal they are associated with a true mammalian cæcum, so that the false and the genuine can be well compared.

With regard to the other edentates, the tamandua and the great ant-eater both show a most rudimentary arrangement of the intestines; and these animals, together with the two-toed ant-eater and the sloths, should occupy a position below the monotremes. They certainly show great specialization of the stomach to make up for their defects in teeth, but, in the general disposition of their alimentary canal, they show the lowest organization of any mammal. The armadilloes show a much higher development, a simpler stomach, a perfect bending of the colon, and a more elaborate blood-supply. In certain of them, indications of the false cæca appear. The pangolin, or scaly ant-eater, marks a still higher step in development; and, at the head of this strange group, stands the Cape ant-eater. This animal shows evidence of advanced development, of a development that places it beyond the marsupials. The cæcum is highly formed, and its colon elaborately developed. With regard to the edentates generally, there is no evidence, derived from the anatomy of the abdomen, to show that they have sprung from the monotremes, much less from the marsupials. They would appear to have sprung up side by side with the monotremes. As regards mammalian descent, they lead nowhere, and are very emphatically separated from all kinship with the marsupials.

The Marsupials.—These animals exhibit three types of stomach: 1, a simple globular viscus as met with in the dasyure and phalangers; 2, a stomach, simple in its external form, but provided with a complex cardiac gland, as in the wombat; and 3, the elaborate sacculated stomach of the kangaroo. The stomach of the kangaroo is thrown into a series of remarkable sacculi, and closely resembles the human colon. It is about equal in length to the body of the animal, and shows some indications of the features of the ruminant stomach. In connection with its blood-supply, it is of great interest to note that in nearly all the marsupials the gastro-epiploica dextra artery runs in front of the pylorus, in a special fold of the peritoneum, derived from the gastro-hepatic omentum. This is precisely the condition met with in the amphibia, and is an arrangement that obtains in no other class of mammal. The great omentum is of large size, and of simple arrangement. The duodenum is large, and the bend in the intestines is pronounced. The cæcum is a third of the length of the body, and the colon shows traces of sacculation. This is the first appearance of sacculation in the mammalian intestine.

In the phalangers, the cæcum is of great length. In the vulpine phalanger, it is twice the length of the body; and, in the koala, three times that length. No mammal shows so remarkable a development of the cæcum, and it is possible to perceive that, by progressive increase in the length of this part of the bowel, the species may become exterminated.

In the wombat, the main features of the intestine closely approach the rodent type; the first part of the colon is twisted upon itself, as is the case in many rodents; the colon beyond presents a loop, which is identical with the colic loops, that form so prominent a feature in the rodents; and the bowel is sacculated. I would point out that the so-called vermiform appendix of the wombat is not a true appendix, but merely a small and dwarfed cæcum. The pouched ant-eater shows an arrangement of the alimentary canal, that recalls the simple disposition of the intestine in the principal edentates. The remaining members of the family call for no detailed notice.

In viewing the position of the marsupials, from the stand-point of the alimentary canal, it must be owned that their position is low, although it is above that of both the monotremes and the edentates. They possess no inferior mesenteric artery, the blood-supply of the stomach is rudimentary, the folds of the peritoneum and great omentum are peculiarly simple. There is no evidence to show that they are derived from either the monotremes or the edentates. In relation to those groups, they appear to occupy an independent position, and to spring from some primitive mammalian stock, of which no members now survive. They would appear to be clearly the progenitors of the rodents and ungulates. The long pointed cæcum, the coiling of the ascending colon, the formation of colic loops, and the sacculation of the bowel, are all features that are predominant in the groups of mammals named. Upon like grounds, it may be argued that the insectivora, the carnivora, and the cheiroptera, cannot be traced back to a marsupial root. I think it can, on the other hand, be shown that these classes of mammal take their rise from the monotremes, and obtain their present position without passing through marsupial territory.

ON SOME CHRONIC NERVOUS SEQUELÆ OF SMALL-POX, ESPECIALLY AS AFFECTING THE SPEECH.

Abstract of a paper read before the Clinical Society of London.

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AND
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We would bring before the Society to-night two cases in which small-pox has left some lasting and peculiar traces on the nervous system. The clinical histories and conditions of the two cases have so many points in common, that we are glad to be able to present them together, especially as we do not find any records of English cases with just the same clinical history, though the experience of Germany and France can leave us little doubt that such cases occur among us occasionally.

They are both women in middle life, aged 45 and 42 respectively, who had attacks of small-pox, the one in 1879, the other in 1881, from which they recovered incompletely, with some paralytic and ataxic symptoms, and a peculiar difficulty of speech, which was at one time so strikingly similar in the two as to produce genuine confusion, if the ear alone were trusted to distinguish them. They have been under observation about six and four years respectively, and have made some progress towards recovery, but still retain some interesting features, especially in the character of their speech.

Jane B., aged 45, the elder, taller, and stronger of the two, enjoyed excellent health up to July, 1879, about six years and a half ago, when she had confluent small-pox, and was treated in the Small-pox Hospital at Fulham. She had given birth to a child only three weeks before that, and had been very anxious about the health of another child. Her speech became affected when the small-pox eruption appeared. Of her state during her stay in the Small-pox Hospital, the resident medical officer very kindly furnishes us with an account. When admitted, she could give no account of her illness, put out her tongue with difficulty, but appeared to understand what was said to her. For the next twelve days, she was delirious and unconscious, but then improved slowly, recovered consciousness, and could put out her tongue. She tried to talk, and she had no deficiency of words; but she could not make herself in the least intelligible for the next ten

ys or so. She was much excited during these attempts at speech. ere was great muscular weakness in her hands and legs ; she made ny unsteady awkward movements, and improved very slowly in is respect, as well as in speech. She was sent home after three nths in Fulham Hospital, with the sequelæ of small-pox showing emselves in weak ataxic movements of the arms and legs, especially the arms, and with an almost unintelligible fashion of speech, ough no signs of paralysis of the palate had been noticed. She had, ther, a very irritable temper, which was quite foreign to her pre- us character. She had quite lost her old power of writing a good nd, and doing sums easily. A fortnight later, she became an out- tient at St. George's Hospital, under Dr. Cavafy, under whose treat- nt she recovered the use of her hands and legs to a considerable ent, and who was good enough, in January, 1880, to transfer her my (Dr. Whipham's) care as an in-patient.

The abnormality of the speech was the most striking symptom ; tone was high-pitched, monotonous, and nasal, the articulation indistinct that at first she was almost unintelligible. Every word s mouthed and forcibly squeezed out, syllable by syllable, by reso- e and exaggerated muscular effort, which made her "hot all over," she said. She ascribed her difficulties to the feeling that her ngue "was stiff," and seemed, as she phrased it, "to belong to neone else." She could put it out easily, but always protruded it first to the right side, with the tip pointing downwards, and, as trusion was completed, gradually turned it to the middle line, so t it ultimately assumed a normal position, but she found it nearly possible to turn the tip upwards at first. This was a habit which l come on with the small-pox, and was variable, but not wholly rid of till three years later. When the tongue was depressed h a spatula, it could easily be seen that just at first the right gos uvulæ acted more powerfully than the left ; the tip of the ula was thus drawn upwards, backwards, and to the right, but in ut ten seconds resumed its natural position. Laryngoscopic ex- ination revealed nothing abnormal about the larynx, all move- nts being perfectly performed. Both hands and arms were weak, l their movements ill controlled ; she could not button anything, write in any but a very irregular fashion, or hold a mug in the left nd, which was the weaker of the two. Her walk was rather stiff l rather unsteady, but she could stand easily when her eyes were t. Sensation was perfect. Her intelligence was remarkably acute; showed great quickness of apprehension. Her look was that of who had undergone much anxiety ; the eyeballs were a little minent, and, at times, especially when questioned, there was a d, eager look in her eyes. Her manner was shy and nervous ; she liked examination and questioning, and was fully aware of her rtcomings in speech. There was now and then some rather hys- ical laughter, but nothing beyond the limits of sanity. She read ily to herself, but said that she forgot all she read. She did not, wever, forget her own life, on which she was frequently tested. e had perfect memory of the Lord's Prayer and the alphabet, and the cesses of addition.

She left, after about nine weeks (April 3rd, 1880), at her own re- st. Her arms had grown rather stronger, but were still clumsy movement, the fingers especially so. Her speech was very little proved, but her general health was better ; she had much less pepsia and headache. Her walking powers were fairly good ; a nth after her discharge (May, 1880), she walked alone about two es up to the hospital without much difficulty.

During the five and a half years since then, she has been kept under asional observation. She has, on the whole, considerably improved. ugh very slowly, and retains the traces, at least, of the more essential ptoms. The gait is slightly irregular, but by itself would hardly ract notice ; she can walk easily with her eyes shut, and feels no diness or difficulty in turning briskly. The hands are both rather k and clumsy, the left the weaker. She cannot perform rapid vements, such as a shake on the piano, with either hand ; but her ting is now fairly well shaped and steady. No tremor is produced paying increased attention to her movements. The deep reflexes, ich were in her early stages rather difficult to estimate, owing to incapacity or disinclination to relax her muscles, are now very easily ited, and perhaps in slight excess, but there is no patellar reflex or kle-clonus. The movements of the laryngeal muscles are natural, before. The most striking symptom is still, as it has always been, abnormality of speech. There has been slow improvement during se last seven years, but still her language is sometimes obscure to the anger. There are the old nasal monotone, in many words the scanned lables at nearly equal intervals and with nearly equal accent ; the ni-explosive muscular effort in articulation, and the unruliness of tongue, which together make up an ataxic picture, widely different from the ordinary forms of stammering in its regularity, and in its absence of long pauses, or of constantly recurrent clonic spasms.

The second case, that of Mrs. B., a married woman, aged 42, is drawn on essentially the same lines, but requires a few words of introduction. She had had very good health up to July, 1881, when she caught the small-pox, that is, about 4½ years ago. She went to the Deptford Hospital ; and we are indebted to Dr. John McCombie, medical officer of that institution, for a brief account of her condition whilst there. It was written from memory, as the notes of the case had been mislaid. "There was nothing peculiar about the eruption," he writes, "which ran the course usual in small-pox modified by vaccination, but the nervous symptoms are peculiar. When she was taken ill, her husband thought she was under the influence of drink, and, on admission a few days afterwards, she was in a state bordering on mania, although unable to articulate. She would bite and tear the bedclothes with her teeth, and grasped objects firmly with her hands, though she had nearly lost the power of moving her upper and lower extremities. She made great efforts to speak, but was not able to do so. Her stools and urine were passed voluntarily. The pupils were unequal. She remained in this state for a week, and then began gradually to recover her senses, as well as the power of moving her limbs, and the power of articulation. She was evidently at no loss for words, but her utterance was difficult, thick, and jerky. In raising her hands to her mouth, she would often miss her mouth entirely. These symptoms improved very much before she was discharged" (about eight or nine weeks after her admission), "at which time she could walk very little, and that only with the assistance of the nurse." Within a week or two of her discharge from the Small-pox Hospital, she came under Dr. Watney's care as an out-patient at St. George's, and he was kind enough to transfer her to me as an in-patient.

What then troubled her most was her weak stumbling and irregular gait ; what, perhaps, struck the medical observer most was her very unusual fashion of speech, strangely like the first case. There was certainly no loss of intelligence ; she was very acute and very cheerful ; no distinct paralysis could be found in the muscles of the face or tongue, soft palate or larynx ; but her speech was peculiarly slow, nasal and monotonous in tone; each word was jerked out in a semi-explosive fashion with an excess of muscular effort ; she did not find, as her analogue, Mrs. B., of case 1, had done, special difficulties with special letters or words, but she hesitated before giving utterance to each word, as though "at first," as she said, "she could not frame to pronounce it right" ; but, after a moment of such hesitation, the word or letter burst forth from her restraining lips.

She could read easily, and remembered perfectly what she had read. Neither her writing nor her powers of calculation had suffered in the least. She was, as a rule, an even tempered woman, but not quite free from those attacks of irritability common in cases of this kind.

Her gait showed some inco-ordination ; she took short, irregular, hurried steps, bringing down the heels first sharply on the floor, and feeling constantly afraid of falling. However, she could stand well with her eyes shut, and could rock from heel to toe with her feet close together without any difficulty. The deep reflexes in the legs and arms were slightly in excess, but there was no ankle-clonus, nor any fibrillar tremor, nor tremor on movement. The grasp of the hands was firm, the left was a good deal the weaker. She could not move her fingers quickly, as in executing a shake on the piano, nor could she manage some such co-ordinate movements as plaiting her hair. She dared not nurse her baby for fear of dropping it, and she could not carry a full cup to her lips, without giving it her very best attention.

She stayed about three weeks in the hospital, without material change, but has often come since during the subsequent four years, to be watched and treated.

During these four years there has been decided improvement, though it has not been quite continuous ; and, on the whole, the chief features of her case still stand out clearly. She walks with short, hurried, undecided steps, and dare not walk through a crowd, knowing that she could be easily pushed down. The deep reflexes are decidedly in excess. The hands are not so clumsy as they were ; she can pick up a pin, and is now able to plait her hair in a fairly tidy fashion ; and not long ago, after attempting it for a minute or two, she volunteered the statement that she felt as if the muscles of the arms had been beaten. No tremor, however, is induced by movement. The speech is rather less broken, and more distinct than it was ; but, if she read aloud a piece of the *Times* taken at random, it is very hard for her audience to follow her. There are the nasal monotonous tone, the exaggeration of muscular efforts, the abnormal separation of the words or syllables, as a rule ; the scanned speech of foreign observers ; less

marked, it is true, than was the case four years ago, and less easily to be mistaken for the speech of her companion case, but still belonging, with her, to a type which we have not met with under other conditions.

As the nervous sequelæ of small-pox have received very little attention in English medical literature, we could be sure they were very uncommon in practice, but thought it worth while to turn for a moment to the experience of some of the chief small-pox hospitals of London. The records at Stockwell were consulted by Dr. Myers, and showed in the last fourteen years about 1,600 deaths from small-pox, but in only three of these is any nervous injury mentioned; and in these it was slight cerebral meningitis, with no symptoms that could clearly be distinguished, during life, in the patient's state of high fever and delirium. The clinical accounts of the last 2,000 cases were looked through without finding any records of nervous sequelæ. At Homerton, the records showed nothing; but from the cases at Deptford, the Junior House Officer, Mr. Struthers, was kind enough to tell us of two cases in the last eighteen months, in which the speech had become unintelligible. In the first, it so remained for three weeks and then recovered, but concurrent delirium tremens lessened the possibility of drawing any accurate conclusions; the second case died early, before detailed record had been made, and there was no post-mortem examination of the nervous system. From Highgate, Mr. Goude has been good enough to send us word that the records throw no light upon the subject; so we have thought we might be excused for drawing up a brief summary of seventeen cases we find elsewhere, previously printed, mostly in Germany and France; only one, so far as we know at present, in England. There is a striking group of eight cases, in which symptoms closely analogous to those of the patients we have brought forward to-night have been carefully observed. Westphal originally, in 1871, after an epidemic of small-pox in Berlin, brought such cases into notice by a brilliant paper, which raised a temporary interest in the matter in France as well as Germany, where Gubler, by his comprehensive essay in 1860, on the nervous sequelæ of fevers in general, had prepared the way. The accuracy with which Westphal's description of the speech applies to the present cases is not a little remarkable.

This is not the time or place to attempt to discuss the pathology of the affection, even if there were a sufficient basis of facts for such an attempt. It may just be remarked, however, that there is nothing in the symptoms incompatible with the hypothesis of minute scattered lesions, chiefly cerebral; and that it should occur in small-pox much more frequently, apparently, than in other fevers—for six out of the eight most closely analogous cases in our table are of small-pox—suggests minute hæmorrhages as a possible origin.

The clinical picture is not that of the commoner types of disseminated sclerosis. There is sudden onset; there is no increase of tremor; no nystagmus. The peculiar laboured speech, with each syllable "squeezed out," as Westphal phrases it, is different from the more ordinary forms in disseminated sclerosis. And what is more important as a characteristic and a distinction is, that the prognosis is better. In these cases, there has been slow improvement during six and four years, and the improvement seems likely to continue. In a third of the analogous cases we tabulate, there has been recovery; in nearly two-thirds, improvement; and in the single case of death out of the seventeen, the prevailing and fatal malady was tuberculosis.

Note.—Since writing the above, we have been glad to see that the same subject has been very ably handled by Professsor Jaccoud, in three clinical lectures published under the date of this year. After reviewing the greater part of the previously recorded cases which we have tabulated, he supplies a very good example in his own practice of the same kind of affection of speech after small-pox, and another after pneumonia; and shows his appreciation of the earliest and most valuable evidence of Professor Westphal, to which we have briefly alluded. To the general condition he is content to give the name of "false" disseminated sclerosis—false, in as much as it tends nearly always to recovery, though the recovery may be very slow, as it has been in the cases we have recorded. He has not been able to find any *post mortem* evidence on the pathology of the affection, beyond what we have noticed—namely, the single case under Ebstein; and agrees in admitting that, on that matter, there is not at present enough material for a hypothesis.

Ambulance Classes for Railway Officials.—The project of forming a Special Ambulance Class for Midland Railway Guards, under the auspices of the St. John Ambulance Association, was mooted at a meeting, held at Derby on Saturday last.

PELVIC TUMOUR COMPLICATING PREGNANCY.

By P. HORROCKS, M.D., B.Sc., M.R.C.P.,
Assistant Obstetrician to, and Demonstrator of Practical Obstetrics and Gynæcology at, Guy's Hospital.

In the British Medical Journal of March 20th, Mr. John W. Taylor suggests that the case which I published on March 6th, as one of Fibro-myoma complicating Pregnancy, might have been chronic distension of the Fallopian tube.

I should like to point out the differential diagnosis between these two conditions; and I will not lay any stress upon the fact that I have had ample opportunities for examining the case, both in the hospital and in the out-patient department, whilst Mr. Taylor has never seen the case.

I will take simply my own account of the facts of the case, given in the Journal, March 6th, from which Mr. Taylor has drawn his conclusion, and I will show from them, even to his satisfaction, that the case is much more likely to be a fibro-myoma than distension of the Fallopian tube.

First. The substantive complaint of the patient was profuse losses at the monthly periods, accompanied by severe pain. Now, it is a well-known fact, that menorrhagia is almost constant in fibro-myoma of the uterus, whereas, even on Mr. Taylor's own admission, it is not a very common symptom of tubal occlusion and distension. Hence this symptom alone renders it highly probable that it is a fibro-myoma.

Secondly. The sound passed three inches and a half, proving that the uterus was considerably enlarged. This, again, is a common condition in the case of uterine myomata, and one which is much less common in distension of the Fallopian tube.

Thirdly. When the uterus had become pregnant, so far as to reach midway between the pubes and the umbilicus, the pelvic tumour itself had not been raised to any appreciable extent, but was lifted up by manipulation, so as to rest in the iliac fossa. Now, had it been a distended Fallopian tube, either it would have been raised up by the growing uterus, supposing it to be movable and free from adhesions, or it could not have been dislodged, and would have probably caused a miscarriage, had it been fixed by surrounding inflammation.

Fourthly. After the confinement, the tumour underwent evident involution, a well recognised phenomenon in the case of uterine myomata, and, to say the least, an unproved process in distension of the Fallopian tube.

Fifthly. The patient had severe pain at her monthly periods, and, when in the hospital, had pain in passing motions; otherwise, there was no pain. Mr. Taylor says that chronic distension of the Fallopian tube "is generally accompanied by pain, increased before or during menstruation." Therefore, if mine were such a case, it would have exceptional symptoms, or lack of symptoms, unless it were a chronic and stationary hydrosalpinx. The menorrhagia, the uterine enlargement, the behaviour of the tumour during pregnancy and under manipulation, the involution during the *post partum* period, and the absence of intermenstrual pain, appear to me to justify the diagnosis of uterine fibro-myoma.

In this differential diagnosis, I have used only the facts contained in my clinical account, which Mr. Taylor had before him; but I feel sure that, had he been able to examine the case carefully, as I was, he would have come to the same conclusion as myself in regard to it. I am far from denying what Mr. Taylor asserts at the end of his paper, namely, "that chronic hydrosalpinx, both by signs and by symptoms, may occasionally closely simulate nodular myoma of the uterus, and need differential diagnosis from that affection;" but I think I have made this differential diagnosis in my case.

REMARKS ON COLLOID DEGENERATION OF THE SKIN.

By ROBERT LIVEING, M.D., F.R.C.P.,
Physician to the Skin Department of the Middlesex Hospital.

Three cases of a rare degeneration of the skin have come under my observation during the last few years, to which I desire to call the attention of those who are interested in dermatology. Unfortunately, all three cases occurred in private practice; and I have been unable to exhibit them, or even to make a microscopic examination; therefore all my remarks will be simply clinical.

I will preface these remarks by saying that a similar disease or degeneration has been referred to by Wagner, under the name col

id milium, and by Besnier as "colloid degeneration of the skin." uhring says "the disease is characterised by numerous disseminated, nall, pin-head sized, discrete, rounded, flat or slightly raised lesions, a pale or bright lemon colour. They are shining and translucent, d have the appearance of being yellowish vesicles. Their appear-ce, however, is deceptive, for they are of firm or solid consistence. hen pricked with a needle, or opened sufficiently deep to cause eeding, a whitish, or yellowish, transparent gelatinous substance ay be expressed." He also says that it resembles xanthoma, but e lesions differ in being bright and translucent. With this latter mark, I entirely agree. In each of the three cases that I have seen, e first glance led me to believe that I had before me a case of xan-oma, and suggested to me the name colloid xanthoma. A careful amination, however, satisfied me that the disease was not xan-oma, or at all events, that, if the little growths were originally nthomatous, they had undergone, and were undergoing, remarkable anges from their original condition, and quite unlike those usually en in xanthoma.

The first case I met with was in a young woman; of this case, I t sight. The second was in a man; the disease attacked his face d neck, and ran its course in about a year; he at last quite re-vered. The third instance was in a girl of about 16, in whom the e, neck, and arms were attacked. The following brief descrip-n, taken from my notes of one of the cases, will apply pretty nearly the other two. The little growths are scattered about the face, k, and upper arms, and many of them are undergoing metamor-osis; there are, however, one or two very perfect ones on the back the neck. They consist of small, slightly raised, yellowish nours, varying in size from a large pin's head to a split-pea, some-at flat, of solid or semi-solid structure, but from being translucent, y look as if they contained fluid; minute vessels are seen round e margin of some of the larger ones; the appearance of these re-nds one of rodent ulcer in its earliest stage, though the re-mblance is in appearance only. These little tumours undergo ange by the formation of a central depression, so that many are bilicated, the depression gradually becoming a shallow crater-like avation; and, lastly, they inflame, scab, and dry up, leaving a rk, but not a defined scar. The changes which they undergo re-nd one of those seen in molluscum contagiosum, but the general earance is not very like that disease, and could not be mistaken it.

t would be interesting to determine the two following points with ard to this disease: (1) where, and under what circumstances, the ease originates, whether from previously healthy skin; or (2) ether the degeneration may not occur in more than one disease of skin, such as, for example, milium, xanthoma, and molluscum ntagiosum.

MODIFICATION OF FEHLING'S SOLUTION FOR TESTING FOR, AND ESTIMATING SUGAR IN URINE.

By F. CRESSWELL, L.R.C.P.Lond., M.R.C.S.,
Late House-Physician, St. Bartholomew's Hospital.

HAVE always found that the chief inconvenience in using Fehling's ution for estimating sugar, was that it would not keep for above a weeks, at the outside, and in hot weather it frequently became rustworthy in a much shorter time. This trouble is owing to the liness with which the sodium and potassium tartrate undergoes de-position. I have therefore tried to dispense with the use of this , and I think have succeeded thoroughly in the following manner. er trying several organic substances which were not prone to de-position in an alkaline solution, I have found that glycerine wers best. It completely prevents the precipitation of copper sul-te by caustic potash or soda, and the solution will keep for an efinite time in an open vessel, in fact, until the caustic alkali omes converted into carbonate, and in a stoppered bottle seems te permanent.

find that grape-sugar reduces somewhat less copper from the cerine solution than from the tartrate solution, and that uric acid scarcely attack it, whereas it was one of the chief causes of acy in Fehling's test.

he best method of preparing the solution is as follows. Take ut 35 grammes of copper sulphate, and dissolve it in 200 cubic timètres of glycerine and 100 cubic centimètres of water; then add grammes of sodium-hydrate dissolved in 400 cubic centimètres of er, and boil the whole for fifteen minutes. This is necessary, as the specimens of glycerine which I have met with contain a small quantity of some substance capable, at a boiling heat, of reducing an alkaline solution of copper. After boiling, the solution is made up to 1 litre with distilled water, and allowed to stand until it is clear. It must be standardised by a solution of grape-sugar of known strength for accurate determinations, and is sure, if made as above, to require diluting. If it be only required for rough clinical purposes, the above quantities may be diluted to 1250 cubic centimètres; 10 cubic centimètres will then be approximately equal to 5 centigrammes of sugar.

The process is carried on in exactly the same way as the well known method of Fehling; 10 cubic centimètres of the copper solution are mixed with 50 cubic centimètres of water, and boiled in a small flask, and the solution of glucose (which should not contain more than one per cent.) is slowly added from a burette, the contents of the flask being kept steadily boiling until the original blue colour of the solution has entirely disappeared; the quantity of solution used must then have contained 5 centigrammes of sugar. Diabetic urine usually requires diluting to one-fifth or one-tenth, in order to reduce the sugar below one per cent. For example, 10 cubic centimètres of a diabetic urine were diluted to 100 cubic centimètres, and transferred to a burette; 10 cubic centimètres of the copper solution require for complete decolorisation 26 cubic centimètres of this diluted urine; 2.6 cubic centimètres of the original urine, therefore, contain 5 centigrammes of sugar, or 100 cubic centimètres would contain 1.92 grammes, or 1 ounce (437.5 grains) would contain 8.4 grains of sugar. In the quantitative examination of urine for sugar, a few drops of the copper solution are mixed with about 5 cubic centimètres of water and boiled, about ten drops of urine are added, when, if sugar be present, on again boiling for a few seconds, the characteristic brick-red hydrated suboxide of copper will fall.

I hope the above will prove especially useful to country practitioners, who seldom require to test for or estimate sugar, and who, when they do, by using the above solution, will escape the annoyance of finding their testing solution decomposed and useless. I have had some of the above solution in an ill-stoppered bottle for between four and five years, without any signs of decomposition.

OBSTETRIC MEMORANDA.

THE ADVANTAGE OF STRAIGHTENING THE UTERUS IN CASES OF HÆMORRHAGE.

Mrs. G., aged 39, had adherent placenta in her three previous confinements, necessitating peeling off from the uterine surface, but made excellent recoveries, with no pyrexia, or undue subsequent hæmorrhage. This last time, however, the placenta was, after some delay and difficulty, removed by expression and traction combined, and she made a good recovery, excepting that there was slight persistent hæmorrhage, which, at the end of six weeks, and after she had begun to move about, became so copious that she was obliged to resume the recumbent posture, and an examination became necessary. The uterus was found large, flabby, and anteflexed, with the os patulous and the fundus tender, and through the anterior wall something was felt hard and nodular; but, as it was just a month since she had ceased to suckle the baby, it was thought that perhaps this fresh accession of hæmorrhage might be due to the return of the catamenia; and, beyond freely manipulating the uterus, and pressing the fundus well up, with injunctions to remain lying on the back as much as possible, nothing further was done. The same evening, however, the nurse brought me a substance she had passed about an hour or so after my departure, which would seem to have been one of the cotyledons of the placenta, that had been retained, and which, although loosened, had been unable to escape, owing to the anteflexion. The placenta was examined when removed, and seemed entire; but it may have been one of the irregular and lobulated sort, in which it is often difficult to be sure that there may not have been a lobule left. The hæmorrhage immediately ceased on the expulsion of the substance, and the patient was soon all right again, the catamenia subsequently being quite regular and natural.

It ought to be mentioned that this patient had, eighteen months previously, and after suppression of the menses for several periods, a severe flooding, which may have been due to an abortion, although the medical gentleman in attendance failed to find any ovum extruded. At any rate, there was very obstinate and prolonged menorrhagia, especially during the menstrual periods, which was only subdued after long confinement to bed, with the rectification of an anteflexion by a pessary, cold irrigation, sitz-baths, etc., together with iron, ergot, and strychnine. Is it possible that the substance above referred to may have been the remains of this abortion that had maintained its

hold on the uterus during the following pregnancy and parturition, only to be loosened during the subsequent process of involution? This question is suggested by the apparent entireness of the placenta when examined.

The case has also a still further interest, in resembling the one brought before the Gynæcological Society by Surgeon-Major Hensman, although having, happily, a very different issue.

Sunderland. B. STRACHAN, M.A., M.B.

SURGICAL MEMORANDA.

PROPER SITE FOR INCISION UPON BACK OF FEMUR.

IN young persons, a not uncommon place for acute periostitis to occur is behind the lower third of the femur. It is very desirable that abscesses thus caused should be opened early, and it were to be wished that the safe place at which to reach the bone were more generally known. It is on the outer side, in the hollow between the tendon of the biceps and the ilio-tibial band. At this spot, a free incision may be made down to the bone without encountering any important structure. If this rule of procedure were generally recognised, such cases might be treated by incisions in their earliest stage, and thus not unfrequently necrosis prevented. JONATHAN HUTCHINSON.

CLINICAL MEMORANDA.

SCIRRHUS OF THE BREAST: SO-CALLED "LONG RECURRENCE."

I HAVE long felt convinced that, in speaking of recurrences of breast-cancer many years after operation, we commit an egregious fallacy, of weighty import in its practical bearings. The second deposit will always be found to have an entirely novel causation, and so to be altogether a new departure, quite independent of the previous attack. The following case well illustrates this fact. I may add that if, two years after excision of the diseased breast, with the contents of the corresponding axilla, a step which should hardly ever be omitted, the patient can pass a careful medical scrutiny, and be pronounced free from all recurrence, experience leads me to consider her permanently cured.

Sarah C., aged 58, admitted into the Cancer Hospital March 14th, 1886. Eleven years ago, the left breast was removed at the London Hospital, by Mr. Jonathan Hutchinson, for cancer of nine months' duration. The patient remained well till five months since; then fell, striking the side against a table. The present tumour appeared a few weeks afterwards. On admission, the old cicatrix was found perfectly healthy, and freely movable. Between its inner end and the sternum was a scirrhous growth, deeply seated, as large as a walnut; the right axilla contained a cluster of enlarged glands.

HERBERT SNOW.

THERAPEUTIC MEMORANDA.

GALIUM APARINE IN PSORIASIS.

THE wife of a staff-sergeant in this garrison had psoriasis of the left hand for upwards of twelve months. She derived no benefit from chrysophanic acid ointment, tar ointment, or arsenic, and was unable to do any house-work on account of the painful fissures and general soreness of the affected part. A friend advised a trial of galium aparine to be applied locally as a poultice, and also to be drunk as an infusion. In less than three weeks, the psoriasis disappeared, and the skin resumed its normal state.

T. W. ORWIN, Surgeon-Major, Exeter.

TREATMENT OF HYDROCELE.—Dr. Keyes recommends, in the *New York Medical Record*, the injection of pure carbolic acid "deliquesced in a little glycerine" as a simple, effectual, and almost painless method of treating hydrocele even of large size. The instrument he uses is a glass-syringe holding about a hundred minims, to which a hypodermic needle of medium size is fitted as a nozzle. The hydrocele-fluid is first drawn off either through this needle, or by a separate puncture; thirty to sixty minims of the carbolic acid and glycerine are then injected. Dr. Keyes recommends that the patient should be kept quiet, but not necessarily confined to bed, for forty-eight hours.

CHOLERA IN ITALY.—A Reuter's telegram, dated Rome, March 10th, says: News from Padua reports the continued occurrence of isolated cases of cholera in that province.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

CHARING CROSS HOSPITAL.

(Cases under the care of Mr. J. ASTLEY BLOXAM, F.R.C.S.)

CASE I.—ABSCESS OF LUNG AFTER SWALLOWING FISH-BONE.

CECILIA S., aged 36, in December, 1879, swallowed a fragment of bone while eating some Irish stew. Vomiting was induced, but the bone only seemed to pass further down, and there was a sensation as of something scratching behind the sternal notch. She then had a violent attack of coughing, which lasted two hours, after which there remained a feeling of rawness in place of the "pricking" sensation. Her breathing now became very short, and the troublesome cough continued, with pain at the apex of the right scapula. This continued for the rest of the month, but there was no expectoration nor hæmoptysis. These symptoms were aggravated by change of posture or exertion of any kind. A few days later, she began to feel pain under the right breast with the cough, and a medical man who saw her considered that she was suffering from pleurisy. She lost flesh a good deal, and on February 20th, 1880, she brought up a large quantity of clear thin yellow matter by the mouth; and for the rest of the day, she said, she felt something sticking in her chest, "as though it wanted to come up."

At 11 A.M. next day, she had an attack of retching, and brought up a further quantity of yellow matter, and she felt something hard pass the fauces. This turned out to be the bone broken into two pieces The patient was very exhausted after this, but soon began to improve in health and to gain in flesh. The cough, however, continued, and, on two or three occasions, she spat up blood in small quantities.

On March 9th, 1881, an examination of the chest showed marked flattening and impairment of movement over the front on the right side. From the apex down to the third rib, resonance was about normal; but from the third to the fifth rib, cavernous breath-sounds could be heard, with gurgling when the patient coughed, and well marked pectoriloquy. The anterior border of the cavernous area was one inch and a half from the right border of the sternum; the posterior border corresponded with the posterior axillary line. Behind, the vocal resonance was generally impaired, decreasing from above downwards, so that at the base it was almost absent. Breath-sounds were fairly normal down to the middle of the scapula, but below that level the breathing was tubular. There was bronchophony over the upper lobe, pectoriloquy over the lower. Cough was accompanied over the lower lobe by distinct gurgling. Over the left lung, the breath-sounds were louder than normal. The sputa were muco-purulent, but not offensive.

On March 12th, her temperature rose in the morning to 101.3° Fahr., and remained at that height until the evening of March 14th, when it dropped to 98.4° Fahr. Cough was very troublesome. She subsequently developed a rapid form of phthisis, and was removed from hospital by her friends.

CASE II.—TRANSVERSE FRACTURE OF PATELLA: OPERATION.

A. B., aged 39, fell down while getting out of an omnibus. Her right patella was found to be fractured transversely, the fragments being separated to the extent of about a third of an inch. Five days later, Mr. Bloxam made a vertical incision over the patella under antiseptic precautions, and exposed the bone. He then drilled a hole in the upper fragment, a work of some difficulty, from the unusual thickness and hardness of the bone. A silver plated copper-wire was then passed through the hole, and through another in the lower fragment, and the two brought into close apposition. A drainage-tube was introduced through another opening on the outer side, and the wounds were closed with silver sutures. She complained of no pain on recovering from the ether, and no elevation of temperature occurred.

On the fourth day after the operation, the incision on the outer side of the knee was slightly enlarged, a larger drainage-tube introduced, and the sutures removed. The patient was discharged four days later, the wounds having completely healed. Twelve months later she was re-admitted, as there had been for the last three months slight discharge of pus from the cicatrix over the wire in the patella. The cicatrix was opened up under the antiseptic spray; the wire was found pretty firm, but movable laterally; it was divided and removed. The wound was then closed by means of horsehair sutures, and the patient did well.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.

CASES OF SPINA BIFIDA.

(Under the care of Mr. F. A. SOUTHAM.)

the valuable report on Spina Bifida recently issued by the Clinical ciety of London, injection with Dr. Morton's iodo-glycerine solution ie method adopted in the following cases) is strongly recommended the best and most successful plan of treatment.

CASE I.—A male child, four weeks old, was admitted on March 5th, 85, suffering from spina bifida over the upper part of the sacrum. ie tumour, which was of the size of an orange and extremely tense, esented all the symptoms characteristic of this affection; the skin vering it was very thin, almost translucent, and commencing to cerate. The child itself was somewhat marasmic, and slightly hydro-phalic; there was a tendency to talipes calcaneus, but no paralysis the lower limbs.

March 18th. As the tumour was very tense, it was tapped, under the rbolic spray, with a small trocar; and, a little fluid having been awn off, one drachm of iodo-glycerine solution was injected. The eration was followed by no symptoms, nor by any change in the ndition of the tumour.

April 1st. The operation was repeated.

In the course of a few days, the tumour began to show evidences of nsolidation and contraction, and these processes have continued ever ace, until, at the present time (eleven months after the injection), l that remains is a mass of thickened puckered skin and dense rous tissue. The subsequent treatment has consisted in occasion-ly painting the tumour with collodion, and applying gentle pressure means of a pad and elastic bandage.

For some months after the operation, as the tumour continued to ntract, the tendency to hydrocephalus increased; but this is now sappearing as the child grows older, and is only present to a very ight extent. The child is bright and well, its intellectual faculties e in no way affected, and the tendency to club-foot is hardly per-ptible. The case may therefore be regarded as completely cured.

CASE II. A male child, eight weeks old, was admitted October 27th, 385, on account of spina bifida in the lumbo-sacral region; the sym-oms were almost identical with those present in the preceding case, cept that the coverings of the sac were free from ulceration.

October 30th. The tumour was tapped, and injected as in Case I.

November 2nd. The temperature was 100.8° Fahr. The coverings the tumour had become red and inflamed.

November 4th. The temperature was 101.4° Fahr. The child was oubled with sickness, and from time to time was slightly convulsed. he coverings of the tumour, which were so tense that it appeared to on the point of rupture, were acutely inflamed and commencing to cerate; there was very slight oozing of fluid from the seat of punc-ure. The tumour was tapped with a fine trocar, and, about one ounce fluid having been allowed to escape, the puncture was closed with llodion. The child was taking small doses of bromide of potassium, id counter-irritation was applied over the spine.

November 6th. The temperature was 103° Fahr. Attacks of con-ulsions, with twitchings of the limbs, recurred from time to time. he tumour was soft and flaccid; the coverings were less inflamed; ie slight discharge of fluid still continued.

November 8th. The temperature was 104.6° Fahr. There was no ange in the condition of the tumour. Death took place after an tack of convulsions. As permission could not be obtained for a *st mortem* examination, it was only possible to examine the tumour. his was soft and flaccid, and contained a quantity of semi-purulent uid; its inner lining was extremely inflamed, and coated with a yer of lymph. The spinal cord and nerves of the cauda equina, hich were contained within the sac, running across its interior, were tensely injected, being of a vivid red colour. The opening into the inal canal was just large enough to admit the tip of the finger.

REMARKS BY MR. SOUTHAM.—These cases illustrate on the one and the success, on the other hand the risk, which accompanies the se of Morton's fluid; one of the chief dangers immediately attendant pon it being the supervention of spinal meningitis. This, in some stances, may be due to the direct action of the iodine on the mem-anes of the cord; or, as in Case II, where the fluid contents of the mour continue to ooze away after the injection, it may probably be ptic in its origin, the result of subsequent admission of air into the terior of the sac through the puncture in its walls. In each in-ance, the operation was performed with all proper precautions. The ocar was introduced at one side of the tumour (to avoid wounding the inal cord, if present in the sac), and near its base, where the skin was icker and more developed than over its summit. The puncture was carefully sealed with collodion. During the injection, and also afterwards, the child was kept lying on its back to prevent the iodine solution from making its way into the spinal canal. The tumour was subsequently protected with a thick layer of cotton wool, a ring-pad being so adjusted as to take off all pressure from its surface.

In Case II, there was an entire absence of any signs by which the presence of the spinal cord or nerve-trunks within the sac could be detected before operation. There was no furrow nor depression over the summit of the tumour, sometimes observed under those circumstances. The swelling had previously been examined by transmitted light in a dark room, but appeared uniformly translucent throughout. The disposition of the cord and nerves within the sac was such that excision of the tumour, according to the plan recently recommended by Mr. Mayo Robson, would have been quite impracticable.

ROYAL FREE HOSPITAL.

BELLADONNA-POISONING: HYPERPYREXIA: DEATH.

[Reported by CHARLES E. TANNER, M.B., House-Physician.]

S. J. C., a strong healthy looking servant-girl, aged 16, but considerably older in appearance, was admitted at 4 P.M. on September 4th, 1885, with the account that she had swallowed some liniment an hour earlier. The bottle produced was empty. It was elicited that the liniment had been obtained from University College Hospital, and a policeman was sent thither to find the nature of the contents of the bottle.

The patient's face was flushed, her tongue dry, and her gait unsteady. She was very drowsy, being roused with difficulty, and giving uncertain and evasive answers; the pupils were partially dilated; breathing was shallow, regular, 20 per minute, and the pulse was 98. She complained of dryness of the mouth and throat. A drachm and a half of sulphate of zinc given immediately, followed by copious draughts of warm water, produced profuse vomiting in less than ten minutes. As there was not much improvement in the symptoms, an œsophageal tube was passed, and the stomach washed out three times. The patient, however, became more drowsy, and the faradic battery was resorted to, and applied at intervals; while the face, chest, and abdomen were slapped with a wet towel.

About 7.15 P.M., the policeman returned with a note from Mr. Penrose, house-surgeon to University College Hospital, stating that the liniment was linimentum belladonnæ *B.P.* Previously to this, opinions had been divided as to whether the contents of the bottle had been chloroform or belladonna liniment.

The temperature was now found to be 105.6° Fahr. (taken with a Kew-registered thermometer, and verified by another), while the pulse was 120.

Two-thirds of a grain of pilocarpine was administered hypodermically at 7.30 P.M. Sweating began at 7.35 P.M., became profuse at 7.45 P.M., and lasted till 8.5 P.M. Improvement was most marked after this remedy; the pupils, which had been fully dilated, returned to normal; the respirations became more deep, and the patient began to show signs of returning animation, opening her eyes and groaning when slapped with the towel, and moving her limbs when the faradic current was applied, even making indistinct efforts to speak.

This improvement was not long maintained, however, and the temperature continued to rise, reaching 107.4° Fahr. at 8.20 P.M., while the pulse-rate had increased to 160, being almost imperceptible at the wrist. Half a grain of pilocarpine was injected at 8.30 P.M., but failed to produce much sweating, although the pupils, which had again become fully dilated, returned to half dilatation. Enemata of brandy had been given, but were not retained. The patient gradually sank, and died about 9 P.M., six hours after swallowing the poison. The temperature in the axilla just before death was 108.6° Fahr. The pulse was imperceptible; the respirations grew gradually slower.

At the *post mortem* examination, a considerable amount of thick, tenacious mucus, of a greenish colour, was found in the stomach; but nothing else remarkable was noted.

REMARKS BY MR. TANNER.—I am not aware that such a high temperature has been before noticed as one of the symptoms of belladonna poisoning. The respirations were not rapid, but, if anything slower than natural, and chiefly characterised by their shallowness. The eyes were not prominent and sparkling; there was no rash, and no delirium. The heart beat more and more rapidly, as the fatal termination approached, while the respirations became slower and slower. The effect of the faradic current was to increase the frequency and depth of the respirations, except when either pole was placed on the median line of the face or neck, when absolute cessation of respi-

ratory movements resulted. The nature of the poison not being discovered till late, the chance of doing good by antidotes was almost past. Alkalies could not be given, as the patient could not swallow: morphine did not seem to hold out much hope of success; I therefore decided on giving pilocarpine. Had this drug been administered earlier, I firmly believe the patient's life might have been saved.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 23RD, 1886.

GEORGE D. POLLOCK, F.R.C.S., President, in the Chair.

Case of Tuberculosis of the Skin. By RICHARD HEBB, M.D.—A strumous boy, under treatment in Westminster Hospital with supposed Barbadoes leg, was seen by many visitors to the International Medical Congress, and no exception was taken to the diagnosis. The boy had never been beyond the environs of London. He died two years later (aged 18) of a bronchial affection, and a portion of the thickened skin was secured for microscopic examination. There was found to be general hypertrophy of skin; the dermis was thickened from overgrowth of its connective tissue, and the presence of collections of lymphoid cells; in many places, there were aggregations of both large and small lymphoid cells, and among them numerous giant-cells, the spheroidal masses thus formed being practically indistinguishable from tubercles, such as were found in the liver and kidney; in the lymphatics, a red staining showed the presence of a small bacillus in great numbers, colonies being also found around the aggregations of lymphoid cells. The case was compared with one reported by the late Dr. Tilbury Fox, where the appearances and history were similar, but the microscopical specimens showed no trace of tubercle. —Dr. RADCLIFFE CROCKER said there were three conditions under which such a state of skin might arise as Dr. Hebb had shown; namely, in lupus, in scrophuloderma, and in that very rare condition in which there was true tubercle of the skin, generally associated with tubercle of other organs. He thought it very possible that the condition shown might have originated in lupus, out of which, as was well-known, a form of elephantiasis was gradually developed.—Dr. THIN related the case of a lady from the West Indies, who had come to consult him for a puffy swelling on the back of her hand, which she acquired in the West Indies, and which was supposed to be analogous to the so-called Barbadoes leg. He found himself, at the time, unable to come to any satisfactory diagnosis. It occurred to him now, however, that it might have been due to the blocking of veins or lymphatics by tubercle-bacilli. We were only beginning to learn, and that chiefly from French researches, the widely different results of these tubercle bacilli, which were as far apart as some that had been traced to another parasite, the *Trichophyton Tonsurans*.—Dr. HEBB said, that to furnish a reply to Dr. CROCKER, it was only necessary for him to read a short extract from Hebra, in which it was pointed out that all cases of a condition of skin at all resembling his case, in which the primary disease had been lupus, retained clear signs of lupus, whereby they would be recognised, whereas the point in his case was that there were no such signs.

Two Cases of Bronchiectasis treated by Paracentesis: with Remarks on the Mode of Operation. By C. THEODORE WILLIAMS, M.A., M.D.; and RICKMAN J. GODLEE, M.S., F.R.C.S.—The first case was that of a gentleman, aged 67, who had suffered for two years from chronic bronchitis and emphysema, and six months later had dry pleurisy of the left lung. After the pleurisy, the expectoration, before moderate, became profuse and somewhat fœtid, the cough more and more harrassing; and, although Malvern and Bournemouth were visited, and a great variety of antiseptic treatment was tried, he obtained no relief. On February 3rd, he was seen by Dr. Williams, who noted the existence of a bronchiectasis in the lower lobe of the left lung, the pleura of which was adherent. Tubular sounds were heard over two small areas, neither exceeding a half-crown in circumference, in the eighth interspace. At the request of Dr. Williams, a puncture was made by Mr. Godlee into the first area, with an aspirating trocar and cannula. Under antiseptic precautions, the cavity was opened, and a drainage-tube inserted. The result of the operation was, that the cough nearly ceased; the expectoration, which was for a few days pneumonic, diminished from one pint a day to a few pellets, and became free from odour; and the patient gained flesh rapidly. At the end of six weeks, the discharge ceased, the channel closed, and the wound healed up. Examination of the chest showed complete disappearance of tubular sound from the second area, as well as from the first, and further shrinking of the chest-wall. The patient, at the close of nine months after the operation, remained free from cough and expectoration, and was able to walk four miles at a stretch. The second case was that of a girl, aged 21, who, ever since an attack of typhoid fever, had had troublesome cough and copious expectoration, gradually increasing in quantity, and becoming more and more fœtid. She had had hæmoptysis three times, on one occasion amounting to a pint. Examination of the chest showed several bronchiectases, two of which gave rise to very coarse *râles* over areas about the size of a half-crown in the sixth and seventh interspaces in the axilla; a third area was detected in the eighth space below the scapular angle. At first, the patient improved under antiseptic treatment, the expectoration diminishing and becoming less fœtid; but after a while these measures ceased to give relief, and an operation was decided on. On June 29th, at Dr. Williams's request, Mr. Godlee passed a small exploratory trocar successively into each of the three marked spots, and, obtaining no result, inserted a large sized aspirating trocar and cannula into the seat of the first puncture in the sixth interspace. But an attempt to cut down on the cavity failed. A second operation was performed on July 16th, and, after some exploratory punctures, Mr. Godlee, with antiseptic precautions, cut down on and laid bare the eighth rib, and excised about an inch of it in order to approach nearer to the bronchi before attempting to open them. The trocar and cannula were then passed to a depth of five inches, and Mr. Godlee cut down along the cannula, and inserted a drainage-tube. The wound gradually healed, and the patient left the hospital at the beginning of September considerably improved, the cough slight, the sputum having diminished to about three ounces a day, and being only occasionally fœtid. The presence of bronchiectases in other parts of the left lung, and possibly also in the right lung, precluded such complete success as was obtained in Case 1. A short account was then given of four other cases of bronchiectasis treated by tapping, in all of which the position of the cavities had been recognised and successfully punctured, but, owing to the presence of other bronchial dilatations, the success was only partial in these cases. The arguments in favour of the operation were:—1. the tendency to death by septicæmia in some form, unless proper drainage were effected; 2. the reduction in the amount of expectoration, this being due, not only to the removal of the matter, but to the disappearance of the effects of its irritation on the healthy bronchi; 3. the invulnerability of the lung tissue; it being proved that punctures of this tissue gave rise to little or no disturbance to the part, or to the system generally. The difficulties of the operation were principally those of diagnosis of the exact positions of the bronchiectases: (1) from the presence of emphysema; (2) from the reverberatory character of their auscultatory sounds, which rendered exact localisation very difficult. Paracentesis of bronchiectases seemed to be indicated under the following circumstances.—1. In cases where, antiseptic treatment of all kinds having failed to correct the fœtor of expectoration, and to allay the harassing nature of the cough, death by septic pneumonia seemed imminent. 2. Where the evidence went to prove that the bronchiectases were confined to one lung, were situated in the lower lobe, and had overlying them an adherent pleura. It was not indicated where multiple bronchiectases existed in both lungs, where they were surrounded by emphysema, and where the pleura was non-adherent. —Dr. GOODHART had brought two specimens to illustrate the difficulties he found in diagnosis. In the first case, after careful examination, he had diagnosed pleural effusion; but, as the child was dying of meningitis, had not advised any surgical treatment. He found, to his surprise, after death, a localised empyema, with a group of much enlarged bronchial tubes underlying it, and a pea blocking one bronchus, which had been the origin of the pathological change. The second case was one of a woman with signs of a small consolidation at the right apex, and at the angle of the left scapula a harsh murmur, with inspiration and a few *râles*, such as he had thought might probably be due to pneumonia in an emphysematous lung. In that diagnosis he had been wrong, for he found it was due to a piece of the lung, which was riddled with much enlarged bronchi. Emphysema often masked bronchiectasis, and the signs of adherent pleura were in many points uncertain. He could only advise operation in bronchiectasis when there was chronic pneumonia accompanying it. Fœtor was an important symptom, as showing disintegration of the lung-tissue itself, and was an indication for operation.—Dr PERCY KIDD had had the second of Dr. Williams's cases for a while under his care, and had certainly thought the hæmorrhage from the wound a very alarming feature. He had several times noticed the onset of fœtor associated with an access of pleurisy, and regarded the pleurisy as probably produced by the approach of the excavation to the pleural surface, and inflammation by continuity. He considered any diagnosis of the size of a cavity to be very difficult. In a case under the care of Dr. Powell,

had expected to find a very large vomica, but a *post mortem* examination had shown a number of small cavities round the root of the ng, none much larger than a blackbird's-egg; and, in such a case, operation would have been of no use. Bronchiectases were often possible to detect, and, if there happened to be some on the side ich was not operated on, then the main value of the operation was it. He had also been driven to the conclusion, that the diagnosis of herent pleura was often quite impossible. The membranous shreds, ich Dr. Williams had mentioned as showing a bronchiectasis, he ought of little diagnostic value; at least he had found very many onchiectases without them.—Dr. CAYLEY congratulated Dr. Williams on the success and boldness of his treatment. He substantially agreed with Dr. Goodhart that the feasibility of the operation pended upon whether the cavity was surrounded by solid lung not. There were no means of certainly diagnosing pleural adsions; but, where there was chronic consolidation of the lung, ey were at least very probable. A notable point in such cases was e frequency of abscesses in the brain, although there were not nerally spread pyæmic abscesses; in fact, cerebral abscesses were re common in these cases than in any others, except diseases of the ernal ear, and of this point he thought no explanation had at first en given.—Dr. BISS considered that pus should be evacuated just as ich when it was in the lung as in the liver. The danger of hæmorage he regarded as very small; there had been none in a case in ich he had advised operation. He used to think adherent pleura uld be diagnosed, but he had given up that idea. In the course of operation, choking by blocking of the bronchi was sometimes a ious danger, and could only be avoided by inverting the patient, ough that was most inconvenient.—Dr. BARLOW wished to express opinion that the diagnosis of bronchiectasis was extremely difficult. had had a case like that of Dr. Goodhart's, in which a pea had en impacted in a bronchus. Over the lung, below this spot, there s dulness, and no audible breath-sounds; but, after death, abundant onchiectases were found. In cases of aneurysm there was frequent onchial dilatation, which, he thought, Dr. Williams would find it y hard to detect.—Dr. COUPLAND mentioned a case where a cavity the lung had been explained by a piece of bone impacted in the g, and another in which a sloughing bronchial cavity was found run up to a perforation of the œsophagus, in which operation would ve been useless.—Mr. PEARCE GOULD wished to add a few words the surgical aspect of the question. The physician's diagnosis was y difficult, and the surgeon's task correspondingly difficult. The act position of the cavity was almost impossible to determine, and, der those circumstances, he thought the best instrument for operan was not a simple trocar and cannula such as Mr. Godlee had d, but a Dieulafoy's aspirator, which could be made to show the oment at which it came upon a purulent cavity. He was sorry he uld not value the danger of hæmorrhage as lightly as Dr. Biss had med to do.—Sir ANDREW CLARK was able to add a little to the rlier history of Dr. Williams's first case. The gentleman had come him some years previously as a dyspeptic; and, three or four years fore he came under Dr. Williams, he had had dry pleurisy the left side, with some consolidation of the base of the t lung. This improved somewhat, but he got paroxysms cough, with expectoration of much muco-pus, and his improvement ceased, and only slight hopes of permanent recovery uld be held out. Since Mr. Godlee had operated, there certainly d been a most remarkable change for the better. There were ough records now of operation in similar cases to show that it often s followed by relief, and sometimes by cure. He considered diagosis of an adherent pleura possible by diminished tactile vocal mitus, combined with diminished vocal resonance, diminished breathnds, and some dulness. The sputa in bronchiectasis were characised by leashes of elastic tissue. That bleeding was not likely to dangerous in the neighbourhood of a bronchiectasis, was due to the roid change which took place there having spread to the coats of e arteries and lessened their calibre. All caseous fibroid or tubercular excavations were said to be characterised by a bacillus, which s their only bond of unity. What an odd kind of phthisis it must , when a man could get his health again from an operation!—Dr. C. WILLIAMS, in replying, admitted that the cases best fitted for erative treatment were such as Dr. Goodhart had described, in ich there was consolidation round the cavity and adherent pleura; had not limited himself so closely, from feeling that the condition the lung was often mixed, fibrous at one part possibly, and emphymatous at another. Bronchiectasis of the central parts, of course, uld not be diagnosed, but in many other cases it could; and, in e same way, an adherent pleura sometimes showed itself distinctly retraction of the intercostal spaces. In reply to Dr. Kidd, he explained that he had laid stress on the membranous shreds he had mentioned as evidence that what he was treating was not an empyema, for, though such shreds were not always found in bronchiectasis, they certainly were never found in empyema. He was much obliged for Sir A. Clark's contribution to the previous history of the case.—Mr. GODLEE agreed with Sir A. Clark that the dangers from hæmorrhage were reduced by thickening of the coats of the vessels, but that took place only on the outside of the lung; and, when the trocar had penetrated more deeply and came upon and passed through a resistant body, it might be only too probable that bronchus and a vessel also had been injured, and the bleeding into the bronchial tubes might be very serious and lead to suffocation. Such hæmorrhage as came from the external wound he did not think nearly so important. As to the possibility of diagnosing pleural adhesions, he was not, of course, the proper person to offer an opinion, but he had had opportunities of observing that the best physicians did not always find them where they expected them. He had not found any stitching together of the layers of the pleura at all satisfactory. Even if there were adhesions, they were sometimes so soft as to be broken down in an operation, as in one he had performed lately, in which, after he had opened a cavity in the lung, a severe fit of coughing broke down the adhesions, and the contents of the cavity were discharged into the pleura, with much bleeding, and very serious consequences. He quite agreed with Mr. Gould, that an aspirator was the best instrument to use; but if that were not at hand, he found a short syringe very suitable. He had no time to notice several points on which there was still a good deal to be said, but he desired that it might be remembered that, in the paper that had been read, no reference was made to cavities due to gangrene or to tubercle.

The PRESIDENT announced, before the meeting broke up, that a special meeting would be held on the next Tuesday, March 30th, to discuss three papers on Suprapubic Lithotomy by Mr. Barwell, Mr. Jacobson, and Mr. Rivington.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 18TH, 1886.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Compound Fracture of the Patella: Partial Necrosis of one Fragment: Recovery with a Movable Joint.—Mr. G. R. TURNER read a paper on this subject. A fireman, aged 32, was admitted into the Seamen's Hospital on June 1st, 1885, with a compound transverse fracture of the patella. The cavity of the joint was open through a contused wound two inches and a half in width, from which blood was exuding, the patellar fragments being separated by about half an inch to one inch. Thorough cleansing under antiseptic precautions—the limb being fixed on a straight posterior splint, with the wound left open—constituted the first treatment. A blood-clot subsequently was found to be projecting between the fragments, but it was not disturbed. At the end of the sixth week, a small sequestrum came away from the lower fragment. He made an excellent recovery, and was discharged in October, with power to flex the knee nearly to a right angle, the fragments being then separated by about an inch and a quarter and by three-quarters of an inch when the limb was extended. In his comments upon the case, the author referred to the slight separation of the fragments in cases of compound fracture, possibly due to the escape of fluid from the joint; to the aseptic course of the case, notwithstanding partial necrosis; and to the question of treatment, in which he gave the preference to the expectant plan, as opposed to wiring. The paper was concluded by a detailed summary of nineteen cases of this injury at present on record.—Dr. WALFORD described a case of compound fracture of the patella in which, with partial antiseptic treatment, recovery had taken place in four months.—Mr. PICK commented on the influence of antiseptic treatment in lessening the gravity of the injury, and related the details of a remarkable case under his own care, ending in synostosis of the joint. He believed in very thorough cleansing of the wound, the edges being left open, to admit of any putrescible matter being kept antiseptic. The separation of the fragments depended upon the amount of fluid effusion, but it was much more marked in cases where the capsule was torn.—Mr. GANT pointed out that, in one case, complete success had been obtained without antiseptics, although he had no doubt as to their value. He should never employ wiring in cases of simple fracture, the less severe treatment being quite as successful in its ultimate results; but he would use it in every case of compound fracture where the joint was once opened. Any great effusion, either of serum or blood, should be drawn off. In ordinary fractures, he had used gutta-percha pads, drawn together by Malgaigne's hooks, with success. Where all the

bones were injured by any form of destruction or partial ankylosis, he should prefer excision of the joint.—Mr. J. H. MORGAN referred to Mr. Pick's case, and observed that, in the presence of much effusion, union was assisted by the removal of the fluid. In such a case, he should prefer to suture the fragments.—Mr. FITZROY BENHAM suggested that the limb should be kept flexed at an angle of ten degrees, believing that no action of the quadriceps extensor was liable to take place in that position.—Mr. TURNER, in reply, commented on the extreme rarity of compound fracture of the patella. He had found one case of suppuration in simple fracture.

Sprained Joints.—Mr. EDMUND OWEN read a paper upon this subject, in which he urged that a sprained joint should be dealt with on the same principles as those which guide the surgeon in his dealings with a fracture at or near the articulation. He advocated rest and compression for the joint, and maintained that if only the part be at once enclosed within a plaster-of-Paris casing, with even compression, effusion will be prevented, and pain allayed. He employed Croft's method of applying the gypsum splints, and urged its adoption in preference to lotions, ice-bags, simple bandaging, and strapping. He instanced various illustrative cases.—Mr. GANT would recognise two classes of sprains; those in which the tendons were affected, and those in which the ligaments only were injured. He related a case in which the extensor tendons had been torn by the foot being doubled under the leg. Passive movements should be employed early, even though pain was caused thereby.—Mr. KIALLMARK advocated the use of American plaster, applied at once, instead of evaporating lotions. He would allow passive movement as soon as it was possible without pain.—Mr. PICK thought it difficult to decide when to begin passive motion, but he should generally begin early and persevere, using evaporating lotions at first. He referred to the use of very hot water in recent sprains on the stage.—Mr. VASEY mentioned the successful use of clay mould applied at once round a sprained joint.—Mr. OWEN, in reply, observed that he would be guided by the heat or coldness of the joint, and not by pain, in deciding to begin passive motion.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 22ND, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

Two cases of Amputation of the Penis by Mr. Pearce Gould's modification of Thiersch's operation for Epithelioma.—Mr. BOWREMAN JESSETT read a paper on two cases where he had employed this procedure with success, recovery taking place without any loss of power over the bladder, and without any great difficulty in micturition. Both patients were men advanced in years and debilitated in health. He suggested that when the penis was removed *in toto*, and sexual intercourse thereby rendered impossible, it was a question as to whether removal of the testicles would not be a justifiable proceeding.—Mr. BRUDENELL CARTER (President) mentioned a case he had heard of, where the amputated penis had been replaced by an india-rubber substitute, with the most satisfactory results, according to the patient, who was able to micturate with the greatest ease, and even became a father subsequently.—Mr. A. PEARCE GOULD, while confirming Mr. Jessett's views as to the advantages attending this operation, expressed a very decided opinion against any operation involving the testicles, unless there were special indications for such a proceeding. He thought that the necessity for sexual indulgence was much overrated, and he denied that even an enforced abstinence was to be regarded in the light of a misfortune, at any rate, to the extent of justifying the removal of the *fons et origo mali.*—Mr. J. MORGAN expressed a doubt as to the propriety of subjecting the patient to the great additional risk which would be associated with removal of the testes, operations involving which were followed by marked depression.—Mr. WALTER PYE denied, so far as the extra risk was concerned, that any valid objection could be made, but he echoed Mr. Gould's remarks as to the possibility of leading a perfectly continent life, and was certainly opposed to removal of the testes, except in accordance with the ordinary rules of surgery.—Mr. DAVIES-COLLEY asked in what class of cases Mr. Jessett would consider the operation indicated.—Mr. BRUDENELL CARTER said that, of course, nobody doubted that, as Mr. Gould had said, thousands of people could, and did lead chaste lives; but possibly the patient might be averse to life on these terms, and, in this case, it seemed hard to condemn him *nolens volens.*—Dr. ORD, in reference to the alleged danger attending operations on the testicles, asked if there were any explanation of the comparative immunity attending this class of operation as practised in the East.—Mr. JESSETT, in reply, said that it had in nowise been his intention to advise the removal of the testes, but he had desired to have the opinion of the Society on that point.

Alveolar Abscess.—Mr. A. PEARCE GOULD read the notes of a ca of alveolar abscess in a woman, aged 57, in which the pus had bu rowed extensively in several directions, and notwithstanding suitab treatment, a fatal result had ensued.

Thrombosis of the Cavernous Sinus.—Dr. SIDNEY COUPLAND me tioned several cases of thrombosis of the cavernous sinus, arising in vario ways, and said that no signs could be obtained by means of the ophtha moscope indicating the nature of the case.—Mr. DAVIES-COLLEY had see thrombosis of the cavernous sinus result from malignant facial carbuncl

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 5TH, 1886.

W. B. HEMMING, M.R.C.S., President, in the Chair.

Indian Medicine.—Drawings, photographs, calculi, and instru ments, collected during a long residence in India, were shown b Brigade-Surgeon CURRAN.

Case.—Dr. BALL showed a case of infantile spastic paralysis.

Urethral Fever, with a record of Three Fatal Cases.—The author Mr. F. S. EDWARDS, believed that this fever was nearly alway caused by some disturbance of the urethra, and notably of its fixe part. The mere emptying of a distended bladder was insufficient t give rise to this fever; because it was not met with, after relief of th bladder either by rectal or by suprapubic puncture. Statistics ind cated that, contrary to Sir Andrew Clark's opinion, the tendency t urethral fever was not lessened by the use of anæsthetics in urethra operations. During the past three years at St. Peter's Hospital urethral fever, generally the acute transient form, followed in exactl 50 per cent. of all strictures operated upon under anæsthetics. I 59 cases without anæsthetics, rigors followed in only 18. As re garded internal urethrotomy, anæsthetics were given 47 times, fol lowed in 20 cases by rigors. This operation was also performed 4 times without an anæsthetic, rigors occurring in only 19 cases. Thre fatal cases were related; in the first, there was a sloughy, false pas sage, and commencing endocarditis. In the second, hemiplegia an death followed the passage of a bougie in an old man strictured fo nine years. In the third, internal urethrotomy had been performed and death from septic poisoning occurred on the fifteenth day. I conclusion, the author remarked that he had never known rigors fol low division of the meatus or of anterior strictures, where the deep urethra had been left untouched. Urethral fever might be due either to local irritation, or to absorption, and probably, in some cases, t both combined. In certain stricture cases, the mere passage of a bougie was followed by rigors, which did not recur after the division of the stricture. If, in these cases, the rigors and rise of tempera ture were due to absorption, it was hardly possible to explain the non-recurrence of these symptoms when a wound of the urethra ha been subsequently inflicted, and the conditions made eminently favourable for absorption. Such cases of fever were probably of neurotic origin. The occurrence of urethral fever might be avoided by puncturing the bladder through the rectum before performing in ternal urethrotomy, in order to divert, for a time, the urinary stream, and thus to keep the urine from contact with the wound, for it was by this contact that urethral fever was excited.

Precautions to be adopted in the Removal of Residual Urine.—Mr. E. HURRY FENWICK, in this paper, laid special stress upon three great causative factors: 1, the reflex vaso-motor disturbance of the kidney set up by irritation of the posterior part of the urethra and the vesical nerve-plexuses; 2, the introduction of septic material upon, within, or through the catheter; 3, the injurious effects upon the badly nourished thin-walled vascular system of the kidney and bladder on the sudden withdrawal of its accustomed water-pressure counterpoise. A week's rest in bed, cucainisation of the prostate and membranous urethra, aseptic catheterism, the withdrawal, little by little, of the residual urine, and the replacement of the same by antiseptic solutions, were precautions invariably adopted by Mr. Fenwick in introducing a patient to catheter-life.—Mr. DUNN, in the course of some observations, said that it was not necessary to admit that all rigors following catheterisation were the result of septic infection. Some of these could be accounted for by attributing them to the manifestation of latent ague; and perhaps this would explain the rigors which have been regarded as having a neurotic origin. Sir James Paget had shown that an agueish attack might be provoked by an operation, many years after the patient had suffered primarily from the disease.—Mr. LLOYD, Brigade-Surgeon CURRAN, Mr. BRUCE CLARKE, Mr. KEETLEY, Dr. ALDERSON, Mr. MENZIES, Dr. POPE, and Mr. WAINEWRIGHT joined in the discussion.—Mr. EDWARDS, in reply, said that external urethrotomy was more often followed by urethral fever than was internal, for, in eleven cases

it. Peter's, nine had rigors. Of the three cases which he had ght forward, death was due in two to septic abortion. In the r (Case 2), the irritation due to instrumentation of the deep hra caused reflex congestion of the internal organs, accompanied rigor. This proving too great a strain for the central vessels, h were highly atheromatous, extravasation, followed by softening, rred. In all three, the urine was normal before the operation, in the first and second, the kidneys were found congested after h. The third case was the first death Mr. Edwards had had in it forty cases of internal urethrotomy. Why pyæmia occurred he d not say, as he took unusual antiseptic precautions, by throwing the bladder an iodoform solution, and by the insertion of an form bougie into the urethra. There was no difficulty nor hitch e performance of the operation. Concerning the question of ague, s a well known fact that patients who had lived in the East, or had been subject to ague, were peculiarly subject to rigors after ference with the urethra.—Mr. FENWICK briefly replied.

thological Specimens.—Mr. DUNN exhibited the following speci- s: 1. Large pulmonary infarct; 2. Congenital stenosis of the al orifice, with general cardiac hypertrophy, weight of heart 27 es; 3. Sarcoma of right testis and cord.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 3RD, 1886.

J. HOLMES JOY, M.D., President, in the Chair.

ad-Tremor.—Dr. SUCKLING showed a man, a lapidary, who had red for years at times from lead-colic. A week before coming to hospital, he noticed trembling of the hands, which came on what suddenly, and obliged him to give up work. There was ed rhythmical tremor of the hands and forearms on extension, ng during rest; also wasting of the thenar muscles, and some ness of the extensors of the wrist. There was a well marked line on the gums.

ass-founder's Ague.—Dr. SUCKLING showed a man who had ed in brass for twenty-six years. The casting-shop was immedi- under the room in which the man worked; and, whenever any ng was done, the dense fumes given off always made him ill, ng shivering and sweating, very frequently also vomiting, pains t the chest and limbs, and bronchial catarrh. The man had a marked green line on the teeth, close to the gums, and his hair of a greenish tint. Dr. Suckling met with the disease very fre- tly among the out-patients of the Queen's Hospital, and he found iodide of potassium gave relief.

nblyopia and Monoplegia.—Dr. SUCKLING showed a child with ysis of the right hand, and amblyopia. Several months pre- ly, it had been seized with vomiting, followed by Jacksonian epi- ; the convulsions always beginning in the right hand, and then ng to the right side of the face, then to the right leg. Three hs ago, the convulsions ceased to occur; but the right upper ex- ity remained paralysed, and had become rigid. Latterly, the had lost its sight, running into objects, and not recognising its ts. The pupils responded normally, and there was no change ther fundus; there was a marked history of phthisis on the er's side. Dr. Suckling considered that the monoplegia indi- mischief in the convolutions around the left fissure of Rolando, hat the amblyopia was due to extension backwards to, and im- tion of the angular gyrus, and possibly, also, of the outer surface e occipital lobe.

eurysm of the Aorta.—Dr. CARTER showed a specimen of rysm of the ascending aorta, taken from a miner, aged 36. There o previous history of rheumatism, syphilis, or chronic alcoholism; he lesion was attributed to chronic aortites occurring in connec- with overstrain of the heart, in the course of his work. The ur pointed externally to the left of the sternum, between the d and fourth ribs. In the early stage, great benefit was derived Tufnell's plan of treatment; later, when all other treatment had l, and the aneurysm threatened to burst externally, galvano- ture was performed. For a month after this there was a great ovement, but the symptoms returned, and finally death took , from hæmoptysis, due to encroachment of the aneurysm on the e of the left lung. The total duration of the illness was about en months.

gular Curvature of the Spine.—Mr. WILLIAM THOMAS ex- ed two patients suffering from angular curvature of the spine, of them wearing an inexpensive jacket, which he brought for- as an useful method of treatment. The principal feature of the t was a support of soft Swedish iron, which could easily be ed to the changing shape of the spine, and could readily be arranged to support the head. This was applied closely to the spine, and, being sewn into a jacket of jean, was kept in position by lacing up the front. He claimed for it, greater facility of application, more ease to the patient, less cost, and better results than from treatment by the plaster jacket.

Removal of Hernial Sacs.—Mr. JORDAN LLOYD showed a hernial sac that he had removed from a child; and another from a man, aged 29, this latter contained a quantity of omentum. The result in both case had, so far, been satisfactory.

Ovarian Cyst.—Dr. MALINS showed a dumb-bell-shaped ovarian cyst, containing a number of papillary growths.

Rupture of Liver and Kidney.—Mr. HASLAM showed a ruptured liver and right kidney, due to a kick on the abdomen from a horse. The patient, a man aged 29, had no symptoms indicative of a serious lesion until after five days; he was then seized with shock and collapse, his abdomen became distended, and there was suppression of urine. He died after twenty hours. At the *post mortem* examination, about half a pint of blood was found in the peritoneal cavity; this probably came from the damaged under-surface of the liver.

Chronic Inflammation of the Uterine Appendages.—Mr. LAWSON TAIT read a paper on four cases of chronic inflammatory disease of the uterine appendages.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MARCH 3RD, 1886.

JAMES HARDIE, F.R.C.S.Eng., President, in the Chair.

Involuntary Muscular Movements.—Dr. RAILTON read notes of a case of involuntary muscular movements, accompanied by coprolalia.

Large Calculus.—Mr. ANDREW BOUTFLOWER showed an unusually large calculus which he had extracted, through the urethra, from the bladder of a girl aged 21. The stone weighed 2½ oz., and measured 2⅜ inches by 1¾ inches, and was nearly 4 inches in circumference. She had long suffered from hip-joint disease, with sinuses discharging pieces of bone, and it was not impossible that a small piece formed the nucleus of the stone. At the time of operation, it was intended, after rapid dilatation of the urethra with the fingers, to introduce a litho- trite, and crush; but, owing to long incontinence, and the contracted condition of the bladder, it was found impossible to do this without embracing a portion of mucous membrane. The stone was therefore grasped with lithotomy-forceps, and removed, but not without some degree of laceration of the sphincter. The girl was now quite well, but some incontinence still continued. It was hoped, however, that this condition might be overcome in a short time.

Suprapubic Lithotomy.—Mr. WHITEHEAD mentioned a case of suprapubic lithotomy.

Laryngeal Dyspnœa.—Dr. THOMAS HARRIS showed a patient suf- fering from paroxysmal attacks of dyspnœa, due to laryngeal trouble.

Nerve-stretching for Facial Spasm.—Mr. SOUTHAM showed a patient in whom the facial nerve had been stretched five years previously for clonic spasm involving the muscles on one side of the face, and where there had been no return of the symptoms.—Mr. WRIGHT showed another case of nerve-stretching for facial spasm.

Chemistry of Gout.—Sir WILLIAM ROBERTS read some "observations relating to the chemistry of gout."

LIVERPOOL MEDICAL INSTITUTION.

THURSDAY, MARCH 18TH, 1886.

J. BIRKBECK NEVINS, M.D.Lond., President, in the Chair.

Miscellaneous Business.—Dr. A. C. E. HARRIS moved the following resolution, of which he had given notice: "That sincere thanks for their services be accorded to the committee appointed on February 4th, 1886; and that, in the opinion of this meeting, it is desirable that the said committee be now dissolved." In giving his reasons for bringing this resolution before the meeting, he said that in the first place the appointment of the committee was contrary to the laws of the Institution, and his motion was intended to be an emphatic pro- test against bringing forward business without due notice. He con- sidered it highly improper that, under the heading of "Renal Cal- culus," Dr. Carter should have alluded to the subject of abdominal section, in such a manner as to spring a controversial question on the Institution, under the heading of a pathological case. In the second place, he regarded the controversy that had arisen, simply as a dis- pute between members of the staff of the hospital for women; and he was of opinion that the authorities of that hospital were the proper persons to deal with the matter. And, thirdly, he remarked that the subject had produced nothing but unpleasantness and disagreement in a hitherto harmonious Society. He was quite sure that the work

imposed on the committee was uncongenial, otherwise he thought that they would have sent in their report ere this.—Dr. ARCHER seconded the resolution, and expressed the opinion that the appointment of the committee was a breach of the laws of the Institution, and he regretted the turmoil produced thereby.—Dr. GRIMSDALE was amazed that any member should stand up to propose the resolution before the meeting. He reminded the gentlemen present that, at an unusually large meeting, the appointment of the committee was unanimously agreed to, and thought that this fact alone should have precluded any member from acting in the manner which the mover of the resolution thought fit to adopt. The Institution not only accepted the appointment of the committee, but, at a subsequent meeting, added three members to represent the staff of the Hospital for women. The committee did not wish to dissolve, as they were still anxious to investigate the subject of the increase of abdominal section; and, as a matter of fact, they had not had time to report.—Dr. CAMERON thought there was admirable justification for the appointment of the committee; but, in consideration of Dr. Imlach's serious illness, the committee might now be dissolved. He declined to serve further, and tendered his resignation as a member of the committee.—The resolution was put to the meeting from the chair, and rejected by a large majority.

Pathological Specimens.—Dr. CLEMOW showed an example of Meningeal Hæmorrhage.—Dr. MACFIE CAMPBELL exhibited a Ruptured Kidney. The patient, who had been run over, had symptoms of ruptured bladder. The pelvis was found full of blood, and the kidney was divided in two. There was no fracture of the pelvis.—Dr. A. C. E. HARRIS showed an Epithelioma of the Penis. The patient had been operated on for phimosis twenty-two years before.—Dr. A. DAVIDSON showed a specimen of Intestinal Obstruction from constriction of the bowel. The lower part of the small intestine and the commencement of the cæcum were involved. Above the cæcum, there was a marked constriction, the cause of the obstruction. Peritonitis resulted.

Obstruction of the Bowel.—Dr. CATON and Mr. CHAUNCY PUZEY read this case, and showed the specimen. The patient, who had never had hernia, and had not suffered from marked constipation, was seized with umbilical pain after drinking a glass of water. There was vomiting of bitter greenish-coloured matter. Purgatives were ineffective, and enemata brought away no fæcal matter. On admission into the Northern Hospital, there was fæcal vomiting; no tumour could be detected; there was slight dulness in the right iliac fossa; pulse 100; temperature 99° Fahr.; the urine contained bile. Opium and belladonna were prescribed. Soon after admission, the temperature ran down to 97°, and the extremities became cold. It was then decided to operate. Mr. Puzey found the cause of the obstruction in a stricture of the ileum. The patient became collapsed after the operation, and died on the following day. Mr. Puzey stated that the intestine resembled an umbilical cord in appearance. If he were to operate again, he would do so nearer to the umbilicus than in the present case. Although the patient died thirty hours after the operation, yet the operation considerably eased him; and the fæcal vomiting did not return thereafter. He considered that the operation had been performed too late, and advocated early surgical interference in these cases, where practicable.—Mr. PAUL showed a similar specimen, and mentioned the chief features of the case. The symptoms in his case were those of acute obstruction. On admission to the Southern Hospital, the patient first vomited green mucus, and then stercoraceous matter. There were no febrile symptoms, and no tumour could be felt. On opening the abdomen, an adherent mesenteric band was found in the vicinity of the cæcum. This was divided, and the liberated intestine sprang out. The bowel had a perforation, and fæces escaped into the peritoneal cavity, which could not be completely washed out. Unfortunately, the operation in this case was performed too late to do any good.

Colour-blindness.—Mr. BICKERTON read a paper on this subject, and showed several cases, demonstrating the colour-blindness of the patients by means of lamps with shades of different colours.—The PRESIDENT, Mr. EDGAR BROWNE, Mr. C. G. LEE, Dr. W. M. WILLIAMS, and Dr. STOCKER, took part in the discussion that followed. The various speakers were of opinion that all sailors, before proceeding to sea, should be tested for colour-blindness, instead of, as at present, confining the test to those who presented themselves for mates' certificates.—Mr. BICKERTON replied.

SUFFOLK GENERAL HOSPITAL.—The Marquis of Bristol has been appointed President of the Suffolk General Hospital, Bury St. Edmunds, *vice* the Earl of Stradbroke, deceased; and Dr. MacNab, Vice-President, *vice* the Marquis of Bristol.

CHESTER MEDICAL SOCIETY.

FRIDAY, FEBRUARY 5TH, 1886.

JAMES TAYLOR, F.R.C.S., President, in the Chair.

Mitral Stenosis.—Mr. H. DOBIE, on behalf of Mr. GEORGE HARRISON, exhibited a heart, the mitral orifice of which barely admitted an ordinary blacklead pencil. The patient's pulse had averaged 48 beats per minute, but no murmur was discoverable.

A Case of Syphilis.—Dr. WEAVER (Frodsham) read notes of a case of syphilis which he had observed through its various phases for two years. Dr. Weaver asked what remedy had, in the experience of members, been found most beneficial for the bitemporal neuralgia of syphilis.—Dr. DOBIE said he had recently seen a case, in which gelsemium had failed, yield at once to a course of perchloride of mercury with iodide of potassium. These, he thought, the best remedies for the neuralgia of syphilis.—Surgeon-Major TOMLINSON thought that when these means failed, the hypodermic injection of morphine should be had recourse to.

Micrococcus of Syphilis.—Mr. ALEXANDER BARRON, of Liverpool, a visitor, exhibited a microscopic section of a primary desquamating papule, showing lymphatic spaces containing a hyaline coagulum, in which multitudes of micrococci were imbedded. He had found it in glands secondarily affected, and in tertiary lesions of recent development.

Typhoid Fever.—Dr. WATERS read a paper on the communicability of typhoid fever, the discussion upon which was postponed.

FRIDAY, MARCH 5TH, 1886.

JAMES TAYLOR, F.R.C.S., President, in the Chair.

Aneurysm of Carotid communicating with Œsophagus and Trachea.—Mr. MILLER showed a specimen removed from the body of a labouring man aged 51. An aneurysmal sac, bounded apparently by the surrounding tissues without arterial coats, containing broken-down coagulum. This sac communicated on the one hand with the right carotid artery, which was atheromatous, by a minute aperture, and on the other with the œsophagus and trachea, with the former by a very free opening.

Ovarian Cyst.—Mr. TAYLOR showed an ovarian cyst recently removed by him with success in the Chester Infirmary.

Incubation Stage of Measles.—Dr. HAINING read a note of five cases of measles which he had had the opportunity of personally observing closely, proving that measles was infectious in the stage of catarrh, and pointing to nine days as about the average length of the incubatic stage.

Typhoid Fever-Chart.—Dr. DOBIE showed a beautifully designed and coloured temperature and pulse chart, of a case of typhoid fever.

Hæmophilia.—Mr. MORETON (Tarvin) read a paper on hæmophilia, giving details of a series of cases in one family of which he had had the care. Mr. Moreton frequently examined the blood of the patients, and always found it normal as regards coagulation and microscopic appearance. He thought a peculiarity in the structure of the capillaries would best explain the condition.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

MARCH 5TH, 1886.

J. H. BELL, M.D., in the Chair.

Cardiac and Renal Disease.—Dr. CHURTON showed specimens to illustrate the lack of connection in extent between cardiac and renal disease in cases of granular kidney—namely (1), a heart, of nine and a half ounces, with kidneys extensively contracted; (2) a heart, weighing seventeen and a half ounces, with kidneys showing only the smallest trace of granular disease. The aorta and coronary arteries were very atheromatous.

Asphyxia from an Orange-pip in the Trachea.—Mr. MAYO gave an account of this case, which occurred in a child, aged 8. Tracheotomy produced partial relief; inversion was tried without success. The child died from gradual asphyxia about eighteen hours after swallowing the orange-seed, which was found fixed about the middle of the trachea, almost completely occluding it.

Inhaler.—Dr. PURDY showed and described Dr. Blaikie Smith's ether-inhaler. The instrument resembled Dr. Allis's inhaler, but was fitted with a face-piece, water-jacket, and inspiratory and expiratory valves. The advantages of safety, simplicity, and economy were claimed for it.

Defective Menstruation.—Dr. BRAITHWAITE read a paper on the treatment of some cases of defective or scanty menstruation by the

troduction of Dr. Greenhalgh's stem-pessary, the only objection to being that previous dilatation by a tent was necessary. He gave ses in illustration. The stem generally induced a flow of blood thin three days; but other measures, such as appropriate diet, hot ths, etc., were not neglected.—Mr. WRIGHT thought the cases in ich it was necessary to induce menstruation by local means were y few.—Mr. MAYO and Mr. TEALE recommended rapid dilatation der ether by means of sounds.—Dr. FARQUHAR spoke of the useless- s of permanganate of potash and apiol, but had obtained good ults from iron and aloes, and from pilocarpin.—Dr. BRAITHWAITE, reply, said he had never seen bad results from the use of tents, if y were dipped in thymol soap, and covered with iodoform, before troduction.

Great Distension of the Gall-bladder, treated by Aspiration.—Dr. ING read a paper on this case. The patient, a woman, aged 60, of vious good health, was suddenly seized with severe epigastric pain, dually spreading to the right hypochondrium, with tenderness. ere were slight jaundice and an area of dulness in the region of the l-bladder, both of which increased. The icterus decreased, but the tions remained pale. A syringe, inserted into the dull area, drew a light brown fluid. Three days afterwards, there was much ging, extending over the right side as far as the crest of the ilium. ty-two ounces of yellowish-brown, partly viscid, fluid were with- wn by an aspirator, with great relief. The fæces still remained e, but, five days later, there was a copious evacuation *per rectum* fluid similar to that aspirated; and, except on one day in which re was a rigor with pyrexia, the patient made a rapid and unin- rupted recovery. The fluid, examined by Dr. Sims Woodhead, of nburgh, contained a sediment consisting mostly of cholesterine bile-pigment.—Mr. MAYO ROBSON preferred cholecystotomy in s of this kind to aspiration, which was only a temporary measure. had had five cases of distension of the gall-bladder under his care ing the last six months. In two, which were chronic, he had ormed cholecystotomy successfully, and had removed numerous -stones; in three more acute cases, relief had been obtained with- operation.—Mr. TEALE referred to a case of extreme epigastric pain, a lump in the position of the gall-bladder, completely relieved by podermic injection of morphine.—Dr. EDDISON thought that the ation of opening the gall-bladder was a severe one, and, in acute s, generally unnecessary.—Mr. LAWFORD KNAGGS recommended ration as preliminary to operation.—Dr. GRIFFITH spoke of the nlessness of aspiration, and referred to a case of cancer of the pan- s, when the gall-bladder was aspirated three times.—Dr. BARRS ught that further evidence was needed as to the particular class se suitable for cholecystotomy.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 11th, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Fetal Monster.—Dr. ALFRED ROBINSON showed a specimen of a cephalic monster, subvariety "miops." The face on one side was ect, on the opposite there being only one eye. There was the l fold of skin or proboscis, which is found in most monsters with gle eye. The umbilical cord consisted of five blood-vessels with gle placenta. The specimen was a seven months' fœtus, a footling ntation, and no difficulty occurred in its delivery.

Large Urinary Calculus.—Mr. THORPE exhibited a large mulberry lus removed by lithotomy. It weighed 4½ ounces, and measured ches in diameter. The patient was aged 63, and died five days operation. Great difficulties were met with in the removal of the lus, and some unavoidable injury to the soft parts resulted.

Cholesterine in Retina.—Mr. SNELL introduced a boy, aged 10, with sterine in the retina. He had been observed to be blind at 2 s of age. Now there was detached retina, which was much ened at all parts, but especially so at the nasal side (right eye), e even the naked eye detected the glistening cholesterine plates, h were rendered very distinct with fœcal illumination or the or. The plates were clearly fixed in the retina, which appeared a wavy at parts. Mr. Snell remarked on the unusual con- n, and said that cholesterine had been found in most parts of eye.

Carbolic Acid Poisoning (?) *Treated by Cucaine.*—Mr. W. D. JAMES ed this case. A. B., aged 35, on the evening of November 19th, a dose of carbolic acid instead of mixture. She did not seem to swallowed any. Her lips were blistered; the buccal and pharyn- membranes looked coated with milk; the pupils were dilated; ulse was uncountable, a mere running thread. She had intense on swallowing. Mr. James administered oil, eggs, and milk, and ordered a linseed-poultice to be applied round the throat, and ice to be sucked continually. Next day she had no sleep; the pain was worse. On the 21st, the area of pain extended all over the front of the chest; her voice was hoarse; there was laryngeal pain with each breath; harsh, dry respiration was heard in the larger bronchi; temperature, 102.3° At night, her voice had almost entirely gone; the pain was very severe. Mr. James ordered one-sixteenth of a grain of hydrochlorate of cucaine every three hours; the poultice and ice were continued. On the 22nd, the patient got up, nearly free from pain; the temperature was normal; arterial tension was restored; her voice was returning. The patient expressed herself as feeling relief from every dose.

Perforating Ulcer of Foot.—Mr. C. ATKIN read a paper on this subject, and drew attention to the peculiar deformity of the toes met with in some instances, a condition originally described by Mr. Bigg and Mr. S. Jones. A man was shown suffering from well marked ataxy, whose toes were not only very much shortened and twisted, but were in parts ankylosed. The existence of this peculiar condition, and the fact that perforating ulcer was often a premonitory symptom of locomotor ataxy, had been strangely overlooked in several recent text-books on medicine and surgery. The case shown, taken in conjunction with two instances of Charcot's joint disease exhibited last year, proved that perforating ulcer could undergo spontaneous cure, as all three cases presented several scars of previous ulcers. Mr. Atkin considered that this fact ought to make surgeons very chary of advocating such serious operations as removal of bone or amputation of the foot.—Remarks were made by the PRESIDENT and Dr. MORTON.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, FEBRUARY 26TH, 1886.

F. R. CRUISE, M.D., President, in the Chair.

The Causation and Treatment of Pneumonia.—Dr. MARTIN (Portlaw) read a paper on the occurrence of a large number of cases of pneumonia, within a period of three months, in a space about equal to half a square mile in the town of Portlaw. In only one instance did two cases occur in the same house, and one of these was seized while working at a place six miles distant, where he had been residing for three weeks previously, and only returned home to be nursed. No person occupied in attending on or nursing a case was affected, even under circumstances particularly favourable to such a result. In almost every instance, a certain amount of unsanitary surroundings existed; and to this, aided by the particularly unfavourable climatic influence which prevailed, he attributed the outbreak—the more so that, in almost every instance, the patient stated that the illness was produced by a chill, caused by exposure when heated by exertion to the peculiarly severe easterly winds which prevailed. Of the twenty-eight cases, twenty-six recovered. The treatment was based on old fashioned lines; in the early stage, aconite, salines, diaphoretics, poultices, leeches; and in the advanced stage, occasionally flying blisters, and, after their removal, cotton-wool covered by gutta-percha paper; the patient's strength being supported all through by milk, beef-tea, eggs, and occasionally stimulants, but in very moderate quantities. He tried quinine in some cases, and perhaps with advantage; but he preferred brandy when temperature was high, as it agreed better with the patient, and acted more speedily; but, when one considered the very unfavourable circumstances under which he had to treat these patients in their own homes—seldom clean, and amidst extreme dirt and poverty—his opinion on the action of a special drug like quinine could not be very positive or reliable.—Dr. J. W. MOORE remarked that, while Dr. Martin regarded the infective theory as non-proven, because, save in one instance, no two cases of pneumonia occurred in the same family, yet there was a general history of exposure to chill; and this exposure to chill had been recently advanced as one of the strongest arguments in support of the infective theory in acute pneumonia. The chill caused a certain amount of bronchial catarrh, enabling the virus of the pneumonia to find ready entrance into the system; in fact, the chill produced a traumatic condition of the bronchial mucous membrane, facilitating the entrance of the virus. The specific theory was also objected to on the ground that the disease commonly resulted from a blow or injury, rending the lung and producing a lesion by which the virus entered the blood. From his own observations in Cork Street Hospital, he concluded that in most cases there was an essential or true pneumonic fever; sometimes, a pythogenic pneumonia. The relation of the local lesion to the disorder seemed to be analogous to that of the lesion of Peyer's patches to the essential disorder in enteric fever. That a second case

did not occur in the same house told very little against the zymotic theory, because other people might not have been exposed to the chill.—The Registrar-General (Dr. Grimshaw) was strongly of opinion that the disease was produced by pythogenic causes. In Dr. Martin's cases, the exhalations from the manure and the cesspools were the real causes of the disease. Neither pneumonia nor enteric fever could be said to be very infective in man. On the other hand, veterinary surgeons believed pneumonia to be very infective in the lower animals, spreading among them with great rapidity, and hence the animals affected were destroyed to prevent the extension of the disease. Since pneumonia was associated with enteric fever, which was one of the reasons for calling it pythogenic pneumonia, he asked if there were any cases of enteric fever in the houses referred to by Dr. Martin. Many local outbreaks of febrile catarrh called influenza, which were confined to one house, had, he believed, a similar origin.—Dr. Henry Kennedy did not look upon pneumonia in any form as an infectious disease. As to the epidemic character of pneumonia, he remembered, a good many years ago, having within three weeks nearly twenty patients in hospital in whom the upper lobe of the lung—generally the right—was attacked.—Dr. Walter Smith said that the cause of the outbreak in a large number of cases was still unknown. He was struck with the remarkable contrast which the mortality of Dr. Martin's cases presented (only two deaths out of twenty-eight cases), as compared with that of the epidemic in Dublin. In Dr. Martin's cases, it was of great practical interest to note that the pneumonia left permanent traces. If a specific fever, it would influence the views of treatment in the same way as did the pathology of continued fevers. No physician dreamed of stopping or curing one of the recognised varieties of continued fever; and if pneumonia came within the category of zymotic fevers of short duration, hope of directly interfering with its course must be abandoned.—Dr. William Moore, referring to the contagiousness of pneumonia, instanced the case of a man, aged 70, who died of it, and whose attendant, aged 22, was attacked three or four days afterwards with the disease, from which he recovered.—Dr. Finny said that investigations subsequent to Murchison's had shown that putrid matter would not of itself produce enteric fever, and that there must be some other factor. Granted that enteric fever and pneumonia were two different fevers, there must be a separate virus to each; and, unless the virus could enter into decomposing animal and vegetable matter, he did not think that it was right to say that fever in the one case, or pneumonia in the other, was produced by such decaying matter. No doubt, Dr. Martin had shown that bad sewerage existed, but that was not sufficient to show that it produced pneumonia. Again, taking the view that there was a special virus, it carried out the observations of Friedländer of a micrococcus being the cause of the disease.—Dr. Gordon, having seen many cases of pneumonia, both in hospital and in private practice, was impressed during the epidemic with its extreme contagiousness. In a private house at Blackrock, co. Dublin, well circumstanced as to air, ventilation, and sewerage, there were six cases of pneumonia, one after another, at an interval of two or three days; and, of these, two proved fatal, the remainder recovering after a long time. He was also struck with the rapidity with which the fatal cases died, mostly within forty-eight hours of attack with the decided symptoms of pneumonia; and what was also remarkable, was the rapidity with which a form of purulent infiltration set in through the greater part of the pulmonary system; in some cases, the entire lung being engaged.—Mr. Doyle never lost a case where pneumonia occurred in children. The German authorities recommended the treatment of the fever, and not of the pneumonic complication at all.—Dr. Martin, in reply, said that pneumonia was a zymotic disease in a great many cases, he had not the slightest doubt. Some years ago, an old man and his wife died in a couple of days, and there were no other cases in the neighbourhood. Seeking a cause, he found under the door an exceedingly foul sewer. He believed that pleuro-pneumonia in cattle was a zymotic disease, caused by filth and dirt, and not by contagion. He did not look to the treatment as curing pneumonia, but devoted his care to the general support of the patient. He emphasised the importance of teaching the young practitioners some of the good old-fashioned methods, as they often forgot the position of the patient; for instance, in inducing profuse perspiration, by the use of jaborandi, where the patient might be possessed only of a piece of a quilt and a torn shirt, so that the reaction left him worse than before

Hyperpyrexia in Rheumatic Fever.—Dr. A. N. Montgomery, in the absence of Mr. W. Langford Symes, read his paper on the above subject. The patient was a lady, aged 27, who, on a passage from Liverpool to Valparaiso, was attacked on board ship with all the symtoms of acute articular rheumatism. The temperature rose on the third day to 102°. She was put on the salicylate of sodium treatment, and in ten days the temperature was normal, and the patient was walking about free from pain and fever. However, after a convalescence of ten days, she was wet through while in bed by a sea coming through the port-hole, and all her old symptoms returned, with a rapid rise of temperature to 106° within thirty-six hours. A full dose of twenty grains of quinine failing to have any effect in lowering the temperature, which continued to rise rapidly until the thermometer showed 108°, as a last resource, the ice-pack was applied, towels wrung out of iced water being used, the application being gradually extended from the head to the lower extremities; and, the patient being then rolled up in blankets, she was kept thus for ten minutes at a time. After the third and last application, the temperature had fallen to 97.8°, thus making a sudden fall of 10.2° in the space of forty minutes, with a marked relief to the head-symptoms, as she completely lost her delirium, spoke rationally, and expressed her delight at feeling the icy cloths around her. The temperature, after three days, rose again to 102°, but never went higher; and from this point the pains diminished, and she finally landed in Chili thirty days after her first attack, free from any acute rheumatic symptoms other than a damaged mitral valve. The author remarked that, though this plan of treatment was not free from danger from endocarditis, considering the weakened condition of the heart, still in this case, when other methods had failed to reduce the high temperature, it had succeeded, when the case, if left alone, must have ended fatally. He, therefore, thought that he was justified in using it.—A debate ensued, in which Drs. H. Kennedy, W. Moore, and Finny took part.

REVIEWS AND NOTICES.

Clinical Lectures on the Diseases of Women. Delivered in St. Bartholomew's Hospital. By J. Matthews Duncan, M.D. LL.D., F.R.S's.L. and E. Third edition, much enlarged, with appendices. London: J. and A. Churchill. 1886.

Within the wide field of medical literature, no class of publication is more important than an educational work. A monograph upon deep questions relating to medicine or surgery is intended for qualified men who are more or less in a position to judge for themselves. A text-book written by the youngest medical teacher in the land is, in many respects, of far more serious import. Its contents are designed for the education of the student; and, since not a few students buy nearly every text-book that is published, its teaching, true or false, will influence, for good or evil, more than one indiscriminating young reader.

It necessarily follows that such a work as that now under consideration is of profound importance. It is destined, through the high reputation of its author, to be widely employed for educational purposes. Indeed, its doctrines have already been imparted to that considerable proportion of the next generation of practitioners who are studying their profession in a great metropolitan school. Owing to the authority of the author, and his deserved popularity as a teacher, that which he has taught and advised will be implicitly believed and faithfully carried out by many a practitioner of the immediate future. Some of Dr. Matthews Duncan's views meet great and possibly deserved, opposition from other authorities. None of his opponents, however, can accuse him of veiling his opinions in ambiguous language, or of making dogmatic assertions without being able to fortify them by a bulwark of sound reasoning. These preliminary remarks may serve to explain why we consider that the *Clinical Lectures* demand a close scrutiny at the hands of the critic.

It must further be premised that this edition is practically a new work, since it contains fourteen new lectures and much additional matter in the appendices. As the second edition included sixteen lectures not published in the first, which we reviewed several years since, the present issue clearly deserves special notice as a work to a great extent original. It contains a most useful index, prepared, as we are informed in the preface, by Dr. W. S. Griffith. The lectures are written in the author's well known lucid style, plain English throughout, never degenerating into the fatal literary vices of dryness and prolixity. Being addressed to students, they are free from some of the harsher features conspicuous in his observations in the course of debates at societies, before more experienced audiences. We have failed to discover more than two or three sentences which require to be read twice. The chief exception is remarkable, and may be found on page 200. In the ordinary language of Dr. Duncan, it would probably read:—"A fibroid has been often observed in all stages of enucleation. I have failed, however, to find any recorded instance of

he development of a fibrous polypus from a fibroid that was first nbedded in the uterine walls and then became prominent, but, for a ime, sessile."

The nomenclature is much less puzzling than that of many standrd gynæcological works, yet we cannot say that it is thoroughly atisfactory. A perfect system of medical terms is impossible, and our uthor cannot be blamed for want of such a system. Every writer of uthority has a privilege to individual peculiarities in the choice of erms. On the other hand, the critic may justly scrutinise that hoice. It is questionable whether some of Dr. Duncan's expressions hould be universally employed, familiar and intelligible as they are n his lectures. "Perimetritis" and "parametritis," his adopted ffspring, are open to a grave objection. They are words very similar n sound, yet they express conditions which he is ever at pains to rove utterly dissimilar. Still, the French do not get into trouble vith *dessus* and *dessous*, and so it may be with peri and para-metritis. At page 379 the author, ironically we trust, parodies himself in remarking: "As in the uterus you have perimetritis, mesometritis, and ndometritis; so here you may have pericystomatitis, cystomatitis, and ndocystomatitis." A terrible precedent this, for the medico-literary eophyte, who, of course, is ever more likely to copy the author's ard words than to imitate his good English! A word like 'hypoplasia" is hardly suited for educational purposes. Hæmatuchen is a dreadful suggestion. A yet more questionable matter is he employment of such an unphilological expression as "sacrache" or sacral pain. We shall soon hear of ovarache, tubeache, and fosscche; nervache for neuralgia would, on the other hand, be more olerable. The author, too, keeps up the English superstition hat the persistent trace of the Wolffian duct in the female was disovered by a man bearing the German surname Gärtner. In this ountry we distinguish between Gairdner, Gardiner, and Gardner, all, y the way, contributors to medical literature; then why should we all a Dane, Gartner, by a German name? The orthography of a surame is sacred. "Ureteral" is a strange adjective, "rheum" has a ne old-world ring, succeeded too quickly, at page 438, by the unhakesperian word "sacrache." Lastly, we never can understand why uterine sound should persistently be called a probe.

On the other hand, there is much to be thankful for in some of Dr. Duncan's favourite forms of expression. The resuscitation of the seful word "phlegmon" will, we trust, lead to its permanent reestablishment in every text-book. To speak of a tumour of "the size f a mandarin orange" would, by many writers, be held as a crime; nd we are not sure that all Dr. Duncan's pupils know what a manarin orange means. Yet we hold that comparison with a familiar bject often conveys a better impression to a class than could be imarted by precise measurements. Few things are less exactly understood than diameters and cubic measurement. The matter is very ifferent when it is the question of the growth of a tumour under bservation, or of the pelvic measurements in labour. Then inches re of essential importance. The lecturer very seldom mentions other uthorities, but, for educational purposes, this omission may be not ltogether indefensible.

The general character of this work having been criticised, the new ectures may now be briefly reviewed. The chapter on Endometritis mpresses upon the student the vagueness of all opinions upon the ature of that disease. Dr. Duncan dwells upon the form which he elieves to be the most definite, the endometritis of elderly women. le speaks with profound scepticism of what is termed the common ype of this disease; and declares that he and Dr. Godson searched in ain for it during an entire winter in the crowded out-patient department at St. Bartholomew's Hospital. Fungous endometritis reresents, in his opinion, no inflammatory condition, but a general myxomatous hypertrophy of the mucous membrane. Scraping with a urette can never, according to his experience, permanently cure endometritis. In the lecture on Retention of Menses, Dr. Duncan reminds he student that what is termed imperforate hymen often means bsence of the inferior part of the vagina, the hymen, not imperorate, being found in its usual situation. The structure taken for hat membrane is the distended and expanded fossa navicularis, or mucous membrane between the posterior margin of the hymen and he fourchette. In another new chapter, the author denies the existnce of vicarious menstruation, and very properly reminds his pupils hat menorrhagia in chlorotic cases is worse than amenorrhœa. A hapter is devoted to Lupus of the Pudendum, a disease about which much was said at the Obstetrical Society last year. In his remarks n polypus uteri, Dr. Duncan advocates operative measures more freely han is his wont. He speaks lightly of the removal of fibrous polypi y means of the scissors, but wisely reminds his students at the end f his discourse that he has known of a fatal result.

In lecture twenty-eight, on the Terminations of Peri- and Parametritis, Dr. Duncan appears at his very best, as writers do when they discuss what is especially dear and familiar to them. The tenour of the lecture is, of course, in favour of expectant treatment. Most cases of pelvic cellular or peritoneal inflammation get well, he declares, by rest. The peritoneal adhesions break down slowly, sometimes after intervals of years. The solid deposits formed in the course of pelvic cellulitis also steadily disappear under favourable circumstances, that is, "lying a-bed." Though their atrophy may be suspended by walking and the exercise of a vocation, they will vanish, we are taught, by another course of "lying a-bed." Dr. Duncan admits, however, that the deposit may degenerate into cicatricial tissue, fixing the uterus. He dwells, also, upon some of the miserable results of chronic pelvic inflammation. Yet not a word is said for or against active operative measures, such as are frequently advocated, and not rarely performed in these days. We fail, moreover, to find any notice of the serious diseases of the Fallopian tube which undoubtedly exist. Certain museums are beginning to fill with specimens of pyosalpinx and hydrosalpinx. It is equally certain that these diseases are often intimately associated with pelvic peritonitis. Dr. Duncan's opinions on oöphorectomy and hysterectomy for the cure of uterine fibroids, are expressed in terms of exemplary fairness and courtesy towards those who resort to such operations. "If hysterectomy is ever to be established, hæmorrhage will be the great and chief motive. All other evils are minor, because rare." Further on, we read: "Oöphorectomy is, of course, a much less formidable and less dangerous operation than hysterectomy, and, therefore, more readily resorted to." We must remind the author that oöphorectomy in a case of a large fibroid is often very difficult, owing to the œdematous condition of the broad ligament and the dilatation of its veins. It may also prove very dangerous, for the pedicle is not easily ligatured. The enlarged arteries can seldom be secured with facility, and are very likely to slip, notwithstanding every precaution. It is much easier and safer to pass a wire clamp round the neck of the entire tumour, which may then be cut away, the pedicle being secured by pins.

The two new chapters on ovarian cystoma are, on the whole, satisfactory. In one respect, the subject is especially suited for treatment at the hands of Dr. Duncan. He ever delights in advising his pupils never to make too sure of any symptom for diagnostic purposes, and there is no disease where symptoms are more deceptive than in supposed cyst of the ovary. The qualified statements which the author adds to each symptom will meet the approval of the most experienced operator. We can especially commend these remarks upon the absurdity of attempting to "select" cases for operation. "You cannot tell with much assurance, in most of the urgent cases, what is an easy, a "good" case, or one likely to do well; you never know, when you begin an ovariotomy, what difficulties you are to meet with." On the other hand, Dr. Duncan omits to remind his readers that the friction detected by laying the hand flat upon the abdomen over an ovarian cyst, during forced respiratory movements, is more frequently caused by the great omentum lying between the cyst-wall and the abdominal parietes, than by inflammatory roughening of the surface of the cyst. He wisely refrains from discussing the "early ovariotomy" question too minutely before pupils. His advice on the treatment of dermoid cysts is very questionable. "They are liable to inflammation and suppuration, and they have been known to burst into the peritoneum," he observes, and ought to add "and then cause very dangerous and painful complications, through irritation of that serous membrane and the viscera by masses of fat, greasy hair, and spicules of bone. A considerable proportion are prone to malignant degeneration. For these reasons, a slow-growing cystic tumour should be viewed with suspicion, and removed after careful deliberation. If it be a dermoid cyst, the operation will probably be easy." Instead of this reasonable advice, which would be given by any surgeon with some practical experience of dermoid tumours, Dr. Duncan continues thus: "Their treatment is the same as for ovarian dropsy, but treatment is in them often not *(sic)* demanded." Our author is wise in throwing discredit on tapping as a diagnostic measure. If "the case proves to be ovarian, not parovarian, you have done your patient harm rather than good." It is a pity that he speaks as though aspiration "minimised the evil." The tapping of a supposed parovarian cyst is not a proceeding of which the majority of experienced operators approve. Not a few such cysts contain papillomatous masses, especially those that are really parovarian, and not developed from the connective tissue of the broad ligament. Some malignant cystic tumours are very thin-walled, and readily mistaken, in their earlier stages, for parovarian cysts. Tapping would be simply disastrous under the above-named conditions, whilst operation would be easy and safe. There are few operations more free from

risk than the extirpation of a true thin-walled broad-ligament cyst, the "parovarian" cyst of most authors, including Dr. Duncan. Several living writers have shown a source of fallacy in this term. Dr. Duncan, in his lecture on parovarian dropsy, does not omit to mention, among minor cystic diseases, the metro-peritonitic cysts of Hugnier. He might have stated that they frequently present a formidable appearance around the broad ligaments in cases of uterine fibroid during operation. They then often puzzle the surgeon, who will be agreeably surprised to find them disappear suddenly during the process of securing the pedicle, like the terrifying spectres which beset the paths of bold adventurers in Arabian and mediæval romances.

There are some very good lectures on retroversion of the gravid uterus, chronic inversion, diseases and injuries of the perinæum, and minor ailments, but want of space renders it impossible for us to review their contents. We are likewise prevented from noting the valuable additions to the appendices, and to the text of those lectures which have already appeared in the two previous issues. Obstetricians and gynæcologists of all countries will read the *Clinical Lectures* with interest. It is, however, as a readable and thoroughly instructive work for students, that this publication deserves especial recommendation at our hands.

NOTES ON BOOKS.

All But: A Chronicle of Laxenford Life. By PEN OLIVER, F.R.C.S. With 20 Illustrations by the Author. (London: Kegan Paul & Co.)—Under this assumed name, which is now well recognised as that of Sir Henry Thompson, that busy and able man has contributed a sketch to the literature of fiction, which will assuredly find a multitude of readers, and which has many points of particular interest to those in the medical profession. *All But* is the second book of the kind which Sir Henry Thompson has produced. His last novel, *Charlie Kingston's Aunt*, which was the first effort in this new literary diversion, had a very flattering success, and quickly achieved a second edition. *All But* marks a stage of decided progress in delineation of character, compactness and ingenuity of plot. One of the leading personages in the chronicle is a country surgeon, an excellent type of the manly, well educated, and devoted professional men, who form the flower of the profession in country practice. Mr. Hamilton takes a very leading part in the development of the story, and to his firmness and quiet intelligence, and devotion under trying circumstances, the hero owes his life. Sir Henry Thompson may be congratulated on having filled his holiday time by the production of a book, which will not only give as much pleasure to a large class of readers as it probably has to its author in its composition, but will also familiarise the public mind with some of the details of the inner life of the medical practitioner, and lead them to appreciate highly the work of a profession which is not always estimated at its true value.

A Manual of Microscopical Technology, for Use in the Investigations of Medicine and Pathological Anatomy. By Dr. CARL FRIEDLÄNDER, Lecturer on Pathological Anatomy in the University of Berlin. Translated, with the express permission of the author, from the second enlarged and corrected edition, by STEPHEN YATES HOWELL, M.A., M.D. (New York and London: G. P. Putnam's Sons, 1885.)—The last decade has witnessed a very remarkable advance in the methods generally available for microscopic investigations. The hardening, cutting, and staining of tissues, has become an art which requires to be systematically studied and practised, in order to attain to the highest efficiency; the merest novice, however, can prepare excellent and useful specimens, by carefully and patiently following out good methods. Dr. Friedländer's book was written with the object of supplying the necessary information, and achieves the object, so far as written descriptions can supply the place of practical instruction. The microscope itself, and the best method of illumination, the hardening of specimens, the making, staining, and mounting of sections, and the examination of fluids, are successively passed in review; a large number of methods, and all the necessary apparatus, are accurately and fully described. Special articles are devoted to the examination of micro-organisms, both in tissues and in fluids. For a work which is intended for use in the laboratory, however, the volume has one very serious defect. Dr. Howell speaks with some complacence of having carefully elaborated portions of certain chapters, and of having added foot-notes; but he has not provided an index; there is no table of contents worthy of the name; even the headlines are of very little use as a key to the contents of the pages. How great a drawback this is, can be easily understood; if, for instance, the student want to ascertain how to use a particular stain, or what is the method of preparation to use for a particular tissue, he will have to hunt through a hundred pages, until he alights upon the information he seeks. It appears most extraordinary that the translator should have risked the success of a volume, which must have cost him a good deal of labour, by the neglect to discharge so obvious a duty towards his readers.

Income Tax, how to get it Refunded. Practical Instructions for Assessment. Appeal and Return of Tax. By ALFRED CHAPMAN. Second edition. (London: Effingham Wilson. 1886.)—We have already referred to this useful treatise on a subject which is of practical interest to professional men. In the new edition, the principal addition is a section on Assessment, Appeal, and Return of Tax on Over-assessed Profits. This is a direct outcome of correspondence with many subscribers of the BRITISH MEDICAL JOURNAL, who have, we understand, written to Mr. Chapman about the shameless way in which they have been and are overtaxed. What Mr. Chapman wrote to those who consulted him, he tells in his new edition to all his readers. If overassessed, there is relief obtainable at the end of the year of assessment. It is necessary to prove by accounts that profits have not reached the assessment, and to claim back the income-tax on the difference between the assessment and the average of the three past years, including the year of assessment. Mr. Chapman has prepared special forms for professional men to present these accounts. This useful little essay will, to most readers, repay its small cost a hundredfold.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CHEAP HAND-SPRAY PRODUCER.

MESSRS. KROHNE and SESEMANN have produced a half-crown hand spray producer, which consists of an ordinary hand-spray bellows and the other accessory apparatus fitting into a four-ounce bottle. It is available for use in antiseptic operations and dressings where portability is an object, as in rural practice and in field-practice. It is equally useful for pharyngeal applications, or for atmospheric purification of the schoolroom. Although strong, it is cheap; and economy is distinctly of advantage in such apparatus.

The same firm have introduced a half-crown hypodermic syringe with two handles. It is necessarily in cheap material—vulcanite, bone and glass. It appears to be durable, and likely to keep in good order.

A GUARDED ASPIRATING AND EXPLORATORY NEEDLE.

IN the JOURNAL of November 14th, 1885, we published the description of a guarded aspirating and exploring needle, proposed by Surgeon-Major Hodder. We have recently received the needle as made by Messrs. Evans and Wormall, 31, Stamford Street, London. In place of a button for protruding and withdrawing the inner probe-pointed cannula, a bayonet-adjustment has been substituted, which appears to be a decided improvement. The advantages claimed for it are that aspiration and exploration of cavities is made safer, more especially where deep insertion is required; that the chance of the cannula catching against thickened serous membrane, and possibly pushing it before it in insertion, is done away with; and that, in deep explorations, the round probe-point is much less likely to injure delicate tissues than the thin sharp edge of very fine cannulæ.

SALMON'S IMPROVED RIDING THIGH-BAND.

THIS band is made of checked jean, coated with a waterproof material, and provided with three straps and buckles. From the nature of its material, it can be adjusted to the thigh, and retained there without the troublesome complication of any further apparatus adjusted to the waist to keep it from slipping. It affords much relief in cases of sprain, and is of great value in the hunting-field. The band is made of several sizes, according to the circumference of the thigh as required by the purchaser.

SANITARY FLOORING.—In our notice of this flooring, in the JOURNAL of March 13th, the address of the agents of the manufacturers (Bucher and Durrer) was erroneously printed as Scheiller, Brothers and Co., 23, New Broad Street, W.C. The address should have been Messrs. Scheièler, Brothers, and Co., 23, New Broad Street, E.C.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SCRIPTIONS to the Association for 1886 became due on January st. Members of Branches are requested to pay the same to their spective Secretaries. Members of the Association not belonging Branches, are requested to forward their remittances to the eneral Secretary, 161A, Strand, London. Post-Office orders ould be made payable at the West Central District Office, High olborn.

The British Medical Journal.

SATURDAY, MARCH 27th, 1886.

MEDICAL ACTS AMENDMENT BILL.

Bill prepared by the Government, for the purpose of carrying out long deferred amendment of the Medical Acts, will probably rtly be introduced to Parliament. It is not premature to indicate outlines, on which there is reason to believe that it will be drawn. rill, of course, proceed largely upon the agreed lines laid down by Royal Commission and Select Committee which have examined subject, and of the previous Government measures. It will, vever, be found, we anticipate, to be at once simpler and more tic. In respect to the questions of the admission to general prac- and the constitution of the General Medical Council, it will essarily provide that no person shall be registered under the dical Act in respect of any qualification, until he shall have passed ualifying examination in medicine, surgery, and midwifery.

The power of holding such examinations will be given to the Uni- sities in the United Kingdom now holding the power of granting dical diplomas, or to any combination of two or more medical cor- ations in the same part of the United Kingdom who may agree to d a joint examination, or to any combination either of one univer- y with another, or of an university with the medical corporation or porations in the same part of the United Kingdom. The General dical Council will have imposed on it the duty of regulating the ndard of proficiency, and it will be called upon to appoint a suit- e number of inspectors for the purpose. These inspectors will have power directly to interfere with the conduct of any examinations, t the duty of reporting, which reports will be forwarded to the lies in question, and also to the Privy Council, together with any servations from the General Medical Council. The General Medical uncil will have the duty of making any representation to the Privy uncil on the subject of insufficient examinations; and the Privy uncil will thereupon be enabled to withdraw, if it should ink fit, from the medical authorities, the power to hold qualifying dical examinations, unless and until such examinations shall be ought up to an adequate standard of sufficiency.

The General Medical Council will have in reserve powers, subject to e sanction and control of the Privy Council, to provide, in cases of fault, for the holding in any part of the United Kingdom qualifying aminations in medicine, surgery, and midwifery, either by a board pointed by itself, or in combination with any existing qualifying dies; and any persons who may have passed such an examination ll be entitled to be registered under the Medical Act as licentiates medicine and surgery. The effect of registration will be to entitle registered persons to recover by law payments for medicines, fees, or medical and surgical appliances supplied.

The General Council under the new Bill will, we believe, be found to consist of six persons nominated by the Crown—four for England, one for Scotland, and one for Ireland; one representative each for the College of Physicians, College of Surgeons, and Apothecaries' Society of England, and one each for the Universities of Oxford, Cambridge, and London; one representative for the University of Durham and the Victoria University conjointly; one representative each for the Colleges of Physicians and Surgeons of Edinburgh, the Glasgow Faculty of Physicians and Surgeons, and the Universities of Edinburgh and of Glasgow; and one representative conjointly for the Universities of Aberdeen and St. Andrew's; in Ireland, one representative each for the King and Queen's College of Physicians, College of Surgeons, Apothecaries' Hall, University of Dublin, and the Royal University. As direct representatives of the profession, there will be two persons elected by the registered medical practitioners of England, one by those of Scotland, and one by those of Ireland. The arrangements for the election of direct representatives of the medical profession will provide their election for a term of five years. Each such representative will be a member of the Branch Council for the part of the United Kingdom for which he is elected.

The returning officer will be appointed by the Registrar of the General Council; the nomination will be in writing, signed by twelve registered practitioners, and the election will be conducted by voting papers.

In order to avoid adding to the number of the General Medical Council, the Council will elect one of its own members to be president, in lieu of electing, as at present, someone from the outside.

In respect to colonial and foreign practitioners, a colonial practitioner, with a recognised diploma, will be registered on proof that such diploma was granted to him when he was not, and had not been for five years, domiciled in the United Kingdom, and that he had been already practising medicine and surgery in the United Kingdom for ten years preceding his application; and the registration of foreign practitioners will be provided for under like conditions. Provision is made for the making of a list of recognised foreign diplomas, and a separate list of colonial and foreign practitioners, in the *Medical Register*. No one holding a diploma, entitling him to practice medicine or surgery in a British possession, will be prevented from holding an appointment as medical officer in any vessel registered in that possession.

There will be nothing in the Act, we believe, which will in any way repeal the powers given by the Apothecaries' Act, nor will there be any provision for strengthening or altering the penal clause of the existing Medical Act. The Privy Council will take power to prevent the default by the General Medical Council of the duties imposed upon it in respect to providing a sufficient standard of proficiency in qualifying examinations, or in making provision for the holding of qualifying examinations: in such a case the Privy Council will, with due precautions, have power itself to act. There will be a saving clause as to the rights or privileges of existing practitioners. Certain amendments will probably be made in the Dentists' Act of 1878, repealing the section of that Act which provides that a prosecution for any offence mentioned in that Act shall not be instituted by a private person, except with the consent of the General Council, or of a branch council; and a prose

cution for any such offences may be instituted by a private person accordingly.

Lord Spencer and Sir Lyon Playfair have had considerable experience in dealing with the question of medical reform, and they are both sincerely desirous of pressing forward a measure which should give to the profession that sense of control over its own educational affairs, and that power to establish an adequate and complete minimum qualification, which it has so long administered, both in its own interests and in the interests of the public.

This Bill may obviously not be an ideally complete measure, and, indeed, there is no reason to believe that, in the complete discord which prevails among medical bodies, any such far-reaching and detailed scheme would be possible; but it provides conjoint complete examinations and an adequate minimum standard, and it includes the recognition of direct representation of the profession in the General Medical Council, which is the first element in self-government, and would of itself be an important concession to the just demands of the great body of practitioners.

In the present state of public business, it is, of course, impossible to say what may be the fate of this measure; but Lord Spencer and Sir Lyon Playfair will have earned the thanks of the profession for their early attention to the subject, and for their sincere desire to carry a practicable and useful measure. It may be hoped that in the course of Committee a stronger penal clause may be introduced. It may be anticipated, and it is to be hoped, that the Government will be able to afford time for its early discussion in Parliament. The date has not yet been fixed for the introduction of the Bill, but it will probably not be long delayed.

A CEREMONY AND ITS MORAL.

THE gracious visit of the Queen, and Her Majesty's performance of the ceremony of laying the foundation-stone of the Examination Hall which the Royal Colleges of Physicians and Surgeons of England are building, out of their common purse, for holding joint examinations as a preliminary to medical practice, gave great extrinsic interest to an event of otherwise relatively small importance. Of the many who took part in the curiously fantastic and parti-coloured spectacle which was mounted for the occasion, there were probably few who did not recognise the singularity and paradoxical features of the ceremony. It is of no great importance to the profession or to the public, whether the Colleges hold their joint examinations in one building or in another; and the exceedingly ugly and hospital-like edifice will certainly not be in itself a joy for ever, and possibly in only a limited and temporary sense a thing of usefulness. The scheme of examination and the basis of junction are a family arrangement, involving a good many selfish interests, and much of fleeting compromise, between the two bodies. It was effected in face and under pressure of a much larger scheme for reforming medical education and examination, which the whole profession and the legislature approved. The Colleges saw their advantage in taking the opportunity of frequent pauses, delays, and obstructions in the larger reform which the profession called for, of which the Government approved, and by which the country would be benefited. They made a rapid and cleverly devised compact; they unceremoniously and ingeniously ousted the Apothecaries; and there is no reason to doubt that they have consummated a rather clever stroke in crystallising their scheme of union, and availing themselves of the funds which the fees of the licencees provide by erecting, and dedicating at a great public ceremonia the new examination-hall. Of the future of that hall, it needless to speculate; it is not probable that it will alway possess precisely the same functions, or hold the same relation medical State examinations, that it is just now intended to do. If s it is destined to be of even more limited usefulness than we venture anticipate. At any rate, it may truly be said that seldom has t maxium *Nec deus intersit, nisi dignus vindice nodus*, been so litt regarded. The visit of the Queen and so many members of the Roy Family serves, however, to emphasise that gracious personal recogn tion by the Queen of the merits of her personal attendants, for whi she is so highly noted, and which was so gracefully and justly e pressed in her reply and reference to Sir William Jenner, the Preside of the Royal College of Physicians.

The real import of the ceremony might best be interpreted, perha by its contrasts and anomalies. It was the apotheosis of a princip which the respective colleges, and especially the College of Physician long regarded as profane and abhorrent. To practice surge was pollution for the pure physician, and midwifery was, at one tim *anathema maranatha*. The creation of the class of licentiates w the result of a long struggle, and they are even now admitted wi maimed rites and limited privileges. The two colleges still sta apart and rigidly separate for their higher degrees. So far as they a conjoined, they are united, at present, in largely ignoring those who pr tise in virtue of the joint examination; and those who fully avail the selves of the privileges of joint practice, of which the new building the symbol, are excluded from the higher offices of the colleges. T "general practitioner" was remarkable by his absence from t official circle of representative men who took part in the functio of the ceremony. On the other hand, the whole performance, wh anomalous and anachronistic in many of its actual features and ret spective relations, was promising in its visible forecasts for those w can read the signs of the times.

The public junction of medicine and surgery, under Royal auspic foretells the growth of unity in medical administration, and the dec of those mediæval distinctions which have only a caste interest, a which have no foundation in science, or any true relation to existi social conditions and necessities. The fact that the real heroes of t occasion were the general practitioners, by whose fees mainly the buildi is being built, and for whom and by whom it will in future be chiefly mai tained, indicates that the time is approaching when the whole prof sion will be admitted to be not less great than one of its part and when the absurd efforts which are still made to monopolise dig ties, governing power, and outward show of superiority before t world, on the part of a few who fill the office of consultants mix with that of family physicians and operative surgeons, will cease to considered either as a valid or as a dignified pretension.

The omens of the future are bright, and the ceremony of t week, although it had by no means the fundamental importance wh many might superficially be disposed to attach to it, is one of not t least promising pledges of future medical reform.

THE BURGH POLICE AND HEALTH (SCOTLAND) BIL

As there was only this insignificant measure of 242 pages and clauses to dispose of before going home to dinner on Monday, t noble lords in the House of Peers obligingly stayed a few mome longer in order to advance the Bill what is humorously described

a stage." Lord Elgin, upon whom has this year been laid the arge of the measure, at first contented himself with simply moving a second reading; but, some observations of Lord Balfour of Burigh and the Earl of Galloway imposing upon him the necessity of ying something, he laid down the singular doctrine that "this" he second reading, when, if ever, the principle of a Bill should be nsidered) "was not a fitting occasion on which he should enter to a defence of the principles of the Bill." He then went on to obrve that there had not yet been any discussion on the proposals of ie Select Committee of last year, but that "this discussion might ery well take place before entering committee." No one seemed, owever, to be inclined to say anything on the subject of the Bill, id so it passed its second reading without further question.

Considering that this Bill affects very importantly the local governent and social well-being of the whole of Scotland, the lack of terest which is manifested with regard to it in the House of Lords greatly to be deplored. Amongst other things, it proposes to ake the appointment of medical officer of health an annual and not permanent one, and it imposes upon every medical practitioner he responsibility of reporting to the medical officer of health all ases of infectious disease that may come under his care. These are urely matters upon which the medical profession has a right, and ught, to be heard; and yet, on repeated occasions, this privilege has een denied it.

On the first introduction of the measure in 1883, the Parliamentary ills Committee of our Association sought an interview with the Lord dvocate as to the medico-sanitary points arising out of it. In 1884, pon the re-introduction of the Bill, a similar interview was sought nd accorded by Lord Advocate Balfour. On that occasion, an exaustive memorandum was prepared on the medical aspects of the neasure, and was subsequently printed in the JOURNAL for general nformation. Copies of this memorandum were, at the request of he Lord Advocate, forwarded to each of the twenty-three members f the Select Committee of the House of Commons to which the Bill vas referred. This Select Committee, which did not include a single nedical member, declined, however, to receive evidence, and held heir sittings in private. Although the Lord Advocate promised that ny written statement should be carefully considered, the printed roceedings of the Select Committee showed that all the clauses dealng with the mitigation and prevention of disease were, with many nore, disposed of at a single sitting of the Committee, without, apparently, any discussion whatever on the important points covered by he memorandum of the Parliamentary Bills Committee. The Bill, as mended by the Select Committee, was attempted to be pushed through its remaining stages at the end of the Session, but was ultimately withdrawn by the Lord Advocate on July 31st, 1884.

In the session of 1885, the Bill was, for a third time, introduced by the Government, on this occasion in the House of Lords. The Parliamentary Bills Committee applied formally to the Minister introducing the Bill, for permission to give evidence concerning it before the Select Committee to which it was to be referred. But, beyond a promise of consideration, the Association heard nothing more on the subject, though copies of the Memorandum of 1874 were sent to each peer who sat on the Select Committee. Evidence was, indeed, taken by the Lords' Committee, but it was mainly given by those who were interested in the promotion of the measure. The only medical witness called was Dr. Littlejohn, the health-officer of Edinburgh, who has strong views on the subject of the notification of infectious disease; and no opportunity was afforded of producing rebutting evidence in reply to his statements.

As already reported in our columns, the Parliamentary Committee took up again the consideration of the Bill as soon as its renewed introduction was announced by Lord Granville; and a new memorandum on the subject was prepared by the chairman, and circulated amongst those chiefly interested, including Lord Elgin and the Secretary of State for Scotland. The latter has been asked to receive a deputation, in order that the medical objections to the Bill may be explained to him; but Mr. Trevelyan has excused himself from receiving such a deputation at the present time, although he has promised that, when the Bill comes to the House of Commons, he will be ready to do so. There seems reason to fear that, by the time that the measure has descended to the Lower House, some important changes may have taken place; and it would not, therefore, be safe to rely too much upon Mr. Trevelyan's promise. In these circumstances, it behoves all medical men, and especially Scotch practitioners, to use such influence as they possess in impregnating the minds of the peers with the importance of the medical considerations arising out of the Bill, which have heretofore been almost wholly ignored.

ON Thursday, April 1st, at 8 p.m., a lecture will be delivered at the Parkes Museum, by Dr. Louis Parkes, on London vestries, and the administration of Sanitary law in the Hospitals.

THE St. Mary's Hospital Festival Dinner is to be held at the Albion Tavern, Aldersgate Street, E.C., on Friday, April 2nd, at six o'clock for half-past, in aid of the funds of the institution, when the chair will be taken by the Right Hon. the Lord Mayor.

A SPECIAL meeting of the Royal Medical and Chirurgical Society will be held on Tuesday, March 30th, at 8.30 P.M., when the subject of Suprapubic Lithotomy will be discussed. Papers will be read by Mr. Barwell, Mr. Walter Rivington, and Mr. W. H. A. Jacobson; and an interesting debate may be anticipated.

AT the meeting of the Committee on the Shop Hours Regulation Bill on Wednesday, under the presidency of Sir John Lubbock, Dr. Butler (medical officer to the Milliners' and Dressmakers' Association), and Dr. Adams (medical officer to the Early Closing Association), gave evidence as to the effect the long hours had on the physical condition of the shop-assistants.

THE Annual Report of the South Devon and East Cornwall Hospital has recently been published. The first twelve months' work in the new hospital shows a considerable increase in the number of patients—987 in-patients, and 2,013 out-patients, having been treated during the year. The number of important operations performed was 215, including 3 gastrostomies, 4 ovariotomies, and 8 perineal sections (Wheelhouse).

MARLBOROUGH COLLEGE.

THE *Marlburian* remarks that the approaching departure of Dr. Fergus, after his long and honourable connection, as medical officer, with the College, occasions a lessened sense of loss in the minds of the college authorities, from the circumstance that Dr. Edward Penny has been chosen to succeed him. The new medical officer seems to possess excellent qualifications for the post; and the experience he has had at Guy's Hospital, at the London Fever Hospital, the Seamen's Hospital, Greenwich, and at the Pinxton Colliery Company, at all of which places he has held responsible appointments, is just of that varied nature that it will stand him in good stead in his new official duties at Marlborough.

HEALTH-LECTURES.

THE success attending the course of health lectures, recently delivered at Bayswater by Dr. Schofield, has encouraged the National Health Society to commence a similar course at the Town Hall, Kensington, to be inaugurated by Her Royal Highness Princess Christian on Wednesday, March 31st. The subjects of general health, causes of disease, dress, food, and home-nursing, will be treated of successively. The health lectures will be followed by ambulance-classes, at which practical instructions will be given in nursing, first aid in accidents, bandaging, and stretcher-drill.

THE PREVENTION OF HYDROPHOBIA.

THERE is reason to believe that the Government has under consideration the propriety of appointing a Commission to examine and report on the results obtained by M. Pasteur in his preventive inoculation of hydrophobia, with a view to decide on the question which has been raised of the establishment of a similar institution in this country for the purpose of carrying out the treatment. Sir James Paget, Professor Burdon Sanderson, and Dr. Lauder Brunton, are named as probable members of the Commission, the details of which have not yet been officially determined.

HYDROPHOBIA.

A RETURN issued this week shows the number of cases of rabies in dogs and hydrophobia in man that have been reported within the metropolitan district from January, 1885, to the end of February of the present year. In January, 1885, eight cases of rabies were reported, and one death from hydrophobia; both these diseases becoming more and more frequent till, in November last, the number rose to 58 cases of rabies, and 5 deaths. On December 10th, the order for the muzzling of dogs was put in force, and in that month there were 46 cases of rabies, and 1 death. During the whole of 1885, there were 373 cases of rabies, and 26 deaths. In January last, the cases of rabies fell to 27, and there was only 1 death; in February, there were 14 cases, and no deaths.

M. PASTEUR.

OUR Paris correspondent writes: The *Journal d'Alsace* publishes an article, signed by its director, Gustave Fischbac, in favour of a subscription for the Pasteur Institute. M. Pasteur was formerly Professor in the Strasbourg Faculty of Sciences; the boy Meister, an Alsatian peasant, was the first patient treated by M. Pasteur. In two days, the amount subscribed has reached 3,301 francs (£128). M. Pasteur has written a charming letter of acknowledgment to Herr Fischbach. The President of the Paris Academy of Medicine announced at the last meeting that the state of the finances had been inquired into, and it was proposed that the Academy contribute £400 to the Pasteur fund; the proposition was unanimously adopted. A telegram from Rome has arrived, announcing that the King has conferred the order of Saints Maurice and Lazare on M. Pasteur. The assembly of M. Pasteur's patients presents a motley aspect; a literary contemporary describes it as follows. Along with fifty French subjects, there is a troop of English children, five Italian peasants, shrouded in their woollen cloaks, and nineteen Russians from Smolensk, dressed in fur-skins. The Russians have all been badly bitten in the face by a mad wolf. For dog-bites, M. Pasteur inoculates once a day during treatment; but for wolf-bites, which are more serious, the inoculations are made twice a day. The Russian Minister of Public Instruction has asked M. Pasteur if he will receive in his laboratory Russian medical men, to study his method of inoculation for hydrophobia. M. Pasteur has expressed the satisfaction he should feel on welcoming Russian scientists to his laboratory, but at the same time believes that one international establishment suffices for France, Europe, and even North America. M. Pasteur proposes that the international institution should offer every facility for carrying on researches on inoculation of the virus of contagious diseases of both mankind and the lower animals, where scientists from all parts of France and other countries could pursue their researches. Prince Alexander of Oldenburg has created, at St. Petersburg, an establishment on a small scale for applying Pasteur's method. Experiments are made on dogs and rabbits before operating on man. Prince Alexander defrays all the expenses of the establishment.

MICRO-ORGANISMS AND MAGNETISM.

M. DUBOIS has sought to ascertain the influence of magnetism on the development of microbes. After placing two powerful magnets in a certain position, he arranged a set of capsules containing artificial cultivations in a circle between the magnets. After careful observation, he was able to prove that microbes, under these circumstances, developed from north-east to south-west. The micro-organisms developed in a capsule situated in the centre exactly between the two magnets, remained rounded in the direction of the axis of the resultant of the two forces, represented by two lines crossing each other in the direction of north-east to south-west, and south-west to north-east.

OPENING OF THE NEW BUILDING FOR NURSES AT THE LONDON HOSPITAL.

IT may interest some of our readers to know that the increased accommodation recently provided for nurses at the London Hospital, Whitechapel Road, now enables that institution to supply thoroughly trained nurses to private families. Nurses trained in the busy wards of this large hospital must have exceptional opportunities for gaining experience of a nature likely to render them specially efficient. It is satisfactory to learn that the constantly increasing demands of the public for skilled home-nursing should be met by fresh efforts to maintain an adequate supply.

A CURIOUS TRIAL.

A SINGULAR case has just been decided by the Paris Civil Tribunal. Dr. Peyrol, head surgeon at the Hôtel-Dieu, claimed 800 francs for extracting a bullet from Mme. de Beauregard, who had accidentally shot herself. The claim was disputed on the ground that the plaintiff stated erroneously that the bullet was lodged in the right thigh, besides which, she had been attended by two other medical men. The tribunal overruled the plea, believing that it mattered very little whether the bullet was on the right or the left side so long as the patient's sufferings had been relieved; and the medical man therefore won his suit.

VISCERAL NERVES.

THE question of the ultimate anatomy and the physiology of the nerves supplying the viscera, has always been one of the most obscure problems. Their central origin, and their course through the various peripheral ganglia and plexuses, have not been by any means clearly defined. Dr. Gaskell has, therefore, done good service to science in directing his attention to the investigation of this subject. The whole tenor of his latest publication (*Journal of Physiology*) is towards the generalisation of the theory of action of nerves on the vascular muscles (vessels, heart), on the hollow viscera (bronchi, alimentary tract), and on the iris. The heart is taken as the standard since it is the classical object of study with regard to visceral innervation. Of late years, the opinion has been becoming more wide-spread that the heart of vertebrate animals is innervated by two sets of nerves, one of which, represented in the vagus, is inhibitory; the other, represented in the sympathetic, is an accelerator and augmentor of force. Further, it is thought that this action is a direct one on the muscular substance, no intracardiac ganglia intervening. Dr. Gaskell has extended these results to the consideration of other visceral innervation, of the parts, indeed, mentioned above. Thus, in the vessels, the vaso-constrictors would correspond to the motor nerves, the vaso-dilators to the inhibitory nerves. Dr. Gaskell would go further than this general theory of action, and say that the moto

es might be called "catabolic," destructive of tissue, and the itory nerve "anabolic," constructive of tissue; these points, ver, cannot be settled till the chemical and physical changes, ring during inhibition and acceleration, have been investigated. new facts regarding the distribution of visceral nerves, contained r. Gaskell's paper, are a valuable contribution to the anatomy of ystem. For the details, the original must be consulted. It is ient to say that these nerves, on leaving the central nervous sys- in the white rami communicantes, are characterised by being com- d of medullated fibres of the smallest calibre, and that they lose medulla in the ganglia, either of the sympathetic or of the plexuses. Further, the cervical sympathetic, and the nervi ntes, corresponding, as they do, morphologically, to the abdominal achnic nerves, would, according to Dr. Gaskell, be more correctly ed cervical and pelvic splanchnic nerves.

DALTONISM AMONGST FRENCH RAILWAY OFFICIALS.

Worms, medical officer to the Chemin de Fer du Nord, has tly published a report, and presented it to the Academy of Medi- . Among 1,173 railway officials whom he examined, in 224 the al power for colours was imperfect, independent of any other ; 118 hesitated in distinguishing the different colours, 41 dis- uished red easily, but confounded green, blue, and grey; 4 were ectly colour-blind; 63 confounded red, green, and grey. Those presented an alteration of chromatic power sufficient to prevent r distinction of signals, were not entrusted with the care of a n. The examination of railway servants before they are employed the company, excludes men with Daltonism from being employed nning the trains. Dr. Worms states that the proportion of colour- d subjects was 5 per cent. Many others, however, did not distin- h colours clearly. These officials had been submitted to an ex- nation previous to that made by Dr. Worms, who suggests that ur-exercises should be included in public instruction.

SHOP HOURS REGULATION BILL.

Select Committee of the House of Commons appointed to inquire Sir John Lubbock's Shop Hours Regulation Bill is proceeding h the hearing of evidence. It is stated that the following clauses e been accepted by the promoters, and are to be added to the : "*a.* Every town council, local board, vestry, or other rural or an authority, shall, upon receiving a requisition desiring the local ption of compulsory early closing, and signed by two-thirds of the pkeepers who are employers of one or more assistants within the rict, make by-laws compelling all shops, excepting chemists' shops, ee-houses, confectioners, eating-houses, fish and oyster shops, fruit l vegetable shops, restaurants, tobacconists' shops, booksellers' and sagents' shops, to close at the hour specified in the requisition, vided that no shop (except those exempted above) shall be open r 8 of the clock on five days of the week and 10 of the clock on sixth day of the week, or on any day preceding a public holiday; In the excepted shops above-mentioned, and in bookstalls and lic-houses, no young person shall be employed for a longer period n 12 hours a day."

THE MANCHESTER AND SALFORD SANITARY ASSOCIATION.

E just issued annual report of this energetic and flourishing Asso- tion shows that it continued during 1885 the work which it has now more than thirty years performed for Manchester and its vicinity. e Committee observe that "they have endeavoured to be vigilant preventing whatever might retard, and in promoting whatever ght assist, the progress of sanitary science;" and, indeed, it is not y to remember any of the socio-sanitary subjects that have lately ne up for discussion on which the Association has not had some- ng pertinent and weighty to say. Like most other societies of the nd, however, its financial exhibit is not so flourishing as could be ired. Considering the vast amount of benefit which the locality derives from its labours, and from those of its affiliated Committees, it ought not to be a great thing to ask the wealthy Lancashire manufacturers to keep it out of debt. This year's series of lectures is being devoted to the subject of "Foods and Drinks," which, especially in view of the eminence of the lecturers, ought surely to be interesting to everybody.

PEN, PENCIL, AND SCALPEL.

Attention has often been directed to the artistic tastes and archæological research of medical men, and to the peculiar faculty of observation and habit of exactness which makes the medical collector distinguished among his fellows, and converts the mere amateur into the critic and the historian of the arts which he loves. Mr. William Anderson, the accomplished surgeon and anatomist, so well known, esteemed, and beloved, at St. Thomas's Hospital, and among his professional colleagues, has long been known to the select few, and in the inner circles of the art-world, as perhaps the best European authority on many of the departments of the historic arts of Japan. Mr. Anderson availed himself of a short professional residence in Japan, soon after the time when that interesting country had come out of its feudal isolation, and had begun to assimilate and develop the science and the literature of Europe, to acquaint himself with the Japanese language, and to relieve some of the tedium of Asiatic exile, by an accurate and intelligent study of the pictorial art of Japan. From the fifth century down to the middle of the nineteenth, the pictorial and ceramic arts of Japan went through many remarkable phases, commencing with Chinese influence, but impressed with the peculiar character which belongs to a nation essentially naturalistic in sentiment, but deeply touched by Buddhist conventions and Asiatic mysticism. The *kakemonos*, or hanging pictures, pottery, sculpture, lacquer, and the embroideries of Japan, which, up to the period when European art and the spirit of mercantilism began to penetrate the "country of the rising sun," and to debase its artistic productions, were of marvellous beauty, rare originality, and produced in the true spirit of art, which was its own reward, and much despised merely venal impulses. Mr. Anderson not only made one of the most extensive and representative collections yet brought together, or which is, perhaps, ever likely to be made by a European, but he has studied them with good effect; and, in the first part of the exquisitely illustrated book on *The Pictorial Arts of Japan*, now before us, published by Messrs. Sampson Low & Co., London, we recognise a work of exceptional beauty, fascinating interest, and of rare erudition. The text is written with a modesty and exactness characteristic of the author; and this book, which has long been looked forward to by the many devotees of Japanese art in Europe, amply fulfils the high expectations which it has raised. It adds another to the many instances in which medical men, whilst following the most difficult and absorbing departments of their art, find time to contribute works of standard value to sister arts and other departments of knowledge.

THE PHANTOM LOCAL GOVERNMENT BILL.

If the House of Commons choose to amuse itself with academic discussion on the taxation of ground-rents, and the inequalities of rating on real and personal property, we know of no reason why its pleasure should not be gratified. Former Parliaments have, on quite a number of occasions, gone through the same farce, imagining themselves to be enacting a tragedy. But the Executive Governments of the day have, with one consent, declined to take any notice of the resolutions—no matter how strongly worded—which the House has passed, because, forsooth, they were not in a position just then to introduce their Local Government Bill, which was to settle these and many other difficulties once and for all. It is really pitiable to see a Minister of the strong common sense of Mr. Chamberlain, setting up the dismal official wail, that until he can get a chance of introducing the comprehensive measure that has been so long incubating, he cannot do anything, or suggest anything, to remedy anomalies that have

been pointed out in the House any time during the last fifteen years. A substantial part of the "authorised programme" of the last autumn was the reform of the local government, "this thoroughly unexciting but as thoroughly vital subject," which, *teste* Mr. Gladstone, "lies at the root of all our liberties and of all our aptitudes." Yet, when the House of Commons has unmistakably demanded the reform of at least the financial incidence of local government, the responsible Minister, for the ninth time, says that, while he has every sympathy with every body, he is not in a position to do anything, because he cannot at that moment expound his plans for doing everything. The country may fairly ask that the veil of secresy should now be torn from the phantom or will-o'-the-wisp Local Government Bill that has been so long talked about, but which no one has ever seen. Whenever it is introduced, it is not likely to be passed in a single sitting; and it would be infinitely better, on every ground of policy—and even of expediency—that it should be printed and published at once, no matter how slender its present chance of passing may appear to be.

SQUILL OR DIGITALIS.

An investigation of much scientific importance has been held by the coroner in Nottingham, in reference to the death of two children in one family after taking a cough-mixture, which also made two others very ill. On investigation of the circumstances, it appeared that the prescription for the cough-mixture included the four following ingredients: syrup of violets, syrup of squill, ipecacuanha wine, and oil of sweet almonds. The symptoms in all the children were those of intermittent pulse, and failure of the heart's action. They were, in fact, the symptoms most commonly identified with the poisonous action of digitalis. The coroner, in addressing the jury, spoke as follows.

"In looking at the prescription, it seemed to the medical men that there were only one or two ingredients which were likely to produce that action. One was a mixture of digitalis or common foxglove, and the other the syrup of squill—a kind of onion or sea-onion. They found that the outside of that onion, just as the outside of the common grown one, was very much stronger than the inside. There was also a kind which had a red appearance, which was stronger than the white, so that there was room for a great deal of difference in the strength of the syrup of squill in its preparation by the wholesale druggist who supplied it to such men as Mr. Wakefield. Mr. Wakefield got it in the form of vinegar from the wholesale druggist, and he added a certain proportion of syrup or sugar to it. As he had said before, in looking at the matter as carefully as they could, the medical men came to the opinion that there were only two things amongst the various preparations they were aware of, that would be likely to produce the action of the heart seen in the cases of those children. These were a preparation of squill, and one of digitalis. The first was much the cheapest, so that a wholesale druggist would have little motive in supplying digitalis in its stead. He was not aware that there was any particular standard for the preparation of squill sold to the retail druggist. He had to depend upon the care with which it was prepared by the wholesale druggist; but they would find that there had been an extra strength of squill in the cough-mixture given in that case. He (the coroner) had been close upon fifty years attending to matters of that kind, and he had always been taught to consider that a quantity of syrup of squill might be given to children without the slightest danger; but it would turn out, from the examination that had been made, that there had been a poisonous quality of it in that case."

Dr. E. B. Truman, the analyst for the borough, gave the result of a number of experiments he had made by injecting extracts of the mixture of syrup of squill under the skin of frogs, and he said he found that Mr. Wakefield's prescriptions contained very strong heart-poison, agreeing, in its essential characteristics, with digitalis. Dr. Whitelegge, the medical officer of health, agreed, and he was satisfied that the cause of death was some poison similar in action to digitalis. The jury returned a verdict of death by misadventure, and the coroner told Mr. Wakefield that everybody was satisfied that he was perfectly innocent in having prepared the mixture. The observations of Dr. Whitelegge and Truman, at the inquest, are perfectly correct. The poisons l likely to produce these symptoms are digitalis, squill, and convall majalis, or lily of the valley. It is scarcely likely that digitalis w become mixed with the squill; and the only possibilities are ei that the vinegar of squill was stronger than the standard strengt the *British Pharmacopœia*, or that, by some mischance, some of bulbs of the lily of the valley might have become accidentally m with the bulbs of the squill from which the vinegar had been pared. The difference in size between the bulbs of convallaria a squill is very great, but after they were sliced and dried, it is possible that they might be confounded. Squill has an action al identical with that of digitalis, and there is still the question whe the squill used was divested of its outside covering, as prescribe the *British Pharmacopœia*.

SMELLS IN THE HOUSE OF COMMONS.

If the matter were not so serious, there would be something al humorous in the pathetic appeal made by Dr. Farquharson, the day, to the representative of the Office of Works, as to the unplea smells that have again been making themselves disagreeably pe nent in the House of Commons. Mr. Fowler's own olfactory ne had been affronted by the smells, and he had spoken about the the Speaker, who could only suggest that universal panacea fo Parliamentary ills—the appointment of another Select Comm Such a committee did, indeed, gravely discuss the question last and took the inevitable batch of evidence from experts and ot But nothing whatever was done, and now the same nuisance cro again. It may suit the views of those who like to find a fan rather than a common-sense, reason for everything, to allege tha smells arise from the burning of distant rubbish, or from the Less analytical noses ascribe the effluvia to a not very recondite o —bad drains; and there is strong reason for believing that the right. The whole of the drainage in that particular corner of W minster, which includes the Houses of Parliament and the Government offices, is thoroughly bad. There is a quite insuffi fall, the drainage-pipes are imperfect, and the leakage of sewage the soil is an admitted fact. Members of the legislature cann accused of neglect of their own comfort; and we are surprised, t fore, that they take so meekly the nuisance of bad smells to w they are exposed. It surely does not need yet another Select mittee to prove that the effluvia exist, and need to be suppre The resources of the Office of Works ought to be equal to the covery of the source of the mischief, and to its effectual stoppag the future. Nor are honourable members likely to quarrel ove expense of freeing the Houses of Parliament from the unsoli presence of sewer-gas.

THE SANITARY STATE OF THE NEW GOVERNMENT OFFICES.

If, however, the authorities should adhere to the "constitutio method of appointing a Select Committee to investigate facts w are patent to every one's nose, we would suggest that, as there ap to be a great thirst for inquiry amongst the new members, the tions of the Select Committee should be extended so as to includ drainage of the whole of the Government buildings which are conn with the sewer, into which the parliamentary drains empty t selves. They might then, perhaps, learn some instructive facts reference to the state of affairs even now, in the new Govern offices, which were built at an enormous expense from the plans o of the first architects of the day, and designed, amongst other for the offices of the Local Government Board, the chief public h authority in the Kingdom. This Board had for years been prea certain sanitary principles, and had spent a considerable amou public money in propagating doctrines that are persistently and rantly violated in its own offices. The building had not long occupied before complaints began to be made as to its health

ch culminated in a roar so prolonged, that official inquiry had to nade into the matter. It was found that the drainage was radi- y wrong; pools of sewage were discovered in the basement; there no effective outflow into the main sewers; in fact, it is the simple ch to say that the last things the authorities had thought about e the drains. And this in the *arcanum* of sanitary virtue! empts have from time to time been made to make the drainage sonably efficient; but to this day floorings have, every now and n, to be pulled up, and futile efforts are made to tinker a system t needs to be begun absolutely *de novo*. The water-closets in the lding still reek abominably, and, as a cynical member of the staff remarked, "sewer-air is laid down like the gas." Can we wonder nembers of local authorities, beguiled to Whitehall to be wheedled o swallowing in their entirety the clauses of the model by-laws that vide for two openings to the drains and other elaborate precautions, uld wonder whether the Local Government Board take any account the old maxim to practice what they preach? In view of the minent erection of another colossal structure for the new offices of Admiralty and War Office, we really think the Select Committee ght, when appointed, usefully make an inspection of the temple of l Tape at Whitehall.

UNHEALTHY CURIOSITY.

E strictures recently passed by the presiding magistrate at the stminster Police Court, upon the crowding of the court-house by ng women and girls, who were only present from motives of idle iosity, are significant, and might be made instructive. This ystery case," which possesses, apparently, an invincible attrac- n for a portion of the female population, from the nature of some ts of the evidence, furnishes by no means an unique example the eagerness with which prurient subjects are sought after by nds either already depraved or desirous of being perverted. The gistrate's menace of abstaining from any attenuation of the evidence be given, in view of these ladies' finer feelings, is one which might ll cause a smile at his ingenuousness in crediting them with any sceptibilities of the kind, or in supposing that his threat was likely have anything in the nature of a deterrent effect. The conduct a certain judge, in a French court of justice, under similar circum- nces, may be appropriately told on the present occasion, and may en serve to point a moral, as well as to adorn a tale. It is related at, on the hearing of a case involving some details of a decidedly sty character, he appealed to all *honest* women to leave the court. ter waiting patiently some few minutes, and seeing that not a lady d stirred, he called to the usher, "Now that all the honest women ve left, turn out the others." A sarcasm of this degree of severity uld not be amiss from time to time in our own courts of justice, and ght effect what milder and more classic remonstrances fail to achieve. te misguided proclivities which we deplore are, unfortunately, not nfined to any particular class of society; and the "ladies" at the estminster Police Court have their representatives in many of the gher courts, when some case is being heard which involves evidence a particularly delicate, or rather indelicate, nature. These latter, it true, are ofttimes accommodated with a seat on the bench or other nvenient point of vantage, so that not a word nor a gesture ay escape them; but the Westminster batch might "claim ndred there, and have their claims allowed." It is a relic of the ys, not so very long ago, when the *beaux* and *belles* of the metro- lis were wont to derive amusement from seeing the women whipped Bridewell. That little distraction, with many others of a similar ture, has been arbitrarily put a stop to; and their successors are mpelled by force of circumstances to fall back upon the comparatively odyne proceedings in the law-courts, where, however, with or thout the approbation of the presiding judge or magistrates, as the se may be, witnesses involuntarily modulate to some slight extent eir higher notes, in deference to the assumed modesty of the sex of hich the audience is to a large extent composed. *Hinc illæ lacrymæ.* These tastes are informally recognised by even respectable journals. When one or other of them, under some fallacious pretext or another, ventures to deal with the scandalous chronicles of the law-courts in style more audaciously florid or more candidly detailed than its contemporaries, its sale promptly beats any on record. From a social point of view, this open, unblushing craving for prurient details is much to be regretted. The absence of modesty implied by this public acknowledgment of debased tastes becomes yearly more striking.

THE OXFORD MEDICAL SCHOOL.

THE new statute, laying down the regulations by which the curriculum of future students of medicine in Oxford will be governed, was finally approved by Convocation on March 16th. The Oxford Medical School may, therefore, now be said to be reconstituted on a modern footing; and there is every reason to anticipate that many students will avail themselves of the advantages which a residence in Oxford affords. Time must be allowed to test the working of the new system; but the regulations still seem capable of improvement, for, even under the new arrangements, the number of terms which the average student will find it necessary to spend in Oxford is excessive. The first year after matriculation has to be spent, some would say wasted, in preparation for the examination in classics and mathematics, called "moderations;" the second year is spent in preparing for the "preliminary examination;" and then two, if not three, years more must be given to anatomy, physiology, and organic chemistry. It thus appears that, even under these new and improved regulations, a student of medicine could not begin the study of medicine until the beginning of his third year at Oxford; and could not, therefore, commence hospital-work until, at the very least, the beginning of the fifth year after matriculation. A simple statement of these facts leaves no doubt that the task of the medical reformer in Oxford is by no means concluded. It is stated that the "Moderations Committee" have the matter under consideration; and there is some probability that, under a new scheme which this committee is expected to propose, students of natural science in general will have some of the obstacles which now beset their paths removed.

STROPHANTHIN.

WHEN Dr. Fraser, of Edinburgh, read his able paper at the annual meeting of the British Medical Association at Cardiff, last summer, on the subject of the physiological effects and therapeutical uses of strophanthin, a demand naturally arose for the drug. It had, however, only been with the greatest difficulty that Dr. Fraser had been enabled to secure wherewithal to continue his experiments, and none was to be found in the market. With characteristic enterprise, a London firm of wholesale druggists immediately took steps to secure a supply of the plant from which this active principle is obtained, and it is now stated that a consignment will very shortly be received. Practitioners desirous of comparing results with Dr. Fraser, will thus be enabled to do so, and to contribute the results of their observations to the profession at large.

SOURCE OF STROPHANTHUS SEEDS.

SOME uncertainty still appears to exist as to the particular species of *Strophanthus*, from which the seeds used by Professor Fraser, in his recent interesting experiments, were derived. Professor Fraser had at first considered the Kombé arrow-poison to be prepared from *S. Hispidus;* but, in a note appended to his paper in the *Journal of Anatomy and Physiology*, he mentions that Professor Oliver had been led, by a further examination of the botanical characters of the plant, to doubt its identity with *S. Hispidus*, and, accordingly, to describe it under the name of *S. Kombé*. Since then, however, some *Strophanthus* seeds, supplied to Professor Fraser from the same locality, have been sown in the Royal Botanical Gardens, Edinburgh, and the plants grown from them are found to differ from the type specimens of both *S. Kombé* and *S. Hispidus*, indicating that probably the seeds

were derived from more than one species. Still more recently, among some specimens of *Strophanthus* pods and seeds presented to the Museum of the Pharmaceutical Society, there is one which has been identified by Mr. E. M. Holmes, the curator, as an undoubted specimen of the pods of *S. Hispidus*, that came from West Africa, in the vicinity of the Niger; whilst there are two other forms of pods and seeds, distinct from those of *S. Hispidus*, that came from the district of East Africa, lying between Zanzibar and Lake Nyassa. Whether either of the latter may be derived from the plant described as *S. Kombé*, it is impossible to say, until complete specimens of the plant have been obtained, but it would be interesting to ascertain whether the seeds of the *S. Hispidus*, and the so-called *S. Kombé*, contain the same active principle, since Sierra Leone would be much more convenient than the east coast of Africa as a commercial source of the seeds.

GAS-FORMING BACTERIA OF THE DIGESTIVE TRACT.

THE formation of gas in the stomach, such as occurs, for example, a short time after food, causing swelling of the organ, has never been completely explained. Though usually ascribed to fermentation, the exact nature of the process has not been discovered. Professor Miller, in a paper in the *Deutsche Medizinische Wochenschrift*, has investigated this subject. He ascribes the formation of gas in the stomach and intestines to the action of certain forms of bacteria on the carbohydrates of the food. These organisms have the common property of withstanding for six to eight hours the acidity of the dog's stomach, which is 0.1 per cent. greater than that of man. If a culture of the organisms be mixed with the food of the animals, diarrhœa ensues in twenty-four to thirty-six hours; and the same result Dr. Miller experienced when he took some of the culture after a meal of potatoes and bread. The symptoms were relieved by a large dose of hydrochloric acid, but he found the bacteria in the fæces for six days afterwards. In the other experiments which were performed, the organisms were added to a digestive mixture containing the food experimented upon, and a large amount of saliva. The amount of gas formed was then roughly estimated, by comparing the level of the fluid before and after digestion. It was found that, of ordinary food, bread and potatoes gave rise to the greatest quantity of gas; while meat, fish, and some vegetables (for example, boiled endive) gave rise to exceedingly little. Connecting these two series of facts together, Professor Miller states that, in some conditions of the alimentary tract, the organisms will give rise to flatulence, in others to diarrhœa and colic, in others, again, to both sets of symptoms combined. As an indication for the treatment of such conditions, it is evident that the antiseptic drug used must be given before meals, from which the greater part of the carbo-hydrates must be removed.

MALIGNANT TUMOURS OF THE OVARY.

DR. ERNEST KOHN has recently written a memoir on this important subject, in the *Zeitschrift für Gebürtshülfe und Gynäkologie*. After an exhaustive review of the clinical and pathological labours of others, he relates the results of his own experience and statistical research. These two expressions, by the way, imply things of very different value, since it is one thing to trust a man's experience, and another to trust his statistics. Dr. Kohn appears, however, to have taken unusual pains to ensure accuracy. Out of 100 operations for the removal of all kinds of malignant, or suspected malignant, ovarian tumours, 20 per cent. died from the operation, including 1 case of puerperal fever following abortion caused by the operation, and 15 per cent. died from recurrence of the tumour; 19 per cent. recovered. Out of 86 complete cases, 17.3 per cent. died from recurrence; 19.5 per cent. were well, without signs of recurrence, one year after operation. Bu these statistics are qualified, since no satisfactory after-history could be obtained in 38 cases. In the 62 remaining cases were included 11 exploratory incisions, which all recovered, as usual, from the tentative exploration. Dr. Kohn, on the strength of these statistics, considres that it is always the duty of the surgeon to remove a solid tumour the ovary as early as possible, before the disease has spread beyo its original limits, so as to save the patient from a miserable lingeri end, far worse than death from operation. When recurrence occu a few months of tolerable comfort are, at least, insured to the patie Dr. Kohn most rightly insists that not a day should be wasted "watching the progress of the case." For, should the diagnosis malignity be correct, a few days may suffice for the disease to adva beyond the pedicle, and render operation hopeless. Should the tum be really not malignant, but an instance of a semi-solid cystic growt it may rupture, and its solid contents, whether adenomatous or pa lomatous, will become clinically malignant, when diffused over the pe toneal cavity. Hence, as Dr. Bantock and others have shown, we m draw the corollary that an ovarian tumour, once diagnosed, cannot too early removed. The earlier the operation is undertaken, t easier it will be to perform. The general health of the patient w be better, the possibility of complications less, and the chance recovery greater.

THE ACTION OF SULPHURETTED HYDROGEN.

M. LABORDE has found that this compound acts specifically on t nervous system, especially the medulla, after passing into the circul tion. He has detected the characteristic spectroscopic band of su phuretted hydrogen in the blood of the carotid artery. A few minut after injection of this gas into the jugular vein, its action on the m dulla oblongata was made evident. Respiration was either imped or totally arrested. Hyperæmia of the medulla was detected b microscopic examination of the substance, near the nucleus of t ascending root of the vagus nerve. Inhalation of sulphuretted h drogen was followed by the same results, but not so quickly. Aft artificial respiration, the animal revives. This proves that su phuretted hydrogen determines death by its action on the pneum gastric nerve. This gas is much less soluble in blood than in wate and is rapidly altered or taken up by the tissues, so that it ceases t be excreted by the lungs within ten minutes after inhalation.

MORTALITY IN THE STATE OF NEW YORK.

THE total number of deaths during 1885, in the State of New Yor was 80,407, of which 30,027 (or 37.3 per cent.) were of children und five years of age. The ratio per 1,000 of deaths from all zymot diseases to the total mortality was 222.17, against 269.12 for ni months of 1884. This diminution was largely in typhoid fever an the diarrhœal diseases; the conjoined ratio per 1,000 from the diseases being 104.07, against 146.40 in 1884. As these are especiall controlled by public hygienic improvements, this indicates th efficiency of the sanitary work that has been done, and is emphasise by the ratio of diphtheria, which depends largely upon domiciliar conditions; namely, 56.06 per 1,000 total deaths in 1885, and 47.6 in 1884. These three typify the filth-diseases. There was no materi change in the other zymotic diseases. Estimating the present popu lation of the State at 5,400,000, an annual death-rate of 20 per 1,00 would give 108,000 total mortality. The reported mortality, wit about 3,000 death-reports received after the bulletin is issued, and th mortality of Buffalo, account for about 88,000 deaths. During th year, about 5,000 more deaths were reported than in 1884, indicatin that more local boards are organised, and that the returns are mor complete.

THE DIGESTION OF FATS.

IT is a dietetic fact of great importance, that the assimilatio of suitable quantities of fat is often of extreme benefit to an en feebled and emaciated patient. From the comparative facility wit which fat undergoes metabolism in the body, a notable economy o energy results, and the process may thus be more thoroughly accom plished. But the good results thus hoped for are not unfrequentl rendered unattainable, on account of the nausea and gastric dis

rbance which follows the ingestion of fat or oil; and, even if these mptoms be absent or overcome, the diminished functional activity the alimentary tract may allow their passage practically unanged. One of the causes of the indigestibility of fats, especially the form of oil, is the fact that they are with difficulty rendered nenable to the action of the intestinal juices when given *en masse*. or fats and oils to be efficiently acted upon, they require to be urned into some kind of emulsion, the finer the better; and when ey form part of a meal, a process of this description takes place. any case, if the quantity of oil be in excess of the powers of the testinal juices to saponify or emulsify, absorption cannot, for obvious asons, take place. The best way to administer oils for medicinal purses, is either as an emulsion or in solution. The finest emulsion, howver, obtainable by ordinary means, under the microscope, shows oilobules many times larger than those of milk, and with a strong tenncy to coalesce. The form of oil most frequently given therapeutically probably cod-liver oil, and this has the additional disadvantage of ssessing a very unsavoury taste and smell, which render its ingurgiation a disagreeable task for adults, and a difficult one with children. uriously enough, it has recently been discovered by Kepler that is oil is capable of being taken into solution by an extract of malt hich, if good, will take up a very considerable proportion of the oil, ie smell and taste of which it very effectually disguises. Under the icroscope, no oil-globules are visible, and the field is perfectly clear; ie presence of the oil is, however, made evident by allowing a drop water to run under the slide, when the oil quits the solution in the rm of extremely minute globules, the diameter of which is about alf that of milk-globules. This then is an ideal form of administation of fat. Apart from whatever qualities the extract of malt may ave *per se*, the oil is taken in a form which offers every facility for ie further changes necessary for its absorption and assimilation. hy the extract of malt should possess this power, is not clearly nderstood. None of its constituents have that property when olated, and, moreover, every extract does not possess it to the same xtent. The amount of oil which will enter into solution is directly roportioned to the care taken in its manufacture, and in the integrity f its active constituents.

CAPSULAR ADVANCEMENT FOR CONVERGENT STRABISMUS.

L. DE WECKER has lately (*Bul. de la Soc. d'Ophthalmologie*, 1885) dvocated a method of treatment for concomitant convergent squint, hen exceeding 25°, which will, in many cases, supersede the necesty of operating on the non-squinting eye. There is often a difficulty persuading patients and friends to allow a non-squinting and nonmblyopic eye to be operated on. Moreover, in case of extreme conergence, even after both internal recti have been divided, some straismus not unfrequently remains; if the tendon of the squinting, and enerally amblyopic, eye be put still farther back, divergence is not nlikely to follow. To obviate these difficulties, de Wecker has dopted the plan of combining advancement of the external rectus ith tenotomy of the internal. He calls the operation capsular dvancement; but it will be seen that the tendon of the muscle is dvanced together with Tenon's capsule. The operation is easy of erformance, and cucaine produces sufficient anæsthesia. It is perormed as follows. A vertical incision, 3 or 4 millimètres long, is made n the outer side of the cornea over the insertion of the external ectus, when the retraction of the conjunctiva allows the tendinous bres to be seen through Tenon's capsule. A small opening is then ade in the capsule over each border of the tendon, and the capsule ell separated from the muscle. Ligatures are then passed through bridge of conjunctiva and subconjunctival tissue, a little above and elow the vertical meridian of the cornea, and the needles carrying he ligatures are passed in at the upper and lower openings in the capule respectively, and made to emerge, passing through tendon, capule, and conjunctiva. The internal rectus having then been divided n the ordinary manner, the ligatures are tied, thus drawing forward the tendon and capsule. The effect produced by the operation depends on the freedom with which the tissues lying over the muscle are separated from it, and upon the distance that the ligatures are carried back in perforating the tendon. There is, of course, nothing novel in the suggestion of increasing the effect of a tenotomy by advancing the insertion of the opponent muscle; the novelty consists in the mode of operating, and in the adoption of the proceeding as a substitute for tenotomy on the other eye. The old operation of detaching and advancing the tendon of the rectus, notwithstanding the various ingenious modifications which have been made in it, is always somewhat tedious, and is subject to the great disadvantage, that, if the new attachment be not maintained, the condition is rendered worse than before; whereas the present operation is exceedingly easy of performance, the risk of failure is very slight, and the condition cannot be rendered worse. There can be no doubt that the operation will prove to be one of great value; whether it will replace division of the internal rectus of the non-squinting eye, or will be reserved as a supplement to this, remains to be seen. Judging by de Wecker's remarks, the objections of the laity to the non-squinting eye being operated on would seem to be much greater in France than in this country.

VEGETARIANISM AND POETRY.

ALL his critics agree that Lord Tennyson's last volume is a marvellous example of poetic fertility and vigour, in a man who has passed the Psalmist's allotted span by four years. He has dedicated *Tiresias and other Poems* to Edward Fitzgerald, who translated the poem of the Persian astronomer-poet, Omar Khayyam, into English so superb, that many have taken leave to doubt whether it can be truly called a translation at all. Of the "Golden Eastern Lay" the Laureate writes,

> "Than which I know no version done
> In English more divinely well."

Fitzgerald was, it appears, in his later years at least, a strict vegetarian, and Tennyson was induced to follow his example, with but indifferent success:

> "Once for ten long weeks I tried
> 'Your table of Pythagoras,'
> And seem'd at first 'a thing enskied'
> (As Shakespeare has it) airy-light
> To float above the ways of men,
> Then fell from that half-spiritual height
> Chilled, till I tasted flesh again
> One night, when earth was winter black,
> And all the heavens flash'd in frost,
> And on me, half-asleep, came back
> That wholesome heat the blood had lost,
> And set me climbing icy capes
> And glaciers, over which there roll'd
> To meet me long-arm'd vines, with grapes
> Of Eschol hugeness."

In this dream the poet showed himself a true-born disciple of Omar Khayyam, who, according to Fitzgerald, held very strong anti-teetotal views, crying out in one stanza—

> "I wonder often what the vintner's buy,
> One half so precious as the stuff they sell!"

SUPERNUMERARY BREASTS AND NIPPLES.

IN the *Vratch*, No. 47, 1885, Dr. V. G. Favre describes two cases of polymastia, and a case of polythelia, which recently have come under his observation in the Zemsky Lying-in Hospital, in Kharkov. One of the patients, an otherwise normally developed, strongly built peasant, aged 30, had three accessory mammæ, two of which were situated symmetrically along the right and left anterior axillary lines, immediately above the normal glands; their respective dimensions being 11 by 8, and 5 by 5 centimètres. A third accessory gland, of the size of a walnut, was found at the bottom of the right axilla, nearer to the interior wall of the fossa. Only the largest gland had in its centre a slightly elevated pigmented patch, the remaining being entirely nippleless. On pressure, all three freely yielded milk,

which proved, microscopically and chemically, identical with the secretion of the patient's normal glands. In another patient, aged 21, only one accessory mamma, of the size of a walnut, was present; it was situated in the left axilla, nearer to the anterior axillary line, had no nipple, and secreted normal milk. In a third patient, aged 32, the left mamma had an accessory nipple placed below the normal one, and separated from it by a furrow, about 5 centimètres broad. It was comparatively smaller, but milk was flowing from it in abundance. According to Dr. Favr, his cases are the first of this kind published in Russia. A series of similar cases is mentioned in Dr. R. Neale's *Medical Digest*, Sect. 15-98. A valuable review on the subject, by Mr. Alban Doran, may be found in the *London Medical Record*, August, 1885, page 319.

THALLIN.

Dr. Janssen, in an article in the *Weekblad van het Nederlandsch Tijdschrift voor Geneeskunde*, mentions that he has had a favourable opportunity, in the military hospital at Helder, for testing the value of thallin. He used exclusively sulphate of thallin, dissolved in alcohol and water. This solution possesses an aromatic taste and smell, and is perfectly harmless, both when inhaled and when taken internally. It has a strong antibacteric action. The average dose given was one gramme. Dr. Janssen observed seventeen cases of malarial fever; in sixteen the thallin was of less use than quinine, since it produced no permanent effect on the disease, only serving to prevent or shorten attacks; but, when its use was discontinued, the fever returned. The indications for the use of thallin Dr. Janssen does not consider to be numerous. In regard to antipyretic treatment, thallin should be preferred in those cases only where the temperature attains such a height as to endanger life; and, even then, he is of opinion that cold baths are better. If, however, circumstances exclude the use of cold baths, thallin is of great service, acting quickly and producing no dangerous symptoms. There is no injurious effect on the kidneys. Thallin is preferable to kairin, which produces numerous complications and unpleasant results, yet gives an extremely short period of apyrexia. It is also preferable to antipyrin, which must be used in large quantities, and, when used as an injection, is apt to produce vomiting. Dr. Janssen states that he has seen a scarlatinal patient, after an antipyrin injection, seized with violent collapse; and that another patient, who had taken 5 grammes of antipyrin, exhibited symptoms of cardiac adynamia. Antipyrin is, however, superior to thallin in the duration of the apyrexia produced. Dr. Janssen has found thallin of great service in phthisis, as very small doses control the fever.

PERSIAN ULCERS.

In the *Vratch*, No. 49, 1885, Dr. A. Pavlotzscy, surgeon to the first Caucasian Shooters' Battalion, draws attention to an obscure ulcerative affection which came under his observation. In all, he happened to see twenty-six cases of the kind (twenty-three amongst Russian soldiers, and three in Persians); he knew, besides of several cases in Russian surgeons, *feldshers* (assistant-surgeons), and policemen, the disease seemingly being contagious. It begins with a papule (no part of the body being exempt), which gradually increases, suppurates, and then sloughs away, leaving a typical chancre-like ulcer with profuse purulent discharge. Its size varies from a sixpenny-piece to a hand, the number of the ulcers in an individual sometimes reaching six. The surrounding tissues are almost invariably infiltrated, but no glandular enlargement is present. According to Persian statements, the ulcers occur in their country yearly in autumn time, and usually heal spontaneously with the advent of winter, leaving either pits or large scars. Treatment by a 5 per cent. carbolic solution, nitrate of silver, corrosive sublimate (2 in 1,000), and iodoform, proved a failure. The perusal of Dr. Goldfeld's paper (see the *London Medical Record*, p. 148, 1885) suggested to Dr. Pavlotzscy a trial of powdering the ulcers with burnt alum. The results were most satisfactory; the ulcers were rapidly covered with a thick, firm, dry crust, which fell off in two or three weeks, leaving either red spots, or a surface covered with small healthy granulations. In nine cases out of twenty-six, complete recovery ensued, the remaining being on a fair way to healing.

ARCHIVES DE BIOLOGIE SLAVES.

The first number of *Archives de Biologie Slaves*, announced in our "Paris letter" of January 30th, has appeared, and realises the expectations it raised. It is published under the editorship of Dr. Riche and M. Mendelssohn, and contains two hundred articles of practical and scientific interest. If the future numbers of this publication equal the first, regret must be felt that Sclavonic science has been so long left unpublished in a language read by most all nations. Among the original articles are one by Professor Navalichin, on Nerve endings in the Pepsine-Glands of the Stomach; and another by Professor R. Kovalevsky, on the Influence of the Nervous System on the Dilatation of the Pupil. In the practical section, Professor Botkin contributes a paper on Pernicious Anæmia. This author admits that the presence of intestinal parasites, such as the *Bothriocephalus latus* and *Tænia solium*, may cause a serious condition of anæmia. Another factor in the etiology of anæmia Professor Botkin believes to be lesion of the nerve-centres. Professor Kurloff, in his article on the Feeding of Phthisical Patients, publishes a considerable number of clinical notes, and decides in favour of Debove's system of forced alimentation.

SCOTLAND.

PRESENTATION AT COURT.

Among the presentations at Court to the Prince of Wales on Monday March 15th, was that of Dr. D. Argyll Robertson, Edinburgh, who was presented by Sir William Bowman; the occasion of it being his appointment as Surgeon-Oculist to the Queen in Scotland.

LORD RECTORSHIP OF THE UNIVERSITY OF EDINBURGH.

The various organisations of students in the University have on this occasion taken time by the forelock as to the election for Lord Rector next November. The Conservative Association is again to run Lord Iddesleigh; the Liberal Association is to run Sir Lyon Playfair while the Independents are to run Mr. Freeman. There will thus be most probably a spirited contest, and, considering the eminence of all three candidates, the University will not be unfortunate in any case.

THE EDINBURGH UNIVERSITY STUDENTS' UNION, AND NOTES OF PROFESSORS' LECTURES.

An interesting debate took place last week, in the Edinburgh University Students' Union, on the subject of the propriety of printing and circulating the lectures delivered by professors or lecturers, and the morality of such a proceeding. The two sides of the question were debated with considerable ability, and, by a large majority, the meeting decided that such publication was not a thing to be forbidden. This has special interest, as showing the opinion of the meeting on a subject for which much may be said on both sides, and which was recently the basis of an action in various law courts in Scotland.

EDINBURGH ODONTO-CHIRURGICAL SOCIETY.

At the annual meeting of the Odonto-chirurgical Society, held in Edinburgh on March 122h, and presided over by Mr. W. Bowman Macleod, L.D.S., the librarian had the satisfaction of reporting several donations to the Museum, among them one of exceptional interest from Mr. Butti, of a picture, entitled "Transplantation of the Teeth," which, from its date, would show that the art of transplantation had been tried a hundred years ago. Mr. E. A. Cormack, L.D.S., read a paper on the Mucous Membrane of the Mouth with special reference to the part played by its secretions, in the

oduction of dental caries, as well as the aid that was given in the ocess, by parasites. A paper was also read by Mr. Wells, of Berwick, the Successful Treatment of a case of Hæmorrhage. We are glad observe that the financial report showed a satisfactory condition as the pecuniary condition of the Society.

ROYAL SOCIETY OF EDINBURGH.

a meeting of the Royal Society of Edinburgh, held on Monday even-g, among the papers read there was one by Dr. D. Noel Paton, in ich he gave an account of the experiments he has been making, to ice the relation between the formation of urea and the secretion of ile, and the relation which these have to the destruction of blood-rpuscles. The paper will appear in the *Transactions* of the Society.

NEW APPOINTMENTS IN EDINBURGH INFIRMARY.

a meeting of the managers of Edinburgh Royal Infirmary, held on onday, Dr. D. Berry Hart was unanimously appointed Senior ssistant-Physician for Diseases of Women, and Dr. H. Freeland rbour was unanimously appointed Junior Assistant-Physician for seases of Women. This not only means that Edinburgh Infirmary s added two specialists who are already eminent, but the second pointment is the creation of an additional assistant-physicianship in lepartment of which Professor Sir J. Y. Simpson and Dr. Matthews ncan did much to develop and enhance the value in Edinburgh firmary. We have pleasure in recording, at the same time, at the Board of Lecturers at Surgeon's Hall, Edinburgh, recently animously appointed Dr. Hart Lecturer on Midwifery and Diseases Women, *vice* Dr. Angus Macdonald, deceased.

THE STUDENTS AND SIR WM. TURNER.

Monday, the students of medicine of Edinburgh University, rough their representative council, presented Professor Sir Wm. rner with a congratulatory address, on the occasion of his receiving e honour of knighthood from Her Majesty the Queen, in which they pressed their satisfaction with the manner in which his services, tending over a period of thirty-three years, have benefited the iiversity.

DINNER AND PRESENTATION TO DR. SIMPSON, ABERDEEN.

st week, Dr. W. T. Simpson, medical officer of health for Aber-en, was presented by his medical brethren of Aberdeen with a gold tch and appendages, on the occasion of his leaving to become Public ficer of Health for Calcutta. On the following evening, Dr. Simp-n was entertained to a public dinner by his medical brethren, and ny of the leading public gentlemen in the city. Dr. Simpson ves Aberdeen with the good wishes of its inhabitants, for in him ey have lost the services of an efficient, trustworthy, and able medi-officer of health.

THE COMBE LECTURES IN GLASGOW.

pursuance of the plan inaugurated successfully last year in Glas-w, of delivering physiological lectures to teachers, the Combe Trust s arranged for another series this year. Dr. Andrew Wilson is ain the lecturer, and the subject of the present course of fifteen tures is the Nervous System and its Work. The first two lectures re delivered last week to a large and appreciative audience, and ere is every evidence of renewed interest on the part of the teachers this new field of study, opened up to them by the liberality of the mbe Trust.

THE BURGH POLICE AND HEALTH (SCOTLAND) BILL.

E above measure, as recently issued, is precisely similar in form to at brought forward last year by the Government. It is divided o seven parts, and consists of five hundred and fifty clauses, gether with schedules giving particulars of the various general and al Acts affected by it. It is generally understood that, when read a second time, the Committee stage will be postponed for ten days, so as to allow the burghs of Scotland an opportunity of forwarding any amendments they may desire to have introduced into the measure.

GLASGOW DISTRICT LUNACY BOARD.

AT the last meeting of this Board, some progress was made in remedying the now pressing want of asylum accommodation, by the selection of one of the numerous plans submitted for the new asylum which it is proposed to erect. The design chosen seems to satisfy, in all requirements, the conditions laid down by the Board, and it should furnish a building admirably adapted for the treatment of the insane, according to modern ideas. Accommodation will be provided for one thousand patients. The building includes two distinct institutions—an asylum and a hospital—each having within itself complete administrative arrangements. The asylum is divided into ten different sections, and the hospital into eight; but there is ready communication between the two by means of an internal covered way. In the asylum proper, the ground-floor is devoted to day-rooms, and the upper floors to dormitories; while there are spacious corridors for the patients to exercise in. We hope that no time will be lost in the erection of this much-needed and long-delayed addition to the asylum accommodation of the Glasgow district.

THE PREVALENCE OF TYPHUS FEVER IN GREENOCK.

THE present state of matters in Greenock, as revealed by the last report of the medical officer of health, Dr. Wallace, shows the importance of every town providing itself with a suitable institution for the treatment of infectious diseases. Under existing arrangements, the hospital at Greenock is used by the neighbouring town of Port Glasgow for fever cases, and these latter are conveyed thither in whatever stage of the disease they happen to be at the time they come under the notice of the sanitary authorities. As a result of this system, we find that of late the number of typhus fever-cases has been largely on the increase. Dr. Wallace speaks of them as certainly startling; and we think that the right step has been taken by the Greenock authorities, in drawing the attention of the Board of Supervision to the present conditions of treatment, which are neither favourable to the patients themselves, nor to the community at large. The local authorities at Port Glasgow should at once provide themselves with a proper fever-hospital.

SMALL-POX IN SCOTLAND.

WHILE Scotland has by no means had an immunity from small-pox of recent years, its sheet has been sufficiently clean to make the present condition worthy of notice. Recently, there have been outbreaks in various places; several cases have occurred in Aberdeenshire, in connection with paper-works. This week are reported, in Ferrydent Montrose, three cases occurring in young women employed in a spinning factory in Arbroath, where flax from Russia is used. Then there is the outbreak at Queensferry, originating among workmen at the Forth Bridge, which so spread as to necessitate the institution of a hospital-ship; and, lastly, we observe that in the City Fever Hospital, Edinburgh, according to the report of the medical officer of health, there are nine cases under treatment. The origin, in most of these cases, appears to be obvious enough; and in view of the number of cases, and the different centres from which the disease may be spread, we have no doubt the authorities are alive to the necessities of the case, and are not losing sight of the importance of the desirability of revaccination.

CENTENARY OF PAISLEY INFIRMARY.

AN interesting event took place last week in Paisley, on the celebration of the centenary of its infirmary. At a meeting of the subscribers, held on March 19th, the hundredth annual report was read, and showed that, during the year 1885, there were 840 cases admitted, 704 of which were medical and surgical, and 136 were cases of fevers,

With the 72 cases in the Infirmary on January 1st, there had been 912 cases in all treated in the wards. There had been 62 deaths, 755 dismissions, and 95 cases in the wards on January 1st, 1886. In the outdoor department, 3,515 dispensary patients had been treated, an increase of 343 on the previous year. The Infirmary began life 100 years ago as a dispensary for relieving the sick poor, and visiting them at their homes. Its success was such that the necessity for a building in which to treat indoor cases became obvious, and accordingly an hospital was built in 1805, at a cost of £890, and was called "The Dispensary and House of Health." But this somewhat misleading title was in the following year changed to "Dispensary and House of Recovery." In 1850, the name was finally altered to that it now bears, "The Paisley Infirmary and Dispensary." Of course it is now a much more enlarged structure than its humble predecessor of 1805. Since the institution began, there have been treated in it 34,341 indoor patients, and 197,751 out-door patients, a total of 232,092, a record of honourable service rendered to the sick poor by Paisley Infirmary, and we cordially wish it continued and increased success in the next hundred years of its benevolent existence.

IRELAND.

ROYAL UNIVERSITY OF IRELAND.

Mr. William Thomson, one of the Surgeons of the House of Industry Hospitals, is a candidate for the seat in the University Senate, which will be rendered vacant on April 5th by the expiration of Mr. Farrelly's term of office as a representative of Convocation. A large number of members of Convocation have selected Mr. Thomson as their candidate, and there can be no question as to his peculiar fitness for the post. Surgery is at present unrepresented on the Senate. Mr. Thomson's recognised position as a hospital surgeon and clinical teacher, as well as his long experience as an examiner, manifests that his appointment would be of great advantage to the governing body of an university which has a large number of medical graduates. The liberal views which Mr. Thomson holds on university matters are, we know, in accord with those of many members of Convocation and graduates; and we trust, for every reason, that his election will be secured.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

We are glad to announce that there will not be a contest for the Vice-Presidency of the College next June. Mr. Corley, it will be remembered, resigned the office two years ago on becoming a candidate for the Chair of Surgery in the College; and his present opponent, Mr. FitzGibbon, appreciating the fact that this gave Mr. Corley, who is also his senior, a claim to the office, has retired in his favour.

HOSPITAL CONSTRUCTION.

At a meeting in Cork last week of the South of Ireland Society of Civil Engineers and Architects, a very interesting paper by Mr. Hill, on the subject of "Hospital Construction," was brought before the members and a large number of medical men. Mr. Hill described the building, which is technically known as a pavilion, as the most suitable for hospital construction. It was desirable that the longitudinal axis of the wards should be north and south, where the circumstances of the ground admitted, as this gave most sunshine to the several windows. The distance also, between adjacent pavilions, should not be less than twice the height from floor to ridge. This distance enables the vitiated air of the wards to pass off, without danger of its going through the windows of another pavilion. Dr. Donovan, medical officer of health, said the nearest approach to the pavilion hospital in Cork was the South Infirmary. He thought it would be well if the trustees of that Infirmary, and, indeed, of all the other public institutions of the city, looked into the sewerage question; for he knew of cases in Cork where persons had contracted fever in those curati establishments, owing to unsanitary conditions. As regarded t North Infirmary, they had good ventilation, but the closet accomm dation was deficient. He was happy to say, however, that the p sent state of things would shortly be remedied. The Cork Fev Hospital was perfectly ventilated; but, unfortunately, its closets we not good, and, were it not for the ventilation of the place, the mo tality would be greater. As regarded the Lying-in Hospital, t floors were in a bad state; and he thought it was a subject of congr tulation that, during the last ten years, there had only been one dea out of one thousand patients. He suggested that the Cork hospit should be thoroughly overhauled, and the defects remedied, and had no doubt but that the necessary funds would willingly be cont buted by the public.

BELFAST ROYAL HOSPITAL.

A meeting of the Board of Management and life governors of t Royal Hospital was held on Saturday for the purpose of presenting portrait of Mr. W. Lyons, D.L., to the hospital, and a copy to M and Mrs. Lyons. Dr. Cuming said it afforded him much pleasure helping to pay a compliment to their esteemed friend, Mr. Lyon and he would be doing injustice to his own feelings, and to that of t medical staff, if he did not state that Mr. Lyons had always act towards them with unfailing courtesy. Dr. J. Walton Browne sa that the subscribers, in presenting the portrait to the hospital, h been actuated by the desire that their successors, on looking upon t portrait of a former benefactor, would be stimulated to extra exertio on behalf of the hospital which had conferred so many advantages the public of the north of Ireland.

THE NATIONAL LYING-IN HOSPITAL.

The first annual meeting of this institution has recently been hel It is managed by a joint committee of ladies and gentlemen, and under the medical charge of Dr. Roe, Professor of Midwifery in t Royal College of Surgeons in Ireland. Sixty-three patients we delivered in the hospital during the year ending December 31st, 188 One mother only died, and she was in a very weak, emaciated sta on admission. There were three still-births, and one infant died hour after its birth. Forty-two women were delivered at their home There were 21 patients admitted to the chronic wards, 14 requiri operations to be performed; all did well. There were 3,504 atten ances at the dispensary for the diseases peculiar to women. Dr. W Martin has been appointed Consulting Physician to the hospital.

ZYMOTIC DISEASES IN PROVINCIAL TOWN DISTRICTS DURING 1885

The deaths from measles in the fifteen urban sanitary districts Ireland, last year, amounted to 709, of which number 591 took pla in Belfast, 91 in Waterford, and 14 in Lisburn. The deaths from th disease constituted 9.6 per cent. of the mortality from all causes Belfast, and 15 per cent. of the total deaths in Waterford. The fat cases of scarlet fever numbered 187, or a decrease of 137 as compar with 1884; while the total mortality from typhus was much und that for the preceding year, the deaths being 88, or 42 less. Deat from whooping-cough in Belfast, which had fallen from 220 in 188 to 89 in the following year, rose to 141 last year, and 55 fatal cas of this disease took place in Cork, showing an increase of 10; dip theria caused but 43 deaths; enteric fever, 71; and diarrhœa a dysentery, 327 deaths, of which 204 were registered in Belfast.

Tobacco-Smoking by Children.—The very general belief th tobacco-smoking is particularly injurious to growing youths has fou a practical expression in a bill which has been drafted and submitt to the Public Health Committee, of the Massachusetts Legislature, restrict the sale of tobacco, to minors under the age of fifteen yea According to the *New York Medical Record*, the petitions in favour the bill state that not only boys but girls at school are in the clutch of the cigarette-fiend, which *Punch* has depicted strangling the gold youth of England.

HE CEREMONY ON THE THAMES EMBANKMENT.

e summer-like weather, which replaced the cold winds and the frost
week ago continued through Wednesday, so that Her Majesty,
the representatives of the profession which she honoured, had
advantage of both sun and warm breezes, a condition not common
March. The pavilion which Messrs. Piggott, of Bishopsgate, had
up was undoubtedly strong without and commodious within,
ough the rank and file of the diploma-holders of the two Colleges
to stand on the elevated tiers of planks which looked down on a
over the foundation stone of the New Examination Hall, a block
Balmoral granite, bearing the inscription: "Victoria, Queen of
at Britain and Ireland, Empress of India, laid with her own hand
stone, 24th March, 1886." By about eleven o'clock, the pavilion
an to fill, and the bright colours of the academic robes gave a
wy appearance to the assembly.

bout twelve o'clock, the band of the Scots Guards commenced a
ction of music, and the arena gradually filled with distinguished
tors, amongst whom were Earl Spencer, the Deans of St. Paul and
stminster, and Canon Duckworth. The President and the two
e-Presidents of the Royal College of Surgeons of England, and
r officials, entered in the following order:—The Usher, with the
lege Staff; the Assistant Secretary, Mr. Frederic Greville Hallett,
ring the charters and laws of the College; the four Senior Members
Council, Sir James Paget, Sir Spencer Wells, Mr. John Marshall,
Mr. Edward Lund; the Secretary, Mr. Edward Trimmer, bearing
College Seal; the Conservator of the Museum, Professor Charles
wart; the President of the Royal College of Surgeons of England,
W. S. Savory, M.B.; the Vice-Presidents, Mr. John Wood, and
Henry Power, M.B. The insignia of office were then deposited upon
ble. Then followed the President and the two vice-Presidents of the
al College of Physicians of London, and their officials, in the follow-
order:—The College Porter, with his staff; the Assistant Registrar,
W. H. Allchin, bearing the Charter and Statutes of the College;
four Censors, Dr. S. O. Habershon, Dr. W. H. Stone, Dr. J. E.
lock, and Dr. W. Howship Dickinson; the Treasurer, Dr. Dyce
kworth, bearing the keys of the chest; the Registrar, Sir Henry
Pitman, M.D., bearing the College Seal; the Librarian, Dr. William
nk, bearing the Historical Roll of the College; the Bedell, Mr.
liam Gurner, carrying the Mace; the President of the Royal Col-
of Physicians of London, Sir William Jenner, Bt., K.C.B.; the
e-Presidents, Dr. Edmund Lloyd Birkett, and Dr. J. W. Ogle.
insignia of office of the College of Physicians were then deposited
a table.

t a quarter past twelve, amidst loud cheering, from within and
hout the pavilion, the Prince of Wales, the Princess Louise, the
ce of Connaught, the Prince and Princess Christian, the Marquis
orne, and the Duke of Cambridge were received by the Presidents
he Royal entrance, which was richly decorated with flowers. Ten
utes later the Queen arrived, accompanied by the Princess Beatrice
Prince Henry of Battenberg and the occupants of the pavilion
ld see the enthusiastic gestures of the crowd which covered Water-
Bridge and the parapets of the embankment. Amidst prolonged
ering, the strains of the National Anthem, and a royal salute from
guard of honour, formed by the Volunteer Medical Staff Corps
a field-officer's guard of the Artists' Volunteer Corps, Her
esty entered the pavilion, and was met by the Presidents of the
eges and the Right Hon. Edward Heneage, M.P., Chancellor of
Duchy of Lancaster. The Presidents led the way to the dais,
re the Queen was received by the Secretary of State for the Home
artment, the Right Hon. Hugh Childers, M.P., and the Clerk of
Council of the Duchy of Lancaster, Mr. G. D. Englehcart, C.B.,
verses of the National Anthem were sung by the choir of the
oy Chapel, and a prayer was offered by the Archbishop of Can-
bury, followed by a hymn from the choir.
r. Savory then read and presented the Address, to which the
en replied. The two Presidents handed to her a short account of
origin of the Hall, and a list of the members of the two corpora-
s. Dr. Duckworth, as Treasurer of the College of Physicians,
placed those documents into a cylindrical glass jar, and, accord-
to ancient custom, he presented the coins of the present year to
Queen, who deposited them in the jar, which she placed under
stone. A handsome silver-gilt trowel, manufactured by Messrs.
cock and Co., was then handed to the Queen by Mr. Stephen
er, the architect, and the stone was laid.
ir William Jenner then presented to Her Majesty the President of the College of Surgeons and the two Vice-Presidents of each College, the Treasurer and the Registrar of the College of Physicians, and the Architect of the Examination Hall. The Archbishop pronounced the Benediction, and the Queen left the building amidst renewed cheering.

The ceremony passed off in the most satisfactory manner, and the honour which Her Majesty has conferred upon the profession is not likely to be forgotten, and will doubtless prove of high social advantage. The crowd without behaved admirably. In case of accidents, an ambulance, thanks to the foresight of Mr. Cantlie, was in readiness at Charing Cross Hospital.

THE PROVISION OF SURGICAL APPARATUS.

THE Special Committee of the Charity Organisation Society, to a part of whose report we recently referred, have devoted a further part of their report to a discussion of the working of the existing societies for giving surgical aid, to whose methods of working we have adverted as being open to much improvement. On this subject also, their report is of considerable practical interest. They observe that the Surgical Aid Societies are, for the most part, wedded to what is called the "letter" system—a system which causes much hardship, besides other evils. A poor person, for instance, requires an instrument, which costs, say, £3 10s.—an average price. To obtain this, he has to collect from subscribers fourteen letters, of the value of five shillings each. If, as often happens, he has no friends among the subscribers to the society, nor any who will hunt up letters for him, he has to travel from street to street begging for them. This entails loss of time and money, and often real suffering. Sometimes he does not succeed until after weeks, or even months of solicitation. Frequently, the toil of two months produces only a small part of the letters required. If, at first, he is successful, he is tempted to ask for money as well as letters; and sometimes a subscriber may say, "I have no letter, but here is half-a-crown for you." And this soon turns an honest fellow into a mendicant. It will, moreover, be evident to anyone who has the least acquaintance with medical practice, that such delays and postponements may make the patient's malady incurable.

Before undertaking the supply of apparatus, the Medical Subcommittee communicated with the Surgical Aid Societies, and they found that they were quite willing to grant the Charity Organisation Society facilities for procuring instruments through their agency, by means of letters and payments, for district committee cases. On further consideration, however, the council were unwilling to adopt these suggestions, because they felt that, although they might in this way protect the interests of the applicants to the society, they would, in fact, rather strengthen than supplant the system of letters; and on the poor and friendless, who might not happen to apply to committees of the society, the system would bear as hardly as ever. But, apart from this, it was also found that, notwithstanding the great assistance afforded by the Metropolitan Hospital Sunday Fund, especially at hospitals at which the Samaritan Funds are not available for out-patients, there were many poor persons who could not be helped through that agency. The sum at the disposal of the Sunday Fund for surgical aid is limited, and there is, in consequence, a delay on that account. It was thought, also, that if a good plan for the supply of surgical apparatus were initiated, and proved to be successful, the Surgical Aid Societies might then be asked, with some hope of arriving at an agreement, to lay aside their hurtful system of letters, and supersede it by organised charity. The subcommittee, accordingly, now ask for the support of all who have at heart the cause of organisation in charity, and who share their strong feeling that the letter system is the cause of much cruel suffering to the deformed and crippled poor. Of this, the following is one among several instances.

A woman came to one of the district committees, and asked help to get a false palate and teeth. She had been, she said, to the Provident Surgical Appliance Society, and they had told her that she must get letters to the value of £5 5s. She had been begging for these from June 10th to the end of September, and she had only obtained nine letters—less than half the number that she wanted. Within ten days of the receipt of her application by the Medical Subcommittee, the apparatus was furnished her, at a cost of £3, and great was her gratitude.

Plan of Work.—As the experiment which they had made, hitherto most successfully, is novel, the Subcommittee give in their report full details of the method which they have adopted. They hope that this may lead to the matter receiving the consideration of medical men and all who are interested in promoting quick and effectual charity. The details, and one or two cases, will show how easily the

system works.[1] The plan is as follows. Application is first made to the district committee within whose area the patient lives. The district committee then decides (1) Whether the patient is in need of help; (2) How much, if any, of the cost the patient is able to pay. It then sends to the Medical Secretary a form, in which are three divisions, for (1) An entry by the district committee of the name and address of the applicant, and of the nature of the apparatus; (2) the surgeon's order certificate; (3) the surgeon's approval certificate. On receipt of the form, the Medical Secretary sends a letter to the patient enclosing the form, to be taken to the surgeon of the out-patient department of the hospital nearest to the patient's home. The surgeon there examines the patient, and fills up and signs the "surgeon's order certificate," by which an order is given for the exact description of apparatus required. The order is then sent to the nearest or most suitable instrument-maker. Subsequently, when the apparatus has been supplied, the patient, wearing it, has to reappear before the surgeon whom he saw before at the hospital, and he now vouches for its fitness by signing the "surgeon's approval certificate." Until this has been done, the instrument-maker is not entitled to payment.

The out-patient departments of most of the hospitals have also been supplied with a form on which are entered (1) the name, age, and full address of patients; (2) the kind of instrument required; and (3) whether the Samaritan Fund of the hospital will contribute towards the expense. This form is signed by the attending surgeon, and given to the patients to be taken to the Charity Organisation Committee of the district in which they are living. When the district committees forward such a case to the Medical Subcommittee, they attach the form to that used by themselves in surgical aid cases (see above); and it then serves as the surgeon's order certificate. The Subcommittee pay the instrument-maker from a fund raised for this purpose, and they expect him to charge the ordinary hospital prices. Any contributions from the patient, or from charitable persons interested in the case, are devoted to the purchase, and help to keep up the central fund, on which the work depends.

From the details furnished in the report, it appears that, since the commencement of this surgical aid work of the Charity Organisation Society, 750 instruments of various descriptions have been supplied by the committee; the amount expended having been rather over £700. This is a most admirable and useful work, very intelligibly directed.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE ninth annual meeting of the above Association was held on St. Patrick's Day (March 17th) at 49, Berners Street, the President, Dr. Macnaughton Jones, in the Chair. There was a large attendance of members.

The report stated that, since July 29th, 1885 (when the last annual meeting under the old organisation was held at Cardiff), the numbers on the roll had increased from 272 to 355. Two members had died since then, namely, Drs. Helen Prideaux and J. J. Jennett. There had been no resignation during the seven and a half months. The Association was in a flourishing condition, over £40 remaining as a balance in the hands of the Honorary Treasurer. The Senior Vice-President (Dr. Balthazar Foster) being now in Parliament, the Council hoped that ere long the King and Queen's College of Physicians would be able to register its membership, and the Royal University of Ireland its degree of M.A.O.

On the motion of Professor YEO, who said the Association was under great obligation to Dr. Macnaughton Jones for his valuable services in connection with the re-organisation and rapid development of the Association, and who drew attention to the curtailment of his period of office by the operation of the new code, that gentleman was re-appointed President. Sir Thomas Crawford, K.C.B., F.R.C.S.I., was appointed President-Elect; Brigade-Surgeon W. Alexander, M.D., and Dr. W. Henry White, were elected members of Council. Dr. James Thompson (founder of the Association) was re-elected Honorary Treasurer.

The annual dinner was held the same evening at the Holborn Restaurant. The President (who occupied the chair) was supported by Sir Spencer Wells, Bart., F.R.S.; Sir Joseph Fayrer, K.C.S.I. (Honorary Physician to the Queen); Professor Humphry, F.R.S. (Cambridge), and other distinguished guests of the Association. Ninety-two members and their friends, the latter including several ladies, sat down. Among the members present were Sir William Mac Cormac (Vice-President); Professor G. F. Yeo (Chairman of Council); Brigade-Surgeons Thomas Wright and W. Alexander; Staff-Surgeon O. Sullivan, R.N.; Dr. S. J. Flood, A.M.S.; Dr. W. A. Carte (Coldstream Guards); Dr. James Thompson (treasurer); Dr. Daniell and Stewart (honorary secretaries), etc. The usual loyal toasts were duly honoured.

Sir SPENCER WELLS, in responding for the guests, said that he was not only an Honorary Fellow of the King and Queen's College of Physicians, but had pursued part of his medical studies at two of the Dublin medical schools. He was therefore qualified for membership, and would be glad if the Council would allow him to join an Association on the roll of which he saw so many distinguished names inscribed.

Sir JOSEPH FAYRER, in responding for the "Naval and Military Medical Departments," said that, as an examiner for the Indian Medical Service, he had formed a very high opinion indeed of the teaching given in the Irish medical schools.

Professor HUMPHRY proposed the toast of the evening in a humorous speech, and said that Englishmen were under great obligations to Ireland for giving them such men as his distinguished colleague, Professor Alexander Macalister.

The PRESIDENT, in his reply, said he felt greatly honoured by being that afternoon re-elected President. The Association had not completed the first eight months of its life since it was reorganised, but there were already indications that before long the aspirations of the indefatigable honorary secretary (Dr. Stewart) would be realised, and that the roll would contain a thousand names at least. He hoped that there would be quite 500 members before he resigned the chair next year to Sir Thomas Crawford, who would have been with them this evening but for a severe cold, which prevented his facing the night air during the continuance of the Arctic weather. He (the President), alluding to Professor Humphry's reference to English and Irish manners, said his experience of the kindness and hospitality of Englishmen was of a most agreeable kind. He knew of no country in which honest work was more justly estimated than in England, no matter where the worker hailed from.

The speeches were interspersed with Irish songs, and performances by Mr. Augustus Tamplin on the harmonium, which contributed greatly to the enjoyment of a very pleasant evening.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 14th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, March 25th, 1886.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

[1] A little paper, entitled "Notes on Medical and Surgical Aid," suitable for distribution, can be had on application. It fully explains the system of work.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The mmittee will be glad to receive the names of gentlemen willing to gage in joint investigation of any of the following points in re-ion to the origin of cases of Phthisis;—(*a*) The influence of idence and occupation; (*b*) the previous state of the patients' racic organs and general health; (*c*) heredity and communication. ll particulars will be sent on application.

A general inquiry into THE THERAPEUTIC VALUE OF HAMAMELIS s now been issued. A report will be made to the Section of Thera-tics in the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination cases in which the lesion has existed for an unusual length of time hout producing serious symptoms; THE EXTREME DURATION OF FECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has pro-ed these two subjects for future inquiry, and has referred them to Branches of the Association, in accordance with its regulations, h a view to preliminary discussion during the present year. Ar-gements have also been entered into with the Section of Medicine he Annual Meeting of 1886 to hold a discussion upon "Cases in ich Disease of the Heart-Valves has been known to exist for up-ds of five years without causing serious symptoms;" and with the tion of Public Health to hold a discussion on "The Duration of fectiousness." The former discussion will be opened by Sir Andrew rk, Bart., the latter by Mr. Arthur Ransome. The inquiry-papers, be subsequently issued, will be based upon the information afforded these Branch and general discussions.

Application for forms, memoranda, or further information, may be de to any of the Honorary Local Secretaries, or to the Secretary of Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

OUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers xhibiting specimens are requested to communicate with the Honorary Secretary. . MAITLAND, M.B., Honorary Secretary, Madras.

VEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at Railway Hotel, Taunton, on Thursday, April 15th, at 5 o'clock; dinner at). Discussion: Do you consider the Antiseptic Dressing of Wounds Advan-eous in Country Practice? Election of a representative of the Branch on the ncil.—W. M. KELLY, M.D., Honorary Secretary, Taunton.

ORDER COUNTIES BRANCH.—The spring meeting will be held at the Com-cial Hotel, Dumfries, on Friday, April 9th. The chair will be taken by the sident at 3 P.M. Dr. Thomson, of Dumfries, will introduce a discussion on in-Surgery. Dr. Campbell Garland will read notes of Four Abdominal es of interest. Dr. Eaton (Cleator Moor) will read Illustrations of the Origin certain Zymotic Diseases in an isolated house. Intimations of papers and cimens should be sent to the undersigned. Dinner at the hotel, 5s. a head, P.M.—HENRY A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

ORTH OF ENGLAND BRANCH.—The spring meeting will be held at Roker, on nesday, April 21st. Members intending to read papers, show specimens, etc., requested to communicate with the Honorary Secretary (Dr. DRUMMOND) as y as possible, Newcastle-on-Tyne.

OUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting of this nch will be held at Carmarthen, on Wednesday, April 21st next. Members hing to join the Branch should send in nomination papers by the end of March. nbers desirous of reading papers, etc., should send titles to one of the Hono-Secretaries. Further particulars in circulars. Signed, A. SHEEN, M.D., Cardiff; ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT. he next meeting will be held at the Hackney Town Hall, on Thursday, April , at 8.30 P.M. Photographs of a Case of Myxœdema will be exhibited by Mr. R. Walker. A paper on the "Byways of Rheumatism," will be read by mas Barlow, M.D., F.R.C.P.—J. W. HUNT, 101, Queen's Road, Dalston, norary Secretary.

OUTH-EASTERN BRANCH.—Notice to Members. Allow me to remind the mem-s of this Branch, "That candidates for the office of representative of the nch at the Council of the Association, should be nominated, by any two nbers of the Branch, before April 15th, and their names sent to the Honorary retary, who shall issue voting papers to the members of the Branch, who shall n vote for any of the nominated members." The Branch is at present entitled hree representatives, one for each county comprised in the Branch; namely, nt, Surrey and Sussex.—CHARLES PARSONS, M.D., Honorary Secretary.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

AN ordinary meeting of the Isle of Wight District of the Southern Branch was held at the Royal Marine Hotel, Ventnor, on January 28th, 1886. In the absence of the President, the chair was temporarily filled by Dr. COGHILL until the arrival of the Vice-President, Dr. WILLIAMSON.—The SECRETARY read letters from the President, and others, regretting their absence.

The Etiology of Phthisis.—Dr. ISAMBARD OWEN, Secretary of the Collective Investigation Committee, who was present by request of the District, opened a discussion on the "Etiology of Phthisis."—Dr. ROBERTSON read a paper on "Family-History in Phthisis. A discussion ensued, in which Dr. Williamson, Mr. Meeres, and Dr. Coghill took part.—Dr. OWEN replied.

A vote of thanks to Dr. Owen was moved by Dr. COGHILL, seconded by Dr. Jas. NEAL, and carried unanimously.—Dr. OWEN, in responding, said it was always both pleasure and profit to him to attend a meeting of a branch of the British Medical Association, and expressed his sense of the incalculable benefit of the Association to medical science and the medical profession.

Dinner.—The members then adjourned to dinner.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE sixth meeting was held at the London Hospital on March 18th; present, Dr. J. Dundas Grant, in the chair, and twenty-five members and visitors.

Specimens from a case of idiopathic pericarditis were exhibited by Mr. Major Greenwood.

Heart-disease.—A boy, suffering from mitral disease, was shown by Dr. A. Ernest Sansom. In addition to the usual apex systolic murmur, a diastolic apex murmur was audible, the origin of which gave rise to some discussion. On this patient, Dr. Sansom demonstrated his method of percussing out the thoracic and abdominal organs, and transferring the records to a chart.

Myxœdema.—Dr. Sansom showed a series of cases of myxœdema, and, after a few remarks, introduced Dr. Ord to the meeting, who gave a clinical lecture on Myxœdema, illustrating his remarks by the cases present. Dr. Anderson joined in the discussion.

After the usual votes of thanks, the meeting adjourned.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

On the Propagation of Cholera.—Scarlet Fever in Paris Hospitals.—The Contagious Properties of Typhoid Fever.—Small-pox concomitant with Vaccination.—Liégeois on Hypnotism.—The Pharmacie Centrale.—General News.

DR. BOURGUET, of Aix, Provence, has published, in the last volume of the *Mémoires de l'Académie d'Aix*, a report on the cholera-epidemic of 1884 and 1885 at Aix, which presents some features of interest. The first case of cholera occurred at Aix on June 26th, 1884, at the time when Toulon was the only cholera-stricken locality. Other cases followed in different parts of the district. Eight deaths occurred between June 26th and July 8th. It has been positively ascertained that six among them were never in contact with cholera-patients, nor with any article of clothes, food, etc., belonging to such patients or coming from a contaminated locality. Three of them lived in the country, one in a convent belonging to an Order where the inmates are forbidden to leave their cloisters. After July 8th, the epidemic spread over a considerable number of communes, and it was difficult to follow its course. M. Bourguet considered that it was difficult to determine whether cholera at Aix travelled from Toulon, or whether it spontaneously appeared. The condition of the district was favourable to the incubation of the cholera-germ. During May and the beginning of June, there were a greater number of diarrhœa and dysentery cases than usual. Towards the middle of June, there were several cases of cholerine, accompanied with cramp and algidity. From June 3rd to June 30th, there were fifty patients sent to the infirmary for diarrhœa and vomiting. The principal part of the cholera-patients at Aix drank spring-water or good well-water. Dr. Bourguet did not think that drinking impure water was a factor, either in causing the epidemic or in spreading it.

M. Ollivier draws attention to the imperfect arrangements in the Paris hospitals for preventing the invasion of epidemics of scarlet fever. Two

have recently occurred in his hospital; both were imported by a scarlet fever patient. At the children's hospital, the scarlet fever patients are in the general wards. At the Hospital for Charity Children (Enfants Assistés), there are eight beds set apart for contagious diseases; but as there are always more patients than beds, the surplus patients are put in the general wards. At the Trousseau Hospital, there is no attempt to isolate infectious cases from the others. The administration has an excellent system for disinfecting beds, bedding, and clothes, by superheated steam; still, however, isolated tenements for infectious illnesses is the great desideratum, and that is conspicuous by its absence.

At the last meeting of the Société Médicale des Hôpitaux, M. Debove read a note on the following cases. He was called in to attend five children of the same family suffering from typhoid fever. A family of six children left the provinces to live at Paris, which they reached on November 15th, 1885. One of the children was ailing before he left the country. On the 20th, he presented all the symptoms of typhoid fever. Another brother was seized with typhoid fever on November 23rd, and died on January 24th. A third fell ill on November 29th; a fourth on December 17th; a fifth on December 29th; the sixth escaped. The children with typhoid fever were separated from the others; hygienic precautions were observed, and the linen was disinfected, as well as the stools, cesspools, and water-closets. M. Goffroy observed that M. Debove's note indicated that typhoid fever can be contracted by direct contact. In Germany, it is believed that the germs of typhoid fever are expelled by the dejecta, and, after undergoing certain modifications, are capable of communicating the disease to healthy organisms.

It is generally admitted that vaccination, successfully effected more than three days anterior to an attack of small-pox, has a favourable influence on the illness. In the following instance, described by M. Bernheim at a meeting of the Medical Society of Nancy, a patient was vaccinated five days before he was seized with small-pox, but the disease assumed the hæmorrhagic form, and proved rapidly fatal. At the necropsy, it was observed that there was softening of the middle portion of the gyrus fornicatus. In the posterior portion of the thalamus, underneath the occipital lobe, there was a softening of the tissues, extending over a considerable area.

M. Liégeois, professor in the Medical Faculty of Nancy, well known by his researches on hypnotism, has made experiments to ascertain the possibility of making hypnotised persons forget names, and yet feel the desire of recalling them. Two medical students, one of them a lady, and both exceptionally intelligent, submitted to experiment. Whilst they were asleep, it was suggested to them that they had forgotten proper names; on awakening, they could not remember one, not even their own. M. Liégeois asked the lady to write her name; she could write the first letter (L), but could not remember the others. The male student tried to help her, and, after a great deal of trouble and hesitation, they succeeded in writing the name entire. As soon as they turned their eyes from the paper, they forgot it. M. Liégeois made several other experiments, equally successful. They were told they could repeat a proper name once, and it was impossible to make them repeat it twice. It was suggested to them that they could only use the infinitive of verbs. They immediately began to talk "nigger French:" "*Vous venir ici*;" "*moi étudier le sou.*"

There are in France 8,208 chemists and druggists; about 900 of these are in Paris. They are united in one compact body, and form an association called Pharmacie Centrale. This Society does not sell drugs, either to the public or to medical men, but only to shareholders of the Society and to chemists and druggists, either at home or abroad. It does not manufacture special remedies that have to be advertised, but only drugs used in current practice. It produces 300,000 kilogrammes of pharmaceutical products, 300,000 of chemical, and 250,000 kilogrammes of powders. The factory is at St. Denis, and extends over a considerable area. The machinery is brought to the greatest degree of perfection, and is worked by a hundred horse-power engine; 250 hands are employed. M. Genevoix, the principal director, has devoted all his efforts to the welfare of the establishment; he has been in office seven years. At the Antwerp Congress, a certificate of honour was awarded to the Pharmacie Centrale.

At the last meeting of the Conseil d'Hygiène et de Salubrité de la Seine, Dr. Voisin called attention to the manner of warming cabs by means of hot bricks, which give off a considerable quantity of oxide of carbon; several people have suffered severely from this method, and have brought it under the notice of the Conseil d'Hygiène.

The Municipal Council of Hyères has protested against establishing a lazzaretto on the Porquerolles island for the troops arriving from Tonkin. The island, in the opinion of the Council, is too near Hyères. The deputies for the department of the Var have been desired to represent the view of the Conseil Municipal to the Minist of War and Marine.

The first number of the *Nouvelles Archives d'Obstétrique et de Gy cologie* has appeared. It is published under the direction of Profes Duplay, MM. Charpentier, Guéniot, and Polaillon, *agrégés* at t Paris Medical Faculty, Drs. Bernutz, Siredey, Porak, and Dolér This journal will appear every month, and will contain contributio from foreign gynæcologists.

UNITED STATES.

[FROM A CORRESPONDENT.]

Charity Patients.—Dispensing Errors.—Cucaine in Painful Defæc tion.—Dressing for Wounds.—Scarlet Fever conveyed by Letter. Forbidding the Sale of Cucaine.—Alcohol and Chloral.—Mistle as a Parturifacient.—Tuberculosis and Variola.—Cucaine Vaginal Examinations.—The Diaphragm in Motion.—Painf Deglutition.—Cancerous Cachexia.

FROM statements recently made at a meeting of the New York Chari Organisation Society, it appears that at least one-third of all wh apply to our medical institutions for aid are unworthy of free trea ment. It was also stated that the average physician spends at lea one-third of his time in charitable work.

We have had so many mistakes in dispensing poisonous drugs, th the *Western Druggist* ironically suggests that, to prevent the dispen ing of morphine for quinine, a strip of steel should be firmly riveted ov the mouth of the bottle containing it, the neck being first plugged witl torpedo, so arranged as to explode and shatter the steel when th poison is taken in hand. If the clerk survive, he will know that th shock meant morphine.

Dr. Samuel Logan, of New Orleans, says that the suffering due t painful defæcation, whether caused by hæmorrhoids, fissure, or rect irritability, can be at once relieved by the application of a few dro of a solution of oleate of cucaine.

Dr. M. S. French, of Philadelphia, highly lauds the following dres ing for lacerated wounds: Iodoformi gr. ii, acidi carbolici ♏ii, un zinci oxidi ʒiv; to be mixed and made into an ointment.

Occasionally, we hear of cases that cause us to believe that cont gious diseases may be conveyed by letter. Recently, a little girl, wh was dying of scarlet fever (in New York), desired to send a kiss to little playmate in another town. She kissed a letter, which was se by mail to the little playmate, who, in turn, kissed the letter as message from her dead friend. In a few days, she herself died scarlet fever.

A Bill is being prepared by the New York Medical Society, askin the legislature to include cucaine in the list of drugs forbidden to l sold without a physician's prescription. This action was rendere necessary, because many drug-stores were selling a paste made of coc leaves and lime, which was in great demand.

The *Medical Age* warns us that no preparation containing alcoh should be put in a prescription with chloral-hydrate, especially if ther be also bromide of potassium or sodium. The chloral will separat and an overdose may be taken.

Dr. G. V. Hale, of Texas, calls attention to the value of mistletoe a parturifacient. The dose is twenty to forty minims of the flui extract, and it is used when the uterus needs a stimulant. He con siders it fully equal to ergot.

Dr. Davy, of Ohio, reports a curious case of advanced tuberculosi wherein the patient was attacked with variola; on recovering fro this acute attack, all lung-trouble was gone, and he continued well

Dr. Scott, of Missouri, thinks that cucaine is especially valuable i examining young girls with a speculum; there is no pain, and it doe away with the necessity of an anæsthetic.

Professor Austin Flint, junior, of New York, in order to exhibi the diaphragm in motion, ties all vessels, and cuts a cat in two. Th respiration is maintained with bellows in the trachea.

Dr. Tauber, of Ohio, recommends, for the painful deglutition of th ulcerative stage of tubercular laryngitis, the following solution, ap plied thoroughly to the parts once or twice a day. ℞ Acidi carboli ʒiss, tinct. iodinii ʒss, glycerini ʒii. M.

Dr. Goodell considers it a great mistake to suppose that the can cerous cachexia is present in every case of cancer of the uterus. H thinks it is absent in one-half of the cases. Many of these patient present a buxom appearance, with rosy cheeks; and such cases he con siders less amenable to treatment than are those where the cachexi is early apparent.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

ing of New Chemical Laboratories at University College.—High ath-rates.—The Distress in Liverpool.—Annual Report of Port nitary Authority.—Consumption Hospital.

r Saturday, the new chemical laboratories in connection with ersity College were formally opened by Sir Lyon Playfair, M.P., ie absence of the Earl of Derby, the President of the College, ugh indisposition. Mr. Christopher Bushell, vice-chairman of College Council, presided at the opening ceremony, which was pre- d by a luncheon and followed by a reception. Sir Lyon Playfair ered an admirable address on the scientific aspect of the educa- question. Amongst those present were the Principal of Univer- College (Professor Rendall), and the Professors and Governors: cipal Greenwood (Vice-Chancellor of Victoria University), and essors Sir Henry Roscoe, M.P., Bedson, Schorlemmer, Balfour, art, etc. These new laboratories, designed by Mr. Alfred Water- e, R.A., have been erected at a cost of over £15,000, the greater of which has already been subscribed. They are thoroughly well ted for all the various branches of chemical study. There is a theatre for practical work, a lecture-theatre, with seat-room for students, a chemical museum, a balance-room, and rooms for gas water analysis, and for distillations requiring steam, etc. The lings occupy the western end of the college site, and are in imme- e connection with the Medical School block. The west front, in h is the principal entrance, faces Brownlow Street, the eastern ation looking out on the college grounds. The interior arrange- ts, as regards heating and ventilation, are most complete, special ation having been directed to these points. The building generally upplied with warmed fresh air, heated by hot water in large nels beneath the ground-floor, and rising through vertical flues e walls to the various rooms. The fresh air is cleansed by pass- through a sheet of water as it enters the building, and its entrance celerated by a fan driven by a gas engine. A large shaft, con- ed with extraction-flues, carries off the vitiated air and the chemi- umes. The Bower light has been supplied. The entire design ultimately be completed by the erection of two large laboratories qualitative and quantitative analysis, placed side by side, and ex- ling from the north end of the present building as far as Dover et. Each of these will measure 60 feet by 30 feet. The old ratories in the Medical School were on a small scale, and lat- y have been found most inconvenient and altogether inadequate. new chemical department, when fully completed, will be second one in the kingdom.

he cold was extreme here during the first two weeks of March. mean average temperature of the first week of the month was °, and that of the second week was 32.2°, the latter being 9.7° w the mean average temperature of the corresponding week for last twenty years. Owing, doubtless, in a great measure to the severe weather, the death-rate of the city has been unusually n. For the week ending March 6th, the rate was 29.5 per 1,000; he week ending March 13th, it was 33.7 per 1,000. During this nd week, there were 94 deaths of persons above 60 years of age, 147 deaths of children under 5 years of age; and phthisis and g-diseases accounted for no fewer than 171 deaths, or 45 per cent. he total number of deaths.

he distress among the working classes and the very poor has been, is, simply appalling. Public attention has been specially directed he matter by a striking series of articles in the *Daily Post*, en- d "Toiling Liverpool," and strenuous efforts are being made to viate the all-prevailing misery.

n the recently published Annual Report for 1885 of the Port Sani- Authority, mention is made of the fact that many vessels arrived he Mersey from Montreal with cases of small-pox on board, which, ome instances, led to the spread of the disease in the town. The lical officer of health has called the attention of the Customs norities to the matter, pointing out that steps should be taken to to prevent such importation of disease for the future. Small-pox epidemic in Montreal during the year, and was prevalent here in 4, and the early part of last year. In the summer of 1885, it ined, only two cases coming under notice in August. In Septem- it increased again to seven cases, in October to fifteen, in Novem- to seventy-three, and in December to fifty-six cases. At the ent time, there are forty-eight cases in the special hospital. Owing he prevalence of cholera in France and Spain, the United States ernment appointed medical inspectors here, last year, to examine grants going to that country, and to ascertain if any of them had come from, or passed through, Spain and France; and, if so, to have their effects and clothing disinfected. This was found necessary in over 600 cases. The emigration returns for 1885 show that the reduction in the number of emigrants passing through Liverpool, which commenced in 1882, is continuing, the total decrease last year being 18,132.

Some interesting statements were made at the annual meeting of the supporters of the Consumption Hospital. At this institution, some of the in-patients pay half their expenses. During 1885, there were 185 in-patients, of whom 30 were "half-pay" cases. The amount contributed by the patients towards the support of the charity exceeded that given by the public in subscriptions, the former being over £800, whilst the latter was only £700.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return and hold over a great number of communications, chiefly by reason of their unnecessary length.

EMMET'S OPERATION.

Sir,—Dr. Barnes is somewhat difficult to satisfy. He accuses me of stating that I was the first person in England to perform trachelorraphy. I reply that I never said anything of the kind. This he calls "discursive." I should have supposed that a point-blank denial is as little "discursive" as anything can be. Should any of your readers be disposed to follow this trivial matter further, they need only look through my paper, published in the 24th volume of the *Obstetrical Transactions*, and in it they will not find a single word as to myself, or anyone else, being the first to perform the operation in England. In fact, I specially provided for the operation having been done without my knowledge, by saying, "in Great Britain it has scarcely been practised," an expression I could not have used if I had intended to claim that no one had done it before myself.

My object was to direct attention to the merits of the operation, not to the merits of the individual who chanced to perform it first on this side of the Atlantic. That I willingly leave to Dr. Barnes. If now Dr. Barnes still maintains that I made the statement that he attributes to me, I have a right to call on him to quote my *ipsissima verba*, on which he founds his assertion.—I am, etc., W. S. Playfair.

31, George Street, Hanover Square, W., March 12th.

THE LUNACY BILL.

Sir,—Allow me to point out that, though Section 26 of the new Lunacy Bill distinctly forbids "single case," this mode of treatment is clearly recognised in the marginal note to Form 3, as the magistrate can authorise the admission of a patient into an "asylum, hospital, home, or as a single patient."

Similarly, though the memorandum of the new Bill, Article 2, limits the licensed home question to the prevention of the establishment of fresh asylums, Section 43 as it now stands most certainly might be construed to go much farther. The fact is that, though the Bill is understood to be substantially the same as that brought in last year by Lord Selborne, it is not the same. In the two most important questions touching the treatment of the insane of the upper classes, a complete revolution is intended. This change of front has been hastily decided upon, and, in consequence, the new provisions clash with the old. There is much reason, therefore, for every medical man to exert what influence he can in preventing the Bill from being carried hastily through Parliament. It is much to be feared that, unless due caution be used, some day we shall find that, though the number of rich patients demanding admission into asylums will be increased by the suppression of "single case," there will be no places, public or private, ready for them, and no medical men to certify them.—I am, yours faithfully, Private Asylum.

*** There is no doubt that new provisions have been hastily introduced into the Lunacy Bill, and that, in some respects, they clash with the older ones as the latter stood in the Bill last year. Not only does Form 3, to which our correspondent refers, recognise the justices as having power to sign the order for reception of a "single patient," but also the wording of Section 3 of the Bill distinctly does the same; so that this also is contradictory to Section 26.

The discrepancy between the wording of the memorandum on pages 1 and 2 and of Section 43 is pointed out in the Report of the Sub-committee on the Bill, published in the last number of the JOURNAL.

With regard to the final sentence of the above letter, it must be pointed out that no difficulty need arise with respect to medical certificates, should new orders for "single patients" be discontinued, as provided in Section 26. The section is apparently not intended to be retrospective in its operation; and if it were, fresh medical certificates would not be necessary to effect the transfer to asylum or other care.

DEATHS FROM ANÆSTHETICS.

SIR,—I have noticed, from year to year, Dr. Jacob's articles under the above heading, and I quite agree with the opinion expressed by a "gentleman holding the office of anæsthetist to a large hospital," and believe that the undue prominence given to this subject can serve no useful purpose whatever. I fail entirely to see how the details of fatal cases, or such details as have been given hitherto, can aid us in our search after a "perfect anæsthetic." I object to the heading of Dr. Jacob's articles, "Deaths *from* Anæsthetics." Where is the proof that the twelve cases he records would properly come under such a heading? Case III, to my mind, does not require a moment's consideration; it could not have been a death *from* ether. I well remember a case in which I gave chloroform for the removal of a small tumour in the sheath of the rectus femoris. Three or four minutes after ceasing the administration, the patient became pale, and the pulse very slow and feeble. In a few seconds, after drawing out the tongue and flipping the patient's face with a wet towel, the pulse was 60, regular, and of fair strength. Had this man died, it would have been recorded by some people as "another death from chloroform." Again, another case: a man was admitted to the Cardiff Infirmary with an unreduced dislocation of the shoulder of some standing. After being in bed for twenty-four hours, he got up to walk from the ward across a corridor to the operation-room, for the purpose of being anæsthetised, and an attempt at reduction being made. He got as far as the corridor, and dropped down dead. Assume that he had got as far as the operation-table, and had taken a few whiffs of chloroform, here would have been another "death from chloroform." The question of death during or after the administration of anæsthetics is far too intricate a one for us to dogmatise upon.

I object to the prominent publication of such records in the manner pursued by Dr. Jacob. Why should such cases be so recorded, any more than, for instance, "deaths from amputation of the thigh?"

Ether is said to be safer than chloroform. I am not prepared to deny this; neither do I see my way, as yet, to affirm it, generally. It is a curious fact that three out of the twelve cases recorded by Dr. Jacob are quoted as "deaths from ether"—that is, one-fourth. What is the value of such a record, until we know what is the proportion in the number of administrations of each anæsthetics? When will we learn the necessity of comparing "like things with like?"—Yours, etc., A. SHEEN, M.D., Senior Surgeon, Cardiff Infirmary.

THE ILLNESS AND DEATH OF MR. COOPER FORSTER.

SIR,—In illustration of the truth of Dr. Wilks's observation, in his report of the case under the above heading, that "there is much need of the expression (gastric fever), since the fever is the most marked symptom, and the gastric disturbance not sufficiently defined to allow an anatomical name," I may be excused for relating the following case, which occurred only a few months ago in my practice.

J. G. W., aged 27, surgeon to a steam-boat service plying between Liverpool and India, sent for me to see him at his residence at the other side of Manchester from this. I found, on arrival, that he was confined to bed, and had been so ever since his arrival home from Liverpool after his voyage, about a week previously. He complained of severe frontal headache and incessant vomiting. The vomiting took place immediately after food, and the vomited matter consisted of the food and some mucus. There was no blood at any time in the vomit. The face was pale, with a bright rosy flush over the malar bones; pupils dilated; tongue whitish, with a brown streak down the centre, moderately moist, except in the centre, where it was dry; not tremulous on protrusion. There was no detectable chest-mischief; no tenderness over the stomach; the spleen and liver were normal. No gurgling could be elicited in the right iliac fossa; spots were absent; no diarrhœa; nothing characteristic about the stools. The pulse was 110, and the temperature 104°. No rigor had been experienced at any time. He stated that the vomiting had commenced on board-ship when about a week from Liverpool, and had continued up to the time I saw him—duration about a fortnight. The normal state of the patient is one of excellent health and high animal spirits; but before setting out on his last voyage, he could not account for the feeling of despondency which he experienced. When on board-ship, his appetite began gradually to fail; until shortly before the vomiting became established, he began to loathe everything in the shape of food on board the boat, although he is usually a very good sailor, and eats heartily when at sea. When his appetite failed, he began gradually to emaciate, until he was reduced almost to a skeleton. I had known him before he sailed, and he was then plump and well. I omitted to say that there was no albumen in the urine, and that it was scanty and high coloured.

The diagnosis was gastric fever, which was explained to the family as being a fever of the typhoid type, but with no well-pronounced symptoms characteristic of typhoid fever. The prognosis was, that it would most probably run the usual course of its prototype.

A saline mixture in effervescence with citric acid and quinine was ordered. The diet was ordered to consist of milk and lime-water, iced beef-tea, etc., in small quantities, at frequent intervals. A sinapism was applied to the pit of the stomach. He was ordered to suck ice to a small enough size to be swallowed in bulk. Gradual tepid sponging of the whole body was ordered to help to reduce temperature. I found on visiting him the next day but one that the vomiting had ceased, but that he was obliged to omit the quinine ordered with the effervescing saline, as his stomach would not retain it. The omission secured the desired effect. The temperature was still very high (105°). The evening temperature was usually, though not invariably, one or two degrees higher than the morning. He refused, at first, to take the quinine now ordered in large doses, on the plea that it was an idiosyncrasy of his that his stomach could never tolerate quinine. With persuasion, he took, however, five grains dissolved in a wineglassful of sweet milk, which he retained very well; in fact, it was never rejected by him when given in milk on any subsequent occasion, and admirably controlled the temperature.

As I had not time to attend properly to the case, living as I did so great a distance, I requested that a local medical man should be called in; and Dr. Fiddes very kindly met me in consultation, and took charge of the case. Dr. Fiddes fully agreed with me in the diagnosis, and we were quite in accord in the treatment. The fever ran a course of twenty-eight days, and became so high at times, over 105°, as to require the administration, by Dr. Fiddes, of ten-grain doses of quinine every two hours, to keep it under control.

J. G. W. paid me a visit after his convalescence was established, and he appeared to be putting on flesh rapidly again; he complained only of a want of power in his feet, which rendered him somewhat lame. He is at present going on all right.—Yours faithfully, W. WILSON, M.D.

80, Broad Street, Pendleton, Manchester.

TEREBENE.

SIR,—I am induced, by two communications which appeared in the JOURNAL last week, to make some remarks in connection with a discussion which has been going on for some weeks past on the subject of an article which has been called "pure terebene," and from which I have desired to keep myself as free as is consistent with defending myself from unfounded charges of unprofessional conduct; but I think the time has now come when I am bound, in justice both to myself and to the medical profession, to intervene in the matter.

The readers of the JOURNAL will be aware that, early in December Dr. William Murrell published an article in the JOURNAL in which he lauded very highly, for certain purposes, an article which he designated as "pure terebene," and which, he was particularly careful to inform those who might be interested in the subject, was not to be "patent medicine sold under that name"—a caution which he has twice since repeated. In this article, Dr. Murrell thought it necessary to warn his readers that his "pure terebene was not the same as the patent medicine sold under that name;" and, in a subsequent communication, he states that he "knew nothing of Bond's terebene"—a statement which is certainly remarkable, considering that Dr. Murrell is a lecturer on materia medica; that terebene was introduced by me to the notice of the medical profession about twelve years ago, and that, in one way or another, its merits, whatever they may be, have been pretty extensively published since that date. Now, it is also rather remarkable that, although Dr. Murrell laid great stress on the importance of using only this so-called "pure" terebene, he did not give the least intimation where this article was to be obtained, though he stated that he had been using it for five years. In regard to this point, I can only say that though, for obvious reasons, I have endeavoured to keep myself conversant with the chemistry and the

utics of terebene, I have never heard, until the publication of Dr. urrell's paper, that terebene was in the market in any form except that in which I originally introduced it. I beg, therefore, to invite r. Murrell to supplement his paper by informing the profession here he obtained the pure terebene which he has been using for so ng a period, and on the procuring of which it appears that the pos-ibility of obtaining the benefits which he states are derivable from its e depends.

But, again, it is somewhat remarkable that, in the very next number the JOURNAL to that in which Dr. Murrell's paper appeared, there so appeared a conspicuous advertisement, by an enterprising firm of ondon druggists, intimating that they were the people who could pply the "pure terebene recommended by Dr. Murrell, etc." Assuming that this intimation was correct, I at once availed myself of e opportunity to examine this article, when I found that so far om having any claim to be called "pure" terebene, it was unmistakably contaminated with a larger amount of unconverted oil of turntine than is contained in my own preparation, and that it is distly less agreeable to take. As to its special merits for therapeutic rposes, they may be inferred from what I have to say on the general bject presently. What I wish to call attention to here, is the fact at, though Dr. Murrell had carefully abstained from indicating here his "pure terebene" was to be obtained, the profession were t left long in doubt upon the subject; and, although he has enertically repudiated any identity between his terebene and mine, d has, as I am informed, protested against the firm who manucture the latter using his name in their advertisement, he does not em to be very indignant at its being coupled with the article to ich I have referred; and he must, therefore, take the consequences, as I unhesitatingly assert, it has no more claims to be called "pure" rebene than mine has.

Now, what is "pure terebene?" I must confess that I have very eat doubts, for chemical reasons into which it is not necessary to ter here, whether such a substance exists; but I am sure that, if it , it is a very different article from that sold "as recommended by r. Murrell." The nearest approach to pure terebene would probly be pure cymene; but this cannot be the article which Dr. urrell has been using, else he would, of course, have so designated

The fact is, that the name "terebene" was applied to an article ich, when I patented it, was assumed to be an integral compound, t which the subsequent progress of chemical research has shown to resolvable into several other bodies by appropriate treatment. Dr. urrell appears to know nothing at all about this fact, but has shed into print with a charming simplicity of knowledge on the subt, which one would scarcely expect to find in a gentleman who, as ave intimated above, is lecturer on Materia Medica in a London hool of Medicine.

But in order that I may clear myself from misconception, it is cessary to say that terebene, as ordinarily prepared, always conins more or less unconverted oil of turpentine, an accompaniment ich, by the way, I am quite satisfied is no disadvantage in its use r any therapeutic purposes for which it is applicable, but rather e reverse. It is possible, by rectification under carefully observed nditions, to remove a good deal of such uncombined oil of turpenne, and it is terebene so rectified which is being sold as the "pure" ticle recommended by Dr. Murrell. But it is well that those who commend this article professionally should know that the degree of purity" which they may desire to obtain depends not so much upon e perfection of the process of rectification, as on that of the original anufacture of the terebene itself; since, if there be a large pertntage of unconverted oil of turpentine in the first product, it is cessively difficult to get rid of it entirely in the process of rectifican.

From all of this it follows (1) that it is very doubtful whether ere is any such substance at all as "pure terebene;" (2) that if ere be, it is certainly a very different article from that sold as recommended by Dr. Murrell;" and (3) that for all the purposes which he recommends terebene, the presence of a certain amount unconverted oil of turpentine is not only no disadvantage, but the verse, as is confirmed by your correspondent, Dr. Masterman. But yone can easily satisfy himself on this point. He has only to tain samples of my terebene and this so-called "pure terebene," d compare their efficacy for any of the purposes for which the ter is recommended, and I have little doubt as to what the result ll be.

I may add that my terebene is not, as Dr. Murrell has alleged, a patent medicine." I did, indeed, take out a patent for the use of rebene for sanitary purposes some years ago, which patent is still lid; but that is a very different thing from its being a "patent medicine," which, aas anyone of ordinary information knows, is the very reverse of a patented article.

In conclusion, it is somewhat singular that Dr. Murrell does not seem to be aware that most of the therapeutic uses which he has discovered in his so-called "pure terebene" have been, at one time or another, announced by other practitioners to be possessed, with others of which he appears to be unaware, in ordinary terebene; and, in taking leave of the subject I can, at any rate, cordially agree with a trifling modification of the last words of Dr. Murrell's original paper, that "(pure) terebene is a valuable remedy, and will, in time, come largely into use;" for I have long held the conviction that in its varied range of applicability for medical, surgical, and sanitary purposes, terebene has few equals.

FRANCIS T. BOND, M.D., F.R.S.E., Gloucester.

POSTGRADUATE COURSE FOR MEDICAL MEN.

SIR,—I, in common with hundreds of country medical practitioners, would be but too delighted to have a chance of realising such a thing, as the establishment of a postgraduate class. I am sure there are many, like myself, who require "rubbing up" in practical matters; this could only be effected in some large centre, as London, with such a staff of men as the metropolis only could supply. If each man were to have but two months' study—and it is as much as most practitioners could afford, either in time or in pocket—I would suggest the following subjects for practical instruction: surgery in a large hospital, medicine, eye and ear cases, and skin-diseases. Anatomy and operations on the dead body would prove a great boon to many to whom a dissection would prove a novelty; and, though not absolutely necessary in the acquirement of knowledge, such as a busy practitioner wants, still it would be a great addition, if time would allow for all to be imparted in the above specified time, and especially to those who, like myself, wish (and hope some day) to attain to the degree of Fellowship. In fact, I think it a good opportunity for a man in mid-age to acquire fresh (and old forgotten) wrinkles, and one more (and last) feather.

I am afraid the fees mentioned by "I.V.R.C." are hardly adequate to remunerate first-class men such as we would desire for instructors; but I see no reason why the proposition should fall through on that ground, as few of us would grudge just compensation. Again, I am afraid that, though April and May might answer for the bulk of country practitioners, September and October would not prove equally so; at least, that is my experience, without entering into any particulars of detail.—I remain, sir, yours faithfully, L.K.Q.C.P.

MANCHESTER AND SALFORD PROVIDENT DISPENSARIES.

SIR,—I should be glad to say a few words in reply to the letter from Dr. Stewart (one of the medical officers to the Pendleton Provident Dispensary), which was inserted in the JOURNAL of the 6th instant. I am desirous of stating that I am not making any attack upon Dr. Stewart, but upon the system of medical practice with which he is connected.

About ten years ago, a number of gentlemen in Manchester formed themselves into an association, called the Manchester and Salford Provident Dispensaries Association. Their object was to procure medical attendance for a class of persons who were too well off to receive gratuitous hospital treatment, and yet whose circumstances rendered the payment of medical men's bills a difficulty and a burden. A guarantee fund having been subscribed, six dispensaries were opened in different districts of Manchester and Salford. Each member subscribed one penny a week, and a penny was charged for each bottle of medicine. Any family, however numerous, under the age of 14 years, had their subscription limited to fourpence a week. Families in receipt of over thirty shillings a week were considered ineligible as members. Any medical man residing in the district in which the dispensary was placed could attach himself to it, the members having the choice of selecting their own medical men. The medical officers were to receive as remuneration for their services one-half of the weekly subscriptions, and two-thirds of any surplus that might be over, after paying all expenses. Very few general practitioners cared to have anything to do with this scheme. However, some medical men gave it a trial, and, after doing the work for some time, it was calculated that they received about fourpence for each visit and consultation. After the dispensaries had been for some time in operation, without meeting with the success which was expected by the promoters, the rule which prevented persons with an income of upwards of thirty shillings a week from becoming members was abolished, and

no limit was placed to the income of those who joined the dispensaries. Consequently artisans, skilled mechanics, small shopkeepers, and families whose united earnings amounted to several pounds a week, enrolled themselves as members, and by this means were able to obtain medical attendance for the small contribution already mentioned. Many medical men lost many of their patients who were in the habit of paying ordinary fees, and the provident dispensary was regarded as a cause of depriving them of the legitimate earnings of their profession.

There are now nine provident dispensaries in operation in Manchester and Salford. Each dispensary is managed by a "working man's managing committee," who have the power to admit any person as a member, and are subject to no controlling authority. At the annual meeting recently held, the Chairman remarked: "Those who belonged to these dispensaries had the matter pretty well in their own hands; they were the managers and proprietors. The measure of success attained by provident dispensaries depended, in his opinion, on the devotion of the doctors, the collectors, and the working-men's managing committee." These dispensaries are scarcely recognised by the medical profession; they are mostly worked by one or two medical men who make as much money out of them as they can. If at the end of a year there be a deficiency in the expenses of a dispensary, a grant is made by the association to cover the loss. It requires about 2,000 members to make a dispensary self-supporting, and they are all self-supporting, with the exception of two.

The most flourishing dispensary is at Pendleton, where there are 3,500 members. This is owing partly to the personal popularity of one of the medical officers, and also to the fact that, in this township, which has a population of 50,000, there reside a large number of well-to-do working and lower middle-class families, who have largely availed themselves of the privileges of the dispensary. It is against this dispensary that complaints of abuse have been most numerous.

A correspondence has been carried on in a local paper, between some medical men and the honorary secretary, with regard to the way in which the dispensary is abused. "Justitia," a medical man, gives the following cases as instances of how the dispensary is taken advantage of. 1. Shopkeeper in a main street, not satisfied with dispensary treatment, paid a bill of £3 to another medical man; had £200 in the bank. 2. Working man paid a bill of £2 2s., then joined the dispensary; wages, 35s. a week; wife and child, and a daughter working; combined weekly income, probably £2. 3. Married couple in Whit Lane, one child; husband a carter, wife a weaver; combined weekly income, £1 16s.; members of the dispensary. 4. Mother and three daughters; combined weekly income, £2 10s.; said to be members of the dispensary. 5. Family in Seedley; income several pounds a week; young men described as big swells; keep a servant; members of the dispensary. It is believed that the circumstances of a large number of the members of the Pendleton Provident Dispensary resemble those which are mentioned. I enclose the copy of a letter written by a respectable working man, who is prepared to uphold all that he says in it.

"Pendleton, February 27th, 1886.

"DEAR SIR,—I would have answered your note sooner, but I have been working late, and have not had an opportunity before now. While I sympathise, to a certain extent, with the object of the Provident Dispensary, yet I fear and know that it is largely taken advantage of by the improvident. I have known many members of above, earning from 40s. to 60s. per week, piece-work, able to lose and win heavy bets, stop days off work drinking, and otherwise squander their earnings, and yet take advantage of this and other charities. Of course, it is a long vexed question how to deal with such. Still, I presume it is more of the well-to-do you want to know, and of these I do know some; one, a family of five (wife, husband, and three children), husband earning 35s., and children upwards of 30s. per week. I am not quite sure if they are all in, but I know the husband is a member, and recently received benefit. I knew a young man (single), wages upwards of 36s. per week, who received considerable benefit; he has lately left Pendleton. Also, I knew a man (married, two children), wages over 40s. per week, who received benefit; he has lately left Pendleton. I have not the paper, but I think Mr. Harwood referred to some rule, that applicants for membership were inquired into before admitted. This is certainly not the case. I joined myself, among upwards of a hundred more in the works, some three years ago, and I think I am safe in saying not one case was inquired into, if suitable; certainly, mine was not, and the question of wages was not mentioned by the agent who came down to propagate the scheme.—I am, etc.,

——"

As regards remuneration, the individual fee is very small, but many of them reach a considerable sum. The sum of £497 was distributed among the medical staff at the Pendleton Provident Dispensary during the past year; and, out of that Dr. Stewart and his assistant or partner received £476. According to the report, 8,900 visits were made during the past year, and 9,000 patients were prescribed for at the dispensary. I believe a considerable item of profit is made upon medicine, even when sold at a penny a bottle. It must not be forgotten that the medical men attached to these dispensaries compete with their neighbours for private practice as well. No person would find fault with these dispensaries if worked within proper limits; but at present the frugal, industrious, and well-paid working and lower middle classes are being gradually absorbed by them, leaving behind a "residuum," which, if they were in their proper place, ought to be members of a provident dispensary.—I am, sir, your obedient servant,

THOMAS N. ORCHARD.

Claremont Place, Pendleton.

A CASE OF GASTRO-ENTEROSTOMY FOR CANCEROUS OBSTRUCTION OF THE PYLORUS.

SIR,—I have been much interested in reading Mr. T. Morse's case of gastro-enterostomy in the JOURNAL for March 13th, and share his regret that it was unsuccessful. I send this line to refer him to an earlier case than either his or my own, operated on by Mr. Reeves at the London Hospital early last year, of which a short note was inserted in, I think, one of the May numbers of this JOURNAL. This case, which was also unsuccessful, would be, so far as I know, the first operated on in England.

It may interest your readers to know that my own patient, operated on on January 5th, left hospital for her home on March 4th, considerably improved. This improvement was steady from the day of operation. Having been confined to her bed for five months before the latter, she was naturally very feeble, but for some weeks before leaving was able to get up, and latterly had been able to move about the ward on her feet with only a little assistance, and was daily improving in this respect. She had ceased all vomiting, and bore light food well, but had occasional eructations, and was somewhat inclined to constipation. This was best treated with a mild aloetic pill, with a little extract of nux vomica. She was very grateful for the relief she had obtained, and was to let me know if she were not getting on well at home. As I have not heard, I presume she still remains well.—I am, Sir, faithfully yours,

8, Harley Street, W. ARTHUR BARKER.

INDIA AND THE COLONIES.

NOVA SCOTIA.

THE HALIFAX PROVINCIAL AND CITY HOSPITAL.—We regret to learn that there appears to be now little hope of an amicable adjustment of the difficulties which arose last spring between the medical staff of the Provincial and City Hospital at Halifax, Nova Scotia, and the Board of Charities. The difficulty has led to the resignation of the whole medical staff and the closure of the medical school. The hospital has been managed, since 1878, by a Board of Charities, which also manages the Hospital for the Insane and the Poor Asylum. The work of the hospital was done by a visiting staff of physicians and surgeons, and two resident officers, a house-surgeon and a clinical clerk. The appointment of the resident officers was governed by a by-law passed in 1872, and not abrogated by the Board of Charities when it was created. This by-law enacts that the Board shall advertise for applications for the appointment about to become vacant; and that "applicants shall undergo a *competitive* examination before the Medical Board, who shall communicate the results thereof to the Board." The difference has arisen on this point. The Medical Board contend that the object of holding the competitive examination was the selection, by competition, of the best candidate. The Board of Charities, on the other hand, contend that the examination was designed to ascertain that the candidates came up to a certain standard of knowledge, and have assumed, apparently without any ground, that any candidate who obtained 50 per cent. of the marks was qualified for the appointment. For the appointment of house-surgeon, vacant on May 1st, 1885, two candidates presented themselves; the one obtained 80 per cent. of the marks; the other, 66 per cent. The Board of Charities appointed the candidate who obtained the fewest marks. The Medical Board thereupon held a meeting and denounced the action of the Board of Charities. A similar dif-

ty had arisen on a former occasion; and, two years earlier, a ancy caused by the resignation of the house-surgeon had been d up without any consultation with the medical staff. It was arly time, therefore, that a stand was made. It is universally ognised in every hospital throughout the civilised world that the ointment of the resident medical and surgical officers ought to be erned by the opinion of the medical staff. The reason is obvious anybody who will take the trouble to understand how the work a hospital is done. The house-physician, or house-surgeon, or ical clerk, is directly responsible to the visiting surgeon or phyan, whose deputy and representative he is. It is essential that house-surgeon or physician should look upon the visiting surgeon physician as his superior officer, and serve him with loyal obedie. The Board of Charities, however—which, it must be noted, sists of five laymen, namely, two *ex officio* members and three paid missioners—in the plenitude of its wisdom, thinks it advisable to ore all such considerations, and has insisted upon its supposed ht to appoint the house-surgeon who may most commend himself it. An attempt to refer the difficulty to arbitration failed, owing, far as can be gathered from the statements which have come to our owledge, to the determination of the Board of Charities to beg the ole question in dispute in the statement of their case to the arbitor. The resignations of the physicians and surgeons were accepted the Board of Charities, and certain other medical practitioners e induced to take their places. The late staff, however, appear to e the sympathy of the profession in the province; and a petition been extensively signed, praying the Legislature to "attentively sider the present condition of the management of the institution, devise such means as may restore to it the confidence of the lical profession, the public, and especially of those for whose efit it was established;" and "that, in arranging the matter of the ernment of the hospital, the Medical Board should have granted t, by law, the same privileges as have been conceded to the medical f of other similar institutions elsewhere." It is, perhaps, not a ter for regret that the legal question was not tested in a court of , since the real cause of the difficulty seems to be the very unsatisory constitution of the governing body. It is certainly suffitly surprising to find in a British colony, where it might be ected that the democratic spirit would be at least as strong as at e, the management of the chief charities of the province comted to the care of a nominative board. The question has been so pletely thrashed out and settled on this side of the Atlantic, that s a little disappointing to find it raised again in a most acute form. perience has shown that the management of a hospital ought to be the hands of an elective body, chosen *ad hoc*, and containing also resentatives of the medical staff. The correct course for the proion in the colony to take would certainly appear to be to use every stitutional means to obtain a thorough investigation into the stitution, mode of appointment, and powers of the Board of rities; and its reformation might then be urged upon the Governt with greater effect.

MEDICO-LEGAL AND MEDICO-ETHICAL.

IRER.—In reference to the several ethical points submitted for our considera-n by "Inquirer," we are clearly of opinion, assuming the facts to be correctly ted, that "Dr. G." (irrespective of the subsequent reputed understanding tween him and "Inquirer's" partner, the expression of whose views on the int in question should not, especially under the peculiar circumstances, have en privately sought or acted upon) should have been governed by the lowing rule extracted from the *Code of Medical Ethics*, second edition, page , rule 7. "When a practitioner is called to an urgent case, either of sudden other illness, accident, or injury, in a family usually attended by another, he ould (unless his further attendance in consultation be desired), when the ergency is provided for, or on the arrival of the attendant in ordinary, resign e case to the latter; but he is entitled to charge the family for his services."

PHYSICAL EXAMINATION OF CANDIDATES FOR PUBLIC APPOINTMENTS.

—I seek the opinion of brother practitioners, as also that of the Editor of the ITISH MEDICAL JOURNAL, together with advice how to act in the following se, which I have endeavoured to condense as much as possible.

My son took first place in open competition for a berth in the British useum; he had to obtain certificates for Civil Service Commissioners from his nily doctor and others, as also testimonials from independent persons as to s bodily health and strength. All of these certificates were quite satisfactory, d particularly that from his medical attendant, Mr. A., specialist, who ended him for curvature of spine, and pronounced him cured, leaving but ght deformity. He had to go before the Commissioners' medical referee (say . A.), who, differing in opinion, found, in his judgment, "physical defect," d took his fee of £1 1s., though knowing that his father was a medical man. eling it a great hardship and injustice that one opinion (and given after a ry short interview) should be taken as against others who knew my son so well, and who were so well able—indeed, better able—to judge of his real state, I appealed to the Commissioners, who agreed to reopen the case if he were prepared to appear before a board of three eminent medical men, and to pay a fee of £6 6s., which sum had to be paid to the secretary before examination, which lasted only a short quarter of an hour. Judge of my son's and my astonishment and indignation at finding Dr. A. one of the three eminent men!

Now, sir, I would ask through you, firstly, if it were professional etiquette for Dr. A. to appear, under the circumstances, without at least option being granted me to protest or object, he having already given an adverse opinion?

Secondly, is it not against all medical etiquette and good order to take fees of a young man quite dependent on his father, a registered medical man, though retired from practice; and, having taken them, Dr. A. knowing, Mr. B. and Mr. C. not knowing, my position, ought they not all to have returned them?—Yours obediently, D. E.

*** According to our correspondent's statement, we consider that Dr. A., in taking the fee from the son, and a minor, of a brother practitioner, acted in contravention of the Faculty's prescriptive custom; and, further that, inasmuch as he had previously expressed an adverse opinion in regard to the alleged "physical defect," he erred in judgment and good taste in electing to be one of the re-examining "board of three eminent medical men," receiving at the same time a double fee.

Looking at the question from our own point of view, we are of opinion that Dr. A. should have at once retired, and left the case to the unbiassed decision of the other examiners. An examination and decision thus unfairly influenced can scarcely be regarded as satisfactory or just.

PRACTITIONERS, CONSULTANTS, AND PATIENTS.

A, LONDON practitioner, acts as *locum tenens*, in the country, for B, during the latter's holiday. Among the patients entrusted to A's charge, is one C, who has been under B's treatment for a long time without improving. A is equally unsuccessful, and suggests C's going to town, and taking further advice. C being impatient, and thinking B will ridicule this course, leaves for London before B returns. Shortly afterwards, A returns to London, and is asked by C to aid in getting further advice. A then writes to B, in the country, telling him this, and asks whom he would like C to consult, suggesting D. B agrees, and writes to C, saying that, if he has time, he will write to D about the case, but does not do so. At this juncture, A, who for the time is attending C, discovers that a grave error has been committed in the diagnosis of the case. He is confirmed in his view by a surgeon, who operates, and removes the cause of disease. A writes to B, informing him of the discovery, and of the success of the operation. B writes back cordially. C remains under A's treatment until fit to return home, but is very angry with B for having mistaken the case for so long. When, at the present time, a medical man is required, C does not go to B, and does him harm in the country-town, by telling everyone of his mistake. A therefore stands in the position of having unwittingly been the means of damaging B, and would be glad to know if he is wrong according to medical ethics.

*** A careful and critical examination of our correspondent's communication, leads us to the conclusion that "A," in suggesting to "C" (while acting as the *locum tenens* of "B" during his holiday trip) the expediency of seeking further advice in London, undoubtedly, however unwittingly, erred in so doing. The case, moreover, being chronic and non-urgent, "A" should, in our opinion, have withheld his suggested advice until "B's" return home, and then, if it were deemed judicious, should have been communicated to "C" through "B," the principal. "Grave" as the error in diagnosis may have been, where, it may be asked, is the practitioner that has not, in the course of his professional life, committed like grievous errors. The mischief, however, which we think might easily have been averted by a little care and forethought on the part of "A," has unfortunately been done; and will probably, at least for a time, injuriously affect "B's" practice.

In regard to the ethical aspect of the case, on which our opinion is solicited, we consider that, although "A" sadly erred in judgment, he acted without any direct unethical intent.

UNQUALIFIED ASSISTANTS.

AN UNQUALIFIED ASSISTANT says that, in the letters in the JOURNAL of March 13th, persons of his class are described as "evils," "dangerous to the public," and it is stated that employment of them casts a shadow on the "integrity of the employer," etc. Had these remarks been confined to those who have sole charge of outlying practices, nothing could have been said by him; but those are in the very small minority, the majority doing their work under the eye and guidance of the principal. There are many men, who now occupy high positions in the profession, would never have been able to qualify had they not been unqualified assistants. He is confident that the lamentations of "A Qualified Assistant" will not elicit much sympathy. Men who have recently taken their diplomas are at no loss for assistantships. Principals object to them, because they often profess to know much better than their seniors, and not because they can get unqualified men to do the work for less money. The "unqualified assistant" is recognised by the Colleges. A certificate of having been "visiting assistant" is accepted instead of the class-certificates of Practical Pharmacy. As regards taking out labours at the hospital, it must be remembered that students do not become assistants, either because their pockets are well filled, or because they have "not succeeded in taking a minimum qualification." There are many who have taken all, or almost all, their curriculum, and have only to pass the final examination, but who, for lack of money, become assistants. In a couple of years or so they save enough money, return to their school, and take their diploma. Mr. Alfred Smith says, "clever and needy students have the sympathy of the profession." But is this to be shown by taking away the only means a "needy" student has of qualifying? No special incentive need be provided. Those who are worthy of the profession have "incentive" enough in the desire to become members of it. "A Qualified Assistant" wants an "insight into practice." Which would be the more "dangerous to the public and derogatory to all," an inexperienced qualified man alone, or an inexperienced unqualified man, under supervision, getting an "insight into practice"?

IS AN APOTHECARY A SURGEON?

SIR,—With reference to the letter, under the above heading, in the JOURNAL of March 13th, signed "M.B.", will you kindly permit me to make a few remarks? It would appear from "M.B.'s" letter, that an L.S.A. had no authority to practise at all, and that no one is to be consulted unless he is a "surgeon," and that the L.S.A. would not have been called in unless it was thought by his patients that he was a "surgeon." "M.B." does not inform us from what disease these patients were suffering, for unless a surgeon holds a medical, as well as his surgical, diploma, he has no more right, legally, to attend a case of fever or bronchitis than an ordinary chemist.

I know at present a L.R.C.S.I. who holds no medical qualifications whatever, still he styles himself "Dr." May I ask "M.B." if this is correct? How many hundreds of men style themselves as Dr. without having any legal right to do so, M.B.s included. The Medical Acts, Section 34, distinctly lays down the words "legally qualified medical practitioner," or "duly qualified medical practitioner," or any words importing a person qualified by law as a medical practitioner, or member of the medical profession, when used in any Act of Parliament, shall be constructed to mean a person registered under this Act. As the L.S.A.s comply with this section, and come under it, I cannot, nor can others who have seen his letter, understand "M.B.'s" meaning, unless that the L.S.A. has perhaps a little better practice than "M.B.", and that he is a little bitter against his opponent.

As regards the title of "surgeon" being used by an L.S.A., I think there can be no objection to that now, as they are examined in surgery by two Fellows of the Royal College of Surgeons of England, regularly appointed to examine in surgery, and they are licensed in surgery as well as medicine and midwifery. There is certainly no law against it, for it had been decided, not by one, but by three judges, namely, the Lord Chief Baron, Mr. Baron Wilde, and Mr. Baron Channel, on November 14th, 1860, that if a man is registered he can call himself what he pleases. This was in the case of Ellis v. Kelly. I therefore think that "M.B.'s" attack on the L.S.A.s was quite uncalled for, and deserves a reply.—I am, sir, yours truly, L.S.A.

OBITUARY.

THOMAS SPENCER COBBOLD, M.D., F.R.S., F.L.S.

DR. SPENCER COBBOLD had so thoroughly established his reputation both as an observer and as a writer on Helminthology, that his death will be felt as a distinct loss to English science. The special department in which he worked is one which touches on the general field of biology; and it was doubtless for this reason that it had so great an attraction for Dr. Cobbold, who belonged to the old school of naturalists, though his mind was open to the wider philosophic views which find favour with modern biologists.

Dr. Cobbold gave early signs, not only of general ability, as evidenced by the high academical honours he obtained at the conclusion of his curriculum in the University of Edinburgh, but of a special bent towards the study of natural history. He was appointed Curator of the Anatomical Museum of the University of Edinburgh, a post which he held until 1856, when he established himself in London. He quickly became known as a student of the habits and nature of parasitic beings, and his reputation was consolidated by the publication of his well known work on Entozoa in 1864. In the same year, he became a Fellow of the Royal Society, and he received from other sources numerous other gratifying recognitions of the position he had achieved. He became Vice-President of the Edinburgh University Club, honorary Vice-President of the Birmingham Natural History and Microscopical Society, honorary corresponding member of the Academy of Science at Philadelphia, a foreign corresponding member of the Royal Agricultural Academy at Turin, and Emeritus Swiney Professor of Geology in connection with the British Museum. Dr. Cobbold was also for some time Examiner in Comparative Anatomy, Zoology, and Botany for the Natural Science Scholarship in St. Mary's Hospital Medical School, Lecturer on Parasitic Disease, Botany, Zoology, and Comparative Anatomy to the Middlesex Hospital Medical School, Senior President of the Royal Medical Society of Edinburgh, Vice-President of the Physiological Society of Edinburgh, and President of the Quekett Microscopical Club. He was elected Professor of Botany and Helminthology at the Royal Veterinary College in 1872, and discharged the duties of the latter chair until last session. Of the success of his teaching in this capacity it is not for us to speak; and we are glad to be able to quote the words of Professor Robertson, the Principal of the Royal Veterinary College, who says, "To him belongs the credit of having introduced the study of helminthology into the curriculum of the College. To his teaching in this department of science the veterinary profession, both in this country and throughout our colonies, is largely indebted."

Dr. Cobbold retired from the active practice of his profession in 1877, but he did not cease to work diligently at his favourite subject. In 1879, he published a shorter work on Parasites; and very shortly before his death he was engaged on a paper on two species of "Strongylus," which was read at the meeting of the Linnean Society on March 4th. His health had, however, been rapidly failing during the past eighteen months, and he had recently suffered from frequent attacks of angina. In one of these he passed away, after a few hours' illness, on March 20th, in the 57th year of his age.

JOHN FREMLYN STREATFEILD, F.R.C.S.

THE unexpected death of Mr. Streatfeild will be a matter of keen regret to those who knew him well. His retired habits and unassuming manner rendered his circle of friends within the profession in London comparatively small; by those friends who knew him, however, he was deeply beloved for his generous kindly spirit and sterling goodness of heart.

He obtained his first diploma in 1852, and soon after the outbreak of the Crimean war he went out to the East, and became Assistant-Surgeon to the British Civil Hospital at Smyrna, where, however, as he sometimes said in a half-complaining way, his duties were rather those of a physician. After his return to England, he devoted himself to the study and practice of ophthalmic surgery, and was appointed Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and Assistant Ophthalmic Surgeon to University College Hospital. At the time of his death, he was Senior Surgeon to the former institution, and Professor of Clinical Ophthalmic Surgery in University College.

Mr. Streatfeild was the first editor of the *Ophthalmic Hospital Reports*, and contributed to its earlier numbers several valuable papers and reports of cases. Later, he wrote the chapters on Ophthalmic Surgery in Mr. Erichsen's well known *Science and Art of Surgery*, and still more recently several articles on ophthalmic subjects in Dr. Quain's *Dictionary of Medicine*. It was, however, chiefly as an operator that he achieved distinction; he possessed a natural dexterity and deftness in manipulation, and had trained himself by constant practice to a marvellous rapidity and accuracy in operating within the eye. In his manner there was never the slightest trace of flurry; and, though his manipulations were rapid, they were carried out in such a quiet methodical manner that they bore no trace of haste. He had given great attention to the treatment of adhesions of the iris, and had devised a special operation, to which he applied the term corelysis (pupil-freeing) for detaching a pupil bound down by a limited number of adhesions to the lens or cornea, or to a false membrane. The subject continued to occupy his attention; and, in recent years, he had conducted a series of experiments in the treatment of synechia by electricity, but without arriving at any results which he regarded as satisfactory.

A friend and former pupil who knew his practice well writes to us. "He was probably the most finished and dextrous operator of his time; in cataract operations and corneal sections for iridectomy he always employed Sichel's knife, his incision, in the former cases, corresponding with the corneal margin. His hands were finely modelled, and the skilful use he made of them was the admiration of all who witnessed his operations, not excepting, I believe, his own colleagues at Moorfields."

Mr. Streatfeild, like many other surgeons, had a strong love for art; his favourite hobby was Wedgwood ware, of which he had formed a small but very beautiful collection. He came of a family long settled in Kent, and highly honoured in that county; perhaps to this circumstance was due his strong affection for everything which had the flavour of antiquity about it. An evidence of this leaning of his may be found, perhaps, in the somewhat quaint title-page of the first volume of the *Reports*, "to be had of Mr. Churchill." At the time of his death he was engaged in the preparation of a book on his native county, and had long been collecting sketches and engravings of localities or ancient buildings which possessed historical associations.

Mr. Streatfeild, though not in recent years in robust health, did not show any signs of age, and died at his house in Brook Street on March 18th, of pneumonia, after only a few days' illness.

DANIEL ELIAS, M.D., M.R.C.P., L.S.A., SOUTHPORT.

DR. ELIAS was assistant to the late Dr. Scowcroft in early life and at length became his partner. On the death of his senior, he soon formed a large and extensive practice in conjunction with his brother, Dr. Tom Elias, who died very suddenly about three years ago. Dr. Daniel Elias's practice embraced all classes, from the very poor to some of the richest and most influential of the "cotton lords." He was universally respected, and was distinguished for his kindness and cheerfulness, and for his constant readiness to take an interest in anything concerning the welfare of the town or the condition of the poor. For some months previous to his death, he suffered from great

akness, and had been obliged to retire, in a great measure, from tive practice. He died at the comparatively early age of 48, of rdiac disease, accompanied by nervous prostration and general de- lity. A large number of medical men were present at his funeral on arch 9th; and after the conclusion of the service, the Rev. Mr. ffrey, Vicar of St. John's, Blackpool, spoke touchingly of the high blic and private services which the deceased had rendered to the wn and to his fellow-townsmen.

NAVAL AND MILITARY MEDICAL SERVICES.

PROPOSED ORDER OF MEDICAL MERIT.

n influential and well informed medical military correspondent ites:—A paragraph in one of the papers states that the military thorities are favourably considering the question of establishing an der of medical merit, as suggested by Dr. Quain in his address livered at Netley on the 1st February last. Dr. Quain's eloquent dress was highly appreciated, but the above suggestion was by no eans approved of; and now that the proposal is so quickly adopted y report), it is calculated to carry dismay to army medical officers, d, indeed, to all the profession, and to those who have its true terests at heart. After all the struggles that have been made to in for the medical staff its true position as the equal of any other dy of officers, entitled to the same credit and the same honours, ere is now a prospect of a blow being dealt it of a most crushing nd. The establishment of an order of medical merit means simply is, the exclusion of medical officers from all the higher orders of ighthood. As soon as this unfortunate suggestion was made, it was ain that it was one that would commend itself only too easily to e military authorities, as an excellent opportunity for snubbing the dical staff, and shelving their claims to higher distinctions. The tural sequence would be a chaplain's order of merit, a commissariat der of merit, each having no value or significance within its depart- ent or without it. The army can only work well as one united body, d each and every officer in it ought to be equally eligible for re- ards and distinctions. It is much to be desired, on every ground, at this proposed order shall not be established, as its being so can ly result in degradation to the medical staff, and a bitter feeling ong its members.

THE BLANE GOLD MEDALS.—Two gold medals were founded by e late Sir Gilbert Blane, Bart., to be conferred, once in two years, the two medical officers of the Royal Navy who shall have delivered to office journals evincing the most distinguished proof of skill, dili- nce, humanity, and learning, in the exercise of their professional ties while in medical charge of ships. This year they have been arded by the Director-General of the Medical Department of the avy, jointly with the Presidents of the Royal Colleges of Physicians d Surgeons, to Fleet-Surgeon Henry Scott Lauder, and Surgeon yles O'Connell McSwiny.

THE NAVY.

SPECTOR-GENERAL of Hospitals and Fleets HENRY FEGAN, C.B., M.D., has en placed on the retired list; he entered the service on June 6th, 1856; became aff-Surgeon, July 3rd, 1866; Fleet-Surgeon, March 28th, 1874; Deputy Inspec- -General, September 11th, 1880; and Inspector-General, October 29th, 1885. In 57-61, Dr. Fegan served at the Royal Naval Hospital, Hong Kong, and received e China medal; he was recommended for promotion, for his valuable services, by e Commander-in-Chief. In 1868, whilst in the *Rodney*, he had medical charge the expedition which occupied Yang-Chow, and was mentioned in despatches. uring the Ashanti War, he was Senior Medical Officer in charge of the Naval igade, and was again mentioned in despatches; was nominated a C.B., and re- ved the medal with clasp, for Coomassie. In 1875, he was Senior Medical Officer the Congo Expedition, and again received the published approval of his periors. During an epidemic of yellow fever, in 1882, whilst Deputy Surgeon- neral of Jamaica Hospital, his very praiseworthy service called forth from the rds of the Admiralty their great satisfaction at the display of zeal and devotion duty which he manifested.

Deputy Inspector-General of Hospitals and Fleets T. J. HARAN has been pro- ted to the rank of Inspector-General. Mr. Haran's commissions are dated: rgeon, July 27th, 1850; Staff-Surgeon, April 4th, 1858; Fleet-Surgeon, ne 8th, 1871; and Deputy Inspector-General, April 1st, 1881. He was at the ack on Lagos in November, 1851, in charge of the *Harlequin's* boats; was sistant-Surgeon of the *Viper* in the Black Sea during the war with Russia, and s engaged at Eupatoria, on the coast of Circassia, at the capture of Kertch, in e operation in the sea of Azov, at the siege of Sebastopol, and the capture of nburn (Crimean and Turkish medal, with clasp, for Sebastopol and Azov). From 57 to 1860, he was Surgeon and Additional Surgeon of the *Boscawen*, on the South rican station, and was present on board during an outbreak of yellow fever con- cted in 1858 on the West Coast of Africa. In 1879, he was selected to take arge of the Royal Marine Battalion, which proceeded to South Africa (Sir lbert Blane's gold medal).

The following appointments have recently been made at the Admiralty: NRY HADLOW, Fleet-Surgeon, to the Royal Naval Hospital, Chatham; W. RUSSELL, Surgeon, to the *Hyacinth*; H. S. R. SPARROW, Surgeon, to the *Polyphemus*; H. A. W. RICHARDSON, Surgeon, to the *Osprey*; E. St. M. NEPEAN, Surgeon, to the *Triumph*; and W. W. JACOBS, Surgeon, to the *Royal Adelaide*, additional; W. E. BRETON, M.D., Surgeon, to the *Revenge*; H. W. MACNAMARA, Surgeon, to the *Asia*; ROBERT M'IVOR, Surgeon, to Plymouth Hospital; J. A. M'ADAM, Surgeon, to the *Indus*; ALFRED H. MILLER, Surgeon, to the Royal Marine Depôt, Walmer; JAMES H. BEATTIE, Surgeon, to the *Vernon*; RICHARD A. FITCH, Surgeon, to the *Cambridge*; WILLIAM SPRY, Surgeon, to the *Boscawen*; HORACE ELLIOTT, M.D., Surgeon, to the *Duke of Wellington*, for service at Haslar Hospital; P. E. MAITLAND, Surgeon, to the *Impregnable*, for service in the *Canopus*; MATTHEW DIGAN, Surgeon, to Hawlbowline Hospital; G. W. F. ARMSTRONG, M.D., Surgeon, to the *Monarch*; C. A. MACAULAY, M.D., Surgeon, to the *Belleisle*; J. N. CORBETT, M.D., Surgeon, to the *Coquette*; Deputy Inspector-General D. M. SHAW, C.B., to Malta Hospital; Deputy Inspector-General A. B. MESSER, M.D., to Plymouth Hospital; C. J. MANSFIELD, Surgeon, to Haslar Hospital; H. A. CLOSE, Fleet-Surgeon, to the *Hector*.

MEDICAL STAFF.

SURGEON-MAJOR H. C. COLLIER is granted retired pay, with the honorary rank of Brigade-Surgeon; his commission as Assistant-Surgeon bears date September 30th, 1863; as Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. Mr. Collier served in the Abyssinian War in 1868, with the 4th King's Own Foot, and was at the action of Arogee, and the capture of Magdala (medal).

The following officers will proceed to England about March 12th:—Surgeons F. B. MACLEAN; W. J. MACNAMARA, M.D.; H. W. MURRAY, M.B.; R. JENNINGS, M.D. They will proceed to Deolali, and report themselves to the senior officer there not later than March 9th, for duty on board ship.

Surgeon-Major ALFRED LEWER, M.D., Senior Medical Officer of the Station Hospital, Madras, is directed to do duty at the Station Hospital, Bangalore.

Surgeon-Major T. M. KIRKWOOD, doing duty at the Station Hospital, Madras, is appointed Senior Medical Officer at that hospital.

Surgeon F. W. H. D. HARRIS, on arrival from England, is directed to do duty at the Station Hospital, Madras.

Surgeon P. J. R. NUNNERLY, on arrival from England, is ordered to do general duty in the Eastern District, Madras.

Surgeon M. J. SEXTON, M.D., on arrival from England, is appointed to the medical charge of the Station Hospital, Malipuram.

Surgeon-Major W. ROBERTSON, serving in the Madras Command, has obtained leave of absence for six months on medical certificate.

INDIAN MEDICAL SERVICE.

THE services of Surgeon T. H. POPE, M.B., of the Madras Establishment, are replaced at the disposal of the Police Department.

Surgeon A. C. THOMPSON, Bombay Establishment, has been permitted by the Secretary of State for India to return to duty.

The undermentioned gentlemen have received leave of absence for the periods specified:—Surgeon-Major D. F. KEEGAN, M.D., Bengal Establishment, Residency Surgeon at Indore, for one year on private affairs; Surgeon W. COATES, M.D., Bengal Establishment, Civil Surgeon of Peshawur, to Europe for one year, on medical certificate; Surgeon-Major F. H. BLENKINSOP, Madras Establishment, in medical charge of the 25th Native Infantry, for 182 days on medical certificate; Surgeon J. B. EATON, Bombay Establishment, in medical charge of Bombay Sappers and Miners, to Bombay and the Hills till May 22nd, on medical certificate.

Surgeon G. A. CONES, of the Bengal Establishment, who was placed on half-pay on May 1st, 1885, has been restored to the effective list.

Surgeon A. R. W. SEDGEFIELD, Bengal Establishment, Medical Officer to the 1st Central India Horse, is appointed to the medical charge of the Goonah Political Agency.

Surgeon-Major R. T. LYONS, M.D., Bengal Establishment, has retired from the service, which he entered on October 1st, 1860, attaining to the rank of Surgeon-Major twelve years thereafter. Dr. Lyons was engaged in the campaign on the north-west frontier of India in 1863, and was present at the forcing of the Umbeyla Pass, and at the defence of the Eagle's Nest Picket. He was mentioned in despatches, and received the frontier medal with clasp. He also served in the war in Afghanistan in 1878-79, and took part in the operations in the Khost Valley (medal).

Surgeon R. J. POLDEN, M.B., Bengal Establishment, passed the examination in Punjabi on January 13th.

Surgeon T. R. MULRONEY, M.D., Bengal Establishment, on return from the Camp of Exercise, has resumed charge of his duties at Goojerat.

Surgeon G. DUNCAN, Bengal Establishment, has assumed charge of the civil medical duties of Murdan, relieving Surgeon D. St. J. D. Grant.

Surgeon M. J. KELAWALA, Madras Establishment, has passed the examination in Persian with high proficiency; and Surgeon N. CHATTERJIE, Madras Establishment, has also passed with high proficiency in Sanscrit.

The services of Surgeon-Major C. W. S. DEAKIN, M.B., Bengal Establishment, are replaced at the disposal of the Military Department.

Surgeon-Major R. G. MATTHEW, Bengal Establishment, Civil Surgeon of Mozufferpore, is appointed Civil Surgeon of Darjeeling.

Brigade-Surgeon J. H. THORNTON, M.B., Bengal Establishment, Civil Surgeon of Bankoorah, is directed to act as Civil Surgeon of Mozufferpore, during the absence of Surgeon-Major Matthew.

Surgeon D. N. PARAKH, Bombay Establishment, is ordered to act as Civil Surgeon of Surat.

Surgeon H. BOYD, Bengal Establishment, is appointed to act as Assistant-Surgeon of the David Sassoon Hospital, Bombay, and as Assistant Civil Surgeon, Poona.

Surgeon-Major THOMAS OXLEY, M.D., M.R.C.P., formerly of the Bengal Establishment, died at Southampton on March 6th, in the eighty-first year of his age.

Surgeon-Major FRANCIS DOUGLAS, M.D., late of the Bengal Establishment, died at Kelso on the 7th instant, at the age of 70.

Surgeon JOHN LEONARD, of the Madras Establishment, died at Trevandrum, Madras Presidency, on January 21st last. He entered the service March 31st, 1880.

Surgeon-Major H. P. KEATINGE, serving in the Egyptian Army, has received Her Majesty's permission to accept the 4th Class of the Order of the Osmanieh, conferred upon him by the Khedive of Egypt, in recognition of his services with the Egyptian Army.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN 1885.

In the accompanying table will be found summarised the vital and mortal statistics issued by the Registrar-General in his weekly returns for 1885, relating to twenty-eight of the largest English towns. Weekly summaries of these statistics have already been published in these columns.

During the year 1885, the births of 297,336 children were registered in the twenty-eight great English towns, equal to an annual rate of 33.5 per 1,000 of their aggregate population in the middle of that year, estimated at nearly nine millions of persons. In London the birth-rate did not exceed 32.6 per 1,000, whereas in the twenty-seven provincial towns it averaged 34.3. The birth-rate in these large towns showed a further decline from those recorded in recent years; indeed, since 1876, when the birth-rate was as high as 38.1 per 1,000, it has steadily declined. The lowest rates last year in the twenty-eight towns were 26.1 in Brighton, 28.8 in Halifax, and 29.1 in Huddersfield; the highest were 38.3 in Newcastle-upon-Tyne, 39.1 in Preston, and 43.1 in Cardiff.

The 182,339 deaths in the twenty-eight towns last year were equal to an annual rate of 20.5 per 1,000 of the estimated population, which was lower than that in any year on record. The recent marked improvement in the health of the town population was therefore more than maintained during the year under notice. During the ten years 1871-80, the rate of mortality in the large towns dealt with by the Registrar-General averaged 24.0 per 1,000. During the first half of the current decade 1881-85, the death-rate in these towns has not exceeded 21.5 per 1,000. This reduction in the death-rate implies that upwards of 110,000 persons in the twenty-eight large towns have survived the last five years, whose deaths would have been recorded had the mean rate of mortality prevailing in the preceding decade, 1871-80, been since maintained. It is worthy of note that the estimated saving of life during the same period of five years, 1881-85, in England and Wales, as the result of the decline of the general death-rate of the country, is no less than 281,000. The rate of mortality in London last year was equal to 19.7 per 1,000, while it averaged 21.3 in the twenty-seven provincial towns, among which it ranged from 17.1 in Brighton, 17.2 in Hull, and 17.7 in Bradford, to 25.7 in Cardiff, 26.1 in Newcastle-upon-Tyne, 26.5 in Manchester, and 27.1 in Preston.

During the year under notice 24,082 deaths were referred to the principal zymotic diseases, equal to 13.2 per cent. of the total deaths, and to a rate of 2.7 per 1,000, which was a lower rate than has been recorded in any previous year. In the ten preceding years, 1875-84, this zymotic rate averaged 3.7 per 1,000. The lowest zymotic death-rates last year were 1.1 in Halifax, 1.2 in Hull, and 1.4 in Brighton and in Huddersfield; while the highest were 4.4 in Newcastle-on-Tyne, 5.0 in Cardiff, and 5.3 in Sunderland. The 24,082 deaths referred to these zymotic diseases included 6,148 which resulted from measles, 6,034 from diarrhœa, 5,332 from whooping-cough, 2,097 from scarlet fever, 1,955 from fever (principally enteric), 1,465 from diphtheria, and 1,051 from small-pox. The death-rate from measles was equal to 0.69 per 1,000, and showed a further increase upon the rates recorded in the two previous years, and considerably exceeded the average measles' death-rate in the preceding ten years. This disease showed the largest proportional fatality in Manchester, Liverpool, Cardiff, Newcastle-upon-Tyne, and Sunderland. The rate of mortality from diarrhœa was equal to 0.69 per 1,000, a lower rate than has been recorded in any recent year; this disease, however, showed excessive fatality in Salford, Leicester, and Preston. The 5,332 deaths from whooping-cough were equal to a rate of 0.60 per 1,000, against 0.64 in 1884; this disease was proportionately most fatal in Plymouth, Cardiff, and Blackburn. The death-rate from scarlet fever was equal to 0.24 per 1,000, and showed a marked further decline from the rates in recent years, and was considerably lower than in any preceding year on record. In London the rate of mortality from this disease did not exceed 0.17 per 1,000, while among the twenty-seven provincial towns it was highest in Preston, Leicester, and Sunderland. The death-rate from "fever" (principally enteric) was 0.20 per 1,000, and showed a considerable further decline from the rates recorded in the three preceding years; this disease caused the highest rates in Newcastle-upon-Tyne, Portsmouth, and Norwich. The rate of mortality from diphtheria showed a further increase upon that recorded in recent years; the fatality of this disease in London considerably exceeded that in the provincial towns, among which, however, diphtheria was somewhat prevalent in Ports-

Public Health Statistics relating to Twenty-eight Large English Towns, for the Year 1885.

Towns.	Estimated Population middle of 1885.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
				Births.	Deaths.	Principal Zymotic Diseases.										
28 Towns	8,966,446	297,336	182,339	33.5	20.5	2.7	24,082	1,051	6,148	2,097	1,465	5,332	1,955	6,034	2.3	155
27 Provincial Towns	4,822,518	164,830	102,339	34.3	21.3	2.7	12,821	152	3,220	1,390	569	2,853	1,260	3,377	3.2	161
London	4,083,928	132,506	80,000	32.6	19.7	2.8	11,261	899	2,928	707	896	2,479	695	2,657	1.1	148
Brighton	114,672	2,981	1,952	26.1	17.1	1.4	159	1	34	7	18	45	18	36	1.2	131
Portsmouth	134,659	4,631	2,640	34.5	19.7	2.3	314	—	7	5	41	48	92	121	1.3	131
Norwich	91,215	3,052	1,844	33.6	20.3	2.1	190	—	—	8	8	41	92	41	1.5	136
Plymouth	76,045	2,317	1,693	30.6	22.3	2.3	178	—	22	12	10	79	20	35	0.6	156
Bristol	218,169	6,776	4,282	31.2	19.7	2.3	503	10	160	24	25	156	21	107	2.0	152
Wolverhampton	79,185	2,745	1,592	34.8	20.2	1.9	154	—	1	45	9	39	9	51	2.6	140
Birmingham	427,769	14,404	8,248	33.8	19.3	2.0	868	12	119	28	46	254	73	336	2.1	157
Leicester	136,147	4,652	2,682	34.3	19.8	3.4	456	—	45	115	15	52	40	189	1.9	193
Nottingham	211,424	7,931	4,197	37.6	19.9	2.3	495	2	115	30	29	113	47	159	1.6	157
Derby	89,691	3,064	1,616	34.3	18.1	1.5	134	—	26	10	1	41	11	45	1.7	137
Birkenhead	93,093	3,212	1,806	34.6	19.5	2.5	228	2	76	30	13	65	14	28	3.8	137
Liverpool	579,724	19,464	13,764	33.7	23.8	3.6	2,085	46	716	190	133	396	182	422	4.8	174
Bolton	110,085	3,788	2,287	34.5	20.8	1.9	213	1	36	8	6	60	20	82	2.8	160
Manchester	337,342	12,225	8,902	36.4	26.5	3.1	1,034	33	375	63	19	235	72	237	2.2	175
Salford	204,075	6,989	4,293	34.4	21.1	3.4	696	—	178	62	16	129	65	246	4.0	174
Oldham	126,390	4,487	2,772	35.6	22.0	2.0	248	—	53	20	15	101	21	38	7.5	166
Blackburn	112,574	4,111	2,441	36.6	21.8	2.6	291	—	1	19	1	143	32	95	2.5	170
Preston	100,406	3,921	2,713	39.2	27.1	4.2	420	1	7	69	16	96	36	195	2.9	218
Huddersfield	87,327	2,535	1,748	29.1	20.1	1.4	124	—	56	11	3	24	10	20	4.5	157
Halifax	77,378	2,223	1,516	28.8	19.7	1.1	86	1	—	30	8	13	15	19	7.0	132
Bradford	214,431	6,221	3,791	29.1	17.7	1.6	341	2	34	47	18	118	38	84	2.0	143
Leeds	333,139	11,420	6,621	34.4	19.9	2.2	731	2	19	210	24	154	74	248	2.4	155
Sheffield	305,716	10,670	6,305	35.0	20.7	2.7	826	8	207	98	11	221	72	209	6.1	164
Hull	186,292	6,284	3,192	33.8	17.2	1.2	228	9	17	41	8	33	42	78	5.6	128
Sunderland	125,327	4,715	2,977	37.8	23.8	5.3	661	17	381	106	12	33	33	79	3.3	158
Newcastle-on-Tyne	153,209	5,848	3,984	38.3	26.1	4.4	676	3	344	77	25	52	74	101	2.9	172
Cardiff	97,034	4,164	2,481	43.1	25.7	5.0	482	2	191	25	39	112	37	76	1.8	189

outh and Cardiff. During the year under notice, 1,051 fatal cases small-pox were registered in the twenty-eight towns; 899 occurred London, and only 152 in the provincial towns, including 46 in iverpool, 33 in Manchester, 17 in Sunderland, 12 in Birmingham, id 10 in Bristol. The fatality of small-pox in London reached its aximum in May, after which it steadily declined. The number of mall-pox patients under treatment at the Metropolitan Asylum Hostals, which was 1,013 at the commencement of 1885, rose to 1,389 at ie end of May, and from that time continuously declined until the id of the year, when only 41 patients remained under treatment.

Infant mortality, measured by the proportion of deaths under one ar of age to registered births, averaged 155 per 1,000 in the twenty-ght towns during the year under notice. In London the rate was ual to 148 per 1,000, whereas in the twenty-seven provincial towns averaged 161, ranging from 128 in Hull, and 131 in Portsmouth and Brighton, to 175 in Manchester, 189 in Cardiff, 193 in Leicester, id 218 in Preston.

THE CHESTERTON BOARD OF GUARDIANS AND MR. J. BRIDGER.

UR contemporary, *The Cambridge Independent*, in its issue of March h, reports the proceedings of the Chesterton Board of Guardians, mbridge, at their meeting on the preceding Thursday. From this, d from other journals, we learn that, on a certain date in the preding month, Mr. J. Bridger, medical officer, was visiting a sick uper, in the parish of Heston, part of the seventh district, when he as asked by two poor women to go in and see Mary Bowers, an ed woman, whom they had found on the bricks in front of the fireace, very cold, and half dead. The two women had done all they uld to revive her, and in this they had partially succeeded, although, hen Mr. Bridger saw her, he found her still very cold and shivering. arning that she had no one to attend to her, Mr. Bridger gave a rbal instruction to one of the women, to go to the relieving officer d state the condition in which the old woman was, and ask him her to send some one to look after her, or to cause her to be removed the house. The relieving officer contented himself with asking e or two questions, and, learning that the old lady refused to go into e workhouse, neither visited her, nor made any provision for her. n the Wednesday morning following the Monday, when Mr. Bridger st saw her, at 8 A.M., she was found on the floor of the room, dead. ne Heston policeman having reported the death to the coroner, Mr. W. Palmer, that gentleman directed that an inquest should be ld; at which inquiry Mr. Bridger attended and gave evidence. ne relieving officer was also in attendance; but, though the coroner vited him to give his version of the case, he declined to do so, which l the coroner in summing up the evidence to state that, although is officer lived within a stone's throw of the deceased's house, he never moved her to the workhouse, provided an attendant, nor went near r, and that if the medical man had put his request to him in writg, he should have asked the jury whether he (the relieving officer) ould not be sent to trial, for manslaughter. It was a disgraceful se. The jury, in their verdict, concurred with the remarks of the oner.

Stung by the censure implied in the observations of the coroner, the ard of Guardians ordered an investigation of their own, at which . Bridger, the two women, and the relieving officer, were present. ne relieving officer had previously given to this Board his version the transaction, which account did not in any particular traverse e sworn facts of the case.

On Mr. Bridger being called in, he was questioned by the chairman, . A. M. Robinson, as to how he came to attend Mary Bowers—by ose authority? To which he replied, he had no order at all. He d been asked by two female neighbours of the deceased to see her, d had done so. He had found her to be in such a condition as to luce him to direct that the relieving officer should be informed as to r state, and requested one of the women to go and see him. This s done. Not hearing anything further of the case, and having had order for his subsequent attendance, he did not visit her again. bsequently he learned that she was found dead, and he had received order from the coroner to attend and give evidence, and to make a *st mortem* examination, if he thought fit. This he did not nsider necessary. Mr. Bridger was thereupon exposed by several the guardians to a cross-fire of questions, from the chairn downwards, dictated from the evident desire to entrap him o some admission that might enable the board to censure n for neglect of duty. Ultimately, a resolution was proed and carried unanimously, that, having heard the evidence of . Bridger and Mary Smith, and the statement of Mr. Saunders, the ard are of opinion that there is no blame to be attached to the relieving officer. A similar resolution, substituting the name of Mr. Bridger for that of the relieving officer, was carried by a majority of three, in a Board where fifteen members were present.

In commenting on this case, we regret to inform our readers that, for a great number of years, the Chesterton Board has been conspicuous for its disregard of justice in its dealings with its medical staff. It must be within the remembrance of many, that about four years ago, one of the gentlemen, then in the employment of this body, had to take legal proceedings in the County Court, to recover a fee which this Board had most illegally refused to pay. Fortunately, the Board had to pay, with costs. The guardians are evidently determined to continue in their high-handed and illegal action.

Fortunately, Mr. Bridger can well afford to treat the action of the minority of the guardians with the contempt it merits; for, not only will all right-minded persons commend him for the kindly feeling he evinced in his suggestions for the care and comfort of this aged woman, but the public generally will agree with the coroner, that no blame could be attributable to Mr. Bridger for his action in the matter, and that the conduct of the relieving officer was most censurable.

There is another point to which we desire to direct attention; and that is the laxity that exists in this union, in making out half-yearly lists of permanent paupers, and supplying them with orders entitling them to medical relief for six months. It was, if we remember rightly, the absence of such a permanent ticket, that induced this Board to try to deprive Mr. Grubb of his fee for a fractured thigh. This neglect was also very properly commented upon by the coroner. Steps will be taken to bring the present matter before the Local Government Board, and, if necessary, before Parliament.

THE HEALTH-OFFICERSHIP OF ABERDEEN.

THE Town Council of Aberdeen have, against the views of the Lord Provost and the more enlightened of their members, taken what can only be regarded as a very retrograde step in discontinuing "the arrangement under which the medical officer of health is head of the sanitary department" (which they seem to regard as something exceptional), and in placing the control of dairies and cowsheds under a separate officer.

It is not alleged that under Dr. Simpson, the able health officer who has now resigned, any inconvenience or conflict of judgment arose in the management of the sanitary department; but the Council have, nevertheless, resolved that, "under the new appointment, the medical officer should, when required by the Public Health Committee, act in conjunction with the sanitary department."

It would, in any case, be unnecessary here to argue on the evils of divided headship; and if the Town Council cannot see the dangers of their proposal after the very cogent arguments addressed to them by the Lord Provost and Dr. Wight, we despair of converting them by any expostulations of our own. Aberdeen was a place to which we had been accustomed to point as one of the few Scotch towns that had any system in its health-organisation; but we fear we shall no longer be able to give it so high rank. The retrogression of the Town Council as to its health-officering is particularly unfortunate, now that, by the notable Burgh Police Bill which the Government are attempting to thrust down the throats of Parliament, medical officers of health throughout Scotland are to be given absolutely no security of tenure, but may be subjected to re-election every year.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 5,484 births and 4,630 deaths were registered during the week ending Saturday, March 6th. The annual rate of mortality, which had been 24.4 and 24.2 per 1,000 in the two preceding weeks, rose during the week under notice to 26.6. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 17.9; Hull, 18.0; Oldham, 20.4; Sheffield, 20.6; Leicester, 20.6; Sunderland, 20.9; Birmingham, 22.3; Huddersfield, 22.4; Bradford, 24.0; Nottingham, 24.2; Newcastle-upon-Tyne, 24.2; Derby, 25.0; Birkenhead, 25.2; Halifax, 25.3; Bristol, 25.7; Leeds, 26.5; London, 26.9; Cardiff, 26.9; Norwich, 28.3; Liverpool, 29.6; Bolton, 30.3; Portsmouth, 30.6; Salford, 30.9; Manchester, 33.5; Preston, 34.0; Wolverhampton, 34.6; Plymouth, 35.4; and the highest rate during the week, 36.4 in Blackburn. The death-rate in the twenty-seven provincial towns averaged 26.3 per 1,000, and was slightly below the rate recorded in London, which, as before stated, was 26.9 per 1,000. The 4,630 deaths registered in the twenty-eight towns during the week under notice included 171 which were referred to whooping-cough, 101 to measles, 42 to diarrhœa, 31 to "fever" (principally enteric), 28 to scarlet fever, 27 to diphtheria, and 3 to small-pox; in all, 403 deaths resulted from these principal zymotic diseases, against 425 and 385 in the two preceding weeks. These 403 deaths were equal to an annual rate of 2.3 per 1,000. In London, the zymotic death-rate was 2.8, while it did not average more than 1.9 per 1,000 in the

twenty-seven provincial towns, and ranged from 0.0 and 0.5 in Wolverhampton and Hull, to 3.5 in Bolton, 4.8 in Plymouth, and 9.6 in Blackburn. The fatal cases of whooping-cough, which had been 197 and 161 in the two preceding weeks, rose again during the week to 171, and caused the highest death-rate in Newcastle-upon-Tyne, Plymouth, and Portsmouth. The deaths referred to measles, which had risen in the three previous weeks from 67 to 91, further rose to 101 during the week, and showed the largest proportional fatality in Bolton, Plymouth, and Blackburn. The 42 deaths from diarrhœa differed but slightly from recent weekly numbers. The fatal cases of fever, which had been 33 in each of the two preceding weeks, were during the week 31; this disease was somewhat prevalent in Cardiff. The deaths referred to scarlet fever, which had risen from 30 to 34 in the three previous weeks, declined again during the week to 28, and showed the largest proportional fatality in Birkenhead. The 27 fatal cases of diphtheria showed a further decline from recent weekly numbers, and included 19 in London, and 5 in Liverpool. Of the 3 deaths from small-pox in the twenty-eight towns during the week under notice, 2 were recorded in Liverpool, and 1 in Brighton. No fatal case of small-pox was registered in London, but the deaths of 3 London residents from small-pox were recorded in the Metropolitan Asylum Hospital-ship *Atlas* situated outside Registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 10 and 15 in the two preceding weeks, declined again to 7 on Saturday, March 6th; no new cases were admitted to these hospitals during the week under notice. The death-rate from diseases of the respiratory organs in London during the week was equal to 9.4 per 1,000, and considerably exceeded the average. The causes of 97, or 2.1 per cent., of the 4,630 deaths registered during the week under notice in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, March 23rd, 1886.

The Care of Idiots.—The LORD CHANCELLOR brought in a Bill to give facilities for the care, education, and training of imbeciles and idiots.—The Bill was read a first time.

Burgh Police and Health (Scotland) Bill.—The Earl of ELGIN moved the second reading of this Bill.—Lord BALFOUR of BURLEIGH said that, as he understood that Bill was introduced in almost exactly the same state as it left the Select Committee last year, he thought their lordships might safely pass it, and let it go to the other House of Parliament as soon as possible. He did not say that as it stood it was perfect. There were many points in it which were open to grave objection; but those who were best entitled to speak for the inhabitants of the burghs affected by it were perfectly unanimous that some such measure was required. He hoped, however, that an interval of ten days or a fortnight would be given before the Committee stage of the Bill was taken, in order that a reasonable time might be afforded for its consideration.—The Earl of GALLOWAY suggested that it would be well if the Government would consider whether the time had not now come when there ought to be established one general police force of an Imperial nature.—The Earl of ELGIN said he did not think that this was a fitting occasion on which to enter into a defence of the principles of the Bill. He could not, however, agree with the observations made by the noble lord who had just sat down. The noble lord was in error in thinking that the Bill would increase the local police forces to any appreciable extent. The Bill had been the outcome of a Select Committee which sat last year, and there had not been any discussion of it. This discussion might very well take place before entering committee. The Government would give ample notice of any amendments they desired to propose. With the object of meeting the wishes of the noble lord who opened the discussion, the Government would suggest that the Bill should be put down on the paper for that day week, not with the intention of taking it on that day, but in order that a later day might be considered.—The Bill was read a second time.

HOUSE OF COMMONS.—Thursday, March 18th, 1886.

Compulsory Vaccination.—In answer to Mr. ROBINSON, Mr. CHAMBERLAIN said he did not intend to bring in a Bill this Session to repeal the compulsory clauses of the Vaccination Act, but there was a motion on the paper which, when it was reached, would afford an opportunity for discussing the whole subject.

Tuesday, March 23rd.

Ventilation of the House.—On the motion of Mr. LEVESON-GOWER, a Select Committee was appointed to inquire into the ventilation of the House, to consist of Dr. Farquharson, Sir H. Roscoe, Mr. Lyell, Sir G. Hunter, Mr. Isaacs, and Mr. R. Power.

Wednesday, March 24th.

The Bodies of Drowned Persons.—Mr. HUGHES, in moving the second reading of the Drowned Persons (Discovery and Interment) Bill, said the object of the measure was to enable a fee of 5s. to be paid to those who picked up the body of a drowned person, and also to transfer the cost of interment from the parish in which the body was found to the county. The hon. gentleman referred to the fact that, in consequence of the disaster to the *Princess Alice*, Woolwich had to incur an expenditure of £1,200 in burying the bodies recovered from the wreck.—After a few remarks from Mr. AKERS-DOUGLAS, Mr. Childers said he should support the second reading of the Bill which proposed such a sound change, and amend it in committee.—Sir J. SWINBURNE asked the hon. gentleman if it were intended that the Bill should apply to the United Kingdom.—Mr. HUGHES said he was afraid it would only apply to Great Britain. The Bill was then read a second time.

The Lunacy (Vacating of Seats) Bill.—This Bill was read a third time.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, March 18th, 1886.

Adie, Alexander James, 38, Leonard Street, E.C.
Halsted, Harold Cecil, M.R.C.S., Slindon, Arundel, Sussex.
Lister, Joseph Jackson, M.R.C.S., 81, Wimpole Street, W.
Pope, Henry Alexander Lepthairia, Donegal, Ireland.
Priestley, Percy, M.R.C.S., 95, Norfolk Street, Sheffield.

MEDICAL VACANCIES.

The following vacancies are announced.

BATTLE UNION.—Medical Officer. Salary, £30, extras. Applications to F. G. Ticehurst.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications by April 10th.

BOURN UNION.—Medical Officer and Public Vaccination. Salary, £25, and extras. Applications to J. L. Bell, Board Room, Bourn.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon. Salary, £120. Applications by April 2nd to the Secretary.

CITY OF ABERDEEN.—Medical Officer of Health. Salary £300. Applications by April 14th, to W. Gordon, Town House, Aberdeen.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Gratuity, £20. Applications by April 6th to T. Storrar Smith, 24, Finsbury Circus, E.C.

COUNTY OF SOUTHAMPTON.—Public Analyst. Applications by March 30th to the Clerk of the Peace, County Hall, Winchester.

COVENTRY UNION DISTRICT.—Medical Officer. Salary, £63. Applications to W. H. Harris.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by April 7th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100. Applications by April 7th.

GENERAL HOSPITAL, Birmingham.—Resident Registrar and Pathologist. Salary, £100 per annum. Applications by March 27th to H. Fox.

HOLLINGBOURN UNION.—District Medical Officer and Public Vaccinator. Salary, £35. Applications to G. Hurn, 36, Earl Street, Maidstone.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 17th, to Henry Dobbin.

HULL ROYAL INFIRMARY.—Honorary Assistant Medical Officers. Applications by April 3rd.

HULL ROYAL INFIRMARY.—Ophthalmic Surgeon.—Applications by April 3rd.

HULME DISPENSARY, Hulme, Manchester.—Honorary Physician. Applications by March 30th to Dr. A. Wahltuch.

LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Applications by April 6th to T. A. Wykes.

PORTSEA ISLAND UNION.—Medical Officer. Salary, £250. Applications by March 31st, to S. R. Ellis, Guardians' Office, St. Michael's Road, Portsmouth.

PORTSEA ISLAND UNION.—Public Vaccinator. Applications by March 31st, to S. R. Ellis, Guardians' Office, St. Michael's Road, Portsmouth.

RICHMOND UNION, Surrey.—Medical Officer for Workhouse. Salary, £125. Applications by March 27th to A. J. Wood, 17, The Green, Richmond.

ROYAL SOUTH LONDON DISPENSARY, St. George's Road, Lambeth.—Surgeon. Honorarium, £20. Applications by March 31st to the Resident Medical Officer.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £80 per annum. Applications by April 5th to G. H. Day.

SHEFFIELD GENERAL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by April 5th to G. H. Day.

SOWERBY BRIDGE LOCAL BOARD.—Medical Officer of Health. Applications by April 6th, to Godfrey Rhodes, Solicitor, Sowerby Bridge.

ST. PANCRAS NORTHERN DISPENSARY.—Physician and Surgeon Accoucher. Applications by April 6th, to H. P. Bodkin.

ST. PANCRAS PARISH.—Assistant Medical Officer. Salary, £100. Applications by March 30th, to A. A. Millward.

ST. PETER'S HOSPITAL, Henrietta Street.—House-Surgeon. Honorarium £26 5s. per annum. Applications by March 27th.

SUNDERLAND HOSPITAL FOR SICK CHILDREN.—Honorary Surgeon. Applications to Secretary, before April 8th.

IVERSITY OF MELBOURNE.—Chair of Chemistry. Salary, £750 per annum. Applications to Robert Murray Smith, Victoria Office, 8, Victoria Chambers, Westminster.

ORK COUNTY HOSPITAL.—Two Honorary Medical Officers. Applications by April 6th, to R. Holtby.

MEDICAL APPOINTMENTS.

APP, Robert, L.R.C.P.Lond., M.R.C.S.Eng., appointed Senior Assistant Medical Officer to the Devon County Asylum.

ODRIDGE, William P. B., L.R.C.P.Ed., L.R.C.S.Ed., appointed Surgeon Superintendent in the Queensland Government Emigration Service.

ORTIMER, John, M.B., appointed Surgeon-Administrator of Anæsthetics to the Dental Hospital of Exeter.

ATT, Henry T., M.B., appointed Assistant House-Surgeon to the Preston Royal Infirmary, *vice* F. P. Maynard, M.B., M.R.C.S., L.R.C.P.Lond., resigned.

PER, Arthur C., M.R.C.S.Eng., appointed Surgeon-Administrator of Anæsthetics to the Dental Hospital of Exeter.

ORTLAND, Walter E., M.R.C.S., L.R.C.P., appointed Medical Officer and Public Vaccinator to No. 3 District, Barton Regis Union.

BIRTHS, MARRIAGES, AND DEATHS.

e charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

ENDERSON.—March 21st, at 6, Hampstead Lane, Highgate, London, the wife of A. Milne Henderson, M.D., of a daughter. Australian papers please copy.

AXWELL.—At Lasswade, on March 23rd, the wife of C. M. Maxwell, M.B., of a son.

OTT.—At Musselburgh, N.B., on March 21st, the wife of Thomas R. Scott, M.B.Edin., of a son.

YTH.—On March 24th, at Holly Lodge, Brockley Road, Brockley, S.E., the wife of F. Sydney Smyth, L.R.C.P., F.R.C.S.E., of a son.

MARRIAGES.

ARWOOD—ROBINSON.—March 18th, at St. James's, Pokesdown, Bournemouth, Sweitzer Soutter Harwood, M.D. (Univ. of Pennsylvania), L.K.Q.C.P., and L.M.Ireland, of Gordon House, Pokesdown, to Josepha, widow of John Mundell Robinson, Edinburgh.

ARSH—WEBB.—On March 17th, at St. Paul's, W. Brixton, Edwin Addison Marsh, L.R.C.P., and L.R.C.S. to Clara, widow of the late Arnold Webb.

LEAD POISONING.—On March 13th, Mr. Carttar held an inquest at reenwich, on a young woman named Frances Pollard, who was stated have worked at Messrs. Pontifex and Wood's lead works, Millwall. n the previous Sunday she had several fits; on Monday she became sensible, and on Tuesday she died. The medical evidence showed at the cause of death was lead-poisoning. It was stated by the anager of the works that all precautions were taken, according to w, in the works to prevent poisoning, such as the wearing of respira-rs, the use of alum-water, bathing, and medical attendance. But om the evidence of one of the work-women it appeared that the pre-utions were little heeded by those at work, as the respirators hin-ered breathing, and the alum-water was insufficient in quantity. fter hearing evidence, the jury returned a verdict "That the de-ased died from lead-poisoning," and the coroner urged the manager the works to be as strict as possible in enforcing the regulations.

THE PARKES MUSEUM OF HYGIENE.—The Parkes Museum of ygiene has received a donation of fifty guineas from the Court of the ishmongers' Company.

THE Duke of Norfolk has been elected President of the Sussex ounty Hospital, Brighton, for the ensuing year.

DR. GUTHRIE RANKIN, being about to leave Kilmarnock to practise Warwick, has been entertained at a dinner, by the medical profession nd other friends, at the George Hotel in the former town.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

ONDAY.—Medical Society of London, 8.30 P.M. Dr. Day: Irritable Brain and Congestion of the Brain in Children.

UESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Barwell: On Suprapubic Lithotomy. Mr. Rivington: A case of Vesical Calculus of unusually large size removed by Suprapubic Cystotomy. Mr. Jacobson: A Case of Suprapubic Lithotomy.

HURSDAY.—Parkes Museum of Hygiene, 8 P.M. Dr. Louis Parkes: London Vestries, and the Administration of Sanitary Law in the Metropolis.—Harveian Society of London, 8.30 P.M. On the Treatment of Obscure Forms of Uterine Metrorrhagia.

RIDAY.—West London Medico-Chirurgical Society, 8 P.M. Specimens to be shown by Mr. Percy Dunn: Scirrhus Growth of Breast; Sac and Contents of large Femoral Hernia, with Gangrene of Walls; Stomach from case of Carbolic Acid Poisoning. By Brigade-Surgeon Curran: Photographs of Elephantiasis and Oriental Boil; Native Indian Eye-probes; Gall-stones. Mr. R. F. Benham: On Epileptiform Seizures, due to sudden Anæmia of the Brain. Dr. Campbell Pope: Case of Epileptiform Seizure, due to Irregular Cardiac Action. Dr. G. N. Pitt: On Cardiac Dilatation at Puberty.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

F. G. V. asks where he can get Dr. Butler's *Hot Water as a Remedy*.

Stock Mixtures in Dispensing.

M.B., C.M., wishes for the formulæ (with quantities) of some cheap stock concentrated mixtures, to facilitate quick dispensing in a working-class practice, where the fees do not admit of large drug bills, nor the help of an assistant. He finds the stock mixtures, sold by the wholesale druggists, too expensive.

Bovine Ring-worm.

An Amateur Short-horn Breeder asks if some member, interested in the above subject, could suggest a cheap remedy for an obstinate case, in a valuable short-horn; ordinary applications having failed. The disease is principally confined to the forehead and round the eyes, where hair is denuded. He also asks whether, as he is inclined to believe, the disease is communicable to man.

Bacteria and Boiling Water.

We have a good deal of enteric fever here; the water we use is condensed from sea-water, drawn from the harbour, which is full of filth. Some of the authorities here have suggested that the heat to which the steam is raised (240° in the shore-boilers, and 340° in the ship ones) in condensing, is not high enough to destroy the typhoid-bacilli, or, in fact, any kind of germ; that we are thus distributing the typhoid-bacilli by means of our condensed water. But, in the Journal of February 13th, is an account of a discussion on enteric fever at this place, in the Royal Medical and Chirurgical Society, and one of the speakers stated that, as only condensed water was used, therefore water could not be the cause. We would like to be certain about that point.

Would you kindly say, in the next Journal, whether it is possible for bacilli and other germs to exist in water raised to the temperatures noted above (240° and 340°) and also what are the exact temperatures, if they be known, at which the various forms of micro-organisms are destroyed. Inquirer.

*** The heat to which the water and steam are raised are quite sufficient to destroy the typhoid-bacilli. Unless the condensed water be afterwards received into impure vessels, such as vessels rinsed out with the harbour-water, it will not be a means of spreading typhoid-germs. Ordinary bacteria, not spore-bearing, are killed in a few minutes by a temperature a good deal below the boiling point of water; and boiling for half an hour to an hour, or exposure to steam at 212° Fahr., for two or three hours, will effectually destroy spores.

Double Spina Bifida.

Inquirens wishes for opinions as to what treatment ought to be pursued in the following case. Mrs. T., aged 32, has a spinal deformity in the dorsal region, which has existed since she was 12 years of age. She has been married six years, and has had one child, a healthy boy, still living; she is now three months advanced in pregnancy. Two months ago, she felt a round soft swelling in her back, which has kept increasing in size. It now measures, transversely, 42 inches, and 10 inches in its circumference; it is situated in the right loin, occupying the whole space between the lower rib and upper crest of the ilium. The swelling is round, but not pedunculated, soft in consistence, and fluctuates distinctly. The contents can be displaced to one side or another without disappearing. It is painless when manipulated. On the left side of the spinal column, a small enlargement of a similar character has shown itself within the last month; they both evidently have communication with the spinal canal. Internal and external medications have proved of no avail. "Inquirens" has thought of aspirating it and injecting it, as recommended by Dr. Morton's method, or injecting ergotine and using mild pressure. The tissues are becoming so thin, that some operative means will be imperatively called for.

Pregnancy and Contracted Pelvis.

J. C. M. writes: Will you kindly give me your advice in the following case? Mrs. B. was confined of her first child in October last. Owing to a rickety and contracted pelvis, it was necessary to perform craniotomy after attempts at version and with the forceps had failed.

The mother made a good recovery, and she was warned of the danger of child-bearing in her case, and advised to avoid subjecting herself to chance of such a danger in future. Yesterday, the husband called on me, and informed me that his wife was nine weeks gone in the family-way, very depressed in spirits, and desirous of having a miscarriage produced.

I have computed the conjugate diameter of the pelvis to be under three inches. Two years ago, I had to perform embryotomy under similar conditions for Mrs. B.'s sister. This was also a first case, and the mother made a good recovery.

*** The history of the first labour renders it highly probable that she may bear a living child at the end of seven months. If the labour then brought on should not proceed under the natural forces, turning, forceps, or craniotomy might be resorted to, without entailing more danger to the mother than the induction of abortion. The methods of conducting a premature labour described in Barnes's *System of Obstetrics* are especially valuable in such a case.

Home for Epileptic Patients.

Edward H. Willoch (Clifton House, Eastbourne) asks whether there is a home for epileptic patients. He has looked everywhere, in vain, for an advertisement.

A Question of Diagnosis and Treatment.

A Member (Dublin) would be obliged for hints as to diagnosis and treatment in the following case. The patient, aged 26, subject to dyspepsia, complained of a sudden attack of the following symptoms, on February 15th, on rising in the morning: Pain in the back, in the region of the right scapula, and on the left side in the lumbar region; worse when waking in the morning; but relieved after about a quarter of an hour, with expulsion of flatulence, subject to exacerbations during the day, when taking exercise; there was constipation, the stools being scanty, hard, and dry, great flatulence and heartburn. The patient has had previous attacks, which were followed by severe chronic dyspepsia, which incapacitated him from work; and though numerous remedies were tried, only finally yielded to change of air.

Is Asthma Infectious?

Mr. Henry Garland (Leeds) asks for an opinion as to whether asthma is considered an infectious disease in any stage; in the instance of an adult being constantly with young people, sleeping with them, and breathing the same air and atmosphere.

*** We have referred this question to Dr. Thorowgood, who writes:—"I have never, in all my experience of asthma, seen anything to make me think the complaint in any way infectious. I can conceive it possible for a hysterical female to contract nervous asthma from being often in the company of an asthmatic, but I have never observed this personally."

ANSWERS.

A Member.—Too small fry.

Whole-meal Bread.

Mr. Henry Terry (Northampton) is ready, if our correspondent will write to him, to give some valuable information. He makes his own bread at home, economically, and without trouble.

Medical Jurisprudence.

Mr. Thomas Partridge (Stroud).—The following is a list of works and their publishers: Guy and Ferrier (Renshaw), Husband (Renshaw), or Abercrombie (Churchill) are all to be recommended. The last mentioned is the most recent.

M.D. (Harley Street).—The point to which our correspondent addresses our attention has, he will see, been carefully considered in the report of the Parliamentary Bills Committee, and they have especially drawn the attention of the Lord Chancellor to it, in a communication they have made to him.

Vermouth and Absinthe.

Subscriber (Egypt).—Vermouth is a wine made in Hungary, Italy, and Switzerland. Its characteristic ingredient is wormwood (*artemisia absinthium*). It is used as a tonic bitter before dinner, like our ordinary "bitters." It is an intoxicating wine, dark sherry-coloured, and of a strong pure bitter flavour. It is not so fiery or so potent as absinthe, which also chiefly consists of wormwood. Absinthe is greenish brown, and of a bitter camphoraceous taste.

Nitro-benzol, as a means for disguising the odour of iodoform, is recommended by Mr. V. Pototzky, in a letter to the *Farmatzevtitchesky Jürnal*, No. 5, 1886, page 67.

Vaccination Awards.

The Member who asked a question as to Parliamentary Awards to Public Vaccinators (see page 572 of the Journal of March 20th) may be referred to page 36 of the *Sanitary and Medical Records Diary* for 1886 (Smith, Elder and Co., 15, Waterloo Place), where the regulations made by the Local Government Board with regard to these awards will be found given in detail.

NOTES, LETTERS, ETC.

Eczema and Vaccination.

In connection with this subject, I should like to report two cases which have come under my notice. Two infants were brought to me suffering severely from eczema. I postponed the vaccination in one instance six months, and in the other twelve. They still remained uncured, in spite of treatment; and at the instance of the mothers, who objected to having to trudge so many miles for nothing, on the last occasion they were brought to me, I vaccinated them. Since that time, they both improved rapidly, and in a short time were perfectly well.

Stalmine Lodge, near Poulton-le-Fylde. Percy Howard Day.

Mortality in the Medical Profession.

With many others, I trust to your sense of fairness for the publication of this letter.

We take exception to a paragraph in a leading article in the Journal of February 6th on the "Mortality in the Medical Profession," which I myself have only just read, being abroad. In it, the writer "fears that alcoholism is too frequent in the class from which ship-surgeons and their assistants are largely recruited," though he "firmly believes that the higher ranks, in every branch of the medical profession, are, as a rule, more temperate than others of the same social position."

To what "class" does the writer relegate "ship-surgeons and their assistants," and how does it differ, socially or professionally, from that which he himself adorns? For the rest, I have been connected with the mercantile marine for many years, and I positively deny that any deaths from alcoholism have occurred among the medical officers in the North Atlantic emigration during the last decade, and I could go back much farther. Supervising largely the immense emigration which is continually going on, the men have too much responsibility and are too closely watched, not only by the companies and the boards of trade, but also by the general public, to err in that direction long. This, apart from higher considerations, which it may astonish the writer to learn, have weight with his brother professionals at sea, as well as ashore.

Slurs cast upon an isolated and hard-working body of men from beneath the ægis of a powerful journal, by a writer who has nothing to show for his "fears" but his fancies, do more harm than he is, perhaps, aware, and are little better than so many stabs in the dark. J. Fourness-Brice, M.D.,

Member of the British Medical and British Medical

R.M.S. *Germanic*, New York. Temperance Associations.

An Appetising Disinfectant.

With regard to the present controversy about "Terebene," will you allow me to quote the following (nine years old) in favour of Dr. Bond's preparation?

In 1877, I was called to see a case of caries of the pelvic bones, in which the smell was quite unendurable, the whole household being sickened by it. Many disinfectants had been tried in vain; I suggested terebene. A letter from the patient's sister, which by accident I have come across, tells of the result.

"Don't you think you should have cautioned my parents as to the probable increase in their butcher's bills when you told us to try terebene?....My sister took double the quantity of food. Nurse said, 'since you have used that stuff, I eat as much at one meal as I used to eat in the day, and quite enjoy it.'.... It must have some magical powers." Colin G. Campbell.

Uppermill, Saddleworth.

Army, Indian and Naval Medical Services.

The following questions in anatomy and physiology, surgery, medicine, chemistry, zoology, botany, and physics, were submitted to the candidates at the examination on February 8th and 9th.—*Anatomy and Physiology:* 1. Certain bones enter into the formation of the orbit. Describe the share which each bone takes in the construction of that cavity. Give a brief account of its contents, describing the relative positions of all the parts you name (this does not include the anatomy of the eye). 2. Describe the origin, distribution, and anatomical relations of the arteries, and their branches which supply the foot with blood. 3. Describe the anatomical relations, connections, and structure of the large intestine, giving also an account of its functions, and of the processes carried on in that portion of the intestinal canal. 4. What are the origin, anatomical relations, distribution, and functions of the glosso-pharyngeal nerve and its branches? 5. Describe the dissection by which you would expose the lingual artery, giving an account of the relative position of neighbouring parts.—*Surgery:* 1. Describe the various conditions of an artery which may give rise to an aneurysm. Under what circumstances, in a case of politeal aneurysm, would ligature of the femoral artery be imperative, without waiting to test the effect of other measures? 2. What are the general external characteristics of the following calculi: 1, uric acid; 2, oxalate of lime; 3, phosphate of lime. What is the explanation when two of these form a single calculus? Describe the microscopical appearance of crystals of oxalate of lime and uric acid. 3. What tissues does enchondroma most commonly affect? What are its general and microscopical characteristics? 4. Describe the causes, symptoms, and usual results of acute periostitis, and the treatment under each condition. 5. Describe the fractures to which the neck of the femur is liable, in what direction the force must be applied to produce either variety, and the treatment to be adopted in each. 6. What are the conditions known as "concussion of the brain," and in what respect do they differ from that of "compression?" What treatment should be adopted in "concussion of the brain?"—*Medicine:* 1 and 2. The histories of two cases, one taken from Dr. C. J. B. Williams's *Life and Work*, p. 351, the other from Dr. Murchison's *Lectures on Diseases of the Liver*, were given for critical analysis and commentary. 3. Describe the characteristic lesions in a typical case of enteric (typhoid) fever when death has taken place towards the end of the second week, and give an account of the stages through which the lesions may pass. 4. Finding a patient comatose and stertorous, of whom you can obtain no history, you are required to diagnose as between narcotic and alcoholic poisoning, uræmia, epilepsy, or external injury on the one hand, and from apoplexy on the other. State the main points on which you would rely in distinguishing between these conditions. 5. What do you understand by "cardiac tonics?" Name the medicines used as such. Describe their action on the heart in full and in poisonous doses (defining such doses); and mention the kind of cases and the conditions of the heart in which cardiac tonics may be of use; and also the risks attending the administration of them. *Chemistry:* 1. What is ammonia? Give its symbol. Describe some process by which it may be prepared. 2. Describe the action of chlorine as a bleaching and a disinfectant agent. 3. By what common properties are chlorine, bromine, iodine, and fluorine distinguished from the other elements? 4. To what extent may carbonic acid accumulate in the air of a room beyond the normal amount in the atmosphere, without rendering the air of the room unfit for human respiration?—(Not more than one question in each of the following subjects was to be answered.)—*Zoology:* 1. Refer to its subkingdom, class, and order the Red Coral of commerce. 2. Contrast the respiratory system of the whelk (*Buccinum*) with that of the snail (*Helix*). 3. What are the most important modifications presented by the sternum in birds? Give examples.—*Botany:* 4. Describe a typical vegetable cell, and cite an example of a plant whose grade of differentiation never passes beyond that of a simple cell. 5. What is the most characteristic action of the leaves of plants on the atmosphere? How is this modified by the presence or absence of sunlight? 6. Point out the difference between a syncarpous and an apocarpous ovary. Give an example of each from genera contained in the *Pharmacopœia.*—*Physics:* 7. What is electrical induction? Describe the changes in which this phenomenon essentially consists. 8. Explain the formation of dew. 9. What is the law which expresses the loss of weight of a solid body when immersed in a liquid.

Pasteur on Hydrophobia.

Our Paris correspondent writes: In the Journal of March 13th, page 530, Mr. Macnicol points out an error in our article on Pasteur on Hydrophobia, with regard to the interval of time that elapsed between the moment of the bite and the child's appearance at M. Pasteur's laboratory. It was a *lapsus calami* on our part. Nevertheless, we are correct in attributing M. Pasteur's serious prognosis more to the gravity of the bite than to the delay. The wound extended over an area of from 12 to 15 centimètres. The analysis of M. Pasteur's note, published in the *Comptes Rendus* of the Academy of Sciences, states this very clearly; and the present answer is authorised by M. Pasteur. M. Pasteur has more recently stated that he regrets that the child's parents did not tell him that she had complained of headache. Pain in the region bitten is a forerunner of the period which precedes death. Had M. Pasteur been told of this symptom, he should have recommenced treatment, and he states he might possibly have saved the child.

The Radical Treatment of Hernial Sacs by Torsion.

Mr. C. B. Ball, Dublin, Surgeon to Sir Patrick Dun's Hospital, and University Examiner in Surgery, referring to the notice in the Journal of March 13th, stating that Mr. Richard Davy had adopted this practice, notes that, at the Belfast meeting of the Association, he read a paper on the same subject. It was published in the Journal of September 6th, 1884, and has been reproduced, either complete or in abstract, in several British and foreign periodicals. Mr. Ball believes that this simple procedure had not been put in practice before the date of this paper. He has since treated eight additional cases, all of which have been kept under observation up to the present time. Some of the herniæ were extremely large, with widely open inguinal canals, yet the cure appears to be absolute in every instance. Only one wears a truss at the present time. This was a case operated on six weeks ago, and Mr. Ball believes that, in this instance, the instrument might now with safety be discarded.

Dr. Hughes Bennett on Spastic Paralysis.

Mr. Hughlings Jackson writes: There is one error in the report of my remarks (British Medical Journal, March 6th, p. 448), after the reading of Dr. Hughes Bennett's paper on Spastic Paralysis. I do not dissent from, but accept, Dr. Gowers' hypothesis of destruction of inhibitory spinal centres in cases of spastic paralysis.

Childbirth during an Attack of Small-Pox.

I am much obliged to the several correspondents who have noticed my incidental and doubtfully expressed statement—that a woman suffering from variola, scarlatina, and so on, cannot contemporaneously give birth to a living uninfected child—so far as that statement relates to the above disease. Personally, I have nothing to support my belief, all my few cases of variola having occurred amongst male patients; it was founded, however, on the records of many eminent authorities, of which I may quote two. Tanner writes (*System of Medicine*, vol. i, p. 273): "Pregnant (variolous) women abort, or they are prematurely delivered, the fœtus being more generally dead than not." And Marson (Reynolds' *System of Medicine*, vol. i, p. 449) says: "Abortion is very apt to take place—the child is generally born dead, but not invariably so—sometimes both mother and child do well." And at p. 440 he mentions, "The existence of small-pox on the fœtus at birth, which must have gone through the stage of incubation, the primary fever, and early days of eruption, before it was born. We have several times seen children who were born with the eruption of small-pox out on the body, but modified as it is on the mucous surfaces. Mead (*De Variolis*, cap. iv) imagined that persons who were insusceptible of small-pox, had possibly gone through the disease before birth." But Heberden and Cotunnius, on the other hand, were of opinion that the disease could not be communicated to the fœtus *in utero*, because they could find no pustules on the bodies of those which were, they say, often expelled prematurely and dead from the womb. But the explanation probably is, that they were extruded before the pustules had had time to form, but had, nevertheless, died from the transmitted effects of the disease. Now, the pustules only form perfectly on the skin or a mucous surface, such as a prolapsed rectum, which is freely exposed to the air; but a fœtus *in utero* can hardly be said to have any external surface, and its skin is almost in the condition of a mucous membrane; therefore, if papules form at all, they would in many cases stop short in that stage, and leave no traces, or the disease might even more probably assume the form of *variola sine eruptione*, so graphically described by Sydenham, and seen by De Haen and Marson. And in some, at least, of the cases quoted by your correspondents, the mothers would have been well vaccinated, and the disease thereby greatly modified, and rendered, perhaps, milder still by its filtration through the placenta. And in all, we may assume, the children were vaccinated immediately after birth, and we know (Marson, *Op. cit.*, p. 485) that a person absolutely infected by small-pox may have it arrested by the relatively more rapid development of vaccinia. And, again, some persons seem to be really proof against its invasion in any form. Therefore, my supposition may still be correct, for the following reasons. 1. Some of the apparently uninfected children born when the disease was fully matured in the mother had passed through all its stages *in utero*, and so lightly or in the form *sine eruptione*, as to show no after-evidence of it. 2. Although present, it had been arrested by vaccination. 3. They were insusceptible to the disease.

As regards scarlatina, I have seen four illustrative cases. In two, the child was born dead, with clear evidence of the disease. In the third, it lived a few days, and then died anasarcous. In the fourth, the skin was shed rather than desquamated on the third day, but the child survived. The mothers all did well.

But all this is, I hope I may be pardoned for saying, of little relative importance. The question about which I wrote, and am most anxious to gain information, is this: Are we to look upon the diphtheritic growth as the cause or the result of diphtheria?

G. F. Masterman.

Yorke House, Stourport.

Medical Practice in the Colonies.

If "Verbum Sap" knew anything at all about Australia, he would not have expressed any surprise, in the Journal of November 28th, at my refusing a country practice of £300 a year. It would pay no one to work a practice of that amount; and, as a matter of fact, I am sure nobody is attempting it. A skilled labourer or mechanic will earn about £185 *per annum*, working only eight hours a day. The *Argus* daily contains advertisements from medical men, soliciting information as to where they can locate themselves. During the past nine months, three medical men have started in Ballarat and three in Sandhurst. What town at home would stand such an influx unless it were growing in population? and neither of the above is. It is a delusion to speak of "the vast tide of emigration continually flowing into Australia." Including New Zealand, it only amounted during the past eleven months to 38,000; and this, be it remembered, includes a very large number of returning colonists, invalids, and commercial travellers; so, to obtain a correct estimate, the arrivals from Australia must be deducted. I would ask "Verbum Sap" if he really think that these emigrants, who, for the most part, land with hardly a pound in their pockets, are likely to prove remunerative patients? Queensland is the only colony on this continent bringing out emigrants; and the marvel is how it pays her to do so, seeing but few of them care to remain in a country and climate of that description; they, for the most part, emigrate south.

The idea as to "the great value attached to British medical degrees by the colonists" is self-flattering, but quite erroneous. The degrees held by men here are for the most part of that description, so I fail to perceive what benefit the new arrival is to derive. The tendency is rather to support local institutions, and the men likely to do the best are those who are colonial born. Some holding only the Melbourne University degree are doing large practices; this is only natural, for they have the advantage of a colonial connection. It is rather a common supposition to imagine that the country is full of an ignorant and hard drinking set of medical men; this is not true. Many who drink do not find the evil habit at all detrimental, as the following extract from a medical man in an up-country town shows. "The community here are an unthinking lot, and seem to estimate a medical's capabilities by the amount of liquor he can consume, and how drunk he can get; the greater beast he makes of himself when drunk, the cleverer the man."

A Member.

On Induction of Premature Labour.

Dr. Ilia F. Balandin, superintendent at the Tontanka Lying-in Hospital (Povivalnyi Institüt) in St. Petersburg, states (*Vratch*, No. 2. 1886, p. 39), that from January 1st, 1881, to September 1st, 1885, 3,344 patients have been delivered at the institution. Not less than 15 per cent. of them had contracted pelvis. In seventeen cases, premature labour was induced; one of these patients died from an accidental cause, while the remaining sixteen rapidly and completely recovered without a slightest febrile rise of the temperature. Ten children were born alive; two of them subsequently died. The author regards the procedure, when conducted under the strictest antiseptic precautions, as absolutely safe, and technically simple. The simplest method is puncture (by means of a sound) of the membranes, after preceding sublimate irrigations (1 in 2,000) of the vagina, five times daily for four successive days.

Alcohol in Hospitals.

The result of the inquiry into the use of alcohol in hospitals has led to the conclusion that the diet, as prescribed in some of our hospitals, has a tendency to sanction and encourage drinking habits, which lead to drunkenness. It is not proposed to charge hospital medical officers with intending to produce this result, but to point out that their practice naturally tends to promote it.

A great attachment to alcoholic drinks is still shown, notwithstanding the strong declaration made in 1847 by the late Sir Benjamin Brodie and 2,000 medical men, "That the most perfect health is compatible with total abstinence from all intoxicating beverages."

I will give my reasons why this subject should be investigated, in order to correct a great abuse, the result of a blind attachment to antiquated habits, and an unwillingness to take the trouble to inquire and profit by modern discoveries.

I am a subscriber to the London Hospital, and obtained the report for 1884, and found there had been in that year 8,565 patients, and £1,350 6s. 7d. spent in alcoholic drinks, besides paying £374 13s. 9d. in lieu of rations to officers. After much trouble, having to apply more than once to the Committee for explanation about these alcoholic matters, I came to the conclusion that there is no accurate account kept of alcohol used for patients separate from that used by the medical men, officials, nurses, etc., the whole staff being reckoned at 250 persons.

In the course of my inquiry, I procured a copy of the diet-table, and found that, for full diet, the medical staff were at liberty to prescribe one pint of porter daily. I also learnt that, at the Middlesex, the Westminster, and the Royal Free Hospitals, no alcohol forms any part of daily diet. On this, I made a remonstrance to the Committee of the London Hospital, and pointed out that, for twelve years the Temperance Hospital had carried on a successful practice with a low rate of mortality without the use of alcohol, and had, therefore, proved that the pint of porter daily was not needful, that the giving it was a mischief, and was fostering a dangerous habit.

It is clear that, in many hospitals, alcoholic drinks are a source of danger. The question also naturally arises whether any money subscribed in charity for the use of the sick and suffering should be applied to supply luxurious drinks for medical men, officials, nurses, etc.

Unless our hospital reports be framed with much more care, and an accurate account given of what is used by the patients distinct from officers, nurses, and others, the numbers given, and the quantity daily allowed, it will be impossible to form a proper estimate of the management, and to check irregularities.

From the present hospital report, it is mostly impossible to decide how much is used in the hospital proper, and how much by officers, nurses, etc.

In the present day, when many medical men have discovered that, for the sake of their own health, it is good for them to be partial, if not total, abstainers, I imagine a small additional money payment, instead of alcohol, would be acceptable, while cocoa, coffee, milk, or tea, would be better for the nurses and attendants. I hope I have shown the need for this inquiry. I have obtained the information that there is a hospital in the London district where accounts are carefully kept; and find that, in the year 1884, they had 2,540 patients, and 106 medical men, nurses, and attendants. On patients, £320 10s. 9d. was spent on alcohol. On 106 officers and others, £218 18s. 10d., or nearly 70 per cent., was spent. Much may be learnt from some of our country hospitals, where little is spent on alcohol compared with London, notably, Manchester, Leeds, Birmingham, Chester, and Sunderland. I hope some one will be able to show how their cures and their rate of mortality compare with the London district.

Sydenham. Geo. Sturge.

Damp and Diphtheria.

On reading Mr. Nelson Hardy's communication under the above heading in the Journal of March 13th, I was struck by the very favourable results of the seven cases of diphtheria which he reports. That seven cases of diphtheria should occur without a single death appears to be opposed to the teaching of our standard works on medicine, and, I may add, to my own experience of the mortality of true diphtheria. In Fagge's *Principles and Practice of Medicine*, the average mortality is stated to be from 30 to 40 per cent., and, when the larynx is implicated, as high as 95 per cent.; in Quain's *Dictionary of Medicine*, the rate of mortality is much the same, but it is admitted that in occasional epidemics, in which the local manifestation of the disease is limited to the pharynx, the prognosis may be more favourable. In Mr. Hardy's cases, there is no mention of diphtheritic membrane, albuminuria, or paralytic affections, and in no case was tracheotomy required, or, at least, there is no mention of its having been performed. Is it unreasonable to assume that these cases were examples of that variety of sore-throat which occurs in persons weakened by unhealthy hygienic surroundings, the symptoms being considerable constitutional disturbance, with whitish-yellow patches of inspissated follicular secretion on the tonsils, and frequently with small, white, superficial ulcers? These cases are common enough in practice, but they are not diphtheria; and although they may cause much local and general discomfort, and subsequent debility, they always ultimately do well, and are not followed by the characteristic diphtheritic sequelæ; so that when one hears of several cases of diphtheria resulting so favourably, it seems natural to be somewhat doutful as to the real nature of the disease. True diphtheria, with its usual extension to the air-passages, is an extremely fatal malady, recoveries in most cases being brought about by the early performance of tracheotomy. When examining the question of the connection between damp and the development of diphtheria, we must be assured that we are dealing with the real disease, if any value is to be attached to the result. If these seven cases were really genuine diphtheria, I feel sure that the profession would be indebted to Mr. Hardy if he would make known the treatment he adopted to attain such happy results.

H. Fraser Stokes.

Highbury Crescent, N.

An Agreeable Disinfectant.

It is of importance in recommending deodorising or disinfecting preparations, to have some regard to their relative agreeableness from the point of view of smell, etc., and the number of such preparations which comply with the exigences of fastidious patients, and at the same time possess any genuine properties of this description, is by no means large.

I have for some time employed a solution of peroxide of oxygen (the so-called ozonic ether) in Rimmel's toilet vinegar as a spray, etc., with the most satisfactory results so far as my patients' tastes are concerned. The ozoniser of the same manufacturer, which consists of the *débris* of various aromatic woods impregnated with eucalyptol is also a very convenient and elegant preparation in good class practice. The popularity of these fragrant and useful deodorisers among patients emboldens me to call attention to their value. A. S. V. G.

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Royal University of Ireland Calendar for 1886. Dublin: A. Thom and Co. 1886.

Practical Human Anatomy. By F. D. Weisse, M.D. (Illustrated.) New York: W. Wood and Co. 1886.

A Short Manual of Chemistry. By A. Dupré, Ph.D., F.R.S., F.C.S., and H. Wilson Hake, Ph.D., F.C.S., F.I.C. (With coloured table of Spectra.) London: C. Griffin and Co. 1886.

Unicode: The Universal Telegraphic Phrase-Book. London: Cassell and Co.

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THE CROONIAN LECTURES

ON

)ME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

)elivered at the Royal College of Physicians, London, April 1886.

By P. W. LATHAM, M.A., M.D., F.R.C.P.,

'ning Professor of Medicine in the University of Cambridge; Senior Physician to Addenbrooke's Hospital, Cambridge.

Lecture I.

. President and Gentlemen,—In rheumatism, gout, and diabetes, have three disorders about the pathology of which there is still ch that is obscure and unsettled. On this ground alone, therefore, y present a very attractive and interesting field for investigation study; and the interest is intensified by the conviction that a rer insight, as regards the changes which take place in either of se disorders, would furnish the clue by which to unravel many he most important phenomena which are associated with other ases.

class these three disorders together, because they seem to possess rtain relationship with each other. Cases occur, in which it is cult to decide whether the disease must be regarded as rheumatic is gouty; not unfrequently, transient diabetes appears as the harger of a gouty attack; and on the other hand, gouty, rheumatic, euralgic pains are very common accompaniments of diabetes. In ve have changes, differing however in character, showing themes in the blood; the result of abnormal metabolism, either in the cular or in the glandular tissues.

hat are the changes which take place in the tissues, or in the d? In attempting to answer these inquiries, we meet at the very et of our investigation with a most serious difficulty. Before we attempt to unravel the changes which will occur in any particular ue or fluid, either in health or in disease, we must know what is the titution of the particular substance we are about to investigate. o not mean its ultimate chemical composition—that is easily ved at—but its proximate constituents, its structural formula. It is almost superfluous to make such a statement. But the difficulty ch presents itself is, that we do not know what are the proximate ents which make up living tissue; nor what are the chemical nges which take place as it performs its function; nor the alteran the arrangement of its molecules, as it passes from an active n effete state. By chemical investigation, it has been shown that ous complex bodies which did not exist as such in the living tissue be extracted from the different tissues after death; in the pro- of dying, a molecular change of some kind takes place; the ulti- e atoms are no longer arranged as they were in the living state, new substances are formed. The chemical features of dead and g tissues are strikingly different from each other. Blood, for ince, when shed from the vessels of a living body, is perfectly fluid; moment it is shed it undergoes changes; in a short time coagula- takes place, and a certain substance, fibrin, appears in the blood na, the coagulation being the result of a chemical process between in factors in the blood and the conversion of living *plasmine*, or part of plasmine (fibrinogen) into fibrin.

living muscle possesses "irritability," which it loses in dying, is succeeded by what is termed "rigor mortis," during the onset nich, chemical change takes place, and the muscle, being previously ral or faintly alkaline, acquires a distinctly acid reaction; and change is accompanied by a large and sudden development of nic acid. From dead muscle, by a certain process, we can obtain sin, one of the proteids, which does not exist, however, in that in living muscle. From living muscle we can obtain a slightly scent substance, termed *muscle-plasma*, which at first is quite , but when exposed, at the ordinary temperature, becomes a solid , splitting up afterwards into clot and acid serum. The loose, ular, and flocculent clot is myosin, which has been produced by chemical change in the living plasma. The serum contains proteid substances, serum-albumin, etc., closely resembling in and fibrin in their properties, and more especially in their cal composition.

Now, notwithstanding numerous researches, no definite agreement has been arrived at as to the constitution of dead proteid or albumenoid substance, or as to the manner in which the various substances, leucine, tyrosine, etc., are contained in it. The formula by which, according to Lieberkühn, a proteid or albumenoid may be approximately represented, is

$$C_{72}H_{112}N_{18}O_{22}S$$

and this, according to Hlasiwetz and Habermann, by hydration, may be split up into aspartic acid, glutamic acid, leucine, tyrosine, and ammonia. Schützenberger obtained other products of decomposition, but none of the attempts hitherto made to assign a molecular structure to the substance have been considered successful. If such is the case as regards dead tissue, it may appear somewhat presumptuous and rash on my part, to endeavour to assign a molecular structure, chemically, to living tissue. But, if this problem could be solved, if we were acquainted with the normal chemical changes which take place in the proximate constituents of a tissue in health, and which, when modified, produced disease, what a flood of light would be thrown upon many points in pathology and therapeutics, which at present are very dimly comprehended; and here I need only refer to the action of so-called alterative remedies, such as iodine, bromine, mercury, and arsenic. Even at the imminent risk of failure, then, I think it is worth while to make some attempt to solve the problem, and to bring forward some of the points which have been suggested to me by the action of remedies in disease. I may at least advance a theory which to myself appears to explain many changes in the tissues; and I shall be content if, whilst endeavouring to arrrive at the truth, what I say may direct attention to the subject, and be useful to others more competent than myself to work out its solution.

A certain number of substances which can be obtained from albuminous material, or which are developed in the animal economy, can be produced in more or less diverse ways in the laboratory—lactic acid, leucine, glycocine, etc.

In examining and investigating the various methods by which these bodies may be prepared artificially in the laboratory, we come upon the remarkable fact that a large number of them can be obtained from a particular series of cyanogen compounds, the so-called cyan-alcohols or cyanhydrins—bodies which may be obtained by oxidising the various alcohols, and so forming the aldehyde, and then combining this with hydrocyanic acid. For instance,

$C_2H_5.HO+$	=	$CH_3.CHO+H_2O$
ethyl alcohol		ethaldehyde
$CH_3.CHO+HCN$	=	$CH_3.CH(CN)OH$[1]
ethaldehyde		cyanathylic alcohol.

Now these cyan-alcohols are very unstable bodies, readily undergoing change. Treated with ammonia, they form a series of cyanamides, which also are very unstable, and easily undergo condensation, being converted into imido-nitriles with elimination of ammonia. These facts at once suggest the inquiry: Have we not in these cyanogen compounds substances possessing some properties that belong to living tissue, namely, those of undergoing intramolecular change, and also condensation? And, further, if from these substances we can obtain the various products which result from the disintegration of albumen, may not albumen itself be simply a compound made up of these elements?

Let me indicate some of the animal products which may be obtained from these cyan-alcohols, and show how these various substances are formed.

Leucine is very largely diffused in the animal organism, and may be obtained by various processes from albumen, flesh, gelatine, casein, etc.[2]

By oxidising amylic alcohol with potassium chromate and sulphuric acid, and distilling, we obtain amylic or valerianic aldehyde[3]—

$C_5H_{11}.HO+O$	=	$C_4H_9.CHO+H_2O$
amylic alcohol		valerianic aldehyde

Mixed with aqueous ammonia, the aldehyde is converted into valeral ammonia, and this, digested with hydrocyanic acid and hydrochloric acid, is converted into leucine—

$$C_4H_9.CHO+NH_3=C_4H_9.CH(NH_2)OH^4$$

valerianic aldehyde — valeral ammonia.

$$C_4H_9.CH(NH_2).OH+HCN=H_2O=C_4H_9.CH\begin{cases}NH_2\\COOH\end{cases}+NH_3^5$$

valeral ammonia — leucine

This is the usual way of obtaining leucine artificially; but Tiemann

[1] Miller's *Elements of Chemistry*, Part III 1880, p. 736.
[2] Watt's *Dictionary*, vol. iii, p. 574.
[3] *Ib.*, vol. v, p. 973.
[4] *Ib.*, vol. v, p. 974.
[5] Fownes, *Manual of Org. Chem.*, 1877, p. 385.

has shown[6] that the amido-acids, both of the fatty and aromatic series, may be obtained by converting the aldehydes and ketones into cyan-alcohols, and then into amido-nitriles or cyanamides. We may consequently also have the following changes:

$$C_4H_9.CHO + HCN = C_4H_9.CH\begin{cases}OH\\CN\end{cases}$$

valerianic aldehyde — pentene cyan-alcohol

$$C_4H_9.CH\begin{cases}OH\\CN\end{cases} + NH_3 = C_4H_9.CH\begin{cases}NH_2\\CN\end{cases} + H_2O$$

pentene cyanamide

$$C_4H_9.CH\begin{cases}NH_2\\CN\end{cases} + 2H_2O = C_4H_9.CH\begin{cases}NH_2\\COOH\end{cases} + NH_3.$$

leucine

Leucine prepared in this way is not quite identical with animal leucine. The explanation I venture to suggest is, that just as sarcolactic acid is a compound of ethidene and ethene lactic acids, so leucine is a compound of several amido-acids, the molecule C_5H_{10} being made up in different ways

$$C_3H_6.CH_2.CH\ ;\ (CH_2)_3CH_3.CH\ ;\ \text{etc.},$$

or it may be prepared in the following manner:—

By the oxidation of the pentyl alcohol, diethyl carbinol, we obtain diethyl ketone:[7]

$$C_5H_{11}.HO + O + O = H_2O + (C_2H_5)_2CO$$

diethyl carbinol — diethyl ketone

Tiemann[8] has shown that this, with hydrocyanic acid, is converted into a cyanhydrin, which, acted upon by ammonia and then by an acid, produces leucine—

$$(C_2H_5)_2CO + HCN = (C_2H_5)C\begin{cases}OH\\CN\end{cases}$$

diethyl-ketone-cyan-alcohol

$$(C_2H_5)_2C\begin{cases}OH\\CN\end{cases} + NH_3 = H_2O + (C_2H_5)_2C\begin{cases}NH_2\\CN\end{cases}$$

cyan-amide

$$(C_2H_5)_2C\begin{cases}NH_2\\CN\end{cases} + 2H_2O = (C_2H_5)_2C\begin{cases}NH_2\\COOH\end{cases} + NH_3$$

$$= C_5H_{10}\begin{cases}NH_2\\COOH\end{cases} + NH_3$$

amido-diethyl acetic acid or leucine

Butene cyan-alcohol $C_4H_8\begin{cases}OH\\CN\end{cases}$—may in like manner be prepared from the butyric aldehydes, from aldol or butene glycol, and from one form of this we obtain Amido-isovaleric acid, which occurs in the pancreas of the ox.[9]

$$(CH_3)_2CH.CH\begin{cases}OH\\CN\end{cases} + NH_2 = (CH_3)_2.CH.CH\begin{cases}NH_2\\CN\end{cases} + H_2O$$

$$(CH_3)_2CH.CH\begin{cases}NH_2\\CN\end{cases} + 2H_2O = (CH_3)_2CH.CH\begin{cases}NH_2\\COOH\end{cases} + NH_3$$

amido-isovaleric acid

Amido-valeric acid or butalanine was also obtained by Schützenberger from albumen.[10]

Similarly by the oxidation of propyl alcohol, propionic aldehyde is obtained, which may be converted into propene cyan-alcohol[11]—

$$C_2H_5.CHO + HCN = C_2H_5.CH\begin{cases}OH\\CN\end{cases}$$

propionic aldehyde — propene cyan-alcohol

By oxidation of isopropyl alcohol, dimethyl ketone or acetone m be produced and then converted into dimethyl-ketone-cyan-al hol[12]—

$$(CH_3)_2CO + HCN = (CH_3)_2C\begin{cases}OH\\CN\end{cases}$$

acetone — dimethyl-ketone-cyan-alcohol

Propene cyan-alcohol may also be obtained, by converting prope glycol into chlor-alcohol[13] and acting upon this with potassi cyanide—

$$\begin{matrix}CH_3.CH.OH\\|\\CH_2.OH\end{matrix} + HCl = C_2H_4.CH_2\begin{cases}OH\\Cl\end{cases}$$

propene glycol — propene chlor-alcohol

$$C_2H_4.CH_2\begin{cases}OH\\Cl\end{cases} + KCN = C_2H_4.CH_2\begin{cases}OH\\CN\end{cases} + KCl$$

propene cyan-alcohol

Each of these cyan-alcohols, treated with ammonia and then wi acids, will yield the corresponding amido-butyric acid, a substan also obtained by Schützenberger from albumen—

$$C_3H_6\begin{cases}OH\\CN\end{cases} + NH_3 = C_3H_6\begin{cases}NH_2\\CN\end{cases} + H_2O$$

$$C_3H_6\begin{cases}NH_2\\CN\end{cases} + 2H_2O = C_3H_6\begin{cases}NH_2\\COOH\end{cases} + NH_3$$

amido-butyric acid

If the cyan-alcohols are treated directly with acids we obtain t corresponding oxybutyric acid—

$$C_3H_6\begin{cases}OH\\CN\end{cases} + 2H_2O = C_3H_6\begin{cases}OH\\COOH\end{cases} + NH_3$$

oxybutyric acid

By oxidation oxy-isobutyric acid is resolved into carbonic acid a acetone, a substance which sometimes appears in diabetic urine—

$$C_3H_6\begin{cases}OH\\COOH\end{cases} + O = (CH_3)_2CO + CO_2 + H_2O$$

oxy-iso-butyric acid — acetone

Ethidene and ethene cyan-alcohols may be prepared (i) by oxid ing ethylic alcohol, and treating the aldehyde so obtained with hyd cyanic acid—

$$C_2H_5.HO + O = CH_3.CHO + H_2O$$

ethyl alcohol — aldehyde

$$CH_2.CHO + CNH = CH_3.CH\begin{cases}OH\\CN\end{cases}$$[14]

alehyde — ethidene cyan-alcohol

(ii) By converting ethene alcohol or glycol into a cyan-alcohol—

$$\begin{matrix}CH_2.OH\\|\\CH_2.OH\end{matrix} + HCl = H_2O + CH_2CH_2\begin{cases}OH\\Cl\end{cases}$$

glycol — chlorhydrin

$$CH_2.CH_2\begin{cases}OH\\Cl\end{cases} + KCN = KCl + CH_2.CH_2\begin{cases}OH\\CN\end{cases}$$[14]

ethene cyan-alcohol

And from these cyan-alcohols the corresponding amido-acids or alanin may be obtained, namely—

$$CH_3CH\begin{cases}NH_2\\COOH\end{cases}\quad\text{and}\quad CH_2.CH_2\begin{cases}NH_2\\COOH\end{cases}$$

α alanine — β alanine

Alanine or amido-propronic acid was also among the products whi Schützenberger obtained from albumen.

Lactic acid, again, is an important product of the animal organis It is developed when a living muscle contracts, and it is pr duced when a muscle dies. The variety of this acid, which obtained by the disintegration of albuminous compounds, and formed during the contraction of tetanus of muscular fibr and hence called sarco-lactic acid, may be regarded as a mixture two kinds of lactic acid[15] the more abundant being paralactic acid ethidene lactic acid $CH_3.CH\begin{cases}OH\\COOH\end{cases}$, the other ethene lact

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[6] *Berichte der deutsch. chem. Gesell.*, xiv, s. 1985. "The amido-acids of the fatty series are easily obtained by the familiar reactions which take place on treating aldehyde ammonia with hydrochloric and hydrocyanic acids, and which led Strecker to the discovery of alanine.....The reactions indicated by Strecker take place unquestionably according to the following general formulæ:

$$R..C\begin{cases}NH_2\\H\\OH\end{cases} + HCN = R..C\begin{cases}NH_2\\H\\CN\end{cases} + H_2O,$$

and

$$R..C\begin{cases}NH_2\\H\\CN\end{cases} + 2H_2O + HCl = R..CH(NH_2)..COOH + H_4NCl.$$

The question arises, whether the cyanamide

$$R..C\begin{cases}NH_2\\H\\CN\end{cases}$$

could not be obtained more readily from the cyanhydrides of the aldehydes

$$R..C\begin{cases}OH\\H\\CN\end{cases}$$

by digesting them with ammonia, expecting the ultimate change to be as follows:

$$R..C\begin{cases}OH\\H\\CN\end{cases} + NH_3 = R..C\begin{cases}NH_2\\H\\CN\end{cases} + H_2O$$

The truth of this supposition has been confirmed by experiment."—*Berichte*, xiii, s. 382.

[7] Fownes, *Manual of Org. Chem.*, 1877, p. 153.

[8] *Berichte*, xiv, s. 1975.

[9] Fownes, p. 385.

[10] *Comptes Rendus*, t. lxxxi, p. 1,110.

[11] Fownes, *Manual of Org. Chem.*, 1877, p. 329.

[12] Fownes, *Manual of Org. Chem.*, 1877, p. 329.

[13] *Ibid.*, p. 176.

[14] Fownes, *Manual*, p. 319.

[15] Watt, *Dictionary of Chemistry*, vol. vii, p. 1160.

$CH_2 . C.H_2 \begin{cases} OH \\ COOH \end{cases}$. Now (i) by treating ethidene cyan-
ol, with acids or alkalies, paralactic or ethidene lactic acid is ob-
ed

$$CH_3 . CH. \begin{cases} OH \\ CN \end{cases} + 2H_2O = NH_3 + CH_3 . CH \begin{cases} OH \\ COOH \end{cases}$$[16]

ethidene lactic acid

) By treating ethene cyan-alcohol in the same way, ethene lactic
is obtained.

$$CH_2 . CH_2 \begin{cases} OH \\ CN \end{cases} + 2H_2O = NH_3 + CH_2 . CH_2 \begin{cases} OH \\ COOH \end{cases}$$[16]

ethene lactic acid

thene cyan-alcohol, $CH_2 \begin{cases} OH \\ CN \end{cases}$. Though methylic aldehyde has
yet been isolated, but only obtained in solution in methylic
ol [17], we may infer from the reactions of the other members of
alcoholic series, that similar changes will be produced here.
by oxidising methylic alcohol the aldehyde will be obtained,
n, combined with hydrocyanic acid, will form methene cyan-
ol.

$$H. CHO + HCN = CH_2 \begin{cases} HO \\ CN \end{cases}$$

methylic aldehyde methene cyan-alcohol

rom this we should obtain amido-acetic acid, or glycocine—

$$CH_2 \begin{cases} OH \\ CN \end{cases} + NH_3 = CH_2 \begin{cases} NH_2 \\ CN \end{cases} + H_2O$$

and $$CH_2 \begin{cases} NH_2 \\ CN \end{cases} + 2H_2O = CH_2 \begin{cases} NH_2 \\ COOH \end{cases} + NH_3.$$

glycocine

ain, by acting on albumenoids with certain oxidising agents,
as a mixture of potassic dichromate or manganic dioxide with
uric acid, Guckelberger[18] obtained the following products:

Caproic acid,	Propionic acid,
Valeric ,,	Acetic ,,
Butyric ,,	Formic ,,

all these acids can be obtained from the bodies under discussion,
y, the cyan-alcohols. By treating them with acids, we have,
f all, the corresponding oxyacid formed.

$$C_nH_{2n} \begin{cases} OH \\ CN \end{cases} + 2H_2O = NH_3 + C_nH_{2n} \begin{cases} OH \\ COOH \end{cases}$$

he oxyacids of the form

$$C_{n1}H_{2n_1} . CH \begin{cases} OH \\ COOH \end{cases}$$

oxidised are converted into CO_2, the corresponding acid of the
series and water,

$$C_nH_{2n} \begin{cases} OH \\ COOH \end{cases} + O_2 = CO_2 + C_{n\ _1}H_{2n\ _1} . COOH + H_2O$$

ne cyan-alcohol $CH_3 . CH \begin{cases} OH \\ CN \end{cases}$, for instance, may be converted
ctic acid $CH_3 . CH \begin{cases} OH \\ COOH \end{cases}$, which, treated with chromic acid
re, is oxidised to formic and acetic acids[19]—

$$CH_3 . CH \begin{cases} OH \\ COOH \end{cases} + O = CH_3 . COOH + H. COOH$$

lactic acid acetic acid formic acid

e formic acid may be further oxidised into carbonic acid and water.
he same way, butene cyan-alcohol is converted into oxy-valeric
$_3H_7 . CH \begin{cases} OH \\ COOH \end{cases}$ which oxidised, is transformed into carbonic
e and butyric acid.[20]

$$C_3H_7 . CH \begin{cases} OH \\ COOH \end{cases} + O_2 = CO_2 + C_3H_7 . COOH + H_2O$$

Oxy-iso-valeric acid iso-butyric acid

n these cyan-alcohols, then, we can obtain the corresponding
-acids, glycocine leucine, etc., and all the acids of the acetic
as well as those of the lactic acid series. This being the case,
ne to the question, Can we reverse the process, as we know can
e chemically in many similar cases? Can the amido-acids be con-
into the cyan-alcohols, and can we then theoretically build up
en from such constituents?

The first step towards this is, I think, indicated in what follows when amylaceous matter or sugar is introduced into the alimentary canal. A certain accumulation of glycogen takes place in the liver, and, further, a considerable quantity of sugar can be slowly injected into the portal vein without any appearing in the urine. The sugar, therefore, as it passes into the liver, loses a molecule of H_2O, and glycogen is formed. We cannot as yet tell how glucose in a living plant is converted into starch, nor can we tell in what way the liver transforms the glucose into glycogen; all we know is that, in some way, in the tissue glucose is dehydrated and glycogen is formed.[21]

$$C_6H_{12}O_6 - H_2O = C_6H_{10}O_5$$

glucose glycogen

Now, in order to obtain the various amido-acids from albuminous tissue, the reverse process must be adopted; the tissue must be hydrated, that is, a certain amount of water must enter into combination with it.[22] Some of these amido bodies are found in the alimentary canal; glycocine and taurine appear as the result of the decomposition in the duodeum of the biliary acids, glyco- and tauro-cholic acids, these two acids by hydration splitting up into cholic acid and glycocine, and cholic acid and taurine respectively.

$$C_{26}H_{43}NO_6 + H_2O = C_{24}H_{40}O_5 + CH_2 \begin{cases} NH_2 \\ COOH \end{cases}$$

glycocholic acid cholic acid glycocine.

$$C_{26}H_{45}NSO_7 + H_2O = C_{24}H_{40}O_5 + C_2H_4 \begin{cases} NH_2 \\ SO_3H \end{cases}$$

taurocholic acid cholic acid taurine

the cholic acid passing off by the intestine, the glycocine and taurine being reabsorbed.

Leucine $C_5H_{10} \begin{cases} NH_2 \\ COOH \end{cases}$ and tyrosine $C_6H_4 \begin{cases} OH \\ C_2H_3(NH_2)COOH \end{cases}$

are also among the substances produced when proteid substances are digested in the alimentary canal. What becomes of them?

"One result of the action of the pancreatic juice is the formation of considerable quantities of leucine and tyrosine. In dealing with the statistics of nutrition, our attention will be drawn to the fact that the introduction of proteid matter into the alimentary canal is followed by a large and rapid excretion of urea, suggesting the idea that a certain part of the total quantity of the urea normally secreted comes from a direct metabolism of the proteids of the food, without these really forming a part of the tissues of the body. We do not know to what extent normal pancreatic digestion has for its product leucine, and its companion tyrosine; but if, especially when a meal rich in proteids has been taken, a considerable quantity of leucine is formed, we can perceive an easy and direct source of urea, provided that the metabolism of the body is capable of converting leucine into urea. That the body can affect this change is shown by the fact that leucine, when introduced into the alimentary canal in even large quantities, does reappear in the urine as urea; that is, the urine contains no leucine, but its urea is proportionately increased; and the same is probably the case with tyrosine. Now the leucine formed in the alimentary canal is carried by the portal blood straight to the liver; and the liver, unlike other glandular organs, does, even in a perfectly normal state of things, contain urea. We are thus led to the view that among the numerous metabolic events which occur in the hepatic cells, the formation of urea out of leucine, or out of other antecedents, may be ranked as one.....Probable, therefore, as this view may seem, it has not as yet been established as a fact."

"The view that leucine is transformed into urea lands us, however, in very considerable difficulties. Leucine, as we know, is amido-caproic acid; and, with our present chemical knowledge, we can conceive of no other way in which leucine can be converted into urea than by the complete reduction of the former to the ammonia condition (the caproic acid residue being either elaborated into a fat or oxidised into carbonic acid), and by a reconstruction of the latter out of the ammonia so formed. We have a somewhat parallel case in glycin. This, which is amido-acetic acid, when introduced into the alimentary canal, also reappears as urea; here, too, a reconstruction of urea out of an ammonia-phase must take place."[23]

Again, "To ascertain the influence of the liver in the formation of urea, Solnikoff has established a direct connection between the portal and jugular veins by means of an India-rubber tube, an operation which, if carefully performed, is borne with impunity. Vascular pressure at first lowered soon returns to the normal. The urinary

wnes, *Manual*, p. 319.
ler's *Elements of Chemistry*, part iii, 1880, p. 723.
big's *Annal*, lxiv, 39. [19] Fownes, p. 325. [20] *Ibid.*, p. 330.

[21] See Foster's *Physiology*, 4th ed., pp. 418-422.
[22] See Schützenberger's experiments, *Comptes Rendus*, ts. lxxx, lxxxi, lxxxiv.
[23] Foster's *Physiology*, 4th ed., pp. 438, 439.

secretion was, however, completely arrested, and was not re-established until urea had been injected into the veins of the animal. The only effect of these injections was to raise the vascular pressure; the results were in no way modified by the preceding section of the splanchnic nerves. If, on the other hand, instead of the portal, the crural vein is placed in communication with the jugular vein, the urinary secretion is unchanged. It is thus clear that the urea which passes out of the system by the kidneys, enters the circulation with the blood which issues from the liver."[24]

So much for the physiological side; let us turn to the pathological. Frerichs[25] pointed out that, in acute atrophy of the liver, the urine contains a large quantity of leucine and tyrosine, and that urea almost or entirely disappears.

It is evident from these statements that these amido-acids, when introduced into the alimentary canal of a healthy animal, are carried by the portal blood into the liver, and there undergo some change, urea being one of the products. It is hardly intelligible, however, that the nitrogen in the fresh nutritive material should immediately be transformed into urea, and as such at once pass out of the system; and I shall endeavour presently to show that this is not the case, and subsequently to show that some of the glycocine, at least, is not concerned in the formation of urea.

These amido-bodies or glycines are capable of uniting with each other (Hofmeister), and it is probable that their molecular weights are at least double as great as their formulæ would indicate.[26] They may be represented by the formula

$$\begin{matrix} C_nH_{2n}.NH_2.O.CO \\ | \qquad\qquad | \\ CO.O-NH_2.C_nH_{2n} \end{matrix}$$

Now, as the function of the liver in the formation of glycogen seems to be the dehydration of glucose, the question naturally suggests itself: What compounds would result from the liver acting in the same way on these duplex or triple glycines; what substances would be produced by their dehydration? Can they in any way be converted into a series of cyan-alcohols?

From two molecules of glycocine dehydrated[27] we should have

$$2CH_2\begin{cases}NH_2\\COOH\end{cases} = CH_2\begin{cases}NH_2\\CO.NH-CH_2-COOH\end{cases} + H_2O$$

glycocine

A very interesting point arises here. In 1828, Wöhler showed that urea $CO\begin{cases}NH_2\\NH_2\end{cases}$ can be produced by molecular transformation of ammonium cyanate $CNO.NH_4$, this change taking place simply by heating a solution of the latter. Pflüger,[28] in calling attention to the great molecular energy of the cyanogen compounds, suggested that the functional metabolism of protoplasm by which energy is set free, may be compared to the conversion of the energetic unstable cyanogen compounds into the less energetic and more stable amides. In other words, that ammonium cyanate is a type of living, and urea of dead nitrogen, and the conversion of the former into the latter is an image of the essential change which takes place when a living proteid dies.[29]

In accordance with this view then, CO.NH in the above formula for the dehydration of glycocine would represent dead nitrogen, and as the substance becomes part of a living tissue, it would be transformed into CNOH.

The two molecules of glycocine, therefore, on passing through the liver would be transferred as follows:

$$2CH_2\begin{cases}NH_2\\COOH\end{cases} = \begin{matrix}CH_2\\CH_2\end{matrix}\begin{cases}NH_2\\CN.OH\\COOH\end{cases} + H_2O$$

glycocine

Similarly

$$3CH_2\begin{cases}NH_2\\COOH\end{cases} = \begin{matrix}CH_2\\CH_2\\CH_2\end{matrix}\begin{cases}NH_2\\CN.OH\\CN.OH\\COOH\end{cases} + 2H_2O$$

glycocine

$$3C_2H_4\begin{cases}NH_2\\COOH\end{cases} = \begin{matrix}C_2H_4\\C_2H_4\\C_2H_4\end{matrix}\begin{cases}NH_2\\CN.OH\\CN.OH\\COOH\end{cases} + 2H_2O$$

alanine

$$3C_5H_{10}\begin{cases}NH_2\\COOH\end{cases} = \begin{matrix}C_5H_{10}\\C_5H_{10}\\C_5H_{10}\end{matrix}\begin{cases}NH_2\\CN.OH\\CN.OH\\COOH\end{cases} + 2H_2O$$

and leucine

and in the same way these compound molecules may be connected together by combining the COOH in one with the NH_2 in the other with elimination of H_2O.

By dehydration of the glycines, then we should have generally

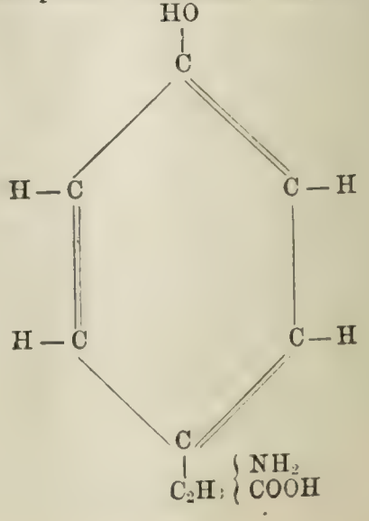
$$3C_nH_{2n}\begin{cases}NH_2\\COOH\end{cases} = \begin{matrix}C_nH_{2n}\\C_nH_{2n}\\C_nH_{2n}\end{matrix}\begin{cases}NH_2\\CH.OH\\CN.OH\\COOH\end{cases} + 2H_2O$$

and

$$6C_nH_{2n}\begin{cases}NH_2\\COOH\end{cases} = \begin{matrix}C_nH_{2n}\\C_nH_{2n}\\C_nH_{2n}\\C_nH_{2n}\\C_nH_{2n}\\C_nH_{2n}\end{matrix}\begin{cases}NH_2\\CN.OH\\CN.OH\\CN.OH\\CN.OH\\COOH\end{cases} + 5H_2O$$

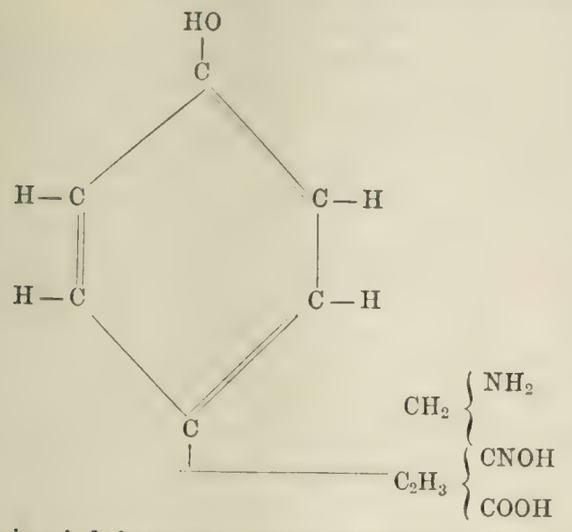
and in this way we arrive at an *atomic* combination of the cyan-alcohols $C_nH_{2n}\begin{cases}OH\\CN\end{cases}$ united to a cyanamide, $C_nH_{2n}\begin{cases}NH_2\\CN\end{cases}$ and an acid $C_nH_{2n}\begin{cases}OH\\COOH\end{cases}$

Another of the glycines; namely, tyrosine $C_6H_4\begin{cases}OH\\C_2H_3(NH_2)CO\end{cases}$ or para-oxyphenyl-amido-propionic acid, which is obtained from albumen and other proteid substances, may be thus represented:



[24] *Lancet*, December 3rd, 1881, p. 971.
[25] *Klinik der Leberkrankheiten*, 1858, s. 206.
[26] Miller's *Chemistry*, 1880, part iii, p. 866.
[27] In dealing with the formation of uric acid later on, I shall show that dehydration of glycocine does take place in the formation of hydantoin in the living system.

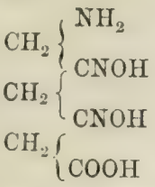
ombining this with glycocine, H_2O being eliminated, we should



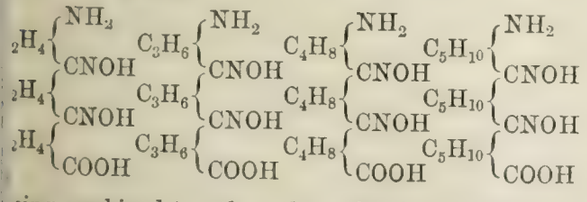
ow, bearing in mind that some compounds of cyanogen by con-ion of three molecules form new compounds such as

$$3CNOH = C_3N_3O_3H_3$$
cyanic acid cyanuric acid

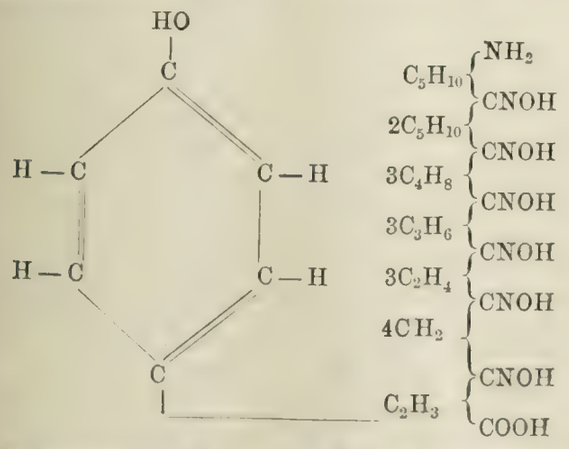
nbine this compound of tyrosine and glycocine (which, as I shall tly try to show, is itself made up of three molecules) with three les derived from glycocine



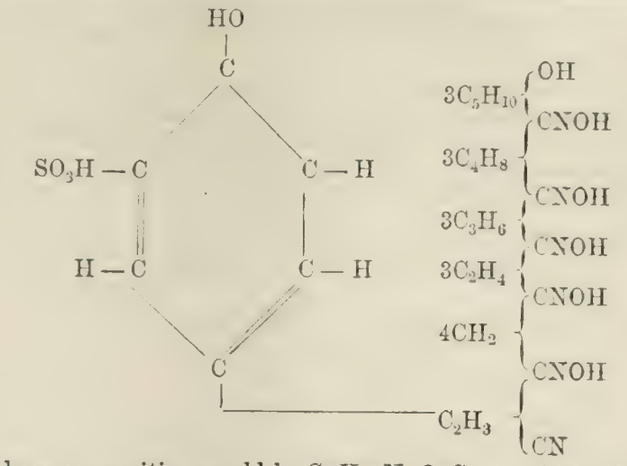
ree molecules derived from each of the other glycines in the ncluding leucine,



eing combined together, the molecule COOH in the one series ing with NH_2 of the other to form CNOH, with elimination of e should have the compound



ger figures representing the number of times that cyan-alcohol ted; and combining the COOH and NH_2 at the ends of the vith other molecules of the same composition, and replacing the hydrogen atoms of the benzene nucleus by SO_3H, as d by the composition of taurine, in which sulphur exists in n of a sulphite, we should have the compound



a body whose composition would be $C_{71}H_{117}N_{17}O_{21}S$; to which, if the molecule CNOH were added, we should have $C_{72}H_{118}N_{18}O_{22}S$, a formula almost identical with that given by Lieberkühn for albumen, namely, $C_{72}H_{112}N_{18}O_{22}S$. I will show further on how the addition is to be made.

Let me assume, for the present, that albumen is built up in this way of cyan-alcohols united to a benzene nucleus, the molecules held together by some force, vital or otherwise, and consider whether a body so constituted would afford an explanation of the changes which take place in the muscular tissue in its active and quiescent state.

If the cyan-alcohols were detached separately, they could, as I have already shown, be converted by hydration into the acids of the lactic acid series; by combining them with ammonia, into the various cyanamides which, hydrated, are transformed into the glycines: glycocine, leucine, etc.

The acids, when oxidised, would be converted into their respective aldehydes, carbonic acid and water,

$$C_nH_{2n}\begin{cases}OH\\COOH\end{cases} + O = C_{n-1}H_{2n-1}.CHO + CO_2 + H_2O$$
acid aldehyde

the aldehyde being then either combined with a fresh molecule of HCN to form a cyan-alcohol

$$C_{n-1}H_{2n-1}.CHO + HCN = C_nH_{2n}\begin{cases}OH\\CN\end{cases}$$

and so again take its place as a constituent of albumen, or be further oxidised into CO_2 and H_2O

$$C_{n-1}H_{2n-1}.CHO + O_{3n-1} = nCO_2 + nH_2O.$$

Or the aldehyde from lactic acid may combine with the SO_3H disengaged from the benzene nucleus forming $C_2H_4\begin{cases}OH\\SO_3H\end{cases}$ which combining with ammonia produces $C_2H_4\begin{cases}OH\\SO_3NH_4\end{cases}$, and this in the laboratory may be transformed into taurine $C_2H_4\begin{cases}NH_2\\SO_3H\end{cases}$.

The glycines or amido-acids, by oxidation, may be converted into the nitriles HCN, $CH_3.CN$, etc.

By the oxidation of glycocine, for instance, we get

$$CH_2\begin{cases}NH_2\\COOH\end{cases} + O_2 = HCN + CO_2 + 2H_2O$$

Leucine gives

$$C_3H_{10}\begin{cases}NH_2\\COOH\end{cases} + O_2 = C_4H_9.CN + CO_2 + 2H_2O.$$

By oxidising asparagin, we get

$$C_2H_3(NH_2)\begin{cases}CONH_2\\COOH\end{cases} + O_4 = HCN + CHO_2NH_4 + 2CO_2 + H_2O.$$
asparagin ammonium formate.

and ammonium formate dehydrated is converted into hydrocyanic acid.

$$H.COONH_4 = HCN + 2H_2O.$$
ammonium formate.

Now the molecules making up these cyan-alcohols may be detached in groups varying with the power which holds them together. The following is one change which may take place. By the hydration or decomposition of the separate cyan-alcohols lowest in the series, we should have ammonia liberated, and the corresponding acid formed, glycollic acid, lactic acid, etc.

$$CH_2\begin{cases}OH\\CN\end{cases} + 2H_2O = NH_3 + CH_2\begin{cases}OH\\COOH\end{cases}$$
glycollic acid

[28] Pflüger's *Archiv*, Bd. x. s. 337.
[29] Foster's *Physiology*, 4th ed., p. 749.

$$C_2H_4\begin{cases}OH\\CN\end{cases}+2H_2O=NH_3+C_2H_4\begin{cases}OH\\COOH\end{cases}$$
lactic acid

the nascent ammonia may, however, combine with the hydroxyl of the next molecule in the chain to form a cyanamide which, hydrated, would form the amido-acid, ammonia being again liberated, and forming a cyanamide with the next molecule higher up; and so on all through the different series. The changes then may be thus represented

$$\begin{matrix}C_2H_4\{OH\\CH_2\{CN.OH\\CH_2\{CN.OH\\CH_2\{CN\end{matrix}+H_2O=\begin{matrix}C_2H_4\{OH\\CH_2\{CN.OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}+CH_2\begin{cases}OH\\COOH\end{cases}$$
glycollic acid.

Two different conditions now present themselves; (i) the molecule $CH_2\begin{cases}NH_2\\CN\end{cases}$ may become detached, or (ii) the larger molecule $\begin{matrix}CH_2\{OH\\CH_2\{CN.NH_2\\CN\end{matrix}$ may be separated from the chain. In case (i) we should have by hydration

$$\begin{matrix}C_2H_4\{OH\\CH_2\{CN.OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}+H_2O=\begin{matrix}C_2H_4\{OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}+CH_2\begin{cases}NH_2\\COOH\end{cases}$$

and so on, the remaining two molecules by hydration being converted into $CH_2\begin{cases}NH_2\\COOH\end{cases}$ glycocine, $C_2H_4\begin{cases}NH_2\\COOH\end{cases}$ alanine, and NH_3, which last passes on to form another cyanamide in the chain.

$$\begin{matrix}C_2H_4\{OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}+H_2O=\begin{matrix}C_2H_4\{NH_2\\CH_2\{CN\end{matrix}+CH_2\begin{cases}NH_2\\COOH\end{cases}$$
glycocine

and

$$C_2H_4\begin{cases}NH_2\\CN\end{cases}+2H_2O=C_2H_4\begin{cases}NH_2\\COOH\end{cases}+NH_3$$
alanine.

If the larger molecule $\begin{matrix}CH_2\{OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}$ is detached from the chain, we have then the elements of creatinine $C_4N_3H_7O$, and the transposition of the atoms may be supposed to take place as follows: if the $CN.NH_2$ is detached, and takes the form $C\begin{cases}NH\\NH\end{cases}$ we should have

$$\begin{matrix}CH_2\{OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}=C\begin{cases}NH\\NH\end{cases}\begin{matrix}CH_2-OH\\|\\CH_2-CN\end{matrix}$$

$$=HN=C\begin{cases}NH.CH_2—CH_2—CN.OH\\N.CH_3-CH_2-CN.OH\end{cases}$$[30]

$$=HN=C\begin{cases}NH——CO\\|\\N.CH_3-CH_2\end{cases}$$

The ordinary formula for creatinine.[31]

The change is, perhaps, more intelligible if we consider the formation of creatine. If before the separation of the molecule $CN.NH_2$ we hydrate the compound, we have

$$\begin{matrix}CH_2\{OH\\CH_2\{CN.NH_2\\CH_2\{CN\end{matrix}+H_2O=\begin{matrix}CH_2\{NH_2\\CH_2\{CN.NH_2\\CH_2\{COOH\end{matrix}$$

$$=CN.NH_2+\begin{matrix}CH_2-NH_2\\|\\CH_2-COOH\end{matrix}$$

$$=C\begin{matrix}\diagup\!\diagup\ NH\ \ CH_2=NH_2\\\diagdown\!\diagdown\ \ \ \ +\ |\\\ \ \ NH\ \ CH_2-COOH\end{matrix}$$

$$=NH=C\begin{matrix}\diagup\ NH_2\\\diagdown\ NH.CH_2-CH_2-COOH\end{matrix}$$

$$=NH=\begin{matrix}\diagup\ NH_2\\\diagdown\ N.CH_3-CH_2-COOH\end{matrix}$$

The ordinary formula for creatine.

A third mode in which the molecules may become detached is the following. The ammonia, when librated by hydration of one of the bodies, may, instead of combining with the hydroxyl of a cyan-alcohol higher up in the chain to form a cyanamide, combine with a molecule CNOH to form $CNO.NH_4$, which, if detached, would in the blood, as out of the body, be converted into urea.

Thus we should have

$$\begin{matrix}C_2H_4\{OH\\CH_2\{CN.OH\\CH_2\{CNO.NH_4\\CH_2\{CN\end{matrix}=\begin{matrix}C_2H_4\{OH\\CH_2\{CN.OH\\CH_2\{CN\end{matrix}+CNO.NH_4$$

and there is formed the next cyan-alcohol in the series

$CH_2.CH_2\begin{cases}OH\\CN\end{cases}$ or $C_2H_4\begin{cases}OH\\CN\end{cases}$, and ammonium cyanate or urea.[32]

$$CNO.NH_4=CO\begin{cases}NH_2\\NH_2\end{cases}$$
ammonium cyanate urea.

In this way, we pass from the lower cyan-alcohols to the higher with the formation of urea; the two molecules of CH_2 combining to form C_2H_4 Similarly,

$$\begin{matrix}C_2H_4\{OH\\CH_2\{CN\end{matrix}\begin{matrix}CNO.NH_4=C_2H_4.CH_2\{OH\\CN\end{matrix}+CNO.NH_4$$

$$=C_3H_6\begin{cases}OH\\CN\end{cases}+CNO.NH_4$$

and

$$\begin{matrix}C_3H_6\{OH\\C_2H_4\{CN\end{matrix}\begin{matrix}CNO.NH_4=C_5H_{10}\{OH\\CN\end{matrix}+CNO.NH_4$$

Here we have not only an explanation of the formation of urea in the tissues, but the reason why the amido-acids obtained from the tissues possess different properties from those made in the laboratory. It may easily be shown that the last cyan-alcohol $C_5H_{10}\begin{cases}OH\\CN\end{cases}$, from which leucine may be prepared, will contain four different forms of $C_5H_{10}\begin{cases}OH\\CN\end{cases}$.

There is another mode, in which the molecules may split up, which is interesting from two points of view. It appears to explain the formation of lactic acid and carbonic acid, when a muscle contracts, or when it dies, and it seems to throw some light on the formation of tyrosine.

[30] We have an example of such a transposition of atoms in the formation of crotonic acid $CH_3—CH=CH—COOH$ from allyl iodide $CH_2=CH—CH_2I$ by its conversion into a cyanide, and thence into the acid. See Fownes, p. 307.

[31] Fownes, p. 614.

[32] Fownes' *Chemistry*, p. 96.

the molecule $CH_2\begin{cases}OH\\CNOH\\CH_2\\CN\end{cases}$ were hydrated, forming

$\begin{cases}OH\\CNOH\end{cases}$ and the portion CNOH then detached, the latter

$\begin{cases}\\COOH\end{cases}$

d be decomposed at once into CO_2 and NH_3, and we should have

$$CH_2\begin{cases}OH\\CNOH\\CH_2\\COOH\end{cases} + 2H_2O = \begin{matrix}CH_2-OH\\|\\CH_2-COOH\\\text{lactic acid}\end{matrix} + CO_2 + NH_3$$

NH_3 combining with some other cyan-alcohol to form a mide.

anges similar to these offer a very simple explanation of the tion of the cyan-alcohols in plants, and as a consideration of changes will help to explain the metabolic changes in the I will briefly discuss them. In plants, CO_2 entering by the , combines with H_2O sent up from the roots, and from these is said to be formed, a volume of oxygen, equal to that of the bsorbed, being exhaled by the plant.

f. Loew and Bokorny, and Pringsheim, have shown that there ubstance in living plasma which has the property of reducing salts, and for this reason is regarded as an aldehyde. The alde- resulting from the combination in the plant of CO_2 and H_2O. sheim gives the following as the reaction; the volume of CO_2 ed, and of O given out, being the same—

$$CO_2 + H_2O = \underset{\text{methylic aldehyde}}{H.CHO} + O_2$$

condensation of the aldehyde glucose is formed

$$6H.CHO = \underset{\text{glucose}}{C_6H_{12}O_6}$$

, by dehydration, is converted into starch

$$C_6H_{12}O_6 = \underset{\text{starch}}{C_6H_{10}O_5} + H_2O$$

if, instead of undergoing condensation, the methylic aldehyde lised, it will be converted into formic acid

$$\underset{\text{methylic aldehyde}}{H.CHO} + O = \underset{\text{formic acid}}{H.COOH}$$

now combines with NH_3, absorbed by the roots, forming am- m formate, which, dehydrated, is converted into HCN.

$$\underset{\text{formic acid}}{H.COOH} + NH_3 = \underset{\text{ammonium formate}}{H.COONH_4}$$

$$\underset{\text{ammonium formate}}{H.COONH_4} = HCN + 2H_2O$$

CN now combines with the methylic aldehyde to form the lcohol $CH_2\begin{cases}OH\\CN\end{cases}$ and from condensation of these molecules, he separation of CNOH, the other cyan-alcohols are formed $\begin{matrix}OH\\CN\end{matrix}C_3H_6\begin{cases}OH\\CN\end{cases}$ etc. The CNOH is with H_2O decomposed into d NH_3, the latter combining with a fresh molecule of formic o be then transformed, as above, into HCN.

n these considerations, then, and having regard to the mode in as I have suggested, urea may be formed, it would appear that the amido-acids are transformed into cyan-alcohols, and pass e liver, condensation takes place, with the formation of higher lcohols, and separation of CNOH, and that this change is con- taking place all through the albuminous chain, the CNOH ombining with NH_3 to form urea or splitting up into CO_2 and In this way, the glycocine in the alimentary canal would, on into the liver, be transformed into $C_2H_4\begin{cases}OH\\CN\end{cases}$ and CNOH, but e no explanation of the origin of the lowest cyan-alcohol. But lants, glucose is a condensation product of methylic aldehyde, en no violent assumption that, in the liver, the glycogen, after ransformed into glucose, is resolved into its elements of six les of methylic aldehyde, and that this, by oxidation, com- n with NH_3, and dehydration, is transformed, as in plants, into est cyan-alcohol of the series, namely, $CH_2\begin{cases}OH\\CN\end{cases}$. This view is ed by the experiments of Nägeli,[32] which showed that albumen

[32] *Sitzungsb. d. Bayr. Acad. d. Wiss.*, 1879.

can be formed by fungi whose nutriment consists exclusively of sugar mixed with ammonia.

Now, tyrosine, when fused with potash, is resolved into acetic acid, ammonia, and para-oxy-benzoic acid.[33] As the other derivatives of albumen can be obtained from the various aldehydes, should not this substance also be derived from the corresponding aldehyde? By combining oxy-benzoic aldehyde or salicylal[34] with HCN, we should have

$$\underset{\text{salicylal}}{C_6H_4(OH)CHO} + HCN = \underset{\text{salicyl-cyan-alcohol.}}{C_6H_4(OH)CH\begin{cases}OH\\CN\end{cases}}$$

Combining this with methene cyan-alcohol, we have

$$CH_2\begin{cases}OH\\CN.OH\end{cases}$$
$$C_6H_4(OH)CH\begin{cases}\\CN\end{cases}$$

which hydrated would form

$$CH_2\begin{cases}NH_2\\CN.OH\end{cases}$$
$$C_6H_4(OH)CH\begin{cases}\\COOH.\end{cases}$$

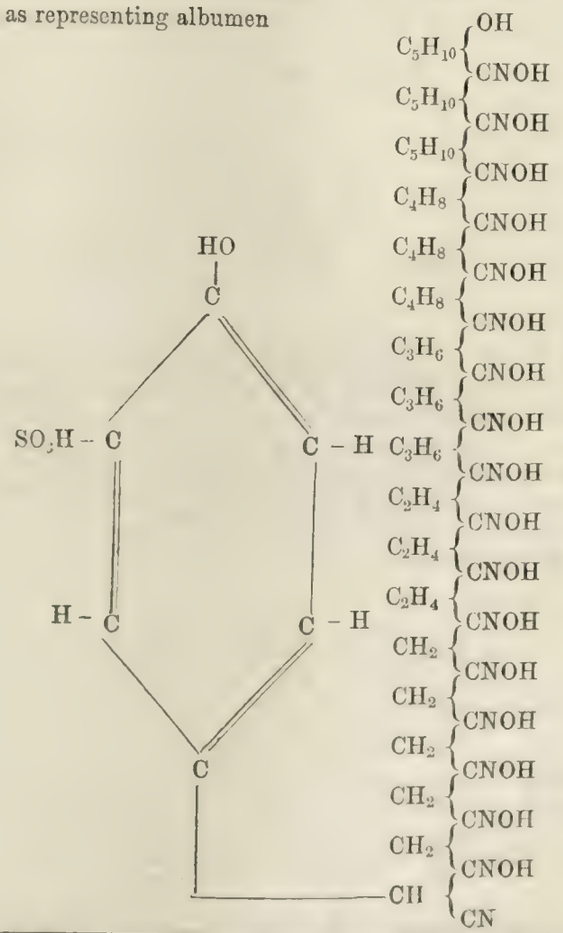
If, now, the molecule CNOH were detached, forming CO_2 and NH_3, the substance would then be converted into tyrosine

$$C_6H_4(OH)C_2H_3\begin{cases}NH_2\\COOH\end{cases}$$

so that, by the condensation of salicyl-cyan-alcohol and methene cyan-alcohol, with elimination of CNOH, we arrive at the constitution of tyrosine. Here, then, we have the molecule of CNOH which was wanting in our formula for albumen. If, therefore, in that formula we substitute for $C_2H_3\begin{cases}OH\\CN\end{cases}$

$$CH_2\begin{cases}OH\\CNOH\end{cases}$$
$$CH\begin{cases}\\CN\end{cases}$$

we have as representing albumen



[33] Fownes, p. 539.

[34] Salicylal is ortho-oxy-benzoic aldehyde—but benzene compounds sometimes undergo isomeric change when distilled with potassic cyanide. Compounds from which resorcin, a meta-derivative of benzene, is obtained when distilled with

a substance whose composition is $C_{72}H_{118}N_{18}O_{22}S$, differing from Lieberkühn's formula $C_{72}H_{112}N_{18}O_{22}S$ only by six atoms of hydrogen.

I have thus endeavoured to show that albumen is a compound of cyan-alcohols united to a benzene nucleus, these being derived from the various aldehydes, glycols, and ketones, or that they may be formed in the living body by the dehydration of the amido acids; that, from a body so constituted, all the different substances may be obtained which have been extracted from albumenoid tissues; that lactic acid is obtained in two ways, either from $C_2H_4\begin{cases}OH\\CN\end{cases}$, or from changes and condensation in $CH_2\begin{cases}OH\\CN\end{cases}$ with the simultaneous development of CO_2, a result which is brought about when a muscle contracts or when it dies; and that urea may be obtained from one series of cyan-alcohols with the production of a cyan-alcohol higher in the series.

Such a compound of cyan-alcohols, therefore, presenting so much resemblance in its properties to albumen cannot, I think, differ very widely (though, perhaps, not absolutely correct) from the molecular constitution of albumen.

Taking this view, then, of the constitution of albumen, the following may be given as a summary of the nutritive changes.

The amido-acids, glycocine, leucine, tyrosine, etc., in passing from the alimentary canal to the liver, are dehydrated, forming a series of cyanhydrins, or cyan-alcohols, attached to a benzene nucleus, and then pass into the circulation. In the tissues, these cyan-alcohols, partly by condensation, partly by hydration and oxidation, give rise to the various effete products which are eliminated from the system chiefly in the form of carbonic acid and urea.

There is still one other point that I do not wish to leave unnoticed. According to Tiemann, the cyanamides $R-C\begin{cases}NH_2\\H\\CN\end{cases}$ are very unstable bodies, and, with the elimination of NH_2, very easily condense into imido-nitriles.[36]

$$2[R-CH(NH_2)\ldots CN]=\begin{matrix}R-CH-CN\\ \diagdown\\ NH\\ \diagup\\ R-CH-CN\end{matrix}+NH_2$$

and

$$\begin{matrix}R-CH-CN\\ \diagdown\\ NH\\ \diagup\\ R-CH-CN\end{matrix}+[R-CH(NH_2)-CN]$$

$$=NH_3+\begin{matrix}R-CH-CN.R\\ \diagdown\\ N-CH\\ \diagup\\ R-CH-CN\end{matrix}\!\!\!

-disease, and after prolonged application of splints. In the case ogressive muscular atrophy, the "claw" condition results mainly atrophy of the interossei. These muscles extend the two distal anges, and flex the proximal; and when their influence is removed, pposite condition prevails, owing to the action of opponents, ly, extension or superextension of the proximal phalanges, and n of the peripheral.

e case from which the drawing was taken was kindly sent me by Sidney Harvey. The patient was a woman aged 27, who was hy in other respects, and the mother of a family. The disease commenced in the left hand at the age of 17 or 18.

nother instance of a similar kind is found in the disease called rhymeningitis cervicalis," where the contraction varies according to art of the cervical region which is affected. If that part from h the median and ulnar nerves emanate be diseased, the muscles lied by the musculo-spiral nerve, remaining intact, produce the of distortion in which the wrist is extended; while, if the upper of the cervical region be the seat of the disease, the muscles vated by the median and ulnar nerves produce quite a different of distortion, in which the wrist is flexed.

eat interest has been taken of late in the effects of alcohol upon heral nerves, and some of our own countrymen have played a inent part in the investigation of them—Wilks, Buzzard, Dresch- Hadden, and others. There is very little doubt that a multiple heral neuritis results from the circulation of this poison, and nces such symptoms as neuralgic pains, anæsthesia, paræsthesiæ, us degrees of paralysis and atrophy, mainly occurring in the sor muscles, ataxia, abolition of tendon-reflexes, vaso-motor dis- s, and occasionally rigidity. Although our knowledge of this ct is not very advanced, it is probable that this rigidity is of the we are now considering, namely, rigidity of the more healthy les which overpower their diseased opponents; and, the latter usually the extensors of the legs, rigid flexion results. Simi- in cases of disease of the peripheral nerves and muscles on the sor surface of the forearms produced by lead, rigidity of the ing flexors is sometimes observed. As I have had an opportunity king a *post mortem* examination in a case of atrophy of the nerves nuscles of the forearm from lead-poisoning, I have brought draw- which illustrate peripheral neuro-muscular disease due to this .

e drawings were made from microscopic preparations of the les of a patient, aged 48, a plumber, who was admitted into St. ias's Hospital under the care of Dr. Bristowe, on March 18th, and died three days after admission, from coma following an otiform convulsion. The patient had had several attacks of inal colic and of gout, and had also had "dropped hands" five years previously, from which he said he made a complete recovery. the two months preceding his admission, he had been labour- nder general dropsy and wrist-drop. His arteries were found to gid, his heart hypertrophied, and his urine albuminous, with ic gravity 1011. He had paralysis, with marked wasting of the les of the forearm, mainly the extensors, and also of the thenar ypothenar muscles, and of the interossei.

the *post mortem* examination, the heart was found to weigh y-two ounces, the valves being competent. The kidneys were acted, hard, and granular on the surface, and weighed eight s. The common extensors of both forearms were pale and atro- , and quite unlike the healthy muscles, the supinator longus among the latter. The posterior interosseous nerve was soft, greyish, while the median and others were firm and white. The scopic sections of the extensor muscles from which the drawings made showed the following peculiarities (Figs. 37, 38, 39, 1).

ngitudinal Section.—(1) Here and there were seen well formed, striated muscular fibres; (2) atrophied, but striated, fibres, extremely thin; (3) waxy-looking, non-striated fibres, some of ize, some very small; (4) strands of wavy tissue where no muscu- ores could be distinguished, but where long rows of nuclei were like necklaces, often running parallel to each other, and quite together; (5) very thick-walled vessels.

ansverse Section showed the muscular bundles very small, each aving a homogeneous appearance, and presenting nuclei irregu- distributed upon it. The nerves were so altered as to be incap- of recognition. The sections of the spinal cord in the cervical showed no evidences of disease. The supinator longus, as is seen in the drawings, was practically healthy.

all these and similar cases, the diagnosis depends upon the elec- eactions of the nerves and muscles in the affected part. For, e the rigidity is directly produced by contraction of the affected muscles, the electric conditions in them closely resemble those of health; whereas, when the distortion is due to atrophy of one set of muscles, owing to disease of the peripheral nerves supplying them, what is called the "reaction of degeneration" is found in them. Setting aside such cases as these, in which the distortion is produced by rigidity, not of the diseased muscles, but of their healthy opponents, there exists still another class, in which contracture results from the shortening of diseased muscles, it is true, but nevertheless does not depend upon true spasm. We may take as an example the following case.



FIG. 38.—Transverse section of the common extensor of the forearm in a case of lead-palsy. The darkly shaded masses in the centre (*a*) are the largest muscular bundles left, most having been reduced to very small dimensions (*b*).

Case of Distortion of Arm due to Shortening of Degenerated Muscles.—On August 11th, 1885, I saw, with Mr. Clutton, a boy aged 5, who had fallen down in April and fractured the lower end of the right humerus. He was treated with anterior and lateral rectangular splints for one month, and was then found to have loss of sensation and of voluntary power in the hand and forearm. The friends took him to Mr. Golding-Bird, who applied electricity daily for one month, without producing any improvement. When I saw the boy, his right forearm was rigidly pronated, and the wrist partially flexed. The fingers were flexed at the peripheral joints, and slightly overextended at the metacarpo-phalangeal joints. On attempting to overcome this condi-



FIG. 40.—Transverse section of the supinator longus muscle from a case of lead-palsy, showing the unaltered muscular bundles (*a a*).

tion and extend the wrist, the deep structures along the flexor surface of the ulna became tense and hard, and, on bending up the elbow-joint, they were again relaxed. The tips of the fingers were anæsthetic as far as the proximal phalangeal joints. The thumb had not lost sensation. The question which presented itself to us was, whether this rigidity was due to muscular spasm, or to shortening of muscles, etc., from disease. Dr. Kilner tested the muscles electrically with me, and found that, while all the extensor muscles of the forearm reacted normally, the flexors could not be brought into action even by the strongest currents. The muscles were therefore clearly in an advanced condition of degeneration. To confirm this conclusion, the child was put well under chloroform, but no change whatever occurred in the limb; all was as rigid as before.

Here, no doubt, we had to do with inflammation and subsequent

degeneration of nerve and muscle, and the cicatricial contraction which accompanies it. Electricity and chloroform are our principal aids in the diagnosis of such cases.

Dr. Alliott, of Sevenoaks, kindly sent me a man, aged 65, who had dislocated his left shoulder-joint five months previously. On examination of the arm, almost complete paralysis of all the muscles was found, with but little alteration of sensation. The elbow, wrist, and fingers were all somewhat flexed, and incapable of extension; but still there was no active contraction of muscles. Even the strongest faradic current produced no effect whatever in them.

In certain cases of long standing facial paralysis, the muscles on the affected side are evidently shortened, for the angle of the mouth is drawn to that side, and the orbicularis orbis partially closes the corresponding eye. And yet the effect produced by speaking or by laughing is most curious, the affected side remaining motionless. In these cases, the electric reactions of the muscles supplied by the diseased facial nerve show almost complete degeneration, which has been accompanied with permanent shortening.

If so many cases of distortion are due to other causes than active contraction of the muscles supplied by the affected nerves, the question suggests itself: Does chronic muscular spasm occur at all from direct irritation of motor nerves? Let us take some of the most frequent and familiar examples of peripheral nerve-disease. Musculo-spiral paralysis is often seen in quite the early stages; but we do not see, nor do we hear the patient describe, muscular spasm as one of its symptoms. The same may be said of most cases of facial paralysis due to peripheral causes. In chronic poisoning by lead and alcohol, various nerve-symptoms are met with, including paralysis, and even muscular rigidity occasionally; but, as has already been pointed out, this is due to the contraction of antagonists, and not of the diseased muscles themselves. In sciatica, from various causes, we meet with twitchings and sudden muscular contractions; but they are very transitory. Again, if we look at those cases where motor or mixed nerves are pressed upon and irritated by new growths, pain is a very prominent symptom, and spasm seems scarcely to occur, though twitchings and transitory contractions are observed. A case which I have already related affords a good example of a tumour pressing upon a purely motor root. The new growth was a myxoma, which grew in connection with one of the left anterior spinal roots, and gave rise to symptoms in the left arm. These were weakness and attacks from time to time of pain and cramp; but no prolonged spasm was ever produced.

Dr. Bristowe has written a paper on Painful Paraplegia in *St. Thomas's Hospital Reports*, vol. xii, in which he relates several cases of paralysis accompanied by pain, which owed their origin to malignant tumours involving peripheral nerve-roots. Some of these cases I saw myself, and also examined *post mortem*. Evidence of spasm occurs in only one case, where the limbs are said to have become stiff occasionally.

Clonic spasm is not unfrequently seen in late stages of facial paralysis, when there is shortening of the muscle from atrophy. Electric examination shows that the latter condition is present, and also that a certain amount of muscular tissue, capable of active contraction, remains. The clonic spasms result from irritation of the nerve and muscle which has survived the process of destruction. In cases of meningitis at the base of the brain, spasm of the muscles supplied by the motor nerves involved is not observed. In spinal meningitis, on the contrary, it is a very marked symptom. Here, however, it is not improbably of a reflex origin, and not due to direct irritation of motor nerves.

Tetany (Fig. 43) is a disease in which the presence of some, although generally trivial, alteration of sensation, increased electric irritability of nerve and muscle, and prolonged muscular spasm, suggest a peripheral cause. The pathology of this affection cannot be said to be known, and opportunities of examining cases *post mortem* rarely fall to the lot of pathologists. Dr. Hadden kindly gave me the opportunity of examining microscopic sections of the nerves and muscles of the affected parts, which were taken from a child who died from diarrhœa, while suffering from tetany. At first I thought there were changes to be made out; but, on procuring sections from the same parts, in a healthy child of the same age, 16 months, who had died of an acute disease, and, comparing them with those from the subject of tetany, I came to the conclusion that there was very little difference between them.

Looking at my own experience, I should say that, while occasional spasm occurs not unusually in peripheral nerve-disease, from direct irritation of the motor filaments, and may even be permanent in disease of the facial nerve, it is quite the exception to find muscular contractions among the marked phenomena of such cases.

Weir Mitchell, who has had a very large experience of injuries and diseases of peripheral nerves, writes thus on the subject (*Injuries of Nerves and their Consequences*, 1872). "Increase of bulk, pro-



FIG. 43.—The hand in a case of tetany.

feration of connective tissue, and wasting of nerve-tubes, are consequences of chronic neuritis." "The nerve-tubes in large part perish waste, and the symptoms affect at first rather the sensory sphere th that of motility. We have pain and anæsthesia, or hyperæsthes but not, as a rule, local convulsions." "In certain cases, the ner wound, in place of causing primary loss of motility, occasions eith sudden muscular contraction, followed by instant loss of power, or, very rare instances, long continued spasm. Tonic contractions muscles are occasionally met with at a later stage of these injuri but are, perhaps, among the rarest of the secondary symptoms."

Looking, then, at the experience of Weir Mitchell and others, may safely conclude that muscular spasm is rarely caused directly chronic disease of peripheral motor nerves.

[*To be continued.*]

ABSTRACTS OF

SIX LECTURES

ON THE

INTESTINAL CANAL AND PERITONEU IN THE MAMMALIA.

Delivered at the Royal College of Surgeons.

BY FREDERICK TREVES, F.R.C.S.,

Hunterian Professor at the Royal College of Surgeons; Surgeon to, and Lectu on Anatomy at, the London Hospital.

LECTURES IV, V, AND VI.

The Insectivora.—The stomach in the insectivora is, in its gene characters, simple; it recalls the stomach of the monotremes. T large protrusion to the left of the gullet, that is so marked in t rodents, is absent. In the shrew, the two diameters of the viscus a about equal. In the hedgehog, banxring, and tanrec, the transve diameter prevails. In the mole, the stomach is of great size, a possessed of a large cardiac sac; the duodenum is large and simp and loosely supported. The "bend" in the intestinal loop is preser but is not very pronounced, owing to the looseness of the duodenu It is an error to state that the intestine in the shrew forms a sing loop with a median mesentery, as in the amphibia. In this anim the loop has been bent upon itself, so that the right side of the mese tery has become the left, as in the higher mammals. In all the i sectivora, the intestine is short; in the shrew, it is three times t length of the body; in the hedgehog, six times; and in the mo seven times. There is no distinction between colon and small i testine; there is no cæcum; the colon is never sacculated. T superior mesenteric artery is distributed upon the plan that obtai in the monotremes, and is totally unlike the corresponding vessel the rodents. The superior mesenteric artery is present. The gre

ntum is extensive, but of rudimentary outline. Three of the ctivora possess a cæcum, namely, tupaya, with a cæcum not un- that of the duckbill; macroscelides, with a cæcum like the dna; and rhynchocyon, with a marsupial-like cæcum. The last- ed animal would appear, if one can judge from the alimentary l alone, to be much more closely allied to the rodents than to the ctivora.

om the standpoint of the alimentary canal, the insectivora would ar to be directly derived from the monotremes. In both, the ach is simple, and has a similar blood-supply. The duodenum e; the intestine is simple and short, and there are no sacculi to the ; the mesentery is wide, and the mode of ending of the mesen- artery is the same in the two classes of animal. Upon the same nds, it would appear that the insectivora can claim no alliance the marsupials. In the latter, the stomach is complex, and liar in its blood-supply; the intestine is long, the cæcum well de- ped, and the colon disposed to be sacculated.

he Cheiroptera.—There is good evidence, founded upon various s, for concluding that the bats are derived from the insectivora. r as the evidence afforded by the alimentary canal goes, that de- ion would appear to be very direct. Three forms of stomach are with in the cheiroptera. 1. The first type is met with he fruit-eating bats, and is best seen in the flying fox opus medius). Here, there is great specialisation. The cardiac ent is developed into a large pouch, while the pyloric segment become enormously lengthened, and, at the same time, much upon itself, and sacculated. The collared fruit-bat shows the mediate stage between the simple stomach of the insectivora, and omplex viscus just described. 2. The second type of stomach is with in the Desmodus—the blood-sucking bat—and is quite ue. The cardiac segment is prolonged in the form of a tubular ss, looking very like small intestine, and that is actually twice ength of the animal's body. It is used for storing blood. The ic segment is abortive, and only two-tenths of an inch separate ppening of the gullet from the opening of the bile-duct. 3. The type is met with in the insect-eating bats, and is practically ical with the stomach of the insectivora. It is, therefore, the minating type in the cheiroptera.

its general characters, the alimentary canal conforms to those with in the insectivora. There are the long free duodenum, hort intestine, the absence of any distinctive features in the colon, he absence of a cæcum. The blood-supply of the bowel is upon ame plan as that met with in the monotremes.

no mammals are the intestines so short as they are in the bats. e insectivorous bats, the gut measures only about two or three the length of the body. One species of vesperugo (V. Kuhlii) be taken as the example of the very simplest form of mammalian ach and intestine.

e stomach is small and globular, the duodenum forms a simple and the rest of the intestine a single coil measuring but little than the length of the animal's body. There is a very simple omentum. All accounts of the alimentary canal in mammals well start from this small individual, since no mammal shows a elementary or less specialised condition.

o bats (Asellia tridens, and a species of vespertilio) present loops e early part of the colon. These loops resemble those met with ne rodents, but the resemblance is apparently accidental.

o bats (Rhinopoma Hardwickii and Megaderma spasma) possess um. In each case, the cæcum reverts to the type met with in onotremes.

e Carnivora.—The general features of the alimentary canal in the vora have been already noticed. The length of the intestine s in the different families after this manner. In the felidæ, it is three to six times the length of the body: in the canidæ about times that length, and in the ursidæ about twelve times.

e steps in the descent of the carnivora can be very well traced, if ce can be placed upon the data furnished by the alimentary .

e line will commence with cats (the felidæ). Here—taking the as the type—there are a simple, human-like stomach, a some- short duodenum, a short intestine, and a very abrupt conical n.

xt comes the hyæna, an animal that displays the first step in the between the felidæ and the canidæ. Here the duodenum is hening, as is also the intestine, while the cæcum has grown to e the size shown in the tiger. Next come the viverridæ—a standing nearest to the dogs. The intestine has now become onger, while the duodenum and the cæcum have again increased. dog follows. In the dog, the stomach is a little modified, there being a separation indicated between the pyloric and cardiac segments. The duodenum is long, and the cæcum has become greatly increased in length, and much twisted upon itself. It is least twisted in the original dog—the wolf—and is, on the other hand, considerably distorted in the foxes. The dog's cæcum can be of little use, so grossly is its lumen disturbed. It has all the aspect of a part that is "going out." It is impossible to conceive it undergoing a further development. With the loss of the cæcum from the alimentary canal of the dog, will appear the alimentary canal of the bear, and so the last state in the line of descent is reached. The ursidæ have no cæcum. Many of them, also, have no superior mesenteric artery. In the racoon, where ileum and colon meet, there is a slight, faintly sacculated distension of the bowel; but it would be difficult to say that it was a genuine cæcum. It is evident, from an examination of the alimentary canal, that the "racoon-like dog" is in reality a dog, and not a racoon.

Arguing from evidence furnished by the alimentary canal, it would appear that the carnivora are descended from some stock of insectivora. They retain the simple stomach, the free duodenum, the short intestine. The colon is not sacculated, and is very short, and in the blood-supply of the bowel the type met with in the insectivora is maintained. It is impossible to conceive them as arising from the marsupials, or as allied to the rodents. These two classes of mammal show, in conspicuous degree, the very features that the carnivora appear ostentatiously to avoid.

The Rodents.—The leading features in the alimentary canal of the rodents can be best followed by taking certain members of the family, in such order as will show the progressive development of the main characteristics. In the rat, the stomach is globular, and there are large and distinct cardiac and pyloric pouches. The duodenum is free; the great omentum simple; the intestines of relatively great length; and the blood-vessels of the stomach and bowel founded upon the type met with in man. The cæcum is stomach-like and wide; the ascending colon is straight, and in the transverse colon is an ill-formed loop. In the gopher, the cæcum is still larger and wider, the ascending colon is still straight, and the colic loop is now very pronounced. In the squirrel, the cæcum reverts to the marsupial type, the ascending colon remains straight, and a second loop appears in the transverse colon. Of these loops, the first is the larger. In the Quebec marmot, there are also two loops, but they are of equal size; and, in Hodgson's marmot, the series is so far completed, because that animal presents the two loops, but shows the greater development in the second of the two. In the jerboa, the cæcum is very long, and entirely marsupial. In the water-vole, it is still longer, and is, indeed, twice the length of the body. Further growth of the cæcum appears to be prevented by the non-development of the peritoneum. By the comparative scantiness of this membrane, the cæcum is much contorted, and the excessive development met with in the phalangers is apparently prevented.

In the ground-squirrel (Tamias), a new feature appears; the ascending colon is forming a loop. In the western mouse (Hesperomys), this loop is pronounced; and in the water-vole (Arvicola), the loop has been formed into a perfect colic spiral. This spiral is identical with that met with in the pig, just as the colic loops already referred to foreshadow the colic loops of the ungulates. The great omentum of the jerboa is identical with that of the kangaroo.

Into any account of the exceedingly complex cæcum and colon of the rabbit and capybara, it is impossible here to enter. Suffice it to say, that the rabbit's colon is founded upon a rudimentary large intestine with two colic loops (as in the squirrel, marmot, etc.); and the colon of the capybara upon a rudimentary gut presenting a spiral, as met with in the water-vole. All the steps that lead from the simple colon of rodents to the complex colon of the rabbit can be traced in perfect order in the mole-rat and the coypu; while the progressive steps that have led to the arrangement seen in the capybara can be equally well traced in the agouti and the guinea-pig.

So systematic and unvarying is the manner of the blood-supply of the colon in rodents, that the stages in development from the simple to the complex bowel can be clearly marked by reference to the distribution of the great mesenteric artery.

The close resemblance between the alimentary canal of the tree porcupine and the flying lemur, and the rodent-like features in the intestines of the aye-aye, can only receive a casual notice in this abstract.

So far as the alimentary canal goes, the origin of the rodents from the marsupials would appear to be clear and direct. The chief common features are the following; the large stomach, the arrangement of the great omentum, the free and extensive duodenum, the long intestine, and especially the long colon, the large and complex cæcum,

the complicated colon, and the presence of sacculi in that part of the canal.

The Ungulates.—Space will not permit the consideration of this family in any detail. So far as the alimentary canal can serve as a guide, it would appear certain that the ungulates take their descent from the rodents. The colic spiral and the colic loop reappear in a pronounced manner in the more specialised class of animal. The line of descent would appear to be in the following direction. From rodents with spirals (for example, the capybara) come the artiodactyla, the hogs coming first in the line of descent. From the hogs, the hippopotamidæ branch off and lead nowhere, and from the same trunk spring the ruminants. The colic spiral is carefully retained throughout, and the development of the ruminant stomach can be followed step by step. From rodents with loops spring the perissodactyla, the rhinoceros, the tapir, the horse, animals that all preserve the rodent outline of stomach, and accurately reproduce the colic loop.

ON PAPAIN AND ITS USE IN THE TREATMENT OF DYSPEPSIA.

By GEORGE HERSCHELL, M.D.Lond.,
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For some time past, a drug has been before the medical world, called papaïn, which claims to be able to replace pepsin and pancreatin in medicine, but, for several reasons, has not come into general use. It is a powder, and is prepared from the juice of the *Carica papaia*, or melon-tree. There are at present two chief varieties of this drug on the market; namely, that sold by Christy, with which most of the experiments up to recently have been made, it having been before the profession some considerable time; and a papaïn quite lately introduced into this country, and prepared according to the process of Professor Finkler, who occupies the chair of physiology at the University of Bonn, and who for the last few years has been experimenting with the digestive ferments. This latter (papaïn, Finkler) is likely to prove of considerable use, as it is without the imperfections which have prevented papaïn (Christy) from doing so. In the first place, it is cheaper; in the second, it is less energetic. This we shall show to be a *sine quâ non*.

I will commence by an account of its properties as determined by Professor Finkler, which will advantageously compare with those of pepsin and pancreatin. 1. It digests equally in acid, alkaline, or neutral fluids, best of all in water. 2. It will dissolve 1,000 times its own weight of fresh blood-fibrin. 3. Its action is increased by the presence of pepsin and pancreatin. 4. It acts at the temperature of the body. 5. Meat infused with a solution of papaïn keeps, while undergoing a softening process, much longer than it does without it. From this, it can be inferred that it has an antiseptic as well as a peptonising action. 6. The product of its action is a pepton, which, from its properties, may be taken to be Meissner's *c* pepton. 7. Papaïn adheres to albumen to such a degree as to prevent its being removed by protracted washing with water. 8. Papaïn, in contrast to pepsin, acts when the resulting pepton-solution is highly concentrated. 9. The addition of antiseptics, such as salicylic or carbolic acids, does not interfere with its action. Hence, in papaïn (Finkler), we have apparently an ideal digestive ferment.

I will now pass on to consider the difference in properties of papaïn (Christy), and papaïn (Finkler). In experimenting with them, and comparing the results, it appears at first sight that the former is much more energetic than the latter; but, on further investigation, it will be seen that this apparent virtue really unfits it for internal use, inasmuch as, not content with converting the fibrin into pepton, it again splits it up into bodies soluble in alcohol, and analogous to leucin and tyrosin, which, so far from being of any use in digestion, are absolutely injurious. It is therefore evident that the chemical and medicinal results must be kept apart.

If .01 gramme of papaïn (Finkler) be placed with 10 grammes of fresh blood-fibrin, and 50cc. of water, at 45° to 50°C. (113 and 122 Fahr.), and put into an oven of the same temperature, the solution takes place in from forty-eight to eighty hours. If, on the other hand, papaïn (Christy), be used instead, in the same experiment, the solution takes place in a much shorter time. But here an important distinction comes in.

If to the result of each experiment be added 10 grammes of fresh blood-fibrin, it will be found that the papaïn (Finkler) will still dissolve this in twenty hours, while that containing the papaïn (Christy) will not dissolve at all. This proves that the former is a true catalytic ferment, and that the latter is not. An alcoholic extract of the latter will also show the presence of the leucin and tyrosin-like bodies by the usual tests. These experiments are easy, and anyone can make them for himself without any very special apparatus.

Dr. Finkler states that he can prepare a papaïn identical in its action to that of Christy, by a different method. I have received a sample, and find it identical in its action with that of Christy. He has discarded this method in favour of that which he now uses, and which produces a papaïn, whose initial action is less energetic but is indefinitely prolonged. It is this papaïn (Finkler) which I have been for some time prescribing, and with which I have obtained very satisfactory results in cases of dyspepsia.

I find it chiefly valuable in the following classes of cases.

1. *Chronic Stomach-Catarrhs of Children.*—Everyone of us is familiar with that state in which we find children at times, and which is very frequently called "biliousness." It is characterised by loss of appetite, languor, pasty complexion, loss of sleep at night, and irritability during the day. There is frequently frontal headache, and the urine is loaded with lithates. If this state continue for any length of time the child emaciates, the unhealthy mucus which sheathes the stomach and intestines preventing the due absorption of the food. Cod-liver oil and compound syrup of the phosphates, which are generally given for this complaint as soon as the child begins to lose flesh, are not assimilated. Sometimes a cough developes, and the child is supposed to have incipient phthisis. I have found these cases rapidly improve with the following prescription:—℞ Papaïn (Finkler), gr. ½ - gr. j; sach. lactis., gr. j; sodii bicarb., gr. v. M. To be taken after every meal. It is also advantageous to give a drop or two of tincture of nux vomica immediately before the meal in little water. The papaïn probably acts by dissolving the mucus, and thus facilitating the absorption of the food.

2. *Acid Dyspepsia.*—This drug is extremely valuable in this form of indigestion. *a.* As it acts equally well in the presence of an alkali a sufficient quantity of bicarbonate of soda may be given with it to neutralise the excess of acid in the stomach without impairing its peptonising power. *b.* Its antiseptic action checks the abnormal fermentation to which much of the accompanying flatulence is due. *c.* An antiseptic can be given with it to increase this action. I usually order it in the following manner:—℞ Papaïn (Finkler), gr. ij; sacch. lactis, gr. v. M. To be taken an hour after meals with the following draught:—℞ Sodii bicarb., gr. xv; glycerin. acid carbolic, ♏vii; spirit. ammon. aromat., ♏xx; aq. ad ℥iss. M. Fiat haustus. It appears that, taken one hour after a meal, a smaller dose of papaïn is required to produce the same result than if taken with the food.

3. *Cases where Severe Gastric Pain coming on Shortly after Eating is the Prominent Symptom.*—I have tried the drug upon twelve cases of this nature. Complete relief was given in ten, one case was partially relieved, and one completely failed to derive any benefit.

Apart from its internal use, papaïn will probably come into extensive use as a peptonising agent, to prepare ready digested food and enemata in the way in which pancreatin and pepsin are used at present.

VIBURNUM PRUNIFOLIUM, OR BLACK HAW, IN ABORTION AND MISCARRIAGE.

By JOHN HENRY WILSON, M.K.Q.C.P., M.R.C.S.E.,
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I am glad that the attention of the members of the British Medical Association has been drawn to the efficacy of this medicine in cases of abortion and miscarriage, by Dr. Macfie Campbell, and Dr. Leith Napier.

In the number of the *Liverpool Medico-Chirurgical Journal* for January, 1885, I reported six typical cases treated successfully by this medicine; and since then, after considerable experience, I have been more and more confirmed in its value. I cannot say it has always succeeded, but in those cases in which it failed, I have been able to account for its doing so. Either the medicine has not been commenced in time, and the ovum has been detached before the viburnum has been taken, or there has been some reason to suspect a syphilitic taint; and, in a case of fatty degeneration of the placenta, after not succeeding with the viburnum alone, chlorate of potash was taken in addition, with a good result.

Dr. Napier says, "some women abort on the slightest provocation and they continue to do so, although every care may have been taken in the way of rest, medicine, etc., to prevent it. I have had many such cases, and have been greatly disappointed; but when I have had the opportunity of commencing the viburnum shortly before the anti-

ed period, and continued it at intervals on the first appearance of eatening symptoms, these patients have invariably gone on to full time, and done well, without being subjected to restrictions lebarred from active exercise.

n the next class of cases, where there may be reason to suspect n a partial separation of the ovum and a dilated external os, with ere pains and hæmorrhage going on for hours, and the patient ler the impression that she could not possibly go on to her full e, and when I had almost despaired of any benefit from the medi- e, I have been astonished at its effect, more than three-fourths of se cases doing well.

he most sanguine advocate of viburnum could not expect it to do ossibilities, or to prevent abortion when there is "a gaping os, a detached ovum presenting." One might as well expect to suscitate a dead body by galvanism.

have never seen ill consequences follow the administration of the dicine, however often the dose has been repeated. In two cases y has it been followed by slight headache. One patient inquired if had not been taking quinine. The symptoms had been relieved; efore it was not continued. In the other case, the patient had n four grains of the extract every two hours. The only change to extend the interval to four hours, and then gradually dis- inue it.

ome patients have taken viburnum at intervals during the whole se of their pregnancy. It seems to act as an uterine tonic and tive, and to relieve the woman of those harassing nervous fore- ngs which often lead to abortion. The patient, after taking only w doses, has quite a changed expression. From a drawn, de- ding look, her countenance becomes cheerful and happy.

nce I have prescribed viburnum, it has not been necessary to the women in the horizontal position more than a few days; reas, under the old treatment, they occasionally spent weeks in and, after all, abortion has taken place.

n some of the plantations in America, it is the popular belief a an cannot abort if she be under the influence of black haw, ough she may be taking medicine with a criminal intent. My rience would go far to confirm that opinion, for I have had nts in whom a succession of abortions have taken place, but, when r the influence of the medicine, they have been able to resist severest tests—frights, falls, strains, etc.—and no ill effects have wed.

ith regard to the mode of administering the drug: at first, the d extract was ordered, but the smell was so strong and objection- that the whole house became impregnated; and in two cases, e the stomach could not retain it, the liquid was given as an a.

now order the extract in pills of four grains, and find it a con- nt form; as usually made, they soon absorb moisture, and run a mass; but I now advise them gelatine-coated, as prepared by e, Davis, and Co., of Detroit, who seem to have been the first to duce this medicine to the profession. I have no doubt others l make them equally well. These pills keep any length of time, advise my patients to keep a supply by them.

ave such confidence in viburnum prunifolium that I am anxious rofession should give it a trial, feeling assured they will not be pointed.

OBSTETRIC MEMORANDA.

INVERSION OF UTERUS.

TLY after leaving college, and while acting as assistant to a al man, I was sent for hurriedly to attend a woman in her first ement, and whom the messenger reported to be very ill; no al man had been previously engaged. On my arrival I found he child was born, and had been removed from the bed. On tion of the patient, who was in a state of collapse, and moaning , I saw, protruding from the vulva, what appeared to my inex- ced eye, like a fœtal head. Closer inspection, however, showed at this was none other than the uterus, completely prolapsed verted, and with the placenta still attached. The amount of rrhage was slight. I first carefully detached the placenta, and with the tips of my fingers, pressed back the uterus into the cavity, and had the satisfaction of replacing and reinverting the ced organ. I then bound the woman up, and administered a lant; but she never rallied, and died a few hours later. In this the midwife acknowledged to me that the umbilical cord was very forcibly; and, at the inquest subsequently held, the evi- dence seemed to show that the poor patient was rather roughly handled, and suffered a good deal subsequent to the birth of the child, and previous to my arrival.

In this case, the direct and immediate cause of the accident was the forcible traction of the umbilical cord by the midwife.

Belfast. ROBERT F. SINCLAIR, M.B.

THERAPEUTIC MEMORANDA.

ERGOTIN IN THE TREATMENT OF PROFUSE HÆMOPTYSIS.

PROFESSOR BARTHOLOW, of Philadelphia, in reference to this question, says (*Practice of Medicine*, p. 378), "The most effective remedy is the hypodermatic injection of ergotin. Often the most severe bleeding will be at once arrested, when other means of treatment had been employed in vain." My own experience is quite in accord with this opinion; I know no remedy so reliable and so speedy in its action in severe cases. The following cases illustrate this action of ergotin.

CASE I.—A man, aged 30, in an advanced stage of pulmonary phthisis, with large cavities in both lungs, was seized with hæmoptysis, and lost a pint of blood in the three or four minutes which elapsed before I reached him. Five minutes after the hypodermic injection of 7 grains of ergotin, the bleeding had entirely ceased, and there was no recurrence of it for several days.

CASE II.—A man, aged 21, with phthisis affecting both lungs, but no decided evidence of excavation, seized with hæmoptysis, had lost more than 10 ounces of blood before the hypodermic injection of 4 grains of ergotin. After the injection, he brought up only two mouthfuls of blood, and then the hæmorrhage ceased entirely, and in half an hour he walked upstairs to bed, and there was no recurrence of the bleeding.

In both cases there was no sign of spontaneous arrest of the bleeding before the administration of ergotin, and I think the loss of blood would have been much greater before spontaneous arrest occurred. Cessation of bleeding after ergotin is more decided and abrupt than natural arrest; and in most cases the patient is ensured against further loss for some hours. ROBERT ROBERTSON, M.D.,

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PHYSIOLOGICAL MEMORANDA.

THE VOICE A STRINGED INSTRUMENT.

THE question has often been discussed, as to what form of musical instrument the human voice most resembles. Many have regarded it as a form of reed-instrument; others have favoured the theory that it partakes of the nature of a wind-instrument; while some incline to the idea of a stringed instrument, such as the violin, or violoncello. With these latter I agree; and, as some observations I have lately made point in that direction, I take this opportunity of putting them on record. We have, I consider, reasons—anatomical, pathological, and what I will venture to call vocal—which confirm the "stringed-instrument theory."

Anatomical.—1. The vocal cords are two strings of yellow elastic tissue, capable of the most exact extension and relaxation. 2. They are covered with extremely fine and closely adherent mucous membrane, without any submucous tissue, and which is incapable of being thrown into wrinkles or folds, that would interfere with perfect vibration. 3. A muscle, the intrinsic tensor of the cords, the thyro-arytenoid, is attached in segments all along the vocal cords, and capable, by its contraction, of creating a state of tension of that part of the cord between the contracting filaments and the point of its insertion.

Pathological.—1. When the cords cannot approximate, from the interposition of mucus, tumours, etc., huskiness or loss of voice ensues; it is analogous to pressing the fiddle-string with the finger, without applying the bow. The aperture between the cords is too large to allow the air to be applied with sufficient force to produce the necessary vibrations, though the cords may be in an exact state of tension. 2. In inflammation (laryngitis) the aperture may remain normal; but the cords, owing to thickening, and the inflamed condition of the intrinsic muscles, are incapable of perfect tension. 3. In cases of paralysis of one cord, there is loss of volume or power, though weak notes can be correctly produced.

Vocal.—1. I have recently had the opportunity of examining the larynges of over fifty practised vocalists, and would venture to formulate the results of my observations in this way. High and low notes are produced through an unaltered vocal aperture, provided the

volume of sound remains the same. There is no difference in the size of the aperture in the production of high and low notes, save that produced by the varying force with which air is driven through the aperture. 2. On stringed instruments alone, such as the violin and violoncello, and by the human voice, can "portamento" notes be produced; that is, the gradual carrying of the sound or voice with extreme smoothness from one note to another.

For these several reasons, I conclude that the human voice most resembles a stringed instrument. The varying notes are produced in the larynx by the varying tension of the vocal cords, regulated as to their volume by the amount of air and force used in their production, and modified in the mouth and pharynx, as a sounding board modifies the tone of an instrument. To my mind, also, the violin is the only instrument that at all resembles the human voice, in the variety and power of its tones, to move our hearts and excite our sympathies.

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REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

CUMBERLAND INFIRMARY.

EMPYEMA: REMOVAL OF PORTIONS OF SIX RIBS: RECOVERY: REMARKS ON A METHOD OF RESECTION WHERE THE THORAX IS RIGID.[1]

(Under the care of RODERICK MACLAREN, M.D., Senior Surgeon to the Infirmary.)

[THE following history is condensed from admirable records kept by Dr. Waters, House-Surgeon to the Infirmary, and by Dr. Shearer, House-Surgeon to the Carlisle Dispensary.]

The patient, a lad aged 17, first came under the care of the medical officers of the Carlisle Dispensary on May 27th, 1882, on account of an attack of pleurisy in the left side. Fluid was rapidly effused; and, on June 11th, seventy ounces of clear serous fluid, which coagulated on cooling, were drawn off. After a few days, the patient again became feverish, and began to have slight diarrhœa, which continued for the next three months.

About the middle of August, ten ounces of healthy pus were drawn off from the chest. On August 30th, two incisions were made into the chest, one in the seventh, the other in the ninth interspace, in the line of the posterior margin of the axilla, and a drainage-tube was inserted. The quantity of pus varied from day to day. His general condition, however, improved somewhat. In December, he was able to sit up for six hours a day. His temperature was taken night and morning from September 1st, 1882, to February 14th, 1883. It was normal or subnormal in the morning, but rarely much below 100° Fahr.; in the evening, occasionally it rose to 101° Fahr., and sometimes to 102° Fahr.

On March 28th, 1883, he was admitted to the Cumberland Infirmary. The two openings still discharged pus, to the amount of about three ounces daily. The lower of the two openings was enlarged, and some of the rib gouged away, so as to admit the finger. A second opening was made, and the cavity was subsequently washed out daily.

He was kept in hospital till the end of May, was then made an outpatient, but was again admitted in July. No material change in his condition had occurred. There was still discharge from his chest, to the extent of three or four ounces daily. On July 17th, portions of the fifth, sixth, seventh, eighth, ninth, and tenth ribs were removed, subperiosteally, in the axillary line. The portions removed varied from two inches and three-quarters of the fifth rib to one inch of the tenth. It was ascertained that the cavity was not a simple one, but was double; the lung-adhesion so dividing it that only the outer part had been effectually drained, and the inner contained putrid pus. A large opening was made at the lowest part of the chest-cavity. Adhesions were broken down, so as to make drainage effectual. Tubes were inserted, and subsequently the chest was regularly washed out. He suffered a good deal from shock and loss of blood, but soon rallied. The discharge slowly diminished in amount, and the cavity gradual contracted. He was discharged in November, with a cavity whi would hold three or four ounces.

He was again admitted on March 4th, 1885. His general cond tion was very good. He was fat and strong; but there still remain a small cavity in the left pleura, discharging through a sinus. T bones had to some extent been reproduced. Enough of the repr duced bone was removed to allow of the cavity being dressed to t bottom. It steadily contracted, and he was discharged on June 18t quite well.

The first aspiration of clear serous fluid was performed a fortnig after he came under treatment; the second aspiration (of pus), t months and a half; the insertion of the drainage-tube, three month and his admission to the infirmary, ten months; the removal of po tions of six ribs, fourteen months; the removal of the part of the produced bone, two years and ten months; and the final closing the cavity, three years one month and a half after the first tapping.

REMARKS BY DR. MACLAREN.—Empyema may be treated in thr different ways: by aspiration, by drainage, and by removal of portio of ribs. From aspiration, I have certainly seen some remarkably su cessful results, but I have also seen many failures. It is worth short trial with young patients, where the disease has not existed f a long time, or at any age where the cause lies in injury. Free drai age by a double opening is so thoroughly recognised as the b treatment in the majority of cases, both on general surgical princip and by its success in practice, that I need not say a word in favour. One condition only I must bring under your notic the immense difference in results of this treatment at d ferent ages. In the young, it is almost invariably successful; deed, untreated empyema is rarely fatal in the young; the pus b rows through the chest-wall, formed a superficial abscess, whi opens and leaves a sinus communicating with the pleural cavity; t chest-wall contracts, the lung expands, or the pus burrows int bronchus and is expectorated, and natural cure follows. Howev drainage very much shortens the process; as age advances, t mortality increases. In the BRITISH MEDICAL JOURNAL for Septe ber 29th, 1883, is a most interesting paper by Dr. Eddison, of Lee on Forty Cases of Incision of the Chest for Empyema. "Of these 9 ended fatally, 5 males and 4 females; the 5 fatal cases among t males were all patients over 35, of whom there were only 8 al gether. Of the 18 male cases below that age, not one died. By co trast, if we take all the cases of both sexes below 11 years of age, altogether, there is not a single death, and every one of them did wel or, again, taking all the cases above 35 and all below that age, find 5 deaths among 8 above that age, and 4 deaths out of 32 belo This may be taken as representing very exactly the common expe ence. In the production of this result, my observation would le me to attach great importance to the slight rigidity of the che walls, and the general adaptability of the structures of the young compared with the adult.

Rib-section, therefore, is applicable only to a very small number cases of empyema. Children, up to puberty, should never requ it. Many adults will recover without it; and, of those who do improve with drainage, a considerable number will be found subj to some other serious disease contra-indicating operation. Still th remain two small classes of cases, from which good may be expect In cases like this one, where adhesion of the lung to the diaphragm, lower part of the chest-wall, is an obstacle to free drainage, t removal of bone is mainly of value as enabling a large opening to made, and free access to be procured to the pleural cavity. I do think the breaking up of the chest-wall had much influence on recovery of my patient. Considering his age, and his good recupe tive power, I believe he would have recovered though his ribs h never been interfered with, if it had been possible to thoroughly dr his chest. The other section of cases from which we may expect go are those in which the rigidity of the chest-wall is a mechanical stacle to healing. The lung expands a little, perhaps; the diaphr matic and mediastinal chest-walls bulge into the cavity somewh and the external wall contracts to a small amount; but all does suffice to close the suppurating space. Now, if we could so break the lung-wall, that it would no longer form a stiff shell, we wo evidently much help recovery. Section of ribs is alleged to do this. have made some experiments on the dead body, with the object seeing how far this is the case. In a young adult, I removed p tions of five ribs (six to ten); with very great compression, the ends could be brought a little nearer to each other, but, so far diminishing the size of the chest-cavity went, the result was most t ing. But I also found that, if this removal were supplemented by sect of the ribs or cartilages, four or five inches away, at once, the chest-w

[1] Notes of this case were read before the Border Counties Branch on January th, 1886.

uld be pressed inwards, and a very great advantage accrue. Therefore, although I have not yet had an opportunity of practising this operation on the living body, its mechanical advantages when performed on the dead body are so very great, that I venture strongly to commend it to you. On the right side, the rib should be excised well back behind the posterior axillary line, and then the cartilages divided subcutaneously. On the left side the excision should be much more to the front, and the division far back, as the heart would render division of the cartilages a dangerous operation.

Circumferential measurements of the patient's chest give the following results. At the level of the lower end of the sternum, the left chest is two inches smaller than the right; at the level of the nipple, and also of the fold of the axilla, one inch. Probably the injury to the soft parts makes the first of these differences somewhat greater externally than internally. The diaphragm is evidently adherent to the chest-wall to within 1½ inches to 2 inches of the angle of the scapula. It is difficult to institute a comparison between his condition and what results from simple drainage, owing to the great diversity in the contraction which occurs after drainage. It cannot, however, be said that the amount of contraction is such as to be unattainable by drainage, for as much as four inches has been noted. The present condition in this case seems to fully bear out the experimental operation, and to show that, if it be necessary to produce great contraction, we must do more than was done to this lad; though, as far as he was concerned, free drainage being all that was needed, there was no occasion to do more.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 30TH, 1886.

GEORGE POLLOCK, F.R.C.S., President, in the Chair.

On Suprapubic Lithotomy. By RICHARD BARWELL, F.R.C.S.—An unfrequent sequela of urethro- or vesico-vaginal lithotomy is an operable form of vesico-vaginal fistula, of which several instances have been under the author's care; hence he rejected those methods in the following two cases. Case I.—Rose A., aged 9, was admitted into Charing Cross Hospital, February 6th, 1885. She was greatly emaciated, and was suffering with dribbling of urine and frequent micturition. A large vesical calculus was detected. On February 12th, three ounces and a half of boro-glyceride solution, all that the bladder would hold, were injected, and Mr. Morgan passed a finger *per vaginam* to steady the stone, and to prevent escape of fluid from the bladder by compressing the urethra against the pubes. The skin and linea alba, and then the thin fascia transversalis, were incised. An exceedingly thin layer of fat separated the bladder from the abdominal wall; this was cautiously divided, the bladder opened, and the stone extracted. The peritoneum did not come into view until the escaped fluid allowed the bladder to contract; the wall of that viscus, as also the abdominal wall, was sewn, a drainage-tube being placed between the two. The child suffered nothing after the operation, and by February 26th the wound had closed. The stone measured 2¼, 1½, 1¼ inches in its several dimensions, and weighed 2¼ ounces. Case II.—W. W., aged 60, but feeble and looking old, had frequent and copious hæmaturia, which was increased by the most delicate sounding; the prostate was enlarged. On sounding, a stone was found. Measurement in three directions gave 1⅛, $\frac{13}{16}$, $\frac{7}{16}$ inches, but the condition of the parts, and the possibility that a papilloma might also be in the bladder, induced Mr. Barwell to prefer suprapubic lithotomy to either the perineal operation or lithotrity. April 30th. Sixteen ounces of boro-glyceride solution were injected, and retained by tying a tape round the penis. The linea alba, and transversalis fascia being incised, the lower fold of the peritoneum was found to lie about three-quarters of an inch above the margin of the pubes. The membrane was pushed without the slightest resistance from the front of the bladder. The man suffered no pain after the operation; the wound healed quickly, save a sinus just above the pubes, from which urine oozed in small quantity, and which did not thoroughly heal till July, the man remaining well in health. The author pointed out that the high operation for stone had been too much neglected, and might well be used in cases other than those of exceptionally large stones. For children it was particularly well adapted, and he contended that, for female children, no other lithotomy should be practised. The danger of a permanent fistula was *nil*, his case (No. 2) being, he believed, the longest period since on record. The danger of urinary infiltration might be avoided with practical certainty by proper after-treatment. In a properly conducted operation, the peritoneum was safe; injection of the bladder would always raise it high enough, and, as it was barely attached to that viscus, it yielded upwards to the slightest touch of the finger. The author showed that distension of the rectum had a very small effect on the anterior peritoneal fold. He also pointed out that Petersen's experiments gave unreliable results, and that Garson's table in reality supported his own views; and he detailed (in an appendix) fourteen experiments of his own in proof of his contention.

A Case of Vesical Calculus of unusually large size, removed by Suprapubic Cystotomy. By WALTER RIVINGTON, M.S.—T. K., aged 61, entered the London Hospital on January 13th, 1885. For sixteen years he had been troubled with symptoms of calculus. On examination by the rectum, a large, round, smooth swelling was detected in the situation of the prostate gland. No stone could be detected with a sound. On February 24th, median urethrotomy, for the purpose of exploration, was performed, and it was ascertained that the hard mass was not connected with the prostate, and that the bladder-wall was pressed over by it to the right side. A sound pushed far back into the bladder, at length struck a stone, which proved almost immovable when grasped by forceps. Under these circumstances, it was decided to open the bladder above the pubes. A staff was introduced into the bladder, and the usual incision made above the pubes. The end of a stone was now detected to project into the bladder, through an opening posteriorly. It was grasped with forceps, but could not be moved. Lithotrites were useless. The stone was therefore broken up with a chisel and mallet, and extracted piecemeal. After the extraction, the wound in the bladder and that in the soft parts were separately sutured, with insertion of a drainage-tube, and a silver tube was inserted into the perineal wound. The patient rallied well from the operation. The suprapubic incision was reopened on the 28th, as there was evidence of the escape of urine through the bladder wound. The surface of the wound was sloughy, but gradually cleaned and filled up with granulations. On March 21st, the patient was allowed to be up for an hour in a wheeled chair. On April 17th, the opening into the bladder had closed by granulation, and, with the exception of a fistula in the perineum, the patient had now recovered from the operation, and was up daily. At the end of May, three months after the operation, he had a renewed attack of cystitis. His urine became ammoniacal, diarrhœa ensued, and he died on June 4th. Permission was only obtained to inspect the abdomen. Suppurative nephritis of the left kidney was found, with cystitis of the bladder, and of the large pouch in which the stone had been lodged. After the operation, the collected pieces of the calculus weighed 23 ounces avoirdupois. In its restored form it measured in circumference 13 inches by 10, in length 4¾ inches, in width 3¼, and 3 inches in thickness, and weighed 22½ ounces. It was mainly composed of lithic acid and lithates. Although not absolutely the largest calculus ever removed from the human bladder during life, it appears to be the largest removed, during life, with recovery of the patient from the immediate effects of the operation. The case stood alone as regards the inclusion of the calculus in a pouch, the difficulty of the operation, and the breaking up of the calculus before extraction. The details of the operation were described and commented upon.

A Case of Suprapubic Lithotomy. By W. H. A. JACOBSON, M.B., F.R.C.S.—A labourer, aged 19, was admitted into Guy's Hospital, on January 21st, 1886. He had suffered from constant irritability of the bladder all his life, with symptoms of stone for five years, and with cystitis for a year. The lithotrite and sound gave evidence of more than one stone. For this reason chiefly, lithotomy was preferred to lithotrity. Hypogastric lithotomy was made use of on account of the age of the patient, the long duration of the symptoms, and the great probability that the kidneys were impaired. On January 30th, hypogastric lithotomy was performed, the bladder having been injected with ten ounces of water, and the rectal bag introduced. The peritoneum was not seen. One stone was readily found on incising the bladder, but prolonged search failed to find others. This was probably due to the mistake of keeping the bladder distended with fluid during the search, owing to which, two other stones, small and light, escaped detection. No sutures in the bladder, or drainage-tube in the wound, or catheter in the urethra, were made use of. The patient's recovery was somewhat retarded by an attack of pneumonia setting in the day after the operation. There was never any sign of extravasation or cellulitis. On the fourth and fifth days, the wound and urine were distinctly ammoniacal, but this condition yielded to treatment. Two weeks after the operation, a large venous hæmorrhage took place, and, a few hours afterwards, a small calculus was removed from the wound; a few days later, another and smaller calculus escaped. On the twenty-third day, urine was first passed naturally; by the fifth week, micturition was normal. It is evident now, that owing to the

small size of the largest calculus (only 300 grains), that all might have been dealt with by lithotrity. Mr. Jacobson, however, still ventured to bring the case forward, and wished to conclude with the following propositions: 1, that this operation had a future of revived usefulness before it, and that it would be found of great value by those who only had to deal with stone occasionally, and who found themselves face to face with stones of good size in adults; 2, that while, as an operation, it could never contrast with the rapid brilliancy of a lateral lithotomy, it would, in its improved form, give better results in adults with stones, not suited to lithotrity; 3, that, at present, till a larger number of cases of the improved operations had been collected, it would be wiser not to attempt to close the bladder with stitches; 4, that in reviewing an abandoned operation, these two questions called for an answer, A. Did we stand in a better position towards the operation than our predecessors had done? This question could only be answered in the affirmative, after the work done by Dr. Garson, Professor Petersen, of Kiel, and Sir Henry Thompson. B. On what grounds was the operation abandoned? The grounds on which this operation was abandoned were enumerated.—Sir HENRY THOMPSON thought the consideration of the three cases that had been brought forward particularly opportune now that the increased power, by the use of lithotrity, was unquestionably proved. Lithotrity could deal with larger and harder stones than formerly, but still an operation was wanted to meet cases of stones of over two ounces or two ounces and a half; and, further, foreign surgeons agreed with English surgeons in saying, that the surgeon with little experience or skill had better use a cutting operation, and the best for him was a suprapubic lithotomy, with some of the modern improvements. An important point was the distension of the rectum by a bag, after Petersen's method. Mr. Barwell had contended that the anterior fold of the peritoneum was very little affected by this; others disagreed with him; but the exact position of the peritoneal fold really was a point of very slight importance. The usefulness of the bag in the rectum was that it made the bladder firm under the finger, and brought it up from the pelvis into the abdomen. Hildanus, in the seventeenth century, had recommended the high operation as the best for children, because in them the finger of an assistant in the rectum could push up and steady the bladder, whereas no finger was long enough to do it in adults. In cases of vesical tumour, it was even more important, because then it made it possible to see something of the tumour, which was impossible when it was in the pelvis. In suprapubic operations on tumour, there was also less hæmorrhage; he had only had to tie one vessel in nine operations, and eight of the patients were still alive. In one patient, an old woman, in whom there was a large tumour, he had preferred to perform a suprapubic operation instead of dilating the urethra, in order to save her from hæmorrhage, and with the use of styptics and ligatures he had been successful.—The PRESIDENT said he should like to ask the opinion of those present how far they would recommend the high operation in the case of women. A patient had come under his care suffering from incontinence of urine, and in her he had found the pointed ends of a hairpin protruding through the posterior wall of the bladder; within the bladder, a considerable phosphatic calculus had gathered round the hairpin. He had made a considerable vesico-vaginal incision, and removed the hairpin; and, subsequently, the incision healed easily.—Dr. HEYWOOD SMITH observed that he had performed a similar operation, and had been able to secure union of the vesico-vaginal incision by first intention.—Mr. CADGE wished to throw in a word of caution in this matter against a too enthusiastic recommendation of the suprapubic operation. At the time of Cheselden and Douglas, men were eagerly in favour of it; afterwards it was coldly neglected. Experience was too limited at present to justify surgeons in proposing to abandon the lateral operation. About a dozen cases had been referred to that evening; among them were two deaths. He thought at least ten of the cases could have been dealt with by the lateral operation. In cases of stones weighing from four to nine ounces, Creighton, of Dundee, had done a dozen lateral operations, with only one death. Martineau, of Norwich, had done eighty-four, with only two deaths; but subsequent misfortunes had reduced his average success to about the same as that of his neighbours. The modern alterations of the suprapubic operation had certainly much improved it. The distension of the rectum raised the floor of the bladder about two inches, and made it much easier to work upon; still stones were occasionally left behind. There should be no hæmorrhage in the high operation; still Sir Henry Thompson had met with a good deal in two cases. If the rectal bag were filled as full as Petersen advised—namely, with twenty-one ounces of water, or even with eighteen ounces—the rectum might be slightly ruptured, as he had seen in a case of his own.—Mr. R. W. PARKER could not go quite so far as Mr. Barwell in recommending a high operation in female children. He had found dilatation of the urethra satisfactory in all his cases.—Mr. CHARLES STEWART had made some experiments on the effect of distension of the rectum on the position of the pelvic organs. They differed from Mr. Barwell's, in being made before the abdomen was opened. The bladder and rectum were both distended; and then the abdomen was opened, and it was easily seen how the bladder fell downwards and backwards when the distension of the rectum was relaxed. An accurate examination showed that by such distension it was the back of the bladder which was pushed upwards and forwards so as to lie over the symphysis pubis.—Mr. BRYANT, wishing to form an opinion on this point, had also made similar experiments on twenty subjects. He first distended the rectum with twelve to fourteen ounces of fluid; then the bladder with sixteen to twenty ounces; and then, on opening the abdomen, found he had two or three inches of bladder-surface to deal with. He had not a shadow of doubt that Dr. Garson's experiments were correct. On the question of method of operation, he had had no experience, but should join with Mr. Cadge in urging caution until further experience was obtained. In some cases of large stones, however, he was not opposed to the high operation.—Mr. LUND thought some attention should be paid to the fact that, after lateral operation, some bruised tissues were inevitably left, whereas there could be none such after the high operation; and also the lateral operation resulted in more hæmorrhage, and in a position more difficult to reach. He had had an instructive case in a patient in whom he had removed a mass of internal piles. Constipation followed, and an enema became necessary. About a pint was slowly and gently injected. This gave the patient extreme pain in the glans, and it became so severe as to be intolerable. That, as he had hardly realised at the time, was the pain from lifting the floor of the bladder by a distended rectum, and disturbing that sensitive part which gave a similar pain in cases of stone. By anæsthetics, this could be avoided; and it was by the help of anæsthetics that the old plan of suprapubic lithotomy could now be revived.—Mr BARWELL, in replying, explained that his paper was written before Sir Henry Thompson's recent publications on the subject and continued to defend his conclusion that distension of the rectum had very little effect on the anterior fold of the peritoneum. It might, however, be useful, he admitted, in cases of tumour of the bladder.—Mr. RIVINGTON, in reference to the President's question on the employment of the high operation in female cases, said he had only found a few stones too big for extraction by the dilated urethra, but, in one case, he had made a vesico-vaginal incision, to get out a stone of three ounces, which had healed by first intention; and, in one case, he had met with and extracted a hair-pin under circumstances such as those the President had described. As to the general use of the high operation, he thought there was insufficient evidence at present for any wide conclusions.—Mr. JACOBSON admitted that, in his case, he should have secured the two small light stones that had escaped him. He still considered it due to his wish to bring only antiseptic fluids into contact with the edges of his incision, and his consequent search for stones whilst the bladder was too full of fluid. On the general question of what operation should generally be practised, he felt no doubt that, if surgeons came fresh to the subject, without any inheritance of tradition, and knowing the possibilities of modern abdominal surgery, they would prefer the suprapubic operation; and that had Cheselden had the modern appliances, instead of his clumsy instruments, we should have heard very little of lateral lithotomy—an operation which, at the best, risked the sacrifice of important tissues.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 26TH, 1886.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Tubercular Ulcer of the Palate.—Mr. CLUTTON read the notes of this case, which was illustrated by drawings. The patient was a girl aged 15, who had been under his care about nine months. Her family history gave no evidence of phthisical tendency. She had been in the Evelina Hospital for six months, under Dr. Goodhart, who has described her condition in his book on *Diseases of Children*, as a typical case of scrofula. In July, 1885, a year after leaving the hospital, she was sent to Mr. Clutton, at St. Thomas's Hospital, by Dr. Rugg. The soft palate was divided by a median cleft, and the whole of the surrounding tissues were swollen and superficially ulcerated. The surface was granular, and numerous pit-like ulcers were distributed over the hard palate at a distance from the median fissure. The glands beneath the jaw were large and hard, as also were those in the left groin. The lungs, examined by Dr. Acland, were reported to be fairly healthy. During September, the surface of the palate

eviously ulcerated, almost entirely healed, but one auditory canal d the interior of the nose were affected with a similar condition. October, the larynx was examined by Dr. Semon, when the epi- ttis and arytænoid cartilages were seen to be ulcerated. In ovember, the apex of the right lung showed signs of active disease. e temperature, taken regularly about this time, recorded only a ght rise of the thermometer at night. In February of this year, e palate was occupied by three deeply cut ulcers. The right cheek o was now covered with scattered scaly papules, like the early stage lupus. In March, the lungs showed no distinct physical signs of disease. The palate also had again begun to heal. The secretions d small portions of the diseased surface were frequently examined Dr. Acland and Mr. Ballance, but no bacilli were at any time nd.—The PRESIDENT could recall only two cases in which the ient could have been certainly said to have lupus spreading from face to the palate. One was that of a woman, in whom recovery rly ensued after scraping, etc. Later, recurrence took place in tongue, and, finally, death from phthisis. He saw no reason excluding the palate, pharynx, etc., from sites of lupus.—. FELIX SEMON said that, when he first saw the girl, her whole it, as well as the appearances of the palate, pharynx, and larynx, tainly suggested the idea of tuberculosis. He agreed with roetter, Stoerk, and many other experienced observers, that in the erative stage of lupus of these parts, it was very difficult, often im- sible, with certainty, to distinguish, from mere laryngoscopic ex- ination, between tuberculosis, lupus, syphilis, carcinoma, and rosy. The absence of demonstrable changes in the lungs did not ue against the tubercular character of the palatinal and laryngeal ons, for the existence of a primary pharyngeal tuberculosis had been itively shown by Isambert and B. Fränkel. The further course of nts, even quite apart from the phenomena on the skin, which ap- red later, proved that the suspicion of tuberculosis must be given in favour of the diagnosis of lupus. There had been, repeatedly, al changes for the better and the worse in the conditions of the te; the patient's general health, apart from the obstruction to athing caused by the progress of the disease in the upper air-pas- es, had not perceptibly suffered; at no time had there been any a or dysphagia. All this, whilst very characteristic of lupus, was ost incompatible with tuberculosis. All observers were agreed, and Dr. Semon) could speak from personal experience, that the occur- ce of pharyngeal tuberculosis was always quickly fatal. Never had h an ulceration been known to heal, even if only in parts, spon- eously, as it had in Mr. Clutton's case; on the contrary, in ryngeal tuberculosis the originally disseminated ulcers quickly esced, formed one very large sloughing surface, and, whilst causing t violent pains, prevented the patient from taking a sufficient unt of nourishment, this leading to premature inanition. In ad- on to these points, the skin phenomena now present would settle, Semon thought, the question in favour of lupus. Had they been ent at the outset of the disease, he would have at once looked upon affection of the mucous membrane as a manifestation of lupus. It at present thought that this disease but very rarely affected the nx; and the excellent paper of Drs. Chiari and Riehl seemed to irm this opinion; for the authors, who had made a very diligent arch through literature, had only been able to collect forty-one s altogether, including eleven which they had seen themselves. It ned, however, probable, as suggested by Chiari, that lupus of the nx would be detected more frequently, if it were methodically ght for in all cases of lupus of the face and nose; for, when it ted the epiglottis, which seemed to be the seat of predilection, it ht obtain even considerable dimensions, without causing any ngeal symptoms. Dr. Semon finally drew attention to a case of is of the face, nose, palate, pharynx, and larynx, which he had rved and treated in conjunction with Mr. Malcolm Morris, and ch they had demonstrated to the members of the Society before meeting. The case, which, so far as appearances went, was very lar to Mr. Clutton's case, as shown by pictures handed round, ld be more fully described in the Society's *Transactions*. Dr. on wished, however, to draw attention to the very satisfactory lt of the local treatment of the larynx, obtained in this case. iri and Riehl had shown that, so far, the results of treatment of laryngeal complication had been most unsatisfactory. In most s, no improvement whatsoever had been obtained; in a few cases, st or slight improvement; in only two cases, apparently a real . In the present instance, the lady, who had been treated by ano-caustic punctures of the affected parts of the larynx, by Dr. on, had lost her voice entirely, more than a year before she came r his care, a big bunch of lupoid tissue occupying the interary- id fold, and mechanically preventing the phonatory approxima- tion of the vocal cords. By perseverance, the credit of which Dr. Semon wished to give to the patient, finally, after many disappointing recurrences, this bunch had been entirely destroyed, and the patient had completely regained her vocal powers. At present, the larynx had not been treated for more than five months; yet there was no trace of recurrence. In view of the very general opinion as to the hope- lessness of treatment of laryngeal lympus, Dr. Semon thought that it was right to communicate this result for the encouragement of others. Mr. DAVIES-COLLEY inquired if Mr. Clutton had examined the brothers or sisters of his patient for evidences of congenital syphilis. One child of the family had a history of some eye-trouble, and of lumps on the head, together with an ulcer of the leg. The child was treated with antisyphilitic remedies, but no marked improvement seemed to be derived therefrom. He had seen cases of ulceration destroy the soft palate, and then almost close the opening from the mouth to the pharynx by cicatrisation.—Mr. MALCOLM MORRIS said that the case shown by himself and Dr. Semon to the Society illustrated true lupus as opposed to tuberculosis. The question whether the two diseases were identical had a direct bearing on treat- ment. It was stated by Dr. Besnier, of Paris, that he had seen lung- infection follow mechanical treatment of lupus of the skin. Many other observers agreed with Dr. Besnier as to the identity of the diseases. The chief arguments used were these. 1. Bacilli were present in lupus-tissue, similar in appearance to tubercle-bacilli. 2. Inoculation of lupus in animals had produced tuberculosis in other parts, such as lungs and joints. 3. Lupus was more common in families that had a marked history of tuberculosis. In spite of these statements, Mr. Morris believed that, clinically, there was a differ- ence between lupus and tuberculosis, though the diagnosis might often be difficult. He would lay stress on two points; first, the rapidity of growth in tuberculosis; secondly, the power of internal remedies, such as iodine, cod-liver oil, etc.; whereas, in lupus, such remedies had, in his opinion, no effect whatever. Again, after treat- ing forty cases of lupus by scraping, he had never seen tuberculosis of the lung occur.—Dr. GLOVER mentioned the case of a man who had superficial round ulcers on the soft palate, which were very painful, but not malignant. They were diagnosed as tuberculous by Dr. Glover and Dr. D. Powell at the Middlesex Hospital. The patient soon had rapid tubercular disease of the lungs, and died. Bacilli were found in the ulcers.—Mr. CLUTTON, in reply, said he had not seen most members of his patient's family; but two he had seen, and they had no evidences of congenital syphilis. Had not the healing of the leg of the patient mentioned by Mr. Davies-Colley possibly occurred because the patient was in bed in the hospital? He cited cases of tuber- cular ulceration of the tongue in the *Pathological Society's Trans- actions* which had been cured.

Left Popliteal Aneurysm in a Patient the Subject of Locomotor Ataxy, cured by Pressure.—Dr. LONGHURST read particulars of this case. J. H. G., aged 51, single, temperate, and for many years an active member of the Alpine Club, notwithstanding that he had vari- cose veins, had syphilis in 1860, treated by mercury, though the attack was not followed by constitutional symptoms. He enjoyed good health until 1878, when symptoms of locomotor ataxy appeared, for which he voyaged to the Cape of Good Hope in 1883, but returned without material benefit; but, though his gait was unsteady, and he had other marked ataxic symptoms up to the time of his coming to Dr. Longhurst, early in April, 1885, for a swelling behind the left knee, he had been able to attend to his office-work as a solicitor, and to hunt two or three times a week. On examination, there was a pulsating swelling, of the size of a small walnut, in the left popliteal space, without *bruit*, and completely controlled by pressure on the femoral artery in Scarpa's triangle. To this, his attention had been called by an occasional aching in the joint, and pains on any movement which necessitated its full extension. Pulsation was distinct in both anterior and posterior tibial arteries at the foot, and the superficial veins of the limb were varicose. The limb was well nourished. Pulsation in the right popliteal was forcible, and the calibre of the vessel full. Treatment by pressure was finally determined on, and being concurred in by Professor Humphry, of Cambridge, on April 19th, treatment by pressure was commenced under the direction of Mr. Thomas Smith, assisted by Mr. F. A. Humphry, surgeon to the Brighton Hospital, and Mr. Humphry, then house-surgeon at St. Bartholomew's. At first, Esmarch's bandage was applied from the foot upwards over the knee, and retained, for about an hour and a half, then the screw- tourniquet to the femoral, and so on continuously by day, all pressure being omitted at night. The pressure was well borne, and, on the evening of the next day, a shot-bag, weighing 11¼ lbs., was suspended from a cross-bar over the bed, resting on the vessel in Scarpa's triangle, which completely controlled pulsation; and, after an hour, an extra

pound was added, and borne until 11 P.M., when it was taken off for the night, re-applied the following morning, the 21st, by which, alternately with Esmarch's bandage, pressure was maintained during the day to the almost complete obstruction of the vessel until 11 P.M., when pressure was again removed for the night. On the next day, the 22nd, the same treatment was pursued until 10.30 P.M., when pressure was taken off for the night, no pulsation being perceptible. On the 23rd, at 7.15 A.M., the shot weight was again put on; at 10.35, the foot was cold and numbed; the weight was removed, but applied intermittingly during the day until 7 P.M., when it was taken off; no pulsation was detected in the aneurysm, but in the small arteries around the knee-joint, and in the anterior tibial only at the foot. At 10.30 P.M., the limb was enveloped in a calico bandage; but, as the pressure was ill borne, preventing sleep, it was taken off at midnight. On the 24th, there was no return of pulsation in the tumour, which was quite firm, the aneurysm being thus cured by pressure in five days, omitted at night. The shrinking of the tumour took place gradually, the collateral circulation became by degrees more fully established, and the patient was at his office in a month from the commencement of the treatment; and, up to the present time, the cure of the aneurysm had remained perfect. Unhappily, however, the nerve-affection had steadily progressed, so that the sufferer was now unable to walk, and his future could not be considered hopeful.—Dr. HADDEN said that Mr. Croft, at St. Thomas's Hospital, had amputated the leg of a man suffering from locomotor ataxy for perforating ulcer of the foot, and that subsequently the patient nearly died from hæmorrhage. The vessels in the amputated limb were found to be much diseased.—Mr. T. SMITH said that Dr. Longhurst's patient had been treated by complete obstruction of the artery as long as he could bear it, as he (Mr. Smith) had desired to hasten the treatment. The first day there was some coagulation, more on the second, more still on the third and fourth days; on the fifth day, the aneurysm was all clotted. The clot, during the cure by this method, was sometimes moved. The circulation became arrested for a time, and then in a few hours the blood was found circulating freely through the limb. He would, perhaps, have rather preferred to tie the artery, in consequence of the patient's general condition, as a less strain would thereby, he thought, have been imposed upon his nervous system. The patient was a very resolute man, and put up with the trouble he had to bear, though his nervous symptoms were much increased by it. He (Mr. Smith) had known a limb removed for perforating ulcer of the sole, and the patient died, as in the case mentioned by Dr. Hadden.—The PRESIDENT thought the treatment adopted in the case by Dr. Longhurst was, perhaps, the best suited to it. In such a case the patient should be closely watched, and if his nervous symptoms seemed to be progressing, the surgeon should be disposed to give up the treatment by pressure, and resort to the ligature. Unless the arteries were actually diseased, he did not consider locomotor ataxy by itself a bar to operation, as the clotting in the arteries was a mechanical process, and was likely to take place as well in locomotor ataxy as in health. He observed that no *bruit* was heard in the aneurysm; if so, there was possibly a large opening into the sac. In that case, a clot might possibly one day fill the opening, and on the following day fail to do so. He thought the best cures were those in which a coagulum formed in the afferent as well as in the efferent vessels of the aneurysm.—Dr. CARRINGTON did not think there was any necessary connection between locomotor ataxy and arterial disease.—Dr. HADDEN thought it had been noticed that many cases of locomotor ataxy had arterial disease.—Dr. ANGEL MONEY corroborated this remark, stating that it had been noticed in papers published in the *Lyon Medical*.—Dr. LONGHURST said that no opium nor morphine had been given to his patient.

Successful Laparotomy for the Relief of Acute Intestinal Obstruction following Ovariotomy.—Mr. MEREDITH read notes on this case. The patient, a feeble old woman, aged 58, was operated on at the Samaritan Free Hospital in April, 1885, for double ovarian cystoma, complicated by very extensive adhesions. The subsequent progress of the case was in all ways satisfactory during the first week, at the end of which time all sutures were removed after the bowels had acted, the abdominal incision being found well united, and the pulse being recorded as normal. On the evening of the same day, the patient suddenly complained of nausea, and soon afterwards vomited a quantity of dark green fluid. On examination, the abdomen was found free from distension, and universally resonant on percussion, excepting immediately over the region of the cæcum, where some dulness was detected. The condition was diagnosed as commencing intestinal obstruction, probably caused by an adhesion-band. All nourishment by the mouth was at once stopped, and replaced by nutrient enemata of beef-tea, containing occasional doses of tincture of opium. By the following morning there had been no return of the sickness; the abdomen was somewhat fuller, and the urine passed during the night was for the first time found laden with albumen. Immediate operation was decided upon as likely to afford the patient the only chance of recovery. On opening the abdomen, the peritoneum was found intensely red and congested, evidently in an early stage of acute inflammation. A coil of greatly distended small intestine, was badly kinked and obstructed in consequence of the traction exerted upon it by a portion of the ligated omentum, which was closely adherent to its surface. This having been released with some difficulty, owing to the inflamed and softened state of the bowel, another distended coil, similarly obstructed by a separate omental band, was also set free. No further obstruction being discoverable, the abdomen was closed. The acute symptoms were at once relieved, and the temperature fell to normal again on the third day, but convalescence was tedious. No evacuation of the bowels took place until the twenty-third day, when fæcal matter was detected in the rectum, and relief followed the use of an enema. Thenceforth the bowels acted daily, and the patient left the hospital on May 16th. At the end of October, she stated that she had quite recovered her health, and was about to resume domestic service. Mr. Meredith urged the advisability of early resort to operation under similar circumstances.—Mr. T. SMITH inquired whether the albumen in the urine was, in Mr. Meredith's opinion, associated with the employment of the carbolic spray?—Mr. MEREDITH replied in the negative. He had seen it occur before in cases of abdominal mischief.

Living Specimens.—The following were exhibited. By Dr. STEPHEN MACKENZIE (for Dr. HANDFORD, of Nottingham): A Case for Diagnosis; Myxœdema (?) (this case was referred to the Myxœdema Committee of the Society). By Dr. CROCKER: Pigmentation, (?) Arsenical, occurring during the Administration of Arsenic for Chorea. By Dr. FELIX SEMON and Mr. MALCOLM MORRIS: A Case of Lupus of Face, Nose, Palate, Pharynx, and Larynx.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 29TH, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

On Irritability and Congestion of the Brain in Young Children.—Dr. DAY read a paper on this subject, in which he drew a distinction between the symptoms indicative of simple cerebral irritation, and those of slight congestion. Either condition might, under suitable treatment, subside, or it might on the other hand, if unrelieved, pass on to genuine meningitis. Cerebral irritation, to which the children of neurotic parents were especially liable, might result from blows, or from any circumstances which, from their local influence or general effect on the circulation, influenced the circulation in the brain. He read the notes of several cases where drowsiness, vomiting, partial unconsciousness, and febrile temperature had been prominent symptoms; several of which, nevertheless, had recovered. It was, he said, important to diagnose these cases early, as, if neglected, the irritation readily gave rise to inflammation. The thermometer was of value, but only to a limited extent, as it was by no means in cases in which the temperatures were the highest that the most unsatisfactory results were obtained. He advocated cold sponging as the best means of lowering the temperature.—Mr. BRUDENELL CARTER (President) had hoped for more definite information on the subject from gentlemen who were connected with children's hospitals. He advocated attaching skilled observers with the ophthalmoscope to hospitals where these diseases could be studied, as elsewhere very few opportunities were to be found. He alluded to the hyperæmia of the disc and the sheath of the optic nerve noticed by Dr. Bouchut, and called by him neuritis and perineuritis.—Dr. WEST thought that the distinction sought to be made between irritation and congestion was rather strained. He did not think that the observations of M. Bouchut were to be relied upon, and said that, personally, he was not much acquainted with the use of the opthhalmoscope, but he was bound to say that, although it had occasionally helped to confirm a diagnosis already established, he had not met with instances in which it had rendered service when the diagnosis could not be made without it.—Dr. SANSOM endorsed the President's remarks as to the value of ophthalmoscopic examinations, but called attention to the frequency with which the symptoms, which had been described as indicative of cerebral irritation, were relieved or cured by the discovery and remedying of errors of refraction. He had sometimes noticed what he would call a thickening of the disc, and this had been of service to him in making a prognosis in one or two cases.

Case of Pneumothorax.—Dr. WHIPHAM brought before the Society

se of sudden pneumothorax, in which careful examination of the st failed to detect any marked alteration in the lung-tissue. The ent was a clerk, aged 21, fond of athletic exercises, who had lost aunt from phthisis. He had enjoyed good health until November 1, 1885; when, in his capacity as a clerk at the general election, was exposed to a cold draught for twelve hours. Although he felt cold at the time, he was not ill. Exactly a week afterwards, while king quietly in the street, he felt a sudden and violent pain in the r part of his right chest, which caused a "catch" in his breath-He applied mustard to the painful part, and next day applied he hospital for treatment in consequence of a troublesome cough. admission into St. George's Hospital, on December 10th, 1885, the looked fairly well, and had no particular symptoms, but on exaation of his chest it was found that he was the subject of right mothorax, but there was no fluid in the pleural cavity. The t was slightly displaced to the left, and the liver was much essed. The patient was directed to keep perfectly quiet in and was ordered a little oxymel of squills to relieve his cough, a purgative pill occasionally. His pulse was 120, but his perature was normal. The signs of pneumothorax continued un-ed until the eleventh day, when evidence of diminution of air in pleura was manifest, and the heart's apex had nearly resumed its ral position. By the end of December, almost all signs of pneumoax had disappeared, and the patient was apparently quite well; on January 6th, 1886, he returned home. Previously to his dis-ge, careful examination failed to reveal any evidence of pulmonary se, though his chest generally was fully resonant, owing, perhaps, e patient being thin. Similar cases were cited bearing upon this lent, which was a rare one, in persons who were not the subjects ulmonary disease, namely, Dr. Thorburn's well known case, re-ed in 1860 in the BRITISH MEDICAL JOURNAL; Dr. George John-, in the *Clinical Society's Transactions*, 1881; Dr. Stephen Mac-ie's case in 1871; Dr. Austin Flint's case, recorded in his *Princi-and Practice of Medicine*, 1883; and a similar case recorded by tzel in Ziemssen's *Handbuch*. In the records of five of the cases ed, it was noted that the affection had occurred in comparatively g persons (under 37), and in them no disease of the pulmonary tissue l be detected, nor was there any history of previous symptoms point-o lung-affection; in one only (Dr. Mackenzie's) had the patient at-d the age of 50. The cases were all characterised by rapid re-ry under absolute rest, save Dr. Mackenzie's, where the urgency e dyspnœa, and the lividity of the patient necessitated paracentesis acis. The authors of the records quoted were somewhat divided the course of the lesion; some attributing it to undue tension and ure of previously formed pleural adhesions; others to rupture of mphysematous dilatation. In the absence of any clear evidence nphysema, it was manifestly impossible to arrive at a definite con-on as to the exact cause of the pneumothorax; nevertheless, hysema afforded the simplest explanation of the lesion, and was likely, therefore, to be the correct one.—Dr. SAMUEL WEST led to similar cases which had been collected, and said that Dr. pham's was singular, in that the patient seemed to have been but inconvenienced thereby, while, as a general rule, people in good th suffered more acutely when made the subjects of pneumo-ax.

NTENARIANS.—Miss Joanna Hastings, aunt of Mr. G. W. Has-s, M.P. for East Worcestershire, died at Great Malvern, on March , at the age of 103 years. Miss Hastings was born at Sutton field on March 14th, 1782, so that she was within two days of her h birthday. She was the eldest child of the late Rev. James ings, rector of Martley, Worcestershire, who died in 1856, at the of 100 years. Sir Charles Hastings, M.D., D.C.L., Admiral Sir nas Hastings, K.C.B., and Rear-Admiral Hastings, were brothers e deceased lady.—The Rev. Henry Seymour, Rector, writes from ne Pierrepont Rectory, Nottingham, March 11th:—"This severe her is fatal to the old. This morning there passed away Knightley h, to whom public attention was directed when he had attained 00th year, in July, 1883. Had he lived to next July he would numbered 103 summers. Retaining all his faculties to the last, ook to his bed a week or more ago, not so much on account of ing infirmities as to escape the severe cold. He was full of anec-to the last, and would brighten up upon any allusion to former es in which he was mostly conspicuous for feats of herculean gth. Though below the standard of height considerably, his characteristic was an enormous depth of chest. He could lift hts from which the strongest men would recoil, and was generally unted the most powerful man among his contemporaries."

REVIEWS AND NOTICES.

PHYSICAL EXPRESSION, ITS MODES AND PRINCIPLES. By FRANCIS WARNER, M.D. Lond., F.R.C.P., Assistant-Physician and Lecturer on Botany to the London Hospital; formerly Physician to the East London Hospital for Children. With fifty-one illustrations. London: Kegan Paul, Trench, & Co. 1885.

THE systematic study of the movements of the human body by the analytic method has, in recent years, attracted the attention of several investigators. M. Marey's researches on the physiology of walking and running are well known, and the gait of horses and other animals has been made the subject of a certain amount of study in other quarters; but the study of attitude and of movement, as indicative of mental or other nervous states, has heretofore been left chiefly to the artist. Dr. WARNER has taken up the subject from the physiological point of view, and has written an essay which, though it is somewhat inconclusive, contains a considerable amount of original thought and observation. The definition of the term Expression is made so wide that a confusion is inevitably imported; if "Expression is the objective sign of a property of the subject," then it cannot be limited to living beings; and we are compelled to admit that it would be logical to speak of the expression of a lump of chalk, or a crystal of sulphate of magnesia, whereupon it is not unnatural to look for some flaw in the premises. As a matter of fact, the term expression has, by a universal convention, been limited to a certain range of phenomena, and to extend its meaning, so as to include all the allied sets of phenomena, does not tend to lucidity.

Dr. Warner does, in fact, confine his attention almost entirely to the discussion of Expression as observed in the human species; but even here extends its meaning to embrace developmental conditions. The most interesting parts of the book are the chapters on Attitude and Posture, and on Art criticism; here Dr. Warner shows himself to be possessed of acute observation, great patience in the accumulation of facts, and no little skill in their analysis. The chapter on the posture of the upper extremities is well worth reading; the various attitudes of the hand are well described, and illustrated by excellent drawings. The experimental methods used by Dr. Warner for the study of movements have already been described in these pages, in a paper published in September, 1883.

INSOMNIA, AND OTHER DISORDERS OF SLEEP. By HENRY M. LYMAN, M.A., M.D., Professor of Physiology and of Diseases of the Nervous System in Rush Medical College. Chicago: Keener. London: Trübner and Co. 1885.

UNDER the pretext of a treatise on insomnia, the author has given us a very interesting disquisition on sleep, with its disturbances and variations in the shape of dreams, somnambulism, etc., introduced by a preface strongly tinctured with poetical allusions, which are charming, even when their relevancy is not quite apparent. A careful analysis of the phenomenon of sleep cannot fail to be replete with interest; the more so that, with the majority of people, the moment of falling to sleep is not precisely the one when their faculties of observation are most to be relied upon. As the author aptly observes, were it not for the fact that we are familiarised with the spectacle from our earliest days, we could not fail to be struck with alarm at the supervention of a condition so nearly allied to dissolution. It is only in recent years, that approximately correct views have obtained with regard to the physiology of sleep. At present, the irresistible feeling of drowsiness, which is premonitory of the onset of sleep, is attributed to the "choking up," so to speak, of the cells of the cerebral cortex by the products of their own activity; and the anæmia, which is also present, occurs rather as a consequence of this temporary cessation of activity than as a cause of it. The curious gradation in which the various systems are overcome and rendered quiescent is tabulated, and the peculiarities of perception during sleep are thus explained. The author declines to allow himself to be hampered by philosophical objections in his endeavours to account for the *modus operandi*, and judiciously refuses to treat mind and matter as separate and tangible entities.

Several interesting chapters are devoted to the consideration of the causes, import, and treatment of insomnia proper. The principal narcotics in general use are dealt with *seriatim*, and an attempt is made to gauge their comparative advantages and disadvantages.

A long chapter is consecrated to the subject of dreams, and numerous wonderful stories are given, bearing on their production and signifi-

cance. Between the mere erotic dream, with its simple etiology, and the vivid and persisting illusions of cerebral disorganisation, there is a great and important difference; and one, too, of practical importance to recognise in its intermediate gradations. The volume concludes by a chapter on somnambulism, and one on hypnotism.

The work is written in an easy, graceful style, and can be cordially recommended as an excellent example of a scientific subject treated in a popular and engaging manner.

NOTES ON BOOKS.

Hard Battles. By the Rev. INGLES HILLOCK. (Sonnensheim and Co.) Second edition.—We heartily welcome this second, and beautifully illustrated edition of Mr. HILLOCK's invaluable little book. This strikingly interesting account of hard battles fought for usefulness, and in getting to the roots of, and supplying the remedies for, London misery, is one of the most interesting and profitable records we have ever read of good work done, which most may imitate, though few can equal. "Not being untutored in suffering," says Mr. Hillocks, "I have learned to pity those in affliction." Since the first edition, the good work done by this good man has been practically recognised by a civil service pension from the Crown. Mr. Hillock is one of the ablest and most experienced of those who have worked in the homes of the poor, and who understand how sanitary aid may be the means of moral, as well as physical uplifting. We should be glad to see services, such as his, made still more continuously available for the service of the people, by an appointment as Commissioner, in connection with the present edition, and with a view to the social elevation of the people. Any leading persons, or bodies, desirous of continuing, for the sake of the higher, as well as of the health, interests of the people, such good work as Mr. Hillocks has given in the past, and could give in the future, may fruitfully direct his labours to any of our great cities. There is no one whom we have come across, who has shown more thorough knowledge of the social conditions which require remedy, or of the means of applying those remedies. Sanitary aid committees are apt to degenerate into sadly mechanical institutions, but inspirited and vitalised by the energy and high endeavour of such a man, their work might be expected to be fruitful in every sense. We recommend this book for general perusal, and we hope to hear that his capabilities, and his enthusiastic love of the work, have been utilised by some such means as we suggest.

Arkhiv Psikhiatrii, Neirologii ee Sudebnoi Psikhopatologii (Archives of Psychiatry, Neurology, and Forensic Psycho-pathology). Edited and published by Professor P. J. KOVALEVSKY. Vol. vi, part 2, pp. 122. (Kharkov).—The current number of this very useful periodical contains the following papers. 1. Professor J. R. Pasternatzky, of Warsaw: A Forensic Case of Morbid Affection. 2. A. G. Steinberg, of Warsaw: On Examination of Epileptics and Stutterers, in regard to their Fitness for Military Service. According to the author, all subjects suffering from stammering, associated with spasms of phonico-respiratory apparatus, as well as those in whom there is present a defect of speech, caused by paralysis of the facial or lingual nerves, are absolutely unfit for the service. 3. P. M. Avtokratoff, of Warsaw: A Case of Progressive Paralysis of the Insane. 4. V. J. Fahrenholz, of Kamenetz-Podolsk: A Case of Murder in the State of Insanity. 5. S. N. A. Mislavsky, of Professor N. O. Kovalevsky's laboratory in Kazan: A Contribution to the Histology of the Medulla Oblongata (in cats), with four tables of drawings. 6. Professor Charcot's Six Cases of Hysteria in the Male, collected by Dr. G. Guinon, and translated by Mrs. Lidia Kovalevskaia. 7. Project of the Bill on the Insane in France, translated by Dr. Maria K. Valitzkaia, House-Physician to Professor Kovalevsky's Clinic. 8. Professor P. J. Kovalevsky: On Perversion of Sexual Sense in Epileptics. This is a short, but masterly sketched, note, on the case of an epileptic peasant suffering from religious ecstasy and aversion to women, the patient invariably having sexual connections only with animals (at first with hens and ducks, then with cows and mares). 9. Mrs. Lidia Kovalevskaia: On a Lunatic Asylum in Styria. 10. Z. V. Gütnikoff: Senile Melancholy, with notes on two cases. 11. Dr. Thudichum: Physiological Chemistry of the Brain; translated from the English by Dr. M. E. Lion, of Odessa.

Mejdunarodnaia Klinika (The International Clinic). Edited by Professor VLADIMIR N. POPOFF. December, 1885. St. Petersburg: N. Zyloff.—The current number of this monthly gives only five articles translated from German (Professor Stoffella, on Habital Constipation in Women; and Professor Bing's, on the Use of Boracic Acid in Ear-Diseases), English (Dr. Herbert Snow's paper, Is Cancer Hereditary? taken from the BRITISH MEDICAL JOURNAL, October 10th, 1885, and translated by Dr. V. Dobroklonskyt), Polish (Professor Szokalski's, on Hyperæsthesia Centralis Retinæ), and French (Dr. Estradère's, on Massage).

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

TINCTURE OF STROPHANTHUS.

MESSRS. BURROUGHS and WELCOME have prepared a tincture of strophanthus, which appears to be an excellent pharmaceutical preparation. It is a clear, dark amber-coloured fluid, miscible with water in all proportions, and yielding an opalescent solution; it can be dispensed with acids or alkalies, and does not change colour with perchloride of iron. As a pharmaceutical preparation, therefore, it has some advantages over tincture of digitalis, and its chief drawback is the intensely bitter taste. Much difficulty was experienced in obtaining the raw material, which was at length purchased, and forwarded through the good offices of a missionary. The material, as imported, consists of dried pods, about a foot long, tied together in strings, after the manner of pan-pipes. The pods are closely packed with the flattened ovoid-seeds, which are surmounted by an elongated feathery head. The tincture, we are informed, has been prepared by the method, and of the strength, recommended by Professor Fraser.

SANITARY FLOORING.—The names of the agents to Messrs. Bucher and Durrer, should have been given, in our issue of March 27th, as Scheibler, Brothers, and Co., 23, New Broad Street, E.C.

SAVORY AND MOORE'S PEPTONISING PELLETS.

SIR,—In a recent note on our Peptonising Pellets, you say "they are intended mainly for preparing predigested food for rectal alimentation." We find this has given rise to an erroneous impression, which we shall feel much obliged if you will correct. Although of course, suitable for preparing predigested foods for rectal alimentation, they are still more suitable for peptonising milk, etc., for drinking, and this on account of the purity of the flavour of the resulting product. They also possess the very distinct advantage of being exceedingly active, and not requiring the large excess of alkali that all other peptonising preparations do. In infant feeding, this should be of considerable moment, as it can hardly be desirable to give what would be large doses, even for an adult, of bicarbonate of soda with every meal.—We are, sir, your obedient servants,

SAVORY AND MOORE.

*** We have pleasure in making the desired correction. We find Messrs. Savory and Moore's pellets, as might safely be inferred, possess the advantages claimed for them. They are very active, and do not require a large excess of alkali, which we consider a feature of much importance, especially in infant-feeding. The milk peptonised by the pellets is of very fine flavour.

SHOP HOURS REGULATION BILL.—A conference on this subject, presided over by the Lord Mayor, was held on Tuesday last, at which the following resolution, proposed by Mr. Stapley, was carried: "That, while heartily accepting Sir John Lubbock's Bill, which would undoubtedly confer great benefit on young persons engaged in shops, though preferring seventy-two hours a week instead of twelve hours a day, this meeting prays Parliament to go further, and to add a clause enacting compulsory general closing at 8 P.M. on five days a week and 10 o'clock on Saturdays, a measure which would confer inestimable benefit on the general shopkeeping community, and relieve them from the intolerably long hours from which they now suffer."

ST. JOHN AMBULANCE ASSOCIATION.—The Countess Stanhope, several officials of the London and South-Western Railway, and Mr. John Furley, and others, distributed, on Tuesday last, certificates to a number of the staff in connection with the classes lately held at Waterloo terminus.

SALE OF POISONS.—The Pharmaceutical Society of Great Britain has claimed two penalties of £5, against a chemist and druggist at Houghton, named Sellars, for selling poisons contrary to the provisions of the Pharmaceutical Act, 1868, his name not being on the register. The defence put forward was that the defendant was formerly assistant to Dr. Anderton, by whom the business was carried on. The magistrate characterised the case as most scandalous, and summoned the defendant to pay the penalties and costs on the higher scale.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SCRIPTIONS to the Association for 1886 became due on January t. Members of Branches are requested to pay the same to their spective Secretaries. Members of the Association not belonging Branches, are requested to forward their remittances to the eneral Secretary, 161A, Strand, London. Post-Office orders ould be made payable at the West Central District Office, High olborn.

The British Medical Journal.

SATURDAY, APRIL 3rd, 1886.

LORD CHANCELLOR'S AMENDMENTS TO THE LUNACY ACTS AMENDMENT BILL.

uesday last, in the House of Lords, in committee on the Lunacy Amendment Bill, as amended in committee, and re-committed, ord Chancellor moved the amendments standing in his name, regard to the postponed clauses of the Bill. These amendments e embodiment of the principal recommendations submitted to ord Chancellor by the Parliamentary Bills Committee of the h Medical Association (*vide* page 658). They were accepted by Lordships' House, and now constitute part of the Bill. They with the subjects of single patients, private asylums, and the y and borough asylum accommodation for patients not paupers.

believe that the profession, and particularly general prac- ers of medicine, will be gratified by the withdrawal of the clause Bill which, had it become law, would have precluded the fresh ion of any person of unsound mind as a patient into the house of ical man or other person, except where the house in question t the passing of the Act, already licensed for the reception of s of unsound mind; for, although the clause was not so l, and no licence is necessary for a "single patient," the actual ion of the Bill, as a whole, would have been to the effect ed. Yet it would not have interfered with the single s already under that form of care at the time of the passing of t.

provision of the Lord Chancellor's amendment, that, with some ons mentioned below, no lunatic shall be received as a single , except under the order of the Judge in Lunacy, is a depar- m the general method of the Bill, concerning the reception of patients under legally authorised care; and we would have pre- mode of procedure for "single," precisely the same as that ther private patients, and that the Bill should have retained ity and harmony in the actual working of its several parts.

xceptions to this provision, as regards an order of the Judge in for the reception of single patients, are the cases of those who, nedical certificates, are certified to be suffering from temporary dness of mind, or senile mental decay, or to be desirous of rily submitting to care and treatment. This is another de- from the general method of the Bill; and one upon which men will do well to be chary of acting; inasmuch as they hen be taking upon themselves the responsibilities undertaken, ard to other patients under the Bill, both by the justice or n Lunacy, and by the medical men certifying.

The modifications introduced into the Bill with respect to private asylums practically amount to a withdrawal of the direct and pressing attack against their existence made in the Bill, and of the imminent and confiscatory closure of many private asylums, and the not far distant closure of the rest of them under circumstances of greater or less uncompensated damage. The effect of the Bill, as now amended, will be as follows. Except in substitution for a house licensed at the passing of the Act, no new private asylum can be established in the future, and no increase will be permitted in the number of patients which any private asylum is allowed to receive; the operation of the Act, however, not extending to houses used solely for the reception of idiots and imbeciles. Nor will the licence for any existing private asylum be continued in the future, unless the Commissioners, or the justices, as the case may be, are of opinion that the house has been, in all respects, well conducted up to the time at which renewal of the licence must periodically be sought. And, again, the effect of the Bill will be to encourage and facilitate the providing of accommodation by the justices of any county or borough for lunatics not paupers, thereby favouring the establishment of powerful competitors with the private asylums, these competitors being backed by the resources of the county or borough purse.

The above provisions ought to satisfy those who are opposed to private asylums in principle, and yet are not prepared to advocate abolition with compensation. The operation of the Bill will be, more or less, to discredit or damage those institutions; but we think it may well be accepted now by the proprietors of private asylums, as a compromise conceived in an intended spirit of fairness, and the amendment as a great concession on the part of the Lord Chancellor. Nevertheless, consistently with the leading article in this JOURNAL of March 6th; with the memorandum of the Parliamentary Bills Subcommittee on the subject, in the issue of March 13th; and with the letter prefixed to the same, and printed in the JOURNAL of March 20th, it is still maintained that the fairest way is to thoroughly investigate the matter; and, if our Parliamentary authorities decide that private asylums are undesirable, to abolish them, as far as concerns *private* proprietorship, on equitable terms of compensation; or, on the other hand, if the result of such investigation be favourable to them, to avoid inflicting upon them direct or indirect injury or slur by legislation.

Lord Shaftesbury's views on the private-asylum question were fluctuating; and the usual discrepancies with regard to them again cropped up in the debate in the House of Lords, although it is not very long since his lordship spoke favourably of private asylums in that chamber.

Whilst thanking the Lord Chancellor for the amendments introduced, it is to be regretted that there have not been brought into the Bill some modifications of several other clauses, more or less on the lines urged in the memorandum of our Parliamentary Bills Subcommittee and the accompanying letter, particularly with regard to (1) the suggestion of a protective provision for those who receive and detain patients in good faith, similar to that provided in the Bill for those who certify and send them; (2) the suggestion under Clause 30 (now 31), the operation of which clause would afford a fertile basis for vexatious actions; (3) the suggestions as to the complex provision and unnecessary details of Clause 22 (now 23); and (4) the suggestions concerning workhouse medical officers.

TUMOURS OF THE SPERMATIC CORD.

New growths in connection with the component parts of the spermatic cord are of interest, not only from their rarity, but also because their diagnosis from hernia and other affections frequent in the inguinal regions is subject to difficulties, and exposed to sources of fallacy. Cystic tumours of the cord have been well studied and much written about; they now are what is termed "familiar to every student," at least in the pages of his text-book on surgery. Their relation to the obliterated peritoneal process between the peritoneum and the tunica vaginalis testis is well known. The long recognised condition of the serous prolongation in congenital hernia is an unfailing beacon to the true pathology of these cysts; and in this sense they are not homologous to any of the cysts common in the neighbourhood of the female internal organs. Solid tumours of the cord have been systematically, or specially and separately described, by Curling, Fergusson, Walsham, and several distinguished French surgeons and pathologists. Last autumn, Dr. Brossard contributed a valuable article on this subject to the *Archives Générales de Médecine*, wherein was contained the author's own experience, added to the researches of others. He found that, in the spermatic cord, fatty tumours were frequent, sarcomata not very rare, fibromata decidedly rare, and primary cancer confined to one single authentic case. The fatty tumours are sufficiently common to be borne seriously in mind, when a swelling resembling an incomplete inguinal epiplocele appears in the inguinal canal. Pelletan describes one form where the tumour is made up of small pellets of fat, each connected with the parietal peritoneum at the internal ring by a distinct pedicle of connective tissue.

The commoner form of fatty tumour forms a lobulated oval growth n the inguinal canal, which it often distends so as to facilitate the descent of intestine. Dr. Brossard only found two cases of fibroma of the cord in medical literature; both grew slowly, and attained a great size. It is probable that either or both might have been partly myomatous. Fibro-myoma has several times been observed in the canal of Nuck; Mr. Stanley presented a specimen of myoma of the round ligament to the Museum of the College of Surgeons, where it may now be seen. That ligament, however, is really a process of uterine tissue, and therefore in connection with an organ highly subject to myoma, whilst the only plain muscular fibre likely to give rise to a tumour of this class in the cord is that which lies in the tunica adventitia of the vas deferens, forming the cremaster internus of Henle. Brossard refers to two cases of myxoma; Walsham has described a case of what he terms myxo-sarcoma, expressing his belief that some of the "fibro-cellular tumours of the scrotum" of old writers might have had their origin in the cord, to which they were described as being adherent. Sarcoma appears to have been accurately described in nineteen cases; many, some pathologists would say all, of the "medullary cancers" of the cord described by pathologists of a bygone age must be included under this head. Brossard agrees with Nélaton in denying that tubercle is ever developed in the spermatic cord, whilst gummata have certainly been found in that structure. The thirty-first volume of the *Transactions of the Pathological Society of London* contains an account, by Mr. Walsham, of a remarkable tumour of the spermatic cord removed from a child four years of age. The child had a congenital hydrocele. A fluctuating globular swelling appeared just outside the external abdominal ring, and was diagnosed as an encysted hydrocele of the cord. It suddenly disappeared, and was followed by a solid swelling just above the testicle. The swelling rapidly increased in size, so that the fluid in the sac of the congenital hydrocele could no longer be returned into the abdomen. There was no history of syphilis. The growth was removed, together with the testis. It formed a tumour intimately connected with the epididymis; the vas deferens ran through its substance. It was made up of a tubular system of cells. Its nature was very uncertain; some might term it an adenoma; others, including Mr. Walsham, were inclined to attribute its origin to some of the tubular remains of the Wolffian body abundant at the commencement of the cord. In this way, it would be homologous to the papillomatous tumours, developed from similar relics of the Wolffian body, in the broad ligament and the hilum of the ovary, or even in its more essential part.

THE WEAR AND TEAR OF MODERN LIFE.

A discussion on the above subject, recently initiated by Dr. Roos in the *Fortnightly Review*, has been largely taken up by the press and treated in a manner befitting its importance. There has lon prevailed a conviction, the outcome in part of intuition, in part o evidence, which, in its nature, is somewhat indefinite, that we ar living at too fast a rate, and that the pressure shows signs of increas rather than of diminution.

There seems no reason to dispute the prevalent impression tha nervous diseases are commoner now than formerly, and that we suff vastly more than our forefathers from the sense of pressure, worry and unrest. Mr. Goschen, in his recent admirable address on Hea ing, Reading, and Thinking, remarked with too certain truth tha not only are we always in a hurry, but that we would be ashamed t admit that it was ever otherwise. This high tension, though n doubt peculiarly characteristic of metropolitan life, prevails more o less in all our large centres of population, and we cannot regard i possible further increase without apprehension, both for ourselv and for those who will come after us. To a certain extent, it is tl inevitable outcome of modern civilisation. Steam has not merc quickened physical movement, but its accelerating effect has operat in every department of life and manners. The telegraph and tel phone mark the victory of the nineteenth century over space an time, but we pay for the boon in an increased expenditure of vit energy. Education has enlarged its scope and its claims at rapid a rate, that already the timid are beginning to demand halt.

Now, we are far from thinking that civilisation will arrest onward career or abate its claims, no matter how loud or how earn be the notes of alarm. We cannot put the drag on human progre or modify at will the complicated conditions of modern socie Ease of existence and simplicity of manners are not to be obtain by merely sighing for them. But, while we can do little to stay t onward relentless rush of modern progress, it is worth our while inquire what are its peculiar dangers, and whither it is surely tendi We cannot leap from the express train, but it is something to kn whither we are going, and whether the road is clear.

Medical science offers us this preliminary consolation. Hard wo physical or mental, is not only not hurtful, but it is actually healthf The hard-worked muscle, whether of arm or heart, responds to stimulus, and receives an accession of vigour and development. hard-worked brain, if placed under favourable conditions for activity, becomes more vigorous and fruitful. Indolent inactivit

or mind is undoubtedly far more injurious to both physical and ectual vigour than severe labour, provided only that the labour ırsued under healthful conditions of food, air, rest, and sleep. in brief, is the message of science, that not labour, but its too abnormal environment, is responsible for the deterioration of the cal and intellectual powers. The factory operative who suc- s at forty, dies not of hard work, but of foul air and defective Overpressure in the schools means, for the most part, not that ain is getting too much food, but that the stomach is getting too The student induces brain-weariness, not merely by excessive but by late hours, insufficient sleep, lack of fresh air, and, ps, an undue partiality for the tobacco-leaf or the tea-pot. It t be too strongly proclaimed, that the need of modern civilisa- , not that we should arrest the pressure of work, which it is un- ary to do, and, if necessary, would be impossible, but that we l learn to work under healthful and rational conditions.

of the most genuine difficulties of modern life lies in the hin- s which exist to the proper adjustment of work. The hard worker man who maintains a high average of work, not he who crowds ne day the toil of two, and then spends two or three days of s in attempting to recuperate his powers. No error is more nt or more disastrous than this. Much vexation, disappoint- and disease would be averted, if we would ascertain the limits powers, and realise that to exceed them is not an economy of ut precisely the reverse. This is a hard lesson to learn, and ometimes learnt too late. *Si jeunesse savait et si vieillesse* —if youth only knew how rightly to use its powers, and if y retained the powers which it learns, perhaps too late, how to This attempt to crowd into one day the work of two has the lisadvantage of entailing a great expenditure of vital force as ult of worry. We wear ourselves out, not by hard work, but ious thought regarding the adjustment of work, and by nervous n at the failure to accomplish an impossible task. A com- cial system makes a multiplicity of claims upon us; but, if we ive wisely, we must learn so to adjust those claims, that we scharge each in the order of its importance, and not waste time ergy in constant hesitation as to which has the right of .

ce gives us a further consolation in its dictum, that rest is not ound in inertness, but in change of occupation. The over- man often looks forward to his annual holiday, and promises the great luxury of simply doing nothing. He tries the ex- t, and, in nine cases out of ten, it is a disastrous failure. He f lying on his back, and watching the clouds or the sea, and a delicious indolence. He gets his wish, and he is more d miserable than ever before. He has forgotten that he is r a child, and that he has lost for ever the capacity of being ut a distinct change of occupation would have given him raction which he needs. Thus, we see a great statesman the leisure of the Parliamentary recess in maintaining a hic controversy, or a great naturalist turning aside to dis- pon the choice of books. Amid the high tension of the th century, it is some consolation to know that the weary rker need not seek absolute idleness; but, by turning aside h pastures, may find new material for the healthful exercise ental activity which has become second nature.

nclusion at which we arrive is, then, that the need of our age is not rest and stagnation, but healthful conditions for work, freedom from worry, suitable variety, and a wise distribution of our time.

In the April number of the *Fortnightly Review*, Dr. Roose resumes the thread of his former discourse, and indicates some of the remedies for the "wear and tear" which formed the subject of his first article. He enlarges with perspicacity and good sense upon food, rest, sleep, recreation, and kindred topics. On some points—for example, the value of horseback exercise to the brain-worker, the importance of rest not only after but before eating, and the necessity of seeing that the annual holiday affords mental distraction as well as physical repose—we can strongly endorse the opinions of the writer. Dr. Roose's articles are apt and timely, and they are sober and practical; they express opinions generally entertained by thoughtful medical men, and are well worth the attention of the wider circle of busy brain-workers, who require from us, not a prohibition of work, but help and guidance towards its better and easier accomplishment.

Mr. James Stuart will take charge of the Contagious Diseases Bill, in the remaining stages, in the place of Mr. Stansfeld.

The use of calf-lymph for vaccination has been made compulsory in the Grand Duchy of Baden, from March 1st.

The college at Corte, a town in Corsica, has been shut up, in consequence of an epidemic of typhoid fever breaking out in it.

A gratis vaccination service has been organised at Tunis. Prizes are given to parents of children from whom vaccine can be taken.

Vaccination from the calf is now practiced at four of the public vaccine stations at Calcutta; and Dr. O'Brien, the Health Officer, reports that it is not now regarded with disfavour by the people.

An extra meeting of the Ophthalmological Society of the United Kingdom will be held on April 8th, in consideration of the devotion of the evening, on May 6th, to the discussion on Exophthalmic Goitre.

A law-court at Constantinople has condemned a vineyard proprietor to six months' imprisonment and twenty pounds' fine, for having imported the phylloxera.

Dr. Horner, Professor of Ophthalmology in the University of Zurich, has retired on account of the state of his health; and Dr. Otto Haab, many years assistant in the Ophthalmic Clinic, has been appointed his successor.

It is stated that the death-rate of Berlin in 1885 was 24.6 pe 1,000, against 26.6 in 1884, and 29.3 in the previous year. This satisfactory reduction has extended to the mortality among children; which, for infants under one year, was 36.52 per cent. of the tota deaths, against 39.13 in 1884.

Lectures will be delivered by Dr. E. Symes Thompson in Gresham College, Basinghall Street, E.C., on the Diseases of Infancy and Childhood, on Tuesday, April 6th, at 6 p.m.; on Wednesday, April 7th, at 6 p.m.; on Thursday, April 8th, at 6 p.m.; and on Friday, April 9th, at 6 p.m.

Dr. G. S. Jewell, of Chicago, the founder and former editor of the *Journal of Nervous and Mental Diseases*, will bring out, next May, the first number of the *Neurological Review*. This journal will appear monthly, and contain forty-eight pages. It will be edited by Dr. Jewell, and published by Rand, McNally, and Co.

Dr. C. Bohr has been appointed Professor of Physiology in the University of Copenhagen, in place of the late Dr. Panum. Dr. Bohr studied in Ludwig's laboratory at Leipsic, and was several years assistant to Dr. Panum, who specially recommended him as his successor.

The fiftieth anniversary of the foundation of the University of London taking place this year, an active movement is on foot amongst the graduates, and some of the members of the Senate, to give some public recognition to the event. A meeting of the annual committee, with members of some other committees associated with the University, has been held this week, with the view of promoting this object.

WESTMINSTER SANITARY AID ASSOCIATION.

The fourth annual meeting of this model Society will take place in St. Andrew's School-room, Victoria Street, Westminster, on Thursday, April 8th, at 3 p.m., Lord Algernon Percy, M.P., in the chair.

THE REPRESENTATION OF THE UNIVERSITY OF LONDON ON THE GENERAL MEDICAL COUNCIL.

At a meeting of the Senate of the University of London, on Wednesday, March 31st, Sir William Gull was appointed to fill the vacancy in the General Medical Council, caused by the death of Dr. Storrar. The appointment being annual, Sir William Gull holds office until the period Dr. Storrar's incumbency would have expired, but he will be, of course, eligible for re-election. It will be remembered that Sir William Gull formerly had a seat on the Council as a Crown representative, but resigned the appointment some years ago.

THE SMALL-POX EPIDEMIC AT MONTREAL.

The *New York Medical Record* states that a report of a Subcommittee, appointed by the Civic Board of Health, attributes the outbreak of small-pox to the arrival of the conductor of a Pullman car from Chicago, suffering from the disease. The admission of this man to the Hôtel Dieu was followed by the occurrence of several cases in the hospital; in consequence, the hospital was closed, and, as the municipality had made no provision for receiving and isolating small-pox patients, the infected persons returned to their homes, and formed numerous centres from which the disease spread.

AN ENGLISH PROFESSOR OF AURAL SURGERY.

We learn with pleasure that Dr. Urban Pritchard, aural surgeon to King's College Hospital, has been appointed professor of aural surgery at King's College. As this is, we believe, the first foundation of a Professorship of Aural Surgery alone in this country, the appointment on which we congratulate Dr. Pritchard has more than a personal significance. It shows a growing recognition of the importance of this specialty.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

The annual meeting will be held in the Rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, W., on Tuesday afternoon, April 6th, 1886, at four o'clock. The President's address, on Improved Legislation for Habitual Inebriates, will be delivered by Dr. Norman Kerr, F.L.S.; and a paper will be read on Uncontrollable Inebriety, by Dr. J. B. Hurry, of Reading. Medical practitioners, and others interested. are invited.

VACCINATION IN TRINIDAD.

In the years 1871 and 1872, there was a widespread epidemic of small-pox at Trinidad, during which 12,351 persons were attacked, and 2,449 died. So generally did the disease spread through the island, that the Surgeon-General, Dr. Leonard Crane, thinks it may be assumed that nearly all were attacked who were susceptible. In 1872 a vaccination ordinance was passed, and most of the childr who had reached the age of three months have been vaccinated, t total number of vaccinations under the ordinance amounting 40,110. Since then the disease has only once appeared in the colon where two children were attacked, and one died.

SUSPECTED CHOLERA IN SPAIN.

The journal *El Liberal* of March 30th states that the Government h received a telegram from the Governor of Bilboa, reporting some su picious cases of illness in the Bilbao mining district, two of which t medical authorities have pronounced to be cholera. Sanitary preca tions have been taken by the authorities.

THE LATE MR. SAMUEL GASKELL.

We regret to hear of the death of Mr. Samuel Gaskell, many yea one of the Medical Commissioners in Lunacy, which took place, la week, at his residence at Walton, Surrey, at the age of 79. A sket of Mr. Gaskell's labours in the improvement of the treatment of lun tics will be given in next week's Journal.

BABY-FEEDING IN WORKHOUSES.

At an inquest on the body of a child held at Totnes Workhouse, t medical officer stated that the deceased had died from being overfe and he strongly condemned the system of giving infants solid foo The matron's evidence, which appeared incredible, stated that, unl the orders of the Local Government Board were to the contrary, s was compelled, even if a child were born to-morrow, to allow it th ounces of bread each day. The Coroner remarked that a child young could not digest the food, and the medical officer added that so food, when given to infants, became "bullets." It could not be term anything else, and he was utterly surprised at the Local Governme Board orders.

A WALK WITHOUT ALCOHOL.

Mr. Edward Payson Weston, the progress of whose great wa without alcohol, of 5,000 miles, at the rate of fifty miles daily, duly recorded, has just won another victory for temperance. H opponent was O'Leary, a younger man. The contest took place the United States; the condition being, that each should walk twe hours daily, the first to cover 2,500 miles to be the winner of a purse 3,000 dollars. Weston walked fifty-four days, averaging 46$\frac{15}{24}$ mi daily, and was in excellent condition at the termination of his br liant performance. O'Leary collapsed after finishing 2,290 miles, a did not reappear on the track. As Mr. Weston has been a total a tainer for some years, and his opponent is in the habit of regula drinking intoxicating beverages, they were regarded as representat men, and the partisans of both abstinence and moderate drinki were sanguine of the success of their respective champions.

THE SEWAGE OF LONDON.

Dr. W. H. Corfield, writing on the several steps taken for the p cipitation and deodorisation works in connection with the metropoli sewage, directs attention to the report of the Works and General P poses Committee of the Metropolitan Board of Works, on this subj which has not, he thinks, received the attention it deserves. T report, he points out, amounts to a recommendation that the sew of London should be treated by certain processes of precipitation deodorisation, and then discharged into the river at the present c falls. "It will be remembered," he observes, "that the Royal C mission on Metropolitan Sewage recommended that, if this were do the effluent should be filtered by passing it through land before be discharged into the river. They, however, anticipated that 'suita land, in sufficient quantity and at reasonable cost, cannot be procu at the present outfalls,' and the board has found this to be the ca but, instead of adopting the alternative suggestion of the Comm sioners, the Works and General Purposes Committee have made

pt to show that the sewage can be sufficiently purified by ical processes, to be discharged into the river at the present out- in spite of the statement of the Royal Commissioners that such rge could be only adopted 'as a preliminary and temporary re,' and that the necessary further purification of the liquid por- f the sewage, 'according to the present state of knowledge, can e done effectually by its application to land.'" "What," he "was the alternative suggestion of the Royal Commissioners the Board's Committee entirely ignore? It is found in Con- n 13 of the Second Report of the Royal Commissioners, which as follows. 'If suitable land, in sufficient quantity and at able cost, cannot be procured near the present outfalls, we mend that the sewer-liquid, after separation from the solids, be d down to a lower part of the river, at least as far as Hole Haven, it may be discharged.' Before the Board decides to enter upon s of very costly experiments, on a larger scale than they have to attempted, the ratepayers," he urges, "have a right to know the deliberate recommendation of the Royal Commissioners, would afford a permanent solution of the difficulty, is entirely arded; furthermore, it would be interesting," he says, "to know view the complainants—namely, the Corporation of the City of n, the Local Board of Erith, and others, at whose instigation yal Commission was appointed, will take of such contemptuous ent of the recommendations of that body, and whether, after ms of the ratepayers' money have been spent in the construction ks and other permanent works, to say nothing of the purchase ensive chemicals, they will, by way of injunction, or otherwise, top to such an imperfect method of treatment, and insist on rrying out of the recommendations of the Royal Commissioners ir entirety."

PHOTOGRAPHY IN PHYSIOLOGY.

ewspapers have lately contained articles on the application of graphy to astronomy, a prolonged exposure of the sensitive plate ng the existence of nebulæ not before suspected. Now, in the at the opposite end of the scale, in physiology, we hear of the tion of instantaneous photography to the study of the action heart. By means of an instantaneous drop-shutter, giving an re of one-sixtieth of a second, Dr. W. Thompson, of New York, ceeded in obtaining photographs of the heart itself, in succes- ases. By taking a series of such photographs, the whole cycle heart's action can be studied at leisure, in a series of pictures, ucing with absolute faithfulness the aspect of the heart before, , and after systole. The peristaltic movements of the intestines so be photographed; and the effect of drugs, both on cardiac and on intestinal movements, can be observed by this method, certainly seems to hold out promise of future usefulness. Dr. son's paper is published in the *New York Medical Record* rch 13th, 1886.

FIRE AT THE EAST RIDING COUNTY ASYLUM.

broke out in this institution at Beverley, on Friday, March bout 5.20 P.M. It was well alight before being observed, and, eing a very strong wind blowing at the time, the flames very spread. The fire was supposed to have been caused by some g soot falling upon the roof of the house occupied by Dr. l, the medical superintendent. The alarm was given, and the engine and brigade were very promptly on the spot. The fire t such a hold, that the efforts of the brigade were directed to our to prevent the fire from reaching the asylum, to which the tendent's house is attached. In these efforts, fortunately aided direction of the wind, they were quite successful. Other en- om the barracks and town arrived, and the fire was ultimately ished. The discipline of the asylum was excellent. The were got out of all harm's way without any panic or un- , and, had matters turned out worse, no difficulty would have been experienced in removing them to a place of safety. No one was hurt or injured in any way. Much property even was saved, but Dr. and Mrs. Macleod lost their personal effects.

SUPRAPUBIC LITHOTOMY.

THE operation of suprapubic lithotomy received the attention it deserves at an extra meeting of the Royal Medical and Chirurgical Society, which was held last Tuesday to discuss it. Sir Henry Thompson showed a remarkable series of eight very large calculi, which had been extracted by that method with complete success (except in one case in which there had been advanced renal disease, and which it is hardly possible to think would have been amenable to the lithotrite, even in very skilful hands, or to the lateral operation, without very dangerous bruising of the tissues). The immense mass which Mr. Rivington showed, weighing about 24 ounces, could certainly have been attacked in no other way. Considering the peculiar circumstances of its encystment in a sacculus of the bladder, it was a considerable triumph to have removed it at all, and brought the patient through the immediate danger of the operation; although its sequelæ, combined with probably pre-existing pyelitis, proved ultimately fatal in three months. That the suprapubic operation was not very difficult was the opinion of all who had had practical experience, and that it was appropriate to the treatment of some large stones was the conclusion to which all agreed, whether speaking from theory or practice. Some opinions of the highest value were expressed by Mr. Lund, Sir Henry Thompson, and Mr. Cadge. A good deal of time was spent in discussing the effect of the distension of the rectum on the anatomical position of the bladder and peritoneum, and some divergence was found in the results of experiment; but we cannot help agreeing with Sir Henry Thompson, that the practical convenience to the operator of a steady base upon which to work, and his ultimate success, must be the final test of the importance of the anatomical question.

ON THE SURGICAL TREATMENT OF BRONCHIECTASIS.

THE discussion last week at the Royal Medical and Chirurgical Society, on the surgical treatment of the lung, gained something in definiteness, though it lost in general importance, from being confined to the question of draining bronchiectatic cavities only. That a cavity in the lung is strictly of this character, it is not easy to diagnose, even by the "leashes of elastic tissue," to which Sir A. Clark seemed to attach considerable importance, or by the "membranous shreds" in its contents, on which Dr. Theodore Williams relied, but which, we should have thought, would have been not inconsistent with a localised empyema which had burst into the lung. To determine the exact position of such a cavity is very difficult; to be sure that it is solitary is impossible. One serious hindrance to the efficient tapping of such cavities, as Dr. Williams said himself, more than three years ago, is the number of operations that are sometimes necessary to establish satisfactory drainage. So far as the records of this class of operations go at present, they do not show much success. Of four previous cases of Dr. Williams's, two died of septicæmia of the lung opposite to that operated upon; one of cerebral abscess; the fourth was living two years after the operation. Dr. Biss had a case, in 1883, where operation was followed by death, in six weeks, from cerebral abscess; Dr. Powell and Mr. Lyell another case, in 1879, which survived for seven weeks. Among foreign experience, Wilhelm Koch, De Cérenville, and E. Bull have only cases to relate, which died after about two months, or sooner, though it is true that, in one case of De Cérenville, the issue was hastened, at least, by refusal of food by the patient, who was insane. Kaczorowski and Lauenstein can each claim a success. It is just possible that more of the acknowledged successes in surgical treatment of abscesses in the lungs should be credited to the treatment of bronchiectasis, but it is very difficult, in cases where there is no *post mortem* examination, to convince everybody that the cavity treated was purely bronchiectatic; and we may be allowed, for

the sake of his patient, to hope that Dr. Williams may have to wait long for evidence that is absolutely conclusive. The dangers of internal hæmorrhage, during incision, were most ably insisted upon by Mr. Godlee, and that foreign feeling goes with him is shown in Germany, by the frequent use of the thermo-cautery, as a penetrating instrument in these operations; a most inconvenient instrument, were it not for its hæmostatic power. The growing importance of thoracic surgery makes it most desirable that some such discussion as this should be held every year, or oftener, for experience is, as yet, very imperfect, and every new trial is of importance.

SANITARY STATISTICS OF ITALY.

FROM a recently published report on the sanitary condition of Italy, it appears that the kingdom is divided into 8,259 parishes. In only 318 of these has a chemical analysis of the water been made; the water was found good in 198, moderately good in 85, and bad in 35. Of the dwellings, 37,203 are underground, and are inhabited by 101,458 persons; regarding these dwellings, 2,836 parishes complain that they are narrow and unwholesome. In the Abruzzi, the Basilicata, and the Roman Campagna, many families inhabit wretched caves hollowed out of the rocks. In 1,876 parishes, privies are entirely wanting, and refuse of all kinds is thrown into open pits near the houses. It is reported that in 1,483 parishes there are no chimneys, the smoke from the fires escaping through the door, the window, or an opening in the roof. In 1,699 parishes, cereal products do not form a common article of diet, and are only used on festive occasions, and by the sick. In 4,985 parishes, the flesh of animals is scarcely ever used as food; in 3,637, there are no slaughter-houses. In 1,437 parishes there are no legally qualified medical practitioners, and the sick are treated by unqualified persons. Malarial fevers prevail over an area of 90,000 square kilomètres, with a population of 6,000,000. In 1879, there were in Italy 97,855 cases of pellagra; in 1881, 104,067. Cholera invaded Italy seventeen times between 1835 and 1881.

THE POLICE AS POST MORTEM EXAMINERS.

THE circumstances arising out of a case, which has occasioned an extraordinary exhibition of popular excitement at Birmingham, illustrates the desirability of obtaining medical evidence in every instance in which a coroner's inquest is considered necessary. On Saturday week, an inquiry was held by the deputy-coroner for Central Warwickshire into the cause of the death of Mary Turner, a young woman aged 20, whose dead body was discovered in a frozen pool at Castle Bromwich, near Birmingham. The principal evidence was afforded by two men named Bagnall, father and son. The latter admitted that the unfortunate girl was pregnant by him; that she had waylaid him on the night previous to the discovery of her death, had implored him to marry her, and had begged him—the night was bitterly cold—to take her to his home, or give her money to obtain a lodging. He had, on his own showing, used violent language towards her, and turned a deaf ear to her importunities. It was also elicited that, next morning, Bagnall senior, with suspicious prescience, despatched a little grandson to a neighbouring pool "to see if there was any one in the water." So far, the circumstances bear a remarkable similarity to the celebrated Mary Ashford case, of 1817, in which Abraham Thornton, a native of this same village, was tried on suspicion of being concerned in the death of his sweetheart. The Ashford case is memorable, chiefly from Thornton's claim to affirm his innocence by "wager of battel," after his acquittal at Warwick assizes; and for the decision of the Court of King's Bench, that he was entitled, under a law, since repealed, to "wage his battel." In the present instance, however, the persons most concerned have, so far, escaped the inconveniences of legal suspicion. No medical evidence was adduced at the inquest; and, after hearing the testimony of the Bagnalls, and of the policeman who removed the body, a verdict of "suicide whilst temporarily insane" was returned. Popular sentiment did not allow the matter to rest. A series of harmless demonstrations during the week culminated in an attack on the Bagnalls' house on Sunday afternoo A disorderly and disreputable mob, of about fifteen thousand perso aggravated by a rumour that the dead body of the girl Turner h exhibited marks of violence, reduced her seducer's house to a ru and compelled him and his father to seek refuge in flight. Pub feeling still runs very high in the neighbourhood, and steps are bei taken to obtain an order for the exhumation of the body. T deputy-coroner, who is a member of the legal profession, is report by a local contemporary to have made an *ex parte* statement, to t effect that an examination of the deceased's body, by the police, r vealed no other signs of violence than a contusion under the ey "probably caused by contact with the ice," and a blue mark on o wrist. It appears possible, indeed probable, that Mary Turne death was the consequence of her own act; but we submit that it w not proven at the inquest. The police, upon whom coroners a necessarily dependent, to a certain extent, for information and gu ance, are far too apt to assume that evidence of a burdened mind, an empty pocket, is sufficient to dispose satisfactorily of every case "found drowned." In a case so surrounded by circumstances suspicion as the Castle Bromwich tragedy, the neglect of the depu coroner to obtain the assistance of medical evidence is beyond und standing.

MESMERISM, ALIAS HYPNOTISM.

SOME years since, mesmerism—or, as it is now termed, hypnotism was a public entertainment very much in fashion; and, latterly, has shown signs of coming once more to the front. Its then popular was largely due to the unsparing use which had been made of its fluence in the dramas and romances of the day. Probably, owing its unscientific and inaccurate employment by authors, and its m glaring caricature by itinerant exhibitors, many, if not most, of wh were thorough-paced impostors, it was promptly dropped by men science, who were naturally reluctant to associate themselves with su questionable surroundings. During the last ten years, during whi time the subject has been left somewhat in abeyance, observati have been made, not only in hospitals with especial facilities for study, on the Continent and elsewhere, but in private circles, wh it has alternated with spirit-rapping meetings, to the delight and pl ing horror of the more impressionable of the sex. It is scarcely nec sary to state that, so far as its existence is concerned, hypnotism a verifiable phenomenon, which has been much studied, especially medical men and physiologists in Germany and France, althou from the difficulty of obtaining suitable "subjects," and ease with which imposture may be resorted to, all pu exhibitions of the same are very properly looked at askan During the past week, a "professor," who arrogates to himself pow of the most extraordinary description, gave—somewhat audaciously, think—a private sitting of this character at the Westminster Aquari The audience consisted largely of medical men from the adjoining h pital, and representatives of the press. The first batch of "subjec nominally drawn from the audience, succumbed promptly to the psych influence of the operator, and did a few foolish tricks to demonst their condition. In view of the general appearance of these "vol teers," these acts of foolishness appeared in no wise incongruous, elicited no marks of surprise, still less admiration. Indeed, audience, in the person of Dr. Donkin, expressed certain doubts a the acceptability of these individuals, from a scientific point of vi After some demur, a really representative batch was chosen f among the audience; and this time, the operator, whose equanim was visibly impaired, signally failed, in a most ludicrous manner induce any one of them to compromise their dignity, or other give evidence of any abnormality in their physiological functi Although such a failure cannot fairly be alleged, as a proof of unju able pretensions on the part of the operator, it cannot, on the o hand, be construed in his favour. Bearing in mind that such exh tions, even when genuine, are in reality of doubtful

ty for purposes of public entertainment we cannot have much pathy with the unsuccessful operator, or urge upon him the de- bility of repeating his attempt under such arduous conditions. On programme, he states that he "baffles the medical fraternity;" he present occasion, the tables seem to have been turned, and e baffler baffled."

EXTRAORDINARY CASES OF OPIUM-POISONING IN MANCHESTER.

deputy-coroner, Mr. Smelt, held adjourned inquests on Tuesday wo cases of opium-poisoning, the opium having been taken in icine which had been given by a surgeon in practice in this city. first case was that of a woman, aged 40, who went to consult J. W. Irvine for a severe cold, and received from him a six-ounce ure, two tablespoonfuls of which were to be taken every two hours. took three doses the same day, and felt extremely sleepy after . She took a fourth the last thing at night; and, on her becoming atose during the night, her husband went for a medical man. attempts to arouse her failed, and she died at 8 A.M. on the fol- ng morning. At the inquest, it was stated that two drachms of anum were put into the bottle, each dose containing twenty s. An analysis of the medicine was made by Mr. William Thom- who stated, at the inquest, that it contained 1.729 grains of ochlorate of morphine per ounce, or about four drachms of ordi- laudanum per ounce; so that the medicine consisted of half lauda- . The second inquiry was with respect to the death of an infant, was taken by its mother to consult Mr. Irvine for a cough from h it was suffering. He gave her some medicine and powders. gave the child several doses of medicine; and, from the time she it the first dose, it fell into a heavy sleep, and died on the follow- lay. The medicine had been obtained on the same day as the case. Before its death, it was seen by Dr. Thomas, who stated that s suffering from opium-poisoning. An analysis of the medicine, by Mr. Thomson, showed that it contained 3.135 grains of ochlorate of morphine per ounce, or about one-third of a grain in a oonful, the latter being the dose taken by the infant. The *post m* examination showed that the child was suffering from pneu- a. The jury returned a verdict of manslaughter in the latter On Wednesday, Mr. Irvine was charged before Mr. Headlam, adiary magistrate, with manslaughter. The case was dismissed, ie ground that the *post mortem* examination showed that hild was suffering from pneumonia, which in itself was sufficient ve caused death.

THE SALE OF POISONS.

satisfactory to find the lay press taking up the question of the r to the public entailed by the present imperfect regulations for le of poisons, regulations which, already inadequate, and in some absurd, are stultified by their non-observance in the very in- es in which their enforcement might be productive of good. No difficulty can be experienced in deciding what substances should luded in the index; and, in case of doubt, everything is to be d by erring on the side of safety. Such drugs as nitro-glycerine, ample, although stated by Mr. Martindale, in a letter to a con- rary, to be perfectly safe, are obviously not so, when dispensed colate tablets indistinguishable from the ordinary "lollypop" so o the juvenile palate. Nitro-glycerine, under any circumstances, rug capable of producing powerful constitutional disturbance, n certain forms of common cardiac disease, may, even in small give rise to alarming symptoms. As to the propriety of restrict- e sale of such cheap and popular poisons as carbolic and oxalic there can be no doubt. With respect to the former, an import- afeguard would be afforded, by making it illegal to sell or dis- it, except in poison-bottles. The protection afforded by a poison- s often illusory, as it may be overlooked or washed off. Lobelia, s a drug of sufficient potency to warrant its inclusion in the list. n constant use by herbalists, with results that cannot but be attended with risk in untrained hands. The sale of such powerful agents as chloroform, the use of which is only permissible by duly qualified practitioners, ought to be absolutely prohibited in a pure state. It is probably useless to endeavour to restrict the sale of poi- sons, to the extent of preventing suicidal or homicidal attempts, but every little difficulty is an obstacle to their performance, and facili- tates subsequent inquiries. In by far the larger proportion, cases of poisoning are the result of accident, inattention, or ignorance; and it is, as far as possible, to minimise this esssentially preventable cause of death, as well as to hamper the procuring of drugs for illicit pur- poses, that some changes in the law, as at present carried out, are im- peratively called for.

CASES OF OBSCURE IRRITANT POISONING.

So little is known of wheat as an irritant poison, that we need make no apology for briefly calling attention to a group of cases which recently occurred, in which four members of a family presented sym- ptoms of poisoning, two of the cases proving fatal; there being a strong presumption that, in some way or other, wheat was the *fons et origo mali*. The fatal cases occurred in children aged 6 years and 15 months respectively; and, unfortunately, it is only in respect of the latter that we are in possession of any details. The elder of the two died in fifteen hours, the infant dying in about thirty hours. On *post mortem* examination, the stomach was found to be greatly congested; the contents were fluid, consisting of a little blood, with a small sedi- ment of wheaten flour. The stomach, its contents, and the flour from which the incriminated meal had been prepared, were carefully ana- lysed for poison, but none was detected. Dr. Stevenson, to whom this inquiry had been entrusted, experimented on mice, both with the flour and with an extract made from the stomach of the infant, but no symptoms of poisoning made their appearance in the animals. Although he had thus entirely failed to demonstrate the existence of any poison, we think the facts fully warranted his strongly expressed opinion that these children had died from an irritant poison, and the jury gave effect to this opinion in their verdict.

DEATH UNDER CHLOROFORM.

THE death has occurred, under chloroform, of Mr. Alfred Herbert Hack- ney, M.R.C.S.Eng., etc. Mr. Reuben Thomas Warn, of Highgate Road, brother-in-law of the deceased, said the deceased resided at 9, Acacia Road, St. John's Wood, and complained to the witness about a month ago of suffering from sore throat and neuralgia. To assuage his pains, the deceased was in the habit of sniffing chloroform, and the witness cautioned him against the danger of this practice. On Sunday, at midnight, witness was informed of his relative's death. He learned that he had been unwell several days prior to this, and on Sunday afternoon he placed a notice outside his bedroom door, saying, "Do not disturb me until I ring." His servant, finding that he did not ring, late on Sunday night burst the door open, and found her master dead in bed. There was a bottle containing chloroform near him. He had five children, and was a widower. Similar evidence was given by another servant. It was stated that the deceased had never threatened to commit suicide. Apart from his recurring neuralgic pains, he had nothing to trouble him, so far as was known. The medical evidence was to the effect that death was due to chloroform poisoning. The jury returned a verdict of death from misadventure.

THE OXFORD MEDICAL SCHOOL.

SOME of the disadvantages under which the Medical School at Oxford still labours, even after the improvements accomplished during the last few months, were pointed out last week. One of the greatest of these, the necessity of devoting a year to preparation for an examina- tion in classics and mathematics, is, we understand, likely to be re- moved within a very short time—in all probability, before next Octo- ber. Meanwhile, the statute passed on March 16th permits the forma- tion of a Faculty of Medicine; heretofore, medical matters have been

managed by the Faculty of Science, which may account for the somewhat slow rate at which reform has progressed. Next term, however, the new Faculty will be formed, and Sir Henry Acland and Professor Burdon Sanderson, with the able coadjutors they already command, will be able to press forward the business of organisation with far greater rapidity than has been previously possible. One of the first questions to engage the attention of the new Faculty will be the provision of a completely appointed anatomical department. The present arrangements are only temporary, and though adequate to meet the present needs of the School, are to be replaced, at the earliest possible date, by permanent buildings, fitted with every improvement which experience can suggest or ingenuity devise.

THE INCREASE IN WATER-RATES.

THE metropolitan water-companies profess to be very indignant at Mr. Torrens' Water-Rate Definition Act of last year, and indulge, in their reports and at their half-yearly meetings, in gloomy forecasts of the impoverished condition of their proprietors in the near future. They have not been slow, however, to turn the Act to their own ends; and renters of expensive premises, requiring comparatively little water, are being charged for water upon the full rateable value of the premises, no matter how insignificant their requirements may be. For example, the water-rate charged for the business premises of our Association has been increased by nearly 12 per cent., under the new Act. In some highly rated properties in the City the increase is even greater, and it is therefore not surprising that the City Corporation should be seriously taking up "the whole question of the enormous increase in the water-rates," so as to find some means, if possible, of checkmating the rapacity of the water-companies, especially of the New River. It might be worth the consideration of some of the sufferers by these increased water-rentals to have a water-meter laid on to their premises. All the companies, except the Chelsea, Kent, and Lambeth, are empowered to supply water by measure; and the authorised rate charged usually varies from about 9d. per 1,000 gallons, where the quarterly consumption does not exceed 50,000 gallons, to 6d. per gallon where the quarterly consumption exceeds that quantity.

THE ENEMY WITHIN THE HOUSEHOLD.

DR. ARTHUR W. EDIS, of 22, Wimpole Street, is to be congratulated on his public spirit in calling the attention of the magistrate to the unmitigated nuisance entailed by overflowing dust-bins. These pestilential contrivances, even when managed with care and emptied with regularity, are acknowledged to be possible and probable sources of disease; but when their contents, in a state of putrefaction, are permitted to sojourn unduly in their tempoorary resting-place, the resulting gaseous emanations are as disagreeable as they are likely to be injurious. The dust-bin is the one great bane of the householder who is at once willing and able to put his house in order and to provide, as far as is humanly possible, for the maintenance of healthy conditions of existence. He can ensure adequate ventilation; he may be enabled, to some extent, to control the drainage-arrangements; but the dust-bin, thanks to the indifference and apathy of the authorities who reign supreme in these matters, remains, and mocks his vain endeavours. There is a republicanism in the impartiality with which rich and poor alike are subjected to black-mail and discourtesy by the varlets who have charge of the dust-cart, which is altogether independent of political considerations, and is not amenable to the arguments usually employed to refute it. It is rather surprising—and we may say improper—that a magistrate should, by asking whether the men were regularly paid for removing the dust, appear to recognise the propriety of such payment, which is technically illegal and utterly unwarrantable. Yet its evasion, under existing circumstances, is clearly impossible; for, if a difficulty be experienced in getting the work done when these exactions are cheerfully acceded to, it is easy to understand that any perfunctoriness on this head would immediately result in complete ostracism by these humble, yet arrogant, arbiters of public health. To hope for any change for the better while the present chaotic condition of local government is allowed to linger on in miserable existence, would perhaps be idle; but the feeling of dissatisfaction, which is deep and general on this and similar topics, cannot but aid the movement, which sooner or later will doubtless end in providing us with a more efficient control over our rulers in matters municipal. For this reason, it is difficult at present to do more than register the articulate cry of that portion of suffering humanity whose position, in a wealthy and select quarter of London, does not exempt them from the evils which prevail in poorer and more populous districts. So soon as circumstances allow of it, every effort should be made to rid ourselves once for all of the filthy and dangerous devices of dust-bins, which are an annoyance when carefully attended to, and a potent power for evil when—as too often is the case—they are neglected. The subject is one upon which the great bodies, the object of whose existence is the improvement of sanitary condition, ought, when the opportune moment arrives, to be prepared to make themselves heard with the emphasis and authority which their position should command. If urban householders generally would follow the example of Dr. Edis, and take the trouble to invoke magisterial assistance in their conflict with blackmailing dustmen, there might be hope of a gradual improvement of that predatory species biped off the face of the earth. It is ridiculous that a large London parish like Marylebone, with its 16,000 houses and 155,000 people, should be still trusting to contractors to clear away its refuse. The work ought to be undertaken by the Vestry itself, and be conducted by its own staff, under the supervision of its own officials. Bind a scavenger by contract as you will, and he will find means, if thereto inclined, to give an infinite amount of trouble to the vestry which appoints him, and of vexation to the householders who are dependent on his ministrations. This is not the place to descant at any length upon the metropolitan law with regard to the recondite subject of dust-bins. The curious in such matters may be referred to two articles which appeared in the *Sanitary Record* in June and July, 1885, and which give a very good account of the present law and practice, and the forms which are necessary in them. The odd part of the affair is that the metropolitan law is, in many respects, inferior to the provincial law, as laid down in the Public Health Act of 1875. The Londoner's protection against the malfeasance of scavengers, is Section 125, of the Metropolis Management Act of 1855, which imposes a fine of £5 on any scavenger who "fails in any respect properly to execute and perform" his duties. This section does not say who is to set the law in motion; but an aggrieved householder would be clearly within his right in involving the assistance of a police magistrate to get the penalty enforced. Householders are far too careless about this question of dust-removal. It certainly ought to be the affair of the local authority itself, and be conducted on something like reasonable sanitary principles.

MR. STANSFELD: 1874 AND 1886.

THE resignation of Mr. Chamberlain has been so long and so generally discounted, that Mr. Stansfeld has stepped into his vacant place with hardly a ripple of public excitement. And yet the occasion and circumstances of Mr. Stansfeld's readmission into the charmed circle of the Cabinet, and resumption of departmental work, are, in many respects, very remarkable. Of the Parliamentary colleagues who gave up the seals of office with him in 1874, he will find only one, and he the Prime Minister himself, still sitting on the Treasury Bench with him in the House of Commons. At his own office, the Local Government Board, Mr. Stansfeld will discover a change even more striking. Of the two Secretaries and the two Assistant-Secretaries whom he left there, three are dead, and the fourth, Sir John Lambert, is in retirement. Mr. John Simon, who wielded fierce but unsuccessful bat against Mr. Stansfeld's attempts at extinction of the Medical Department, is in retirement too. In the place of all these have arisen new officials, who twelve years ago were known to Mr. Stansfeld only

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ds of subdepartments, or are importations since his time. He will d his cherished Public Health Act of 1872 summarily thrust, three rs after its passing, into the limbo of obscurity, and superseded by Act possessing all its demerits, with many more. He will be able survey the abundant crop of tares which his misjudged association sanitary with poor-law procedure has produced, and he will see v the efforts of later reformers to unify and systematise local self- ernment have been choked thereby. Many of the problems of itary legislation, that he left in the pigeon-holes unsolved, lie l waiting for solution. Personal fitness for particular work seldom never weighs with the makers of Cabinets, who have to adjust nd men into square holes according to the exigencies of the hour. the mere work-a-day business of the Local Government Board, Stansfeld will, no doubt, do as well as anybody else; but venture very much to question whether he, now a com- atively old man, is quite the Minister for initiating and ying through the extensive scheme of local government re- n which successive Presidents have promised us, but which is be- ed to be now a question of the immediate future, so soon as the h problem is settled. Perhaps, however, by the time that that yon period arrives, there will have been another shuffling of the isterial cards, and some one more active and less doctrinaire will nstalled in the chair which Mr. Stansfeld now resumes after an ial exile of twelve years.

SCOTLAND.

HE winter medical session of the University of Aberdeen closed riday, March 26th.

ROFESSOR STIRLING and Dr. W. J. Simpson have been elected rary members of the Aberdeen Philosophical Society.

PRESENTATION TO PROFESSOR STIRLING.

he close of the winter session in Aberdeen, Professor Stirling was ented with an address by the medical students of Aberdeen, on occasion of his leaving for Owens College, Manchester. The ess expressed the sense of the great loss which the University the medical students have sustained by Dr. Stirling's removal to chester, while it also referred to his great success as a teacher. essor Stirling, in responding, acknowledged his indebtedness to essors Ludwig, of Leipsig, and Rutherford, of Edinburgh; and some useful advice to the students, and concluded by adv ocating value of some instruction in ethics.

ANDERSON'S COLLEGE DISPENSARY, GLASGOW.

eighth annual meeting of the subscribers to Anderson's College ensary was held last week, presided over by Dr. Andrew Fergus. director's report showed that there were 4,937 visits paid to the poor; 17,091 surgical consultations; and 15,995 prescriptions ensed. In addition to this, the dispensary had paid 300 visits to ensioners of the Association for the relief of incurables. The ne amounted to £330 15s. 4d., and the expenditure had been 14s. 7d., leaving a balance of £52 9s. The report was adopted, he directors appealed to the benevolence of the public for a com- ion of their support, to enable them to maintain the present effi- y of the institution.

GLASGOW AND THE BRITISH MEDICAL ASSOCIATION.

sponse to a circular issued by the President of the Faculty of icians and Surgeons of Glasgow, a meeting was convened on h 26th to consider the question of inviting the British Medical iation to hold its annual meeting in Glasgow in 1888. There a numerous and representative gathering of the medical profes- in Glasgow and of the west of Scotland, and there was an unanimous feeling, expressed in most cordial terms, that the Association should be invited. All the necessary steps were taken to ensure the meeting being a success, should the invitation now offered be accepted.

GLASGOW PHILOSOPHICAL SOCIETY.

AT the last meeting of this Society, some interesting extracts were given by Professor McKendrick, from a paper prepared by Mr. Sahlström, entitled "The Riches of the Sea;" and afterwards, an opportunity was offered of seeing the results obtained under the Sahlström process of preserving fish. By this plan, the air is driven out of the newly caught fish by extracting their gases *in vacuo*, and then a weak solution of salt, or other preservative solution, is forced into the tissues with a pressure of seven atmospheres, so as thoroughly to saturate them. To carry out the different steps of the process, the fish are first introduced into a closed cylinder, and there subjected to a pressure sufficient to drive out the air. Afterwards, the preservative solution, which may be made either with pure salt or a mixture of salt and boracic acid, is introduced into the cylinder; and, by applying a pressure of from 60 to 100 lbs. to the square inch, it is forced into all the tissues of the fish. Specimens of fish so preserved were exhibited at the meeting, and seemed in excellent condition. The Sahlström process has been extensively used in Norway, but a trial of it at Aberdeen has given excellent results; and as the method only requires a few hours for carrying it out, it is hoped that its more general adoption on the west coasts of Scotland will prove a boon to all concerned.

THE RECENT WAVE OF COLD WEATHER.

THE long continued period of cold weather recently experienced in Scotland has been made the subject of communications from Professor Grant, of Glasgow Observatory, and Mr. Alexander Buchan, of the Scottish Meteorological Society. The former points out that, comparing it with the corresponding periods of cold weather in former years, the recent cold is remarkable for having advanced further into the year than any other wave of cold recorded in the registers of the Observatory. Assuming that it commenced on January 4th and terminated on March 19th, it embraced a period of seventy-five days, and the mean daily temperature for this entire period was the very low one of 34.4°, or only 2.4° above the freezing point. Many other figures are quoted in Professor Grant's paper, which give a very clear idea of the intensity of the cold which prevailed during the period under consideration. In his remarks on the recent weather, Mr. Alex. Buchan points out that the coldest part of this remarkable season was from February 16th to March 15th, and that, during these four weeks, the average temperature on the Moray Firth marked the period as one of the very coldest experienced in this country. He also makes clear how this came about by referring to the weather throughout Europe, where he finds that, at this time, barometric pressure was very low over the Mediterranean, the Bay of Biscay, and the west generally. As the result of previous observations, it has been found that, when the earth's atmosphere is thus distributed, we in this country have in winter very severe weather, just as, when there is a high barometric pressure over the Mediterranean and all the south, we should have very mild weather; the simple explanation being that the high pressure over the Mediterranean gives us southerly winds, with the warm temperature accompanying them. There are many other interesting facts brought out in Mr. Buchan's communication, which show how thoroughly the science of meteorology is being understood, and removed from the domain of chance and theory that completely ruled it but a few years ago.

ARBROATH LOCAL AUTHORITY AND SCARLATINA.

A SPECIAL meeting of the Commissioners of Police of Arbroath, as the local authority under the Public Health Act, was held last week. Communications were read to the meeting by the Board of Supervision, including a complaint by the inspector of poor of the parish of

St. Vigeans respecting the outbreak of scarlatina. Mr. Stuart, the inspector of poor, reported the case of a man who had become chargeable as a pauper against his will, simply on account of scarlatina in his family. The substance of the complaint was that the local authority, for reasons of economy, had not opened their epidemic hospital to receive patients. Mr. Stuart's report stated that there had been one thousand cases of scarlet fever in Arbroath since the outbreak of the epidemic, thirty of which had been fatal; and that, since January 1st, there had been six hundred cases. Mr. Campbell, the returning officer of the Board of Supervision, reported that there had been a certain amount of scarlet fever in Arbroath for upwards of a year, and that there had been more cases recently. The medical men in the town did not intimate cases coming within their practice. Mr. Campbell thought it would be well that the local authority should arrange with the medical men that they should do so; and sufficient advantage, he added, had not been taken of the hospital. A report, read by Dr. Anderson, medical officer of health, in reply to a communication from the Board, stated that, during December, when the epidemic hospital was open for the isolation of the children of a family in which there was scarlet fever, no applications had been made for admission. All the applications which had been received during the epidemic for admission had been acceded to, with two exceptions, in which it was considered better to arrange otherwise. The epidemic, he also said, did not exceed eight hundred cases, with thirty deaths; and the number of cases, in the first two months of this year, he estimated as not exceeding one hundred and fifty. Dr. Anderson also approved of the suggestion that an arrangement should, if possible, be made with the medical men to report cases in their practice. After some discussion on this point, the meeting approved of the conduct of the sanitary inspector and medical officer of health, and ordered Dr. Anderson's report to be sent to the Board of Supervision.

IRELAND.

CORK SOUTH INFIRMARY.

THE report for the past year, as regards the financial position of the hospital, may be regarded as satisfactory, owing chiefly to the economy exercised by the trustees. This is the more commendable, when the numbers admitted into hospital are taken into account. The total number treated in the intern department was 1,091, or an increase of 42, and the total expenditure for the year shows a reduction of nearly £100. The income derived from the paying patients has also shown an increase over the previous year, by about £20. Miss Townsend has endowed a bed, the first of its kind, in memory of her father, by the yearly sum of £30, called "the Payne-Townsend Bed," and has erected a memorial tablet, recording the gift. A large sum has been expended in permanent improvements and repairs, whereby the heating apparatus and sanitary arrangements have been placed on a satisfactory system, while the ventilation is almost perfect.

DUNGARVAN WORKHOUSE HOSPITAL: CHARGE OF MANSLAUGHTER AGAINST A NURSE.

AN inquest was held on Saturday evening, March 27th, to inquire into the death of an inmate of the hospital, named Langley, who, it was stated, had been injured by a male pauper-nurse, during the previous Wednesday night. Evidence was given that, when deceased called for a drink, about eleven o'clock, Mulcahy, the pauper-nurse, said he would give him reason to call when he went down. The sounds of several blows were heard, and next morning Langley was found dead, with both eyes blackened, and contusions on the face, while the sheets and pillow were covered with blood. The jury have returned a verdict of manslaughter against Mulcahy, who has absconded.

MR. E. J. STANLEY, M.P., has been re-appointed President of the West of England Sanatorium, Weston-super-Mare, for the ensuing year.

LUNACY ACTS AMENDMENT BILL.

MR. ERNEST HART received a communication, early in the week, from the Lord Chancellor, stating that the suggestions of the memorandum, submitted to him by the Parliamentary Bills Committee of the British Medical Association, have had his Lordship's careful consideration, and he believed it would be found that many of these have now been made by alterations, or additions to the present Bill. The amendments which the Lord Chancellor now introduces in committee on re-commitment of the Bill, practically adopt several of the more important recommendations embodied in the memorandum submitted to the Lord Chancellor by the Parliamentary Bills Committee, and especially in regard to the removal of the obstacles which the Bill proposed to place in the way of the reception of private patients duly certified as single patients in the houses of medical practitioners, and under their special care; and in regard to the unjust and confiscatory action of the clauses relating to private asylums. On these very important subjects, the suggestions made by the Parliamentary Committee of the Association will be found to be practically accepted. There remain, however, several other points on which the Lord Chancellor has not yet adopted the suggestions of the Committee; and, with reference to these, Mr. Hart has addressed a further communication to the Lord Chancellor, pointing out their importance, and reiterating the arguments by which they are supported.

The adoption, by the Lord Chancellor, of the amendments which, immediately on the issue of the Bill, we pointed out as being of the most vital medical interest, is highly satisfactory; and the Bill thus amended will undoubtedly prove to be of the greatest benefit to the public at large, while affording to the medical profession a degree of protection in the exercise of their necessary functions in relation to lunacy which they have not hitherto enjoyed, but which is equally essential to the welfare of the patients, and to the free and just action of reputable members of the profession when called upon to express an opinion in respect of lunatic patients, or to undertake their treatment. The Lord Chancellor has shown so much ability and courtesy in dealing with this subject, that there is every reason to hope that the Bill may yet be further improved, and that it will meet with but little opposition in the House of Commons.

CONFERENCE ON CHOLERA PRECAUTIONS.

THE general committee of medical officers of health and others interested in sanitary work, who some months ago met in the Manchester Town Hall to consider what steps should be taken by local authorities in the way of preparing for an epidemic of cholera in the ensuing summer, met again last week in the Mayor's Parlour, at the Town Hall, Manchester. Mr. T. C. Horsfall presided. At the first meeting, a subcommittee was appointed to go fully into the subject, and their report was now read by Mr. Vacher (Birkenhead). In the course of the report, the subcommittee said:

Circulars have been addressed to the various local authorities represented at the conference and others, to ascertain how far these authorities are in a state of preparedness to resist cholera, should it be imported. The answers show that whilst much has been done and is being done for the furtherance of public health by many of the local authorities represented, very much still remains to be accomplished, and no town or district from which returns have been received can be regarded as offering no facilities for the cultivation and dissemination of the poison of cholera; besides this, very few authorities have seriously taken in hand the matter of providing hospital-accommodation for cholera-patients. Inquiry has also been made as to whether it is the duty of the guardians of the poor or the sanitary authority to provide infectious hospital-accommodation for patients who are earning a living at the time of being attacked with infectious disease or members of families of working men in employ. On this matter the Local Government Board appear to hold the opinion that it is the duty of the guardians to arrange for the proper treatment of every person suffering from infectious disease who is without the means of obtaining such necessaries (including medical attendance and nursing as he may require, and that it is only when removal of the patient to a hospital is merely necessary for the purpose of isolation, and the pe

m is not destitute, either wholly or to the extent referred to, that it evolves upon the sanitary authority to deal with the case. However, hospital provision has to be made, it is preferable that this should e undertaken by the sanitary authority, the guardians of the poor ying the sanitary authority for the maintenance of all patients for hich they (as guardians) are responsible. A charge of twenty-five illings per week each patient is held to be reasonable. Your sub- mmittee recommend : (1.) That local sanitary authorities be advised at the first and most important precautions against the infec- on of cholera are such measures as may be found necessary insure cleanliness, a pure water-supply, and efficient drain- ge. (2.) That sanitary authorities, poor-law authorities, and firmary authorities, should together provide sufficient hos- tal accommodation ; and terms be agreed upon beforehand, so at, when admission is sought for a patient, there may be delay caused by disputes as to who is liable for maintenance arges. (3.) That when the sanitary authority and poor-law thority are different boards, the sanitary authority should under- ke the duty of making provision, temporary or otherwise, for the atment of cholera patients, and received pauper-patients at a charge be agreed upon. (4.) That the sanitary authorities represented at conference be requested to obtain sites, and make arrangements hospitals, huts, or tents suitable for the reception and treatment cholera-patients, to be erected in case of need. (5.) Authorities uld provide sufficient ambulance accommodation, medical attend- ce, nursing, medicine, and medical comforts. Lists of the ambu- ce-stations, of the addresses of medical men volunteering for the lera-service, and of competent nurses, should be supplied to the al justices, the police, relieving officers, etc. (6.) That sanitary horities should provide houses of detention for the temporary ging of persons apparently in health who may be removed from ises in which cholera has appeared, such persons to be maintained the sanitary authority for so long as it may be deemed desirable keep them under supervision. (7.) That all common lodging- uses and tenements occupied by tramps and vagrants, should be tematically and regularly inspected, and the keepers of the same ructed to report immediately to the sanitary authority any case of pected cholera. (8.) That initial cases of suspected cholera be le the subject of investigation at a biological laboratory ; also that uiries be made of some of the teachers of biology and pathology in principal medical schools in the kingdom, as to whether they uld be prepared to instruct medical officers of health in Koch's hod of examining water, cholera discharges, etc., and the time uired for such course of instruction ; also that inquiries be made if of the said teachers would be prepared to receive samples of er and cholera discharges for examination at their laboratories, the cost of examining and reporting on the same.

r. A. RANSOME moved that the report be adopted and circulated.

r. J. MARTIN seconded the resolution, and it was passed.

n the motion of Dr. J. TATHAM, seconded by Mr. ARMISTEAD, Subcommittee was reappointed, with instructions to call a meet- of the General Committee in the event of any special need arising ombined action in respect of cholera precautions.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

EETING of the Council will be held in the Council Room, r Hall, Strand, London, on Wednesday, the 14th day of April at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

A, Strand, March 25th, 1886.

OTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

qualified medical practitioner, not disqualified by any by-law of ssociation, who shall be recommended as eligible by any three ers, may be elected a member *by the Council* or by any recognised *h Council.*

tings of the Council will be held on April 14th, July 14th, and er 20th, 1886. Candidates for election by the Council of the ation must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis ;—(*a*) The influence of residence and occupation ; (*b*) the previous state of the patients' thoracic organs and general health ; (*c*) heredity and communication. Full particulars will be sent on application.

A general inquiry into THE THERAPEUTIC VALUE OF HAMAMELIS has now been issued. A report will be made to the Section of Therapeutics in the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms ; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms ;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Mr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—**Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary.** —J. MAITLAND, M.B., Honorary Secretary, Madras.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 15th, at 5 o'clock ; dinner at 5.30. Discussion : Do you consider the Antiseptic Dressing of Wounds Advantageous in Country Practice ? Election of a representative of the Branch on the Council.—W. M. KELLY, M.D., Honorary Secretary, Taunton.

BORDER COUNTIES BRANCH.—The spring meeting will be held at the Commercial Hotel, Dumfries, on Friday, April 9th. The chair will be taken by the President at 3 P.M. Dr. Thomson, of Dumfries, will introduce a discussion on Brain-Surgery. Dr. Campbell Garland will read notes of Four Abdominal Cases of interest. Dr. Eaton (Cleator Moor) will read Illustrations of the Origin of certain Zymotic Diseases in an isolated house. Intimations of papers and specimens should be sent to the undersigned. Dinner at the hotel, 5s. a head, at 6 P.M.—HENRY A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

NORTH OF ENGLAND BRANCH.—The spring meeting will be held at Roker, on Wednesday, April 21st. Members intending to read papers, show specimens, etc., are requested to communicate with the Honorary Secretary (Dr. DRUMMOND, Newcastle-on-Tyne) as early as possible.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting of this Branch will be held at Carmarthen, on Wednesday, April 21st next. Members wishing to join the Branch should send in nomination papers by the end of March. Members desirous of reading papers, etc., should send titles to one of the Honorary Secretaries. Further particulars in circulars. Signed, A. SHEEN, M.D., Cardiff ; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Hackney Town Hall, on Thursday, April 15th, at 8.30 P.M. Photographs of a Case of Myxœdema will be exhibited by Mr. C. R. Walker. A paper on the "Byways of Rheumatism," will be read by Thomas Barlow, M.D., F.R.C.P.—J. W. HUNT, 101, Queen's Road, Dalston, Honorary Secretary.

SOUTH-EASTERN BRANCH.—Notice to Members. Allow me to remind the members of this Branch, "That candidates for the office of representative of the Branch at the Council of the Association, should be nominated, by any two members of the Branch, before April 15th, and their names sent to the Honorary Secretary, who shall issue voting papers to the members of the Branch, who shall then vote for any of the nominated members." The Branch is at present entitled to three representatives, one for each county comprised in the Branch; namely, Kent, Surrey and Sussex.—CHARLES PARSONS, M.D., Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at Erith on Friday, April 30th; F. Spurrell, Esq., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District, A. W. NANKIVELL, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than April 15th.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT MEDICAL SOCIETY.—An ordinary meeting will be held at the Grosvenor Hotel, Queen's Gate, Southsea, on Wednesday, April 7th. The chair will be taken by the President, Surgeon-General J. Lamprey, M.B., at 4 P.M. *Agenda:* 1. Statement of Accounts. 2. Election of Officers. 3. Living Specimens. 4. Pathological Specimens by Surgeon-Major W. Morton Harman, M.B., Dr. C. C. Claremont, Mr. G. H. Snowden, and Mr. P. H. Gardner. 5. Remarks on Hydrophobia: the President. 6. Microscopic Sections: Dr. F. J. Driver. 7. Case of Monster: Dr. Axford. 8. New Pressure and Torsion-Forceps: Dr. Ward Cousins. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. Dinner will be provided at 6.30 P.M. Charge 5s., exclusive of wine, etc.—J. WARD COUSINS, Honorary Secretary.

OXFORD AND DISTRICT BRANCH.—The next meeting will be held at the Radcliffe Infirmary, Oxford, in the afternoon of Wednesday, April 28th. Members are asked to send to the Honorary Secretaries notice of any business, cases, or papers, or candidates for election, on or before Monday, April 19th. Advantage will be taken of the meeting to present Dr. Tuckwell with a testimonial. There will be a dinner at 5s. a head (exclusive of wine) after the meeting.—Honorary Secretaries, Dr. DARBISHIRE, W. L. MORGAN, Esq., Oxford.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE second general meeting of this session was held at the North-Western Railway Hotel, Stafford, on Thursday, February 25th, 1886: present, Mr. J. T. HARTILL, President, in the chair, and twenty members.

Communications from Secretary.—Mr. VINCENT JACKSON informed the meeting that, in connection with the Collective Investigation Committee, and on behalf of the International Medical Congress, he had sent to each member a circular in which information was requested upon the frequency of the following diseases in the various districts in which the members lived: namely, Rickets, Acute Rheumatism, Chorea, Cancer, and Urinary Calculus. A slip advocating the claims of the Medical Sickness, Annuity, and Life-Assurance Society had also been posted to every member. A letter from the East Anglian Branch was read, and a resolution they submitted for the consideration of the Staffordshire Branch was, upon the proposition of Dr. ARLIDGE, unanimously agreed to.

New Members.—The following members of the Association were balloted for as members of the Branch: Dr. J. C. Waddell, Longton; Dr. A. Exham, Market Drayton; Mr. W. F. Fletcher, Uttoxeter; Mr. Gosse, Eccleshall; Mr. J. Kenny, Leek; Mr. A. V. Griffiths, Fenton; Dr. A. Macindoe, Willoughbridge, Market Drayton; Mr. T. Ridley Bailey, Bilston; Mr. C. R. Bamford, Uttoxeter; Dr. E. J. Leapingwell, Butler's Hill, Cheadle; Dr. F. Miles Blumer, Stafford.

The Royal Medical Benevolent College.—A letter from the Secretary of the above mentioned College was read, acknowledging the receipt of a donation of five guineas; and stating that, by giving five guineas more, votes for life would be conferred on some named individual, or votes for twenty years, to be exercised by any office-bearer of the Branch for the time being. It was resolved: That the donation to the Royal Medical Benevolent College, Epsom, be increased to ten guineas.

Hare-Lip: Strong Family-History.—Dr. E. T. TYLECOTE showed a male infant, six months old, suffering from double hare-lip, and cleft hard and soft palate. The resulting deformity gave the infant a most repulsive appearance. Dr. Tylecote narrated a family-history of both parents, carefully prepared. No other deformity had been known on either side; but this was the second child suffering from hare-lip. The mother stated that, when not more than six weeks advanced in pregnancy with the first child thus deformed, she received a severe mental shock through seeing a man disfigured by hare-lip. Dr. Tylecote, however, ascertained that her father had three first cousins, brothers, each having this deformity. The first five children of the same parents were living, and free from deformity.

Multiple Lipoma.—Dr. ARLIDGE exhibited a specimen of the somewhat rare disease, multiple subcutaneous fatty tumour, occurring in a healthy young farmer, referred to him by his usual medical attendant. A number of similar tumours were distributed over the forearms and the thighs. The largest specimen exhibited measured three inches by two, and was situated over the radial aspect of the left forearm.

Calculi.—Mr. VINCENT JACKSON exhibited a collection of ninety-six calculi, removed from the bladders of men, women, boys, and girls, by eighty-eight operations, either of lithotomy, or lithotrity, or lithectasy. The collection represented, the exhibitor observed, a considerable amount of surgical work and much anxiety, but, fortunately, a large measure of success.

Salivary Calculus.—Mr. J. T. HARTILL exhibited a large salivary calculus, recently removed.

Papers.—The following were read.

Mr. F. Marsh: On the Use of Kocher's Method of Reduction of Subcoracoid Dislocation of the Humerus.

Dr. Gibson: Notes on a Case of supposed Perforating Ulcer of the Foot: with Specimen.

The Removal of Vesical Calculi from Boys and Male Infants.—In referring to cases of small stones in the bladder of boys, Mr. Vincent Jackson, who read this paper, said that the question of the method of their removal was supposed to be settled, but lately the subject had been revived by Professor Annandale, who suggested suprapubic lithotomy for this purpose; and he described a rather elaborate way of performing the operation. This operation was hardly capable of general application—certainly not in male infants; and the same remark applied to ordinary lithotrity. The alternative proceedings were perineal lithotomy, lateral or median. These operations were not devoid of special risk; and, as they seemed too severe for the purpose, Mr. Jackson suggested perineal median cystotomy as sufficient. The only instruments entering the bladder would be a grooved staff, a small-sized director (not essential), and a pair of forceps, with which the stone was seized and extracted. Afterwards, the bladder should be carefully explored by a sound before the patient was sent to bed. The duration of cure was less than after lateral lithotomy, but much longer than after lithotrity.

NORTH OF IRELAND BRANCH: GENERAL MEETING.

A GENERAL meeting of the Branch was held at the Belfast Royal Hospital, on Wednesday, February 10th. In the absence of the President, Dr. Kidd, of Ballymena, Dr. GRAY, of Castlewellan, occupied the chair. There were 31 members of the Branch present at the meeting.

Vote of Condolence.—A resolution of condolence and sympathy with Mrs. Charles, on the death of her husband, the late Dr. D. A. Charles, of Cookstown, was unanimously adopted by the meeting.

Patients.—The following were shown.

1. Dr. St. George (Lisburn) exhibited a patient who had been treated by by him for compound compressed and comminuted fracture of the skull. He trephined, and reimplanted the trephined portion with excellent result.

2. Dr. St. George showed a patient, the subject of inguinal hernia, who had been successfully treated by him by Spanton's method for radical cure. He also exhibited a patient with a congenital defect of the iris.

3. Dr. O'Neill (Belfast) showed three patients whom he had treated by a dental splint, for fracture of the lower jaw.

4. Dr. O'Connell (Belfast) exhibited a patient with gangrene of the finger and wasting of the arm, depending on an intra-thoracic growth.

5. Dr. O'Neill also showed a man with femoral aneurysm, whom he had successfully treated by compression of the external iliac artery.

6. Mr. Fagan (Belfast) showed a patient on whom he had ligatured the subclavian artery for a large axillary aneurysm. The pressure of the tumour had caused paralysis and wasting of the arm, which still remained.

7. Mr. Fagan also exhibited a patient in whom he ligatured the brachial artery for traumatic aneurysm, and another with an aneurismal varix below Poupart's ligament, which resulted from a punctured wound of the thigh.

Inhaler.—Dr. Thomson (Omagh) exhibited an improved combination ether and chloroform inhaler, which he had himself invented.

Ophthalmic and Aural Operations.—Dr. McKeown, at the Ulster Eye, Ear, and Throat Hospital, operated on several cases of catarac by his injection method, in presence of a number of members who had been invited. He also showed his method of incising the membrana tympani for disease of the middle ear.

SPECIAL CORRESPONDENCE.

PARIS.

e Halfpenny Sign in Pleurisy: a New Symptom.—Cerebral and Meningeal Symptoms accompanying Parotiditis.—Complete Aphonia ccompanying Nasal Lesions.—Myriapods in the Intestines.—A New Form of Paralysis.—Salts of Copper Test not Absolute Proof of Sugar in Urine.—Diphtheria treated with Resorcine.—Ptomaines and Puerperal Fever.—Differential Diagnosis between Hard and Soft Chancre easily made.—Pulmonary Phthisis treated with Vapour impregnated with Turpentine.

ofessor Pitres, of Bordeaux, indicates a new sign in auscultation. Davezac describes it as follows, in the *Journal de Médecine de deaux*. The patient is seated, and is auscultated in the dorsal on. An assistant places a sou on the thorax, in different parts, ording to directions, and percusses. The ear of the auscultator ns at the opposed corresponding parts. The healthy side is first nined; then the side with pleurisy, where the note is much ier. A clear metallic sound indicates pleuritic effusion; when sound is absent, there is no effusion.

rs. Lannois and Lemoine, in an article in the *Archives de Neuro-*, publish clinical notes which indicate that, in the course of otiditis, the cerebral troubles are not always acute and transitory, that they frequently remain for a considerable length of time, are symptoms of serious brain-lesions—aphasia and paralysis. It ossible that in both of these lesions there is inflammation of the ingeals. In aphasia, there is irritation of the adjacent cortical rs; in paralysis, the cells of the grey substance affected, and con- ite superficial encephalitis. M. Sorel records a case of orchitis sympathetic parotiditis accompanied by delirium and fever, fol- d by faulty articulation and aphasia. After fifteen months, the ent recovered his powers of speech, but imperfectly. The authors able to study a patient in whom cerebral disturbance was serious; he was aphasic, and had right hemiplegia. This con- n continued a considerable time, and he was obliged to leave the y. Eventually, he was completely cured.

r. Brébion publishes, in the March number of the *Revue Mensuelle aryngologie*, two interesting clinical notes concerning a nasal n, followed by aphonia. The patient had attacks of coryza, h frequently produced aphonia. When he consulted Dr. Brébion, ttack had been prolonged for an unusual length of time. There not any laryngeal lesion, but in the nasal fossæ were a consider- number of small polypi. These were removed, and the patient ered the use of his voice.

Rooms, in the *Archives Médicales Belges*, reports the following A boy, aged 11, showed symptoms of illness, which lasted years. He had strange tastes and fancies; he grew thin, and xcessively irritable and nervous. It being imagined that intestinal ns were at the root of the evil, vermifuges were administered out any result. The child was better in winter, and grew worse mmer. One day he drank a glass of gin, in which artemisia blos- had been infused, and he afterwards expelled a quantity of living apods, which lived several days. The child's condition greatly oved, but on the summer following it again fell, and the old toms reappeared. A double dose of the gin, with artemisia blos- was given him. He vomited violently, and expelled myria- from the mouth, nasal fossæ, and anus. The treatment was nued a month, and the pseudo-parasites disappeared. Probably, g the season of ripe fruit, the boy ate blackberries, and thus owed these insects. The vitality exhibited by the myriapods in ntestinal canal is explained by the denseness of the envelope and eculiarity of their respiration.

a recent meeting of the Biological Society, Dr. Brown-Séquard l that he believed he had observed a special form of paralysis, has never been described. The slightest effort on the part of atient is followed by paralysis. Dr. Brown-Séquard gave a rapid iption of three patients afflicted with this form of paralysis—one 37, another aged 48, and the third aged 54. One of these was ked with paralysis, every time he walked longer than five minutes; ier remained paralysed for months, after a very slight effort.

Coignard, in a memoir presented to the Société de Médecine de stated that the reduction of salts of copper, by urine, is not solute proof that there is sugar in the urine.

Fraignaud reported to the same Society, that he had treated a aged 14, suffering with diphtheria, with resorcine; he applied it locally; at the same time he administered sulphide of calcium internally. The child recovered. Three days after resorcine had been applied (4 grammes to 30 grammes of glycerine), the urine became black, an indication to discontinue it.

At a recent meeting of the Biological Society, M. Doléris stated that soluble ptomaines had been found in the blood of a young woman, who died of puerperal eclampsia, shortly after parturition. Rabbits inoculated with these ptomaines died.

M. Balzer indicates how to easily recognise the difference between a soft and a hard chancre and herpes. According to this investigator, it is sufficient to examine the products of the ulceration. With the soft chancre there are always lesions of the derma; and, on examining the secretions, there are present epithelial cells and pus-corpuscles, in this respect like those of indurated chancre and herpes, but, unlike the secretions of those affections, there are also elastic fibres. These fibres are easily perceived, by treating the preparation with potash, and staining it with eosine. This method enabled M. Balzer to make a differential diagnosis, which otherwise would have been impossible.

Turpentine has been for some time recognised as a valuable therapeutic agent in pulmonary phthisis, but its use is attended by so much difficulty and functional disturbance, that its valuable properties have not been utilised. Dr. Brémond Guinior has discovered a method by which turpentine penetrates the skin, and is inert in its influence on the digestion. The patient is placed in a box, from which his head protrudes; this assures normal respiration. During twenty minutes, the patient is surrounded by water-vapour, supersaturated with turpentine. This vapour condenses, and deposes turpentine on the entire cutaneous surface; its presence in the urine is evident after the first micturition; it is also detected in the sweat and in pulmonary expiration. The animal economy is more saturated with turpentine by this method than it was possible to obtain by any other manner of administration. Its action continues after the treatment is discontinued. The efficacy of this method has been tested in M. Leven's wards at the Rothschild Hospital. S. R., a compositor, was received into the wards on September 20th, 1885. The February previous, he was treated at the Necker Hospital for pleurisy; since that time, he had a constant cough, and was excessively weak; during a short walk, he was obliged to rest several times. When he entered M. Leven's wards, he was excessively thin and weak; he had lost appetite, had night-sweats, and dreadful fits of coughing. There was dulness at the apex of each lung on percussion; the sputa contained a considerable quantity of pulmonary bacilli. The turpentine treatment was begun on September 22nd. On October 5th, after twelve applications, the improvement was considerable; the patient had gained two kilogrammes in weight; he felt much better, the night-sweats were less, appetite returned, and less sputa were expelled; the *souffle* was less strong. On January 2nd, the patient left the hospital; he had gained six kilogrammes in weight; the sputa contained a few bacilli, detected only by a very careful examination. Subsequently, S. R. returned to the hospital; his general condition was not so good as when he left, but he had not decreased in weight, and there were not any bacilli in his sputa. The turpentine treatment was not recommenced; he took warm shower-baths. A month after his readmittance, the cavernous *souffle* had disappeared, and bacilli remained absent. Another patient was submitted to the same treatment. He gained three kilogrammes: the treatment was discontinued during seventeen days, and he lost two kilogrammes in weight. After seven applications of the turpentine treatment, he increased a kilogramme in weight.

CORRESPONDENCE.

THE PROPOSED HYDROPHOBIA COMMISSION.

Sir,—As the rumour that the British Government intends to appoint a Commission to report on M. Pasteur's method of preventing the development of hydrophobia in persons who have been bitten by rabid dogs, appears to be well founded, I would venture to point out that the work of such a Commission, if it is to present a report possessing any greater scientific value than belongs to M. Pasteur's own papers in the *Comptes Rendus*, will necessitate the expenditure of a good deal of time.

The scepticism which has been excited is largely due to the want of exactitude in M. Pasteur's report of his experiments, and their results; even in his last paper, in which he professes to give exact statistics, a careful examination shows that he has omitted many important particulars with regard to certain cases. For instance, in the case of Lorda, a man bitten by an undoubtedly rabid dog, the part of the body

wounded is not stated. The point, however, which M. Pasteur leaves most in doubt, in a great number of cases, is the most important point of all—namely, whether the dog was really rabid. Several children were sent to Paris from Newark, in the United States, under the impression that the dog by which they had been bitten was rabid From a paragraph in the *New York Medical Record*, it would appear that this was not the case ; for seven other dogs bitten by it, and kept under observation until March 2nd, did not become rabid. His last paper makes it clear that M. Pasteur is fully alive to this grave source of fallacy ; and, in criticising him, it is only fair to remember that, not being a bird, as Sir Boyle Roche would have said, he cannot personally verify the diagnosis of rabies which he obtains from the veterinary or medical practitioner.

The first duty of the Commission would be to examine into this ; the number of cases at present published, in which the evidence is conclusive, is only four at most ; and the Commission, I take it, would have to make observations for itself. M. Pasteur does not, as yet, appear to have had as many as a hundred patients in a month ; but, assuming that, within that time, the Commission witnessed the commencement of a hundred inoculations, then, since as a rule each patient has been bitten by a different dog, some sixty or seventy journeys throughout the length and breadth of Europe, and the careful observation, perhaps for several days, of as many dogs, *post mortem* examinations, and secondary test inoculations, would be necessary. The period of incubation of hydrophobia may be at least as much as sixty days, and all the patients inoculated would have to be kept under observation for at least this period. The best available statistics show that, of one hundred persons bitten by rabid dogs, only twenty will develope hydrophobia. M. Pasteur, it is true, includes persons bitten on parts of the body covered by clothes, unless the clothes are torn ; but, on the other hand, a certain unknown proportion of his patients have not been bitten by rabid dogs. It is, therefore, fair to assume that, if the Commission observes a consecutive series of a hundred cases, its report will be founded on not more than twenty cases of potential hydrophobia. To do this, with any approach to completeness, will take three months' work ; and yet, the settlement of these elementary questions : Was the dog mad ? Did the patient escape hydrophobia ? leaves us still at the threshold of the inquiry.—Yours truly,

DAWSON WILLIAMS.

EMMET'S OPERATION.

SIR,—I am sorry to trespass once more upon your much-contested space. Dr. Playfair and myself seem at last to have agreed. He denies explicitly having ever said that he was the first to perform Emmet's operation in England. I therefore acknowledge my mistake, simply submitting in extenuation that Dr. Graily Hewitt said, in the JOURNAL of February 2nd : "It was first performed in England by Dr. Playfair." Dr. Playfair will, I am sure, thank me for giving him the opportunity of correcting the error.

The other point was that, in his original communication to the Obstetrical Society in 1882, Dr. Playfair said "he knew of no paper on the subject in our medical periodicals, or in our gynæcological text-books, with the exception of the two recent works of Drs. Galabin and Edis, in which there is a brief notice of it." In the course of the discussion on this paper, Dr. Fancourt Barnes called attention to the fact that Emmet's operation had been described in my work on *Diseases of Women* in 1878. Had Dr. Playfair acknowledged his omission to refer to this, in his reply at the time, he would have been spared the trouble of doing so in his answer to my recent interpellation. Trusting that at length all cause of difference between us is removed.—I am, etc.,

ROBERT BARNES.

Harley Street, W., March 29th, 1886.

ABATEMENT OF SMOKE.

SIR,—In your issue of March 20th, Mr. D. K. Clark, Testing Engineer of the Smoke Abatement Institution, writes : "Mr. Pridgin Teale's grate was one of those tested, but he did not attend at the test, although invited." Unless my memory grossly deceive me, this is the first intimation of any such invitation ; and your article of February 15th, written in the same strain as Mr. Clark's letter, was the first intimation that any grate constructed on principles advocated by me had been tested by the Smoke Abatement Committee. When the testing took place, what form of grate was tested, what results were obtained, I have never been informed.

The fact is, that the Smoke Abatement authorities have never shown any desire to ascertain the truth of the discoveries I made about the effect of the "Economiser." They have never taken the trouble to send a competent person down to Leeds to see my principles in effective work, as could easily have been seen on a large scale at the Leeds Infirmary.

Mr. Clark says, of what he calls Mr. Pridgin Teale's grate : "The results of the test were not better than those of some other grates." Truly, a very exact statement of the results of a scientific investigation ! All I can do is to meet one assertion by another. If Mr. Clark's tests of grates on my principles failed to show more effective heating of a room with a smaller expenditure of fuel, than is found in the case of grates with an open bottom grid, his tests are faulty, or, if individually accurate, fail to cover the whole ground involved in the question. The strong testimony and practical experience of large numbers of persons who have acted upon my advice contradict the verdict of the Smoke Abatement Institution.

Those who have undertaken to criticise my views (BRITISH MEDICAL JOURNAL, *Journal of Health*, *Engineer*, and *Echo*) fail to grasp the fact which lies at the root of good combustion of coal ; namely, that there is a slow combustion at a high temperature, which is satisfactory and economical, and is found in grates which embody my principles, and that there is a slow combustion at a low temperature, which is unsatisfactory and disappointing, and is sometimes found in grates with solid fire-brick bottoms.

The question is an important one to the country, and is not to be settled by loose assertions, but it ought to command careful investigation by competent persons, with minds perfectly unbiassed. It is, above all, important to the medical profession, both on their own account, and for the sake of their patients.—I am, etc.,

Leeds. T. PRIDGIN TEALE.

CORONERS' INQUESTS.

SIR,—On considering the facts of the Pimlico case, and others of a similar nature which occasionally come to the front to startle the general public, it may not be out of place to call attention to the lax way in which inquests are held. It is true that inquests are slipped over as if they were not of any importance ; whereas, if they be worth holding at all, the investigation should at least be thorough. I can mention two cases coming within my own knowledge within the last two months.

On February 9th, 1886, an inquest was held in Atherton, county of Lancaster, concerning the death of a married woman. She died suddenly, having gone about her household duties the day before her death. No medical man had attended her for twelve months at least before her death. The medical man who had last attended the deceased was not called to give evidence at the inquest as to her previous state of health, but another medical gentleman was called at the inquest. The coroner suggested that the jury should return a verdict of died from natural causes, etc. This was strongly protested against by the jury, who returned a verdict of died from excessive drinking, because the deceased had, for some time before and up to her death, habitually taken strong drink. There was no *post mortem* examination ordered by the coroner, although the deceased was going about her household duties the day before her death.

On March 17th, 1886, an infant, a few months old, died suddenly at Home Bridge, in the district before mentioned, and had no medical attendance for six weeks previously to its death. The medical man refused to certify the cause of death, and suggested that the coroner should hold an inquest. The coroner was communicated with, and did not consider it necessary to hold an inquest. Though this is not quite so strong a case as the first, it is not at all satisfactory. I write this letter in the interest of the public generally.—I am, yours faithfully, BENJAMIN MARSHALL, L.R.C.P.Ed., L.R.C.S.

Atherton.

DEATHS UNDER ANÆSTHETICS.

SIR,—Dr. Sheen's criticism in the JOURNAL of March 27th, that the relative numbers of deaths under ether and chloroform published give no idea of the relative frequency of deaths, without a statement as to the relative number of administrations, is perfectly fair. It is very difficult, however, to secure this ; but I may give some information on the subject that will aid. Returns were furnished me from five large hospitals, including during the year an aggregate number of administrations, roughly speaking, amounting to about 12,000. So far as I am able to judge, 9,500 of these would be of ether, and 2,500 of chloroform ; and I think this may be taken as about the usual proportion in the practice of most large hospitals in England. Deaths from anæsthetics are so rare that, unless reports be gathered from all parts, I do not possibly see how we can obtain any information on the subject ; and, without the amplest information on the physiological effects of the various agents, I do not see how we can estimate the

lue of any new substance which may be proposed, as compared with ose in general use.

Unless deaths from chloroform had been published, we should all at s moment probably be using it instead of ether; and, so far as can judged by statistics of many hundreds of thousands of cases, the rtality would be much larger than it is now.

It would, perhaps, be better not to use the expression "death *from* esthetics;" and, in my recent report, I have generally used the ex- ssion "during the administration of ether or chloroform." But . Sheen would seem to imply that the anæsthetic has little to do with e cause of death. In certain cases, indeed, such as I have noticed the report, it was only one of a number of factors; but, considering large number of cases where a healthy subject succumbs to the ct of an anæsthetic given for some trivial operation, such as the raction of a tooth or the removal of a small tumour, we can hardly uit the anæsthetic of frequently being the sole cause.

I have certainly formed the opinion that ether is a safer agent than oroform, from a fairly large experience and the examination of a e number of statistics; and, on examining lists of accidents ing the use of ether and chloroform respectively, it is remarkable t a much larger number of comparatively trivial operations appear er the list of chloroform accidents than in the case of ether.

here are many cases in the last reported list which I do not con- r to be due mainly to the anæsthetic; but, for the general in- nation of the profession, I think the circumstances of these should ecorded, as having occurred during the period of narcosis.

With regard to publishing lists of deaths from other causes, as mputation of the thigh," to which Dr. Sheen refers, I may observe these are published in connection with the surgical statistics of y large hospital, and there is no difficulty in obtaining any in- ation on the subject. During the last year or two, one or two pitals have begun to publish lists of casualties from anæsthetics; the total amount of information, as yet, is but small. Were these rts universally the rule, there would be no need of the papers on subject which I have been in the habit of sending to your mns.—I am, etc.,

ERNEST H. JACOB.

eeds.

R,—When I read Dr. Jacob's article on the above, I was struck the practical uselessness of it. To find out how many times roform and ether had been given, respectively, during the year, so to get an estimate of the ratio of deaths to each, I wrote to ral of the large London hospitals; but, from the answers received, pears that no record is kept of the numbers.

would be very little trouble for the registrars or house-surgeons spitals to keep such an account, and then only, it seems to me, the ssion will be able to form a fairly accurate opinion of the relative y and value of the chief anæsthetics. Meanwhile, the publica- of such a death-list is calculated very much to mislead.—Yours fully,

J. WHITEHOUSE, F.R.C.S.Eng.

nderland.

CENTENARIANS.

R,—I propose, shortly, to prepare for publication in the JOURNAL, eports which I have received in the collective investigation in- respecting persons who have attained or exceeded the age of years. Should any members of the Association, or of the pro- n, be able to give particulars of any such persons, I shall be y to forward to them the requisite forms to be filled up. I shall, urse, state the sources from which the information has been ed.—I am, etc.,

G. M. HUMPHRY.

nbridge.

REPRESENTATION OF GENERAL PRACTITIONERS.

,—The remark in your impression of March 27th, that the al practitioner was not represented in the ceremonial of Wed- y, March 24th, on the occasion of Her Majesty laying the first of the Examination Hall of the conjoint Colleges of Physicians urgeons, is not correct. It was with much pleasure that I saw . M. Corner walk in and take his place among the magnates.

Corner is President of the Hunterian Society, Surgeon to the r Hospital, etc., and altogether so excellent a representative of ficiency of the general practitioner, that it would be equally an upliment to all parties concerned not to suppose that he was in- nally selected to represent "the backbone" of the profession, ch the physicians and consulting surgeons are the acknowledged —I am, sir, your obedient servant,

D. DE BERDT HOVELL.

Mansfield Street, Cavendish Square, W.

THE PENDLETON PROVIDENT DISPENSARY.

SIR,—Dr. Orchard's letter, in the JOURNAL of March 27th, is a re- capitulation of letters which appeared in local papers, signed by "Justitia," "Medicus," and Dr. Orchard—the three signatures in- dicating one and the same person. It is no reply to the letter of mine which you were good enough to insert in the JOURNAL of March 6th, and to which I would beg the interested reader to recur before he agrees to the assertions made by Dr. Orchard. The honorary secretary of the dispensary has already replied to these letters, volunteering that every case of proved abuse would be expelled, and asking for particulars that the cases might be investigated, and not one of those cited and paraded before the public as cases of abuse of the system has been given to him. My own belief is that the system is, to a great degree, self-preventive of abuse by the well-to-do. They will not readily wait in a crowd of poor people, it may be, for two hours or more, before they can see the medical man and obtain medicine. And No. 1 of the alleged cases of abuse (allowing it to be true, of which I am entirely ignorant) goes to prove this. Applicants for membership have been refused, and members have been struck off the books, because they were discovered to be unsuitable.

The whole question of the medical attendance of the wage-earning classes is most difficult of solution. I believe the provident dis- pensary system indicates a possible method of solving it, as yet im- perfect. My connection with this system has afforded, to my mind, proof positive that the home visiting of the charitable dispensaries is unnecessary, because (1) many of those who have been thus attended voluntarily join the provident dispensary, and (2) there are members in receipt of parish aid, so that, in this way, the dispensary is even doing work which the union medical officer is paid to do. I regret very much that Dr. Orchard should feel aggrieved at, and in- jured by, the dispensary, and that he thinks himself thereby "de- prived of the legitimate earnings of his profession." I regret still more if there be any just cause for such a feeling, but he is not with- out a remedy. As one of the medical officers to an institution that I believe to be doing good work—work for which it was established—I am bound to make every legitimate effort for its success.

May I ask Dr. Orchard and those who think with him to ponder over this question: On what grounds do practitioners readily give their professional services for a fixed sum per member *per annum* (medicine included) to clubs, to the income of whose members there is no limit or restriction whatever, and at the same time object to women and children being treated on the same principle?—I am, sir, yours faithfully,

ALEXANDER STEWART, M.D., one of the Medical Officers to the Pendleton Provident Dispensary.

HOSPITAL NURSING.

SIR,—At a meeting of the Hospitals' Association, the proceedings of which were reported in the BRITISH MEDICAL JOURNAL of March 20th, some remarks were made by Dr. George Potter, which are a direct challenge to the religious feeling and good sense of the profes- sion; and they ought to have some reply.

The nursing at University College Hospital is a matter which mainly concerns the managers of that institution; but some principles are involved which concern the nursing at every hospital and in- firmary in the kingdom.

The All Saints' sisters stand to University College Hospital in the relation of contractors, who engage to provide a certain working article. If this article fail to give satisfaction to their employers, the engagement can be withdrawn at any time. Now the sisters allege that they can do their work best if they bind themselves to- gether by a definite tie, the tie of religion; and this religion must not be an amorphous meaningless thing, but of a distinct and practical creed and shape.

The sisters have a perfect right to do this. If the governors accept their services at all, their own terms must be accepted too. It is not pretended by anyone that these terms make them less efficient as nurses. If the sisters choose to enact that every one belonging to their society must have black hair or bright skins, they would be within their rights to insist upon these conditions. All that they say now is, that they find the religion of the Church of England a powerful impulse and support in their work; and nobody accuses them of trying to convert medical men or patients to the Church of England.

In the slang of the day, the Committee of University College Hos- pital are said to encourage "sectarian nursing;" a poor and foolish utterance, indeed, in those who so loudly talk about toleration; but if we read between the lines, the objection is not to "sectarianism," but to Christianity itself, as the motive force. As the *Spectator* re- marked some weeks ago, in writing upon this question, everything

may be allowed in this world but that one magnificent engine of doing good, the teaching of Christianity; and we seem actually jealous and hurt when its healing influence is brought to beds of sorrow and suffering.

Let us examine this silly word "sectarian" a little more closely. Most hospitals have a chapel and a chaplain. Is it "sectarianism," to have only one form of service in the chapel, or ought the mode of worship to be changed as the Sundays come round? Is the minister to be by turns Roman, English, Wesleyan, Congregationalist, Baptist? Our union workhouses and prisons have chapels and chaplains, nearly all belonging to the Church of England; are they, therefore, "sectarian" institutions?

At the Royal ceremony, last week, of laying the foundation-stone of the Medical Examination Hall, a prayer was offered by the Archbishop of Canterbury. Was this a "sectarian" proceeding?

Let me assure Dr. Potter and his allies, that it is they who are making religion a "militant theologian," instead of a "ministering angel," and that the "strife" is excited by no one but themselves. It is time to say plainly, that the spirit with which they approach this subject must be resisted in the name of liberty and freedom.—Your obedient servant, A HOSPITAL PHYSICIAN.

THE CHAIR OF PHYSIOLOGY IN ABERDEEN.

SIR,—Kindly correct a mistake in the JOURNAL. I have never offered myself as a candidate for Aberdeen, nor am I at present one. I shall be much obliged if you will give this prominence.—Yours sincerely, JOHN B. HAYCRAFT.

Birmingham.

MANURE-HEAPS, AND THEIR RELATION WITH DIPHTHERIA.

SIR,—I was very interested to see in the communication published in the JOURNAL of March 20th, from your Paris correspondent, some remarks upon the relationship of diphtheria to manure-heaps. He says:—"M. Ferraud, in an article published in the *Lyon Médical*, for March, traces some relation between manure-heaps and epidemics of diphtheria." I remember, when resident at the Children's Hospital, being struck with the frequency with which children were brought to us from mews, suffering from diphtheria. In these cases, the families occupied the rooms over the stables. So noticeable was this connection, that I mentioned the point in a paper on diphtheria, that was published in the *Medical Times and Gazette*, February 24th, 1883. Not only did the children suffer from diphtheria, but we had reason to believe that the dogs and cats that frequented the mews also suffered in the same way. We tried to obtain the bodies of some of the cats that died of throat-affections, but never succeeded; therefore, we were unable to confirm our opinion.

Some districts of London were entirely free from diphtheria, while others afforded numerous examples of the disease. It would be interesting to know whether the localities that experienced immunity are deficient in their number of mews and manure-heaps. It would also be interesting to know if any others of your numerous readers have ever noticed such relationship between diphtheria and stable-refuse, as is referred to in this letter.—I am, sir, yours faithfully,

Welbeck Street. W. E. STEAVENSON, M.D.

INDIA AND THE COLONIES.

INDIA.

THE WATER-SUPPLY OF MADRAS, AND CHOLERA.—Dr. Furnell, the Surgeon-General at Madras, lately delivered an address on cholera and water; and, from the figures relating to the town of Madras which he produced, it is clearly proved that in Madras, as in Calcutta, the introduction of a supply of good drinking-water has an immediate effect upon the ravages of cholera. For many years before the introduction of the Red Hill water-supply into Madras, the number of deaths from cholera annually amounted to hundreds, and too frequently to thousands; but from the year 1872, when the water-supply was first opened, there has been a very large reduction in the mortality, one year being absolutely free from the disease, and in three others the deaths being five, six, and two respectively. Of course, during the famine years, there was a large increase in the fatal cases of cholera, caused by the migration into the town of many poor half-starved creatures, who had no strength left to resist the disease. But, as soon as the famine was over, the rate of mortality again fell to below 100 *per annum*; and, during the last four years, when there has been a severe epidemic of the disease throughout the greater part of the Madras Presidency, the average number of deaths had not exceeded 250 *per annum*. The greater part of these deaths also, it is shown, took place in those parts of the town which had not had benefit of the Red Hill's water-supply; and Dr. Furnell, therefore, urges the necessity of extending the water-supply to these localities.

MEDICO-LEGAL AND MEDICO-ETHICAL.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

*** AN unbiassed consideration of the alleged facts detailed in Dr. P.'s letter, leaves no doubt upon our mind that the young surgeon, if correctly reported, in so acting, and "calling in another surgeon to assist him, without any consultation with, or even acquainting Dr. P. about the matter," committed a grave and regrettable breach of professional rule against his much senior brother-practitioner. Further comment is, in our opinion, unnecessary, inasmuch as the case, as related, conveys its own condemnation.

NEW PRACTICES, AND COURTESY CALLS ON PRACTITIONERS.

SIR,—I intend to set up in practice in a large town, where there are a considerable number of medical men, so many, that I cannot well call on all of them. What is the best way to do? I think of calling on those in the immediate neighbourhood of my house, and a few of the principal medical men in the town; namely, those who are attached to the town hospital. Please let me know your ideas on this matter, and oblige, yours truly, ZETA.

*** "Zeta" will do well to be guided by the principle laid down in the following rule, which appears in the *Code of Medical Ethics* (published by Messrs. Churchill), page 90, rule 2. "In towns of not exceeding 35,000 inhabitants, and containing some thirty, more or less, medical men, a preliminary visit of courtesy should be paid to each several practitioner, but in those in which the preceding numbers are much exceeded, the call or visit may very fairly be limited to such practitioners as live within a radius of (say) half a mile, or less, according to the nature and population of the locality; while in London and other large and densely populated cities, the area of call must necessarily be very circumscribed, and, in a great measure, left to the judgment and discretion of the intending practitioner himself, or of a local professional friend. As a safe and simple guide, however, in either or in any case, the extreme area of call for such initiating visits may, perhaps, be sufficiently defined by a circle, comprising within its space some thirty practising members of the faculty."

UNQUALIFIED ASSISTANTS.

J. B. F. writes: Mr. Allbutt's over self-assertiveness induced him to miss the points in dispute. These I take to be: that the dispensaries in question should not be carried on by unqualified assistants, however highly esteemed, but under the direct personal attention of qualified proprietors; and that, consequently, the fees at the dispensary should be such as will be not only within the ability of the patients to pay, but equally within the self-respect of a professional man to take; and that these fees should be graduated, as far as practicable, to the assumed position (income) of the patients.

I made no reference to the out-door attendance, but solely to the dispensary, and the relative work done there. Now, what are Mr. Allbutt's fees, or those of his unqualified assistant, for advice and medicine there? This is a mere question of fact, and one not to be dealt with by generalities. My knowledge of these dispensaries warrants my former assertion that, generally, they are simply shops for selling physic and cheap doctoring. Whether Mr. Allbutt's branch at Hunslet be a favourable exception to these, remains to be shown by the necessary evidence.

It is much to be feared that "united action" among the local practitioners, suggested by your working man correspondent last week, would, in the face of the existing strong competition, be found impracticable.

ATTENDANCE ON DECEASED PARTNER'S WIDOW.

A CORRESPONDENT writes:—In 1875, I purchased a half share of a practice, for £1,000. In 1881, my partner died, and I was compelled to buy the remaining half share (by the articles of partnership). The total practice cost me over £2,100. My partner left his widow his house and grounds, and several thousand pounds' worth of real and personal estate. Her friends also are wealthy people. She has since married, and lives in the country, at a "Manor House." It taxed my earnings heavily to pay the last premium, and the executors charged 5 per cent. on the amount remaining unpaid. Do you think that it would be courteous on my part to expect to be paid for my professional services? I intimated that it would, but the widow was indignant. Of course, I refer only to attendance on herself and children, during her widowhood.

*** We would refer "F.R.C.S.Eng." to the following rule, extracted from the new edition of the *Code of Medical Ethics*, page 53, Section 2, rule 1, from which he will find that, under the circumstances related, he is fully justified in charging for professional attendance on the widow and her children. "All legitimate practitioners of medicine, their wives, and children, while under the paternal care, are entitled (*not* as a matter of *right*, but) *by professional courtesy*, to the reasonable and gratuitous services—*railway and like expenses excepted*—o

he faculty, resident in their immediate neighbourhood, whose assistance may e desired. In the case, also, of near relatives, who are more or less dependent upon a professional brother (other than wealthy), it will likewise be well, at his request, to forego or to modify the usual fee. On the other hand, a son or aughter altogether independent of the father—or the widow and children of a practitioner, left in affluent or well-to-do circumstances, should be charged as ordinary patients—unless feelings of friendship, or other special reasons, render he attendant practitioner averse to professional remuneration; in such case, he rule need not apply. Moreover, if a wealthy member of the faculty seeks rofessional advice, and courteously urges the acceptance of a fee, it should not e declined—*for no pecuniary obligation ought to be imposed on the Debtor, which ie Debtee himself would not wish to incur.*"

MIDWIFERY ENGAGEMENTS.

. J. French Blake writes: A patient whom I had attended in her first connement, engaged my services for her second, requesting me at the same time send her a nurse; this I did. She has since been confined; and, without y assignable reason, sought the assistance of another medical man; nor have ie relatives of the patient had the politeness to acquaint me of the fact that ie "little event" was over.

I should esteem it a favour if you will kindly inform me whether I can claim y fee.

*** Our correspondent would be justified in asking the patient's friends for a e, on the ground of common civility and good feeling; but we are doubtful hether he would be successful if he attempted to recover it by action at law. a similar case that was tried some years ago in a provincial county court, the dge decided against the plaintiff, on the ground that, as no deposit had been id at the time of the engagement, there was no legal contract. On the other nd, there are legal precedents, we believe, for success in such a claim.

. B. (Dorset) writes: A man whom I have attended on two former occasions, d whose account I sent in without items, paid me an instalment of this, his ird bill, but refuses to pay the balance unless I send the items, which I dene to do. Only one medical man does send items in this town, and that for reason. Can I be compelled to send items, no arrangement as to charges ving been made, when I was engaged; and having received two former bills, items having been required? Does the fact of having paid an instalment nowledge the debt, and render it indisputable.

*** Particulars must be given when required.

OBITUARY.

EDWARD BRÖNNER, M.D., M.R.C.S.Eng.

Edward Brönner, who died at Bradford on March 19th, at the of 63, of acute pneumonia, was one of the most respected members ie large German community of that town, where he had lived for ards of thirty years. He was a native of Wiesbach, in Baden, studied at the University of Heidelberg, and afterwards at Vienna Freiburg.

e practised first in Wiesbach, but, on the outbreak of the revolu- of 1848, he took a prominent part in the events of that exciting , and sat as a representative in the Constituent Assembly of en in 1849. On the overthrow of the revolutionary party, Dr. mer was obliged to leave the country. He went to Paris, and e studied specially the diseases of the eye and ear. In 1852, he to England (in company, among others, with the late Dr. Bordt, of Manchester), and settled in Bradford, where he soon made a general practice, and where he became a benefactor to the poorer es of the town and the surrounding districts, by the establishment dispensary for the gratuitous treatment of diseases of the eye and In course of time this developed into the Bradford Eye and Ear pital, now one of the largest and best appointed special hospitals ie provinces, where, since its opening in 1857, over 40,000 patients been treated. Dr. Brönner was the senior honorary medical r of this institution from its foundation until his death, the rule pelling retirement at 60 years of age having been abrogated in his ir.

1865, Dr. Brönner translated Professor Moleschott's *Chemistry od and Diet* into English. Among his countrymen in Bradford, erted himself as one of the founders of the "Schiller Verein" for urtherance of intellectual and social intercourse. For many years he was one of the active promoters of the Society for the Promo- of German Freedom and Union. As a token of the widespread ion and esteem in which Dr. Brönner was held, he was presented, years ago, on the occasion of his silver wedding, with a hand- service of plate and a purse containing a thousand guineas. He a man singularly free from personal or professional jealousy, who herefore universally beloved and respected by the members of his profession, and admired by those members of the laity who could ciate a modesty and solid worth which abhorred all meretricious questionable modes of professional advertising. Dr. Brönner leaves a widow who shared all the eventful hardships of his early life, as well as his later professional success. The family consists of two daughters and two sons, both of whom have qualified as members of the medical profession.

In the district of which Bradford is the centre, few events have happened in recent years which may be more truly described as a public calamity, than the death of Dr. Brönner. His remains were followed to their last resting-place by a large crowd, which represented the regret of all classes of the community.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE BIRMINGHAM BOARD OF GUARDIANS AND MR. A. B. SIMPSON.

From files of the Birmingham daily journals, and from other sources, we learn that, in the early part of last year, some cases of puerperal fever appeared in the lying-in wards of the Birmingham Workhouse. The wards having been closed, and fresh ones provided, for a time the disease appeared to be stamped out, when, in the autumn, other cases occurred.

On November 2nd, Mr. Price, the chairman of the Workhouse Infirmary Committee, requested the attendance of Mr. Simpson, the workhouse medical officer, in the wards, for the purpose of conferring with him about the drainage; and, as he alleges, whilst so engaged, took occasion to intimate to this gentleman that, as he believed that he (Mr. Simpson) was the source of infection, he must request him to cease his attendance on the lying-in cases, and leave the custody and control of the wards to the assistant medical officer. This intimation was made, so it appears, without any authority from the board, to whom it was never conveyed; nor was it intimated to the master, matron, nor head nurse. Mr. Simpson not having received any official intimation, save from the chairman, continued his attendance on the cases, holding, we presume, the common-sense view of the duties of a guardian, that he was no authority save when acting on a board or committee meeting, and then only so far as the majority of his colleagues support his views, and authorise their expression.

A further, though somewhat doubtful case, having been reported, and Mr. Simpson having been seen coming away from the wards, the committee was called together, when it was shown that Mr. Simpson had continued his attendance, holding that it was his duty so to do, unless such attendance had been interdicted by a distinct and positive official injunction.

Mr. Simpson having communicated with the Local Government Board on the subject, his letter was forwarded to the guardians, and this evoked from that body a reply, in which they charge him with "entirely ignoring his instructions, and with the worst result, with culpable carelessness," and call upon the board to remove him. Subsequently, an official inquiry was held, at which Mr. Simpson stated that, whilst admitting that a conversation took place between him and the chairman of the Workhouse Infirmary Committee, Mr. Price, respecting Mr. Cook, the assistant medical officer, having charge of the lying-in wards, nothing was said from which he gathered that he was not to go into the wards. If he had so understood him, he should have obeyed the order. Dr. Barratt (the chairman of the board) said he first heard that Mr. Simpson had been prohibited from going into the lying-in wards on December 1st, when an inquiry was made by the guardians.

On February 26th, the Local Government Board, acting on the report of Mr. J. J. Henley and Dr. Mouat, the two inspectors who conducted the inquiry, state as follows. "The Board cannot but consider that, in attending these cases after the date referred to, you disobeyed, without any sufficient cause, an important order given you by an authority whose right to give such an order you have fully admitted. Having regard to these circumstances, and to the want of confidence which has been expressed in a letter from the guardians to the Board, the Board do not feel that they can allow you to retain the office of principal medical officer of the workhouse, and they must therefore request that you will at once place your resignation in the hands of the guardians."

Comment on the procedure of this board towards an officer who has held charge of the workhouse for fifteen years, endorsed, though it be, by the action of Mr. Henley and Dr. Mouat, is wholly unnecessary. The facts speak for themselves.

THE SANITARY DUTIES OF A VESTRY.

An inquiry into the immediate sanitary requirements of Clerkenwell, made, at the instance of the Home Office and at the recommendation of the Royal Commission on the Housing of the Working Classes, by Mr. D. Nicholls, a government inspector, disclosed the fact that, in the 475 houses inspected, there were 294 water-closets without any water-supply. Fifty-two had water-closets with defective apparatus; 32 defective cisterns, 106 houses had defective dustbins or none at all, 32 had defective gullies or sinks, 10 defective drains, and 117 defective yard-paving. There was a large number of dirty and dilapidated houses, particularly those formerly occupied by one family, but now let in tenements. Additional sanitary precautions were, he considered, desirable on the part of the Vestry. There were 1,642 dwellings, many of them dirty and dilapidated, in which the landlords were non-resident, which, he considered, it was desirable to place under regulations for the inspection and control of lodging-houses. Their condition he regarded as, to some extent, due to the dirty and destructive habits of the occupants.

As to the absence of complaint put forward by the Vestry as their reason for not taking steps to provide a constant supply of water, Mr. Nichols points out that the Vestry, through their inspectors, were acquainted with the actual condition of the houses, and the sanitary requirements, "and," he adds, "it seems to be their duty to take the initiative without waiting for complaints. It also seems of importance that the Vestry should encourage their inspectors to make to them recommendations of necessary improvements, and should let it be known that such recommendations, wherever practicable, shall be carried out." He adds: "Although I consider it most desirable some additional precautions should be adopted, I do not consider the parish to be in a bad sanitary condition."

Messrs. Robson and Goode, who assisted in the report, express their concurrence in this report, the consideration of which was deferred until after it had been printed.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Featherstone. — Dr. Alexander Buncle is to be congratulated on the tact and success with which he appeals for sanitary improvement in the Featherstone district. The drainage of Loscoe, to which he has been directing attention for some time, has been carried out. It would appear that such drainage was urgently needed. Dr. Buncle is still urging his authority to provide an adequate supply of wholesome water. He says: "During last summer, the whole district was in great distress for want of water, many places being without a supply of any description." The birth-rate for 1884 was 46.2; the death-rate, 19.9. The zymotic death rate was 3.8. Measles carried off eight lives, scarlet fever one, diphtheria two, whooping-cough four, enteric fever two, and diarrhœa eight. Diphtheria was introduced from an outlying district into Loscoe some time ago. There has been no case of small-pox recorded in the district for the past twelve years. The zymotic rate being high, the infantile mortality also stood high—namely, 150.

Holborn District—The report of the medical officer of health for this district is largely taken up with questions on the housing of the working-classes. Dr. Gibbon thinks that "injurious, immoral, and obstructive buying and selling in the public thoroughfares" has largely to do with the maintenance of the slums and rookeries of the metropolis; for, he says, these places are occupied chiefly by those who are engaged in such vocations. He enters a warm protest against the "assertions of the Commissioners' Report" on the Housing of the Working Classes; and says that, in regard of Holborn, they "are not borne out by the evidence of the witnesses examined." The births for the year 1884 numbered 1,014. Dr. Gibbon finds, however, that many births among Irish and Italian families are not registered, and he accordingly claims a higher birth-rate than that represented by the number above quoted. The deaths numbered 841; in the three preceding years they numbered 830, 908, and 769 respectively. The number of deaths in the year 1884 is open to various corrections. Allowing for these corrections, the death-rate stands at 23.15 per 1,000 of the population, a number closely approximating that (23.8) for the central districts of London, of which Holborn forms a part.

Hartismere Rural District.—In his last annual report, Dr. Barnes gives some statistics with the view of showing the good result of the sanitary work that has of late years been done in this district. He points out that, whilst for the ten years 1870-79 the average annual death-rate from all causes was 18 per 1,000, the average rate during the five years 1880-84 fell to 16.2 per 1,000. The percentage to registered births, of deaths of infants under one year, has also fallen from 12.1 in the earlier to 9.7 in the later period. This seems to mean that in the last five years 125 lives have been saved to this district. The epidemic of scarlet fever which prevailed during the two previous years continued in a lesser degree during 1884. But, out of forty-nine cases, which occurred in twenty-one houses distributed among eleven parishes, only one death was registered. Isolation of the patients, and temporary closing of schools, proved, as usual, beneficial. Eight outbreaks of diphtheria occurred, but, with regard to most of these, Dr. Barnes can only say they "were unaccounted for." Five outbreaks of enteric fever took place, and were found mostly in association with defective sanitary arrangements. Dr. Barnes seems to keep his district under constant supervision, and his efforts are well supplemented by his inspector of nuisances.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, March 13th, 6,195 births and 4,837 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 24.2 and 26.6 per 1,000 in the two preceding weeks, further rose, under the influence of the unseasonably cold weather, to 28.0. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 19.3; Sheffield, 19.6; Derby, 19.9; Hull, 21.0; Leicester, 21.7; Birkenhead, 23.0; Oldham, 23.2; Wolverhampton, 23.5; Nottingham, 24.2; Bradford, 24.7; Leeds, 25.2; Bristol, 25.3; Halifax 25.3; Birmingham, 25.5; Newcastle-upon-Tyne, 25.6; Norwich, 27.2; Blackburn 27.3; London, 28.7; Portsmouth, 28.7; Huddersfield, 29.4; Sunderland, 29.9; Preston, 30.4; Cardiff, 30.6; Bolton, 33.2; Liverpool, 33.8; Salford, 34.3; Plymouth, 35.4; and the highest rate during the week, 35.7 in Manchester. The death-rate in the twenty-seven provincial towns averaged 27.3 per 1,000, and was 1.4 below the rate recorded in London, which, as before stated, was 28.7 per 1,000. The 4,873 deaths registered in the twenty-eight towns included 430 which were referred to the principal zymotic diseases, against 384 and 404 in the two preceding weeks; of these, 191 resulted from whooping-cough, 122 from measles, 36 from diarrhœa, 31 from "fever" (principally enteric), 30 from scarlet fever, 18 from diphtheria, and 2 from small-pox. These 430 deaths were equal to an annual rate of 2.5 per 1,000. The zymotic death-rate in London was equal to 2.6, while in the twenty-seven provincial towns it averaged 2.4 per 1,000, and ranged from 0.0 and 0.4 in Huddersfield and Leicester, to 5.5 in Bolton, 6.0 in Plymouth, and 6.8 in Blackburn. The deaths referred to whooping-cough, which had been 161 and 171 in the two preceding weeks, further rose during the week under notice to 191, and showed the largest proportional fatality in Sunderland, Portsmouth, and Bolton. The fatal cases of measles, which had risen in the four preceding weeks from 67 to 101, further increased during the week to 122, and caused the highest death-rates in Oldham, Nottingham, Plymouth, and Blackburn. The 36 deaths from diarrhœa showed a decline of 6 from the number in the previous week. The fatal cases of fever, which had been 33 and 31 in the two preceding weeks, were again 31 during the week under notice; this disease caused the highest death-rate in Wolverhampton. The 30 deaths referred to scarlet fever showed a slight decline from the number returned in the previous week, and showed the largest proportional fatality in Salford. The 18 fatal cases of diphtheria showed a considerable further reduction from recent weekly numbers, and included 14 in London. The 2 deaths from small-pox recorded in the twenty-eight towns were both returned in Liverpool. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 15 and 7 on the two preceding Saturdays, were again 7 on Saturday, March 13th; 1 new case was admitted to these hospitals during the week, against 7 and 0 in the two previous weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 10.7 per 1,000, and very considerably exceeded the average. The causes of 143, or 2.9 per cent., of the 4,873 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 6,004 births and 5,101 deaths were registered during the week ending Saturday, March 20th. The annual rate of mortality, which had increased from 24.2 to 28.0 per 1,000 in the three preceding weeks, further rose during the week under notice to 29.3. The rates in the several towns, ranged in order from the lowest, were as follow:—Norwich, 18.7; Leeds, 20.0; Bristol, 21.0; Leicester 21.3; Birkenhead, 22.4; Sunderland, 22.5; Sheffield, 23.8; Huddersfield, 25.3; Bradford, 25.4; Birmingham, 25.5; Newcastle-upon-Tyne, 26.6; Salford, 26.9; Hull, 27.0; Nottingham, 27.1; Plymouth, 27.2; Wolverhampton, 28.0; Brighton 28.2; Oldham, 30.0; London, 30.3; Cardiff, 30.6; Derby, 33.0; Portsmouth, 33.3; Preston, 34.5; Halifax, 35.3; Manchester, 35.7; Liverpool, 36.0; Bolton, 39.2; and the highest rate during the week, 39.6 in Blackburn. In the twenty-seven provincial towns the death-rate averaged 28.4 per 1,000, against 30.3 in London. The 5,101 deaths registered during the week in the twenty-eight towns included 195 which were referred to whooping-cough, 103 to measles, 44 to diarrhœa, 32 to scarlet fever, 32 to "fever" (principally enteric), 20 to diphtheria, and only one to small-pox; in all, 427 deaths resulted from these principal zymotic diseases, against 404 and 430 in the two preceding weeks. The zymotic death-rate was equal to 2.4 per 1,000. In London the zymotic rate was 2.7, while in the twenty-seven provincial towns it did not exceed 2.7 per 1,000, and ranged from 0.0 in Norwich, Huddersfield, and Sunderland, to 6.1 in Portsmouth, 8.9 in Bolton, and 10.9 in Blackburn. The fatal cases of whooping-cough, which had been 161, 171, and 191 in the three preceding weeks, further rose during the week under notice to 195, and caused the highest death-rates in Bolton, Portsmouth, and Brighton. The deaths referred to measles, which had increased in the five preceding weeks from 67 to 122, declined to 103, and this disease showed the largest proportional fatality in Portsmouth, Bolton, and Blackburn. The fatal cases of diarrhœa differed but slightly from recent weekly numbers. The 32 deaths from scarlet fever showed a slight further increase upon those returned in the two preceding weeks, and showed the highest proportional fatality in Leeds. The fatal cases of "fever," which had been 31 in each of the two pr

ig weeks, were 32 during the week under notice. The 20 deaths referred phtheria exceeded by 2 the number in the previous week, and included 14 in on and 2 in Birmingham. The fatal case of small-pox was recorded in burn; no death from this disease was recorded during the week under e in London. The number of small-pox patients in the Metropolitan Asylum itals, which had been 7 at the end of the two preceding weeks, were again Saturday, March 20th; two new cases were admitted to these hospitals g the week, against 1 in the previous week. The death-rate from diseases e respiratory organs in London during the week under notice was equal to er 1,000, and very considerably exceeded the average. The causes of 137, or r cent., of the 5,101 deaths registered in the twenty-eight towns were not led, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

ng the week ending Saturday, March 6th, 823 births and 614 deaths were ered in the eight principal Scotch towns, having an estimated population 3,977 persons. The annual rate of mortality, which had been 22.3 and er 1,000 in the two preceding weeks, further rose last week to 24.9, but 7 per 1,000 below the average rate in the same period in the twenty-eight English towns. Among these Scotch towns, the rate was equal to 17.1 erdeen, 17.4 in Dundee, 20.9 in Greenock, 22.5 in Edinburgh, 24.4 in 22.5 in Paisley, 30.1 in Glasgow, and 31.1 in Perth. The 614 deaths re- d during the week under notice in these Scotch towns included 43 which eferred to the principal zymotic diseases, against 46 and 51 in the two ling weeks; of these, 19 resulted from whooping-cough, 7 from "fever," diarrhœa, 4 from scarlet fever, 3 from measles, 3 from diphtheria, and e from small-pox. These 43 deaths were equal to an annual rate of 1.7 per which was 0.6 below the average zymotic death-rate during the same period twenty-eight large English towns. The highest zymotic rates during the were recorded in Edinburgh, Paisley, and Glasgow. The fatal cases of ing-cough, which had been 13 and 19 in the two preceding weeks, were 19 during the week under notice, of which 17 occurred in Glasgow. The 7 referred to different forms of fever showed a slight further increase upon weekly numbers, and included 4 in Glasgow. The 7 fatal cases of diarrhœa onsiderably below those returned in recent weeks, and included 3 in Edin-

The deaths from scarlet fever, which had been 8 and 6 in the two pre- weeks, further declined last week to 4, of which 3 occurred in Glasgow. atal cases of measles were all recorded in Edinburgh; and of the 3 deaths l to diphtheria, 2 were returned in Dundee and 1 in Aberdeen. The mor- from diseases of the respiratory organs in these Scotch towns during ek under notice was equal to 7.2 per 1,000, against 9.4 in London. The of 73, or 11.9 per cent., of the 614 deaths registered during the week in Scotch towns were uncertified.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, March 30th, 1886.

acy Acts Amendment Bill.—In Committee (on recommittal) on ill, the LORD CHANCELLOR moved to leave out subsection 1 of 27, and to insert a provision that, except in certain cases, no should be made for the reception of a lunatic, as a single patient house of a medical practitioner, except by the judge in lunacy. xceptions allowed were in the case of persons who should, by dical certificates accompanying the orders for their reception, ified to be suffering from unsoundness of mind of a temporary ter, or from decay of mind in old age, or who should be de- of voluntarily submitting to care and treatment.—The Earl of ANE agreed to the proposal, and the amendment was added to use.—On Clause 42, the LORD CHANCELLOR proposed to insert, beginning of the clause, subsections relating to licences to asylums. He said he believed that the system of private asy- as a bad and mischievous one, and he hoped the effect of the ould be gradually to extinguish that system. But they must faster than the public were prepared for; and he had, there- etermined to preserve all vested interests. He proposed that, ommissioners or justices were of opinion that a licensed house en well conducted, they might, on the expiry of the licence, t to the licensee or his successor. He also proposed that a might be given for a new house, built to take the place of a l house, if the commissioners or justices were of opinion that d be as well suited for the purpose as the old house.—The ents were agreed to.—Lord GRIMTHORPE moved the omission clause, contending that no case had been made out against the of private asylums, and that those asylums cured 50 per cent. atients than the public ones. Their lordships ought not to all they read in novels, in reference to wicked doctors and the ment of private asylums.—The LORD CHANCELLOR pointed the late Lord Shaftesbury, who had passed half a century closest attention to this subject, held to the last that the of proprietary houses was a bad one, which ought to be en- placed by a public asylum system.—The Earl of MILLTOWN d CRANBROOK were in favour of the clause being retained in nt shape.—Lord GRIMTHORPE withdrew his motion, and the as agreed to.—The Bill passed through Committee.

Bill.—This Bill was read a second time, on the motion of D CHANCELLOR, who said that he had taken the clauses from acy Bill, and that he was glad to believe the measure gave ion.

HOUSE OF COMMONS.—Tuesday, March 30th, 1886.

Criminal Lunatics.—In answer to Mr. MORGAN HOWARD, Mr. CHILDERS said: Having satisfied myself that the four men—Strain, Wilson, Longman, and Jarvis—ought not properly any longer to be treated as criminal lunatics in Colney Hatch Lunatic Asylum, I ordered their discharge, in the exercise of a discretion which has been vested in the Secretary of State by the Act of 1884. The effect of their discharge will be, as the hon. member's question infers, to throw the cost of their maintenance on to the local funds. There will be no Treasury contribution, as there are no sentences to expire, none of these persons having been convicted, but having all become lunatic before they were tried.

Mr. MORGAN HOWARD, Q.C., has taken charge of, and introduced into Parliament, a Bill of the Medical Alliance Association, for the amendment of the Penal Clauses of the Medical Act of 1858.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

Fleet-Surgeon W. J. EAMES has been promoted to be Deputy Inspector-General of Hospitals and Fleets. Mr. Eames entered as Surgeon, February 14th, 1856; became Staff-Surgeon, June 30th, 1863; and Fleet-Surgeon, November 2nd, 1877. In 1860-62, he was Surgeon to the *Bloodhound* in the expedition up the Niger, during which he had to contend with a severe epidemic of yellow fever; he was also at the attack on Porto Novo, on the West Coast of Africa.

Surgeon FRANCIS WILLIAMSON died at St. Leonard's-on-Sea on the 16th instant, in his thirty-third year; he joined the Royal Navy as Surgeon, September 30th 1876, but retired August 19th, 1882.

Dr. J. G. M'KENDRICK, F.R.S., has been appointed Honorary Staff-Surgeon to the Clyde Brigade of the Royal Naval Artillery Volunteers.

The following appointments have been made at the Admiralty during the past week:—JOHN LAMBERT, Fleet-Surgeon, to the Royal Victoria Yard, Deptford; ROBERT NELSON, Fleet-Surgeon, to the *Ajax;* JOHN O'CALLAGHAN, Surgeon, to the *Impregnable;* CHARLES B. A. E. CHAMBERLAIN, Surgeon, to the *Martin;* JOHN S. FOGERTY, M.D., Surgeon, to the *Seaflower;* ROBERT HICKSON, Surgeon, to the *Sea-lark;* GEORGE D. TREVOR ROPER, Surgeon, to the *Nautilus;* JOHN LOWNEY, Surgeon, to the *Liberty;* and OCTAVIUS S. FISHER, Surgeon, to the *Pilot;* W. W. JACOBS, Surgeon, to the *Comus.*

Assistant-Surgeon R. J. LAWSON, M.B, C.M., late of H.M.S. *Triumph*, died on the 23rd March at Edinburgh. Mr. Lawson entered the Royal Navy as Assistant-Surgeon, August 28th, 1882.

Deputy Inspector-General THOMAS STRATTON, M.D., died very suddenly, on the 16th March, at Stoke Damerell, in his 70th year. Dr. Stratton's commissions bore date:—Surgeon, December 19th, 1837; Staff-Surgeon, January 30th, 1847; Fleet-Surgeon, May 13th, 1859; and Deputy Inspector-General of Hospitals and Fleets, June 5th, 1867. He served in the Lakes during the Canadian rebellion in 1838, and was employed in the Canadian Immigrant Fever Hospital in 1847-48.

Surgeon E. H. BEAMAN, of the Lancashire Hussars, has resigned his commission, which dates from April 6th, 1869.

Surgeon E. G. PURCELL, of the 3rd Middlesex Volunteers, is granted the honorary rank of Surgeon-Major.

Mr. A. F. TRAIL, M.B., is appointed Acting Surgeon to the 3rd (the Buchan) Volunteer Battalion of the Gordon Highlanders (late the 3rd Aberdeen Volunteers).

Mr. J. D. JEFFREY has been appointed Acting Surgeon to the 1st Berwick Volunteers.

Captain E. S. WARBURTON is appointed Acting Surgeon to the 2nd Glamorgan Volunteers.

Surgeon JOHN BURNS, of the 3rd Lancashire Volunteers, is granted the honorary rank of Surgeon-Major.

Acting Surgeon W. T. ANGOVE has resigned his appointment in the 6th Suffolk Volunteers, which he joined, July 7th, 1883.

Surgeon and Honorary Surgeon-Major CHARLES HITCHCOCK, M.D., of the 2nd Wilts Volunteers, has resigned his commission, with permission to retain his rank and uniform

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, March 25th, 1886.

Avarne, Arthur Blair, 46, King Henry's Road, Regent's Park, N.W.
Aston, William, Ivy House, Codsall, near Wolverhampton.
Harvey, Thomas Richard Aloysius, M.R.C.S., Australia.
Sealy, Francis Marmaduke, Gosherton Vicarage, Spalding.

MEDICAL VACANCIES.

The following vacancies are announced.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications by April 10th.

BOURN UNION.—Medical Officer and Public Vaccination. Salary, £25, and extras. Applications to J. L. Bell, Board Room, Bourn.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon. Salary, £120. Applications, by April 2nd, to the Secretary.

CITY OF ABERDEEN.—Medical Officer of Health. Salary £300. Applications by April 14th, to W. Gordon, Town House, Aberdeen.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Gratuity, £20. Applications by April 6th to T. Storrar Smith, 24, Finsbury Circus, E.C.

COVENTRY UNION DISTRICT.—Medical Officer. Salary, £63. Applications to W. H. Harris.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by April 7th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100. Applications by April 7th.

GATESHEAD DISPENSARY.—Assistant-Surgeon. Salary, £120. Applications by April 12th to J. Jordan, Newcastle-on-Tyne.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 17th, to Henry Dobbin.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Physician. Applications to Henry Dobbin.

HULL ROYAL INFIRMARY.—Honorary Assistant Medical Officers. Applications by April 3rd.

HULL ROYAL INFIRMARY.—Ophthalmic Surgeon.—Applications by April 3rd.

LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Applications by April 6th to T. A. Wykes.

LONDON SCHOOL OF GYNÆCOLOGY.—Clinical Assistants. Applications to the Honorary Medical Secretary.

LONDON TEMPERANCE HOSPITAL, Hampstead Road. Registrar and Chloroformist. Salary, £50 per annum. Applications by April 12th, 1886.

METROPOLITAN LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications to Lockhart Syms, Esq., 7, Furnival's Inn, Holborn.

NORTH CAMBRIDGESHIRE HOSPITAL, Wisbech.—House-Surgeon. Salary, £130. Applications by April 18th to W. E. Schofield.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead, N.W.—Resident Medical Officer. Salary, £40 per annum. Applications by April 17th to L. Hill, 216, Tottenham Court Road, W.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £80 per annum. Applications by April 5th to G. H. Day.

SHEFFIELD GENERAL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by April 5th to G. H. Day.

SOWERBY BRIDGE LOCAL BOARD.—Medical Officer of Health. Applications by April 6th, to Godfrey Rhodes, Solicitor, Sowerby Bridge.

ST. PANCRAS NORTHERN DISPENSARY.—Physician and Surgeon Accoucheur. Applications by April 6th, to H. P. Bodkin.

SUNDERLAND HOSPITAL FOR SICK CHILDREN.—Honorary Surgeon. Applications to Secretary, before April 8th.

UNIVERSITY OF MELBOURNE.—Chair of Chemistry. Salary, £750 per annum. Applications to Robert Murray Smith, Victoria Office, 8, Victoria Chambers, Westminster.

YORK COUNTY HOSPITAL.—Two Honorary Medical Officers. Applications by April 6th, to R. Holtby.

WILLITON UNION, Somerset.—Medical Officer and Public Vaccinator. Salary, £80 and extras. Applications by April 12th to W. H. White.

MEDICAL APPOINTMENTS.

AGANOOR, M. S. P., M.B., C.M.Ed., appointed House-Surgeon to Gray's Hospital, Elgin, N.B.

BEAVERS, E. A., appointed Consulting Dental Surgeon to the Radcliffe Infirmary.

CLENDINNEN, J. George, L.R.C.S.I., reappointed for three years Medical Officer to the Sedgley No. 3 District, Dudley Union.

EDGELOW, Percy, M.R.C.S.Eng., L.R.C.P.Ed., appointed House-Surgeon to St. Peter's Hospital.

EVANS, Thomas Melancthon, M.R.C.S., L.S.A., late Senior Assistant Surgeon, appointed Surgeon to the Hull Royal Infirmary.

HABGOOD, William, L.R.C.P.Lond., M.R.C.S., L.S.A., appointed Resident Clinical Assistant to St. Luke's Hospital, London.

HUMPHREYS, Charles E., M.R.C.S., L.S.A.Lond., appointed Medical Officer, Public Vaccinator, and Medical Officer of Health for the Llanfair district of the Llanfyllin Union, *vice* Parry Jones, M.D., resigned.

HUTTON, H. R., M.A., M.B.Cantab., appointed Honorary Physician to the Ancoats Hospital.

JONES, Hugh Edward, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Liverpool Eye and Ear Infirmary.

LIESCHING, C. E., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the Stroud General Hospital.

MAGGS, William Adolphus, L.R.C.P.Lond., M.R.C.S., L.D.S., appointed Dental Surgeon to the North-West London Hospital.

NICHOLSON, Robert Hicks Bourchier, M.R.C.S., L.S.A., late Assistant-Surgeon, appointed Surgeon to the Hull Royal Infirmary.

REID, Irvine K., M.B., C.M.Aberd., appointed House-Surgeon to the West Norfolk and Lynn Hospital.

SALTER, John R., M.B.Lond., M.R.C.S.Eng., L.S.A., appointed Medical Officer to the Sudely and Capel District of the Tonbridge Union, *vice* Caleb Gargory, M.R.C.S.Eng., L.S.A., retired. [This appointment was incorrectly given in the JOURNAL of February 20th.]

SCHOFIELD, Gerald, appointed Resident Surgeon and Dispenser to the Great Yarmouth Hospital.

SHERBURN, John, M.B., C.M., M.R.C.S., late Assistant-Surgeon, appointed Surgeon to the Hull Royal Infirmary.

THOMAS, Hugh, M.R.C.S.E., L.S.A., appointed Honorary Surgeon to the Birmingham Lying-in Charity.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d which should be forwarded in stamps with the announcements.

BIRTHS.

BLACKMAN.—On March 30th, at Poplar House, Portsmouth, the wife of Josia George Blackman, M.R.C.S.Eng., L.S.A.Lond., of a son.

DEATH.

CÆSAR.—On March 26th, whilst staying with his brother at High Road, Totte ham, Henry Augustus Cæsar, L.R.C.P.Ed., etc., eldest surviving son of t late Henry Augustus Cæsar, M.D., F.R.C.S.I., aged 50.

CHESTERFIELD HOSPITAL.—The Duke of Devonshire has bee elected President of the Chesterfield and North Derbyshire Hospit for the ensuing year.

POISONED BY MISADVENTURE.—A case of poisoning by misa venture has occurred at Kensington to a coachman, aged 67, who, transpired at the inquest, had been suffering from bronchitis, for whi he had been in the habit of taking a cough-specific, and using a lin ment on his throat and chest. Both bottles, it was stated, were ke side by side; and the wife of the deceased, who was short-sighted, ha in the early morning, given the deceased a dose from the bottle co taining the liniment. Evidence was given to the effect that t specific was covered by a fawn-coloured wrapper, which made it scarce distinguishable from the liniment. The medical evidence was to t effect that the cause of death was collapse from taking liniment co posed of strong ammonia, chloroform, and soap. It was stated th the deceased and his wife had lived on the most affectionate terms. verdict of "Death from misadventure" was returned.

HYGIENIC DRESS AND FASHION.—The subject of hygienic dr is receiving renewed attention by the Rational Dress Society, und the presidency of Viscountess Harberton; and, at a recent meeting this society, at the Westminster Town Hall, it was decided to promo as far as possible, the wearing of dresses by which "no internal org can be injured, no muscle cramped, no movement of the body impede and to which the wearer may add as much grace and beauty as h own good taste may direct." It is satisfactory to see that a vigor protest is made against, among other things irrational and detrimen to health, boots and shoes with narrow heels, and tight-fitt bodices.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. John Lowe: Traum Hydronephrosis.—Odontological Society of Great Britain, 8 P.M. Com nications are promised by Drs. Joseph Walker; G. Cunningham, C bridge; and J. H. Redman, Brighton; Messrs. C. S. Tomes, F.R W. A. Maggs, Walter Coffin, S. J. Hutchinson, C. J. Boyd Wallis, F. He Weiss, E. G. Betts, J. H. Mummery, and A. S. Underwood.

TUESDAY.—Pathological Society, 8.30 P.M. Mr. Roger Williams: Acute phritis in Lambs. Dr. G. N. Pitt: Hydatid of Liver imbedded in Syphi Deposit. Dr. Sainsbury: Valvular Obstruction of Ureter. Dr. Pr Reading: Embolism of Abdominal Aorta. Dr. Turner: Septic Aort Mr. Sydney Jones: 1, Malformation of Foot; 2, Peculiarly Shaped Cal (Card). Mr. Lockwood: 1, Congenital Fatty Tumour from Sole of Foot (for Mr. W. Adams): Fatty Tumours from Palm of Hand. Dr. Sharkey Meningeal Hæmorrhage; 2, Phthisis commencing at Base of Lung (Car 3, Stenosis of Mitral, Tricuspid and Aortic Valves (Card). Dr. Carringt Double Intestinal Stricture. Dr. Pye Smith: Cystic Teratoma fro infant (Card). Mr. Lunn and Mr. Larder: Aortic Aneurysm (Card). S. Taylor: Cerebral Tumour (Card). Mr. E. H. Fenwick: Stone Impa in Prostatic Urethra (Card).

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be sh by Dr. W. S. A. Griffith and others. Papers.—Dr. Matthews Duncan Contraction, Inhibition, and Expansion of the Uterus. Dr. Coates: A of Labour in a Primipara Suffering from Mitral Disease. Dr. Amand Ro A Case of Serous Perimetritis. Dr. Champneys: Note on the Artif production of so-called Lymphatic Varix.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. ing and Card Specimens at 8 P.M. Adjourned discussion on Mr. Pries Smith's Paper. Mr. W. H. Jessop: A New Pupillometer: on Herpes Fron Affecting the Eye. Mr. W. Lang: A New Microtome. Dr. L. Werner: Vitreous Infiltration of the Retina, and Central Guttate Choroiditis. M Brudenell Carter: Two New Forms of Perimeter. Mr. W. Spencer Wat Hæmorrhagic Glaucoma treated by Trephining. Mr. G. E. Walker: G coma treated by the use of Convex Glasses. Mr. Edgar A. Browne: Wo of one Eye, followed almost immediately by Iritis Serosa in the ot Water-Colour Drawing by a Colour-Blind Artist.

FRIDAY.—Clinical Society, 8.30 P.M. Dr. Stephen Mackenzie: On Eryth Nodosum, especially dealing with its Connection with Rheumatism. Samuel West: On Some peculiar Cases of Pneumothorax. Mr. Walsh A Case of Lithotrity at a Single Sitting, in a boy aged 10. Dr. Carring A Case of Rheumatic Hyperpyrexia. Mr. Bellamy: Enormous Vasc Growth of the Upper Extremity in a Child (Living Specimen).

PERATION DAYS AT THE LONDON HOSPITALS.

ONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

ESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

EDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

URSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

IDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

URDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

RING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, Th., 1.30; Dental, M. W. F., 9.

'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, ., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

DON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 0; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

DLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 0; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; ., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 0; Orthopædic, M., 2.30; Dental, Tu. F., 9.

EORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., ., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., Dental, Tu. S., 9; Th., 1.

ARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. ., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

HOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; ., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; n, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

ERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, , 2.30; Dental, W., 10.30.

MINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. , 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

UNICATIONS respecting editorial matters should be addressed to the Editor, , Strand, W.C., London; those concerning business matters, non-delivery he JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, nd, W.C., London.

ler to avoid delay, it is particularly requested that all letters on the editorial ness of the JOURNAL be addressed to the Editor at the office of the JOURNAL, not to his private house.

ORS desiring reprints of their articles published in the BRITISH MEDICAL RNAL, are requested to communicate beforehand with the Manager, 161A, nd, W.C.

SPONDENTS who wish notice to be taken of their communications, should enticate them with their names—of course not necessarily for publication.

SPONDENTS not answered, are requested to look to the Notices to Corredents of the following week.

HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of th if they will, on forwarding their Annual and other Reports, favour us *Duplicate Copies.*

NNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

MR. T. WHITTINGTON (Neath) asks: What fee is the regular medical attendant allowed to charge in consultation? Is it one guinea, or double the ordinary visiting fee?

THE BACTERIUM TREATMENT OF PHTHISIS.

SPES asks for information on the "bacterium termo" treatment of phthisis. He would like to know the method of treatment, where the "bacterium termo" is to be obtained, and anyone's experience who has tried it.

*** We have asked Dr. C. T. Williams for his opinion on the subject. He writes as follows: I have no personal experience of the bacterium termo treatment of phthisis, but am not yet satisfied with the evidence of its power of destroying the bacillus tuberculosis. My experiments confirmed those of Malassez and Vignal, that the bacillus tuberculosis is remarkably tenacious of life, and can be detected in sputum, and tubercular organs, which have been kept for weeks, and even months, in which putrefactive bacilli, including the bacterium termo, are also present. However, I have never tried it on the living body, as Cantani did. The best plan for your correspondent "Spes" to follow, is to write to Professor Cantani at Naples, who will, I doubt not, furnish him with the particulars he desires, and give him directions as to the preparation of the bacterium termo solution. Particulars of the one used by Dr. Talama, of Pisa, are to be found in the *London Medical Record*, November 16th, 1885.

STAMMERING.

A CORRESPONDENT writes to us on this subject. We must refer him to the JOURNAL, February 6th, p. 278, February 20th, p. 374, and February 27th, p. 431. Our correspondent would like to know if any qualified medical gentleman treats stammering and stuttering as a speciality.

UNQUALIFIED DENTISTS ON A HOSPITAL STAFF.

A CORRESPONDENT asks: 1. Is there any instance of a public hospital having on its staff a dental surgeon not possessing a diploma? 2. Would the interests of a public hospital suffer in the eyes of the medical profession, and of the public, by the admission of such a dental surgeon to be a member of the staff?

PRACTICE IN WESTERN AUSTRALIA.

A MEMBER writes: I should feel very thankful if any of your readers could give me some information about practice in Western Australia: what parts of the colony afford the best openings at present, and what capital would be necessary for the purpose of starting in practice? Are drugs easily obtainable; also furniture and a residence? Would it be advisable to take out drugs and furniture? In what part would the climate be most suitable for a person whose lungs are slightly affected?

BIMECONATE OF MORPHINE.

SYNTAX writes: Will you kindly inform me concerning the liquor morphinæ bimeconatis of the new *British Pharmacopœia*, whether it be incompatible in a mixture with acids or alkalies? And will you also be good enough to tell me of any "table of incompatibilities" which may be published, and which may be relied on?

*** Alkalies would precipitate the morphine; acids would probably form a combination with the morphine, and set meconic acid free, but no precipitate would occur, except in concentrated solutions. We do not know of any table of incompatibilities, but most of them are given in the *Companion to the British Pharmacopœia*.

PRACTICE IN SWITZERLAND.

ALPHA writes: Could you, or any of your readers, kindly inform me what are the chances of a well qualified English medical man, who speaks German, doing a fair practice in one of the Swiss health-resorts? Is it necesary to obtain a Swiss diploma in order to practise in Switzerland?

ENGLISH PRACTITIONERS IN FRANCE.

M.D.EDIN. asks for information concerning the regulations and qualifications necessary to enable an English medical man to practise in France.

*** Our correspondent's best plan will be to write to the Dean of the Faculty of Medicine in Paris for a copy of regulations bearing on the subject.

PURE TEREBENE.

DR. C. W. B. MACAULEY, First Lieutenant and Assistant-Surgeon, United States Army, of Camp, Poplar River, Montana, United States, writes:—In the BRITISH MEDICAL JOURNAL for December 12th, 1885, I saw an article on "Pure Terebene," by Dr. Murrell. All he mentioned of the mode of preparing it was, that it was formed by the action of sulphuric acid on turpentine. I have been unable to find, in any of the books at my command, a more precise, or in fact, any description of the process.

The lowest temperature at this place last winter (1884-85), was 62.7°; the lowest this winter has been 49.1°. In the last twenty-four hours, the thermometer has fallen about forty degrees. These extremes, and great variability, are conducive to bronchitis of all kinds. Fourteen per cent. of the command were, at one time, on the sick-list from bronchitis. I have a case of chronic bronchitis in hospital now. For this man's sake, I write to ask if you will be kind enough to publish, at an early date, a detailed account of Dr. Murrell's method of making "pure terebene."

*** The method of preparing "Pure Terebene" is fully described in the BRITISH MEDICAL JOURNAL, of February 6th. It can be obtained from most of the leading chemists in New York, and other large cities in America.

A MEMBER would be greatly obliged to any gentleman who has passed the Sanitary Science Diploma of Cambridge, if he would give particulars of best books to read, stiffness of examination, etc.

Z asks as to the best books to read for the final F.R.C.S.Eng.

ANSWERS.

C. A. W. will find the list of books recommended to be read for the Sanitary Science Certificate of the University of Cambridge, in the BRITISH MEDICAL JOURNAL, for September 12th, 1885, page 519.

VARIX OF THE VULVA.

R. C. writes: I am inclined to question the advisability of keeping a woman, who is suffering from varix, in bed for two or three months prior to her confinement. The relief gained at the seat of the varix would not be a sufficient compensation for the disturbance set up in the alimentary tract. And again, I think "Inquirens" would find that most of his patients, especially among the poorer classes, would object to the prolonged rest.

Next to "rest" in bed, our professors would tell us that support to the tumour is indicated. In a case which I had a few months ago, I took the elliptical guard which is supplied with the vaginal tube of a Higginson's enema-apparatus, had it well padded with boracic lint (which should be changed frequently), and fastened over the varix, like an ordinary pad for prolapsus uteri. The patient applied this support every morning, and, after using it for two months, said that it had been a great comfort to her, and she could not do without it. She has since been confined, and the varix has disappeared.

A MEMBER would do well to instruct a solicitor to attend before the magistrate in question. A reference to the *Medical Register* would probably be satisfactory.

JUNIOR MEMBER.—The object in view is one with which we fully sympathise, and will keep in view; but we do not think that it can be realised in the precise manner suggested.

J. W. A.—We have made inquiries. It is not published, but probably may be.

MONDAY.—Professor Paul Broca died on July 8th, 1880.

PERMANENT DEVELOPMENT OF THE FACIAL MUSCLES.

F.R.C.S.—The facial muscles could certainly be developed by exercise. Faradisation would be beneficial, should atrophy have occurred, provided that the cause of the atrophy has been removed. Injection of irritants would be quite unjustifiable. It would excite inflammation of the muscle, followed by loss of function and atrophy. Consult Darwin, *On the Expression of the Emotions*.

R.—We regret to say we have no information on the subject.

NOTES, LETTERS, ETC.

BAD TIMES.

CANTAB writes:—May I call attention to an injustice to which the profession is liable? At the present time, when everyone feels, to some extent, the existing depression, medical men have in many cases to reduce their fees or make bad debts. Some people, however, who are called upon to reduce their expenditure, think proper to begin by cutting down their doctor's fees. A few days ago, a lady, who attends at my consulting rooms for a special complaint, requested to be seen twice for her usual fee of £1 1s., saying that X, a well-known medical man, who attends Royalty, attended her family for 5s. a visit. I happen to be in a position to make inquiries, and find that she is decidedly wealthy, with town and country establishments, etc., and altogether quite of the last class of person who ought to pay reduced fees. Unless medical men will combine against this form of cheating, rather than compete for the patient, the profession is likely to suffer a great injury.

ASEPTIC CATHETER FOR WASHING OUT THE BLADDER.

MR. W. J. PENNY (Clifton) writes:—In his communication to the JOURNAL of March 13th, Dr. Foulis very candidly admits the point to which I called attention on February 27th, that his "apparatus does not entirely guard against the admission of air, which may enter the bladder when urine ceases to pass from the end of the instrument, before the tap, allowing the antiseptic solution to flow, is turned on."

If we could trust our patients not to cough, or sneeze, or forcibly strain with sudden relaxation, the simplest appliance, an ordinary catheter and a syringe, would be sufficient to prevent the entrance of air into the bladder; but, as I implied in my last letter, the elaborate apparatus, devised by Dr. Foulis, does not guard against such accidents, and therefore is very little better.

The double-current catheter, with siphon apparatus attached to one orifice, more effectually guards against such accidents. If the patient cough, the urine is ejected from one orifice; and, on relaxation of the pressure, the antiseptic fluid takes its place, without fear of air entering the bladder at the same time.

If Dr. Foulis will experiment with an accurately fitting plug, or press his finger firmly on the orifice, he will find that the fluid does not escape from the closed pipette catheter.

There is no necessity "to bend the catheter on itself, or move it about, or turn it upside down," at any rate, until it is in the urethra; and then, if the plug fit accurately, there is no danger of air, laden with motes, entering the instrument.

Dr. Foulis and his friends are fortunate in possessing patients who are not easily alarmed at elaborate appliances.

MATERNAL IMPRESSIONS.

MR. A. LEDLIE (Belfast) writes: About three years ago, I was summoned to see a child that had fallen to the pavement from a window upstairs. The child recovered. About ten months afterwards, I was again summoned to see another child, then about three months old, in a house just opposite that from the window of which the child had fallen. I found this child the subject of very pronounced double congenital talipes equino-varus. The mother (unquestioned) told me that she had seen the child fall from the window, and that, from that moment, she "knew something would be wrong" with her child.

DR. JAMES BRYDON (Hawick) relates the following case. A short time ago, I attended Mrs. C. during her second confinement. After the child was born, the common question, Is it all right? was asked by the mother, and answered in the affirmative. Presently, the nurse discovered that the great toe of the right foot was entirely wanting. The mother then related that, when she was in her fourth month of pregnancy, she dreamed that a rat had bitten off her corresponding toe; and so vivid was the impression that she awoke screaming, and narrated the cause of her fright to her husband, who corroborated her statement. The veracity of both parties is unimpeachable.

THE LATE DR. STORRAR.

A CORRESPONDENT informs us that Dr. Storrar was not the first chairman of the Convocation of London University. His predecessor in that office was Dr. C. J. Foster, who was chairman from 1858 to 1863.

DR. R. S. ARCHER (Liverpool) is referred to the standing notice. We regret to be unable to make special conditions.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. J. W. Greenwood, Hanley; Mr. S. Wilson, London; Mr. T. E. Perks, Nutfield; Monday; Dr. Haughton, Upper Norwood; Dr. Willoughby, London; Dr. Mackenzie, Glossop; Dr. W. E. Steavenson, London; Dr. Taylor, Anerley; Mr. H. Welch, Blackpool; The Secretary of the Parkes Museum; Mr. J. B. Kenny, Killashandra, County Cavan; Mr. W. E. Davidson, London; Miss Whitehead, South Stockton; F.R.C.S.; Dr. T. D. Acland, London; Mr. E. F. S. Green, London; Dr. Joseph Coats, Glasgow; Dr. A. W. Edis, London; Mr. W. H. Date, Moseley; Dr. W. Osler, Philadelphia; Mr. W. Cox, Cheltenham; Dr. A. Money, London; Dr. H. Payne, Ashton-under-Lyne; Mr. J. B. Haycraft, Birmingham; Dr. B. Foster, Birmingham; Dr. Meadows, London; Mr. R. S. Archer, Liverpool; Dr. T. R. Bradshaw, Liverpool; Mr. M. N. Gandevia, Bournemouth; Dr. A. Stewart, Manchester; Messrs. J. Brainsby and Sons, Peterborough; Dr. Brady, Sunderland; Mr. W. J. Rhodes, Glossop; Dr. F. M. Pierce, Manchester; Mr. Robert Bowen, Wellington; Dr. A. Hill, Cambridge; A Hospital Physician; Mr. Gubb, London; Mr. S. Wilson Hope, Petworth; Mr. J. A. Douglas, Loughbrickland; Mr. J. T. Neech, Oswestry; Dr. Patrick Hehir, London; Dr. Hitchcock, Bournemouth; Mr. W. E. Sacker, London; Mr. F. E. H. Daunt, Dublin; Mr. T. N. Nash, Dublin; Dr. Gowan, Newtown; Dr. Macleod, Beverley; Mr. T. A. Collinson, Chester-le-Street; Mr. Chauncy Puzey, Liverpool; Mr. Vincent Jackson, Wolverhampton; Mr. R. Kershaw, London; Mr. J. W. Taylor, Birmingham; Dr. Grant Bey, Cairo; Mr. W. F. Haslam, Birmingham; Mr. Simeon Snell, Sheffield; Dr. Mickle, London; Dr. Schnée, Nice; Dr. Maxwell, Woolwich; Mr. D. De Berdt Hovell, London; Dr. F. Fitch, Kidderminster; Dr. S. Martin, London; Dr. E. H. Jacob, Leeds; Sir Edmund Lechmere, London; Dr. Abrath, Sunderland; Mr. H. Percy Dunn, London; Mr. W. Martindale, London; Mr. H. Behrend, London; Dr. R. Barnes, London; Dr. Tatham, Wigan; Dr. Alder Smith, London; Mr. J. Whitehouse, Sunderland; Dr. D. Williams, London; Mr. E. White Wallis, London; Dr. Norry, London; Mr. J. G. Clendinnen, Coseley; Dr. W. G. Bacot, Blandford; Mr. P. H. Squire, London; Mr. J. Conry, Kilkelly; Dr. W. A. Brailey, London; Dr. J. K. Spender, Bath; Dr. R. Wade Savage, London; Observer; Dr. C. J. Renshaw, Ashton-upon-Mersey; A.; Mr. Hugh Thomas, Birmingham; Mr. G. Jackson, Plymouth; Dr. J. W. Moore, Dublin; Dr. Styrap, Shrewsbury; Dr. Tatham, Salford; M.R.C.S.; Mr. George Weller, Wanstead; Dr. J. A. Lindsay, Belfast; Mr. Shirley Murphy, London; Mr. William Habgood, London; Dr. G. Vincent, Manchester; Messrs. Curtis and Henson, London; Dr. Wood, Bromsgrove; Dr. C. R. Illingworth, Accrington; Tarsus; Mr. J. Cronin, Cork; Mr. C. E. Humphreys, Llanfair; Dr. Thiele, Chatham; Dr. Irvine K. Reid, London; Mr. T. M. Evans, Hull; Mr. J. Deans, Bournemouth; Mr. J. Raby, Totnes; Mr. H. Howgrave Graham, London; Mr. W. Perkins, Glastonbury; Dr. Steele, London; Our Aberdeen Correspondent; Mr. Nankivell, Chatham; Dr. Ashby, Manchester; Our Edinburgh Correspondent; Mr. W. E. Scott, London; Dr. G. W. Thompson, Ballaghy; Mr. T. D. Ransford, Bath; Dr. James Morton, Glasgow; Mr. William Elder, Kirkcaldy; Mr. B. A. Daniell, Aberavon, Taibach; Mr. F. A. Floyer, London; Secretary Westminster Sanitary Aid Association; Mr. F. L. Richardson, Rhayader; Dr. R. L. Moorhead, Carrington; etc.

BOOKS, ETC., RECEIVED.

Salammbô, of Flaubert: Englished by M. French Sheldon. London: Saxon and Co. 1886.

St. Thomas's Hospital Reports for 1884. New Series. Vol. XIV. Edited by Dr. Seymour J. Sharkey, and Mr. Francis Mason. London: J. and A. Churchill. 1886.

Representative Men and English Traits. By Ralph Waldo Emerson. Edited by G. T. Bettany. London: Ward, Lock and Co. 1886.

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REPORT
ON
PASTEUR'S RESEARCHES ON RABIES AND THE TREATMENT OF HYDROPHOBIA BY PREVENTIVE INOCULATION.

By M. WILLIAM VIGNAL,
Collége de France, Paris.

Part I.

Pasteur's First Experiments.—Facts concerning the Transmission of Hydrophobia.— *The Incubation-Period shortened by Inoculating the Virus beneath the Dura Mater.—All Forms of Hydrophobia proceed from the same Virus.—Symptoms are excessively Varied.—The Saliva in Rabies may provoke Death from Three Different Causes.—The Medulla Oblongata, Spinal Cord, and Encephalon of Rabid Subjects are Virulent.—Virulence affected by Decomposition.—Different Methods of Inoculation and their Results.—The Nature of Rabies Confirmed by the Quantity of Inoculation Fluid Injected.—Furious Madness produced by a Smaller Quantity of Virus than Paralytic Madness.—Virus does not Travel along the Peripheral Nerves to the Central Nervous System.—Initial Period of Madness disappears; the Symptoms reappear after a long Interval, and Result in Death.—Dogs Rendered Refractory to Madness by Inoculation.—A Summary of Facts.*

Pasteur's First Experiments.—M. Pasteur's first experiments in connection with hydrophobia were made in December, 1880. He collected, by means of a camel's hair brush, some mucus from the mouth of a child aged 9 years, which had died from hydrophobia in M. Lannelongue's wards in the St. Eugénie Hospital. The child had been bitten in the face by a mad dog in a village—Choisy-le-Roi near Paris. It was ascertained beyond doubt that the dog was mad.

The mucus was removed from the child four hours after death. Two rabbits were inoculated with it; these died thirty-six hours afterwards. Other rabbits were then inoculated from them, some with the saliva, others with the blood. The second series of rabbits died more rapidly after inoculation than the first, the third series more rapidly than the second, and so on, through several successive series of animals.

M. Pasteur and his pupils, MM. Chamberland and Roux, who helped him to carry out his experiments, detected in the blood of the animals experimented on the presence of a micrococcus presenting the aspect of a figure of 8, indicative of a diplococcus. (Subsequent researches have demonstrated that it was a diplococcus present in normal human saliva.) M. Pasteur cultivated this diplococcus in veal-broth, through several successive generations. He observed that, when it was used for inoculating rabbits, death resulted, accompanied by the same symptoms as those which followed the inoculations made with the saliva and blood removed from the first series of rabbits, which had been inoculated from the saliva taken from the child dead from hydrophobia. This microbe, then, appeared "to be the veritable and sole author in the new malady."[1]

M. Pasteur, not being certain whether the condition called into existence by his inoculations was identical with hydrophobia, presented his note to the Academy of Sciences, headed "Sur une Maladie nouvelle provoquée par la Salive d'un Enfant mort de la Rage" (On a New Disease produced by the Saliva of a Child dead from Hydrophobia). M. Pasteur seriously doubted that the illness caused by his inoculations was hydrophobia, and stated, in his note to the Academy, that the animals experimented on died without passing through an incubation-period; whereas M. Galtier, Professor at the Veterinary School of Lyons,[2] had observed that rabbits inoculated from rabid dogs did not exhibit symptoms of hydrophobia until from four to forty days after inoculation; neither had M. Galtier observed the lesions at the necropsies of his animals that M. Pasteur had ascertained to exist in them—an emphysematous condition of the areolar tissue of the groins and axillæ, areas of pulmonary apoplexy, and swelling of the lymphatic glands of the trachea, groin, and axillæ, accompanied by hæmorrhage. The condition of the blood closely resembled that of animals dead from charbon. Blood removed from M. Galtier's rabbits, which died from hydrophobia, did not communicate the malady to other rabbits. Dogs inoculated with the blood or saliva taken from M. Pasteur's rabbits did not exhibit either dumb nor furious madness. M. Pasteur therefore abstained from arriving at any definite conclusions concerning the nature of the affection which proved fatal to the rabbits experimented on, and concluded his note by saying that he should continue his experiments.

It is unnecessary here to reproduce the objections which M. Colin, of Alfort, made to the contents of M. Pasteur's note; or the communications of MM. Lannelongue and Raynaud concerning the transmission of hydrophobia to rabbits, after inoculating them with fragments of salivary glands, and with the saliva removed from the same child which had furnished M. Pasteur with his original inoculating matter; inasmuch as all these questions are decided in a letter from M. Pasteur to the Academy of Medicine,[3] in which he states that the new disease (*nouvelle maladie*) he had produced in rabbits, and consequently that induced by M. Lannelongue, were not hydrophobia, but another pathological condition, due to the presence of a micro-organism, found in the buccal cavity of human beings. The following week, M. Vulpian confirmed M. Pasteur's statement, in a communication describing his own experiments. He had killed rabbits by injecting saliva from healthy people, and had found in the blood of these rabbits the same micro-organism as that described by M. Pasteur, who had used, in his control experiments, saliva taken from children with broncho-pneumonia. M. Pasteur's letter, and M. Vulpian's communications, close what may be called the preliminary period of M. Pasteur's experiments on hydrophobia. These experiments can be divided into three distinct stages—the first, or preliminary stage, which we have just described; the second, in which the different methods of transmitting hydrophobia are studied; the third, and last, in which the different methods of inoculating animals, and the human subject, are described.

In our report, we propose following this order, which seems to us the most logical, and also essential in making a clear exposition of the facts on which is based the method of inoculation for hydrophobia.

Facts concerning the Transmission of Hydrophobia.—On May 30th, 1881, M. Pasteur stated at the Academy of Sciences, that, as the blood of rabid animals failed to communicate hydrophobia, he and his assistants, MM. Chamberland, Roux, and Thuillier, had determined to test the truth of the view expressed by M. Duboué in 1879, in a note presented to the Academy of Medicine by M. Bouley. The conclusions arrived at by the author appear in the *Bulletin de l'Académie*, 1879, page 865. M. Duboué's opinions were purely theoretical. He supposed that the nervous system, and especially the medulla oblongata, were important factors in the development of rabies. This supposition was not confirmed by the experiments of M. Galtier, of Lyons,[4] who made more than ten inoculations with fragments of cerebellum and spinal cord removed from mad dogs, all of which were unsuccessful.

M. Pasteur, however, had obtained more successful results, and had, by inoculating animals[5] with medulla oblongata, and frontal portions of the cerebral hemispheres, and the cerebro-spinal fluid, removed from animals dead from hydrophobia, succeeded in transmitting the disease. The incubation-period varied from eight to forty days. These experiments demonstrated that the nervous system, as well as the saliva, contained the virulent element. This was a most important fact arrived at, inasmuch as the saliva always contains more or less micro-organisms capable of complicating and masking the action of the virus of rabies by causing death to arrive more rapidly. Thus, with rabid saliva, experiments are less demonstrative than those made with portions of the central nervous system, which can always be obtained, by observing certain precautions, free from external contamination.

In this same note to the Academy of Sciences, M. Pasteur announced another important discovery. If, instead of inoculating the rabid matter by subcutaneous injections, it were, after trephining the cranium, placed on the cerebral surface, the uncertainty which attached to former methods was thus avoided. Hydrophobia was invariably manifested; not one inoculation failed. Sometimes dumb

[1] *Comptes Rendus de l'Académie des Sciences*, 1881, tome xcii, p. 162.
[2] *Ibid.*, 1879, tome xci, p. 2468.
[3] *Bulletin de l'Académie de Médicine*, 1881, page 380.
[4] Galtier, *Bulletin de l'Académie de Médicine*, 25 Janvier, 1881.
[5] Note on Hydrophobia by M. Pasteur and his assistants, MM. Chamberland, Roux, and Thuillier, *Comptes Rendus de l'Académie des Sciences*, tome xcii, p. 1259.

madness was developed, sometimes furious, that is to say, both forms of hydrophobia.

The Incubation-Period shortened by Inoculating the Virus beneath the Dura Mater.—The incubation-period, after inoculation by subcutaneous injection, is excessively variable; sometimes it is very long; inoculation after trephining is followed by a much shorter incubation-period. An interval of three weeks is the maximum of time that elapses between the introduction of the rabid virus under the dura mater, and the appearance of the first symptoms of hydrophobia. It is needless to dwell on the importance of this note, which demonstrates the virulence of the nervous system, and furnishes an accurate method of inoculation for hydrophobia, which, by shortening the incubation-period, saves much valuable time for the experimenter, and relieves him from anxiety. Rather more than a year later, M. Pasteur and his assistants completed the note of which we have given the substance above, and described fresh facts, which may be enumerated as follows.[6]

1. *All Forms of Hydrophobia proceed from the same Virus.*—Dumb madness and furious madness, indeed, all forms of hydrophobia, proceed from the same virus.

2. *Symptoms are excessively Varied.*—The symptoms of hydrophobia vary. Each separate case may be said to have its special symptoms. There are grounds for supposing that this non-uniformity of the symptoms depends on the regions of the central nervous system in which the virus localises and develops.

3. *The Saliva in Rabies may provoke Death from Three Different Causes.*—In saliva, the virus of hydrophobia is combined with different kinds of microbes. This saliva, used for inoculation, may cause death from three different morbid agents, from the microbe presenting the form of figure 8 (which killed the rabbits M. Pasteur used for those experiments, which he fully described in the note, entitled, "Sur une maladie nouvelle, provoquée par la salive d'un enfant mort de la Rage," to which we have referred at the beginning of this report), from the formation of a considerable quantity of pus, and from rabies.

4. *The Medulla Oblongata, Spinal Cord, and Encephalon of Rabid Subjects are Virulent.*—The medulla oblongata, encephalon, and spinal cord found in a person or animal dead from rabies are virulent. The medulla oblongata is always virulent; the spinal cord is also always virulent in parts, and frequently throughout its entire length; the encephalon may be virulent, sometimes only in certain parts, sometimes in its entirety.

5. *Virulence affected by Decomposition.*—So long as the nervous system does not undergo decomposition, its virulent properties remain intact. M. Pasteur kept, during three weeks, the brain of an animal dead from hydrophobia; it was kept submitted to the influence of a temperature of 12° C. (53.6° Fahr.), and it was still virulent.

6. *Different Methods of Inoculation and their Results.*—In order to inoculate rabies with certainty and rapidity, one of two methods may be adopted; inoculating the cerebral surface immediately beneath the arachnoid membrane, after trephining the cranium; or venous injection of the virus. These methods always result in the appearance of hydrophobia, and greatly shorten the incubation-period, which, on an average, lasts from six to ten days.[7]

7. Hydrophobia, communicated by venous injection of the virulent matter, is frequently different from the form of hydrophobia, resulting from the bite of a mad dog, or from cerebral inoculation; this last method generally produces furious madness, and that of venous injection, dumb madness. In virtue of the region of its localisation, it might be called medullary hydrophobia; paralysis frequently occurs, the characteristic bark of rabies is more or less rare, the animal is seldom furious, and frequently tormented by most violent itching. The symptoms exhibited by animals, inoculated by venous injections, indicate that the spinal cord is first attacked, that is to say, that the virus is localised and developed there.

8. If death do not follow inoculation of rabid saliva or a venous injection of virulent blood, the animal is not, on that account, exempt from the danger of contracting hydrophobia, on a further inoculation, after trephining, or a venous injection of virulent matter. These facts are directly opposed to the statements made by M. Galtier, on August 1st, 1882, at the Academy of Sciences.

9. Hydrophobia is never spontaneously arrested when the acute period is reached; it may be at the period of initial symptoms, but only then. Sometimes hydrophobia is arrested at this period, and, after a long interval has elapsed, the malady reappears, and death ensues.

M. Pasteur also stated in the above note that he had then at his laboratory four dogs, all refractory to the influence of the virus of hydrophobia. These dogs were inoculated at the same time as other dogs; but they had escaped the disease, whilst the others had contracted it, and died. In one of the four dogs refractory to hydrophobia, the first symptoms of the disease spontaneously disappeared, and did not reappear. The animal was then inoculated twice, after trephining had been effected, and yet remained free from hydrophobia. The three other dogs did not exhibit any symptoms of hydrophobia, but were nevertheless refractory to the influence of the virus. M. Pasteur hesitated to decide between two probabilities: one, that the dogs were naturally refractory to the virus of hydrophobia, or that they had acquired immunity from it by the slight attack they had contracted.

In this same note, M. Pasteur suggests the probability of arriving at a method of inoculation which might be applied to human subjects.

More than a year later on—February 25th, 1884—M. Pasteur stated, at a meeting of the Academy of Sciences, that he felt justified in asserting that there are not any dogs which were constitutionally refractory to hydrophobia; but he believed that he had found a method which rendered them so. He abstained from giving fuller details, or making positive affirmations, until his experiments were carried on further. It might be possible that the incubation-period in these animals would be very long.

These experiments suggest the possibility of inoculation becoming a prophylactic measure for hydrophobia. His researches, nevertheless, were not solely directed by this idea; we find in the same note that M. Pasteur was engaged in ascertaining the different methods of transmitting hydrophobia,[8] also the differential characteristics of this disease, special to each animal species, and the region in which the virus becomes localised.

Whilst studying the comparative virulence of the spinal cord—especially at the lumbar enlargement, and that of the medulla oblongata, of animals inoculated by venous injections, and killed when the first symptoms of hydrophobia set in, M. Pasteur ascertained that the cord may have virulent properties, but not the medulla oblongata. The hypothesis that M. Pasteur formulated a year previously, which assumed that the form of hydrophobia resulting from venous inoculation might be called medullary hydrophobia, because its principal symptom is paralysis, was thus verified.

M. Pasteur, in the further course of his researches concerning the localisations and development of the virus of hydrophobia, observed that not only was it present in the central nervous system, and in the salivary glands, but also in the peripheral nerves. Animals inoculated with fragments of the pneumogastric nerve, and also of the sciatic, were seized with hydrophobia; this fact explains that intense excitability which in human subjects is manifested by that remarkable symptom in hydrophobia known as aërophobia; the entire peripheral nervous system is affected.

M. Pasteur also ascertained that the saliva and the salivary glands, the parotid, maxillary, and sublingual, were as virulent in dogs seized with hydrophobia developed from venous or cerebral inoculation, as in those attacked by spontaneous hydrophobia (*rage dite spontanée*). Another fact also determined by M. Pasteur's researches is, that the virulence of the central nervous system remains intact during several weeks, if decomposition be prevented; likewise pure virus, kept in glass tubes, hermetically closed, retains its virulence during an entire month in summer weather.

M. Pasteur observed that the virus of hydrophobia is not always present in the cerebro-spinal fluid. In the preceding communication to the one from which we are now quoting, he stated that inoculation by venous or subcutaneous injection produces principally the paralytic form of rabies; the animal, especially if it be a dog, is not furious, and never barks in that particular way known as the barking of a mad dog, neither has it a propensity to bite. Furthermore, furious madness is easily provoked by venous and hypodermic injections, if very small doses of the virus are used.

The Nature of Rabies Confirmed by the Quantity of Inoculation-Fluid Injected.—Portions of rabid medulla oblongata were mixed with sterilised broth, and injected into the veins of three dogs, in the following quantities. In the first dog inoculated, half a cubic centimètre of this mixture was injected into its veins; in the second 1-100th of this quantity, or, in other words, 5 milligrammes; in the third, 1-200th, or 2.5 milligrammes.

[6] Nouveaux faits pour servir à la connaissance de la Rage.—*Comptes Rendus de l'Académie des Sciences*, tome xcv, 1882, p. 1187.

[7] We do not describe the precautions necessary to be taken in order to avoid the accidents that can attend venous injections; we imagine our readers are acquainted with them; should they wish to refresh their memory, they will find them minutely described in Cyon's, Burdon Sanderson's, Foster's, and Brunton's *Laboratory Handbooks*. Neither do we consider it necessary to describe trephining, as this operation is described in all manuals of surgery.

[8] Nouvelle communication sur la rage avec la collaboration de MM. Chamberland et Roux.—*Comptes Rendus de l'Académie des Sciences*, 25 Fevrier, 1884, p. 457. (M. Thuillier, M. Pasteur's third assistant, died at Alexandria in September, 1883).

On the tenth day, the dog first inoculated began to lose his petite; he became paralytic on the eighteenth day, and died on the ventieth; he had neither barked nor bitten. The second dog had a spicious appearance on the thirty-eighth day; on the thirty-ninth, barked the characteristic bark of a mad dog; the next morning, he as found dead. The third dog had never shown any symptoms of bies.

In another experiment, made on another series of three dogs, the oculations were made as follows. One cubic centimètre of rabid edulla was mixed with sterilised broth, and injected into the veins a dog; one-twentieth of this quantity (or fifty milligrammes) was ected into a second dog; and, in a third, twenty-five milligrammes. The first dog presented an incubation period of seven days; the ond, one of twenty days; the third, one of twenty-five days. The t two dogs inoculated died from paralytic rabies; the third, from ious madness, with barking and biting propensities.

Furious Madness produced by a Smaller Quantity of Virus than ralytic Madness.—Thus, these experiments indicate that furious, king, biting hydrophobia, or the paralytic form, can be produced ording to the will of the experimenter. The first form, the most rible as well as the most dangerous, is produced by a smaller quan- of virus absorbed in the animal organism than that producing the ralytic form. This fact probably explains the more frequent occur- ce of furious madness among dogs, which results from the bite of ad dog, when only a small quantity of virus is lodged in the wound the dog's teeth.

M. Pasteur has also established another important fact: inoculating uantity of virus insufficient to produce the symptoms of madness *enomènes rabiques*) does not confer immunity from rabies; sub- uent inoculation is followed by the appearance of the disease

Virus does not Travel along the Peripheral Nerves to the Central vous System.—The certainty that attends venous injections of virus pletely destroys the hypothesis maintained by some, that rabid s travels from the peripheral nervous system to the central, ob- ving the course of the nerves. This hypothesis entirely disregards tomical and physiological data; a virus cannot, evidently, observe same behaviour as a sensation, and travel like one. It is thus more cal to suppose that it is absorbed by the circulatory system.

M. Pasteur, in order to demonstrate that this hypothesis is erro- us, inoculated a rabbit in the auricular vein. He anticipated possible objection that the virus, after having been carried ugh the entire circulatory system, returned to the wound, and there absorbed by the nerves, by severing the ear with the mo-cautery just below the inoculation-point; nevertheless, the mal contracted hydrophobia; therefore, the supposition that the s travels along the nerves is negatived.

nitial Period of Madness disappears; the Symptoms reappear after g Interval, and result in Death.—In this same communication, Pasteur says that he has again observed, in dogs and rabbits, in- ces in which the first symptoms of madness appear, disappear, after a long interval, return, and result in death. This rarely ens with dogs and rabbits, but among fowls these phenomena more frequent. Rabies in fowls has special characteristics; the mal is sleepy, loses appetite, becomes paralytic, peripheral anæmia anifested by a discoloration of its comb, and its dies without ng presented any violent symptoms.

hen the virus has been passed through a long series of animals of same species, it acquires a sort of certainty in the periodicity of symptoms provoked, and in the influence it exercises over a given es; this influence varies, according to each species. The viru- of virus varies according to the animals in which it has been vated, even though the different cultivations have a common n. As an example of this, M. Pasteur said that he had in his ssion a virus which communicated hydrophobia to rabbits in or eight days; the length of the incubation-period could be calcu- almost exactly, within a few hours' difference; he had also another which communicated hydrophobia to guinea-pigs in five or six and always with the same certainty. But this certainty is only ned after the virus has been passed through a considerable number imals; during the early passages, the incubation-period is sub- o considerable varieties.

Pasteur believes that the virulence of the virus is in inverse pro- on to the incubation-period. A virus communicating hydro- a in twenty days, is not half so virulent as a virus that gives it . This rule must not be considered absolute. If the propor- of virus inoculated be much less or much greater at one time than other, the several results will vary. In young animals, the period ubation is shorter than among adults.

ys rendered Refractory to Madness by Inoculation.—M. Pasteur again stated, in this communication, that the dogs, which he had described in his preceding communication, as refractory to madness, he did not believe to be so by nature; but that he believed he had arrived at a method by which he rendered dogs exempt from the influence of the virus of hydrophobia. These experiments required to be repeated several times before arriving at positive results. In case there should happen a delay in the appearance of the phenomena of rabies, M. Pasteur abstained from making positive statements, and would only say that he possessed twenty-three dogs, all refractory to madness, and rendered so by inoculations of virus, varying in strength. This communication terminates what we, in this report, have termed Researches on the Transmissibility of Hydrophobia.

Summary of Facts.—M. Pasteur's experiments, up to this stage, may be summarised as follows. 1. Not only saliva and salivary glands of animals seized with rabies are virulent, or, in other words, capable of transmitting rabies, but also the peripheral and central nervous systems. 2. This virulence is maintained during several days by observing a temperature varying from 0° to 12° Cent. (from 32° to 53.6° Fahr.), and avoiding decomposition. 3. There is more certainty attached to inoculation for rabies with nervous substance than with saliva or salivary glands, because rabid virus can be obtained from the nervous system, free from foreign micro-organisms. 4. Inoculating the cerebral surface, after trephining, also inoculating by venous injection, is attended by more certain results than introducing the virus in the subcutaneous arcolar tissue. 5. The form of rabies developed by inoculating the cerebral surface is generally that of furious madness (*rage furieuse*). Furious madness, paralytic madness, or dumb madness, can be produced by venous injections of smaller or larger quantities of virus. 6. An animal is not rendered exempt from hydrophobia after inoculation with too small a quantity of virus to produce the disease; inoculation with a stronger dose will produce the malady. Rabid virus obtained by successive inoculations through a series of generations, in the same animal species, is attended with great certainty in the regularity and nature of its effects, always providing that the concomitant conditions are identical; the incubation-period becomes considerably shortened, and the virus reaches its maximum of virulence.

[*To be continued.*]

HUDDERSFIELD.—Dr. J. S. Cameron suggests the important inquiry whether we are not apt to pay too great attention to the group of "zymotic diseases." He admits that undoubtedly this is the group of most preventable diseases; but he observes that, even of these, the diseases that have been most fatal in Huddersfield during the past few years have been the most preventable of all—namely, measles and whooping-cough. "In both cases, the deaths are due almost entirely to affections of the lungs, supervening upon, or perhaps more strictly part of, the original disease, but in a large number of cases curable. Unfortunately, however, mothers are ignorant of the dangers of the disease, and equally ignorant as to the means of treatment." Dr. Cameron recommends the issue of a handbill on the management of young infants. During 1884, the diseases of child-life, again, were exceptionally prevalent. Whooping-cough, which was very fatal towards the close of 1883, continued to prevail during the first half of the following year, and caused one-sixteenth of all the deaths in the borough during that period. In the third quarter of the year, diarrhœa played the part taken during the two earlier quarters by whooping-cough, and produced 9.5 per cent. of the mortality from all causes. Dr. Cameron deals at some length with the relations of meteorological conditions to the prevalence of autumnal diarrhœa, and he seems to incline to the view that a high temperature and an absence of rain are two of the most important conditions affecting our death-rate from this disease. He attaches much importance to the persistent and regular flushing, in a dry season, by means of hose-pipes, of the drains in the yards and alleys; and he considers that, by thus artificially imitating one of the functions of the rain, the fatality from zymotic diarrhœa was very greatly limited in Huddersfield in the dry season of 1884. "I feel pretty confident," he says, "that, could we afford the water and the labour, we might by such constant flushings diminish the infantile mortality from autumnal diarrhœa in the thickly peopled parts of the town by at least three-fourths." The rate of mortality from all causes was, during 1883, 21.38; and during 1884, 19.54 per 1,000. The zymotic death-rate was, in 1883, 1.68 per 1,000; and in 1884, 1.77. No death from small-pox has occurred in the borough since 1880.

MEDICAL MAGISTRATES.—Dr. F. Buszard has been appointed a magistrate for the borough of Northampton. Mr. R. W. Watkins, of Towcester, has been appointed a justice of the peace for Northamptonshire.

THE CROONIAN LECTURES

ON

SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

Delivered at the Royal College of Physicians, London, April 1886.

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LECTURE II.

WHAT in rheumatism is the starting-point of the morbid process? Is there such a thing as the rheumatic poison; if so, what is it? and what is the nature of the change which takes place as the result of its action? Let me, in the first place, enumerate the more salient features of the disease, as gleaned from clinical experience. An individual, after feeling out of sorts for two or three days, perhaps after a chill, wakes up in the morning with one of the joints stiff and tender; soon afterwards it swells, and motion causes pain. Other joints now become affected; the knees, wrists, elbows, ankles, and the smaller joints of the hands and feet. There are pain, tenderness, increased heat, swelling, and redness of the skin. The tendency of these to shift from joint to joint is a remarkable feature of the disease. The slightest motion becomes insupportable; even vibration of the room or of the bed causes suffering. There is more or less febrile movement, the temperature ranging from 102° to 104°, or higher generally more or less sweating, the odour of which is characteristic. The tongue is coated; thirst is generally a marked symptom; and the urine is turbid with lithates, and has a strong acid reaction.

The more acute and severe the case, the more profuse and acid is the perspiration, and the larger the amount of lactic acid which it contains.

This last feature has led to the supposition that, in acute rheumatism, there is excessive formation of this acid, which, circulating through the system, gives rise to the symptoms which accompany the disorder. It is a theory which has got a very firm hold of the minds of many physicians, and is probably the one most generally adopted. There is so much to be said in its favour, that, until recently, I unhesitatingly accepted it. I hope to show now that, though lactic acid is formed in excess in the disease, and its presence in the blood modifies the symptoms in some degree, it is not the chief agent in producing them. Other factors are at work giving rise to the characteristic feature of rheumatism, namely, the affection of the joints, as well as to some of the other symptoms which I have enumerated; and the excessive formation of this acid must be regarded more as one of the symptoms than as the cause which gives rise to them.

The lactic acid theory, however, has furnished me with my true starting-point. In attempting, five or six years ago, to arrive at some satisfactory explanation of the phenomena of this disorder, the line of argument which suggested itself to my mind was much as follows.

1. Lactic acid is the *materies morbi* in rheumatism.

2. According to the views of some authorities, the natural source of lactic acid in the system is glucose, which is first transformed into lactic acid, and then further oxidised into carbonic acid and water.

$$\underset{\text{glucose}}{C_6H_{12}O_6} = 2\underset{\text{lactic acid}}{C_2H_4\begin{cases}OH\\COOH\end{cases}}$$

$$\text{and } 2C_2H_4\begin{cases}OH\\COOH\end{cases} + 6O_2 = 6CO_2 + 6H_2O$$

lactic acid.

3. By the so-called "diabetic puncture" the metabolism of glucose in the system can be arrested; sugar appears in the urine, and we have the phenomena of diabetes.

Changes, therefore, in the medulla oblongata entirely arrest the metabolism of glucose; and if so, if this is true, would it be possible by modifying these changes in the medulla partially to arrest the transformation of glucose into CO_2 and H_2O at the intermediate stage of lactic acid, and so develop rheumatism? That is to say, have neurotic conditions, have changes in the medulla oblongata, anything whatever to do with the symptoms which are associated with rheumatism?

These were the hypotheses with which I started; but I have tried to show in my previous lecture that lactic acid in the tissues is formed, not from glucose, but from the nitrogenous molecules of the tissues, namely, the cyan-alcohol $CH_3.CH\begin{cases}OH\\CN\end{cases}$ and $CH_2CH_2\begin{cases}OH\\CN\end{cases}$ My second hypothesis, therefore, falls to the ground, and with it the third to a very large extent. Certain points, however, presented themselves to me during the consideration of the subject, which seem to connect the disorder with changes in the nervous system, and to furnish a theory as to the causation of rheumatism, by which an explanation may be offered not only of the way in which the symptoms are produced, but also of the action of some of the remedies which have been successfully employed in the treatment of the disease. To these points let me now specially invite your attention.

As a first step in demonstrating the connection of rheumatism with changes in the nervous system, let me refer to some nerve-lesions which are associated with changes in the nutrition of the joints. In respect to this, I find that more than fifty years ago the late Dr. J. K. Mitchell[1] advanced a theory of the pathogenesis of rheumatism which connected it with affections of the spinal cord. My own view, which localises the controlling action of the nervous system in the disorder chiefly in the medulla oblongata, was formed quite independently; it was only, in fact, quite recently that my attention was directed to Dr. Mitchell's views by finding a reference to them on reading a most admirable work, abounding with interesting facts, by his son, Dr. Weir Mitchell, on *Injuries of Nerves*. I here discover, however, some most important links in the chain of evidence supporting my theory, which I will place before you; and, after referring to other cases of a similar kind, I shall then attempt to point out the way in which the nervous centre is affected, both in gout and in rheumatism—how, in fact, the rheumatic poison is developed, and how it acts.

In a work on *Gunshot Wounds and other Injuries to the Nerves*, by Drs. Weir Mitchell, Moorhouse, and Keen, of the United States Army[2], there is the following statement:

"*Alterations in the Nutrition of Joints.*—Again we call attention to a peculiarity of nerve-injuries, which we believe to have been overlooked.

"Like the altered nutrition of the skin, the symptom which we are at present considering occurs at any time after the first few days. It consists essentially in a painful swelling of the joints, which may attack any or all of the articulations of a member. It is distinct from the early swelling due to the inflammation about the wound itself, although it may be masked by it for a time; nor is it merely a part of the general œdema which is a common consequence of wounds. It is more than these—more important, more persistent. Once fully established, it keeps the joints stiff and sore for weeks or months. When the acute stage has departed, the tissues about the articulations become hard, and partial anchylosis results, so that, in many cases, the only final cause of loss of motion is due to this state of the joints. Of all the agencies which impede movement, it is the most difficult to relieve.

"Were we asked to state in what essential respect these lesions differ from subacute rheumatic disease of the same parts, we should certainly be at some loss to discern a difference.

"The subject suggests certain interesting reflections. We have ourselves seen cases of spinal injury, in which rheumatic symptoms seemed to have been among the consequences; and four such instances of striking character are to be found recorded in a paper by the late Professor J. K. Mitchell, in the *American Journal of the Medical Sciences*, vol. viii, p. 55. Upon the hints which were thus furnished, Dr. Mitchell was induced to consider rheumatism as of spinal origin. His treatment,[3] founded on this view, was most successful, and is still used and recognised in this country. Modern pathologists have traced the causation of rheumatism to a strictly chemical source; but no one can avoid seeing that there may be a cause beyond this, even though the chemical conditions be still considered as essential links in the chain. Thus, after all, the true origin may be spinal, or, at all events, the indisputable fact that there are rheumatisms depending for existence on neural changes, may aid us hereafter to discriminate varieties of type among the forms of rheumatic disease.

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1 *The American Journal of Medical Sciences*, 1831, vol. iii, p. 55.

2 *Gunshot Wounds and other Injuries of Nerves.* By Drs. Weir Mitchell, Moorhouse, and Keen. Philadelphia, 1864. Pp. 83—85.

3 The treatment he adopted was to apply from eight to sixteen cups, abstracting about as many ounces of blood, to the cervical or lumbar spine, according as the upper or lower extremities were affected, and follow the cupping, if this did not afford relief, by the application of blisters to the spine.

were easy to dwell upon this subject, but enough has been said to ow that subacute inflammation of joints may be brought about by rve-lesions, and to direct medical thought anew in a direction which ems favourable to its true and rational progress."

In a subsequent work—the work to which I have already referred—*Injuries of Nerves*,[4] Dr. S. Weir Mitchell writes: "Of all the rious forms of mischief wrought by nerve-wounds, the most inctable and disabling are the curious inflammatory states of joints which we were the first to call attention." . . . . .

"In a certain number of nerve-wounds, notably most often in those the upper extremities, one or more of the joints in the wounded nb become swollen. The nature of the injury does not seem to inence the case, as I have seen it follow dislocations, ball-wounds, d contusions of nerves; while, in an interesting case of Dr. Packard's, was one of the consequences of compression of the sciatic nerve by a mour. More lately, in the service of my friend Dr. J. A. Brinton, the Philadelphia Hospital, I saw a man who had extensive jointions, owing to the brachial nerves having suffered during the dislotion, or upon the subsequent reduction, of the humerus, so that I spect these troubles are more common than has been supposed.[5] In e case the joints of the fingers became swollen and tender on the ird day after ball-wound of the brachial plexus, but usually the elling appears much later, and, like the glossy skin, is frequently e offspring of secondary neuritis. Often masked at first by the neral inflammation of the limb, or concealed by the œdema so comon after nerve-wounds, it is more persistent than these, and, as they le, begins to assume importance. We may then have one articulan—and if only one, a large one—involved, or perhaps all the joints a finger, or every joint in the hand, or of the entire limb may ffer. The swelling is never very great, the redness usually slight, d the tenderness on touch or motion exquisite. This condition of ngs remains, with little change, during weeks or months, and then wly declines, leaving the joints stiff, enlarged, and somewhat senive, especially as to movement. A small proportion of such cases d ready relief, but in many of them the resultant anchylosis proves erly unconquerable, so that it is vain to break up the adhesions der ether, or to try to restore mobility by manipulation on splints. l alike fail, and serve only to add to the essential tortures of the ompanying neuralgia and hyperæsthetic states of skin. Since iting my last paper,[6] I have met with some of the former patients o suffered with these troubles, but in no case originally very severe s there any great gain; indeed, in most of them the joints had bene every year more stiff and useless.

"It is then quite clear that injuries of the spine, diseases of this an, and of the brain, and wounds, or any form of lesions of nerves, capable of developing in the joints inflammatory conditions, ually subacute, and which so precisely resemble rheumatic arthritis their symptoms and results, that no clinical skill can discriminate ween the two. In this state it were well to leave the subject. The mical theories have crumbled, and, in the growing tendency to ieve that rheumatism may have more forms than one, it may not amiss to recall the facts to which we have contributed, and which well illustrated by the following case. Other and more severe mples will be found in the cases appended to the later chapters of s work.

"Case 30.—*Gunshot Wound of the Right Brachial Plexus: usalgia: Tremor: Arthritic Lesions: Nail-Changes: Acid Sweats: peræsthesia: Little Loss of Motion from Paralysis: Great Gain der Treatment.*—B. D. L., aged 43, a farmer from Maine. Enlisted y, 1862. He was healthy to the date of his wound, received July l, 1863, at Gettysburg. While kneeling and aiming, he was shot the right side of the neck. He felt pain in the wound, but none vn the arm. He spun round, feeling stunned, and fell on his back, unconscious. In five minutes he rose and walked to the rear, ere the wound was dressed with cold water, no splint being emyed either then or later. At first, all motion was lost. In an hour could move his finger and abduct the arm, but not flex it. He nks sensation was perfect, except as to the ulnar distribution. thin an hour, he had severe earache, and pain in the shoulder, arm, l forearm. During the second week, he began to have burning n in the hand. At this time, which probably marked the onset neuritis, the shoulder-joint grew stiff, then the elbow, and lastly of the fingers. This condition was excessively painful, and reined unchanged. The tremor, which is constant in the upper arm scles, began the day of the wound, and had not ceased on his adsion to our wards.

"*Site of Wound.*—On admission, October, 1863, it was noted that the ball had entered the right side of the neck, in front, three inches above the clavicle, in the outer edge of the trapesius. The missile passed downward and outward, and struck the anterior edge of the supraspinal fossa of the scapula, five inches external to the spine of the first dorsal vertebra. Both wounds sloughed, leaving scars one and a half inches in diameter. The patient is well and florid. The shoulder is motionless from stiffness. The lower joints are alike stiff, swollen, red, and painful; the arm, semi-prone and flexed, is carried across the chest, supported by the sound hand. He has slight motion throughout, but the effort caused fibrillar tremor and exquisite pain.

"*Sensation.*—The sense of touch is everywhere good, save that there is slight numbness of the back of the hand and forearm. Some causalgia is felt in the palm, but no other pain, except on movement.

"*Nutrition.*—The palm is thin and red, or purplish, and on it the patient uses water, now and then, as a dressing; there is no atrophy; the wound is healed, but tender, as are also the upper nerve tracks. Muscular hyperæsthesia of the deltoid and triceps is present. The nails are remarkably curved; the hair is scanty; the sweat ill-smelling and acid. The shoulder muscles alone have lost electro-muscular contractility (induction current). Under ether, the joints when moved are found to be free from well-marked organic adhesions.

"Passive motion and electricity caused speedy gain in movement, and in February, 1864, he was able to move all the joints, with diminished pain. The muscles were, at this time, sensitive to induced currents, and the numbness and causalgia had nearly disappeared. He was allowed a furlough, at the expiration of which he deserted.

"This case is valuable, as an example of arthritic changes, extreme in character, with very little sensory or motor paralysis, and seemingly aided by treatment."

Again, Sir William Gull[7] has recorded the two following cases, and his remarks upon them are so suggestive, that I quote them in full.

"Case 27.—*Acute Rheumatic (?) Affection of the Larger Joints: Paraplegia of Lower Extremities: Slough over Sacrum: Recovery.*—Anne E., aged 38, was admitted into Guy's Hospital, March 31st, 1857, under the care of my colleagues, Dr. Hughes and Dr. Wilks (to whom I am indebted for placing the case at my disposal). Both hands were swollen, stiff, and painful, with an erythematous blush over the back of the right, and on the second joint of the thumb of the left. The legs were so far paralysed that she could only very slowly and feebly move them. The muscles were greatly wasted and flabby, but had not lost their excito-contractility by galvanism. Sphincters weak. No swelling of the knees or ankles at this time. Sensation nearly normal; but at times both legs felt numb, and were drawn up involuntarily. Urine acid, high coloured, and scanty. Tongue covered with a cream-like fur; skin hot; perspiration profuse, with acid smell. Pulse 120; systolic murmur over ventricle. On examining the spine, the lower third of the sacrum was found to be bent forward, the result of a fall eleven years before; and near the sacral notch, on the right side, was the cicatrix of a wound which formed at that time. Except this, there was nothing abnormal, nor any pain or tenderness on pressure. The history she gave of her case was that, being a widow, she was necessitated to work laboriously at a mangle. She had for two years, when much exerting herself, felt pain in the back between the shoulders, and a sense of constriction and coldness round the chest. Ten days before coming into the hospital she was seized with pain in the left leg, and had spasmodic contraction of the muscles, with an increase of the pain and constriction round the chest. She had still power to extend the leg, but could not walk. The day following, the hand, knees, and ankles were swollen and painful. With these symptoms there was febrile heat and diarrhœa. The sphincter ani was so weak that the fæces ran from her involuntarily. On the third day a slough formed over the sacrum. No important change occurred in her symptoms after her admission. There was great muscular emaciation generally. Involuntary twitchings of the muscles of the arms and legs. Aching, gnawing sensations in both calves. Touching the feet gave rise to formication and very lively excito-motor movements. For ten days the hands remained red, painful, stiff, and swollen. She complained much of heat and profuse perspirations, which returned several times in the twenty-four hours. On April 8th the urine was ammoniacal, and contained mucus. The hands were still swollen and erythematous; face flushed; pulse 100, full, as in rheumatism; acid smell of

[4] London and Philadelphia. 1872, pp. 168-172.
[5] I have since met with similar cases.
[6] Reports of the Sanitary Commission.
[7] Guy's *Hosp. Reports*, 3rd Series, vol. iv, 1858, Cases 27 and 28.

perspiration; respiration 28; movements thoracic and abdominal; abdomen soft; pupils large; nights sleepless. Ordered a grain of opium every six hours, with six ounces of wine daily, and a chop. On April 18th, the good effects of the opium and support were very apparent. The patient had passed good nights, and was tranquil in the day. Perspiration lessened. Urine retained in the bladder for thirty-six hours was at length passed voluntarily; it was acid, and without mucus. Tongue pale and moist. The slough on the back had deepened. The pupil still continued large. Occasional contraction of the muscles of the legs; no permanent rigidity. Hands remained swollen and stiff, but less red. She was unable to move the shoulders freely. On April 22nd, the hands had recovered their normal appearance, and had lost their stiffness. The legs could be moved more freely. The sense of constriction round the chest was gone; pulse 96; skin cool and dry; appetite good; urine normal, but she could not empty the bladder oftener than once in twenty-four hours. From this date, she slowly recovered. The opium was continued throughout her convalescence. At the beginning of June, the muscles of the lower extremities were galvanised regularly. By the end of the month, she was able to stand without help. Her improvement was uninterrupted, and in September she left the hospital quite well.

"Remarks.—It is a matter of great clinical interest that lesions of the cord are occasionally attended with an affection of the joints not to be readily distinguished from that which occurs in acute rheumatism. When this happens, there may be difficulty in determining the pathology of a case. It may, indeed, be impossible to say whether the symptoms at a certain stage are due to disease of the cord or to a rheumatic state of the blood. In such instances, we have a proof of the near relation of humoralism and solidism; for one observer may maintain that the local lesions have a common origin in the altered state of the blood, whilst another may with equal confidence assert their dependence upon a primary disturbance of the nervous centres. The case here recorded is an example of these difficulties. Fatigue from mechanical labour, acting especially on the lumbar and dorsal portions of the spine in a delicate and anxious subject, appears to have injured the nutriment of the cord. For two years, when much exerting herself, the patient felt pain between the shoulders, and a sense of constriction and coldness round the chest. Paraplegia then suddenly came on, followed by redness, pain, and swelling of the larger joints, as in rheumatism. Together with these symptoms, there were others indicating a rheumatic condition—white furred tongue; flushed face; hot skin; profuse perspirations, having an acid smell; systolic murmur over left ventricle, etc. Was there here a rheumatic state of the blood induced by the spinal lesion; or was the nervous derangement the result of a rheumatic state? Notwithstanding the labours of morbid anatomists and chemical pathologists, we are not at present in possession of any certain knowledge of what constitutes the rheumatic condition. My colleague Dr. Addison, from his clinical experience, has long drawn attention to the close connection between spinal lesions and true rheumatism, but has never developed the idea beyond expressing a suspicion of their relation. At the time this case was under care, the treatment was a subject of much observation. The result was very satisfactory. Whatever might have been the state of the cord, it was clearly induced by fatigue, and was soon followed by sloughing of the integuments. It would not, therefore, admit of depletory measures, but, on the contrary, required a nutritious diet, and wine. Opium was prescribed apparently with great advantage; it allayed nervous irritability, and gave the patient sleep.

"The following case is also illustrative of the relation between spinal injury and rheumatic symptoms. The same plan of treatment as above was equally successful. The therapeutical view of this subject is certainly not without the greatest interest. No doubt the texture of the cord has but feeble reparative powers, notwithstanding it has been shown by experimenters on animals that occasionally, after a transverse section, the parts unite, and the functions are re-established.

"Case 28.—*Concussion of the Spine: Partial Paraplegia: Redness and Swelling of the Wrists and Ankles as in Acute Rheumatism: Recovery.*—N. T., aged 38, on January 22nd, 1885, inadvertently stepped backwards into a hole, a few feet deep, and received a concussion of the spine. After a few days, he became partially paraplegic, with weak sphincters; and at the same time there came on a diffused redness and swelling of the ankles and wrists. The swelling was not from effusion into the joints, but from œdema of the surrounding tissues. The joints were very painful. The redness and swelling were variable in degree. When most marked, they presented the usual appearances of rheumatism, or rather of gout, for the erythema was brighter, and the œdema more distinct than in rheumatism. The hands equally affected with the ankles, though there was no obvious want of muscular power, nor any affection of sensation in the upper extremities. Tongue clear. Pulse 120. No acid perspirations. Urine high coloured, free from deposits, of normal quantity. The nerves of the surface generally were hyperæsthetic to a slight touch, but deep pressure gave less inconvenience. The treatment consisted of good nourishment, wine and brandy freely administered, and opium to allay pain and overcome sleeplessness. The pulse gradually acquired more power, and sank to 80. The affection of the joints continued in varying degree through March, April, May, and June. From the beginning of April, there was an improvement in the power over the legs. The same treatment was continued throughout, without the use of mercurials, local depletion, or counter irritation. In June, the patient was able to walk without assistance. During sleep, the hands and feet, wrists and ankles, often become erythematous and swollen. There was occasional formication in the lower extremities. Sleeplessness, from the beginning of the case, and throughout, was a troublesome symptom. In July, the patient was able to leave the hospital, and to resume to some extent his duties as medical practitioner. He was under the care of my colleague Mr. Cock."

Again, according to Professor Charcot,[8] "nutritive disorders consecutive on lesions of the nervous centres not unfrequently take up their seat in the articulations." He establishes two varieties. The first comprises such cases as those to which I have already referred, and includes here, also, the arthropathy of hemiplegic patients, first described, in 1846, by Scott Alison,[9] afterwards by Brown-Séquard.[10] These "arthropathies are limited to the paralysed limbs, and mostly occupy the upper extremities. They supervene, especially after circumscribed cerebral ramollisement, and more rarely as a consequence of intra-encephalic hæmorrhage.

"They usually form fifteen days or a month after the attack of apoplexy; that is to say, at the moment when the tardy contracture that lays hold on the paralysed members appears; but they may also show themselves at a later epoch. The tumefaction, redness, and pain of the joints are sometimes marked enough to recall the corresponding phenomena of acute articular rheumatism. The tendinous sheaths are, indeed, often affected at the same time as the articulations.

"It is needless to insist upon the interest which pertains to these arthropathies as regards diagnosis—articular rheumatism, whether acute or subacute, being an affection often connected with certain forms of cerebral softening, and one which, indeed, shows itself also, occasionally, after traumatic causes, capable of determing shock in the nervous centres. On the other hand, many affections of the spinal cord are erroneously attributed to a rheumatic diathesis in consequence of the coexistence of these articular symptoms. The clinical characters which render it easy to recognise arthropathies correlated with lesions of the nervous centres, and which allow them to be distinguished from cases of rheumatic arthritis, are chiefly these:

"1st. Their limitation to the joints of the paralysed members.

"2nd. The generally determinate epoch in which, in cases of sudden hemiplegia, they make their appearance on the morbid scene.

"3rd. The coexistence of other trophic troubles of the same order, such as eschars of rapid formation; and (when the spinal cord is involved) acute muscular atrophy of the paralysed members, cystitis, nephritis, etc.

"The type of the second group is to be found in progressive locomotor ataxy.....

"Ataxic arthropathy usually occupies the knees, shoulders, and elbows; it may also take up its seat in the hip-joint."

Professor Charcot then goes on to describe the physical and clinical characters of this form of arthropathy; and, after pointing out the absence of all traumatic or diathetic cause of rheumatism or of gout, he proceeds as follows:

"It is not very rare to find the spinal grey matter affected in locomotor ataxy; but the lesion is then generally found in the posterior cornua. Now, it was quite different in two cases of locomotor ataxy, complicated with arthropathy, in which a careful examination of the cord has been made; the anterior cornua were, in both cases, remarkably wasted and deformed, and a certain number of the great nerve-cells, those of the external group especially, had decreased in size, or even disappeared altogether without leaving any vestiges. The alteration, besides, showed itself exclusively in the anterior cornua, corresponding to the side on which the articular lesion was situated. It affected the cervical region, in the first case, where the arthropathy

[8] *Lectures on Diseases of the Nervous System.* Translated by Dr. Sigerson. New Sydenham Society, 1877, p. 92.

[9] "Arthritis occurring in the course of Paralysis." *The Lancet*, vol. i, p. 278, 1846.

[10] *Ibid.*, July 13th, 1861.

cupied the shoulder; it was observed a little above the lumbar gion in the second case, which presented an example of arthropathy the knee. Above and below these points, the grey matter of the terior cornua appeared to be exempt from alteration.

"From what precedes, I hope to have made it appear at least highly obable that the inflammatory process, first developed in the posterior lumns, by gradually extending to certain regions of the anterior rnua of the grey matter, was able to occasion the development of the ticular affection in our two patients. If the results obtained in these o cases are confirmed by new observations, we should be naturally l to admit that arthritic affections connected with myelitis, and ose observed to follow on cerebral softening, are likewise due to the vasion of the same regions of the grey matter of the spinal cord. In ses of brain-softening, the descending sclerosis of one of the lateral lumns of the spinal cord might be considered as the starting-point of e diffusion of inflammatory work."

From these illustrations, gathered from various authorities, it is, I ink, very clearly shown that lesions in the spinal cord, or along the rse of the motor nerves, may give rise to changes in the joints, ich, in many cases, present no difference from the condition seen in bacute rheumatism; in others, as in Charcot's disease, producing id disintegration of the bony tissue, decay without repair, as it has en aptly termed by Morrant Baker. But in all the cases we have anges taking place in the condition of the joints, and these anges produced by causes acting on the nerves connected with the rt, either along the course of these nerves, or at their origin in the ntral nervous system.

Now, is there in the phenomena of rheumatism anything suggestive an irritating cause acting upon portions of the central nervous sys-n? If so, what is it, and how is it produced?

Let me call your attention to the changes produced in the system nen, under the normal state of things, the surface of the body is posed to the action of cold or heat. The effect, as is well known, is ry different as regards cold-blooded and warm-blooded animals. ternal cold diminishes and heat increases the metabolic activity of e cold-blooded animal, acting like a mixture of dead substances in a emical retort. But in a warm-blooded animal, within certain limits, d increases and heat diminishes the bodily metabolism, as shown by e increased or diminished consumption of oxygen, and production of bonic acid, as the temperature falls or rises. There is obviously a chanism of some kind counteracting, and indeed overcoming, those re direct effects which alone obtain in cold-blooded animals. But, der the influence of urari, which paralyses the end-organs of the scular nerves, a warm-blooded animal behaves, as regards its bodily tabolism under the influence of external cold and heat, like a cold-oded animal. A similar result is obtained by division of the dulla oblongata. The temperature of an animal so operated upon ls, and then exposure to heat augments, and exposure to cold dimin-es, its metabolic activity. "We can best explain these results by posing that, under normal conditions, the muscles which, as we ve seen, contribute so largely to the total heat of the body are placed, means of their motor nerves and the central nervous system, in ne special connection with the skin, so that a lowering of the tem-ature of the skin leads to an increase, while a heightening of the nperature leads to a decrease, of the muscular metabolism. Further, ough the matter has not been fully worked out, the centre of this rmo-taxic reflex mechanism appears to be placed above the medulla ongata, possibly in the region of the pons Varolii. When urari is en, the reflex chain is broken at its muscular end; when the spinal d is divided, the break is nearer the centre."[11]

How does this bear upon rheumatism? An individual is exposed a cold draught or gets wet; the surface is chilled; the cutaneous cular areas are constricted; by reflex action through the vaso-tor system, the splanchnic vascular areas and the vessels of the scular areas are dilated; the vaso-motor nerves distributed to se parts are paralysed, so to speak; with this paralysis of the vaso-tor nerves there is dilatation of the vessels in connection with m, and so a large amount of blood is carried to the part, and con-uently a larger quantity of oxygen to act upon the tissues. But increased supply of blood is not sufficient of itself to increase the ctional activity of an organ, and therefore to produce increased t. This has been clearly demonstrated by the well known experi-nts on the submaxillary gland, and by the experiments on the scles. The submaxillary gland is supplied by two nerves, the nches of the chorda tympani reaching it along its duct, and by nches of the cervical sympathetic reaching it along its arteries. w the chorda contains two sets of fibres, (i) secreting fibres acting only on the epithelium cells, and (ii) vaso-motor or dilating fibres. Stimulation of this nerve brings about two events, dilatation of the blood-vessels of the gland and a flow of saliva; that is, there is not only a dilatation of the vessels, and so increased supply of blood, but there is an absorption, an assimilation, of some of the molecular constituents of the blood by the gland cells; and, if these constituents are properly elaborated by the cells, the formation of saliva. But the elaboration of these constituents can be modified, for by stimulating the sympathetic nerve "a slight increase of flow is seen; but this soon passes off, and so much saliva as is secreted is remarkably viscid, of higher specific gravity, and richer in corpuscles and protoplasmic lumps, and is said to be more active on starch than chorda saliva."[12] This fact has a very important bearing upon the subject I am discussing—the fact, namely, that, according to the variations in the stimulus applied to the two sets of nerves, alterations in the secretion can be produced: modification, that is to say, in the molecular changes in the contents of the secreting cell can, in this way, be brought about.

Further, if a small quantity of atropin be injected into the veins, stimulation of the chorda tympani produces no secretion of saliva at all, though the dilatation of the blood-vessels takes place as usual. This proves "that atropin, while it has no effect on the vaso-motor fibres, paralyses the secreting fibres just as it paralyses the inhibitory fibres of the vagus. Hence, when the chorda is stimulated, there pass down the nerve, in addition to impulses affecting the blood-supply, impulses affecting directly the protoplasm of the secreting cells, and calling it into action, just as similar impulses call into action the contractility of the protoplasm of a muscular fibre. Indeed, the two things, secreting activity and contracting activity, are quite parallel. We know that, when a muscle contracts, its blood-vessels dilate; and, just as by atropin the secreting action of the gland may be isolated from the vascular dilatation, so by urari muscular contraction may be removed, and leave dilatation of the blood-vessels as the only effect of stimulating the muscular nerve."[13]

If this is the case, there must be, in order that heat may be developed, not only an increased supply of blood to a tissue, but also some chemical change in its molecular constituents. Such a molecular transformation is shown by the production of lactic acid and carbonic acid, when a muscle contracts or when it dies. The molecules forming these substances are detached from the muscular tissue. Now, I would suggest that the change in the molecular constituents of the muscular tissue which leads to the further development of heat, results from a weakening or lessening of the power, whatever that may be, which holds the molecules together; that with the dilatation of the vessels in the part, under the influence of the vaso-motor nerves, there is also a splitting up or tumbling to pieces of the albuminoid molecules, and from both causes heat is developed. The normal change of the cyan-alcohols is interfered with. Their condensation into higher cyan-alcohols with elimination of urea, or their change into cyanamides and amido-acids, with the ultimate oxidation of the latter, is modified. The molecules $CH_2\begin{cases}OH\\CN\end{cases}$ and $C_2H_4\begin{cases}OH\\CN\end{cases}$[14] become detached more or less from each other, and by hydration (by which heat is developed) form substances—glycollic acid and lactic acid—which are readily oxidised, more readily than the amido-acid glycocine which is also formed. The oxygen, though conveyed in larger quantities than normal by the increased blood-supply to the tissue, is completely used up in oxidising into carbonic acid and water, the glycollic and lactic acids[15] which have been formed; the excess of lactic acid and the glycocine are unoxidised, and pass into the circulation. Now, in a normal or healthy state of things, the irritating or stimulating cause acting on the vessels and nerves of the skin being removed, reaction would be set up there, the cutaneous vascular area acted upon by the lactic acid would dilate, and consequently the vessels of the muscular area would contract; and this latter contraction would be increased by the stimulating effect of the glycocine, or some resulting morbid product, which, being a morbid product, would stimulate some portion of the nervous system. We should naturally expect that, under the normal state of things, it would so act upon the nervous system as to check the further formation of the morbid material. This could be done by stimulating the vaso-motor nerves connected with the vessels of the muscular area, and causing their contraction. We have such an example of stimulation, though in a different direction, in the effect of carbonic acid on the respiratory centre. A closer illustration may perhaps be found in

[11] Foster's *Physiology*, 4th ed., p. 467.

[12] *Ibid.*, p. 261.

[13] *Ibid.*, p. 261.

[14] See p. 635

[15] See p. 633.

what results from the injection of bile (which contains glycocine) into the blood. This is at once followed by increased arterial tension. But the closest analogy may be found in the effects produced on the system by what is simply a form of vegetable uric acid, namely, caffeine. In moderate doses, this increases the heart's action, both by its direct effect on the organ, and also by exciting contraction of the arteries; the blood-pressure and the frequency of the pulse are both intensified. The morbid product, then—which, as I shall endeavour to show, is uric acid—by increasing the arterial contraction, would, in a healthy state of things, cause less blood to go to the muscular area; the molecular constituents would again be held more firmly together, and undergo the normal changes, the uric acid being meanwhile excreted by the kidneys, and the lactic acid by the skin. I have here drawn you a picture of an ordinary feverish cold—the primary chill, the ensuing febrile condition, the elimination of lithates with the subsidence of the attack.

The morbid product, I have said, is uric acid, and results from the excessive formation of glycocine in the muscular tissue. This brings me to the questions: What relationship has glycocine to uric acid, and how are these concerned in the phenomena of rheumatism?

We know that, in gout, an abnormal amount of uric acid is present in the blood. The researches of Dr. Garrod have shown this very clearly. But how the uric acid is formed, why in some cases it leads to uric acid calculi, why in others it passes off in the urine as gravel, in others as urate of ammonia, and in all these cases, it may be, without the joints being disturbed; why, again, in other cases associated with uric acid in the blood, the joints become affected, and present the symptoms known as gouty, are points still open for discussion; and I will, therefore, as I think they are closely related to, and have a distinct bearing upon, the phenomena of rheumatism, turn aside and detain you for a short time whilst I try to throw some light upon them.

Two years ago I published a paper on the formation of uric acid, in which I endeavoured to show that the formation of this substance in the human subject is due, in the first place, to defective assimilation or metabolism, and, secondly, that it is a condensation-product, much in the same way that cyanuric acid is a condensation-product of cyanic acid, or that cyanuric acid and biuret are condensation-products of urea.

Starting with the result obtained by Strecker[16], that if uric acid is heated in a sealed tube to 160°—170° C. with a cold saturated solution of hydriodic acid, it is decomposed with the formation of ammonium iodide, carbonic acid, and glycocine,

$$\underset{\text{uric acid}}{C_5H_4N_4O_3} + 5H_2O = 3NH_3 + 3CO_2 + \underset{\text{glycocine}}{CH_2(NH_2)COOH}$$

I endeavoured, by treating glycocine in sealed tubes and otherwise, with cyanuric acid and potassium cyanate, to reverse the process, and perform the synthesis of uric acid; but unsuccessfully. Horbaczewski, however, stated in a paper published in the *Berichte* for November, 1882, page 2678, that by heating glycocine and urea together, he had accomplished it. On heating glycocine with ten times its weight of urea in an open vessel to 200°—230° C., he obtained a cloudy and thick fluid. This, on cooling, was dissolved in weak potash solution, and supersaturated with ammonium chloride, and precipitated with an ammoniacal solution of silver and magnesia. This precipitate, containing the uric acid, was washed with water containing ammonia, and decomposed with potassium sulphide. The filtrate, freed from the precipitate, was supersaturated with hydrochloric acid, and evaporated down. On cooling, the impure uric acid separated, which was again dissolved in a weak solution of potash, and submitted twice to the same process as above. Lastly, the product was washed with alcohol and dried. It was next treated with bisulphide of carbon to dissolve the sulphur, and then treated with ether.

I tried the experiment, carefully following the directions, but failed to obtain a satisfactory result. Testing the substance at various stages, I got with nitric acid and ammonia a colour somewhat approaching the murexide colour, but nothing more. I failed then, probably, from using too high a temperature. The experiment, for a long time, received no confirmation; but in May, 1885, in the *Monatshefte für Chemie*, S. 356—362, Horbaczewski gives the following additional particulars:

"Uric acid is obtained very readily by carefully heating a mixture of glycocoll and urea in a test-tube over the flame of a small Bunsen's burner, holding the test-tube in an inclined position, and moving it backwards and forwards over the flame, and taking care to keep up a continuous and free evolution of ammonia from the mass; being careful also that the temperature is not raised too high. The mass, at first clear and colourless, gradually becomes yellowish and opaque. The mass is then heated very carefully until (during the heating) it becomes quite hard, without being charred, or, at least, until a copious deposit is formed. The experiment is now completed. It is desirable to use only a small quantity (0.1 grm. to 0.2 grm.) of glycocoll at one time.

"In this way, the whole experiment occupies only a few seconds, and the residue, after cooling, remains of a pale yellowish colour; while, by using a large quantity of glycocoll, the residue appears of a dark brown colour. As regards the quantity of urea which must be used in the process, it is necessary to use a large excess. When, therefore, the glycocoll and urea are mixed together in proportion of one molecule of each, no uric acid is obtained, nor is any obtained when one molecule of glycocoll is taken with two molecules of urea. It is only when three molecules of urea are taken with one of glycocoll that uric acid is produced. It is very difficult, however, to isolate the uric acid in this case, and to purify it, on account of the very dark brown colour of the residue. The larger the quantity of urea taken, the more easily is the experiment made, and the residue is so much freer from colour. It is therefore advisable to mix one part of glycocoll with from seven to fifteen of urea, and to heat them together in the manner above described.

"If the experiment be successful, a very small portion of the residue gives the murexide reaction; it is not so marked as with pure uric acid, but it is quite distinct.

"If the experiment have not been perfectly carried out, no murexide reaction will be obtained from the residue alone.

"The amount of uric acid obtained by this method, even when successfully performed, is rather small. In several experiments, from 1 grm. of glycocoll and the proportionate quantity of urea, only 50—150 milligramme of impure uric acid were obtained. The reason of this unsatisfactory result appears to be that the reaction only takes place at a high temperature, at which also the uric acid is, in some measure, decomposed."

After reading this paper, I again tried the experiment, and by adopting the following method, succeeded in producing the substance.

I took 30 grains of glycocine and 300 of urea, and put them into an ordinary test-tube (6 in. by ¾ in.). Having inserted a thermometer, to note the exact temperature, the test-tube was then placed in an oil-bath, the temperature of which had been previously raised to 230°C. The bath was maintained at this temperature, and the heat so arranged that the bath could be raised in a few seconds to 240°. The mixture of glycocine and urea quickly melts; at 110° it begins to boil, and ammonia is given off; as the temperature rises it begins to froth up, and between 175° and 180° does so to a considerable extent. By raising the test-tube from the bath from time to time this action can be controlled, and the temperature kept at 180° for some minutes, until the ammonia comes off much less freely, and the mixture acquires a very faint yellowish tinge. The heat of the bath must then be rapidly raised to 240°, and the temperature of the mixture in the test-tube quickly raised to 210°. By lifting the tube from time to time out of the bath, the temperature must be kept exactly between 210° and 212° for four minutes, when the mixture will acquire the colour of brown sherry, but remains perfectly clear. The test-tube can now be removed from the bath and allowed to cool, when the mass will assume a very pale fawn colour. The mass can now be almost dissolved in three ounces of warm water, and perfect solution takes place on the addition of solution of potash. The fluid is then supersaturated with ammonium chloride, and considerable excess of ammonia added, otherwise a mixture of urate and cyanurate of potash may be precipitated. A mixture of three fluid drachms of the solution of ammonio-nitrate of silver of the *British Pharmacopœia*, the same quantity of the solution of ammonio-sulphate of magnesia, and of strong solution of ammonia, is now added to the other liquid. A considerable brownish precipitate of the mixed urate and cyanurate of silver is thrown down. Let this stand for twenty-four hours, and allow the precipitate to subside. Decant off the supernatant liquid, and wash the precipitate with water, to which a little ammonia has been added. Take now two parts of solution of potash, and, having saturated one part with sulphuretted hydrogen, mix it with the other part. Add sufficient of this solution to decompose the argentic precipitate, heat the mixture gently, and filter from the insoluble sulphide. To the filtrate add sufficient hydrochloric acid to produce a slight but distinctly acid reaction. Boil the mixture until all the sulphuretted hydrogen is driven off, and, on cooling, uric acid mixed more or less with cyanuric acid, with very little colouring matter will be deposited. Pour off the mother liquid and evaporate it down, when a further amount of uric acid may be obtained. The presence of uric acid at

[16] Strecker, *Zeitschrift für Chem.* [2], Band iv, p. 215.

:s stage is shown very distinctly by the murexide test. In the lier stages the murexide reaction is very faint indeed. In this y, though the yield is comparatively very small, I have obtained remely well marked crystals presenting all the characteristics when n under the microscope of ordinary uric acid, and responding per-tly to the murexide test.[17]

The following equation represents the changes :

$$3CO\begin{cases}NH_2\\NH_2\end{cases} + CH_2\begin{cases}NH_2\\COOH\end{cases} = 3NH_3 + 2H_2O + C_5H_4N_4O_3$$

urea glycocine uric acid

But it is important to know what are the intermediate stages, if we to understand the mode of formation of this substance in the living ly.

Now, hydantoic acid has been formed synthetically, and here we ve the first step towards the synthesis of uric acid. By heating urea d glycocine to a temperature of 120°—125°C., they combine and m hydantoic acid [18]

$$CO\begin{cases}NH_2\\NH_2\end{cases} + CH_2\begin{cases}NH_2\\COOH\end{cases} = NH_3 + CO\begin{cases}NH_2\\NH-CH_2-COOH\end{cases}$$

urea glycocine hydantoic acid

l this dehydrated forms hydantoin ; for, by boiling the latter with yta water, it is converted into hydantoic acid.

$$CO\begin{cases}NH-CO\\NH-CH_2\end{cases} + H_2O = CO\begin{cases}NH_2\\NH-CH''-COOH\end{cases}$$

hydantoin hydantoic acid

By heating urea alone to a temperature somewhat higher, namely, 150°—160° C., condensation takes place, and it is converted into iret $C_2O_2N_3H_5$

$$2CO\begin{cases}NH_2\\NH_2\end{cases} = NH_3 + \begin{matrix}CO\begin{cases}NH_2\\NH\end{cases}\\CO\begin{cases}\\NH_2\end{cases}\end{matrix}$$

urea biuret

If now we combine together hydantoin and biuret, we have the elents of water and ammonium urate :

$$CO\begin{cases}NH-CO\\NH-CH_2\end{cases} + \begin{matrix}CO\begin{cases}NH_2\\NH\end{cases}\\CO\begin{cases}\\NH_2\end{cases}\end{matrix} = H_2O + C_5H_3N_4O_3 . NH_4$$

hydantoin biuret ammonium urate

n performing Horbaczewski's experiment, when the temperature is sed to 120°—125° C. hydantoic acid is formed, and at 130°—150° C. urea condenses into biuret. If, then, between 130° and 160° C. hydantoic acid is dehydrated into hydantoin, which melts at 207°, l, at that temperature, or one something above, combined with the ret in the manner above shown, forming water and ammonium te, we have a complete explanation of the process.

That the synthesis takes place in this way, I have confirmed in some asure by experiment. One part of hydantoin, with four parts of ret, were treated in the same manner as in the experiment with a and glycocine. Throughout, the same results follow as when rating upon glycocine and urea ; but the yield of uric acid is aller. On evaporating the solution after the addition of hydroloric acid, crystals are deposited which give the murexide reaction y distinctly, but as yet I have not been able to isolate the uric d.[19] The constitution of glycoluril $C_4H_6N_4O_2$ which can be obned from uric acid, and from allantoin, also favours this view. By ling glycoluril with acids it is converted into hydantoin and urea. nsequently, by combining these substances together in a suitable y, we ought to perform the synthesis of glycoluril.

$$CO\begin{cases}NH-CH_2\\NH_2-CO\end{cases} + CO\begin{cases}NH_2\\NH_2\end{cases} = CO\begin{cases}NH-CH\\\|\\NH-C-NH-CO-NH_2\end{cases} + H_2O$$

hydantoin urea glycoluril

f, then, hydantoin were combined with biuret instead of with a, we should have

$$CO\begin{cases}NH-CH_2\\\quad|\\NH-CO\end{cases} + \begin{matrix}CO\begin{cases}NH_2\\NH\end{cases}\\CO\begin{cases}\\NH_2\end{cases}\end{matrix} = CO\begin{cases}NH-CH\\\|\\NH-C-NH-CO-NH-CO-NH_2\end{cases} + H_2O$$

hydantoin biuret

and ammonia being given off, the compound would be

$$CO\begin{cases}CO-NH\\|\quad|\\NH-C\quad CO\\\|\quad|\\NH-C-NH\end{cases} + NH_3 + HO_2$$

uric acid

which is the molecular formula for uric acid given by Medicus, and the one most generally accepted.[21]

My explanation of the formation of uric acid in the animal economy, based on these considerations, is as follows :

In the human subject, glycocine conjugated with cholic acid is poured out as glycocholic acid, a constituent of the bile, into the intestine. After the bile has served its purpose in digestion, the glycocine as well as taurine are returned into the blood. These, together with the other amido-bodies, leucin, and possibly tyrosin, the products of the digestion of albuminous food, reappear in the urine as urea ; that is, the urine does not contain them, but its urea is proportionately increased. Now these amido-bodies, glycocine, leucine, etc., are probably carried by the portal vein straight to the liver, and, from certain facts which I need not here detail, we are led to the view that, among the numerous metabolic events which occur in the hepatic cells, the formation of urea from these bodies may be ranked as one. Suppose from some cause this metabolism of glycocine is interrupted (and I need only refer here to the interrupted metabolism of starch or glucose in diabetes as an illustration of what I mean), whilst taurine, leucine, etc., still undergo the normal changes with the production of urea, we should then have in the gland the two substances, glycocine and urea) (or the immediate antecedent of urea) the conjugation of which by the gland (just as in the case of hippuric acid being formed from the conjugation of glycocine and benzoic acid) would produce hydantoic acid,

$$CO\begin{cases}NH_2\\NH_2\end{cases} + CH_2\begin{cases}NH_2\\COOH\end{cases} = NH_3 + CO\begin{cases}NH_2\\NH-CH_2-COOH\end{cases}$$

urea glycocine ammonia hydantoic acid

which dehydrated would be converted into hydantoin

$$CO\begin{cases}NH-CO\\\quad|\\NH-CH_2\end{cases}$$

---

[17] The solution of potassium sulphide must be pure. If on adding hydroloric acid to the solution of uric acid in this, sulphurous acid is evolved, the acid is decomposed and not precipitated.

[18] Heintz, *Jahresb. für Chem.* 1865, S. 360.

[19] The reason, probably, is that the hydantoin combines more readily with the iret in its nascent state, that is, as condensation of urea takes place, than with iret fully formed.

[20] Strecker-Wislicenus, *Org. Chemistry*, London, 1881, p. 539.

[21] This explanation of the synthesis of uric acid indicates, I think, the way in which guanine, xanthine, hypoxanthine, theobromine, and caffeine may each be built up from glycocine, and thus showing their relationship to uric acid. By combining glycocine with formyl diamine $CH\begin{cases}NH_2\\\|\\NH\end{cases}$ which is prepared from HCN, we should obtain the substance $CH\begin{cases}NH-CH_2\\|\\N-CO\end{cases}$ and this, united with two molecules of urea, or with biuret, would probably result in

$$CH\begin{cases}CO-NH\\|\quad|\\NH-C\quad CO\\\|\quad|\\N-C-NH\end{cases}$$

guanine.

From guanine the other bodies have been obtained; but it would appear probable that they should be synthesised independently. By combining glycocine, formyl diamine, guanidine (obtained from biuret) and urea in the order given, xanthine would result. By acting on the compound of glycocine and formyl diamine so as to obtain its methyl derivative $CH\begin{cases}N.CH_3-CH_2\\|\\N\text{———}CO\end{cases}$ combining this with dimethyl carbamide, and then with urea, the resulting product should be caffeine. I have not had time to attempt these experiments since this mode of synthesis occurred to me. I hope to do so, however, during the summer, and so either confirm or refute the hypothesis.

Hydantoin is easily soluble, and so would pass on in the circulation to be combined elsewhere with two molecules of urea or with biuret, which is also soluble, to form ammonium urate.[22]

$$CO\begin{cases}NH-CO\\ |\\ NH-CH_2\end{cases}CO + CO\begin{cases}NH_2\\ NH\\ NH_2\end{cases} = H_2O + C_5H_3N_4O_3.NH_4$$

hydantoin — biuret — ammonium urate

It may be urged, as an objection, that in order to produce hydantoic acid and biuret out of the body a temperature of 160° C. is required, and therefore that the body at the normal temperature of 37°—38° C. cannot produce this result. The fact that the conjugation of benzoic acid and glycocine takes place in the body at the normal temperature, when benzoic acid is introduced into the alimentary canal, hippuric acid being formed and passing off in the urine, to effect which conjugation out of the body requires exactly the same temperature of 160° C., is a complete answer to such an argument. But I will show directly that the combination of urea, or its antecedent ammonium cyanate, with other bodies does actually take place in the animal body.

Horbaczewski, in his paper in the *Monatshefte*, also describes a method for obtaining methyl uric acid by synthesis. He says:

"It was naturally to be expected, that if in the previous experiment, instead of glycocoll, a derivative of glycoll was employed, instead of uric acid a derivative of uric acid would be obtained. The experiment was performed with sarcosine, and confirmed this supposition. When sarcosine is heated in small portions (0.1—0.2 grm.) with 5 to 10 parts of urea, after the method described for uric acid, and carefully warmed until the mass becomes solidified whilst hot—which can always be effected in the present case—the residue is found to contain methyl-uric acid. This can be demonstrated at once in the residue by the murexide test; in fact a small atom generally gives a much more decided reaction than can be obtained from the uric acid residue. If the experiment has been successful, the reaction is very striking. The methyl-uric acid can be separated from the residue in exactly the same way as described for uric acid. The purification of this compound can be effected far more easily than that of the uric acid, and presents no difficulties whatever."

The changes which have taken place here are, I venture to suggest, of the same character as those indicated for the formation of uric acid. The sarcosine is combined first with one molecule of urea, forming methyl-hydantoic acid, which dehydrated into methyl-hydantoin, and then, combined with biuret, forms ammonium urate.

$$CH_2\begin{cases}NH.CH_3\\ COOH\end{cases} + CO\begin{cases}NH_2\\ NH_2\end{cases} = NH_3 + CO\begin{cases}NH_2\\ N.CH_3-CH_2.COOH\end{cases}$$

sarcosine — urea — methyl-hydantoic acid

$$CO\begin{cases}NH_2\\ N.CH_2-CH_2-COOH\end{cases} = CO\begin{cases}NH\text{ ——— }CO\\ |\quad\quad|\\ N.CH_3\text{ —— }CH_2\end{cases} + H_2O$$

methyl-hydantoic acid — methyl-hydantoin

$$CO\begin{cases}N.CH_3-CH_2\\ |\quad\quad|\\ NH\text{ —— }CO\end{cases} + CO\begin{cases}NH_2\\ NH\\ NH_2\end{cases}$$

methyl-hydantoin — biuret

$$= CO\begin{cases}N.CH_3 & CO-NH\\ & \|\quad\quad|\\ NH & C\quad\quad CO\end{cases} + NH_3 + H_2O$$

methyl-uric acid.

Now methyl-hydantoin has been actually formed after the administration of sarcosine to a living animal, and detected in the urine. Considerable discussion took place at the time this was announced, as to whether or not methyl-hydantoin really appeared in the urine, and a number of experiments were made by Schultzen, etc. The importance attached to the question at the time arose from the fact, that it appeared to demonstrate the existence of carbamic acid in the animal system, and to show that this acid was the immediate precursor of urea. A good deal may be advanced in favour of this view of the formation of urea, but, as I have endeavoured to show that the antecedent of urea is ammonium cyanate, and as methyl-hydantoin has been formed by mixing together sarcosine, potassium cyanate, and ammonium sulphate, and digesting them at the temperature of the body (40° C.), the experiment with sarcosine possesses great interest and significance with regard to the steps by which uric acid is formed in the animal economy. In the *Zeitschrift für physiologische Chemie*, Dr. J. Schiffer gives an excellent summary of the experiments and views of the others, together with an account of his own observations and experiments. From this paper[23] I take the following extracts.

"Few investigations in the range of physiological chemistry have in recent times excited so much attention as those of Schultzen on the transformation of sarcosine in the animal body. In conjunction with Leon v. Nenki (*Zeitsch. für Biologie*, Band viii), he had previously found, on giving glycocine as food, the amount of urea excreted corresponded with the amount of N given..... He repeated his experiments with methyl-glycocine or sarcosine. Increased secretion of urea did not take place; on the contrary, two new bodies appeared in the urine, both having an analogous composition, the one compounded of sarcosine and carbamic acid, the other of sarcosine and sulphamic acid. The first of these bodies was identical in its constitution with methyl-hydantoic acid, but was not recognised as such by Schultzen. He concluded from his investigation that the sarcosine attached to itself the carbamic acid resulting from disintegration of the albuminous bodies, and which, in a normal condition, gives rise to the production of urea. With this hypothesis, it appeared very plausible that urea should disappear from urine containing sarcosine. He imagined, therefore, he had explained the mode in which urea was formed, and had thus solved one of the most important questions in physiological chemistry by the convincing proof of a carefully devised experiment.".....

"Salkowski found, after administering taurine, its uramido-acid, tauro-carbamic acid, in the urine (*Berichte*, vi, s. 744)."....

"Later, E. Bauman and Hoppe-Seyler (*Berichte*, Band vii, s. 34) succeeded in forming methyl-hydantoic acid synthetically under such conditions as might exist in the animal body. Equivalent amounts of sarcosine, potassium cyanate, and ammonium sulphate, were digested at a temperature of 104° Fahr., the potassium sulphate removed by alcohol, and the baryta salt of the acid referred to obtained."

"In a similar manner, Salkowski (*Berichte*, vii, s. 116) at the same time produced this acid, or rather, as it is easily decomposed, its anhydride, methyl-hydantoin."

"So far, everything seemed to confirm Schultzen's experiments; but, when further experiments were made, essentially different results were obtained. These experiments were undertaken by E. Salkowski on the one hand and Baumann and v. Mering on the other. The results obtained by all completely demonstrate the absence of sarcosine sulphamic acid. As regards methyl hydantoic acid, Salkowski (*Berichte*, Band viii, s. 115) first stated, in the urine of dogs, it appeared only in small quantity after the administration of sarcosine; whereas Baumann and v. Mering, in their experiments on the human subject, showed that, after administering as much as twenty-five grammes of sarcosine, methyl-hydantoic acid was entirely absent from the urine; and that Schultzen, in his experiments, could not have had this substance to deal with, At the same time, they discovered a probable source of error in his experiments—namely, that, in the presence of sarcosine, Liebig's test for urea fails. They discovered also, as Salkowski also did, that a portion of the sarcosine appeared unchanged in the urine. In later communications, Salkowski confirmed the view of Baumann and von Mering that, after the administration of sarcosine, there is no appearance whatever of methyl-hydantoic acid in the urine."....

"There appeared to be very little left then from Schultzen's experiments. One point only still remained for investigation. As the uramido-acids are so easily converted into their anhydrides, and as this is specially so in the case of methyl-hydantoic acid and its conversion into methyl-hydantoin, this latter substance might possibly exist in the urine after the internal administration of sarcosine. Salkowski has given great care and attention to this point—without, however, arriving at any definite proof."....

"This, then, was the state of the question when Professor Baumann informed me that methyl-hydantoin reduces sulphate of copper in an alkaline solution, and asked me to make some fresh experiments with sarcosine founded upon this reaction."

Schiffer then describes the experiments which he performed to de-

[22] In the paper published two years ago, I suggested that the synthesis might take place also, in another way, by the conjugation of glycocine first with biuret, which, afterwards combining with urea, would form ammonium urate, but this would give a different molecular arrangement fur uric acid, and the actual production of uric acid from hydantoin and biuret shows that the latter is the correct interpretation.

[23] *Zeitschrift für physiol. Chemie*, Bd. v, s. 267.

strate the existence of methyl-hydantoin in the urine, and thus s up the result of his investigations.

Our knowledge, therefore, of the destination of sarcosine in the nism may be formulated as follows. By far the greatest part is eted unchanged; a smaller portion, one-fifth to one-sixth, is sformed into the uramido-acid we have been discussing, or rather its anhydride (methyl-hydantoin), and a smaller portion is oxidised methyl urea."

rcosine, then, undergoes little change in passing through the sys- but a portion is converted into methyl-hydantoin. If, therefore, n glycocine is absorbed from the alimentary canal, it does not ergo the normal change, we may reasonably suppose that, when ght in contact with ammonium cyanate, it will be acted upon in same way as sarcosine, and a portion transformed into hydantoin, thus we have the first step towards the formation of uric acid. ulating in the system, the hydantoin may, under certain condi- s, so affect the central nervous system, and thereby the innerva- of the kidneys, that, when it arrives at these organs, condensation wo molecules of ammonium cyanate may take place with elimina- of ammonia, forming biuret, and thus be conjugated with hydan- ; or this condensation may take place independently of the nervous m. Condensation of the cyanates readily takes place, as is shown he action of acetic acid on potassium cyanate, forming potassium urate and potassium acetate.

$$KCNO + 2CH_3 . COOH = KH_2C_3N_3O_3 + 2CH_3COOK + 2H_2O.$$

cyanate acetic acid pot. cyanurate pot. acetate.

ch a view, I think, meets all the difficulties which have been raised regard to previous theories as to the formation of uric acid— culties which have been very clearly set forth by Dr. Garrod, in umleian Lectures. Nor is it difficult to understand that if, as I endeavoured to prove, the final conjugation of two soluble bodies s place in the kidney forming the very slightly soluble ammonium e (1—2400), a portion may not be excreted, but remain in the d—overflow, as it were, and so pass on into the circulation; a t which certainly happens when the ureters are ligatured. The onium salt would then, meeting with the soda in the blood, be erted into sodium urate, the form in which it is deposited about y joints.

he appearance, then, of uric acid in the secretion is the result arily of the non-transformation or metabolism of glycocine into —whether that glycocine be derived from the bile poured out into luodenum, or formed elsewhere in the body.

now come to the question of the abnormal formation of uric acid he human system. Just as in diabetes, the essential fault lies in nability of the system, either in the liver, or it may be elsewhere, fect the metabolism of glucose, which then passes into the circula- and is discharged by the kidneys, so, in gout or gravel, the im- ct metabolism of glycocine is the primary and essential defect. anged, it passes from the alimentary canal, or elsewhere, into the ; there, under the action of the gland, it is conjugated with urea ting from the metabolism of the other amido-bodies, leucine, etc., is converted into hydantoin; it then passes on to the kidneys to mbined with other molecules of urea or biuret, forming ammonium, e, a portion of which overflows into the circulation, and is con- d into sodium urate. It is not difficult to understand that, in ons who are addicted to the pleasures of the table, who are fond ort, and who take little exercise, the liver should become ggish;" that the gland-cells should, from overwork, become in- e or destroyed; or the terminations of the nerves should, from ssive stimulus, become somewhat paralysed, and the gland in some ure like the submaxillary after the injection of atropine. The t would be the imperfect performance of its function, and the metabolism of glycocine. But it is not every toper and gourmand develops gout, nor is every gouty man necessarily a toper or a mand. Further, it is certain that uric acid is also present in ex- in the blood under other pathological conditions which have no ection with arthritic mischief. How are these facts to be ex- ied?

EDICAL MAGISTRATES.—The Lord Chancellor for Ireland, on the nmendation of Viscount Monck, has appointed Dr. Lambert enstal Ormsby, to the Commission of the Peace for the county lin.—Dr. Griffin, of Kilkee, county Clare, has been appointed a ice of the Peace for that county.—Drs. Anderson and Weir have appointed Justices of the Peace for the county Down.—Dr. erick H. Daly, of Amhurst Road, Hackney Downs, has been ap- ted a Justice of the Peace for the county of Middlesex, by the Lord ncellor, on the recommendation of Lord Enfield, Lord Lieutenant e county.

THE GULSTONIAN LECTURES,

ON

SPASM IN CHRONIC NERVE-DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

By SEYMOUR J. SHARKEY, M.B., F.R.C.P.,
Assistant-Physician and Joint-Lecturer on Pathology at St. Thomas's Hospital.

LECTURE III.

(Concluded from page 638.)

2. *Spasm produced in a Reflex Manner by Disease of Afferent Nerves.*—There is scarcely a more difficult subject in the whole range of nerve-pathology than that of reflex spasm. Cases of general convulsions, as well as of local spasm, are so frequently explained in this way, and are in so many instances quite insufficiently supported by scientific evidence, that one cannot help coming to the conclusion that many cases are accepted as of reflex origin, which, at any rate, carry very little conviction with them. Some reasons can be adduced for the difficulties which beset the diagnosis. Many of these cases occur where some sensory nerve is the seat of severe pain; or where a part is diseased which is painful to move. A good example of the former class is spasm of the muscles of the face, accompanying facial neuralgia; and, of the latter, rigidity in joint-disease. But the most ordinary method of expressing pain is, by some overaction of the facial muscles; while the ordinary way of preventing pain in joint-disease is by keeping the joint still, and opposing attempts at movement, by contraction of muscles which produce an opposite effect. This is so natural a contrivance, not only in man but in lower animals, that it must be looked upon as almost an involuntary act. Reflex muscular acts are in very different degrees capable of being controlled or modified by the will; and even if it be allowed that the latter plays a part in the limitation of the movements of a diseased joint, this does not prove that the act is not partly involuntary and reflex. In many cases, it is very difficult to form a definite conclusion with regard to this question.

No one who observes the great variety in the degree of reflex muscular contraction, produced by similar stimuli applied to different individuals, can be surprised at finding evidence that persistent spasm occasionally occurs as the product of a reflex act; or that a stimulus, which produces no motor result in one person, gives rise to definite muscular contractions in another, not equally healthy. Thus, in hemiplegia, accompanied by descending sclerosis in the lateral columns, deep reflexes are much more brisk than they were before the hemiplegia occurred; and contractures, Brissaud says, may be suddenly increased by comparatively slight injuries. If this increased reflex excitability be due to the hyperphysiological activity of the spinal centres, which have been loosed from cerebral control, similar disorders of nerve-centres rather than of nerve-fibres are probably the most fertile causes of reflex spasm. Hence, it is scarcely too much to say that the injury, or disease, which supplies the stimulus to the sensory nerve in such cases, though apparently the principal agent, is really so in many instances only from a particular point of view. That is to say, a mine exists in the patient which has been accidentally exploded by a stimulus applied to a nerve in connection with it; but, had the same nerve been connected with a healthy and stable centre, no spasm would have ensued.

In speaking, therefore, of the present division of the subject, namely, spasm produced in a reflex manner by disease of afferent nerves, we can scarcely deal with it apart from the next division, namely, spasm produced by disease of ganglionic cells. For it is questionable how far stimuli applied to afferent nerves in chronic disease would produce muscular spasm if the centres were healthy. I am not aware that there is evidence to show that gross or demonstrable disease of ganglionic cells produces spasm. But impalpable disorders do; such, for instance, as those resulting from their separation from the cerebral centres. Non-demonstrable disorders, however, are what we presume to be the basis of so-called functional spasms; and to these we shall revert presently.

Reflex spasm no doubt occurs, but how frequently it does so, or how far the afferent or efferent nerves, or the nerve-centres, take the leading part in its production, are points which can scarcely be estimated. As good an instance as I know of reflex spasm is recorded by Mr. Clutton

in the *St. Thomas's Hospital Reports*, vol. x, p. 64. A boy, aged 14, had been bitten in the face by a dog eighteen months previously. The spot had been painless until a month before his appearance at the hospital; but, since that time, he had suffered from constant shooting pains in the neck, which always started from the scar. At the same time that the pain was felt, the angle of the mouth was drawn outwards, and the skin of the neck was wrinkled by the action of the platysma; the whole side of the face and neck blushed, and then became bathed in perspiration. This succession of symptoms recurred every time the scar was pinched. Croton-chloral-hydrate in five-grain doses twice a day soon cured the affection.

Weir Mitchell, in his work on *Injuries of Nerves*, gives instances of reflex muscular spasm; and this condition is often referred to intestinal, uterine, or other irritation, but often without sufficient reason.

Charcot has written a good deal in support of the view that various affections of joints may give rise to rigidity of muscles in a reflex way; and it certainly is very difficult to explain them otherwise. The following case appears to me to be one of the kind referred to.

Case of Persistent Muscular Spasm due to Joint-Disease.—F. W., aged 16, was an out-patient at St. Thomas's Hospital, under the care of Mr. Clutton, in February, 1884. I saw the case with him, and the following is the clinical record which he took while she was under his treatment, and which he has kindly put at my disposal. The patient was sent to him by Mr. Merces, of the Bath Mineral Water Hospital, with the following history. During May, 1883, she had had rheumatic fever, and the joints chiefly affected were the wrists and ankles. For three months the wrists were placed in splints, and in the autumn of the same year she was sent to Bath with perfectly stiff fingers and wrists. Passive movement was employed, which made the fingers pliable, but which left the wrists as stiff as ever. The accompanying illustrations (Figs. 44 and 45) show the condition which existed when the case came under Mr. Clutton's notice. The photograph was taken by Mr. Charles West. Both hands were in the same condition. On attempting to move the wrist-joint, the flexors and extensors alike resisted, and could not be overcome. Taking them by surprise produced no better results. When the patient was placed under ether, the muscles yielded to attempts at flexion and extension, but the rigidity did not entirely disappear. There were but few adhesions in the joint, and these readily gave way under the anæsthetic, but left the state of affairs practically the same as before. That is to say, the wrist could be flexed or extended, but, on removing the force, the hand again assumed the position shown in the illustration. When the wrist was extended, the fingers always became flexed, and when it was flexed, they became extended. The patient could voluntarily extend or flex the phalanges, and could separate the fingers. The thenar muscles also acted normally. The wrist was rigid, and could not be moved in either direction, and there was slight superextension at the metacarpo-phalangeal joints, which was easily overcome voluntarily when the patient flexed the fingers. Dr. Kilner tested the electric condition of the nerves and muscles, and found it normal.

Let me here briefly refer to a class of spasmodic affections which appear to have the same explanation as tendon-reflexes. Whether explicable as a reflex or as a purely local phenomenon, contraction of muscles occurs when they are put on the stretch by their antagonists; and this has the effect of controlling and steadying movements which might otherwise be jerky and uncertain. When the influence of the lateral columns of the cord is removed, the spinal centres, in which reflex acts are produced in relation with parts below the level of the lesion, are brought into a state of excessive activity, and stretching of a tendon produces an abnormally sudden and extensive contraction. This is very probably the cause of the tremors in the direction of movement seen in cases of disseminated sclerosis. But it is probable that some cases may have a peripheral origin. A medical friend of mine informed me that he once took a vehicle, in order to drive to a house where he was going to stay for a while. The driver put him down two and a half miles from his destination, and drove off. The medical man had rather a heavy bag, and, being unable to get another conveyance, he carried it himself. For four days after this walk he suffered from pretty constant contractions of the triceps muscle of his right arm, whenever he flexed the latter. In this instance, the muscle had been what we call strained, the tendon had been unduly pulled upon, and, when the arm was flexed, the slight increase of tension made the triceps contract. Such a case represents a very small departure from the normal, but suggests an explanation of more troublesome affections; such an one, for instance, as the following.

Case of Persistent Rhythmical Contraction of the Palmaris Longus, due to Injury—On July 7th, 1878, I saw a girl, aged 19, who had had her wrist bent backwards and sprained, five years previously. The parts injured had swelled, and she had been obliged to carry her arm in a sling for some weeks. Ever since that time she had suffered without intermission from twitchings of the arm and palm of the hand. On examination, I found that the general power of the arm was unimpaired, but that there were spasmodic contractions of the palmaris longus muscle, occurring with perfect regularity ninety times in the minute. The contractions were energetic, and showed the muscle and its attachments very beautifully. In this case, probably the palmaris longus had been stretched, and the peripheral nerves ending in it had been rendered more irritable; the result being that the slight tension of it, which occurs ordinarily in the act of extending the wrist, caused the muscle to contract. This occurring frequently, gave rise to a neuro-muscular habit.

The following is a somewhat similar instance. Mr. Clutton once showed me a girl, aged 10, who had fallen down a week previously and slightly sprained her right wrist, but had done herself no other damage. I found her suffering from an affection which had come on immediately after the fall. Her right arm was in a position midway between pronation and supination, and was the seat of perfectly regular tremors of very small excursion, such as one sees in paralysis agitans, occurring in a direction transverse to the longitudinal axis of the limb.

Other pathological conditions, as well as injuries, may produce these rhythmical spasms. In January, 1886, a girl, aged 14, was in St. Thomas's Hospital, under the care of Dr. Bristowe, for rhythmical contraction of the occipito-frontalis muscle on both sides, which occurred from fifty to sixty times in the minute, and had been going on for some months. The history she gave was that she had had a very bad attack of "erysipelas of the face," commencing on the forehead and spreading downwards. The onset was sudden, and the description she gave of the affection corresponded with that of erysipelas. Roughness and pigmentation of the skin of the forehead could still be seen. As the disease got well, the contraction of the occipito-frontalis muscle supervened, and continued for months without intermission, except during sleep. The original cause of this condition was probably an irritable state of the muscle and tendon owing to inflammation, and an involuntary neuro-muscular habit was soon developed. Although the girl showed no evident hysterical peculiarities, I found that she had marked localised tenderness over those regions which Charcot has found to be unduly sensitive in hysterical subjects. Moreover, information which I subsequently obtained proved that at least one other member of her family was hysterical. For, while the patient was still in the hospital, her sister, aged 11, was admitted under Dr. Bristowe's care, suffering from a similar affection. The latter had been under me as an out-patient for fits, which were evidently hysterical; and, at the early age of eight years, she had had an attack of rhythmical spasm of the occipito-frontalis muscle, which lasted three months, and then got well. When I saw her in the hospital during the second attack, I found that the muscle was contracting pretty regularly 120 times per minute, and this condition was accompanied with sighing, yawning, slight movements of the tongue, partial loss of sensation on the left side, pain in the left hip and knee, and drawing up of the left leg so as to produce distinct shortening.

Other cases of spasm from peripheral injury are more complicated, but appear to be reflex in their origin, whether the pathological stimulus acts upon the nerves which exist in muscles and tendons or upon other afferent paths. The following is an example.

Case of Spasmodic Movements of the Jaw, the Floor of the Mouth, etc., due to Injury.—On November 20th, 1877, a boy, aged 10, came to St. Thomas's Hospital, on account of a peculiar affection which he had had for five days. There was nothing noteworthy in his family or personal history, except that he had suffered from incontinence of urine. Five days before coming to St. Thomas's, he had been in a playground where his schoolfellows were having a game of football. He happened to be in their way, and one of them took him by the back of the neck, and threw him to one side. His neck pained him at the time, but by the following day the pain was gone. In its place, however, was a peculiar affection, consisting of constant movements of the lower jaw and of the floor of the mouth, and they had increased since then. As he stood in front of me, I saw the lower jaw and the floor of the mouth descend in regular and frequently recurring jerks, and when the child's mouth was open it was seen that the tongue was likewise jerked spasmodically downwards and backwards. In addition to this, the larynx descended slightly, and the depressor muscles in the neck could be seen contracting. Each downward movement was accompanied by a sound like the croaking of a frog.

her the faradic nor the galvanic current applied from the nape neck to the parts below the jaw had the slightest effect on rious condition. I gave the child some bromide of potassium, at him away. Nine months after that I saw him, and he was but not quite well.

have already said, it is a matter for speculation how far such would give rise to spasm, if the nerve-centres were in a normal on. What is really developed in these cases is an involuntary muscular habit. We are all familiar with the ankle-clonus is set up sometimes in healthy people when sitting with the the ground, and the heels a little raised. If we start the voluntarily, or if it have occurred several times in succession in- trily, it may be difficult to stop it by an effort of the will, unless ition of the legs be altered. This is probably a physiological ntative of certain cases of muscular spasm which assume patho- dimensions.

e now come to the end of the remarks I have to make upon st two divisions of spasmodic affections in connection with nerve-disease, those, namely, which result from pathological in the cerebral motor mechanisms, on the one hand, and the notor mechanisms, on the other. The third division, and that st difficult of all, remains still to be dealt with, and is co- ve with what are called functional spasms. As I have already out, the first two divisions should, and we may hope some l, cover the whole field of spasmodic affections; and, by functional diseases under a separate heading, we publicly con- ignorance, and proclaim that there is a very long list of spas- ffections which have been carefully observed without success, s their pathology is concerned. In lectures professing to deal, r perfunctorily, with spasm, it would be impossible to pass by ce the class referred to. It remains, therefore, for me to con- w far these functional diseases are capable of explanation or ole classification.

III.—Functional Spasms.

esult of our consideration of those diseases which produce arieties of spasm, and which are represented by gross lesions ervous system, is, that a very large proportion must be put o the credit of the cerebral system of fibres, or pyra- ract. The spinal mechanisms are less prolific causes of ffections; but those spasmodic conditions which do occur ection with them have been considered under the heads: pheral motor nerves; (2) afferent nerves; (3) centres. It is sonable to suppose that, if functional spasms resemble those sult from gross lesions, they may admit a similar explana- n nerves and muscles which during life have been the seat of isorders, we may find no naked-eye or microscopic patholo- anges after death. But clinical observation shows that, so nction is concerned, marked changes have occurred. Now we at healthy function must depend upon fine molecular re- ents, which are at present a closed book to us; and we con- at, if molecular changes form the basis of healthy function, n that of pathological conditions also. If this be so, it is te to argue that the molecular changes in question might e same parts which are the usual seats of the grosser lesions, equently give rise to similar abnormalities of function; and anatomical classification which has already been attempted se of tangible disease, might serve also for those cases which esult of impalpable alterations in nerve and muscle. I pro- erefore, to consider shortly certain forms of functional spasm, all use the same divisions for classification which I have sed for grosser diseases.

functional disorders of the cerebral motor mechanism, or l tract, produce spasmodic conditions at all resembling those from gross disease? They do. In hysteria, not only does ia occur, but hemispasm, both fixed and mobile, is not uncom- here is this difference between the hysterical conditions and ich are seen in gross disease; the leg is affected most, the , and the face not at all. But the facts observed in gross where the leg is usually less affected than the arm, are pro- be explained mainly by the fact that the vessels which bleed quently, and interrupt the functions of the internal capsule, which are situated towards the anterior part of its motor that part, in fact, which contains the fibres controlling the arm. But apart from these points, the spasmodic contrac- he leg and arm are similar in the two conditions. In func- seases, there is simply removal of the voluntary impulses n health, travel down the pyramidal tract. The muscles es of the limbs remain practically healthy; and if rigidity be not too great, the tendon reflexes are increased. Fevers and other exhausting conditions, such, for instance, as that of the patient with anæmia to whom I have already referred, may give rise to increased reflexes, and even to clonus and rigidity. Moreover, absence of portions of the motor area of the cortex, such as is occasionally seen congenitally, is accompanied by non-development of the corresponding portion of the pyramidal tract, and gives rise to spastic conditions like those found in hemiplegia. Absence of the voluntary impulses, then, is enough to give rise to the phenomena in question; and certain cases of hysteria have died after long continued contraction of limbs, and the most careful examination with the microscope has failed to disclose any palpable pathological changes. Such a case is recorded by Dr. Bristowe in *Brain* for October, 1885. This case I often saw myself, and, as Dr. Bristowe remarks, "at the end of her two years, she seemed as well in general health as when she first came to the hospital; but she was suffering from headache, sickness, ophthalmoplegia externa, complete anæsthesia of the right side, with rigid paralysis of the arm and leg, and repeated hæmorrhages of both ears." Dr. Hadden made a most complete microscopical examination of the central nervous system in this case, but found no evidences of disease. As we know, however, that mere absence of the voluntary motor impulses along the pyramidal tract is sufficient to give rise to this condition, it is legitimate to conclude that suppression of the functions of this tract is the cause of functional hemispasm. We are still further supported in this view by cases like that just quoted, where there is at the same time clear evidence of suppression of the functions of the sensory area as well.

Clinical and pathological observation has shown that monospasms having similar characters may be produced by certain limited lesions of the motor convolutions; and, after what has already been said, it is not too much to assert that, when spasm limited to a leg or arm occurs in hysteria, it is due to suppression of the functions of the pyramidal tract, which in health controls the action of the affected member. In discussing the question of athetosis and other allied mobile spasms, we arrived at the conclusion that they were due to affections of the same tract of fibres, which were not severe enough to stop the passage of voluntary impulses. Now, similar conditions occur in hysteria, and may probably be explained in the same way. Weir Mitchell, in his work on *Nervous Diseases*, records cases of "hysterical motor ataxy," and of "hysterical athetosis." It appears probable that changes, ending in greater or less functional abeyance of the pyramidal tract, lie at the root of unilateral, and sometimes of bilateral, spasm, both in functional and in gross disease. The only difference is that, in the latter case, we can appreciate, by our present methods of investigation, the alterations which have been wrought, while, in the former, they are hidden from our view.

There is another class of functional spasmodic affections which are hardly represented among the forms of spasm due to gross lesions, and which, I believe, have their origin in suppression of the functions of certain portions of the pyramidal tract. I refer to those conditions which are sometimes termed "professional hyperkineses." They include histrionic spasm, writers' cramp, pianists' cramp, telegraphists' cramp, etc. The striking peculiarity of these affections is that, when a voluntary effort is made to perform the accustomed muscular acts, spasm of the muscles involved occurs, and prevents further efforts. Before this stage of the affection is reached, great fatigue often accompanies endeavours to work. In a considerable number of cases, at any rate, the muscles can be employed in other ways without difficulty. What has occurred is probably that, after long repeated acts of the same kind, that part of the pyramidal tract which is used becomes fatigued, and its functions are partly suppressed, so that a condition of "latent contracture" of the muscles, over the voluntary actions of which it presides, is developed; the lower centres are "let go," as Hughlings Jackson says, and are in a state of "hyperphysiological activity," just as the spinal centres of one side are in hemiplegia accompanied by slight rigidity.

In describing "latent contracture" in connection with hemiplegia from gross disease, Ross says: "The patient may perform all the simple movements of the limb, and probably with undiminished power; but when his attention is specially directed to the movements, as when he wishes to perform any manual operation requiring a little dexterity, the muscles instantly become rigid, the fingers are flexed on the palm, and the deformity, which was present during the period of fixed contracture, reappears." Surely this description suggests the true explanation of professional spasmodic affections, which present symptoms resembling very strikingly those which Ross pourtrays.

Erb divides the professional hyperkineses into spastic, tremulous, and paralytic. The tremulous cases are perhaps due to similar but slighter paralytic affections of the pyramidal tract, and the condition probably

resembles in kind, though not in degree, paralysis agitans. The pathology of the latter disease is not known, but those cases which one meets with where rigidity of limbs and exaggerated reflexes occur, suggest forcibly degeneration in the pyramidal tract as the physical basis of the affection. The paralytic variety of the professional hyperkineses is probably the result of extension of disease to the motor cells in the anterior cornua of the spinal cord, at any rate in those cases where marked atrophy occurs (see *Brain*, vol. vi, 233, a Case of Sawyers' Cramp, by G. V. Poore, M.D.).

I should remind my hearers, in passing, that the term pyramidal tract, as used here, includes not only fibres, but the motor cells of the cortex in which they originate.

2. We have seen that spasms of muscles resulting from gross disease of the pyramidal tract has its representative among functional diseases; let us now consider that which owes its origin to affections of peripheral motor nerves. Is it likewise represented among functional disorders? Actual gross pathological changes in motor nerves give rise to muscular spasm, as has already been pointed out, in two ways—the one direct, and the other indirect. In the latter case, certain muscles atrophy and disappear, and undergo cicatricial shortening, producing distortion; or else their opponents being left to act in their absence, give rise to abnormal positions of the limbs. Now, one of the striking peculiarities in functional nerve-disease is the absence of such degeneration and destruction of muscles. Hence we should not expect to find any functional spasms which were due to such indirect causes; nor do we, so far as I know. We also came to the conclusion that direct irritation of motor nerves is a very rare originator of spasm; and there is no reason to suppose that it is less rare as a cause of functional affections. Nerve-centres seem much more prone to functional disorder than nerve-fibres. I am not sure that the latter condition, originating in centres, may not so affect even peripheral nerves which are connected with them, as to give rise to symptoms which are found in gross disease only when peripheral nerves are involved. Dr. Norris, of Windsor, sent to me, for treatment in the hospital, a girl, aged 16, who had lost the use of her left hand for eighteen months. She was a strong, healthy girl, and free from evident hysterical tendencies. The affection commenced with swelling and blueness of the fingers, such as is seen in chilblains; and the hand was cold and numb. When she came to me, the hand was completely paralysed, and had a swollen puffy look; the skin was paler and smoother than that of the right hand, and the backs of the fingers far less wrinkled. The left hand was much more influenced by external conditions than the right, and rapidly became warm when covered, and cold when exposed. She suddenly recovered after the application of a blister to the wrist, but then lost power in the left leg. The latter also suddenly recovered power. But, although slight alterations, such as those which were observed in this patient, may occasionally occur in peripheral motor nerves in cases of functional disease, I am not aware that they give rise to muscular contraction.

3. Nor is there any proof that chronic spasm is produced by molecular changes of afferent nerves alone. Even in gross disease of an afferent nerve giving rise to reflex spasm, the lesion is often so trivial as to make it very probable that functional disorder of the centres is present as well, and is the main factor in the production of spasm.

When speaking of reflex spasm from gross disease, I pointed out certain cases of what appeared to be rhythmical spasm due to affections of tendons; and I cannot help thinking that this class has frequent representatives in functional diseases. But they are due more to the abnormal condition of the centres than to that of the peripheral nerves. There can be no question that one of the peculiarities of nerve-centres in hysteria is their abnormal irritability; so that slight afferent impressions give rise to muscular acts, which pass with great ease into neuro-muscular habits. Such a condition is well exemplified in cases due to imitation. The patient sees a certain form of muscular spasm, and the idea produces the same in her. For instance, a healthy girl, aged 17, came to my out-patient room complaining of involuntary movements in her right hand and tongue. On examination, it was seen that the thumb was rhythmically adducted, and there was simultaneous flexion of the fingers, most markedly of the index, which moved in such a way that she appeared to be rolling something between it and the thumb. At the same time, she was troubled by being suddenly unable to finish a sentence, owing to the tongue refusing to act properly. The girl worked in a confectioner's shop, where one of her comrades became affected with uncontrollable movements in the left hand and catching in her speech. After a short time, my patient became similarly affected.

The following is another case of suddenly developed neuro-muscular habits, though it originated in a somewhat different way. A healthy dark-haired girl aged 16, who had never had any illness, and had evident neurotic peculiarities, went out for a row on the Thames wi some friends in the summer of 1885. She rowed without much int mission for five hours, which was to her quite an unaccustom length of time for such recreation. She used to row every morning Wandsworth, where she was at school, but only for an hour at a tin About an hour after returning from this long row, her arms began twitch, and movements continued uninterruptedly, and remained o precisely similar kind up to December 29th, 1885, when Dr. Bristow under whose treatment she had been, very kindly asked me if should like to see her.

Both arms were the seat of similar and synchronous mov ments, occurring regularly about one hundred and sixty times minute. They consisted of rapid elevation and retraction of the a at the shoulder and of the scapula, partial flexion at the elbow, a slight extension of the wrist; in fact, they bore a very marked r semblance to the movements of the arms and hands in rowing, the e treme rapidity of the "stroke" making up for the limited extent the movements.

In these rhythmical contractions, it is not at all improbable that t slight stretching of the tendons of the affected muscles which natu ally results from the action of their antagonists gives rise to anoth contraction, and so on, for an indefinite number of times. Such condition, though much less marked, is sometimes seen when t spinal centres are cut off from connection with the cerebral cortex gross disease.

A case of caries of the cervical vertebræ was under my care St. Thomas's Hospital last summer, in which paraplegia, wi rigidity, had been present for five years. The legs were always flex at the knee and hip, but could be extended by continuous gent traction. As this was being performed, movements of flexion and e tension, which were involuntary, occurred. When the tendons the flexor muscles were stretched, the latter contracted, and, in doing, they put the extensor tendons on the stretch, and so caus their contraction.

Weir Mitchell has noticed these "alternate spasms" in hysteri in which, as he remarks, the action of the flexors calls the extens instantly into play, and this, in turn, summons the flexors in activity. "These spasmodic motions," says he, "were the m curious in the last case I saw, because of the general and profou paresis, which made every volitional effort excessively difficult. Such an absence of voluntary power, in the case of which Weir Mi chell speaks, shows that the functions of the cortical motor centr were in abeyance. Instances of alternating spasms are far from ra in hysteria, and probably owe their presence to excessive irritability the spinal centres, and the development of a habit through the int mediation of tendon-reflexes. "Saltatory spasm" is a good instan of this class of cases.

4. The fourth and final heading, under which we have to compa spasmodic conditions arising in connection with gross nerve-lesion with functional disorders, is disease of the spinal motor centres. W have already seen that tangible pathological alterations in these cel give rise to paralysis and subsequent atrophy of muscles, but we cou quote no facts to show that muscular spasm ever originates from su disease. Those impalpable molecular changes, which result fro the anatomical separation of the cerebral motor centres fro the spinal centres produce a condition of hyperphysiologic activity of the latter, to which many spastic conditions are du Does abnormal functional activity ever exist primarily in the spin centres and result in spasm? This is a question which is very difficu to answer. In the case of gross lesions which interrupt the continuity the fibres of the pyramidal tract, even where no actual spasm has resulte there exists a condition of excessive excitability of the spinal centre which gives rise, on the slightest provocation, to rigidity of muscle An injury, even of a trivial natnre, may, in such patients, produ contracture. Exactly the same state of things is found in hysteric subjects; and Charcot, in his lectures on nerve-disease, gives instanc of the most trifling injuries suddenly producing spasmodic conditio of limbs in such patients. But we must remember that persons ma have those peculiarities of their nervous system which are usual embraced under the term hysteria, without ever presenting strikin emotional or other tendencies which are wont to call attention to t existence of the disorder. The first evidence of the latter may be t sudden supervention of spasm from a very slight external injury. this condition of the spinal centres depends mainly upon the amou of cerebral control exerted over them by the functional activity of th pyramidal tract, it is evident that there must be infinite gradatio between the normal and abnormal. Indeed, it is impossible to giv any strict definition of health and disease. All we can say is, tha

ore cerebral control retires into the background, the more likely asmodic conditions to come to the fore.

s quite impossible to answer the question, whether hyperexcit- y of the spinal centres occurs in the absence of diminution of al influence to account for it; but it probably does. know that strychnine, in certain doses, produces an ex- e condition of the spinal centres, which Charcot has likened t which is seen in "latent contracture" due to gross lesions of ramidal tract, and to hysteria. In comparing strychninism with tter, Weir Mitchell says (*Lectures on Diseases of the Nervous a, especially in Women*, page 100), "Perhaps I shall, in a re, clear your minds as to the nature of what I mean by func- spasms if I recall to you the influence of strychnine in large such as you have seen given here many times. You will remember in certain spinal maladies, such as those of syphilitic birth, it habit first to give iodides in heavy doses, then to suspend for a time, and to give strychnine up to the limit of physio- endurance, that is to say, until I cause an approach to spasm. , for example, you give hypodermically the one-fifth to the ghth of a grain daily, the patient will have little or no annoy- f you are careful to insist that he remain at absolute rest in r two hours after each injection. If there be any tendency to e twitchings of the muscles, the will is competent to control unless—and this is the point I would make—the patient at- s to exercise. Should he do this, the effort results at once in ar movements of an inco-ordinate character, and in slight or rave spasms of the muscles employed. While at rest, there is vious trouble, but voluntary movement occasions spasms, which e offspring of the poison. They are, in a word, functional s, and would not be seen at all, with limited use of strychnine, not for the efforts of voluntary action." If, then, a substance ting in the blood can directly produce this condition of the centres, in which they may almost be said to be watching their unity to produce muscular contraction, it is not improbable olecular alterations may arise from other causes, and produce a excitable condition of these centres. We know, however, if anything, about the changes which act thus. What are phantom tumours of the abdomen, and sometimes of other may have some such origin; Weir Mitchell records one, in all the abdominal muscles had remained violently contracted ear. But whether this be the explanation of such cases or no, perphysiological activity, due to lack of cerebral control, which n the spinal centres of some subjects, is probably the principal n a very large number of tonic and clonic functional spasms.

e comparison which has been attempted between the results of isease on the one hand, and molecular or so-called functional ions on the other, the pyramidal tract stands prominently as the great offender in the production of muscular spasm. on is indirect, it is true, as it only looses the reins of the centres, which it should keep well in hand. Still, it rules the n. Spasm rarely ensues directly from injury or disease of eral motor nerves; and, although it frequently results from causes, it is very likely that the spinal centres are, in a con- le proportion of cases, more at fault than the afferent nerves. be thought somewhat curious that, in speaking of diminution oral control, the voluntary motor tract should alone have been l to as liable to suffer from depression of its functions. But y reason why it has been thus signalled out is, that these s have dealt with motor phenomena. The sensory functions of in, suffer, too, in a very striking manner, so that complete sthesia is far from a rare occurrence in hysteria, the loss of n being evident in the realm of the special senses, as well as which has to do with common sensation. And although at ht these functional defects appear to be confined to one side, investigations show that they are not. For, in cases of hemi- esia, both fields of vision are contracted, although that on the tic side is the more affected. Again, in cases where the loss tion appears to be confined to the sensory area, a careful com- of the muscular power on the two sides will show that this is

In a case of the kind which I lately saw, I found that on the sthetic side the patient could only reach 45 on the dyna- r scale, although this was the right side, while with the left hed 50. In such hysterical patients, it is probable that nerve- is deficient in all parts, and on both sides of the brain, h this deficiency is more marked on one side than the other, some portions of that side than in others. Considering how pyramidal tract develops in man, and what a high pitch of n it represents, it is not to be wondered at if it is one of the rts to suffer in the process of dissolution.

If we are right in considering deficient nerve-power, especially in the brain, as the condition which is at the root of functional nerve disease, the term neurasthenia, a product of modern times, would be a more suitable general title for such disorders, than the older term, hysteria. When we review the history of nerve-disease in families, we cannot but conclude that people are born with very different physical bases, both in their nervous and in their other systems. And no line can be drawn between those who are normally stable and enduring under unfavourable circumstances, and those who are liable to lose equilibrium. Some patients would remain perfectly well had they not accidentally met with some catastrophe; and then they fall into the category of hysterical patients. And yet there are many of their friends and acquaintances who are as liable to functional disorder as they are, and who yet may never have their weakness brought to light, owing to their not having been exposed to a sufficiently severe trial. Even small portions of nerve-centres may become hysterical, if I may be allowed to say so, as, for instance, in writers' cramp, pianists' cramp, and other professional hyperkineses. All that we know of this matter is, that functional nerve-disease, even in the case of apparent exceptions, such as spasm, is due to deficiency of nerve-power. How the condition is actually brought about we cannot tell. Some think the centres are starved by contraction of their nutrient vessels. It seems to me more likely that the nerve-centres are exhausted by their own action. Thus, sudden emotional excitement may bring on hysterical phenomena, indicating nerve-exhaustion, such as hemi-anæsthesia, paralysis, or spasm. It is important to remember, too, that exhaustion of one area seems to affect the whole system. This may indicate that the various differentiated centres draw nerve-force from some common supply. Considering the enormous amount of cells which are found in the cerebral grey matter, many without evident connections, is it going too far to suppose that a large number of these are factories for the production of nervous energy, which is necessary for the continuous and regular action of the highest centres, and which flows in increasing quantities towards those centres which are from time to time brought into action? Constant supply would mean constant power in all centres; and as the latter are all bound together so as to produce a physiological equilibrium, constant power would involve constant control of one by the other. Where the store of constantly produced force (represented, of course, by structural peculiarities) is by inheritance small, or where it has been exhausted by unnatural calls upon it, there would be insufficient to supply all the centres; and those to which the nerve-paths are most freely open by habit would command it, while others would be starved, and loss of equilibrium, or the natural control of one centre by the healthy action of others, would be the inevitable result. If we do not suppose any such reservoir of nerve-energy, how can we explain the exhaustion of all, by the excessive action of some, centres? Why is a person who has had excessive mental work less able for the time to do active bodily work? and why, when bodily fatigued, are we less ready to do intellectual work?

But I have gone, I fear, too far into a region of speculation, which it is hardly legitimate for me to have even entered with so small an equipment of facts. I shall, therefore, say no more, but bring these lectures to a conclusion by offering an apology for having chosen a subject which is so extensive in range, and at the same time so obscure and little understood, that my treatment of it must fall far short of that which is expected on occasions like the present.

ROYAL FREE HOSPITAL, GRAY'S-INN ROAD.—The Report read at the Forty-eighth Annual Meeting of the Governors of the Royal Free Hospital, Gray's Inn Road, stated that the receipts of the Institution from all sources during the year had amounted to £7,556. A handsome brass cot, with a suitable inscription, had been placed in the Milne Ward, as also a brass tablet had been erected in the large room used for meetings, in commemoration of Dr. Samuel Rabbeth, the senior resident medical officer of the institution during the previous year, who sacrificed his life in endeavouring to save that of a child upon whom he was performing the operation of tracheotomy, by sucking the tube in order to clear the child's throat. The expense of the cot was defrayed out of a fund raised by public subscription, and the tablet by subscription at the hospital. The total expenditure for the year had been £11,085, and to meet this the committee had been compelled to sell out £5,000 of consols. The number of in-patients admitted during the year had been 1,728, and the daily average in the wards 135. The number of out-patients treated was 21,853. Several changes had taken place in the medical staff, and some slight structural alterations had also been effected.

FURTHER OBSERVATIONS UPON THE "DERBYSHIRE NECK."

Read before the Midland Branch.

By WILLIAM WEBB, M.D., F.R.C.S.Eng. (by Exam.) and Edin.,
Late President of the Midland Branch of the British Medical Association.

In a paper read some years ago before the Midland Branch, I gave a tabulated statement of the various forms of bronchocele met with in a practice of many years in a goîtrous district. The close connection between the goîtrous mother and the cretin child was in that paper clearly established; but how to account for the connection remained then, as I believe it remains now, a matter of mystery and speculation. How is it that a sharp intelligent woman with a goître, married to a man of equal intelligence, has a child who becomes a cretin; whilst other children of the same parents are not wanting either in physical or mental power; or, to speak more definitely, how is it that one or two children in a family become dwarfed both in



mind and in body, having the development of the cerebro-spinal centres arrested, and assume the form of funny little creatures, even when beyond the period of puberty, looking prematurely old, and having thick bony skulls and expressionless faces? I have a family in my



recollection at this moment, consisting of a man and his wife (since dead) having a large fibrous goître. Both are of average mental capacity. They have some sharp children, and also two cretin women, their offspring. These latter, in age between 20 and 35, are stunted in growth, and have but limited powers of understanding, or even of going to and fro, except in the shuffling gait of the paralytic. The sit from morning till night, nursing a doll, or other toy, and compor ing themselves as very little children do, but with only a fraction part of their intelligence. Here is a representation of one of the curious little creatures.

This is a case for "collective investigation;" but the investigati must be quick, or before it comes, bronchocele and cretinism, as shall hereafter explain, will be gone.

In discussing the various plans of treatment for the lessening removal of the enlarged thyroid body, I mentioned, in the paper befo alluded to, the very limited experience I had had in the treatme of fibrous goître by the injection into its substance of the tincture iodine, a practice which I learned from a very able paper read King's College some years ago by Dr. Morell Mackenzie. I have no used this plan of treatment in sixteen cases, and not, I think, wit any very splendid results—results in no way superior to the ordina treatment by the old iodine paint applied externally, and the intern administration of either the iodide of potassium or the iodide of iro Thus, of these sixteen cases, in seven there was complete reductio of the gland after using injections once a week or a fortnight, for time varying from two to eighteen months. In five, there was son lessening of the mass; but the patients became tired of it, and di continued the treatment. In two, no marked benefit was observe In two others, the inflammation brought on by the injection assume the suppurative form, and ended in abscess; and one of these patient a woman in a respectable position in life, nearly succumbed to pressu upon the right recurrent nerve, paralysing on that side the abducto of the vocal cord. The distress and dyspnœa were of such urgency to necessitate at an early period an incision into the substance of th gland, and evacuation of the pus, which gave immediate relief. The is reason to believe that the trouble and distress in these two cas might have been prevented by closer attention on my own par Either the syringe-point was not forced to a depth sufficient into th fibrous mass, and a drop of the tincture of iodine escaped into th connective tissue between the gland and the skin, or, perhaps, i removing the point of the syringe, adequate pressure was not ma upon the perforation through which the fluid was injected, and so drop or two of it in this way entered the cellular tissue.

I know that the injection of the cysts, in the cystic form of bro chocele, with a strong solution of perchloride of iron, has bee practised by some authorities with varied success. I have nev attempted this practice, because I feared the consequences of an great lateral or median pressure, which might, as I have known it i a case of malignant disease of the thyroid gland, completely paralyse th abductors, and close the glottis. Years ago I have several times before the revival of ovariotomy by Clay, of Manchester, passed seton into an ovarian tumour, and brought out the folds of silk agai through the abdominal wall, removing it when complete adhesion between the cyst and the wall of the abdomen, had been establishe As soon as all acute inflammatory symptoms had passed away, a solu tion of perchloride of iron, or the tincture of iodine, was injected int the cyst, generally with the effect, after several injections, at interval of a fortnight or three weeks, of completely obliterating it. It i manifestly a different thing to inject an ovarian cyst, and to produc acute inflammation in the thyroid gland; and I cannot agree with writer in the British Medical Journal, a little time ago, who said that such operations are unattended with risk. There is one circum stance in connection with enlargement of the thyroid gland which i especially worthy of note; and that is, that the distress in breathin is in no respect proportionate to the size of the tumour. If the swel ling be in the middle line, at or near the isthmus of the gland, an be tightly compressed by the fasciæ of the neck, so that the wind pipe or larynx cannot work with freedom, or there is pressure upo one or both of the recurrent nerves, producing more or less paralysi of the abductors, then the distress and dyspnœa are very marked If, on the other hand, the tumour be ever so large, and it become necessity even to support it with a handkerchief or bandage, pr vided it is free and able to extend itself in a downward direction t wards the sternum, distress is seldom complained of, and the risk t the patient is minimised.

I have tried many other plans of treatment besides that of injec tion, and have not found any better than that used a generation ago namely, the combined internal and external use of iodine. The tumou is painted daily with a solution of iodine, just half as strong again a the ordinary tincture, whilst the patient takes five grains of iodide o potassium at first (to be gradually increased to a scruple, in the absenc of iodism), twice or thrice daily, in a tumbler of water. I think it i Mr. Jonathan Hutchinson who recommends the iodide to be given i this way, and without combination with any other drug, in syphiliti

; and its effects have certainly seemed to be more pronounced given uncombined and largely diluted with water, in thyroid ement. In cases where the iodide of potassium is not well borne, titute for it a pill of the iodide of iron.

question is often put to me, as it doubtless is to other practi-, by the sufferers from recent bronchocele, whether it is well ove from a goîtrous district to another in which goître is com-ely unknown; and the advice I generally give is that, if there ascertained hereditary taint, that is, if the mother or grand- have not been goîtrous, and especially if the woman be and have suffered only since coming to live in the district, it to select another residence, if this can be managed without in-ience; whereas, in those who have suffered long from broncho-nd there is clear hereditary transmission of the hypertrophy, ecially if the character of the swelling have become changed to laginous, bony, or calcareous mass, then there is no real advan-moving from the district.

ve recently seen the benefit of change of place, coupled with ntinued treatment, in the case of a lady, who first came under ice in February, 1884. She had been married only two years, that time only had lived in Derbyshire. Since her marriage l noticed (but she could not tell the precise time) a small swel-each side of the isthmus of the gland. She came to me in istress, and was very nervous and excited about the swelling, han its small size seemed to justify. The pulse was quick, and balls remarkably prominent; the face was flushed, the area of car-lness increased, and a murmur, synchronous with the first sound heart, was heard at its base. I had no hesitation in advising (es- as it could be afforded) a change of residence for this patient. first went to a village near Derby, from a hilly part of the , and now she has gone to live about forty miles farther south, from the district in which she was born and lived during od; and when she last came to see me (April, 1885), after hav-en the perchloride of iron in large doses for more than twelve , and painted the swelling with iodine tincture periodically that period, although the goître had not quite disappeared, as an absence of all nervous excitement or distress, the eyeballs longer prominent, and the cardiac murmur was gone.

hthalmic goître is not a very common affection in Derbyshire, s I can judge, yet other practitioners may possibly have seen it than I have. When I last spoke to the Branch upon the , I had noted thirteen cases. I have since seen only three, my own practice, and one under the care of my colleague, Mr. , at the Wirksworth Hospital.

re apparently as far as ever from any clear demonstrative proof eal cause of this curious hypertrophy, and shall be, I expect, true functions of the thyroid gland have been discovered. rs still cling to the theory that it is, in some hitherto unex- way, associated with the water drunk. If so, how is it that ease is confined almost exclusively to women, for men have with them the luxury of a thyroid gland? Snow-water, rain- magnesia-water, water impregnated with calcium carbonate and e, have each had their advocates for the causation of goître; last, the sulphide of iron in the drinking-water is asserted by ger to be causative in some way of this affection. Years ago ssigned to the presence of large tracts of magnesian limestone district, because goître appeared to be prevalent wherever such eared the surface; then the carboniferous limestone theory was ascendant, and took half the credit. These theories may at e be proved to be fallacious, because goître is seen (and was rty years ago much more than it is now) equally common upon edale rocks and millstone-grit measures of Derbyshire, as it is e limestone formations; moreover, some places built upon the es derive their water-supplies from the surrounding Yoredale rom which they are conveyed to the inhabitants in a state of tive purity, and the water coming from these springs contains n the usual proportion of lime salts. The town of Wirksworth, nce, is built upon the carboniferous limestone, which is, for st part, drained of its water by the Meerbrook Sough, which, r to relieve the lead-mines in the valley of Wirksworth of mpties itself into the Derwent, not far from the town of Crom- that limestone-water is not drunk here. The water used is in iron pipes from the millstone-grit measures on the east side town, from which it issues in springs of remarkable purity. er has been analysed several times. This is what Dr. Ber- ys of it: "It is beautifully clear and sparkling, very soft and e for every household purpose. It contains a large amount of acid, to which the briskness of the water is owing. On fur- restigation, I find in one gallon:

	Grains.		Grains.
Sulphate of lime	0.6500	Silicia	0.0080
Bicarbonate of lime	2.4480	Carbonate of potassa	Traces
Bicarbonate of magnesia ..	0.1370	Organic matter	1.1210
Bicarbonate of iron	0.0090	Free carbonic acid	7.2160
Carbonate of soda	Traces	Its specific gravity is	1.00014
Chloride of sodium	0.0258		

"In conclusion, it is just such a water as one would expect from the millstone-grit, and I have no hesitation in saying that no town in England is supplied with one of better quality."

The urban sanitary authority has lately had the water analysed again, and the report of another analyst corresponds very closely with that of Bernays made many years ago. Here is a water, then, containing a very small quantity of lime-salts, and only an infinitesimal proportion of iron; and yet the district, thirty years ago, was unmistakably goîtrous. It is much less so now, from causes which admit of easy explanation, the water drunk coming from the same springs now as then. The most recent theory, as far as I know, is that of St. Lager, who attributes the presence of endemic goître in some parts of France to the impregnation of the drinking-water with iron sulphide, an insoluble salt, but readily converted into a soluble sulphate; and in this way he believes it impregnates the system, and is a cause of bronchocele. Were this theory tenable, it would follow, one would think, that whenever we give our women patients sulphate of iron, which is often done in much larger doses than could be got from the drinking-waters of France, and often for considerable periods, we should produce in them enlargement of the thyroid gland; but this is not so in my experience, or in the experience of other practitioners in the county of Derby to whom I have spoken upon the subject. St. Lager says, in his interesting treatise on *Bronchocele*, that he has produced enlarged thyroid in mice by giving to them for months iron sulphate. I am naturally sceptical about the production of bronchocele by iron, because it does not appear that this hypertrophy is more common in the coal or shale districts of Derbyshire, where the inhabitants get their water from the shale, which contains more iron than is found in the waters obtained from the other formations.

1. As far as I have been able to ascertain, enlargement of the thyroid gland begins, in at least 90 per cent. of those affected, at or about the period of puberty, when the vascular system is brought into greater activity for the development of special functions. This gland, being made up of innumerable vesicles, bound together by connective tissue, and surrounded by networks of capillaries, deriving their blood-supply from branches of the carotid, subclavian, and innominate arteries, is necessarily a highly vascular gland; and, heredity being present, it is possible that the increased blood-supply at the period of puberty may cause in women predisposed to this hypertrophy, in some cases, increased cell-formation in the connective tissue of the gland, culminating in the development of the fibrous form of the hypertrophy; or in others, enlargement of one or more vesicles, ending in the cystic form of the disease. This is a theory of my own, and may be taken for what it is worth.

My friend, Professor Furneaux Jordan (*Surgical Inquiries*, p. 16), of Birmingham, believes that the natural function of the thyroid gland is supplementary to respiration, and that, where respiration is impeded from any cause, the thyroid gland increases in functional activity. During sleep, during pregnancy, while carrying burdens, during any mechanical restraint in breathing, the thyroid gland enlarges. It enlarges also in diseases which impede respiration if they be not attended by wasting, and by diminution of the totality of the blood. He is of opinion that goître is a true hypertrophy of the thyroid gland from the excessive performance of functional duty. This theory explains to some extent the occurrence of bronchocele when the girl is approaching womanhood; and also those cases which happen in women who get their bread as workers in the cotton-mills of Derbyshire, and who have frequently to walk two, three, or even four miles, over steep hills to their work before six o'clock in a morning, then to live in a flocculent atmosphere, working all the time, for ten hours every day, and afterwards to tramp over the same ground to their homes at night.

2. Enlargement of the thyroid gland is for the most part seen in women belonging to the working classes, although not altogether confined to them. It is also common in those whose ancestors have intermarried.

3. It is found equally amongst the Yoredale rocks and limestone formations, and does not appear to be confined to those who drink any special character of water.

4. It is much less prevalent now than it was thirty years ago, and yet the women drink the same waters. They get better wages, which means better and more nutritious food. The railway communication, which did not then connect the goîtrous districts with the county-

town, has now given the people opportunities and means to pay visits to other parts, of which they constantly avail themselves; consequently, there has been less intermarriage, and less breeding in-and-in; and I am decidedly of opinion that, if the decrease of bronchocele take place in the same ratio as it has done in the last generation, ere another has passed away, endemic goître will, in so far as Derbyshire is concerned, have almost disappeared.

THE TUNING-FORK IN DIAGNOSIS OF LESIONS OF THE INTERNAL EAR.

By P. McBRIDE, M.D., F.R.C.P.E., F.R.S.E.,
Surgeon to the Ear and Throat Department of the Edinburgh Royal Infirmary, and Lecturer on Diseases of the Ear and Throat, Edinburgh School of Medicine.

Until quite recently, it was—and by many aural surgeons it even now is—an accepted theory that, if the tuning-fork be heard by bone-conduction better in the deaf or deafer ear, the labyrinth is intact. To those who have followed the otological literature of the last few years, it must be known that this rule is by no means without exceptions. Twelve years ago, or more, Cassells, of Glasgow, published a case in which, after exfoliation of the left cochlea, the hearing power actually improved, and all the notes of the piano were perceived. More lately, Schwartze and Christenneck had under their care a patient who, in spite of the loss of the right cochlea, continued to hear the tuning-fork (C) by bone-conduction louder in the affected ear. Jacobson, too, has recorded a case in which, notwithstanding suppurative disorganisation of the cochlea, hearing by bone-conduction was retained until just before death. The last contribution towards this subject is by Gruber, who records an instance of exfoliation of the two upper convolutions of the cochlea, associated with only partial loss of hearing on the affected side and retained bone-conduction. Schwartze, in his recently published work, accepts frankly the position which alone is tenable—assuming, as we have every reason and right to assume, that these observations are accurate. According to this author, retained bone-conduction only proves the trunk of the auditory nerve and its centre to be sound, but does not necessarily imply a healthy condition of the labyrinth. But, even with this evidence before them, there may probably be found those who, on the ground that such facts are contrary to physiological common sense, will refuse them the consideration they deserve in clinical investigation.

The following is a brief record of a case which recently came under my observation. Mr. —— some months since fell from a height, striking the right temporo-parietal region. He was stunned, and for two days could not stand. During this time, there was paresis of the right arm and leg. Giddiness was at first intense, and is still troublesome. His right ear has been deaf ever since. The tuning-fork (the large fork used by Politzer, furnished with brass clamps, and vibrating 512 per second), placed on the middle line of the forehead, was better heard in the right ear, and was also distinctly perceived from the mastoid of the same side. The same remarks also apply to a small fork of higher pitch. The giddiness is increased by turning from right to left, but not from left to right. The right ear is quite deaf, and even words spoken loudly through a conversation-tube are not heard. The drum-membrane on the right side was slightly depressed, but moved freely outwards on Valsalva's experiment—needless to say, without improving the hearing power.

Taking all the facts of this case together, we cannot but arrive at the conclusion that the labyrinth of the affected side was injured, either by concussion or fracture; and yet the hearing by bone-conduction was not only as good as, but even better than, that of the healthy ear. It did at first occur to me that a rupture in the continuity of the chain of ossicles might account for the symptoms, but the persistent giddiness could not be explained on this hypothesis.

This case, then, taken together with the evidence before adduced, proves to my mind that better hearing by bone-conduction is by no means certain proof of a healthy condition of the internal ear. It is well known and admitted that the converse proposition is also subject to numerous exceptions. Thus we meet with cases of chronic middle-ear catarrh, in which bone-conduction is interfered with, and which are readily amenable to treatment. In acute inflammation of the tympanic cavity, the same state of matters is often produced.

To discuss this matter in all its bearings would occupy too much space, and would, I feel, in the present state of our knowledge, be of but slight value. I cannot help, however, before I conclude, calling the attention of those who are interested in otology, to the fact that the time-honoured tuning-fork test must now be considered uncertain, whether in the positive or negative sense. No doubt it is a valuable aid to diagnosis, so far as we at present know, in the majority of cases; but then arises the question whether the number of exceptions may not increase more than we expect, as our knowledge augments.

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DELUSIONS, THE RESULT OF INTESTINAL ACCUMULATIONS.

By A. E. BRIDGER, M.D., B.Sc. Paris, etc.

I propose to bring under notice the following case of mental delusion dependent on intestinal accumulation, and its resulting reflex derangement.

My patient, a lady, about 50 years of age, was brought to me with the following history. She had been married for twenty-nine years and had brought up a family of six children, all of whom were healthy; no miscarriages. Her general health had been remarkably good all through her married life; she had been a good wife, and an exemplary mother. She had passed the change of life without any marked nerve-derangement. Her family-history was good; no traces were discoverable in it of mental derangement, or of serious hereditary disease.

About a year ago, she began to lose appetite and flesh; her skin became harsh, dry, and yellowish in tinge; her digestive powers became greatly impaired; once or twice there had been some vomiting of blood, and a troublesome dry cough had developed itself. These symptoms led, on the part of her family, to a fear of consumption, which fear was dispelled by a medical examination. Remedies, however, failed to relieve her symptoms; and, about eight months ago mental delusions began to show themselves. These at first took place invariably at night, and were, from first to last, of one class only—namely, that connected with taste and smell.

At first, two or three times a week, and of late nightly, the patient would complain that some one was burning sulphur or phosphorus in the room. She would get up frequently to search the room for a man who, she supposed, was smoking. She became impressed with the idea that her husband and children produced these smells, in order to annoy her, and, if possible, to kill her; and twice she had left the house, and remained away for days, in order to rid herself of her supposed persecutors. The smells, however, followed her wherever she went, and she came to believe herself the victim of a wide-spread conspiracy. About this time she began to refuse food, alleging that it contained poison, and that she could distinctly taste arsenic and sulphur in everything that was prepared for her. She accused the grocer, the milkman, the baker, and the butcher, of attempts to poison her, and communicated her suspicions to the police.

When brought to me, her condition was as follows. She was much emaciated, and disinclined to talk, had a stupid and spiritless aspect, a cachectic look of the skin, yellowish conjunctivæ, etc. She made no special complaint, other than of the conduct of her friends. The bowels were said to be regular. The urine was thick, depositing lithates in abundance; no albumen or sugar. Examination of the special senses and of the chest resulted negatively. Inquiries about the abdomen elicited the fact that a sense of weight and of movement had latterly been much complained of, and I determined on making an examination of the part. On inspection, a curious state of matters became apparent. The position of the transverse and descending colon was occupied by a large elevated ridge, and the movements of the smaller intestine were distinctly visible through the thin abdominal walls.

It is scarcely necessary to add that the elevated ridge was produced by an immense collection of hardened fæces, which it took several days, with the aid of spoon-handles, injections of glycerine, castor-oil, hot water, and the free use of mild aperients, to remove. The first scybalum passed was so large and hard, that it actually once seriously occurred to me to place the patient under chloroform, and extract it with Simpson's short forceps.

It is now six weeks since the accumulations were removed, and in that time the patient has increased wonderfully in weight. She eats

id sleeps well, and, most satisfactory of all, not a trace of her is remains. Her friends declare that she is in better mental vsical health than they have known her to be for the last ten

IYSITIS AFFECTING THE LONG BONES OF THE HAND.

Y JAMES W. SMITH, L.R.C.P.Lond., M.R.C.S.Eng.,
Surgeon to the Doncaster Infirmary.

llowing case, affording, as it does, a contribution to the clinical of bone-disease, is worthy of record. Moreover, very little, if lusion is made to such cases in the ordinary text-books.

, aged 18, came under treatment in April, 1880, for disease of ximal phalanx of the middle finger of the left hand. The bone arged at its proximal extremity, tender and painful, but with- redness of the skin. The joint was quite free, the tendons t implicated, and movement of the finger did not increase the The swelling of the bone was most marked on the palmar The appearance was indicative of great periosteal thickening one. Various remedies were used, including the local appli- f preparations of iodine, and the internal administration of f iron. These measures had apparently the effect of retard- disease, for it made no further progress for some time. The ntinued enlarged as before, but the pain diminished, and, as as no impediment to the use of the hand, the patient ceased to In February, 1882, he again came under treatment for the . The thickening of the bone had increased, the skin was red, e was, in addition, distinct evidence of fluctuation. I made ion, and then discovered that the case was one of central the base of the phalanx. The probe passed into a cavity in of the bone, which was distended, blown out as it were. I out the cavity well, and swabbed it out with nitric acid, put d on a splint, and resumed the iodide of iron internally. There ttempt at repair, however; and, as the caries was extending up t of the phalanx, and the joint between it and the metacarpal s becoming involved, and my patient's general health was g, I advised amputation of the finger ; this I did in August,

round healed rapidly, and my patient resumed his employ- Two years afterwards, in May, 1884, he called upon me again, g from a similar affection of the metacarpal bone of the middle f the opposite hand, the right. The mischief was confined to al extremity, or epiphysis, of the bone, which presented the mptoms as those he had experienced in the phalanx of the nd, with the exception that the bone was not so much en- The disease, in spite of treatment, very slowly but steadily ed, fluctuation manifested itself, and I incised on October 84. The probe passed into a considerable cavity in the head one. The case was like the other—central caries. The entire the bone was hollowed out, and a very thin partition separated e from the joint, which, however, was unaffected. The patient v in a much better state of health than on the previous occa- d the cavity in the bone speedily filled up, and cicatrised. In y, 1885, he came to me again with a renewal of mischief. A abscess was forming in the recently cicatrised tissue. This, in se, was opened, when the probe again impinged on dead bone. plan of treatment, and a few weeks' residence at the seaside, in the complete healing of this sinus, leaving an indentation, shortening of the finger, and no impairment of the efficiency and. He has since remained perfectly well.

oints of interest in the case are the following.

e disease had its origin in the epiphyses or epiphysal carti- e disease manifesting itself in the proximal end of the phalanx, distal end of the metacarpal bone, the situations respectively piphysal cartilages.

e disease affected a symmetrical character ; for, although this absolute, in the one instance a phalanx, and in the metacarpal bone being attacked, yet it was sufficient to be l as an essential feature of the disease.

mplete recovery took place in the metacarpal bone, without any ng or impairment of the usefulness of the finger.

was no evidence of syphilis, inherited or acquired, and the embers of the family are quite healthy. He gave an obscure of injury.

ase bears additional testimony to the frequency with which ease commences in the epiphysal line, or in the epiphysis

THE TREATMENT OF HÆMOPTYSIS.

By H. T. BATCHELOR, M.R.C.S., L.R.C.P., L.S.A.,
Queenstown, Cape Colony.

In considering the treatment of hæmoptysis, one naturally looks for the cause ; but I think in the cause ought to be included the liability to bleed in the individual, that is, the constitutional liability, as well as the reason why he bleeds from the lungs. Bleeding is by no means an unfamiliar accident to which mankind is liable; but if we could select our bleeding ground, it would not be the lungs. But bleeding in itself ought to be regarded chiefly as an expression of a diathesis, whether it come from the nose, lungs, stomach, rectum, kidneys, or uterus ; an expression of a diathesis aggravated probably by some error in diet or other temporary cause. I am not now referring to bleeding from ulcerated lungs or stomachs, etc., where a vessel is opened, and the treatment would best be met by a ligature if we could only apply it, but to the hæmorrhage which occurs suddenly in a person in good health, and from an apparently healthy mucous membrane. The diathesis which underlies the tendency to bleed has, by Mr. Jonathan Hutchinson, been shown to be the gouty. Fothergill's definition of gout is : "Gout is hepatic reversion—the formation of primitive urine products by a mammalian liver." If these two statements be accepted as correct, it follows that bleeding is due to functional derangement of the liver, or, to put it differently, dissolution from its normal and healthy development or imperfect evolution.

Now, I firmly believe that the tendency to bleed occurs with the gouty diathesis ; and that the excess of uric acid in the blood, and the locality of the bleeding, is due to individual peculiarities. Most people in youth inheriting this diathesis bleed from the nose ; later on in life, from the rectum or uterus ; some of them from the lungs. Now those who do so from the lungs need not necessarily descend from phthisical ancestors ; a badly formed thorax, interfering with due expansion of the lungs, may be a sufficient cause. But, apart from such considerations, and to come to treatment, I think such people are best cared for by being dieted. Alcohol and meat are pernicious. But, supposing such a person has an hæmoptysis, saline purgatives, diuretics, and diaphoretics, will best meet the case. But as these people are always very nervous, it is necessary to administer a nervine tonic. Opium may also be given ; cannabis Indica is almost better. I quite agree with Dr. Samuel West in his remarks on profuse hæmoptysis published in the British Medical Journal of January 16th, 1886.

It is to my mind often amusing to read the experience of some as to the value of a particular remedy in the treatment of bleeding. It seems to be forgotten that bleeding naturally ceases when the vascular system is adequately reduced. This is Nature's method of saving the patient, and we cannot do better than imitate her. Bleeding, therefore, or dry cupping, or depressants, ought to be effectual aids as applied by us. Certainly, astringents imbibed cannot hold out much prospect of doing good. And as iron and opium also do not agree with these gouty people if continuously used, much care ought to be exercised in prescribing them.

Iron and digitalis I believe to be a particularly obnoxious combination. A man has an hæmoptysis, we will say, and he is given such a mixture. It is supposed that it stops the bleeding, whereas I believe the bleeding has stopped naturally. He continues with the mixture to prevent a recurrence, with frequently unhappy results. The iron impedes still more the already imperfectly acting liver, and the digitalis increases the tension in the already wounded vessel. It follows, then, that a recurrence may be naturally expected. Then, as to the bleeding from the lungs, the danger does not lie in the amount lost, but in the irritative changes it induces in the lung-substance. Now, it is believed that the cough must be allayed (and, to do this, opium is usually given), in order to prevent more bleeding. If it be accepted as true that the bleeding naturally tends to cease, I think we ought not to do anything to interfere with the expectoration of the effused blood. I am certainly of opinion that, if it be necessary to give opium continuously, in order to stop more bleeding, although the patient may not die of hæmoptysis, he assuredly will eventually of lung-inflammation. To give opium is truly a barbarous way of treating lung-affections. In order to explain an apparent discrepancy with a former statement, when I said that opium might be given to allay the vascular and nervous tumult, I wish to say that a single dose may be given for this object, but the continuous administration is hurtful. As I said before, I believe cannabis Indica the better of the two for this purpose.

A CASE OF RHINOLITH.

By MATTHEW D. MORIARTY, M.B., F.R.C.S.I.,
Surgeon-Major, Indian Medical Department.

It would appear that there are not more than forty-five cases of rhinolith on record (British Medical Journal, pp. 841 and 1164, vol. ii of 1885). I have recently come across a well marked instance. The patient, a Mohammedan female, aged 24, and otherwise in sound health, had suffered from a discharge from the right nostril for six years; the nostril gradually became obstructed, and for two years had been completely blocked. Latterly the discharge had become offensive, with occasional slight bleedings. The right side of her nose, with the adjoining cheek and upper lips, were swollen, slightly reddened, and tender. A thin offensive discharge flowed from the right nostril, the margins of which were red and irritable; the septum nasi was markedly deflected to the left; the mucous membrane of the right nostril was much swollen, congested and thickened, so as to almost completely close the anterior naris. Further examination disclosed two points of what appeared to be dead bone, one in the position of the anterior edge of the inferior turbinated bone, the other in the situation of the nasal spine; they appeared to be firmly fixed. A few days syringing with perchloride of mercury lotion removed the fœtor, and reduced the swelling considerably. With a dressing-forceps, I then seized the end of the supposed sequestrum on the outer side, when, to my surprise, it crumbled away. I tried a second time, with the same result. The portions removed were exactly like bits of a phosphatic vesical calculus after litholapaxy. The nature of the case was now clear; the rhinolith filled the whole nostril, hidden from view, except at two small points, by the swollen mucous membrane.

Taking a strong fenestrated nasal polypus-forceps, I gradually broke down the front of the stone, till finally, getting the forceps well on, I crushed the whole mass, breaking it into three large pieces, which were removed in succession. In the crushing, considerable force was used. The bleeding was slight and easily checked. She complained of a good deal of pain in her upper front teeth, especially when the large pieces were being extracted.

After the last fragment had been removed, she expelled from the nostril a quantity of greyish-white putty-like material, not unlike brain-matter, finishing with a huge plug, which evidently had occupied the posterior nares.

The nose was well syringed with solution of perchloride of mercury, (1 in 1,000). She went home after two days; the external swelling had then almost entirely disappeared. The swelling of the mucous membrane had much subsided. There was no discharge or fœtor; the nostril was free; the deflection of the septum was unaltered.

The stone (dried) weighs exactly two drachms. There is no trace of foreign body. A certain amount of concentric lamination is apparent. A regular analysis has not yet been made. Doubtless the calculus is composed chiefly of phosphates, with perhaps a blood-clot for a starting-point.

SURGICAL MEMORANDA.

THE BEST METHOD OF REMOVING FOREIGN BODIES FROM THE EARS.

I quote the following passage from an interesting pamphlet by Mr. Ernest Maylard. He is speaking of the importance of museum illustrations of the anatomy of the ear, in order that students may know the curves of the external auditory canal, and thus be made competent for the every-day duties of practice. He writes: "How many unfortunate patients have had the membrana tympani ruptured by pushing in a foreign body in the fruitless endeavour to pull it out, from ignorance of the curves and direction of the external auditory canal. I know of one case, which came immediately beneath my notice, where death occurred indirectly from the inflammation set up by a foreign body in the ear. The body was extracted, but not until the evils of previous delay and vain endeavours at removal had rendered the patient's recovery hopeless. But instances too numerous must exist in the knowledge of every surgeon."

My own experience, like Mr. Maylard's, comprises more than one case of this kind; and, whilst I quite agree with him as to the importance of good anatomical knowledge, I am yet induced, by his statements of recent experience, to try to draw attention to a method of treatment which I long ago advocated, and which is so simple and efficient that it almost supersedes the need of knowledge. It is the use of a silver wire-loop, instead of either forceps or scoop. I have never, since I was a student, used either of the latter instruments; and, for the purpose of extracting hard bodies from the ear, I hold that they are most dangerous. With a flexible silver wire-loop, or, if need be, with two placed at right angles, I have repeatedly succeeded when all other means had failed. Thus, not only is the loop quite devoid of danger, but it is both more easy of use and far more efficient than any other method. It is impossible that it can injure the membrana tympani, or the walls of the canal. The method of procedure is, after having put the patient under an anæsthetic, to introduce the loop gently into the ear, and turn it about until it is believed to have got behind the foreign body. This it will often do at once; but sometimes a little patience is necessary. In one instance, I took out a piece of heavy lead in this way with very little trouble, using two loops at right angles with each other. The simplicity, safety, and efficiency of the method make it desirable that it should be better known.

Jonathan Hutchinson, F.R.S.

CLINICAL MEMORANDA.

AN ANOMALOUS CASE OF RENAL CALCULUS.

Calculi may exist for long, not only in the pelvis but in the structure of the kidney, without producing any definite manifestation of their presence; and often they are discovered, on *post mortem* examination in cases in which they were wholly unsuspected during life. Some months ago a young lady, aged 24, consulted me, complaining of aching pain in the right lumbar region, from which she had suffered more or less for six years. During the last two years she had been subject to paroxysmal attacks of severe pain in the same region, shooting across the abdomen towards the left groin, associated with vomiting and occasional rigors. Simultaneously with the recurrence of these attacks of pain, appeared a swelling in the situation of the right kidney. For four or five hours prior to the paroxysm, the patient usually experienced an aching in the front of both thighs, but especially the right. On three separate occasions, I had the opportunity of examining the patient whilst thus suffering. A cystic swelling, about the size of a small cocoa-nut, was distinctly felt in the region of the right kidney, the lower and inner margin of which was always more or less sharply defined. It could be readily palpated by the fingers, employed in the manner usual to elicit any change in the renal organ, but was manifestly tender to the touch. There was marked increase of the area of normal kidney-dulness, whilst, anteriorly, there was a limited though appreciable area of resonance between the liver-dulness and that over the fluctuating tumour. As soon as the paroxysmal pain ceased, which it usually did in twenty-four or thirty-six hours, the swelling gradually disappeared, and the patient was again able to get about as usual. Twelve hours after the cessation of the attack, the right kidney could be felt, apparently normal in size, and no trace of the swelling could be detected. As the tumour disappears, there is no appreciable change in the amount of urine passed. The urine is acid and somewhat thick; it contains a few apparently inflammatory corpuscles, and spindle-celled flat epithelium, with no trace of degeneration; a fact strongly in favour of the supposition of the presence of a calculus, and the removal of the epithelium from the pelvis of the kidney by attrition.

James Oliver, M.B.Ed., M.R.C.S.Lond.,
Assistant-Physician to the Hospital for Women, London.

THE DIAGNOSIS OF CANCER.

In a communication to the Journal of March 20th on the diagnosis of cancer of the uterus, Dr. Handford directs attention to the fact 'that negative results of the microscopic examination of scrapings or small fragments by no means disprove the malignant nature of the growth." In the case recorded by Dr. Handford, the fragment removed for microscopic examination showed mainly the structure of granulation-tissue.

I have witnessed the same occurrence in cases of carcinomatous disease of the larynx, and have recorded one notable example of it in a work recently published by me (*A Practical Treatise on the Sputum*. Edinburgh: W. and A. K. Johnston). In this case, which proved to be of a highly malignant nature, the laryngoscopic appearances during the initial stages closely resembled those of simple chronic laryngitis. Granulation-looking growths appeared from time to time on the surface of the neoplasm without marked ulceration, and were frequently expectorated. Their microscopic examination showed mainly the

ure of granulation or inflammatory tissue, and it was only by l and prolonged examination that the microscope revealed ue nature of the malady.

G. HUNTER MACKENZIE, M.D., Edinburgh.

REPORTS

OF

OSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BIRMINGHAM WORKHOUSE INFIRMARY.

CASES OF NERVOUS DISEASE.

(Under the care of Dr. SUCKLING, Visiting Physician.)

I. *Sensory Aphasia due to Embolism (Word-blindness and Word-ss).*—R. S., aged 19, a stamper, was admitted on September 1885, suffering from what was said to be "brain-fever." years before, he had suffered from rheumatic fever, but had re- l well up to September 21st, except for occasional attacks of pain in the chest (angina). On this date, while at work, he ddenly affected with pain in the head, and it was noticed that ked nonsense. He was taken home, but his friends could not tand him, neither could he understand them. He put up his o the left side of his head, and made signs of being in pain

xamination, double aortic and mitral systolic *bruits*, with con- ble cardiac hypertrophy, were found. The second sound was ble in the vessels of the neck, being completely replaced by the ic *bruit*. Capillary pulsation was observed. The patient did swer questions, but continually put his hand to the left side of ad. Verbal deafness was complete; when told to hold up his e put out his tongue, and answered questions by saying, "I ardly think of it hardly," which he frequently repeated. He a great deal, but used wrong words, and little sense could be out of what he said. At the same time, he acted in a perfectly l way, was quiet, and understood signs to take his food. He tood nothing printed but figures and letters; figures he easily sed, and could add them together correctly (the knowledge of being greatly automatic). He could spell words aloud, but tly did not understand their meaning. He could write his but nothing else, could copy from a book, but did not under- what he wrote; could not copy from dictation. He had great ty in naming objects, and always described them. When an egg, he could not name it, but pointed to the fire and said, es about two minutes;" he assented when the proper name ntioned to him, but could not repeat the name. When shown he said, "It grows;" "Will do for a Sunday;" and similarly any other objects. He signed an I O U for £100, and allowed ake it, without showing in the slightest that he understood e had done.

temperature was raised to 101° Fahr. (due to softening). There hemiplegia, but slight paresis in the buccal region of the right the face.

ARKS BY DR. SUCKLING.—The case was a typical one of sensory , there being loss of understanding, of spoken and of written ge, loss of faculty of repeating words, of writing to dictation, reading aloud; with preservation of power of writing, copying and of volitional speech. The lesion was, in all probability, rea of distribution of the posterior terminal branches of the ddle cerebral artery, and due to embolism; the convolutions being the supramarginal, angular, and superior temporo- dal. The patient improved daily, being able to name objects he day previously he had failed to name. It was noticed that, sked to name an object, he would look in a book till he came ame in print, and then would be able to say it.

ctober 29th, the patient was much better. He understood all s said to him, could read short sentences, but failed to under- any words; he was quite unable to copy from dictation, except llables, and still suffered from considerable difficulty in naming His mother informed me that before his illness he could read d had taken prizes at his board-school.

II.—*Word-deafness.*—J. M., a man, aged 70, when seen in 885, complained of tinnitus in the left ear, deafness, and ver- d falling to the left side. He had had two slight attacks of hemiplegia on the left side, which had quickly passed off. There was no albuminuria, but the arteries were very extensively diseased.

On October 15th, he asked the nurse to let him see the doctor, as he did not feel well, and had pain in the left side of the head. When the medical officer saw him he found that the man could not answer any questions. Dr. Suckling found that the patient suffered from complete word-deafness; he could not understand anything that was said to him, but spoke rationally and freely. He could read, and understood what he read, and could copy from print, evidently understanding what he copied. He could hear when spoken to, but could not understand. Verbal amnesia was also present; he could name none of the several articles shown him, but described them well.

The next day the verbal deafness had passed off, and he understood what was said to him, and could name various articles.

REMARKS BY DR. SUCKLING.—The case is interesting in connection with the symptoms of Menière's disease previously observed, and indicates that they were probably due to central mischief. The lesion was in all probability thrombosis of the branch of the left middle cerebral artery to the superior temporo-sphenoidal convolution.

CASE III. *Locomotor Ataxy with Hysterical Anæsthesia.*—M. C., a woman, aged 32, a pen-maker, unmarried, was admitted on May 5th, 1883, complaining of difficulty in walking. No family history of nervous disease could be obtained, except that her father had hemiplegia. Three years before she came to the infirmary, she was an in-patient of a large hospital, suffering from severe pains in the legs, which used to occur paroxysmally; these pains still occasionally occurred. No distinct history of syphilis could be obtained.

The patient had great difficulty in walking, the gait being very unsteady; her body swayed from side to side, and she had to cling to surrounding objects for support; the ataxy affected the body far more than the legs.

The ataxy was rendered worse by closing the eyes, swaying being then well marked (Romberg's symptom). In the dark, she was quite unable to get about. She complained of a sensation of "pins and needles," on placing the feet to the ground. The knee-jerk was abolished on both sides; the plantar reflex was also absent. There was complete loss of sensation in both lower extremities, up to the middle of each thigh; analgesia and anæsthesia being absolute. Sensation elsewhere was normal. Co-ordinating power in the upper and lower extremities was normal, and she could accurately tell the position of her limbs. She suffered from shooting pains in the legs and pain in the back. There was no paresis or rigidity of the legs, no spinal nor ovarian tenderness. The pupils were unequal, responded normally to accommodation, but did not respond to light (Argyll-Robertson). Faradisation of the skin of the legs caused no pain, but faradisation of the muscles caused normal contractions and slight pain.

She had recently suffered from attacks of vomiting. She was very emotional, giving considerable trouble in examining her, and being careless in her replies. She had a typical "facies hysterica" and nictitation. There was no ischæmia in the anæsthetic area, and no vaso-motor or trophic change. There was no history of clavus, globus, or fits. Micturition, defæcation, and menstruation were normal. This case was diagnosed by Dr. Suckling as locomotor ataxy, and the anæsthesia was supposed to be hysterical.

For two years the patient was under observation in the infirmary; and isolation, faradisation, blisters, and Berg's treatment were tried, without any influence upon the anæsthesia. Vertigo was occasionally complained of.

On May 11th, 1885, she took her own discharge, and returned to the infirmary on August 26th, 1885. On readmission, it was found that the anæsthesia of the legs had quite disappeared. The knee-jerk was still absent; and the Argyll-Robertson pupil and ataxy, with vertigo and occasional pains, were still present. She said that, while out of the infirmary, it struck her that "leeches would make the blood circulate." She applied a leech to each knee and ankle, with the result that sensation was completely restored. The scars of the leech-bites could be seen. Localisation, discriminative tactile sensibility, and perception of pain and heat, were normal. Faradisation of the skin occasioned pain, but there was some loss of muscular sense.

The patient is still under observation, with the above mentioned symptoms of locomotor ataxy.

REMARKS BY DR. SUCKLING.—The above case illustrates the important truth that, in all organic affections of the nervous system in women, hysterical symptoms are apt to appear; and that organic disease of the nervous system may be present in an hysterical subject. Such a group of symptoms as loss of the knee-jerk, the pupil-phenomena, pains, ataxy, and vertigo, could not be ascribed to

hysteria. Loss of the knee-jerk I have never seen or read of in hysteria. On the other hand, the anæsthesia in this case was far more extensive and complete than that usually met with in tabes. Its hysterical nature was proved by its disappearance immediately after the application of leeches.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 6TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Report of Morbid Growths Committee.—Mr. R. W. PARKER read the report of the Morbid Growths Committee, on Dr. Macdonald's specimen of intracranial cystic tumour. The report showed that the cyst was a subdural hæmatoma, probably of old standing, possibly produced during birth. Fresh hæmorrhage had probably occurred shortly before death.

Acute Nephritis in Lambs.—Mr. ROGER WILLIAMS read a paper on a form of acute nephritis, which occurred as an epizootic among newly born lambs. He had observed it in the neighbourhood of Rugby, where it affected chiefly the lambs of ewes recently imported from Scotland. The urine was acid, and loaded with albumen; the cortex of the kidneys was soft and yellow, while the medulla was deeply congested. Microscopic examination showed the presence of tubal nephritis. The other organs of the body were not affected. The disease was in some cases congenital, and the most prominent symptoms were motor paralysis of all the limbs. No marked febrile symptoms were noted.—Dr. PYE-SMITH observed that in suckling lambs the urine would be normally acid.

Hydatid of Liver Imbedded in Syphilitic Deposit.—Dr. G. N. PITT read a paper on a case of hydatid of the liver, with diffuse interstitial hepatitis. The patient was a man, aged 39, who had twice been a patient at Guy's Hospital on account of a swelling of the abdomen, due to enlargement of the liver. The patient had had syphilis thirteen years before his death, and both testicles had been removed for disease which was presumed to be syphilitic. He had been under the care of Dr. Fagge, in 1881, with enlarged nodular liver and slight right hemiplegia. When admitted in 1885, there was a large globular swelling attached to the liver, and bulging out the ribs. The urine was albuminous, and the patient died of uræmia. At the necropsy, the tumour and liver together weighed 147 ounces; the tumour alone weighed 100 ounces; it occupied the left lobe, forming a dense elastic mass, creamy white on section, with a firm surface, and dense fibrous trabeculæ. There was no trace of any liver-structure, and the line of demarcation from the healthy liver-structure was very distinct; in the tumour were the remains of multiple hydatid cysts. There was lardaceous degeneration of the spleen and liver, and large white kidneys. The examination of the brain revealed nothing to account for the hemiplegia; the left internal capsule showed very slight changes, but there was no pigmentation, cyst, or tumour. In commenting on the case, Dr. Pitt expressed the opinion that the mass of growth was of a syphilitic nature, and was determined by the presence of the hydatid, and rejected the hypothesis that the growth was lymphadenomatous.—Dr. SHARKEY referred to a case of perihepatitis, where the affection had produced, by contraction, such projection of the intervening tracts of liver-tissue, as to simulate during life multiple tumours; in this case, throughout the whole of the growth, there were microscopic gummata.—Mr. SHATTOCK said that, in another case of diffuse hepatitis, these miliary gummata were very distinctly present, and he look upon them as the only criterion of diffuse syphilitic lesions.

Valvular Obstruction of Ureter.—Dr. HARRINGTON SAINSBURY showed a specimen of pyonephrosis, from a woman who was admitted on account of hæmatemesis. At the necropsy, no trace of the true kidney-substance could be seen in the left kidney, which was in an extreme condition of pyonephrosis. The ureter was completely obstructed by valvular folds close to the pelvis. The right kidney was fibrotic.—Mr. SHATTOCK suggested that the valves might have arisen through an ulcer undermining the mucous membrane, and pointed out that the whole of the mucous membrane of the pelvis had undergone ulceration. The question arose whether the case were not one of tubercular disease.—Mr. ROGER WILLIAMS said that such valves might not unfrequently be seen in patients who had died with malignant disease of the uterus.—The PRESIDENT agreed with Mr. Shattock.—Dr. SAINSBURY said that there was no evidence of tubercle elsewhere in the body; he found it difficult to believe that such definite structures could be formed by ulceration.

Embolism of the Abdominal Aorta.—Dr. PARRY PRICE showed a specimen of abdominal aneurysm from a woman who died in G Hospital. A presystolic murmur was noticed during life, and l lower limbs became gangrenous. On the surface of the brain v localised areas of superficial softening, and in the left middle cere artery was a small embolism. There was marked mitral stenc In the aorta was a clot, extending up close to the point of exit of renal arteries. The kidneys contained numerous infarcts; cavities of the bladder and uterus were black and gangrenous-look A second case described was that of a woman, aged 46, in whom grene of the right, and then of the left, leg occurred. The pat died after operation. There were old adhesions of the pericard near the apex; the endocardium was fibrous; and wasting of the m cardium had advanced so far that a recess had been formed, in wh lay a large *ante mortem* clot. The iliac arteries, and the abdom aorta, were plugged with clot up to the renal arteries; the clot peared to have originated in connection with embolism at the p of bifurcation of the aorta.—The PRESIDENT said that he had ne been able to satisfy himself that embolism was ever produced intracardiac clot in the manner indicated by Dr. Pric Dr. SEYMOUR TAYLOR referred to a case of aortic clot, recorded Dr. Bristowe, where a communication had become established betw the aorta and vena cava.—Mr. MARMADUKE SHEILD described a where clotting had commenced at the point of bifurcation of aorta, in a woman who was liable to phlebitis.—Dr. SAMUEL W referred to a specimen he had shown to the Society, where the arc the aorta was obstructed by a curled-up clot, which had originate the ventricle.—Dr. CARRINGTON thought that there was g evidence of detachment of *ante mortem* intracardiac clot in cer cases of cerebral embolism.—Mr. ROGER WILLIAMS described a where a clot, detached from a small abdominal aneurysm, had bec impacted at the bifurcation of the aorta, and had caused moist grene of the limbs.

Septic Aortitis.—Dr. F. CHARLEWOOD TURNER showed three sp mens of septic aortitis, and a microscopic section from a fourth The first specimen showed the aorta extensively ulcerated, with un mining of the endarterium. This was obtained from a female, a 62, who had aortic incompetence, with hypertrophy and dilatatio the left ventricle, and granular kidney. Microscopic section from of the ulcers showed masses of micrococci in the deepest layer of endarterium, at the base of the ulcer. The second specimen sho massive fibrinous coagula in the arch of the aorta; this was from a of burn, fatal on the twenty-fifth day, from suppuration and pyre The third specimen was from a man who died of secondary hæn rhage, from a wound of the left internal mammary artery. A fibri mass was found adherent to the aorta near the valves, with sma fibrinous deposit on atheromatous elevations. A fourth case was m tioned, in which a similar lesion was found in a patient who died the second day after primary amputation of the thigh. A microsc section showed masses of leucocytes about the vasa vasis in the o and middle coats, great swelling of the intima with corpusc infiltration and exudation in the most superficial layer, and clo granular fibrin on the surface. The arterial lesion in all the cases referred to the combined effect of structural disease and septic tamination of the blood, weakening the resistance of the tissues, giving a grave character to the lesion. The difference in anatom character between the lesion in the first case and in the other attributed to the predominance of the former factor in the one c and of the latter factor in the other. The vascular lesion in this sp men was regarded as indicating the starting of similar lesions of pulmonary artery or venous trunks, and of thrombotic lesion smaller vessels, associated with severe endocarditis.

Specimens.—Dr. A. H. ROBINSON: 1, Hypertrophied and Dila Bladder; 2, Adherent Pericardium. Mr. SYDNEY JONES: 1, M formation of Foot; 2, Peculiarly Shaped Calculi. Dr. SHARKEY: Meningeal Hæmorrhage; 2, Retroversion of Mitral Valves; 3, Ste sis of Mitral, Tricuspid, and Aortic Valves. Dr. PYE-SMITH: Cy Teratoma from an Infant. Mr. LUNN and Mr. LARDER: Ao Aneurysm. Dr. S. TAYLOR: Cerebral Tumour. Mr. E. H. F WICK: Stone Impacted in Prostatic Urethra. Dr. CAYLEY: Ch with Large Hairy Mole. Dr. CHARLWOOD TURNER: 1, Kidneys w Necrosis of Pyramids; 2, Jejunum with Circumvascular Hæmorrha

OUR FOOD-SUPPLY.—No less than a ton of hams and bacon, the possession of one provision-factor at Burnley, has been found be unfit for human food, and ordered to be destroyed. The meat h been purchased at a sale in Liverpool, where it was catalogued having been damaged by poisonous copper-ore, to be sold for boili down purposes. The defence was, that the meat was sound, and c tradictory evidence was given

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 5TH, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

Case of Traumatic Nephrosis.—Dr. JOHN LOWE read the notes of a e in which the patient, a healthy, robust young man, was run over an empty wagon, the wheel passing over the abdomen. Some eks later a tumour formed in the right hypochondrium, which lded distinct signs of fluctuation and fluid vibration. There was albumen in his urine, no history of hæmaturia, nor any distinct ndice. The tumour was slightly tender on pressure. The opinion s in favour of its being a renal cyst, resulting from injury to the ter. Dr. Lowe introduced a moderate sized trocar, and withdrew e pints of fluid, which deposited a copious precipitate on the ap- cation of heat, the precipitate not being soluble in nitric acid. osequently, even larger quantities were evacuated, and tincture of ine was injected into the sac. The area of dulness and the circum- nce of the abdomen gradually diminished, and he was finally made out-patient, ultimately resuming his laborious occupation on the way, without inconvenience. The diagnosis rested mainly on the owing points: 1. The rapid formation of the tumour soon after injury; 2. The highly albuminous character of the clear fluid hdrawn. Several other cases were on record where tapping had n attended with success, although it was not easy to see exactly y this was so.—Mr. BERNARD PITTS mentioned the case of a girl o had been run over by a hansom cab. There appeared to have n some hæmaturia; and six weeks later a tumour was found, which tapped, and about thirty-one ounces of clear fluid withdrawn. sac rapidly refilled, and massage was then resorted to, with the lt of procuring ultimate arrest and diminution in the size of the nour.—Mr. WALTER PYE quoted the case of a man who had been nded by a spear thrust, involving the kidney. About a fortnight r hydronephrosis developed, and was tapped; sixty ounces of a r albuminous fluid being evacuated. There had been no recur- ce. It was probably caused by plugging of the ureter with blood- , the result of the injury to the kidney.—Mr. DAVIES-COLLEY lled an incomplete but interesting case of hydronephrosis, attri- ed, by the patient, to the shock of a railway accident. An action brought against the railway company, and some division of nion was elicited as to the influence of the shock in the production he tumour. His own opinion was that a calculus had probably me displaced, and so caused the blockage.—Dr. SAMUEL WEST that, to his mind, the evidence was inconclusive as to diagnosis ydronephrosis, and suggested that some of the symptoms pointed ier to chronic peritonitis with effusion.—Dr. LOWE, in reply, said t plugging by means of blood-clot was a very probable cause, and aid that injuries to the kidneys, involving hæmaturia, were more mon than might be supposed.

Tonsillitis and its relation to Scarlatina and Diphtheria.—Dr. GSTON FOX read a paper, in which, alluding to the function of the sils as absorbents of the surplus saliva, he suggested that, when amed, they might become the means of constitutional infection by absorption of specific poisons in the saliva.—Mr. R. BRUDENELL RTER said that it was desirable, in putting forward an hypothesis the present one, to afford proof of the physiological basis.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, FEBRUARY 24TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimens.—Dr. MANSELL-MOULLIN showed microscopic specimens the micrococcus of puerperal fever, illustrating the plugging of els by masses of cocci, and also the cocci found scattered in chains ifferent lengths in the pus of a septic abscess.

Adjourned Discussion on Dr. Chalmers' Paper.—This was opened Dr. GRIGG, who dwelt on the frequency of eclampsia in single ien.—Dr. ROUTH said that perhaps no man in England had seen iany fatal cases of puerperal fever in England as he had in Vienna. mortality there on some days (out of about 3,500 cases yearly), ntinued, would have averaged 500 a month. The history of that emic he had published in 1849. This fever was neither conta- s nor infectious, but was due to the direct impregnation of cadaveric ter from the hands of the medical men. It did not exist in the ining department, where the work was done by midwives exclu- ly. In that paper he had shown that many cases of fever occurring rivate practice were either due to odours from dead-houses, or from ical men who had been dressing gangrenous or erysipelatous sores re attending their midwifery cases. It might be useful to divide these peral cases into malignant, cases affecting the serous membranes, cases affecting the mucous membranes, and the sweating recurrent fever. The important point, however, was to recognise a special morbific poison. That belonging to the Vienna fever was communicable through the milk to the babe, the fatal cases being usually preceded by the death of the infant, the *post mortem* examination of which children revealed the existence of extensive peritonitis. At Vienna, these epidemics were stopped by compelling all the medical men to wash their hands in a solution of chloride of lime before touching the lying-in women; since then, they were compelled to change their clothes, and those attending *post mortem* examinations were not allowed to attend the lying-in cases at all. In those days the uterus was not injected with antiseptics; now that was invariably done, and this opened the question as to which was the best antiseptic for the purpose. He considered iodine superior to both carbolic acid and corrosive sublimate. It had one great advantage over the bichloride. It was a complete deodoriser, and by reason of its volatility it permeated the tissues through and through. This the bichloride failed to do; it only purified the tissue over which it flowed. Its advantage over iodine was, that it coagulated the albumen and closed the vessels, preventing reabsorption; but if the water used with the iodine were not lukewarm only, but as hot as the patient could bear it, the iodine was more readily volatilised through the tissues, and the high temperature of the water had the same coagulating effect on the mouths of the open vessels, and also effectively prevented reabsorption. He thought that offensiveness of the lochia was not the sole indication for the use of injections. The *materies morbi* might be perfectly free from smell, yet intensely poisonous. High temperature and rapid pulse might exist without any lochial offensive odour. The uterus were washed out with iodine; the same night there might be a normal pulse and temperature. When this improvement occurred, it was quite safe to stop the uterine injections. He always gave quinine in every case of septicæmia, five grains night and morning, and with the best results. The fever prevailing at present in London was of the sweating or intermittent variety.—Dr. BARNES wished especially to dwell upon one condition, that lay at the very foundation of the history of puerperal fever, and without admitting which, it was impossible to arrive at an intelligent conception of the disease. And yet it was a condition very much neglected. He had long insisted that a puerperal woman might develop fever out of the natural processes going on within her, that is, that there was an autogenetic puerperal fever. It arose in this way. During gestation, the blood assumed a peculiar character; the vascular and nervous system was in high tension. The volume of blood increased, new vessels developed, and new tissues formed in subservience to the need of the embryo. The vascular force was divided from the centre to the periphery. The process was one of building up. There was no absorption of superfluous matter, beyond the usual waste of nutrition. But the moment labour had taken place, a sudden revolution occurred. On the second or third day, the superfluous tissues of the uterus, and other tissues brought into existence during gestation, underwent rapid disintegration, and must be as rapidly got rid of. The vascular force had become centripetal. The tide had turned. The process of absorption was now intensely active. Volumes of effete stuff were quickly sucked into the circulation; and, unless the excreting organs were in good working order, the stuff that should be eliminated accumulated, the healthy blood was overpowered, and fever was kindled. Here there was the story of autogenetic puerperal fever. There was no need to invoke the hypothesis of an extraneous poison. Such cases might be seen on close search, especially in private practice, where the patients had the best provisions for security against the invasion of poison from without. But it was in this condition, peculiar to the puerpera, that the nidus for the reception and evolution of noxious poisons from without was found. Then there were the heterogenetic puerperal fevers. If the poison of scarlatina, diphtheria, or other zymotic, or any septic matter effected an entrance, it found the most favourable conditions for setting up fever, zymotic or septicæmic. But this could not be simple septicæmia, as might occur in an ordinary surgical patient. In the puerpera, something more was found than the wound and the poison from without. Indeed, it was not necessary to postulate a wound at all. The Germans, drawing their experience chiefly from the enormous mortality in their lying-in hospitals, which was certainly due to the working of extraneous poison, ran into the error of contending that this was the sole cause. Their minds were engrossed by this preponderating evidence, and they conclude that there was no autogenetic puerperal fever. The absence of marked symptoms of pain, high pulse and temperature, in peritonitis with suppuration, even running a fatal course, noticed by Dr. Chalmers, was by no means uncommon. He approved of the use of iodine, for the purpose of injection, and appreciated the value of quinine.—Dr. MANSELL MOULLIN thought that the cases which had

been related with such careful detail by Dr. Chalmers were very typical instances of pyæmia, running a chronic course with progressive suppuration. It was generally admitted that puerperal fever, pyæmia, and septicæmia were identical conditions, the former being modified in certain respects by the peculiar circumstances of the case. Experiments on animals had given considerable weight to the theory, that the rapidity of the case depended in some measure on the mode in which the morbific virus entered the system. If it entered at once into the blood-current, the case was rapidly fatal; if, on the other hand, it entered through the lymphatic system, an effort was made to shut it off, and eliminate it by the process of abscess-formation. The parturient uterus afforded a ready entrance for extraneous germs in each of these ways. It was difficult to dispose of the germ theory when it was supported by such practical evidence as that afforded by the microscope; still, the fact that some patients might possibly be more susceptible than others, as suggested by Dr. Chalmers, was not to be lost sight of.—Dr. EDIS had recently been called to a case which illustrated one phase of the subject. It was that of a primipara, at full time, with a conical cervix not larger than the end of the finger, and a canal hardly admitting the uterine sound. The membranes had ruptured four days previously. After about sixteen hours of severe suffering, the cervix was only dilated to the size of a crown-piece, and the pains were beginning to lessen in severity and frequency. Chloroform was administered, and the forceps applied. Some bruising and slight laceration of the cervix naturally resulted. For a fortnight following, the temperature ranged from 100° Fahr. to 103° Fahr., and the patient apparently hovered on the limits of an attack of septicæmia. Cases like this not unfrequently occurred, and were spoken of as puerperal fever. There was no doubt that, the more we understood the subject, the more frequently should we be able to split up the so-called puerperal fever into its constituent factors.—Dr. RASCH related two cases illustrating that many cases of puerperal fever differed nothing from other cases of septicæmia. The first was that of a medical man who poisoned his hand while examining a case of fatal pyæmia; the second occurred in a multipara after an abortion at the third month, and terminated fatally. These two cases, except in their end, so closely resembled one another, that they must both be called puerperal fever if the female case were to go by that name. They, at any rate, showed that some septic poison, either from without or autogenetically, might cause the same series of symptoms.—Dr. FANCOURT BARNES said he had recorded a case in which the husband had contracted septicæmia (it could hardly be designated puerperal fever in a man) from his wife, who had puerperal fever. There was no doubt in his mind as to the existence of autogenetic puerperal fevers. Mental worry from illicit pregnancies and clandestine marriages was a common source of autogenetic empoisonment. He could also endorse Dr. Chalmers' proposition, that the origin of the fevers often lay in the morbid juices of the mother. In Germany, several cases had been published of poisoning by the bichloride of mercury, ending in death. In 1880, he had instituted an antiseptic system in the British Lying-in Hospital, the antiseptic used being carbolic acid. This had been uninterruptedly continued without any toxic result. In a case which died under his care in the Royal Maternity Charity from puerperal septicæmia, he found, at the necropsy, that the abdomen contained no less than a pint and a half of pus. He could, with difficulty, avoid the reflection that, had the abdomen been opened, the pus voided, and the peritoneum washed out, this patient's life might have been saved.—Dr. BLAKE said his experience was that sewer-gas was a frequent factor in the production of puerperal fever, and he had observed that a change of atmosphere in this class of case was frequently followed by most beneficial results.—The PRESIDENT and Dr. CARFRAE also made remarks.—Dr. CHALMERS then replied.

WEDNESDAY, MARCH 10TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimens.—Dr. BANTOCK exhibited a dermoid tumour of the left ovary, and several fibroid tumours which he had recently removed by supravaginal hysterectomy.—Dr. MEADOWS, Dr. HEYWOOD SMITH, the PRESIDENT, and Dr. BARNES made remarks.—In reply, Dr. BANTOCK stated that he did not lay any stress on the statement that there were no adhesions in the case of the dermoid tumour, but he mentioned that it was an exception to the rule which held in the cases that had come under his observation. The tumour had been in existence several years to the patient's knowledge, and was the seat of great pain. He had not made an accurate diagnosis, but, on the contrary, had thought it was solid, it was so very tense. He therefore operated in accordance with the rule which now guided him; namely, that when a patient had a tumour in the lower abdomen, which was very painful, and did not yield to any other treatment, the proper co was to open the abdomen, prepared for any eventuality.—Dr. AVEL exhibited a subperitoneal tumour, which grew in the anterior a minal wall, and reached from two inches above the umbilicus to pubes. It was removed *post mortem*, the patient having died afte exploratory operation. Sir Spencer Wells, who saw the tumour, he had only seen two similar cases, and he called it, after Virch "fibroma molluscum cysticum abdominale." The specimen was ferred for further examination.—The PRESIDENT, Dr. GRIGG, Dr. BANTOCK made remarks.

Two Cases of Amputation of the Pregnant Uterus.—The PRESID read a paper on this subject. His experience in meddling with pregnant uterus, by abdominal section, consisted of five cases; t of the ordinary Cæsarian section, and the two about to be descr in detail. Of the Cæsarian sections, one was performed for malig disease of the vagina, the other two for deformed pelvis. All mothers died, and only one of the children was now living. The sults, indeed, were such as to determine him absolutely never to peat this proceeding, having in view the arguments of Dr. God and the fact that both the amputation cases recovered. It was ne sary to keep quite apart cases where the pregnant uterus was remo before the completion of gestation, for some reason other than of pregnancy, and to keep a separate account of those cases w the uterus was removed at or very near the time of labour, on acc of difficulty in accomplishing delivery by the natural method. first case belonged to the former category, the second was what was def by Dr. Godson as a "true Porro." Mrs. E. P., had a large semis tumour of the right side of the uterus, and was clearly pregnan far as between the fourth and fifth months. As the tumour rapidly increasing in size, he advised immediate operation, which carried out on August 5th, 1884. The tumour proved to b soft cystic sarcoma, and as the uterus was scattered thro out with nodules of the same disease, he opened it, remo the fœtus, and clamped the cervix with the wire clamp. T was no disease visible below the point of constriction. The cl came off on the ninth day. The patient made an uninteru recovery, and went home at the end of September. Contrary to ticipation, the disease had not recurred, and the patient remained to this day (March 10th, 1886). He lamented that Dr. James B dell had not lived half a century later than he did, or that he possessed the courage of his opinions. There was hardly one of th cent advances in gynæcology that was not to be found in anticipa in his writings. The total removal of the uterus was suggeste him as a possible improvement on the Cæsarian section. "The tality of the Cæsarian section is a long way over 99 per cent., an itself it is essentially an immoral proceeding. It is primarily chiefly based on the medieval belief, that any risk to the mo ought to be encountered in order to save the child, even if that c live only long enough to be baptised. This is a most immoral p ciple upon which to decide a surgical question, and it is economic wrong. But the chief immorality of the ordinary Cæsarian sec is, that all of the .029 cases of recovery are left to tumble exactly the same awful trouble immediately after they have recov from their first fearful ordeal; and, as a matter of fact, many cases are known where the Cæsarian section has been repeated on same patient a second, and even a third time. I think the time come to protest against such practice." Impressed with these victions, he removed the ovaries in the last case of Cæsarian sec (1880). Unfortunately, the patient went the way of 99.97 similar cases. He was convinced that, if he had a hundred case Porro's operation, such as that about to be described, before the obst art had been exhausted on them, there would not be more than deaths in the series. He believed that, in any case where the imp ment to delivery was such as to require the destruction of the child, to require this inevitably in a subsequent labour, the performan Porro's operation as a first step would be by far the best decisio the interests of all concerned. E. D., aged 33, who had been ma five years, was taken in labour with her first child at 2 P.M. on J ary 8th. A leg presented. On examination, it was found t whilst there was plenty of room on each side of the pelvis, the i was absolutely blocked by a prominence of the sacrum closely app mating the symphysis, and that the limb had passed on one sid this projection. It was determined to perform Porro's operat This was done in the following way. An incision was made in middle line, a little short of four inches; and as soon as the toneum was fully laid open, a loop of India-rubber tubing was pa over the fundus. It was then passed down as far as possible into pelvis, and tied tight. A small incision was made into the ute and, as recommended by Dr. Godson, enlarged sufficiently by tea

enable the child to be grasped. The child, a fine boy, was easily ivered, and as he emerged, hardly a drop of blood was lost. The rus was then pulled outside, Kœberlé's wire clamp applied, the stic ligature removed, and the wound stitched up. The whole eration did not take more than ten minutes, and nothing could be ier than its steps. The stump was dressed with perchloride of iron d iodoform. The only trouble was with the clamp. The tendency an uterine pedicle was always to shrink; and, although it was htened in this case at the time of the operation as much as was e, the shrinkage caused bleeding in a few hours, and this occurred eral times, so that the screw had to be tightened up. He believed pedicle would be best treated by means of the cautery. The tery failed in hysterectomy, because there was nearly always some cleation in the removal of uterine tumours, and, therefore, when stump was relieved from the cautery clamp, the inside bled. In regnant uterus, this would not be the case. No kind of treatment the ligature would be safe, owing to the shrinkage. If the pedicle ld be treated by the intraperitoneal method, the mortality might reduced to something approaching that of ovariotomy. If, how-r, experience should determine that the extraperitoneal method was cessary, the mortality would probably never fall below 15 or 20 per t.—Dr. GRIGG, Dr. FANCOURT BARNES, Dr. HEYWOOD SMITH, Dr. NTOCK, Dr. ROUTH, and Dr. AVELING, joined in the discussion; d the PRESIDENT replied.

Mr. NOBLE SMITH read notes of a case of congenital deficiency of anterior wall of a female bladder, cured by operation.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MARCH 19TH, 1886.

W. H. CORFIELD, M.D., President, in the Chair.

Water-closets in Poor Districts.—Dr. LOUIS PARKES read a paper "The Sanitary Condition of Poor Districts in the Metropolis, with pecial reference to their Water-closet Accommodation." In introcing his subject, the author brought the following questions forrd, as being some on which it was very desirable to get an expression opinion from members of the Society, as a body entrusted with the re of the public health of the metropolis. 1. Is it desirable that e water-closets of poor-class houses should be flushed by hand with ils of water, or should they be supplied with water from a cistern? 2. the law, as it now stands, sufficient to enable a sanitary authority to force a supply of water by cistern to a closet which is without one, all cases and under every kind of circumstance? and is it obligay on an authority to undertake this duty, whenever the fact of a set being without a water-supply is brought to its notice? 3. If e law be insufficient, or too undecided in its terms, as regards the wers of the sanitary authority in this respect, or its obligation to force the powers with which it is invested, what alteration is it deable to introduce in any fresh legislation on the subject? And with is may be included the consideration of what further powers, with gard to water-closet accommodation, it is desirable to furnish a sanry authority with. The danger arising from the situation of closets underground cellars in tenement-houses was alluded to. These ngers were shown to be unnecessarily aggravated, in many cases, by e closet being without a water-supply, and used as the only conmience by all the lodgers in the house, who might be thirty in mber in some of the poorest quarters. A far better arrangement was r the closet to be in the back-yard, outside of and away from the use. The "long hopper" closet was the one almost invariably found use, and it was one of the worst forms. It soon became soiled d corroded, and was incapable of being properly flushed. The best rm of closet for use by poor people was the "short hopper" of glazed oneware, with vertical back and sloping front, and with siphon-trap low. This form was easily flushed out and kept clean, when supied with water by a two-gallon waste-preventing cistern. But such aste-preventing cisterns as were supplied to poor houses, was almost variably found to be out of order, the ball-valve being defective, or e outlet-valve leaking. The siphon action water-waste-preventer was eferable, as being more certain in action, but it was more expensive, d the chains, ball-cocks, and other detachable metallic parts in all ese cisterns attracted the cupidity of the destructive class of tenants the poorest quarters, and consequently disappeared. Flushing by nd with pails might be made to answer (1) if there were a water-tap close proximity to the closet in the yard; (2) if the duty were entrusted some one person in the house, who should become responsible for proper performance; (3) if the sanitary inspector could visit at fretent intervals to see that the flushing was not neglected. In courts d alleys which were not through thoroughfares, the author advocated e use of trough-closets in the court, with separate locked compartments or cubicles for the use of each house. These closets could be effectually flushed by a Field's automatic siphon flush-tank, placed in a separate locked compartment, accessible only to the sanitary inspector. These trough-closets had been found in Liverpool, and elsewhere, to answer extremely well in the case of courts and blind alleys occupied by the lowest and most degraded classes. As to the sufficiency of the law, Section 81 of the Metropolis Local Management Act of 1855, gave power to a sanitary authority to enforce a suitable water-supply and apparatus to a closet which was without them, even where no nuisance—as the result of the absence of such fittings—could be proved to exist, and in the case of houses built before as well as after the Act was passed. The case of Tinkler *v.* Wandsworth District Board of Works, although often cited, had no bearing on this question, except indirectly; as here it was a question, not of water-closets, but of privies and cess-pits, unconnected with the public sewer, in which water could not properly be used. It was, however, decided in this case that the Local Board had power to convert one privy into one water-closet with water-supply apparatus, but could not make a general order to convert any number of privies in their district into water-closets, without exercising discretion in each particular case. In the case of the Vestry of St. Luke's *v.* Thomas Lewis, it was a question of water-closets without water-supply. This case was tried in 1862 in the Court of Queen's Bench. The magistrates' decision, adverse to the plaintiffs, was reversed, and Lord Chief Justice Cockburn gave judgment to the effect that the vestry had power to order a water-supply to a closet without one. However, it still remained to be decided whether a local authority had power to make a general order enforcing water-supply to all or any number of closets in its district, without exercising discretion in each particular case. The Public Health Act of 1875 empowered a local authority to insist on a "sufficient water-closet" being provided, but there was no clause which dealt with the enforcement of a water-supply. "Sufficient" was no doubt intended to include a water-supply. The author pointed out that, by Section 7 of the Housing of the Working Classes Act of last session, sanitary authorities in the metropolis now lay under a statutory obligation to enforce, in sanitary matters, all the powers with which they were provided. It did not appear to be proved that any alteration in the law as regards water-supply to closets was either necessary or desirable, although enlargement of powers for the purpose of providing trough-closets in courts seemed to be needed.—In the discussion which followed, the PRESIDENT, Drs. SEATON, PRINGLE, DUDFIELD, GWYNN, ILIFF, WEST, and Messrs. FURNIVALL, BERNAYS, HART, CASSAL, LOVETT, and Mr. SHIRLEY MURPHY took part.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 10TH, 1886.

WALTER DICKSON, M.D., President, in the Chair.

Cholera in Fleets and Ships.—Sir WILLIAM SMART read a paper on this subject. He pointed out that one of the earliest English observers of cholera was Mr. Curtis, of Her Majesty's ship *Seahorse*, and of the Naval Hospital at Madras, 1782, who called the disease the Cramps; and the same name was used by Mr. Girdlestone, surgeon of the 101st Regiment, which regiment landed at Madras that year, and was at once attacked by cholera of most intense type, of which the cramps were the most prominent symptoms. At that time, Dr. Paisley considered the disease the same as the cholera morbus of Sydenham, in 1669. From Curtis, who published in 1807, there is no naval authority on cholera. In 1833, it was among our ships at Lisbon, when the Spaniards denied its presence in Spain; it also was seen in the West Indies. In 1837, when epidemic at Malta, some ships were infected. In 1850, the squadron at Malta was severely infected through the summer; and three times it appeared from infection received in the harbour; but from all the ships, the disease disappeared when they were taken to sea. In 1854, it broke out in the fleets in the Black Sea and the Baltic. In the former, the infection was brought from France, and it ravaged five ships, especially the *Britannia*, of which Sir William Smart gave the history in detail. He gave the length of exposure in some ships having cholera from the third to the seventeenth day after entering the infected port. The fleet went to sea, and in three of the line-of-battle ships there were violent epidemic outbursts at sea. The *Britannia* was the worst, and returned to port on the fifth day, having lost fifty-nine men in the first twenty-four hours of the outburst, and ninety-three out of 201 attacked in five days. She was cleared out, after which the disease ceased in her. Eighty-five men were transferred to the *Apollo*, of whom twenty-six died; the nurses sent with

the sick were attacked, and some died, but the crew of the frigate were not at all infected by their visitors being eleven days on board. The Baltic fleet was infected with variola on leaving England, and that was followed by fever; but three months had elapsed when cholera appeared in the Gulf of Finland. With cholera on board, the combined fleet, English and French, went up the gulf to Cronstadt, where the infection became worse; then it went to the mouth of the Gulf, and it had nearly disappeared when the French army arrived from Brest bringing among the troops a fresh infection, that infected the sailors and marines who had landed to besiege Bomarsund, and thence took it to their ships. The French troops and ships suffered much more than the English. On September 17th, the French ships left for home, taking their troops, but the English did not leave the Baltic till December 7th. In that fleet, there were no severe outbreaks as in the Black Sea fleet, and the disease was more of the diarrhœal type. In the Black Sea, there were 655 attacks of cholera, with 354 deaths; and in the Baltic there were 327 attacks, and 124 deaths. The author went on to give facts and details of the severer visitations of cholera in ships on the East Indian stations at recent periods. In 1858, the year of the second China war and of the Indian Mutiny, and in 1862, when our forces were directed to repel the Taeping rebellion, the *Euryalus*, whose crew had had no leave since quitting England, arrived there; and, next day, part of her crew formed a boat-expedition up the river, of which the water was drunk by them, and on the fourth day they landed and scoured the country. That same night, cholera broke out in the party; but, on returning to their ship, no ill effects resulted to those who had not gone on the expedition. The whole epidemic of cholera became one of dysentery and remittent fever. Sir William Smart said he had no reason to believe that cholera could be communicated by close contact; but that there must be an infectious "aura" from the sick or their excreta, where cholera was of epidemic type, which reproduced the disease in others, of which there was, to his mind, proof in the secondary infection of the marines in H.M.S. *Queen* in 1850. He had witnessed nothing to give support to the doctrine of Pettenkofer, but believed in the necessity of keeping the decks as dry as possible whenever any kind of bowel-disorder was epidemic in a crowded vessel. Although admitting that the theory of Koch might explain some phenomena of epidemic cholera, yet the author of this paper found no support to that theory in the terrific and sudden outbursts of which he had had to speak; but he felt that it was not inconsistent with what appeared in those epidemics that grew up more slowly by isolated cases, that might or might not culminate in an outburst of the disease. It appeared that in epidemics the ratios of diarrhœal attacks increased proportionally with those of cholera-attacks and mortality, thus showing that the diarrhœa was a constituent of the epidemic. In the worst infected ships, this was equally observable. Again, the first victims to cholera in the outbursts were the men already under treatment for diarrhœa, which added support to the idea that the great majority of diarrhœal cases occurring in cholera-epidemics possessed the potentiality of development into the rice-water collapse type of the same disease.—In the discussion which followed, the PRESIDENT, Dr. LAWSON, and Dr. PRINGLE, took part.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

THURSDAY, MARCH 4TH, 1886.

F. E. MANBY, F.R.C.S., President, in the Chair.

Scirrhus of the Breast.—Mr. VINCENT JACKSON exhibited a woman, aged 58, whose right breast he amputated thirteen years since, for scirrhus cancer. At the time of report she was in good health, and there was no evidence of the return of the disease. Four years previously to the operation, an unmarried sister had her left breast removed for the same disease, and she also continued quite well. Mr. Jackson stated that this case, and two others, one being an example of the removal at the same time of both breasts, were the only instances of a long survival after excision of the breast, out of the total number of cases in which he had performed this operation.

Paralysis following the Injection of Iodo-glycerine, for the Treatment of Spina Bifida.—Dr. LYCETT exhibited a girl, aged 6, who, at birth, was the subject of spina bifida over the upper part of the sacrum, forming a tense sessile tumour, of the size of an orange, having an ulcerated surface of the area of a crown-piece, which, on healing, formed a thin membranous covering to that portion of the sac. As it became thinner through expansion, it was tapped when she was six weeks old. An ounce and a half of fluid was drawn off, and forty minims of iodo-glycerine injected with a negative result. The sac refilled about a week afterwards; about an ounce of fluid was withdrawn, and the injection increased to a drachm and a half, causing the sac, in a few days, to become obliterated. Co-incidentally with the shrink however, came loss of sensory and motor power in the legs, with continence of fæces and urine; the paraplegia, which persisted, b completely below, and incomplete above the knees. Hydrocepha also commenced immediately after the operation, and gradually creased until the third year, when the fontanelles closed wit developing any nerve-phenomena, or imparing the mental power. horizontal circumference of the head now measured 22 inches. In report of the committee, appointed by the Clinical Society of Lon to inquire into the subject of spina bifida, there was a case record where paralysis supervened and persisted after the cure of the tum and appeared to be due to the treatment adopted. In several c temporary paralysis occurred, which passed off in a variable t once complete paraplegia, which subsequently disappeared. In t cases, hydrocephalus set in subsequently to the cure of the s bifida. Of the various operative measures, that by the injection iodo-glycerine was recommended in preference to any, as promi the greatest success, though the table of results showed that o cases, only 35 recovered, 27 died, 4 were relieved, and 5 unrelie As evidence of the frequency and serious nature of this affection appeared that it caused no fewer than 647 deaths in 1882, of wh 615 were in children under one year of age.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIE

THURSDAY, MARCH 18TH, 1886.

G. S. BRADY, M.D., F.R.S., President, in the Chair.

Loose Cartilage from Knee-joint.—Mr. MORGAN showed a large cartilage, which he had removed a week before, from the knee-j of a man by direct incision. The wound was treated antiseptica and was healed when the first dressing was removed.

Scirrhus of Male Breast.—Mr. MORGAN showed a large scir which he had excised from the breast of an old man, and had removed several axillary glands, which were enlarged. Eczem the nipple had been present for a long time.

Double Hydrosalpinx.—Mr. MORGAN showed this specimen, wh he had removed from a young woman. The cyst had been tap four months before the operation, and three pints of fluid withdra In the outer part of the tubular wall, on one side, a small fibro-cy tumour existed. Free discharges of pus had gone on from the dominal wound for a month after the operation, at the end of wh time the silk ligature from the tube made its escape, and the pati rapidly recovered.

Annulus Migrans.—Mr. WHITEHOUSE showed a card specimen this disease of the tongue in a female patient, aged 25. Two ye ago, she had suffered from a severe attack of typhoid fever, on covery from which she noticed, for the first time, the peculiar appe ance of her tongue. She complained of little inconvenience, oc sionally a smarting and itching, and enjoyed perfect heal Numerous remedies had been tried, but to no purpose.

Pigmentation of Skin and Early Menstruation in a Child.—M HOPGOOD showed a photograph of a child, aged 6, with large patc of pigmented skin on the back and front of the chest. The child h commenced menstruating at 5, and the mammæ were well develope pubic hairs were also pretty abundant.

The Therapeutic Value of Calcium Chloride in Tabes Mesenterica. Dr. DRINKWATER read this paper, and showed several cases whi had made rapid recovery under this treatment.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 17TH, 1886.

LAWSON TAIT, F.R.C.S., in the Chair.

Abscess in the Tibia.—Mr. JORDAN LLOYD showed a boy who h had well marked symptoms of an abscess in the lower end of the tib The bone was trephined, and a small collection of pus evacuated, fro which time the symptoms rapidly subsided.

Divided Plaster-Jacket.—Mr. EDWARD FREER showed a divid plaster jacket for spinal curvature.

Transfusion of Blood.—Mr. LAWSON TAIT showed the apparat used by Professor Annandale, of Edinburgh, in transfusion, and re the following account of the operation. "1. The vein having be selected and exposed, a double catgut ligature is passed around i the vein at the lower part of the wound is then securely ligatured. A opening is next made in the vein, and the glass nozzle inserted, pre sure being kept up on the india-rubber tube. The other ligature now tied with a single knot around the vein and nozzle, and the en held by an assistant. 2. The giver of the blood is meanwhile ble into the glass-measure, containing two ounces of the solution of pho

iate of soda ; this will require six ounces of blood. This vessel must kept at a temperature of about 100°, by means of hot-water in a sin, and the blood and solution stirred carefully with a glass rod ring the remainder of the operation. 3. The glass syringe is now led with the mixture of blood and solution, care being taken to pel all the air. The syringe is next inserted into the small piece of dia-rubber tubing, from which pressure can now be removed, and e blood very slowly injected. The syringe must be kept warm by eans of hot flannel cloths. The point of the syringe should be rected downwards, to avoid the entrance of air to the vein. When e syringe is emptied, pressure is again made on the tubing, and the ringe refilled as before. After all the blood is injected, the glass zzle is removed from the vein, the ligature at the same time being ghtened and secured. The wound in the skin is then stitched up. e time occupied in injecting the eight ounces of the mixture (about ree syringesfull) should be about twenty minutes. The phosphate soda solution consists of one ounce of phosphate of soda to twenty nces of distilled water. This solution should be freshly prepared, d one part is mixed with three parts of blood. All the apparatus ust be carefully washed with distilled water."

Azoturia.—Dr. SUCKLING showed a specimen of urine passed by a an, aged 47, who complained of insomnia and restlessness. The ine was acid, of specific gravity 1030. A copious deposit of nitrate urea was at once thrown down on adding nitric acid, and the per-ntage of urea, by Squibb's process, was 3.4. The average daily iantity of urine was forty-four ounces. The patient was ordered milk d farinaceous food, with immediate relief.

Dr. SUCKLING also showed a well marked case of Post-hemiplegic remor.

Dr. CARTER read a commentary on a case of Enteric Fever.

PLYMOUTH AND DEVONPORT MEDICAL SOCIETIES.

WEDNESDAY, MARCH 24TH.

. JACKSON, F.R.C.S., President of the Plymouth Medical Society, in the Chair.

Ichthyosis.—The PRESIDENT showed a case of ichthyosis of the lower p, with leucomatous patches inside the cheeks. The patient was a an who had worked inside the double-bottoms of ships, with no parent ill effect at the time.

Cystic Degeneration of a Kidney: Absence of Symptoms.—The PRE-DENT also showed a pair of kidneys removed from a man, who had mplained of no symptoms of kidney-disease during life. One kid-ey was much hypertrophied, the other atrophied, and the subject of stic degeneration.

Cholera.—Dr. WILLIAM H. PEARSE read a paper on cholera. He gued that the facts of miasmatic contagion, and of the autogenesis cholera must both be admitted, and were embraced in a greater eory of evolution. He applied Darwin's hypothesis of autogenesis to ie autogenesis of cholera ; he maintained that changed environment ad been followed by cholera ; and held that vito-chemical poisons volved, after periodic intervals, from varied "shocks," or extremes f environment. Dr. Pearse applied the doctrine of "continuity" to holera, and suggested the method of co-ordination to those not visibly ffected.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 4TH, 1886.

J. H. ROSS, M.D., President, in the Chair.

Peptonisation.—Mr. MADDOX, representing Messrs. Burroughs and Wellcome, demonstrated various modes of peptonising milk, etc., and showed that cod-liver oil was so far altered by mixture with maltine as scarcely to present any oil-globules under the microscope ; by such mixture, it was thus probably rendered more digestible than in any orm of emulsion.

Extroversion of the Bladder in a Female.—Dr. WHITTLE showed a ase of extroversion of bladder in a young girl.

Scald of the Throat.—Dr. WHITTLE brought forward a child, aged 2 years, admitted on November 14th last to the Children's Hospital, suffering from effects of scald of the throat, and treated by large doses of calomel (after Dr. Bevan's method), with very satisfactory result. The child had drunk boiling water from a teapot, and had the lips and fauces swollen and blistered ; there were a hard cough, urgent dyspnœa, pulse 120, and general signs of collapse ; tracheotomy was thought probable. After a hot mustard-bath and fomentation of the throat, he was placed in a steam-tent, and one grain of calomel ordered every half-hour, until green motions occurred. He took the first powder at 1 A.M., and continued the treatment regularly all night without sickness or diarrhœa, but also without evident improvement. Next morning, pulse 124, temperature 100.8°. The child had taken very little milk. A nutrient enema given was mostly returned. The tongue being coated with calomel, two grains of powdered rhubarb were ordered, and afterwards the grain-doses were continued until 12.30 A.M. (November 16), when a green slimy stool was passed, 41 grains of calomel having been taken. The breathing now improved. There was no swelling of the gums, and only slight dribbling of saliva. He took milk and lime-water. The calomel treatment was now stopped. After this he improved. On the 21st, he was able to take bread and butter, and soon made a good recovery. In four similar cases treated by Dr. Bevan, of Dublin, between 50 and 60 grains of calomel were taken with success and no bad result ; and he stated that green stools might be expected in eight to twenty-six hours after the first dose. In the present case, they occurred twenty-eight hours after.

Purpura in a Child.—Dr. MACKEY brought forward a boy aged 12, admitted into the Children's Hospital with purpura, which had developed without apparent cause, and was shown by hæmorrhage into the skin, and, judging from the abdominal pain, etc., into the peritoneum, as well as from the bowels, kidneys, nose, etc. The special point in the case was the benefit derived from turpentine and perhaps from arsenic.—Mr. BABER remarked on the value of the latter remedy in vaso-motor neuroses ; and Dr. WHITTLE on the causation by shock and symmetrical eruption as favouring a nerve-origin.—Dr. Ross had given Ruspini's styptic in a similar case without benefit.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 25TH, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Sarcoma of Cervical Vertebræ.—Mr. W. W. BANHAM showed this specimen. It originated in the bodies of the third and fourth cervical vertebræ, infiltrating and softening the bone, and so compressing the spinal cord.

Cystic Disease of Kidney.—Mr. BANHAM also exhibited this specimen of surgical kidney, in which a number of cysts had developed. The cysts were filled with cheesy matter. The case was one of bladder-mischief, and the walls were found much thickened ; there was a sinus in the ischio-rectal region, and the bladder was perforated in the posterior wall, and lead to a cavity in the perinæum.

Rupture of Intestine.—Mr. LOCKWOOD exhibited this specimen from a lad, who had been kicked in the abdomen on the evening of March 20th. At the necropsy, there were signs of recent peritonitis, and a rupture in the gut at about the junction of the jejunum and ileum.

Diseased Kidneys.—Mr. C. F. COOMBE exhibited specimens of (1) Fatty Kidneys ; (2) Cirrhotic Kidney, with Hæmorrhage into the Pons Varolii ; (3) Tubercular Kidney, with Caseous Degeneration.

Rupture of Aorta.—Mr. KILHAM exhibited a specimen of ruptured aorta from a man, aged 30, who died suddenly. The heart was fatty, and the aorta atheromatous ; in the latter were three or four small ulcers, one of which had an opening through it.

Diverticulum of Ileum.—Mr. KILHAM showed this specimen, from a man, aged 58, who died of cancer of the liver. It was situated about a foot from the ileo-cæcal valve, and projected from the lower border of the ileum ; it was $1\frac{3}{4}$ inch by $\frac{3}{4}$ inch broad, curved slightly to the right. It contained a small quantity of fæces and greenish mucus. A fold of mucous membrane acted as a valve to the diverticulum, at its opening with the intestine.

The Present Position of Therapeutics.—Dr. HUNT, after a brief retrospect of the history of therapeutics, went on to show that medicine was influenced by fashion, which arose from certain remedies being associated with certain diseases. Another influence that was brought to bear on medicine was public opinion. He thought that experimental research had not been successful in establishing therapeutics on a true scientific basis, and that the principle of arguing from a physiological condition to a morbid one was not sound, and did not, in practice, correspond with theory. It was further stated that medicinal agents could never be called curative ; their only use being to treat symptoms. Another character of modern therapeutics was its approach to surgery, and the influence surgery had brought to bear on the medical art. Dr. Hunt mentioned the value of certain recent drugs in certain morbid conditions, and concluded by giving his opinion on the relation that should exist between the medical man and the public.—Remarks were made by the PRESIDENT, Dr. MARTIN, Dr. GWYNNE, and Mr. BROWNING.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THURSDAY, MARCH 11TH, 1886.

Sir JAMES SAWYER, M.D., President, in the Chair.

Purulent Peritonitis.—Mr. LAWSON TAIT showed a girl, from whose peritoneal cavity he had removed upwards of three pints of pus, one week ago, for purulent peritonitis.

Porro's Operation.—Mr. TAIT exhibited a woman, with her child, who had been delivered successfully by Porro's operation, rendered necessary by deformity of the pelvis.

Spurious Venereal Diseases.—Mr. JORDAN LLOYD read a paper on spurious gonorrhœa and chancre, and on predisposition to venereal diseases. He drew attention to urethral discharges and sores, which, although venereal in their origin, were not specific in their nature. They arose in the absence of pre-existing gonorrhœa or chancroid, from inoculation by other morbid products, such as menstrual fluid or leucorrheal discharge. Although it was sometimes recognised that urethritis might occasionally originate from inoculation, by other morbid poisons than that of gonorrhœa, in his experience, the majority of so-called gonorrhœas actually arose in this way. Spurious chancroids were of less common occurrence, but still they were not unfrequently seen. Numerous cases were quoted in support of the above opinions. American and continental authorities were referred to as having promulgated similar views for many years past, without having taken hold of the profession in this country. The paper concluded with remarks on idiosyncracy in reference to venereal diseases. Cases were quoted which appeared to show that, while some people exhibited special liability to such diseases, others enjoyed more or less immunity from them.

Ovariotomy.—Mr. LAWSON TAIT read a paper on a series of 139 ovariotomies without a death. The paper will shortly be published *in extenso*.

PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, MARCH 26TH, 1886.

H. R. KER, F.R.C.S.Ed., in the Chair.

Card-Specimen.—Dr. SUCKLING showed a specimen of Laryngeal and Tracheal Phthisis, taken from a man aged 26, who died in the Queen's Hospital from extensive tubercular disease.

Mr. LLOYD OWEN showed a specimen of unusual Plication of the Iris.

Injury to Pelvis: Ligature of External Iliac Artery.—Mr. LANGLEY BROWNE described a case of injury to the pelvis, and subsequent ligature of the external iliac artery. A man was winding up a heavy grindstone, weighing nearly two tons, when it slipped and fell upon him, resting on the left hip. He had great collapse, with symptoms of ruptured bladder. There was little external injury, except a small wound in the perinæum. When the wound was enlarged, large quantities of clot escaped, followed by free hæmorrhage. The external iliac artery was exposed by incision, and it was found that the epigastric was torn off. The iliac artery was tied. Both rami of the os pubis were fractured, and had been greatly displaced under pressure. The lower fragment penetrated the urethra, and caused the perineal wound; the upper one tore off the epigastric artery, and punctured the bladder. The man died four hours afterwards, from shock.

Tubercle of the Cornea.—Mr. EALES showed a female patient, aged 19, in whom both corneæ were infiltrated, chiefly in the outer half of their extent, with greyish-yellow roundish masses, which had coalesced, rendering this part of the cornea opaque. There were considerable vascularity of the opaque cornea, and deep injection and swelling over the adjoining episcleral regions, resembling episcleritis. There was a history of three intractable attacks of inflammation in the eyes during the last six years. At the onset, the cervical glands became enlarged, and had remained so for the last six years. The patient stated that two maternal aunts had died of consumption. Mr. Eales considered the case to be one of so-called tuberculosis of the cornea.

Gangrene of Fingers.—Mr. J. MCCARTHY showed a case of symmetrical gangrene of the fingers.

Pachymeningitis Interna.—Dr. FOXWELL showed two durae matres which had undergone this lesion. Both were taken from men under 50, and mentally sound. In one case, death resulted from multiple pontine hæmorrhages; in the other, it was due to phthisis.

Cerebral Tumours.—Dr. SAUNDBY exhibited diagrams, and related the particulars of two cases of cerebral tumour, in which the cortical motor area was involved, without giving rise to distinct paralysis. In one case there was spasm of the left side of the face, the left arm, and deviation of the eyes to the left, the lesion being found at the lov part of the left ascending frontal convolution.

Unusually Prolonged Typhoid Fever.—Dr. SAUNDBY showed t charts of a case of typhoid fever, in which the patient had just covered from his third relapse since admission, and whose histo pointed to eleven weeks of fever before admission, making a total 160 days, the patient being still under treatment. Dr. Saund alluded to the writings of the late Dr. Pearson Irvine, and to t statement that Dr. Irvine that many cases of typhoid fever ran a cou of a hundred days or more. In the present, the diagnosis was based characteristic temperature-curve, rash, and stools. The patien general condition at the end of this long illness was not very bad, a he was now making progress towards convalescence.

Fatty Degeneration of the Heart.—Dr. SAUNDBY showed a hea with incompetent aortic and stenosed mitral valves; but its chief i terest lay in the fatty degeneration of the cardiac muscle, now call parenchymatous myocarditis. It was, no doubt, often associated wi inflammatory processes, as in the present case, but not always, so th the old name should not be given up. Dr. Saundby opined that valv lesions, with healthy heart-walls, are of small consequence, few cas of simple valvular disease proving fatal. Cheyne-Stokes breathing w present in this case seven weeks before death took place, and pass off before that event.

Mollities Ossium.—Mr. AUGUSTUS F. CLAY showed the bones fro a case of mollities ossium, and gave a history of the case, with a f account of the *post mortem* examination.

Specimens of Spina Bifida.—Mr. BARLING, in showing these spe mens, drew attention to a report of a committee of the Clinical Socie on the subject. The first specimen was an example of mening myelocele in the lumbo-sacral region. The cord, immediately aft leaving the vertebral canal, blended with the posterior wall of t sac; and from it the nerve-cords, normally arising here, were direct horizontally forward across the sac to their intervertebral foramin The sac-cavity, about four ounces in capacity, appeared to be lined l arachnoid membrane, but it was completely shut off from communic tion with either the arachnoid or the subarachnoid space, or with t central canal of the cord, but there was no evidence as to how th closure had been produced. The second specimen was an example spinal meningocele in the sacral region, and was brought fo ward as a "typical" specimen. In their report, the Com mittee stated that they had seen no specimen illustrating the typic form, "that is to say, a sac composed of dura mater and arachno (the so-called visceral layer) communicating with the general caviti of the spinal membranes, invested with normal skin, and tending be pedunculated." This specimen, due to imperfect closure of th second and third sacral laminæ, appeared to comply with all the conditions.

Dr. MALINS exhibited a Tumour of the Recto-vaginal Wall.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 2ND, 1886.

T. R. JESSOP, F.R.C.S., President, in the Chair.

Treatment of Injuries to Joints.—Mr. MAYO ROBSON read a pap on a series of cases illustrative of the treatment of severe injuries t joints, and referred to the following cases, all of which had bee under his care during the past year, and had been treated antisepti ally by means of perchloride of mercury solution (1 in 2,000) and dr dressings; and in every case a sound movable joint had resulted: 1 compound comminuted fracture of the patella, with wound of th knee-joint; 2, compound comminuted fracture of the humerus, wit wound of the shoulder-joint; 3, compound fracture of the humerus with wound of the elbow-joint; 4, compound dislocation of the astra galus backwards; 5, suppuration in the knee following injury, treate by incision and drainage; 6, suppurating hæmatoma of the knee-join in a man aged 70, treated by incision and drainage. Several of th cases were shown.

Popliteal Aneurysm: Gangrene of Foot.—Mr. E. ATKINSON showe a man, aged 37, the subject of popliteal aneurysm, in whom ligatur of the femoral artery was followed by gangrene of the foot, for whic amputation had been performed through the calf by a long posterio flap, while the contents of the sac were still unconsolidated. Th stump was five weeks in healing, having been complicated by suppu ration of the knee-joint, which had to be incised and drained. Not withstanding this, the aneurysm steadily contracted and shrivelled while the knee, bent at a right angle, made a much better support tha if amputation through the thigh had been performed, as was usuall laid down as the only safe practice.

Amputation of Both Arms.—Mr. ATKINSON showed a boy, aged , who had suffered primary amputation of both arms, for an acci- nt in which he had fallen in front of some railway-wagons, with th limbs outstretched across the metals. The left arm had to be mputated through the shoulder-joint; the right within two inches d a half of the head of the humerus. Both had healed rapidly, thout a bad symptom, and the right stump was now being fitted th one of Mr. Heather Bigg's artificial limbs, by means of which e boy could feed himself.

Inguinal Hernia.—Mr. ATKINSON showed a case of enormous left guinal hernia in a man, aged 55, who had been admitted into the firmary with urgent symptoms of strangulation. Taxis had been ely used before admission. The sac was tense and dark-coloured, d, on being opened, a quantity of dark grumous serum escaped. early, if not quite, all the ileum was in the sac, and at two points e gut was ruptured; at one place at its free border, and at another ose to its attachment to the mesentery. These rents were closed by e catgut; the one, an inch long, by four interrupted sutures; and e other, one and a half inches long, by an uninterrupted suture. nsiderable delay was caused by the ring being occupied by a large isted mass of mesentery, that rendered necessary a free division of e muscular-wall before it could be reduced. The adherent sac was o large to be stripped and removed. The patient was under ether r an hour and three-quarters. He had no general peritonitis after- rds; and, though suppuration of the sac retarded his recovery, it sulted in contraction of the cicatrix, which brought the ring within sy control of an ordinary truss, with a water-pad.

The Mountain-Cure in Heart-Disease.—Dr. CLIFFORD ALLBUTT ad a paper on this subject. After referring to Oertel's recent papers, detailed three cases, all occurring in medical men, whom he had vised to try the plan of graduated exercise, known in Germany as e mountain-cure. The patient, under careful supervision, was urged walk certain paths of gradual ascent. The distress at first felt came less as perspiration ensued, and the "second wind" was ob- ined. The sweating was then very profuse, and the inspirations came deeper. The first case referred to was suffering from mitral gurgitation, with œdema of the legs, and some fluid in the pleuræ. e recovered sufficiently to be able to resume his professional work in mfort. The second patient suffered from orthopnœa, with weak stole, and a systolic murmur audible at the cardiac apex, and neral irregularity of secretions. In a week after he commenced the eatment, he could walk an ascent of 400 feet, and shortly afterwards ounted 4,000 feet without difficulty. He remained well till two ars later, when he died of acute pneumonia. The third case was a man, aged 48, with dyspnœa and signs of cardiac dilatation, who rfectly recovered. Dr. Allbutt remarked that cases must be very refully selected, as this method would probably prove rapidly fatal cases of aortic regurgitation or purely atrophic conditions of heart. Mr. WHEELHOUSE thought that, in the cases related, there was a ong gouty element, for which the method adopted, aided, as it s, by copious water-drinking, would be well suited.—Dr. CHURTON ought that the weakness of the right heart, prominent in mitral ease, was intensified by spasm of the pulmonary artery due to im- rity of blood, and that, by increased elimination from the skin and her organs, this might be relieved; while, in some cases, irrecover- le distension might occur during the effort.—Dr. S. C. SMITH had vocated, in a recent paper, an increased amount of exercise in some ses of cardiac disease. He thought the treatment of a weak heart s the treatment of a weak muscle, which would be improved by ercise, active or passive.—Dr. BARRS thought that, in the class of tients generally seen in hospital practice, the usual treatment by t and drugs was comparatively satisfactory.

M. Pasteur's Treatment for the Prevention of Hydrophobia.—Dr. C. CHADWICK read a paper on this subject. Having shortly re- wed M. Pasteur's previous work, he proceeded to follow his inves- ation from his first case in 1880, when he discovered the presence a microbe in the saliva, probably only an attendant on the virus, d not the virus of rabies, and its rapidly fatal effects. Passing n to the inoculation, from dog to dog, under the skin, he showed w M. Pasteur expedited the process by direct inoculation under e dura mater. The uncertainty, however, of these results led to e passing of the virus through a series of rabbits, with the effect at the length of the incubation-period was much reduced. The ferent results obtained in dry air, from those in a moist atmosphere carbonic acid, was then explained, several of the cases having been tailed at some length and commented upon. He advanced the ree theories as to the *rationale* of the treatment, namely, the minishing of the virulence, the diminishing of the quantity of the us, and, finally, what appeared most likely to M. Pasteur, the pro- bable growth of some new material antagonistic to the proper develop- ment of the primary virus. Having then detailed the daily pro- cesses at the laboratory, first, for the keeping up of the supply, and, secondly, the mode of treatment adopted, he eulogised the excellent work and marvellous modesty of the discoverer of the process.—Mr. WHEELHOUSE pointed out that the cases sent to M. Pasteur from Bradford had all passed the usual incubation period of hydrophobia, one patient having died from it.—Mr. LODGE gave some particulars as to the Bradford cases. Thirteen persons were bitten on that day, but it was uncertain whether more than six were by the rabid dog. In the dog's stomach the usual collection of foreign bodies was found, which, to some extent, indicated the affection of rabies.—Mr. MCGILL pointed out the small but unknown proportion of cases of hydrophobia occurring among persons bitten by certainly mad dogs, as leading to fallacies in drawing conclusions as to the use of M. Pasteur's process.

ACADEMY OF MEDICINE IN IRELAND.

SUBSECTION OF STATE MEDICINE.

THURSDAY, FEBRUARY 4TH, 1886.

A. H. JACOB, M.D., F.R.C.S.I., in the Chair.

Inaugural Address.—The CHAIRMAN delivered an address on "The Poor-law Medical Charity System of Ireland."

Contrast of the Duties of Medical Officers of Health in England and Ireland.—Mr. EDGAR FLINN read a paper on "The Duties of Medical Officers of Health in England and Ireland Contrasted." He referred to the great disadvantages under which the Irish health-officer laboured in the execution of his duties, and condemned the system of appointing dispensary medical officers as medical officers of health. The paltry stipends of £10 and £15 a year which they received were an insult to the profession; and it was no wonder that the Public Health Act was not worked, and had become a dead letter throughout the greater part of Ireland; in fact, the duties of a medical officer of health in the rural districts in Ireland existed only in name. The difference was apparent in England, where the recognised duty of the urban or rural sanitary authorities was the health of the people; where the medical officer of health was obliged to make monthly or fortnightly reports; these reports were duly discussed, and the officer's suggestions promptly acted upon. It was yearly becoming more evident that the Irish Local Government Board would have seriously to consider the question of districts and unions being combined, for the better administration of the Public Health Act. Instead of a plurality of medical officers in each district and union, with a superintendent medical officer of health, there should be one or, at most, two, who should be men free from the cares of practice, with special sanitary knowledge, and whose pecuniary interests would not be perpetually at war with a fearless discharge of their duties. This combination of districts had worked very well in England, and it was one of the main reasons why the Public Health Act was so thoroughly and efficiently carried out. Possibly there might be a difficulty in carrying out a suitable scheme in Ireland, on account of the smaller rateable value; but any combination scheme would be an improvement that would provide for the Irish medical officer of health being independent of the prejudices and whims of the local bodies.—The REGISTRAR-GENERAL (Dr. GRIMSHAW) said he was one of the earliest persons who took an interest in promoting the very service which Mr. Flinn had condemned. He had no pecuniary interest whatever in the service, whether it succeeded or whether it failed; but one of the reasons for adopting the present system at the passing of the Public Health Acts, 1874-78, was that the English system had worked so very badly, it was better to try something else in Ireland. It was not usual in England to pay the medical officers of health so well, as to secure their whole attention to the duties. But it was impossible that any of the unions in the West of Ireland could supply funds to maintain public health-officers' independently of private practice. There were reasons why the dispensary medical officer should be also the best officer of health. In a large number of infectious cases, he was the medical attendant, and was accordingly enabled at once to isolate such cases, and stop the spread of the disease. Thus, the notification of the infectious disease was avoided, and the necessary precaution taken, without the difficulty experienced in cases of compulsory notification by an independent practitioner. Moreover, the dispensary medical man saw many things dangerous to health as he went through his district, and these he remedied at once. Hence the advantage of combining the two offices. No doubt, the dispensary medical officers were not properly paid as officers of health; but still the combination of the offices rendered the Irish system superior to any existing in any other part of the world. Apart from

certain difficulties and occasional mistakes, there was, in Ireland, the best sanitary system of police that existed in the world.—The CHAIRMAN said he was in the happy position of concurring both with Mr. Flinn and with the Registrar-General. The Irish system deserved much criticism; at the same time, he was sensible of the importance of having the medical officer of health one and the same with the dispensary medical officer. An inspector of nuisances, or a superintendent officer of public health, could only inspect those places where there was something to inspect. In Ireland, there was a corps of 860 officers, who went every day in the week into places where there was most likelihood of the existence of dangers to health. But the Irish medical officers were badly paid, and worked under discouragement. The history of the question was this. When the various bodies agitated for a compulsory public health system, in 1878, the most essential element urged was the propriety of making the health-officer, in the discharge of his functions, independent both of the dispensary committee and of the board of guardians. That proposal was not listened to, and the public health system was constructed on the lines of the best legislation that previously existed in England, and on a system which, if rightly administered, would have produced every hoped-for result. As soon as the Act passed, compelling boards of guardians to take the matter in hand, the Local Government Board instructed them, in the first instance, that they were on no account to pay the medical officers sufficient for the discharge of their duties. It was not that the guardians should pay them too much, but that they should not pay them anything like a reasonable competence. Thus the annual salary was preposterously minute, varying from £2 10s. to £5, and being equivalent to a notification that the public health-officers were expected to do nothing; while the superintendent medical officer of health was to be a dummy until consulted, and then he was to be paid £1 1s. for the consultation. No encouragement whatever was given by the central authority for the development of the public health system. Every effort had been made to induce the authorities to carry out the behests of Parliament; and, until the authorities and the inspectors saw that the public health-officers did their work, nothing could be expected from the public health system. If an inspection were provided, and energy infused, a better system than that which existed in Ireland could not be found elsewhere.—Mr. FLINN, in reply, said he bowed to what Dr. Grimshaw had said; but, at the same time repeated, from what he had seen in Ireland, and, from his experience in England, that he could not forego what he had stated in his paper.

LIVERPOOL MEDICAL INSTITUTION.

THURSDAY, MARCH 18TH, 1886.

J. BIRKBECK NEVINS, M.D.Lond., President, in the Chair.

Obstruction of the Bowel.—Mr. CHAUNCEY PUZEY requests us to publish the following correction of the report on March 27th, p. 594, of the case read by Dr. Caton. The cause of the obstruction was found to be partly a stricture of the ileum, but mainly owing to that rare condition, an unobliterated vitelline duct, which, still retaining its connection with the umbilicus and the ileum, so dragged upon the bowel at its strictured portion as to cause a "kink" of the acutest angle, completely obstructing the flow of the intestinal contents. This duct it was (not the intestine) which he said resembled in appearance a large umbilical cord. The duct was ligatured in two places, and the intervening portion was cut away. By this means, the "kink" was obliterated; and, though the narrowing of the bowel still remained, the obstruction was so far removed that the contents of the distended upper part of the bowel readily ran through into the hitherto collapsed lower portion. The result was immediate relief of all the symptoms of obstruction. The patient had been unfortunately suffering for more than a week before admission, and was already somewhat collapsed when the operation was commenced, signs of commencing peritonitis being also observed. He gradually sank, and died thirty hours after the operation.

A WONDER DOCTOR.—A Dr. A. Askotchensky, of Verkhnedneprovsk, by permission of the local authorities, distributes a leaflet describing wondercures which he obtains from the internal administration of clay in cases of chronic rheumatism and other morbid forms depending upon rheumatic cachexia, as well as in cases of anæmia, where clay is more of use than all steel preparations. A solution (*sic*) of clay being injected into the vagina, cures catarrh of the latter. Of course, all those marvellous properties are manifested exclusively by the clay sold by the doctor (*Vratch*, No. 4, 1886, p. 87).

REVIEWS AND NOTICES.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the l
CHARLES HILTON FAGGE, M.D., F.R.C.P.; Physician to, a
Lecturer on Pathology at, Guy's Hospital; Examiner in Medici
in the University of London. Vol. I, pp. 1024; Vol. II, pp. 8
London: J. and A. Churchill. 1886.

THE untimely death of Dr. HILTON FAGGE deprived the young generation of English physicians of one of its most representati men; industrious in the acquisition and accumulation of the facts morbid anatomy, experienced in the practical management of disea skilled in the use of modern instruments of precision, and widely re in the literature of medicine, he also possessed, in an eminent degr the judicial faculty. By his possession of these qualities, indust and ability, combined with judgment, he appeared peculiarly w fitted to write a treatise on the science of medicine; in the t volumes before us, we have the result of a labour of this kind, whi occupied a large part of the last twelve years of his life. The wo is, in fact, a treatise on medical pathology, understanding that phra in its widest sense as embracing the etiology, the symptoms, and t anatomy of disease; it reflects the present state of medical scien as it appeared to a singularly competent and acute critic, who wr with a width of grasp and accuracy of detail which would be hard match in any extant treatise.

It is not easy to assign this work its exact place in a medi library; as a text-book, it will only be read by advanced students, b to that class it will be invaluable. Its bulk, and the enormous m of detailed description which it contains, put it beyond the range of ordinary student, who seeks to hasten through the curriculum with possible speed. It is perhaps most truly comparable with Sir Thom Watson's *Lectures on the Principles and Practice of Physic*; that to say, it is probably such a work as Sir Thomas Watson would ha written, if he had commenced his task in the last quarter of the ni teenth century. The greatly increased attention now paid to etiolo and pathological anatomy, and the much greater precision with whi symptoms and physical signs are now studied, are the circumstan which have introduced the chief differences in the treatment of t same subjects by the two writers.

A short introductory chapter deals with the general facts of nosolo and etiology. The modes of dying are classified under six hea —paralysis of respiration, asphyxia, syncope, collapse, hæmorrha and asthenia; the subject is discussed and illustrated in a mann which gives the reader a favourable impression of the author's sources. The nature of contagion is next investigated in the light recent knowledge, and the opinion is expressed that the evidence a cumulated from various sources "almost, if not quite, amounts proof that the contagia are living organisms of exceedingly minu size." A classification of micro-organisms, in which Nägeli is f lowed, is given, and an excellent summary of methods of disinfecti concludes the chapter. Dr. Fagge had evidently been much impress by the attenuation of virus produced by M. Pasteur, and has so remarks in connection with this subject, and the stamping out disease, which will deserve to be weighed by advocates of the lat system. Liebermeister is generally followed in the description of t nature of the febrile process, and the theory is advanced that t fundamental fact is a change in the normal function of the heat-reg lating apparatus. "One might imagine the index of the heat-regul ing machinery to be 'set' not at 98.4°, but at 101°, 102°, 103°, even a still higher point." The chapter on Inflammation is a maste essay, in which the history of the discoveries of the last forty years interwoven with a description of the phenomena; the remarks plastic exudation, and on croupous and diphtheric false membran are especially valuable, and contain several original suggestions whi help to clear up certain difficulties. The pages devoted to tuberculo read as though they had been written, as may very well have been t case, before the publication of Dr. Koch's discovery. The theory p forward by Dr. Fagge, on grounds afforded by previous observati and experiment, only required some such agent as the bacillus tub culosis to round it off; and the discovery of that organism evident supplied to his mind a welcome link in the chain of reasoning whi he had already elaborated.

Of the chapters devoted to the specific diseases, the most remar able is that on Enteric Fever. The great amount of space devoted the question of its etiology is well expended, and the epidem chosen to illustrate the various channels by which the poison may distributed are well described, with the exception of the famous La

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en epidemic, where the very peculiar geological formation is not well brought out.

Dr. Fagge held his opinion in suspense as to the nature of Pettenkofer's theory, and adds that, "like some other problems, it will probably be ultimately settled by the experience of general practitioners practising in the less crowded districts of the country." The subject of cholera is treated with great ability, and the mode in which the symptoms are most probably produced is investigated with much acumen; but all the specific diseases are not treated with equal thoroughness, and questions of treatment are, in most cases, dismissed after somewhat inadequate discussion.

Nervous diseases are described, as a rule, from the clinical standpoint; and, in most cases, the so-called functional diseases are more graphically described than the so-called system-diseases. Some of the articles attain a very high standard of excellence; we may especially instance those on megrim, on neuralgia, on hystero-epilepsy, and on cerebral hæmorrhage, as examples of the wide grasp of principles and rich fund of illustrative cases which are characteristic of the best parts of the book. Other articles, as, for instance, the majority of those on diseases of the spinal cord, fall far below the high standard elsewhere attained. Questions of treatment are more fully discussed in this part of the book, and some suggestions are made which, if not entirely novel, will yet have greater weight in the future, owing to Dr. Fagge's recommendation. The extensive use which he seems to have made of Calabar bean may be instanced as a case in point.

Diseases of the Lungs are so carefully described and so thoroughly discussed, from both the clinical and the pathological side, that the work would be worth possessing for the sake of these chapters alone. Auscultation and percussion, and the other physical methods of examining the thorax, are dealt with in an admirably clear and concise chapter. The theories which have been propounded are analysed with scrupulous exactitude, and with a simplicity of language which goes a long way towards making an intrinsically complex subject easy of comprehension. All through this section of the work, observations and arguments occur which will be highly appreciated by experienced practitioners, who will be ready, for instance, to endorse the very admirable remarks on the diagnoses of pleuritic effusion. One point is of especial importance. Dr. Fagge states, as a general proposition, that whenever a part of the lung fails to be acted upon by the inspiratory forces, it becomes airless; the collapse has nothing to do with the condition of the bronchial tubes, which may remain patent. He quotes the observation of Dr. Moxon, that the presence of even a few ounces of fluid in the pleural cavity is accompanied by complete collapse of the part of the lungs which ought to have occupied that space; this observation is brought in to explain the fact that the effect of gravitation is not easily perceived in pleuritic effusion. Even if one can alter the level of dulness a little by making the patient sit up (when he has been lying down) the alteration does not, I think, amount to more than a finger's breadth or two. Now, if a certain part of the lung is rendered altogether airless by pleuritic effusion, it is easy to see how the fluid may, as it were, be held up in a fixed position, in opposition to the force of gravity."

The symptoms and pathology of phthisis are, of course, elaborately detailed, but the attention which is all through the work given to the subject of etiology is well instanced in the care devoted to the investigation of the influence of hereditary transmission, diathesis, overcrowding, injurious trades, climate, and soil in producing the disease. Under the head of treatment, also, modern views find full expression.

The chapters on Diseases of the Heart and Great Vessels had been commenced, but not completed, at the time when the author himself succumbed to an affection of this nature. The articles and paragraphs which were wanting have been supplied by Dr. Wilks, who has written on chronic endocarditis and valvular lesions, on aneurysm, and on thrombosis and embolism. On this part of the book, it is hardly necessary to offer any criticism. Dr. Wilks's terse language and close logical style are well suited to the subject; and his extensive knowledge of pathology at first hand enables him to weld facts and theories together into a continuous story, which ought to be generally read.

Passing over the articles on diseases of the nose, mouth, œsophagus, and stomach, attention may be directed to the very admirable discussion of the diagnosis and treatment of intestinal obstruction and peritonitis. Diseases of the Liver are treated at considerable length. The article on hydatid disease gives a very complete account of the affection, and there is a vein of original thought running through it. Dr. Fagge, in particular, observes that some weeks or months after tapping the tumour is often found to have regained its former size, but that this enlargement is due, not to the growth of the parasite, which is, in fact, effectually killed by the puncture, but to effusion of serum into its capsule; the fluid obtained on a second puncture always contains albumen, and, if punctures be repeated, leucocytes appear and increase in number, until finally the fluid is converted into pus. On the other hand, if, after a single puncture, the tumour be left strictly untouched, the enlargement will be found to have been only temporary, and the tumour entirely disappears. "I would therefore lay it down as a rule that no second operation upon a hydatid cyst should be performed within twelve months, unless there be reason to fear that suppuration has been set up within the capsule." The difficulty of applying this rule in practice would appear to be that it is not always easy to decide whether a tumour, which appears two or three weeks after a tapping, is the original cyst, or a second, which has come forward owing to the withdrawal of fluid from the neighbouring cyst, and a consequent alteration in the pressure. This is a reason frequently assigned for making a second puncture.

The pathology of splenic leuchæmia, Hodgkin's disease, pernicious anæmia, and Addison's disease, is stated and analysed with the care and skill which were certain to be given to these diseases by a physician to the hospital where three of them were first described. Dr. Fagge adopts Dr. Wilks's view that, in Addison's disease, "one particular morbid change in the capsules is found." This morbid process is characterised in the earliest stage by a small-celled growth, which becomes fibrous; caseation subsequently occurs, and "finally a process of absorption begins, and the diseased organ, from being many times larger than natural, shrinks into a very small puckered mass, in which irregular nodules of calcareous material are deposited." Dr. Fagge mentions one case he had examined, where only "a hard puckered fibrous knot, sending out bands into the fatty tissue in which it lay imbedded, and having dispersed within it a number of irregular calcareous masses" alone remained. A perusal of Dr. Fagge's account of the disease will strengthen the impression that the cases of Addison's disease, with atrophy of the adrenals, recently published, and to which the editor refers in a foot-note, are, in reality, examples, not of simple atrophy, but of atrophy supervening rather earlier than usual on the small-celled infiltration described by Dr. Fagge.

It must not, however, be supposed that it was only in treating rare diseases that Dr. Fagge showed his wide knowledge and rare critical ability. The article on acute rheumatism may be chosen almost at random as exemplifying the manner in which he could deal with a subject so much and so often discussed, that it is difficult not to be trite when writing of it. The symptoms and morbid anatomy are described and illustrated at considerable length, and questions of treatment are very fully discussed; all the facts and arguments for and against the use of the salicin compounds have been carefully collected and thoroughly analysed.

The chapter on Skin-diseases, to which Dr. Fagge had given much attention, had not even been begun at the time of his death; but Dr. Pye-Smith has filled up the blank by an essay which is certainly not the least valuable part of the book; a good working classification is adopted, the matter is conveniently arranged for reference, and the more uncommon cutaneous disorders are described with sufficient detail to make their recognition possible. Dr. Pye-Smith is also responsible for the general arrangement of subjects throughout the book, though this does not appear to be in all respects fortunate. Any objection on this score, however, is completely silenced by the splendid indices made by Dr. Carrington, who has assisted the editor throughout. The index of authors covers forty pages in double column; under the name of each author, the subjects upon which he is quoted are enumerated, the title of the volume, and the page to which reference has been made in the text, are also given as a rule: references indeed are, in addition, recorded with great freedom throughout the book, and it would perhaps be better, in future editions, to place all references to periodicals in foot-notes and not in the text. Dr. Carrington has also provided a separate index of subjects.

The labour expended by the editors must have been very considerable. It is no light matter to see eighteen hundred pages of printed matter through the press under any circumstances; but when, as in this case, the author has been taken away from his work while his task was yet incomplete, the difficulties are redoubled. Dr. Pye-Smith is to be congratulated on the general high standard of accuracy attained; the mistakes, even of a trivial kind, which we have noticed, are few in number. That the work, as a text-book, has faults of a somewhat serious kind, cannot be denied; there are some curious omissions, there is a want of proportion in the length at which different subjects of equal importance are treated, and, in parts, the narrative is overloaded with detail. Yet it is a distinctly valuable posses

sion. The habit of constantly citing cases to illustrate every exceptional event, and perhaps also that of quoting authorities by name, give a living interest, which charms the reader on from page to page. It is a book which ought to be on the shelves of every practising physician, for in it modern pathology and traditional experience are combined. To it we may turn in many difficulties. Is there a case of some ordinary malady with some perplexing complication? Dr. Fagge has probably recorded a parallel or suggested an analogy. Is there a case of rare occurrence? Dr. Fagge will have noted the existence of the disease, discussed its nature and treatment, and given the reference to original papers. Is there a case difficult of diagnosis? Dr. Fagge will have noted the difficulty, and shortly described, perhaps more than one case, where a mistake of one kind or another has been made. The prominence given to mistakes in diagnosis is indeed one of the distinctive features of the work; Dr. Fagge was able to draw upon the large experience of Guy's Hospital, and without wounding any susceptibilities, to point a moral. To take some examples: the student may think pyæmia due to caries of the temporal bone not liable to be mistaken for typhoid fever, but his confidence will perhaps be modified, when he finds Dr. Fagge stating that "at Guy's I know of two instances in which such a mistake was actually made." Again, the diagnosis of phthisis is thought to be easy enough, and it is well to be reminded that the mistake recorded by Graves, of attributing the intermittent hectic of phthisis to ague has been repeated "some years ago" in the wards of Guy's Hospital; so, too, it is not uninstructive to be told of a case of herpes zoster mistaken for erysipelas of the face, or a case of internal strangulation of the bowel mistaken for Asiatic cholera (during an epidemic). It would be easy to multiply instances of this kind, and easy to occupy whole pages of this JOURNAL in quotations of cases or discussions of the first importance; enough, however, has, it may be hoped, been said to induce every reader of this notice to give this remarkable book an honoured place in his library.

NOTES ON BOOKS.

Mediko-Pedagogitchesky Vestnik (The Medico-Pedagogic Herald). Edited by Dr. IVAN V. MALAREVSKY. 1886. No. 1, pp. 97. St. Petersburg.—This monthly is published by the Medico-Educational Institution, which has been established by Dr. Malarevsky, a specialist alienist, for education of children showing mental anomalies, and remaining behind in their mental development. The current number contains three articles: 1. The editor, on Hand-skill as an Object of Education; the author warmly advocates a systematic training of the child's hands and brain, by means of introducing obligatory manual work into the schools; 2. Professor Petr F. Lesshaft: A Lecture on Physical Education in School; 3. A. S. Virenius: Anatomico-Physiological Bases of Sexual Life in Man, and its Anomalies occurring during School-age. The main practical object of the author is to lay down measures for preventing premature and anomalous sexual development in children.

Select Methods in Chemical Analysis (chiefly inorganic). By WILLIAM CROOKES, F.R.S., V.P.C.S. Second edition. (London: Longmans, Green, and Co. 1886.)—This work does not pretend to embrace the whole subject of analytical chemistry, but the selections have been made by one who is not only eminently qualified to judge their value, but has also verified their accuracy, by personal observations conducted in his own laboratory. All the most recent and least familiar improvements in analytical methods are here described; and, in the case of important additions to our knowledge, the names of discoverers are inserted. The metals are first dealt with, then the non-metallic elements; whilst the concluding chapters are devoted to gas-analysis, miscellaneous processes, new methods of manipulation, and useful tables. The book will be much appreciated by chemists, and especially will it be welcome to those who are interested in spectroscopy. There is, in Chapter II, a full account of the author's interesting and laborious research into the spectra of the rare alkaline earths; and one of the general features of the whole work is that the rare elements are treated at great length, thus supplying a deficiency which was becoming painfully perceptible in modern analytical treatises.

Meditzinskoiè Obozreniè [*The Medical Review*]. Edited and published by Dr. V. F. SPRIMON. Vol. xxv, fasc. i, pp. 102. (Moscow: 1886.)—The current number of this important periodical, which has entered its thirteenth year, and is edited with unabated admirable care and skill, contains the following original contributions. 1. N. T. Grigorieff: Aneurysm of the Pulmonary Artery, with Thrombosis of the Popliteal, in a Syphilitic Woman. 2. A. T. Pospeloff: On Cases of Lichen Ruber Planus of the Skin and Mucous Membranes. The author m with twenty cases of the disease, in five of which the rash attacke both the skin and oral mucous membrane. 3. Z. N. A. Esipoff: Case of Rupture of the Female Urethra during the First Coitus, th patient having congenital atresia of the vaginal orifice (atresia hymen alis). 4. J. J. Jakŭb: Two Cases of the Use of Cucaine in Operation on the Vagina and Perinæum. The author describes entirely pain less colpoperineorraphy (after Hegar's method), and excision of papi loma of the vagina. A 20 per cent. solution of cucaine was repeated painted over the field of operation. 5. S. S. Kholmogoroff: On th Treatment of Puerperal Endometritis by Scraping-out with a Sharp Spoon 6. E. Belaieff: A Case of Addison's Disease in a new born, the di gnosis being verified by a *post mortem* examination. 7. T. K. J. Shi lovsky: On a Case of Werlhof's Disease in a Girl aged 3½. 8. A. A Anseroff: On the Physiological Action of Thallin and Antipyri The outcome of the author's observations, carried out in Professo Ostroümoff's clinic in Moscow, is, that antipyrin should be preferre to thallin, since the antipyretic action of the latter is of a short duration than that of the former, and is accompanied by rigors In the editorial part of the number, Dr. Bradley's case is dwelt upon a warm sympathy with him is expressed, and the brotherly behaviou of his colleagues is emphatically held up as a model for Russia professional brethren.

Lightning-Conductors, their History, Nature, and Mode of Applica tion. By RICHARD ANDERSON, F.C.S., F.G.S., Member of the S ciety of Telegraph Engineers, etc. Third Edition. (London: E. an F. N. Spon. 1885.)—For the ordinary reader, who rejoices in n special or technical knowledge of electricity, the chapters devoted t the history of the invention of the lightning-conductor will posses the most, if not the only, interest. The author tells this by no mean prosaic tale with much animation and humour. The subject can scarcel be classed as medical, for the only instances on record of the applica tion of electricity to human beings by means of lightning-conductor were immediately fatal in their result. As prophylactic treatmen however, the invention has been of incontestable utility. Th *rationale* of these conductors, the special points which require atte tion, and the ills that are apt to follow negligence or ignorance, a told in a style free from unnecessary technicalities. The informatio is, therefore, accessible to everyone who may wish thereby to ensu his life or the integrity of his buildings.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NON-POISONOUS WHITE LEAD.

WE have received from Messrs. J. B. Freeman and Co., Grove Works Battersea, samples of their non-poisonous white lead, which has th great merit of being perfectly innoxious. This paint, there is goo evidence to show, will retain its colour, and is superior in body colour, density, and durability, to white lead manufactured by th ordinary methods. It is certified to mix more readily with oil, and t be entirely free from the injurious smell of poisonous white lead. No the least important of its advantages is that of its resistance to th action of the sulphur compounds, which discolour ordinary whit lead; nor does it turn yellow or buff when a surface painted with it i excluded from light for some time, as is so often the case. Its grea hygienic feature, however, is that, being insoluble in water or acids it is really non-poisonous, and this quality cannot be other than great boon to the workmen employed in its manufacture and its use Professor Church, and other eminent authorities on this subject, en dorse the opinions above expressed, and there is, without doubt, muc to recommend it on hygienic and economic grounds.

A SAFE BENZOLINE LAMP.

MR. WILLIAM HARDY, jun., Thistleton, of Oakham, has introduced cheap and simple benzoline lamp, which he alleges to be "unspillable self-righting, and self-extinguishing." It seems to be a simple an useful contrivance, and is manufactured by Messrs. Snell and Brown Birmingham.

M. VULPIAN has been elected, by a majority of one over M Alphonse Milne-Edwards, permanent secretary of the Academy o Sciences of Paris, in the place of the late M. Janin.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 10th, 1886.

MEDICAL ACT AMENDMENT BILL.

ON Monday last, the 5th instant, Sir Lyon Playfair, Vice-President of the Privy Council, introduced, in the House of Commons, the Medical Act Amendment Bill, which we foreshadowed in our issue of March 7th last.

So many Bills have passed successfully through the House of Lords, only to encounter insuperable hostility in the Lower House, that we should despair of the passing of any measure similarly conducted. We are, indeed, pleased to find that this measure has been at once laid before the Commons, instead of going through what has invariably proved to be the idle formality of passing the House of Lords, only to be wrecked on reaching the Commons.

The difficulties in the way of securing the Medical Act of 1858 were only overcome by thirty years of incessant struggling, a period which, to our profession, might well be styled "The Thirty Years' War;" and that Act, doubtless, would never have been passed, but for the enormous advantages and privileges it conferred on Universities and Corporations which, previously, exercised licensing powers over very limited areas. The reciprocity granted by that Act enriched more than one poverty-stricken Corporation. Our Association, seconded by the present Lord Mount-Temple, then endeavoured to make the double qualification in medicine and surgery a *sine quâ non* for admission to the *Medical Register*. The three-fold qualification in medicine, surgery, and midwifery, as a minimum qualification, is now universally admitted to be indispensable; but, at that time, the Association was defeated on the point; and so, to the present day, single imperfect qualifications remain in considerable numbers, to the detriment of the public, on the *Medical Register*—men with only partial qualifications parading as registered medical practitioners, and practising all three branches of the profession, though possibly only qualified in one.

The Medical Council, as constituted by the Bill of 1858, contained representatives of all the corporations. The chief duty of the Medical Council was to supervise the very bodies who sent representatives to it; no wonder, therefore, that the Medical Council, owing to this inherent defect in its constitution, should have proved itself inefficient, and been unable to enforce a valid controlling influence over the examinations of the diploma-giving bodies. The profession has always believed and maintained that, if the Medical Council contained direct representatives of the profession—representatives having no corporate interests to protect, but having only the interests of the public and the welfare and elevation of the profession at heart—this grievous blot in its composition would be rectified, and its power for good greatly enhanced.

When the profession first moved in the advocacy of medical reform after the passing of the Medical Act of 1858, the Association directed all its efforts to the attainment of direct representation of the profession on the General Medical Council. Ever since the Report of the Royal Commission on the Medical Acts, there has been a general consensus of opinion that this should be granted, not only as a distinct improvement in the composition of the Council, but as a simple act of justice to the registered medical practitioners, who supply all the funds by which the existence of the Medical Council is maintained.

The details of the Medical Act Amendment Bill now before the House of Commons were given, as already stated, in our issue for March 27th; they provide for the election of direct representatives of the profession in the Council, and for the complete examination, under the supervision and control of the improved Medical Council, of candidates for admission to the *Register*.

Any legislative enactment by which these two cardinal points of reform could be realised, would be a boon to the profession and the public, and should not be lightly refused or rejected. The complete threefold examination is an improvement on the double qualification which the Association sought in 1858; the direct representation will be the attainment of that which the profession has found the greatest difficulty in securing. Any act, therefore, which concedes these two great principles, must constitute an unquestionable advance in medical reform.

Dr. Grimshaw, once an active member of the Medical Reform Committee, but who resigned on being appointed Registrar-General for Ireland, in the debate on the Report of the Medical Reform Committee at Belfast, described the Bill of Lord Carlingford and Mr. Mundella as too complicated. In fact, the Government of the day found that it was too complicated, that it was overweighted by the attempt to establish Divisional Boards, in the formation of which the mutual jealousies between the different universities and corporations rendered it impossible to arrange their proportional representation. The patience of the Government was inexhaustible; change upon change was made, but without success. Still, the Bill would, in all human probability, have passed, but for the multitude of amendments which crushed it.

Hitherto, the difficulties in the way of securing an amendment of the Medical Act of 1858 have been insuperable. Bills have been promoted by different bodies; several Bills have been introduced by the British Medical Association; Bills have been drafted and pressed forward session after session, by Liberal and Conservative Governments—powerful Governments, commanding large majorities—earnestly, persistently, but only to end in lamentable failure. A Select Committee sat on the Medical Acts and Bills before Parliament during two sessions; a Royal Commission, embracing the finest intellects of the day, took evidence during a long period, and made an exhaustive report, but all in vain; the interests involved in the question were so varied and so powerful, that every attempt has failed. This sad history places one fact beyond doubt, namely, that private legislation on so vast a subject must be hopeless.

The Bill now before the legislature is a less ambitious measure than the Government Bills that have preceded it. It would seem that past failure has shown the necessity of not embarrassing the Bill with immense machinery; but it provides for, first, the improve-

ment in constitution and power of the Medical Council by the introduction of direct representatives; secondly, the compulsory examination of every candidate for admission to the *Medical Register* in medicine, surgery, and midwifery, under the supervision of the reformed Medical Council.

It is known that any restrictive measure against quackery is hopeless in the House of Commons; a Public Prosecutor, and an efficient Medical Council, will doubtless be found to be the best repressive agency.

The present Bill of the Government may not be everything that the profession desires. Should it, or not, be accepted? In answer, we may repeat the words of Dr. Cameron, M.P., at Belfast, when he stated that he advised accepting the legislation which offered direct representation, as a great gain, a most important advantage in a Council with increased power, and discouraged the Association from urging provisions which they would not have the least chance of carrying, and which would probably wreck any Bill which embodied them.

ALBUMINURIA IN HEALTH.

THE occasional presence of albumen in the urine of apparently healthy persons is a fact of no mean clinical importance. The British practitioner is quite aware of the usually grave signification of albuminuria, even when the albumen is scanty, and he is perfectly cognisant of the ordinary chemical test for that compound. Hence, it is important that he, as well as the hospital physician, should not jump to the conclusion that a trace of albumen necessarily means serious kidney-disease. Dr. C. von Noorden, of Giessen, has recently contributed a monograph, On Albuminuria in Healthy Persons, to the *Deutsche Archiv für Klinische Medicin*. He classes "physiological" albuminuria into three groups. In the first group, the albuminuria is generally found in weakly youths between the ages of puberty and twenty, rarely in children, or in adults. The presence of albumen is discovered in these cases, either during clinical statistical researches, or else in persons who send for the medical attendant because they feel faint, weak, or otherwise slightly indisposed. The proportion of albumen differs greatly at intervals of a few hours. It may run up from 0.0 to 0.5 per cent. or higher, in a single morning. Rarely, if ever, is the urine continuously albuminous all day. These conditions are very characteristic of physiological albuminuria, and do not exist in any form of nephritis. The urine is pale, clear, and generally, but not always, of high specific gravity. The albumen is always coagulable on boiling. Occasionally a globulin-like compound has been detected in excess of the serum-albumen. Casts very rarely are found, and if present, they are hyaline, never epithelial. The albumen is always to be found in greatest quantity before noon. In some cases of physiological albuminuria, no abnormal general condition could be found; in others, muscular pains, errors of diet, or mental excitement have been observed and assigned as causes of this condition. No evidence of renal disease has ever been proved, nor of altered conditions of the blood. Dr. von Noorden believes that it is more likely due to blood-changes themselves, possibly caused by slight renal disease, than by disturbed filtration in the tubuli uriniferi, as Leube has suggested.

In the second class of cases, mucin is present as well as albumen. In this class, again, the albuminuria is most marked before noon. The mucin might be derived from the lower part of the urinary tract, or from the kidney itself. The proportion of albumen is very variable and much influenced by bodily exertion. In raw recruits it is most abundant after heavy drill. Dr. von Noorden believes that this class represents mild vesical catarrh.

The third class of cases, on the other hand, appears to represent slight renal catarrh, insufficient to cause the general and local symptoms of renal disease, just as, in the second, the subjective signs of cystitis are present. In striking contrast to the first class, the albuminuria may last for a whole day and then disappear, or may be found only before noon, yet in regular, but very small, proportions. No mucin can be detected, but hyaline and sometimes epithelial casts, and even red corpuscles, are generally present.

The first class is evidently the purest kind of "physiological" albuminuria. Yet this term is still questionable, for a trifling amount of disease in the genito-urinary apparatus is a more probable cause of the condition in question than any unusual "physiological" tissue-change, caused by exertions after heavy meals, etc. Physiological albuminuria, then, must be held to imply albuminuria in persons who appear to be otherwise healthy, though local disease is, in all probability, present to an extent insufficient to produce any other symptom.

MEDICAL STUDENTS AND ATHLETICS.

EVERY London medical school has its cricket and football and rowing clubs, which, in the larger institutions, attain respectable or even ambitious proportions. Their teams, or elevens, prove formidable to rivals made up of youths who are not students of medicine; so that the sporting columns of the daily press speak of the athletic prowess of St. Bartholomew's, Guy's, etc., with respect. The question as to whether the sports themselves are formidable, in another sense, to the players, has constantly been raised by medical officers, teachers, and parents, and will never be settled. It involves matters of opinion, and cannot be solved by any kind of logical proof. All parties concerned in the argument are more or less one-sided. Parents, who lay out much money for the hospital expenses of their sons, generally look with disfavour on sports and games. These amusements mean more guineas to pay, and time "wasted." They want their sons to make haste and qualify, and often cherish two erroneous opinions: firstly, that success in examination bears a direct relation to the amount of hours expended on work, and not to the soundness of the work; and, secondly, that, when the qualification is won, the young doctors will be at once off their hands. The staff of a hospital is generally divided in opinion on athletics. About ten years ago, a leading surgeon observed, in the course of an introductory address to students, that the athletic clubs gave him an opportunity of making the acquaintance, once a year, of two or three young gentlemen whom he never had the pleasure of seeing in the wards, nor in the lecture-room. Amongst students, the athletic question, as apart from the athletics themselves, is frequently the cause of a mischievous type of gossip. "You had better not be seen in the cricket-field, you will offend the staff," a hard-cramming student will often say. "My dear ——," a young cricketer will reply, "you are a fool. They don't really care a straw whether you work or play; and, when you get into practice, they will be glad enough to be called into consultation, whether you are industrious or lazy." Such conversation is by no means rare, and betrays base motives on both sides.

No doubt, if a hard-working student believe that sports will do

n no good, that he does not care for the company of his cricketing leagues, and (above all) that he will never excel at games, he is ht to abstain from such amusements. But he had best avoid bad uses. It is equally certain that many fine young men of idle tastes er their disinclination for work by expressions of the advantage of rts. In such cases, the idleness is clearly pernicious, and will do m harm, but certainly not through field-games. In discussing estions which relate to human nature, it is best to reason upon mmon-sense principles. The crammer and the inveterate idler are ceptions, as is shown by their prominence at their medical school. e majority of students not only play in the field, but also at the d-table, in the billiard-room, and in the ball-room. Nobody can vent them, unless by exceptional command of an authority which y may be compelled, or may think politic, to obey. It is evident t, of the youthful sports just noted, field games are far the best. rd-playing may involve far greater moral and physical risks, though as a rule, does no harm whatever to the student. As for typically l students, they are proverbially least offensive to themselves and others when engaged in out-door sports, and it is there that they do least mischief to younger men. A literary spendthrift, of great ent but incurably intemperate habits, finished his existence in a lthy suburb, twenty years since, after a life-long residence in ndon, on the plea that "it is better for men to go to the dogs in open air than in a London tap-room." A dissipated idle student d best stay out of the hospital altogether ; and he will be more re-imable in the cricket-field than in the billiard-room.

In short, the athletic clubs are, on the whole, favourable to the idents' welfare. They are liable to abuse ; but all good things are ble to abuse. They are natural to youth, and therefore right for uth. They are manly, and therefore good for all young men, espe-lly for medical students, whose future calling demands an excep-nal amount of manliness. They are, above all, healthy, and hence ich needed by the student, whose labours are not healthy, and ose future involves great strains on his constitution. Indeed, here feel it right to assert that the hard-worker who does not play must least walk. For the reasons which we have given, we cannot deny at we read with great interest any account of a good cricket, foot-ll, or rowing match between gallant young students of the London spital clubs.

HE PRESIDENCY OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

the time approaches, and it is now very near at hand, for the ction of President of the College of Physicians of London, rumour of course, busy with several names; and individual claims are urged a post which is the highest in the medical world, and various combina-ns are formed, dissolved, and re-formed with the view of pushing e claims of particular nominees. It would be useless, and perhaps ischievous, to repeat all the current gossip on the subject, or to tempt to penetrate the real or apparent motives which lead to the inging forward, or setting aside, of one or other of the senior Fel-ws for the post, in accordance either with individual likings or dis-es, or with the particular views of cliques, which have either their n or the public welfare to serve, or which manage to persuade emselves that the two are identical. The peculiar method by which e President of the College of Physicians is elected would, in a more mercurial body, easily lend itself to a variety of intrigues ; but it would, of course, be profane to suggest that the election of a President of the College of Physicians, any more than the election of a Pope of Rome, which takes place by a similar method of ballot without nomination, is ever influenced by any other than the most open and avowable suggestions and motives.

It is true that singular fervour is from time to time displayed in putting forward incapable candidates, and that the choice is very often argued less upon the positive than upon the negative qualities of the lauded or favoured candidate. Nevertheless, it is quite apparent to anyone who looks back on the roll of the Presidents of the College of Physicians, that the choice of the Fellows has almost, if not quite, without exception fallen upon candidates of the highest fitness, and whose qualifications were so obvious as to disarm all opposition, and to unite an immense majority of votes. It must also be said that the salutary rule, which leaves the College free to elect and re-elect without being bound by any strict precedent as to term or duration of office, and without being limited either to rapid rotation or to long continued and multiplied re-election, has worked well for the dignity of the College and for the interests of the profession. When men of the highest class have been elected, the College has not only been glad to entrust them with continued and prolonged term of office, but has been successful frequently in persuading them to continue to carry the burden of high office in the public interest, long after their personal feelings would have induced them to resign its arduous duties.

At the present moment it would, obviously, from the present state of medical opinion as to the various candidates proposed, and with so eminent a President as the College now possesses, be very much for the good of the profession and of the College, that Sir William Jenner should be induced to continue to hold an office, for which no other man of equal claims or comparable popularity could be named. It is not that the College lacks, among its senior Fellows, men of distinction, public spirit and great attainments, or of such eminent reputation as would justify their election to the office of President; but in these rather changeable times, and at the moment when the claims of general practitioners are being more and more definitely urged upon the College authorities, and when it is increasingly necessary that the old and fantastic distinctions between physicians and surgeons, consultants and general practitioners, should be viewed in the light of reason and of fact ; the presence, in the presidential chair, of a physician of Sir William Jenner's life-history, and authority, and liberty of view, is peculiarly desirable; and there is no solution of the present position which can give so much general satisfaction as that he should accept the office once more. It is satisfactory to know that Sir William Jenner is believed to be not altogether unwilling to accept a renewed term of office, if the opinion of the Fellows be manifested with practical unanimity; although it is well understood that he is very far from desiring it, and would prefer to withdraw from the labours of the Presidential position.

These labours have been much diminished, of late, by the appointment of two vice-presidents, who are able to relieve the president from a good deal of the formal work. Without entering, therefore, into any of the minor details or flavoured gossip of the charmed circles of collegiate cliques, we may express what we believe to be the general feeling of the profession, that the re-election of Sir William Jenner would be hailed with universal satisfaction.

THE first Congress of the German Gynæcological Society will be held in Munich, on June 17th, 18th, and 19th.

A CORRESPONDENT of the *Union Médicale* states that planting datura stramonium among his vines has killed the phylloxera.

WE are requested to state that application for admission to the Murchison Scholarship Examination will be received at the Royal College of Physicians up to the 10th instant, as originally advertised.

THE thirty-seventh annual meeting of the American Medical Association will be held at St. Louis, Missouri, on Tuesday, Wednesday, Thursday, and Friday, May 4th, 5th, 6th, and 7th.

DR. KESSEL, docent in the University of Graz, has been appointed Professor of Aural Surgery in the University of Jena, in the room of Dr. Weber-Liel, retired.

DR. W. D. HALLIBURTON, Sharpey Physiological Scholar, has been appointed Assistant Professor of Physiology in University College, London.

DR. C. VIBERT has just brought out an important work on medical urisprudence, entitled *Précis de Médicine Légale*. The introduction is written by Dr. Vibert's principal, Professor Brouardel.

THE sixtieth anniversary of the appointment to office of Dr. R. Neumann, Professor of Pathology in the University of Königsberg, was celebrated on March 16th.

DR. JOSEPH NOWAK, Professor of Hygiene in the University of Vienna, died at Prague, aged 45, on March 26th.

THE Roman Academy of Medicine has just held a special meeting to discuss the subject of hydrophobia and Pasteur's method. It was unanimously resolved to send a delegate to Paris, and the President was empowered to try to obtain the necessary funds partly from the Minister of Public Instruction and Home Affairs, and partly from the municipality of Rome.

DR. CROOKSHANK was summoned to Abdeen Palace, on March 23rd, and was presented by H.H. the Khedive with the decoration of the Third Class of the Imperial Order of the Medjidieh, in recognition of his many distinguished services rendered to the Egyptian Government in his capacity of Director-General of Prisons.

AT the next meeting of the British Gynæcological Society, to be held on Wednesday, April 14th, a paper will be read on Vicarious Menstruation, by Dr. Robert Barnes. The subject is one of those which eminently deserve investigation, from physiological and clinical points of view. It is especially calculated to throw light upon some pathological problems, and to receive improved light. An interesting discussion may be anticipated.

THE mystery of the smells in the House of Commons is being diligently tracked by the Committee of the House appointed to inquire into this subject. One member of the Committee, Mr. Isaacs, described a visit he made to the sewers, where his self-sacrificing experiences in the interests of his fellow-members convinced him that there is a strong up-draught into the House, and insufficient trapping from the main sewer. One of the officers of the Local Government Board accounted for a peculiar smell complained of in 1884 as being due to to the burning of some woollen rubbish about three hundred yards from the Houses of Parliament.

HYDATID disease has so rapidly increased in Victoria, that the Central Board of Health have issued a circular to all local boards pointing out the danger of drinking open natural waters to which dogs and other animals have access, unless the water be first well boiled. The number of deaths in Victoria, during 1884, directly from hydatid disease, was 59.

THE *Liverpool University College Magazine*, for March, contains two articles of much professional interest; one on the Horse Ambulance in Liverpool, by Mr. A. Fisher, M.R.C.S., from which it appears that during two years, 1,200 cases have been attended by the Horse Ambulance of the Northern Hospital, which is worked on the American system, and is much more efficient than anything we have in London. The other article is on the New Chemical Laboratories which have recently been opened at the Liverpool College, which have been erected by Mr. Alfred Waterhouse, at a cost of over £15,000 and which is among the most efficient and extensive in Europe. These evidences of provincial activity and intelligent munificence are in the highest degree interesting and satisfactory.

SEVERAL English people are now in Paris undergoing treatment at M. Pasteur's hands for bites by mad dogs. Amongst the latest arrivals is a man, the assistant of a veterinary surgeon, in Paddington, who was bitten in the lip by a mad dog on Sunday, March 28th, and was treated the same day at St. Mary's Hospital. He went to Paris on the following Tuesday; and, on the succeeding day, received his first inoculation of the attenuated virus at M. Pasteur's laboratory. The dog which inflicted the bite was killed shortly afterwards, and the patient took its dead body to Paris. The man's lip and face were much swollen a few hours after the bite had been given, and the patient was very nervous about himself.

A KNIGHTHOOD DECLINED.

SINCE the laying of the foundation-stone of the Examination Hall of the Royal Colleges of Physicians and Surgeons by the Queen on the 24th ultimo, Mr. Gladstone has written to Mr. Savory, the President of the Royal College of Surgeons, offering him the dignity of a knighthood, which Mr. Savory has decided to decline.

A HYSTERICAL CRIMINAL.

A DEAD infant was sent by post to a French priest. The police made inquiries, and arrested a young servant girl, who confessed her guilt. She immediately afterwards completely lost power of speech, which has not returned. During her trial, she made known her answers by signs and writing. She has been examined by Dr. Brouardel, who pronounces her to be hysterical. She is aphasic and anæsthetic; pins stuck into different parts of her flesh produce neither pain nor bleeding. Dr. Brouardel does not suppose that her dumbness is assumed, but adds, as it is a symptom of hysteria, and she is hysterical, it is impossible to be certain. The patient, who had previously committed other crimes, has been sentenced to three years' imprisonment.

THE NEWLY ELECTED ASYLUMS BOARD.

ON Saturday, March 27th, the newly elected and newly nominated Asylums Board met for the first time. The changes are not very great. The City of London Union has displaced Dr. Fowler, who preferred the conscientious discharge of his duty to the desire for re-election, and the guardians of this union have elected four opponents of making suitable provision for the sick poor. Paddington is the only board which has elected a lady member out of the forty-five representing the various parishes; but the Local Government Board in the fifteen nominations at the disposal of that authority, have nominated three ladies, namely, the Honourable Maude A. Stanley, Mrs. Jeune, and Miss I. M. Baker. Mr. Galsworthy was unanimously elected chairman, and Sir Edmund H. Currie vice-chairman.

HYDROPHOBIA AMONGST WILD ANIMALS.

EVEN more Russians have arrived at M. Pasteur's laboratory, to be reated for hydrophobia. These unfortunate subjects of the Czar have een bitten by a mad wolf. As the same accident occurred to the ormer batch of Muscovites under M. Pasteur's care, it will now be nown in Western Europe that the wolf, not very dangerous to man hen sane, unless met with in great flocks, is formidable from his iability to become rabid. The Americans have long observed rabies mongst wild animals, and have noted that the skunk, when rabid, oses the power of secreting its characteristic fœtid fluid.

THE PREVENTION OF RABIES AND HYDROPHOBIA.

)R. C. R. DRYSDALE, Senior Physician to the Metropolitan Free Iospital, writing on the subject, calls attention to the fact that the eturn called for in the House of Commons, by Sir R. Cross, shows that ast year there were no fewer than 373 cases of rabies and hydrophobia eported to the metropolitan police, and 26 deaths from that terrible isease, hydrophobia, in London, and contrasts this alarming state of hings with what was stated, the other day, in the German Reichstag, y Herr Gossler, the Minister of Public Instruction. He points out hat that gentleman informed Professor Virchow that the number of eaths from hydrophobia in Germany had fallen within the last five ears from ten to six, and then from four to one, and that no death ad occurred from it for some time past. The Prussian law, he ob- erves, which is similar to that of London, since December 10th, 1885, f universally muzzling all dogs throughout the Empire, has had this plendid result; and he earnestly urged that our Government hould at once energetically set to work to stamp out hydrophobia, in he same manner, from the United Kingdom. Perhaps Dr. Farqu- arson, or Dr. Cameron, or Dr. Vanderbyl might be induced to bring 1 a Bill, rendering the muzzling of dogs obligatory for the next six ionths in all parts of the British Islands. We should then hear no iore of hydrophobia.

DR. OLIVER WENDELL HOLMES.

'HE promised visit of Dr. Oliver Wendell Holmes to this country ithin the next few weeks will doubtless give some opportunity to is many friends on this side of the Atlantic to testify their regard. 'r. Holmes represents some of the best traditions of the profession. hough the prime of his life was given to the arduous and apparently ncongenial duties of Professor of Anatomy in Harvard University, e has yet achieved for himself a position in literature which is, at the resent moment, almost unique. There is probably no living .merican, and few, if any, living Englishmen, who have been so idely read by the brain-workers, who are the marrow of the country. 'r. Holmes has made himself a medium of communication between ie best thought within and the great thinking world without the rofession of medicine. It is one of our greatest misfortunes, as a rofession, that we have so comparatively few channels of intercom- unication with the outside public; and, as medicine grows more)mplex and absorbing, so does the danger grow. Such men as Dr. olmes bridge over the chasm in the most effectual way. Respected 1 both sides, they help to teach the lesson of mutual tolerance and spect.

CATALEPSY AS A TRADE.

N American, who claims to be a "Strange Man," gave a perform- ice on Monday, March 22th, at the Strand Theatre, wherein five)ung men were, or were supposed to be, mesmerised, and while in at condition, performed a variety of not very edifying and but oderately funny antics. Several of these youths seemed to become taleptic, and at least two others showed great promise of develop- g eventually into good low comedians. Still, as these young men ere admittedly well known to the "Strange Man," the possibility of llusion cannot be dismissed. Moreover, the promising young low medians seemed, to a good many of the audience, to overdo their rts. With chance members of the audience, the performer was not very successful, and the reflection inevitably suggests itself whether it is justifiable to make catalepsy, as a public exhibition, a source of money-getting. Very much more curious and striking sights, it is true, may be seen any day in Professor Charcot's wards at the Salpêtrière; but if the public understood that catalepsy was a form of mental disease, perhaps they would be less ready to join in these unwise experiments.

SECOND-CLASS LIVES.

AT the last sessional meeting of the Institute of Actuaries, Mr. Marcus N. Adler, Vice-President, in the chair, held on March 29th, Mr. James Chisholm, read a paper dealing with the method in use by life-assurance companies of adding a number of years to the age of a person proposing to assure his life, to compensate for supposed extra risk due to impaired health or imperfect family history; and it was contended that this method was based on an incorrect theory, and was, besides, misleading in practice. Suggestions were made, illustrated by a diagram, for obtaining the opinion of medical examiners in a more accurate way; and the opinion was expressed that it was extremely desirable that assurance offices should adopt, as far as practicable, one common form of medical report. There were present several members of the medical profession, including Drs. James E. Pollock, Symes Thompson, Kingdon, Tirard, Havilland Hall, Buxton Shillitoe, Allchin, Selfe Bennett, and others, many of whom took part in the discussion which followed.

PROVISION FOR SMALL-POX IN THE METROPOLIS.

THE Local Government Board has given attention to the views of a deputation from the Dartford Sanitary Authority, urging that the Asylums Board shall not be allowed to build a convalescent small-pox asylum at Darenth. The Local Government Board has requested the Asylums Board not to proceed with the asylum, until the Board has had an opportunity of consulting Dr. Bridges. The Asylums Board, in reply, has pointed out that the site at Darenth was purchased, with the full consent of the Local Government Board, at a cost of nearly £17,000, and that great outlay had been made on the site, also with the full consent of this Board. Decisions at law, after long litigation, had been given in the managers' favour; and to look for another site elsewhere would entail upon the managers the enormous trouble of fighting other suits which would no doubt arise, and would cost the ratepayers the immense sums already expended in preparing for the new asylum, which was to be erected in carrying out the views of the Royal Commission on Infectious Hospitals. It was determined that this answer should be laid before the Local Government Board. Sir E. H. Currie remarked that the only way the managers could practise economy was by preparing, in times of quiet, for epidemics.

CALF-VACCINATION AT THE ANTIPODES.

SOME years ago, when Mr. Ernest Hart first pressed upon the Government the importance of introducing calf-vaccination into this country, he was met by the stereotyped official argument, that the supply and use of animal lymph could not be fitted in with our public vaccination arrangements, and that, even if it could, the success with calf-lymph was nothing like so good as that with lymph derived from human arms. These objections were, however, shown to be untenable, and the official reluctance to new methods of procedure was at length overcome. The best answers to the objections of six years ago, are now to be found in the official reports of the director of the Animal Vaccine Establishment to Dr. Buchanan, as printed in the annual Blue Books of the Medical Department. Another argument, however (not urged, it is true, with much insistence), was that other countries had not thought it necessary to set up calf-lymph depôts. A considerable body of evidence as to the existence of the practice of animal vaccination in a great variety of communities in both hemispheres, was adduced in Mr. Hart's memorandum; and we are every day coming

across information as to the use of calves for the cultivation of lymph in the most diverse parts of the globe. Our latest information is from the Antipodes. At Melbourne there is a calf-lymph depôt, under the control of the Central Board of Health for Victoria. From the officers of the Board, lymph is sent to public vaccinators, and to all legally qualified medical practitioners throughout the colony. Supplies have also been sent to New South Wales. All calves are carefully examined by the Board's veterinary surgeon, and no calf is permitted to be inoculated until a certificate has been obtained that it is in good health, and fit for the purpose. In addition to the regular visits of the medical and veterinary officers, the depôt is frequently visited by the President of the Board. During the last year for which there are complete statistics, 7,390 points of calf-lymph were distributed. It is not stated, however, how many calves were used for this purpose.

CLASSES FOR PRACTITIONERS.

WHILST the movement for "*post* graduate" instruction for medical men, as far as it concerns London, has not yet got beyond the correspondence published in recent numbers of the JOURNAL, we are glad to find that, in Manchester, such courses have been established. For the last two years, classes for practitioners have been held in the pathological laboratory for the practical study of morbid histology, and a similar course will be held during the next summer session. Dr. Griffith, one of the surgeons of the Manchester Eye Hospital, has instituted a practical and clinical class for practitioners, which is given in the new Eye Hospital. The class is frequented by twenty-four practitioners, who receive instruction in the use of the ophthalmoscope, etc. The hospital lends itself admirably for the purpose; the material is abundant, and the teaching is very much appreciated by the members of the class, who attend with great regularity.

MYRTOL.

MYRTOL has only been, hitherto, studied as a curiosity. Dr. Linarix, in his doctoral thesis, *De l'Emploi du Myrtol*, gives a complete account of the properties of this substance. Myrtol is both an antiseptic and a disinfecting agent. By its presence, it prevents the decomposition of fermentative and putrescible organic substances; applied to the skin, it does not produce the slightest irritation, if the epithelium be intact. If there be a slight abrasion, a few drops produce a very trifling burning sensation, which quickly goes off. Myrtol stimulates the digestive faculties; all who use it find their appetite increased. In small doses, it acts as a sedative. It is eliminated by the lungs and kidneys, and has also a powerful balsamic action, but is more easily tolerated than most balsams. Its use is not followed by dyspepsia, nor by any of the other troubles attending the use of balsams in general. Dr. Linarix says that myrtol does not produce the same result at all periods of the affections of the respiratory system: in subacute and chronic catarrhal affections, it should be administered when fever has subsided; then the sputa become less abundant, also less purulent. Six capsules daily, each containing fifteen centigrammes of myrtol, form a moderate dose, which should be taken before meals.

WHO GOES FIRST?

A CORRESPONDENT writes: Nothing conduces so much to absence of friction, in the matter of consultations, as a competent knowledge of the proper etiquette which has been handed down to us as the fruit of centuries of careful observation. It is not, therefore, an useless task to attempt to define the rules of this etiquette, so that both the ordinary practitioner and the consultant may be made cognisant of the proper course to pursue, in order that the dignity of all the parties concerned may receive the attention it deserves. In the first place, the ordinary medical attendant should invariably lead the way, and enter first into the sick-chamber; and this is a rule that, for obvious reasons, should admit of no relaxation. When the interview with the patient comes to an end, the consultant should leave the room first, and the medical attendant should be the last to leave the room. Where there are several consultants, they should enter the room as stated above, but in the order in which they have been called into the case; the converse holding good for the exit. No communication, direct or indirect, by word of mouth or by letter, should ever take place between the consultant or consultants and the friends of the patient or the patient himself, except through the intermediary of their ordinary medical attendant; and any breach of this rule should lay the consultant open to the most serious remonstrance. The prescription should be written by the medical attendant, who, as a matter of courtesy, should precede his own initials by those of the consultant. This, however, should be done by the medical attendant himself, and not by the consultant. If these rules were duly observed, especially in the country, much of the soreness and disagreeable feeling, now too common, would be obviated, and the foundation laid for more cordial relations between the consultant and his brethren in general practice.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

IN his recent annual address, the President, Dr. Norman Kerr, called attention to the fact that, though ample provision was made for the poorest, stricken down by ordinary diseases, there was no provision whatever, under the Habitual Drunkards' Act, for the destitute inebriate or the inebriate of limited means. Yet, habitual inebriety was as true a disease as was gout, or rheumatism, or insanity. Fine and imprisonment were the only legal measures employed for the treatment of the diseased dipsomaniac. In inebriety, there was, indeed, "one law for the rich and another for the poor;" for only the well-to-do could afford the expense of residence at any Retreat in the country. Even for the rich, the law did little. The Habitual Drunkards' Act, being temporary, had not offered scope for the investment of capital sufficient to treat many cases. Some Homes had been Inebriate Homes, not Homes for Inebriates, and only confirmed the inebriety of the inmates. These affected the reputation of genuine Homes, of which the Dalrymple Home, at Rickmansworth, was the principal, it being the only licenced Retreat which published its records in a scientific form, and was conducted, without pecuniary profit to the owners, as a disinterested effort to apply the moral and medical cure of inebriety under the most favourable conditions. Over one-half of the patients discharged had been decidedly improved. It was a national disgrace that, while England did nothing for the poor inebriate, in America the very poorest could be treated for six months at State-supported establishments. The Habitual Drunkards' Act was incomplete. A permanent measure was called for. Confirmed inebriates ought to be allowed to enter a licenced Retreat, and to surrender their liberty for a limited period (without their deterrent and forbidding appearance before two justices), on a simple agreement with the licensee. All abuse of the liberty of the subject could be safeguarded by inspection, visitation, and power of appeal by the patient. Escaped patients should be taken back direct to the Home, without having to appear before a justice, as at present. There ought also to be provision, at the public cost, for the poor; and magistrates ought to have power to order entry into a Home in certain well-defined cases of confirmed inebriety. Dr. J. B. Hurry (Reading) read a paper on Uncontrollable Inebriety.

HEALTH-LECTURES IN KENSINGTON.

THE success which attended the lectures given by Dr. A. T. Schofield, under the auspices of the National Health Society, at the Paddington Baths, has encouraged the Society to commence a similar course of both health and ambulance lectures at the Kensington Town Hall, inaugurated by an introductory lecture and meeting on March 31st, at which H.R.H. the Princess Christian was present. Mr. Ernest Hart, chairman of the Society, presided, and was supported by Dr. Thorne Thorne, Mr. Malcolm Morris, the Rev. C. Ridgeway, Mr.

f. Leonard, and others. Among the ladies present, who are known for he interest they take in the question of sanitary reform, were Mrs. Jeune, Irs. Buckton, Mrs. Priestley, Miss Chreiman, and Miss Lankester. Ir. Ernest Hart, in introducing the lecturer, described the quiet and ost useful work of the Society in promoting a knowledge of the ws of health. Dr. Schofield commenced his lecture by enlarging pon the shameful ignorance displayed, both by educated and by uneducated people, in matters relating to human life in health and isease, and illustrated this fact by accounts given of the position and unctions of different parts of the body by persons in all classes of ociety. He likened the human system to a kingdom with a double overnment, by which he referred to the action of the voluntary and avoluntary muscles, and showed how their movements sometimes ame into serious collision. He described the ceaseless change taking lace in the body, and defined health as "ease," in contra-distinction to ill health or "dis-ease." After touching upon the question of eredity, and the transmission of a healthy or diseased frame, Dr. chofield concluded his discourse by recommending those present to ake into more serious consideration the vital questions connected ith their physical life, and to be more careful that every part of the 'human machine" should be allowed to perform its function in a ealthy manner, not only for their own sakes, but also for the sake f succeeding generations. Mr. Malcolm Morris, in an earnest speech, roposed a vote of thanks to Dr. Schofield, and urged upon the udience the need of sanitary reform for the social welfare of the eople, pointing out that the women of the generation had it in their ower to clear away the clouds of ignorance by becoming "apostles f health." Dr. Thorne Thorne seconded the resolution, speaking ost ably upon the hurtfulness of all ignorance of sanitary questions, nd touching upon the good work done by the National Health Society n instructing the poorest, as well as the richest, in the simple laws f ventilation, cleanliness, drainage, food, the care of infants, etc. Ie showed, also, that although much had yet to be learnt by the nglish in matters of hygiene and sanitation, yet that they had aken the lead in sanitary reform—a fact clearly evidenced at the late nternational Conference upon the Prevention of Cholera, when Dr. 'horne Thorne had been able to point to the unrivalled diminution, n England, of deaths from typhoid and enteric fever. With an acnowledgment of the vote of thanks, the proceedings terminated.

ADONIDIN.

'HIS drug, which is the glucoside extracted from the plant *Adonis ernalis*, belongs to the natural order Ranunculaceæ. It was rst employed by Dr. Botkin, of St. Petersburg, but the first pubshed recognition of its physiological and therapeutical properties was ue to Bubnoff, who died recently. Two years later, Vincenso Cerello isolated the active principle, which he found to belong to the roup known as glucosides. He carried out his experiments with his drug in the laboratory of Schmiedeberg at Strasburg. The active rinciple is an amorphous colourless mass, without any characteristic mell, and intensely bitter. It is only slightly soluble in water or ther, but much more so in alcohol. To isolate it, the leaves of the lant must be macerated in a mixture of two parts of water to one of lcohol for ten days; the resulting solution is treated with acetate of ad, and the precipitate separated by filtration. The adonidin is then btained from the filtrate, by means of tannic acid with the addition of few drops of ammonia. This compound of tannate of adonidin is ashed and decomposed by acids of zinc and alcohol. The impure donidin so obtained is purified by successive crystallisations in a ixture of alcohol and ether. The drug may also be administered in he form of an infusion or of a watery extract. Injected into the rural sheath of a frog, the heart being laid bare, the first effect oticed is a marked increase in the ventricular contractions followed y slowing. The ventricle looks pale, the auricular appendix and rge veins are dilated, and finally the heart stops in systole. The me effects have been observed in the case of the dog and rabbit, a diminution in the number of heart-beats and elevation of the blood pressure first occurring, followed by an increase in the pulse rate and blood pressure, finally the heart beats tumultuously, and the blood pressure falls. Dr. Durand, of Lille, has published notes of several cases of mitral regurgitation, with and without narrowing of the mitral orifice, in which he has employed the drug. Stated briefly, the effects of the drug bear principally on the heart, but it also possesses marked diuretic properties. Irregularity and want of rhythm of the heart-beats are diminished and relieved, but the pulse is rendered distinctly slower, in one or two cases to such an extent as to render it advisable to discontinue the use of the drug. A rise in blood-pressure invariably follows its administration, and a small weak pulse is converted into a full strong one. In doses of two centigrammes (about one-third of a grain) of adonidin, the quantity of urine in the twenty-four hours was doubled, and with four centigrammes (three-fifths of a grain) trebled, these effects thus corresponding to the increase in the dose. In larger doses (three grains), considerable vomiting and diarrhœa, with persistent nausea, were induced. The drug is said not to cumulate as does digitalis; but this is an assertion which must be necessarily difficult to prove.

MICROSCOPIC RESEARCH.

THE Rev. Dr. Dallinger, F.R.S., President of the Microscopical Society, delivered a lecture on Saturday evening at Firth College, Sheffield, on "The Latest Work amongst the Least and Lowest Forms of Life." The lecture described the result of three years' close study of the minutest forms of life. Dr. Dallinger stated that he was now possessed of microscopic lenses so constructed as to realise results which, only five years ago, were declared by mathematicians to be impossible of accomplishment. By means of these, he threw upon an illuminated screen various forms of minute life. One of these was a piece of hard chalk, of the size of a pin's head, which contained shells estimated to be equal to four millions in an ounce of chalk. He also showed a drop of water, taken by himself near the reservoir at Preston, Lancashire, containing specimens of desmids, which, cubically measured, were only about one-millionth of an inch. Taking a single specimen of living organism from a drop of water, he showed it upon the screen, and said, by the aid of very powerful lenses which had come into his possession only within the last few months, he had discovered this, which was the minutest organism known. He had measured the flagellum or motor fibre of this organism, and found it to be the two hundred and fourth millionth seven hundred thousandth of an English inch. Dr. Dallinger subsequently gave the results of his recent researches on the subject of bacteria and putrefactive organisms, and said the work of these organisms was to break up and to set free from dead organisms the elements of which they were made, so as to render them capable of circulating in new generations. In his recent labours, he had found one whose duty it was to glean, as it were, the remaining particles after other forms had done their work.

THE BROWN INSTITUTION: A YEAR'S WORK.

THE report of Professor Horsley, professor-superintendent of the Brown Institution for the year 1885, shows a good record. The great increase of the laboratory work involves, however, the necessity of further funds, which should be raised privately or publicly, to avoid interfering with the funds of the hospital as a charity. In the hospital, 3,357 animal patients have been treated in the out-patient department, and 258 in-patient animals. In the laboratory, twelve gentlemen have carried on researches. Dr. Berdez's research with the ptomaine, produced by Koch's comma-bacillus, has been published in the BRITISH MEDICAL JOURNAL of November 7th. Dr. Theodore Cash has made researches on the destruction of pathogenic micro-organisms by non-pathogenic (under a grant from the Scientific Grants Committee of the British Medical Association), and on the influence of mercury in the prophylaxis of bacillus anthracis. The results of the latter highly import-

ant research have been published in the proceedings of the Physiological Society. Dr. Klein's researches have borne on the etiology of foot-and-mouth disease, and the antiseptic and germicidal power of perchloride of mercury. Mr. Lingard has continued his researches (with a grant from the British Medical Association) on the intimate etiology of gangrenous stomatitis or noma. The researches of Professor Horsley and Mr. Parker, on union of tendon after subcutaneous division, have shown that complete renewal of the tendon occurred, and that the rapid method of treatment of orthopædic deformities by which the limb is at once put up in complete extension, and the tendons separated as far as possible, give a valuable result. Dr. Wooldridge has carried on his research on the coagulation of blood, on which he is about to lecture, as elsewhere announced. Professor Horsley's further researches on the thyroid gland, on canine chorea, on the posterior columns of the spinal cord, and (jointly with Klein and Dowdeswell) on the comma-bacillus, complete an excellent record of good work. The latter have been published in the BRITISH MEDICAL JOURNAL, and are especially important and well known to our readers. The whole work of the year is most valuable and promising.

REFORM OF THE UNIVERSITY OF LONDON.

THE question of the reform of the University of London is not to be allowed to sleep even within the Senate; for the newly elected Fellow, Lord Justice Fry, has given notice to move "that a Committee be appointed to consider and report upon the communication of the Executive Committee of the Association for Promoting a Teaching University for London, with power to confer with the Committee of that Association, and with any committee of Convocation, or with other persons, as they may think fit." The Senate will, without doubt, accede to this request, and from the energy with which Sir Edward Fry is, as we understand, working at the subject, there are now some good grounds for hoping that the Senate of the University may, at length, become alive to its duties and responsibilities.

RESEARCH SCHOLARSHIPS OF THE GROCERS' COMPANY.

IN compliance with the conditions under which the Research Scholarships of the Grocers' Company are held, a lecture will be given in the Theatre of the University of London by each scholar. On April 13th, at 5.30 P.M., Dr. L. C. Wooldridge will deliver a lecture on the Coagulation of the Blood, in which he will describe the new constituent of the blood observed by him, and will discuss the influence of peptone on the coagulability of the blood, the relation of the red corpuscles of the blood to coagulation, and the artificial production of coagulation within the vessels. On April 15th, at the same hour, Mr. Alfred Lingard will deliver a lecture on the "Intimate Etiology of Typhoid Fever," in which he will give the results of recent investigations. The chair at each lecture will be taken by Sir James Paget, the Vice-Chancellor of the University.

THE SENATE OF THE UNIVERSITY OF LONDON.

WE are glad to be able to announce that Dr. Pye-Smith has been selected as Crown nominee to fill the vacancy on the Senate of the University of London. Dr. Pye-Smith is well known as one of the most thoughtful and energetic advocates of medical reform in the organisation of the University, and he will be a valuable ally to Lord Justice Fry. The last two Crown nominations were of legal persons, and a medical nomination was, therefore, due from the Crown. It is understood that the selection of Dr. Pye-Smith was made in full accord with the general sentiment of the Senate, among whom, as is customary, the matter had been discussed prior to the formal nomination. This may be taken as an indication that the Senate are not adverse o a fair consideration, and, we may hope, to a favourable conclusion, as to further reforms in the direction of extending its efficiency and enlarging its boundaries as a graduating body, in the interests of the medical schools of London.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society on Wednesday night, Dr. Black, Vice President, took the chair. Dr. W. S. Griffith exhibited a Nægele's pelvis, which he believed to be the first completely developed case occurring in London. The patient had died a fortnight after labour where craniotomy was requisite. The pelvic deformity did not show externally. Dr. John Phillips showed a living infant, one month old with fusion of all the phalanges of the right index and middle fingers the corresponding metacarpal bones remaining distinct. A subcutaneous ligamentous band prevented full extension of the second on the first phalanx of the ring-finger. The third toe on the left foot was ill-developed. Dr. Phillips also exhibited a specimen of hæmatosalpinx. After acute abdominal symptoms, followed by menstruation, a small ovarian cyst had been removed. A hæmatocele was found in Douglas's pouch, and the small cyst in the ovary was distended with dark blood. The Fallopian tube was swollen, though its fimbriæ were healthy and the ostium patent; and its channel was filled with bright red clot. The broad ligament also contained extravasated coagulum. The transverse colon adhered to the ovarian tumour. Dr. Benington showed a case of meningocele in a new-born child. The meningocele had presented, and felt like an ear; then a fleshy projection on the scalp was felt, and was at first taken for a penis and testes; but Dr. Benington at length recognised the true condition by feeling the orbits and mouth. A long discussion, in which several leading obstetricians took part, followed the reading of Dr. Matthews Duncan's paper, "On Contraction, Inhibition, and Expansion of the Uterus." A second paper was read; it was entitled "A Case of Labour in a Primipara, suffering from Mitral Disease," and was contributed by Dr. Coates.

SCOTLAND.

APPOINTMENT BY THE SECRETARY OF STATE FOR SCOTLAND.

THE appointment of Surgeon to Her Majesty's Prison in Edinburgh, vacant by the death of Dr. Sidey, has been filled up by the Secretary of State for Scotland, who has given the appointment to Henry Hay, M.B. and C.M., Edinburgh. There were a good many candidates for the office. The terms on which the appointment was held by the late Dr. Sidey have been considerably altered, and may be summed up as follows. The surgeon is to make at least two visits daily; the appointment is not to be held *ad vitam aut culpam;* the salary is to be £200 *per annum;* and there is not to be a retiring allowance.

MATERNITY HOSPITAL, EDINBURGH.

THE arrangements for the ensuing summer session at the Royal Maternity and Simpson Memorial Hospital, Edinburgh, are: Dr. Underhill, who has been physician on duty since February 1st, is succeeded by Dr. Keiller; while Dr. A. H. Freeland Barbour goes on duty as assistant-physician. The present house-physicians, Messrs. T. W. Dewar, M.B., and D. M. Moir, M.B., are succeeded by Messrs. W. Gloag Galletly, M.B., and G. L. Sommerville, M.B.

THE MEAT-SUPPLY OF GLASGOW.

WE observe that the question of the control of the dead meat supply of the city has been under the consideration of the authorities of Glasgow. Recent inquiries have brought out the fact that there is no systematic or compulsory inspection of meat in the city; and that, if recent statements in the Press on the matter have not exaggerated the present condition of things, there is great need of some reform. There seems to be a feeling that an effort should be made to obtain powers, under the proposed Burgh Police and Health (Scotland) Bill, for the inspection of dead meat sent into the market. It is possible that some such arrangement can be carried out; but it is most important that there should be some increased control obtained without further delay.

THE SCOTTISH METEOROLOGICAL SOCIETY.

The report by the Council of the above Society, which was made public at the recent half-yearly meeting of the members, is not only a most satisfactory document, but one of considerable scientific interest. A perusal of it shows the valuable amount of work that is being done under the auspices and by the aid of the Society. Not only have the careful zoological researches at the Marine Station at Granton been continued during the year, but various other subjects have been investigated, such as the summer and winter temperatures of the river Forth at different depths, a knowledge of which, it is expected, may throw some light on the, as yet, imperfectly understood migrations of the fish frequenting our estuaries and rivers. At the observatory on Ben Nevis, there has been no lack of enthusiastic observers; and full records have been made, not only of the ordinary natural phenomena of the locality, but also of special subjects of inquiry that the elevated position of the meteorological station renders it specially adapted for following up. We are glad to see that the membership of the Society is steadily increasing, as research of this varied and useful character is worthy not only of State aid, but also of private support and encouragement.

UNIVERSITY OF GLASGOW.

Among those selected by the University of Glasgow for its honorary degree of LL.D., it is gratifying to notice the name of Professor Pettigrew, of St. Andrew's. Professor Bell Pettigrew is an Alumnus in Arts of the University of Glasgow, an illustrious M.D. of Edinburgh, and a Fellow of its Royal College of Physicians. Among his other numerous honorary distinctions, he is a Fellow of the Royal Societies of London and Edinburgh; Laureate of the Institute of France, and the holder of its Godard prize; and a former Croonian Lecturer to the Royal Society of London. He is the author of various splendidly illustrated and original memoirs and works on anatomical, physiological, and physical subjects in the *Philosophical* and other *Transactions*, several of which are translated into other tongues. To his researches we owe the important discovery of the structure of the heart, the unique dissections connected therewith, now forming part of the treasures of the Museum of the Royal College of Surgeons of London. We are further indebted to him for the discovery and explanation of the figure-of-8, and wave movements made in walking and swimming. Besides, he was the first, as conclusively proved by the date (1867), to announce and demonstrate the non-accepted and famous figure-of-8 and wave theories of flying. Dr. Pettigrew is the present Chandos Professor of Medicine, and Dean of the Medical Society of the Universities of St. Andrew's; and he represents the Universities of Glasgow and St. Andrew's, at the General Medical Council.

ST. ANDREW'S AMBULANCE ASSOCIATION.

The annual general meeting of the St. Andrew's Ambulance Association was held in Glasgow last week. Professor Chiene, of Edinburgh, occupied the chair. Among other satisfactory items in the report submitted, we learn, with pleasure, that the Association has had six ambulance-wagons built since the previous report was submitted, and that these are now stationed at Glasgow, Edinburgh, Dumbarton, Paisley, Hamilton, and Baillieston. The Central Committee of the Association is very desirous that such wagons should be established in all towns in the country, and, as a means towards this, are of opinion that new centres of the Association should be instituted. Such ambulance-wagons are at the call of any necessary case, by day or night, free of all charge. On receipt of the message regarding an accident, the ambulance-wagon is at once sent, accompanied by a trained attendant, who is able to give first aid to the injured until a medical man arrives, and afterwards convey them safely and comfortably to the infirmary or home. Centres of the Association have recently been instituted at Paisley, Campbelltown, Hamilton, North Berwick, Ayr, Portobello, and Annandale. The report showed that the charges for management are very small. The chairman congratulated the meeting on the success of the Association, as shown by the excellent work done by it, and spoke of the favourable condition in which patients were now brought to the infirmary by the attendants and wagon of the Association.

IRELAND.

Their Excellencies the Lord Lieutenant and the Countess of Aberdeen visited the House of Industry Hospitals last Tuesday, April 6th.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Mr. John Marshall, F.R.S., late President of the Royal College of Surgeons of England, has been elected an Honorary Fellow of the Irish College.

ROYAL UNIVERSITY OF IRELAND.

We are glad to announce that at the meeting of Convocation of this University, held on Tuesday last, April 6th, Mr. William Thomson, F.R.C.S.I., whose candidature for the seat on the University Senate we referred to last week, was elected by a majority of three votes. The retiring candidate, who sought re-election, Mr. Farrelly, polled 248 votes; and Mr. Thomson, 251.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Mr. William R. Kynsey, Surgeon, medical staff (seconded), was elected a Fellow of this College at its last meeting. Many years ago, while serving in Ceylon, Mr. Kynsey was selected to fill the appointment of Principal Civil Medical Officer of the Island. In this capacity he had to organise, and then to superintend, the medical service throughout the Island, and to act as medical adviser to the Government. The efficient manner in which he has discharged these important duties, and the active part he has taken in connection with the successful medical college of Ceylon, is acknowledged, and was duly recognised in the Island, and by the Colonial Government. Mr. Kynsey is the author of a valuable report on the Paranghi disease of Ceylon, and is a Justice of the Peace for the Island.

BELFAST OPHTHALMIC HOSPITAL.

From the fortieth annual report, it appears that, in the extern department, 890 cases of eye-disease, 360 of ear-disease, and 70 of throat-affections, were treated; and, in the wards, 89 cases, or a total of 1,320 new cases attended to during the year. During the year, the sanitary condition of the hospital was carefully examined, and every effort made to keep the institution in an excellent state of sanitation. A large class of students attend the clinical instruction at the hospital, thereby gaining a thorough acquaintance with an important branch of their profession. The expenditure is not conducted on very extravagant lines, as a calculation shows that the outlay on medicine, bandages, etc., was at the rate of fivepence per patient *per annum*.

DUNGARVAN WORKHOUSE.

The man, Mulcahy, who was charged with causing the death of a patient named Langley, and to whom allusion was made in last week's Journal as having absconded, gave himself up, and last week was brought before a magistrate. Evidence was given that Mulcahy, and a female named Mullins, a nurse in charge of the ward, had assaulted the deceased on several occasions. Dr. Holland, J.P., deposed that Langley was a hospital patient, suffering from paralysis and softening of the brain; and that the treatment he had received had, no doubt, hastened his death. He thought a trained paid nurse should be appointed, instead of pauper nurses, who were irresponsible. Both prisoners have been returned for trial to the next assizes.

M. PASTEUR'S RESEARCHES ON HYDROPHOBIA.

We publish to-day the first part of an authentic and detailed report of M. Pasteur's researches on rabies, and of his treatment of hydrophobia by preventive inoculation, which has been prepared especially for the British Medical Journal, at our request, by M. W. Vignal, the well known histologist, of the laboratory of the College de France, in Paris. M. Vignal, who is extensively known in this country by his numerous and valuable histological works, and also as the fellow-worker with Professor Rutherford, in the researches on cholagogues undertaken for the British Medical Association, in the University of Edinburgh, has had, from the first, ample opportunities of carefully studying the methods and results of M. Pasteur. This detailed report will, therefore, put before the medical profession, in an authoritative form, the whole course of M. Pasteur's mode of research, his methods, and the results thus far obtained. Such a report will, we believe, have a very general and permanent interest to the whole of the profession, and will be of great public value at the present moment.

LUNACY ACTS AMENDMENT BILL.

The following further communication has been addressed to the Lord Chancellor by Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee.

To the Right Honourable the Lord Chancellor.

My Lord,—While thanking your lordship for the concessions and modifications embodied in the "Amendments to be moved in Committee (on recommitment) by the Lord Chancellor, 26th March, 1886," it is felt to be desirable to refer to the letter and memorandum submitted by the Subcommittee of the Parliamentary Bills Committee of the British Medical Association, appointed to consider the provisions of the "Lunacy Acts Amendment Bill, 1886."

It is particularly desired to draw the attention of your lordship to several of the suggestions, namely:

1. Those which relate to the extension, to those who take charge of insane patients, of the protection given under the Act to the practitioners who sign certificates of insanity, under which head it is submitted that recent trials, in which actions have been brought against the medical officers of public lunatic hospitals, show that the protection at present granted by law is inadequate to provide the safeguards that may reasonably be expected with respect to vexatious actions against those who take charge of insane patients, whether in private or in public asylums. [The suggestions were those in the memorandum under Section 8, Subsection 5, page 10, line 26, of the Bill ordered to be printed on February 19th, 1886; and under Section 16, Subsection 3, p. 13, line 19. The corresponding parts of the Bill, "as amended in Committee," and ordered to be printed March 18th, 1886, are Section 5; Section 9, Subsection 4; and Section 17, Subsection 3.]

2. It is also desired to draw attention, again, to the operation of Section 31 [of the Bill "as amended in Committee," and ordered to be printed March 18th, 1886], under which any lunatic under care in an asylum, etc., may be examined, and, if two medical certificates are secured, may be discharged on the application of any person; and to point out that the section would place power in the hands of those who might act under misconception or delusion, or from unworthy or vindictive motives; and, in all likelihood, would lead to discharges of insane persons under circumstances that would render its operation a fertile cause of actions at law for alleged improper detention.

3. It is also desired to redirect attention to the suggestions of the memorandum under Section 22 (now Section 23 of the Bill "as amended in Committee," and of March 18th), especially with regard to the omission of "a special report;" and the concluding suggestive statement that "it is thought to be extremely desirable that the signing and making of *all* reports or certificates required under the Act, or under this section of it, should be protected in like manner as is the signing of certain certificates in [Section 8, Subsections 4 and 5]," or, as now, in Section 5; and Section 9, Subsection 4, of the Bill "as amended in Committee."

4. It is desired to again urge the suggestions made in the memorandum, under Section 13 (now Section 14 of the Bill as "amended in Committee"), in reference to the medical officers of workhouses.

5. Leaving the former recommendations, it is desired to draw the attention of your lordship to the word "before" in Section 5, page 7, line 31, of the "Bill as amended in Committee," which, if one may judge by the apparent intention of the section, is seemingly a misprint for "after," and would make the section give no protection for acts done after the commencement of the Act.—I have the honour to be, your lordship's obedient servant,

Ernest Hart, Chairman.

A communication has been received from the Lord Chancellor acknowledging the receipt of the above letter, and intimating that the suggestions contained therein will receive consideration.

The Lunacy Acts Amendment Bill again came under consideration in the House of Lords on April 6th, on the report of amendments. In its amended form, we trust it will receive a general support from the medical members of the Commons.

According to the Bill at present, the judge, magistrate, or justice to whom is presented the statement of particulars, the medical certificates, and the petition for an order for the reception and detention, in an asylum, hospital, or licenced house, or as a single patient, of an alleged lunatic, not a pauper; if satisfied with the evidence of lunacy appearing by the medical certificates, may forthwith make an order thereon; or he may appoint a time for the consideration of the petition in private, and, if not satisfied with the evidence of lunacy appearing by the medical certificates, may make such further and other inquiries concerning the alleged lunatic as he may think fit, may take evidence on oath, and may also, if he shall think it necessary to do so, visit the alleged lunatic at the place where he may happen to be.

The Lord Chancellor moved an amendment, placing clearly before the judge, magistrate, or justice the duty of fully considering whether or not it is necessary for him personally to see the alleged lunatic.

Fully accepting the principle of the Bill as regards the order of a judge of county courts, stipendiary magistrate, or specially appointed justice, in all private cases (except temporarily in "urgency" cases and except for "single" patients), it would seem to be desirable that the judge, magistrate, or justice, should in each instance personally see the alleged lunatic before signing an order for his reception into an asylum, lunatic hospital, or licensed house; and particularly inasmuch as, under the Bill, such order (in the case of a justice) would be signed, not indefinitely by any and every, but only by a specially appointed justice.

And this reminds us of another feature of the Bill, namely, that while by it the general provisions for the reception of private patients are vastly increased in stringency, those for pauper patients are relaxed, by omitting the present requirements, that the justice should personally examine the alleged lunatic, before signing an order for reception into an asylum, etc. The expediency of this relaxation we venture to doubt.

Of the amendments of Lord Hobhouse—which were not accepted—one would have extended the operation of a recent amendment by the Lord Chancellor to the effect that where, at the passing of the Act, arrangements had been made for a new private asylum in the place of an existing one, the new one being as well suited for the purpose as the old one, and the latter in all respects well conducted, a licence for the new house may be given; and would have extended it by removing the limitation of the subsection's operation to cases where such arrangements had been made at the time of the passing of the Act. Lord Hobhouse, as reported in the *Times*, "understood that several of these properties were held upon lease; and, if the lease expired after the passing of the Act, the freeholder would be liable to put a terrible screw on the lessee, who could not continue to conduct his asylum in any other premises."

No doubt, this would result in a few cases, and bear hardly and with confiscatory effect, and we may add that other cases may easily arise in which Lord Hobhouse's amendment would be preventive of that uncompensated direct injury to vested interests which the Lord Chancellor expresses a desire to avoid; as, for example, where a railway, acting under its parliamentary powers, may take possession of the property, and thus, in the case supposed, bring the licence for an asylum peremptorily to a close. Nor was another amendment successful, to the effect that joint-licensees might be licensed individually, the aggregate number of patients not to exceed those in the joint-licence. At every turn, the Lord Chancellor desires to see the number of private asylums gradually diminish; but perhaps his lordship may see his way clear to insert some extension of his amendment (now Subsection 2, of Clause 42), so as to meet the exceptional cases above referred to, where its action might tell severely on individuals. It would also seem necessary, in order to carry out the apparent intentions of the Bill, after the word "survivors," s. 43,

page 30, line 14, to insert "or a successor, or one of the successors, in the licence (as provided under Section 42)."

An amendment, making it felony, and punishable by penal servitude for life, at maximum, on the part of certain officials to carnally know a female lunatic under their care, was rejected, the Lord Chancellor believing that the offence was punished with sufficient severity already.

COLLECTIVE INVESTIGATION COMMITTEE.

LIST OF RETURNS RECEIVED DURING THE MONTH OF FEBRUARY, 1886.

Dorset and West Hants Branch: III, C. C. Claremont.
Metropolitan Counties Branch: IV, N. Davies-Colley, F.R.C.S.
North-Wales Branch: I, L. F. Cox.
Shropshire and Mid-Wales Branch: X, M. D. Bromfield.
Staffordshire Branch: XIII, J. T. Hartill.
West Somerset Branch: Intemperance, F. Stockwell.

The Committee beg also to acknowledge (March 25th) the receipt, since their last acknowledgment on February 22nd, of the following replies to the International Inquiry into the geographical distribution of certain diseases.

Bath and Bristol Branch, 1.
Border Counties Branch, 13.
Cambridge and Huntingdon Branch, 27.
Dorset and West Hants Branch, 28.
Edinburgh Branch, 1.
Glasgow Branch, 5.
Metropolitan Counties Branch, 5.
Midland Counties Branch: Nottingham District, 2.
North Wales Branch, 28.
Reading Branch, 1.
South-Eastern Branch: West Kent District, 11; East Surrey District, 28; East Sussex District, 4.
South of Ireland Branch, 1.
South Wales Branch, 6.
Southern Branch: East Hants District, 3; Wilts District, 13.
Staffordshire Branch, 8.

The Secretary to the International Committee begs also to acknowledge (March 25th) the receipt, since his last acknowledgment on February 22nd, of the following returns to the same inquiry from members of the profession, not being members of the Association:

Metropolitan District (inquiry issued January 30th), 31 additional.
England, Wales, and the Channel Islands (inquiry issued February 27th), 809.
Scotland (inquiry issued February 6th), 71 additional.
Ireland " " " 49 additional.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 14th day of April next, at 2 o'clock in the afternoon.

Tuesday, April 13th, 1886.—Scientific Grants Committee, 5 P.M.; Premises Committee, 6 P.M.; Trust Funds Committee, 7 P.M.—*Wednesday, April 14th*, 1886. Committee on Branch Organisation, 10.30 A.M.; Journal and Finance Committee, 11.30 A.M.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, March 25th, 1886.

NOTICE OF QUARTERLY MEETINGS FOR 1886.

ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

A general inquiry into THE THERAPEUTIC VALUE OF HAMAMELIS has now been issued. A report will be made to the Section of Therapeutics in the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Mr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 15th, at 5 o'clock; dinner at 5.30. Discussion: Do you consider the Antiseptic Dressing of Wounds Advantageous in Country Practice? Election of a representative of the Branch on the Council.—W. M. KELLY, M.D., Honorary Secretary, Taunton.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting of this Branch will be held at Carmarthen, on Wednesday, April 21st next. Members wishing to join the Branch should send in nomination papers by the end of March. Members desirous of reading papers, etc., should send titles to one of the Honorary Secretaries. Further particulars in circulars. Signed, A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Hackney Town Hall, on Thursday, April 15th, at 8.30 P.M. Photographs of a Case of Myxœdema will be exhibited by Mr. C. R. Walker. A paper on the "Byways of Rheumatism," will be read by Thomas Barlow, M.D., F.R.C.P.—J. W. HUNT, 101, Queen's Road, Dalston, Honorary Secretary.

SOUTH-EASTERN BRANCH.—Notice to Members. Allow me to remind the members of this Branch, "That candidates for the office of representative of the Branch at the Council of the Association, should be nominated, by any two members of the Branch, before April 15th, and their names sent to the Honorary Secretary, who shall issue voting papers to the members of the Branch, who shall then vote for any of the nominated members." The Branch is at present entitled to three representatives, one for each county comprised in the Branch; namely, Kent, Surrey and Sussex.—CHARLES PARSONS, M.D., Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at Erith on Friday, April 30th; F. Spurrell, Esq., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District, A. W. NANKIVELL, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than April 15th.

OXFORD AND DISTRICT BRANCH.—The next meeting will be held at the Radcliffe Infirmary, Oxford, in the afternoon of Wednesday, April 28th. Members are asked to send to the Honorary Secretaries notice of any business, cases, or papers, or candidates for election, on or before Monday, April 19th. Advantage will be taken of the meeting to present Dr. Tuckwell with a testimonial. There will be a dinner at 5s. a head (exclusive of wine) after the meeting.—Honorary Secretaries, Dr. DARBISHIRE, W. L. MORGAN, Esq., Oxford.

NORTH OF ENGLAND BRANCH.—The spring meeting will be held at Roker, on Wednesday, April 21st. Members intending to read papers, show specimens, etc., are requested to communicate with the Honorary Secretary (Dr. DRUMMOND, Newcastle-on-Tyne) as early as possible.

THAMES VALLEY BRANCH.—The next meeting of this Branch will be held at the Griffin Hotel, Kingston, on Wednesday, April 14th, at 6.15 P.M. A paper will be read by Dr. Langdon Down, on Some of the Causes of Mental Feebleness. The subjects suggested by the Collective Investigation Committee will be considered, namely: 1. Prognosis in Heart-valve Disease; 2. Extreme Duration of Infection in the Infectious Diseases.—CHARLES C. SCOTT, M.B., Honorary Secretary.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fourth annual meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, March 24th, E. C. BOARD, Esq., President, in the chair. There were also present forty-three members and two visitors.

New Members.—Dr. W. H. C. Newnham, Bristol; Dr. L. Lees, Bristol; and Dr. E. H. Warner, Bristol, were elected members.

Medical Advertising.—The Council presented their report on this subject, which gave rise to a short discussion.

Paper.—Dr. Aust Lawrence read an exhaustive paper on Pelvic Abscess, founded on one hundred cases.—Mr. Tivy, Dr. Swayne, Mr. Penny, and Dr. Waldo joined in the discussion which followed.

SPECIAL CORRESPONDENCE.

PARIS.

The Influence of Water on Nutrition.—Respiratory Elimination of Carbonic Oxide.—Typhoid Fever Treated by Tepid Baths allowed to get gradually Cold.—Neuralgia Treated by Spray of Methyl Chloride.—Albuminuria Concomitant with Acute Articular Rheumatism.—New Inventions for Ligature—Belladonna an Antidote to Potassium Iodide.—M. Pasteur.

AT a recent meeting of the Société Médicale des Hôpitaux, M. Debove stated that so many objections had been raised against the method which he had adopted in making his experiments to ascertain the influence of water on nutrition, that he had subsequently made a fresh series of control experiments. In this series, he had selected none but perfectly healthy individuals. These persons were fed on raw meat, new bread, and water. Either raw meat or meat boiled to shreds must be given, because both the chemical constitution and nutritive qualities of meat vary according to the way in which it is prepared. The daily bread should always be equally well baked. M. Flameng, M. Debove's house-surgeon, adopted a uniform diet for thirty-eight days. When he reached a weight that remained stationary, the allowance of water was doubled and trebled, but the rations of bread and meat remained the same. During the second part of the experiment, neither the weight nor the excretion of urea increased. Two other persons were submitted to the same treatment. Their weight also remained stationary, as did the quantity of urea excreted. M. Debove therefore concluded that the ingestion of more or less large quantities of water did not exert any influence on nutrition, when the quantity reached a certain degree. He admitted, with Dr. Dujardin-Beaumetz, that entire abstinence from water would disturb the digestive faculties. Therefore, persons deprived of water grew thin.

M. Gréhaut stated, at a recent meeting of the Biological Society, that the results of his experiments on the elimination of carbonic oxide, by the respiratory channels, after poisoning by that gas, had been denied by Herr Kreis, who asserted that there was no elimination, since the gas entered into combustion in the organism, and was transformed into carbonic acid. M. Gréhaut repeated his experiments, and obtained the same results as those that followed his first set of experiments. He injected a dog with thirty grammes of blood containing five cubic centimètres of carbonic oxide, and he found that four and a half cubic centimètres were eliminated. M. D'Arsonval asked if the period of elimination was in proportion to the weight of the animal. M. Gréhaut answered that the process of elimination was quicker with the rabbit than with the dog.

M. Bouchard, in treating typhoid fever, substitutes tepid baths, which gradually grow cold, for cold baths. The bath, he considers, should contain sufficient water to cover the patient's shoulders; also, the shirt should be kept on. The bath must be arranged in such a manner that hot or cold water can be easily added, and surplus water allowed to run off. The rectal temperature is to be ascertained before the bath is given. The water must be lowered two degrees in temperature every ten minutes, until it has fallen to 30° Cent. (86° Fahr.). The patient remains in the bath at that temperature for ten minutes. He is then well dried, a warm dry shirt is put on, and he is carried into bed, wrapped up in a warm blanket. These baths are given as soon as the diagnosis is made, and are continued until the rectal temperature is maintained at 37.5° Cent. (98.6° Fahr.). Eight baths should be taken within twenty-four hours, but, towards the end of the fever, three or four are found sufficient. The advantage of these tepid baths is that immersion is not disagreeable to the patient at first, as is the case with a cold bath. The temperature is lowered, and the state of stupor typical of typhoid fever rarely sets in. Sleeplessness also disappears. Delirium, ataxy, and headache are greatly modified. Tetaniform muscular contractions have, in some instances, disappeared after three baths. Dryness of the tongue and mouth is also thoroughly relieved. When the temperature is not sufficiently lowered by tepid baths, M. Bouchard gives quinine. This mode of treatment may be followed by slightly disagreeable results. The epidermis of the soles or palms may be raised. It then cracks, and a painful swelling of the axillary or inguinal glands may appear; sometimes, fifteen days subsequently, there forms a purulent area below the derma; this is generally painless. It is, however, necessary for the physician to search for the purulent blister, and make an incision to let out the pus. The frequency of the baths and the length of time which they last are sometimes very trying. If syncope happen before, during, or immediately after the baths, they ought to be discontinued; and so must they be in cases of intestinal hæmorrhage, perforation, and peritonitis. The appearance of the catamenia need not prevent the use of the baths. In pulmonary affections, they should not be used; but hypostatic congestion accompanying typhoid fever need not be considered as contra-indicated.

Dr. Peyronnet de Lafonvielle, in his doctoral thesis, entitled *De la Neuralgie du Trijumean et de son Traitement par les Pulverisations de Chlorure de Methyl* (Neuralgia of the Tregeminus, treated by Methyl Chloride Spray), reviews the different methods of treatment. The most successful are slow in curing neuralgia, whereas the analgesic action of methyl chloride is instantaneous. M. Debove was the first who used it. In 1884, he successfully treated sciatica with it; since then several physicians have used it, and M. Abadie finds this method especially efficacious in curing neuralgia of the trigeminal nerves. Dr. Peyronnet mentions several cases successfully treated by Dr. Abadie by methyl chloride spray. According to the author, the experiments of Waller, Schultze, and Ranvier, on the congelation of nerves, prove that no therapeutic agent combats the pain in neuralgia of the trigeminal nerves so efficaciously as methyl chloride. The analgesic effect appears to be the result of the congelation of the peripheral expansions of the branches of the nerve.

M. Chéron, in a memoir, entitled *De l'Albuminurie dans le Rhumatisme Articulaire Aigu* (Albuminuria in Acute Articular Rheumatism), demonstrates the frequent occurrence of albuminuria in the course of acute articular rheumatism. He met with it in forty per cent. of such cases. In order to make a qualitative analysis, the urine was made acid by the addition of acetic acid; a certain quantity of a saturated solution of sulphate of sodium, amounting to the sixth part of the urine, was added, and the mixture was then heated. The presence of albumen was at once detected, if any were contained in the urine. M. Chéron considers that albuminuria in acute articular rheumatism is an indication, in most instances, of a transitory renal catarrh, more rarely of nephritis or renal embolus. It may also be deduced that salicylate of soda may be administered in the majority of cases of rheumatism accompanied by albuminuria.

At a recent meeting of the Surgical Society, M. Trélat showed a forceps invented by M. Segond for the purpose of preventing ligatures from coming off. This forceps is especially useful for securing the uterine pedicle after hysterectomy. M. Pozzi, at a recent meeting of the Paris Surgical Society, stated that the elastic ligature which he had invented and exhibited before the Society, last November, had been fully tested by use, and found to be of great service. Kœberlé and others use it, and admit that it is highly satisfactory. With the elastic ligature of M. Pozzi, vessels can be ligatured without the help of an assistant.

In the *Lyon Médical* and *Journal de Médicine* for March 27th, Aubert states that headache and coryza resulting from full doses of iodide of potassium can be prevented by using belladonna. In one instance, in which five grammes of the iodide were administered daily, six grammes of extract of belladonna were also given. A few days later, the belladonna was discontinued, and iodism did not return.

The *Journal d'Alsace* states that the Alsace-Lorraine Government

s decided on sending a medical man to Paris to study Pasteur's thod. Dr. Ledderhose, principal assistant at the surgical clinic, ll probably be chosen. Archduke Charles Theodore of Bavaria, other of the Empress of Austria, also a distinguished physician, has rived in Paris to study M. Pasteur's method. Subscriptions con- ue to arrive from societies and provincial municipalities; it would tedious to enumerate them.

A second death has occurred, at the Hôtel Dieu, among the Russians o have been operated on for their wounds from the bite of a wolf. e sufferer presented all the symptoms of rabies. A portion of the dulla oblongata has been removed from the Russian who died last ek, and M. Roux will employ it for inoculating animals.

CORRESPONDENCE.

☞ To Correspondents. ☜

R correspondents are reminded that prolixity is a great bar to publication; nd, with the constant pressure upon every department of the Journal, brevity f style and conciseness of statement greatly facilitate early publication. We re compelled to return, and hold over a great number of communications, chiefly y reason of their unnecessary length.

THE LUNACY ACTS.

Sir,—I feel it my duty to report the experience which I have ely had in certifying as to the mental condition of a supposed natic; believing it will afford assistance to many, and draw atten- n to a serious defect in our lunacy laws; and expose a grave in- stice, both to medical men and to those whom they may be called on to examine; as a premium obviously is being offered on their ng able to establish the insanity of the person.

Last November, late one evening, the relieving officer of the ardians of Brentford called on me, bringing an official printed order, ned by the Chairman of the Brentford Magistrates, commanding to visit a very poor girl in this neighbourhood, who had been re- rted to him, by that poor-law official, as being insane. I was also ected to send, in writing, by that night's post, the opinion I formed pecting her condition. I reported that, although the girl exhibited ny suspicious symptoms, yet I hardly felt able to certify her as ng insane, but I would advise her admission into the workhouse irmary, where she might be watched. The relieving officer, how- r, informed me that, as she was a suspicious mental case, she could t be admitted, there being no accommodation for such patients re. Accompanying my report was an application from myself for ee of 21s., to which I have received no reply. I applied again with same result. Then I wrote to Mr. Glossop, the magistrate who l signed the order, and from him I received a most kind and urteous letter, assuring me that the matter should be immediately ked into by him. In a few days he wrote again, to say that he had itten to the clerk of the magistrates, and he had replied that the ardians had refused to acknowledge their responsibility, and the cal Government Board and the Lunacy Commissioners had also nied assistance. Unfortunately, just at this moment, Mr. Glossop d; but, had he lived, I feel sure he would have left no stone un- ned until my fee had been delivered to me.

Mr. Hastings Draper, solicitor, of 83, Vincent Square, now kindly k the matter up, and on Saturday March 27th he made an applica- n at Brentford, before the magistrates, on my behalf. But the ision was given against me, the magistrates refusing to acknow- ge their responsibility, and also acquitting the guardians from irs. I was, however, directed to write to the clerk of the County ard, but he referred me to Scotland Yard; and there the matter nds at present, and the reply that I shall probably next receive l probably be as unsatisfactory as the others.

The magistrates refused my application on the ground that, ough the relieving officer had applied to them for assistance, and girl, although not in actual receipt of poor-law relief, was never- less, virtually a pauper, the guardians could not be made re- nsible because she was not on their books as a pauper, and also for astounding reason that I was unable to establish her lunacy. erefore, it would appear that if she had been a pauper and not a atic, or if she had been a lunatic and not a pauper, or if she had n a lunatic possessed of means and at large, or if she had possessed icient, and I had failed to certify her as insane, I had no claim on magistrates or guardians, even though I had been, in each instance, ered by the magistrates to attend.

think I need add little to what I have written, in order to show it a grave injustice exists, both towards the medical practitioner and the unfortunate individual whom he may be called upon to examine; but I do not believe you will upbraid me for trespassing unnecessarily on your limited space in endeavouring to urge that immediate steps should be taken to rectify so great an evil.—I am, sir, your obedient servant, Warwick C. Steele.

1, Florence Terrace, Ealing.

SECTARIAN HOSPITAL NURSING.

Sir,—Don Quixote tilted at windmills and flocks of sheep; but the poor Don had a "bee in his bonnet." "Hospital Physician," in your issue for April 3rd, rides his Rosinante against something much more impalpable than windmills. Has he also a "bee in his bonnet," or does he make a too obvious attempt to lead your readers off on a false scent? Will he graciously accept a word of explanation? and will he try to believe that it is perfectly frank and sincere?

1. The object of my paper, read at the meeting of the Hospitals Association, was not to assail University College Hospital, but to convince the public that the nursing arrangements at the London hospitals are not sectarian.

2. Speaking for myself, the "objection" is to "sectarianism," and not to "Christianity." If baptism in the Church of England, confirmation in that Church, and personal conviction of the truth and reasonableness of Christianity, constitute a man a Christian, then I claim to be numbered among the friends of Christianity, and certainly object to being classed with its enemies. The real enemies of Christianity are those who make it appear irrational, fanatical, ungenerous, and unlovely. To this class belong all those who mistake their own sect and their special little circle for the broad and true religion, which seeks to include all mankind.

I can understand a narrow ecclesiastic. It is one of the privileges of a certain class of ecclesiastics (of all sects) to be limited in knowledge and infallible in judgment—the more limited, the more infallible. But that a man who has had a scientific education, like "Hospital Physician," and presumably still remembers the generous breadth and the moderating discipline of such an education, that he should claim for one sect the possession of all religious truth and wisdom—this is indeed a phenomenon.

3. Now that the real facts are known, and it is proved that the nursing at the London hospitals is not sectarian, the matter is of much diminished public importance. If University College is satisfied with its position, and with the general condemnation of reasonable men, all I can say is: "'Tis true, 'tis pity; pity 'tis, 'tis true." Let us hear no more of the matter.—Yours faithfully,

60, Highbury New Park. George W. Potter.

PRIZE FOR SOUND-DEADENERS.

Sir,—A medical friend has recently sent me an extract on the above subject from your Journal, of October 31st last, from your report of the proceedings of the Council of the British Medical Association, at a meeting held in the Council-room on October 14th, 1885, in which you state as follows. "Dr. Ward Cousins brought before the Council the question of the refusal of Mr. Bartleet to give the prize of £20 for his sound-deadener, after it had been awarded to Dr. Ward Cousins at Liverpool"—it should have added, "in 1884." As this very misleading statement has led to my medical friends suggesting that the circumstances under which I took this course ought to be made known, in justice to myself, I hope you will kindly allow me to state what they were. My offer was made in a letter, dated July 23rd, 1882, and contained, amongst others, the following condition: "The award to be made during the annual meeting in 1883." No award was made in 1883; therefore, no claim could be made on me, as I never renewed my offer. I should like to add, that I decided not to renew my offer, because I was convinced by an aurist that it was impossible to obtain the amount of sound-deadening that I was aiming at, as he informed me that sound is conveyed through the nose and mouth, and also by the bones of the head as well as by the ears, to the sound-nerve; and, therefore, no apparatus affecting the ears alone could produce it.—I am, sir, yours faithfully, R. S. Bartleet, J.P. and D.L.

The Shrubbery, Redditch.

MANCHESTER AND SALFORD PROVIDENT DISPENSARIES.

Sir,—Permit me, as the Honorary Secretary of the Pendleton Branch of the Provident Dispensary referred to in Dr. Orchard's letter, which appeared in your Journal of March 27th, to make a few remarks with reference to the charges contained in that letter.

The five cases of alleged abuse, to which Dr. Orchard directs attention, have been cited in a local newspaper. When, however, I asked

for full particulars, and promised that, if they are furnished, a complete inquiry shall be instituted, and if the cases are found to be unsuitable for the dispensary, they shall immediately be struck off the books, Dr. Orchard replied that, in his opinion, "an investigation of the cases mentioned would lead to no satisfactory result." In this manner, serious charges are brought against the management of an important institution without any attempt to substantiate them.

The only particulars furnished, upon which it is possible to found an inquiry, are those relating to the case of a member who joined the dispensary after Dr. Orchard first laid his complaint.

Dr. Orchard is not quite correct in stating that "each dispensary is managed by a working-man's committee, who have the power to admit any person as a member, and are subject to no controlling authority." As the operations of the subcommittee, which Dr. Orchard calls a "working-man's committee," have, in all cases, to be approved by the general committee, which, in Pendleton, consists of gentlemen of undoubted social position, and embraces the names of a clergyman, a Catholic priest, two Dissenting ministers, a Member of Parliament, and two magistrates, besides others well known in the district.

The object of these gentlemen is to admit, as members only, those artisans and others whose earnings enable them to pay the necessary small weekly contribution, but do not enable them to pay the ordinary fees to medical men, without causing a great and continuous strain upon their resources. That such object is fairly carried out in Pendleton is evidenced, I think, by the fact that, after urgent request on my part, reliable particulars of one case only, out of 3,600 members, have been sent for investigation.

As to the "residuum" of the working-classes, which Dr. Orchard states "ought to be members of the Provident Dispensary," I may, perhaps, be permitted to say that we in Pendleton shall be only too pleased to receive them, if they will pay the usual weekly contribution; but this, of course, is a *sine quâ non*. That a portion of this "residuum" has already been absorbed by the provident dispensary system, is shown by the fact that some persons, who formerly were dependent upon the Medical Charities, are now members of the Pendleton Provident Dispensary.—Yours obediently,

Buile Hill. HENRY HARWOOD.

PAPAIN AND DYSPEPSIA.

SIR,—In your issue of April 3rd, Dr. George Herschell has given a short account of papain as regards its physiological action and its use in dyspepsia. I should like to make a few remarks on the statements he has made on both these heads. First, as regards the action of papain. Professor Finkler makes an assertion, which Dr. Herschell evidently accepts, that the ferment digests in acid media. This assertion, however, is not correct. In the experiments published in the *Journal of Physiology* (1884), I showed that, though fibrin or albumen was partly dissolved in acid media when papain was present, there was no digestive action, no formation of peptones, unless the acidity was slight, equal to one-quarter of that of the normal gastric juice; and even in this case the action was very little. I cannot but think that, in estimating the "digestion" in acid media, Finkler estimated the amount of proteid passing into solution, and not the amount of peptone formed. The fact that papain does not act in acid media is important, inasmuch as it contra-indicates the administration of the drug by the mouth. Secondly, as regards the two kinds of papain, those of Finkler and Christy. There is only one proteolytic ferment in the papain-juice, a ferment, as I have shown, closely associated with an albumose, and having a definite action, that is, it converts animal proteids into peptones, with the formation of an intermediate globulin-like body, and leucin and tyrosin as bye-products. Therefore, Finkler's papain is only a less active preparation of the ferment than Christy's; for how, indeed, the latter cannot, as Dr. Herschell has stated, be considered a "true catalytic ferment," I cannot conceive. The reason given for such a statement is inadequate; moreover, it is readily proved by experiment that papain (Christy) has the action I have just mentioned, namely, the formation of peptones from fibrin, this being a true catalytic action.

In conclusion, sir, I would suggest to Dr. Herschell to try whether papain (Christy) would not give the same results in dyspepsia as papain (Finkler). I am sure it would. I would further state that, in this JOURNAL, in July, 1885, I detailed a method of the preparation of peptonised food by papain.—I am, sir, yours faithfully,

135, Gower Street. SIDNEY MARTIN.

THE medical officers of Nos. 1 and 2 districts, Tuam Union, reported last week that 33 children in their districts still remained unvaccinated.

THE REPEAL OF THE CONTAGIOUS DISEASES ACTS.

SIR,—The enclosed letter of Dr. Quain appeared in the *Weste Morning News*, in connection with a speech of mine here in oppo tion to the repeal of the Contagious Diseases Acts. I think t common-sense views of so eminent an authority, if read by the me bers of the profession, would act as an incentive to bring about, ev now, some mitigation of the evils which must follow the inconsidera repeal of these Acts; and I send it for insertion in your columns. I am, yours faithfully, J. H. PULESTON, M.P.

House of Commons, April 6th, 1886.

"My dear Mr. Puleston,—The purport of my remarks to y on Tuesday evening, in reference to the subject of contagious disease amounted to this. The old adage, that 'prevention is better th cure,' is daily more and more acted on by the medical professio This is especially manifested in the prevention of diseases by t adoption of measures which check the spread of contagion. The pri ciple applies to the lower animals as well as to man, and we th witness the successful operation of the Contagious Diseases (Animal Act in the prevention of such maladies as rinderpest, pleur pneumonia, foot-and-mouth disease, etc. In man, we see ho under judicious and proper control, the spread of many contagion such as cholera, typhoid fever, small-pox, etc., is prevented. Wi this object, we have the Registration of Diseases Acts in operation several boroughs, with most beneficial results. For the life of me, cannot see why the foul and terrible disease, to which the Contagio Diseases Acts have special reference, should be secured the freedom universal diffusion by being exempted from all control. Why shou political interests or morbid sentiments be allowed to assist, not checking, but in the propagation of, disease, and its consequent suffe ing—even death? Such action is cruelly retrograde. The time cann be far distant when it will be regarded nearly as criminal knowing to communicate disease to another person, whether that disease small-pox, scarlet fever, or syphilis, as it is now to sell an adulterat article of food, or to administer a poisonous drug. Those who co after us will look back with amazement on the action, or it may inaction, of those who allowed disease and suffering to exist a spread, which the exercise of common-sense and right feeling mig have prevented."

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL SCHOOL.

SIXTY surgeons, on probation for the British Medical Service, a sixteen for the Indian Medical Service, joined at Netley on April 1s to attend the summer session of the Army Medical School. The i troductory lecture was delivered on the following day, by Profess Boyes Smith, who drew largely from his wide field of Indian e perience for the subjects of his discourse. The talented lecturer, the course of his address, paid a very eloquent tribute to the valuab services of his predecessor in the chair, Professor Maclean, C.B., advancing tropical medicine, and especially expressed his gratitu for the kind and ready help he had afforded himself when enteri upon his present position in the school. The large number of sevent six surgeons sent to go through the present session, has caused son difficulty in providing the necessary accommodation, and a certain pr portion have been lodged in different houses in the adjoining villa of Netley.

THE WOOLWICH DIVISION OF THE VOLUNTEER MEDICAL STAFF CORPS.

THE War Minister has sanctioned the formation of a Woolwi Division, of one hundred men, for the Volunteer Medical Staff Corp The non-commissioned officers and men will be of the same class those in ordinary volunteer corps, and three medical officers and o quartermaster will direct the company; which, for military purpose will be under the control of the district military principal medic officer, the same way that Engineer Volunteers are under the Co manding Royal Engineer of the District.

London, Edinburgh, and Woolwich, are thus recognised as medic volunteering centres, but no reason exists why Manchester, Liverpo Glasgow, Aberdeen, Newcastle-on-Tyne, Portsmouth, Plymouth, a other cities and towns, should not start the same work. At firs local subscriptions would be needed to begin the movement, but as t capitation grant became available, the expenses would not be heavy

It is understood that, during the summer months, at Woolwic opportunities will be taken to combine the medical staff corps, a the medical volunteers, for drill and practice parades, similar to tho

rried on at the Aldershot Medical Training Depôt, and possibly a mplete bearer company and field hospital may be seen pitched on oolwich Common.

The non-recognition of the Aberdeen University Company, is a rious delay in the spread of ambulance work.

We understand that Dr. Taylor, of Scarborough, is also waiting for cognition for a company which he has raised in the Scarborough strict. The Trinity College, Dublin, Company is also making fair ogress.

REWARDS TO ARMY MEDICAL OFFICERS.

R,—In a recent number of your JOURNAL, a correspondent commented on the insufficiency of the rewards given to the medical staff of the army for the operations in the Soudan. I beg to bring forward a still more glaring case. In the recent expedition to Bechuanaland, although the campaign was a bloodless one, the honours and rewards have been monopolised by the combatant officers, except three promotions in the Commissariat, Ordnance Store Corps, and Veterinary Departments, while the services of the medical officrs have been completely ignored.

It is allowed on all hands that the work of the medical staff was admirably performed, and this was warmly acknowledged by Major-General Sir Charles Warren in a General Order published at the close of the expedition. This General Order, however, has not been published in England, and no medical officer has been mentioned in any of the gazettes. Hence, the public may suppose the medical arrangements to have been faulty; while, as a matter of fact, the prevention of disease by sanitation, the extremely small mortality, and the quick suppression of any disease which did appear, prove their efficiency; and, at the same time, the gratuitous treatment by the medical officers of very large numbers of Boers and Kaffirs in a part of the country where there are no qualified practitioners, had a most pacifying effect on the inhabitants.—Yours faithfully,

BECHUANA.

P.S.—The following is an extract from the General Order referred to in the letter.

"Bechuanaland Field Force. Special General Order by Major-General Sir Charles Warren, K.C.M.G.

"Barkly West, August 29th, 1885.

"14. The excellent health of the troops throughout has been very remarkable, and I have great pleasure in tendering my thanks to the Principal Medical Officer, Deputy Surgeon-General Faught, and to the officers of the medical staff, to whose attention to the comforts of the men and to all sanitary arrangements, this result may in great measure be attributed. They have been unremitting in the care of the sick."

SLOW PROMOTION IN THE MEDICAL STAFF.

R,—Permit me to draw your attention to the growing stagnation of promotion in the medical staff, especially as regards the prospects of the brigade-surgeons and the surgeons-major. As this deplorable state of affairs is assuming alarming proportions, I hope you will publish this letter, for your columns have ever been open to the exposition of real grievances.

Quite recently, the Dublin Branch of the British Medical Association took up our case, and petitioned the War Office; the answer of the then War Secretary was most disappointing and disheartening. Sooner or later, however, the authorities will be forced to take the matter up, and apply a remedy.

To have a large body of its officers despondent, disgusted, and more or less apathetic, is, to say the least of it, not for the weal of any State; and such, I maintain, is the prevailing feeling of the senior executive officers of the medical staff. As it is from this body that the administrative officers of the future are to come, it behoves those in power to consider our just demands; for otherwise the best men will be driven to retire in disgust; and the principal medical officer in the near future will, from sheer old age, be physically unfit for even the shortest and least arduous campaign; little better than an infirm and incapable dotard, shattered in health by long tropical services, soured and gloomy by many weary years of subordinate drudgery.

The remedy is simple enough, and has been put forward in your columns from time to time, namely, compulsory retirement of the deputy surgeons-general after, say, four years' service; or administrative appointments might be for five years all told; the cost of this change would be a mere trifle.

There are other remedies, but I merely mention what seem to me to be the simplest. I sincerely hope you will perceive that the case sadly needs attention; and it requires no figures to demonstrate the very hopeless outlook of a large and deserving body of officers. Wherever we go, we hear nothing but complaints on this score, coupled with more than astonishment that we have been abandoned in a certain quarter whence so much was expected.—I remain, truly yours,

DESPONDENT.

THE PROPOSED ORDER OF MEDICAL MERIT.

R,—There are a few points regarding Dr. Quain's suggestion for an order of merit for military medical officers which it may be well to answer. One is, that the Orders of the Bath appear to be reserved for medical officers of high rank only, or that our experience teaches us they are seldom or never given to one below the administrative ranks: also, that they are usually given for "war-services only." But we have, I am pleased to say, dozens of medical officers who have "several times" received the highest praise from the chief medical, military, and civil authorities for their services during periods of great trial and sickness abroad, but who have, I regret to say, nothing but official letters of thanks (and their own *mens conscia recti*) to show for their hard work. There are, no doubt, other distinctions which might be given, such as "C.M.G.," or "C.S.I.," or "C.I.E.," according to the part of the world where such good work is done; but the unfortunate part of the question is, that these distinctions are seldom or never given to medical officers, no matter how distinguished their services. As far as the experience of the service teaches us, the only reward ever given for good service (in a medical sense), and which, no doubt, that distinguished physician, Dr. Quain, had in his mind, when the valuable suggestion was made, is to promote the medical officer over his brother officer's heads, some of whom may have previously performed quite as good service, but who had not the good fortune to have their claims for reward brought prominently to notice.

It would undoubtedly be a serious misfortune should the Army Medical Staff be debarred from the higher distinctions open to the military service generally, but then it may be well to consider the claims of those who have to labour in the deadly yellow fever wards, or Indian cholera-camps, and small-pox tents, and who, at present, have to go without reward (except those dubious ones above noticed). The two questions appear to me easily separated; let us have the higher distinctions for the higher ranks, and for war-service, but why not, at the same time, have some way (beyond empty official letters of thanks) of showing appreciation for medical merit, as in the instances above quoted.—I am, etc.,

SPES.

THE NAVAL MEDICAL SERVICE.

MEMBER asks:—Can a surgeon, who is a single man, save money out of the £209 17s. 6d. which is his yearly salary for the first four years of service; or, if married, how much could he reasonably allow out of this sum for the support of his family? Is the accommodation on board the war-vessels of such a nature as to attract men to the service? I should feel pleased, also, to know what are the ordinary routine duties in time of peace, how much of the medical officer's time is spent on ship, and how much on land?

If any naval medical officer will answer these queries, giving at same time any other information such as would be interesting and instructive to young men thinking of becoming candidates for the department, he will confer a benefit on many.

THE NAVY.

SURGEONS W. H. PATTERSON, E. H. SAUNDERS, H. A. W. RICHARDSON, J. A. COLLOT, E. W. LUTHER, ROBERT BENTHAM, N. C. ROSS, W. E. BENNETT, J. W. H. HAWTON, and E. R. MULOCK, have been appointed Staff-Surgeons in Her Majesty's Fleet.

Fleet-Surgeon W. M. POWER has been placed on the retired list of his rank. He entered the service February 29th, 1864; became Staff-Surgeon, September 5th, 1877; and Fleet-Surgeon, July 5th, 1884.

The following appointments have been made at the Admiralty during the past week: J. B. DREW and T. O. SULLIVAN, M.D., Staff-Surgeons, to the *President*, additional for service at the Royal Victoria Yard, Deptford; GEORGE MACLEAN, M.A., M.B., Fleet-Surgeon, to the *Alexandra;* T. G. WILSON, Fleet-Surgeon, to Haslar Hospital; HENRY MACDONELL, Fleet-Surgeon, to the Chatham Division, Royal Marines, for Walmer Depôt; W. L. POWELL, Fleet-Surgeon, to the *Duke of Wellington;* ROBERT HAY, M.D., Fleet-Surgeon, to the *Minotaur;* CECIL DRAKE, Staff-Surgeon, to the *Britannia;* J. G. MACKASKIE, Surgeon and Agent to Holy Island, Budle, Sunderland (north), Beadwell, Newton, Bulmer, and Craster; A. W. WHITLEY, Fleet-Surgeon, to the *Colossus;* T. O. SULLIVAN, M.D., Staff-Surgeon, to the *Belleisle;* J. A. COLLOT, Staff-Surgeon, and GEORGE WELCH, Surgeon, to the *Royalist;* H. E. SOUTH, Surgeon, to the *Colossus;* L. H. KELLETT, M.D., Surgeon, to the Portsmouth Division Royal Marines; WILLIAM THOMPSON, Surgeon, to the *Duke of Wellington;* W. J. B. BOOKEY, Surgeon, to Devonport Dockyard; H. B. BEATTY, Surgeon, to the *Royal Adelaide*, additional; JOSEPH CROWLEY, M.D., Surgeon, to the *Excellent;* H. L. CROCKER, Surgeon, to the Royal Naval Hospital, Chatham; and J. A. WALSH, M.D., Surgeon, to the *Excellent*, additional.

MEDICAL STAFF.

Surgeon-Major F. B. BAKER has been placed on retired pay, with the honorary rank of Brigade-Surgeon. Mr. Baker joined the service as Assistant-Surgeon to the Scots Fusilier Guards, March 3rd, 1854. He became Surgeon to the Grenadier Guards, January 4th, 1871; and was promoted to Surgeon-Major, March 1st, 1873. He was in the Egyptian war of 1882 with the 2nd Battalion Grenadiers, and was present at Tel-el-Kebir. He received the medal with clasp, the 3rd Class of the Order of the Medjidie, and the Egyptian bronze star.

Surgeon-General GRAHAME AUCHINLECK, M.D., has been placed on retired pay. His commissions are dated, Assistant-Surgeon, December 22nd, 1848; Surgeon, October 2nd, 1857; Surgeon-Major, December 22nd, 1868; Deputy Surgeon-General, July 2nd, 1876; and Surgeon-General, February 6th, 1883. Dr. Auchinleck served in the Burmese war in 1852-53, and has the medal with clasp for Pegu. He was also engaged in the Indian Mutiny campaign in 1857-58, and was present when the 81st Regiment, under Colonel Renny, disarmed at Meean Meer a regiment of native cavalry and three regiments of infantry, all disaffected. He was also present in the campaign on the North-West Frontier of India in 1858.

Brigade-Surgeon O. CODRINGTON, M.D., has been granted retired pay, with the rank of Deputy Surgeon-General. He entered the Army service as Assistant-Surgeon June 13th, 1859; became Surgeon, March 1st, 1873; Surgeon-Major, January 7th, 1875; and Brigade-Surgeon, August 19th, 1885. Dr. Codrington has the medal for the New Zealand war in 1864-66, in which he served.

Surgeon-Major W. ROBERTSON, M.B., has also been granted retired pay, with a step of honorary rank. He became Assistant-Surgeon March 31st, 1865; Surgeon, March 1st, 1873; and Surgeon-Major, March 31st, 1877. He has no war record.

Quartermasters W. M'KAY, F. TIGHE, and H. GRAHAM have been granted the honorary and relative rank of captain.

Surgeon G. B. STUART, M.B., is appointed Surgeon-Major to the Grenadier Guards in the place of Surgeon-Major F. B. Baker. Mr. Stuart was appointed Assistant-Surgeon to the 2nd Dragoons, April 1st, 1871. In 1873, he went to the Gold Coast, whence he returned in the following year; soon after which he, for a time, rejoined the 2nd Dragoons as Surgeon. He was appointed to the Grenadier Guards in 1877. The Army Lists do not assign him any war-service.

Deputy Surgeon-General W. A. THOMSON, M.B., is promoted to be Surgeon-General, *vice* G. Auchinleck, M.D. His previous commissions are dated: Assistant-Surgeon, October 14th, 1851; Surgeon, December 31st, 1858; Surgeon-Major, September 4th, 1871; and Deputy Surgeon-General, November 2nd, 1879.

Deputy Surgeon-General SINCLAIR, M.D., who was placed on half-pay on April 10th last year, has been restored to full pay as Deputy Surgeon-General, *vice* Thomson.

Brigade Surgeon E. G. M'DOWELL, C.B., is promoted to be Deputy Surgeon-General, *vice* A. Guthrie, M.D., deceased. Mr. M'Dowell entered as Assistant-Surgeon, November 6th, 1855; rose to Surgeon, September 3rd, 1870; to Surgeon-Major, March 1st, 1873; and Brigade-Surgeon, August 4th, 1881. He was engaged in the China war in 1860, and was at the action of Sinho and the storming of the Taku Forts (medal with clasp). He was also in the Egyptian war in 1882, and was Principal Medical Officer in the Soudan campaign in 1884, being present at the actions at El Teb and Temai (twice mentioned in despatches, nominated a C.B., medal with two clasps, 3rd class of the Order of the Medjidie, and Egyptian bronze

star). Mr. M'Dowell returned from Egypt in the summer of 1884, and in the spring of last year was appointed Principal Medical Officer of the Woolwich District, which position he still fills.

Surgeon-Major W. F. Samuels, serving in the Bombay command, is appointed to the medical charge of the Poorundhur Sanitarium, *vice* Surgeon-Major R. W. Hare, M.B.

Deputy Surgeon-General D. A. C. Fraser, whose tour of duty in the Bombay Presidency has expired, is directed to return to England on being relieved by Deputy Surgeon-General Hinde.

Surgeon E. O. Milward, Bengal; Surgeon-Major W. P. Smith, Madras; and Surgeon-Major R. W. Hare, M.B., Surgeon A. Hewett, and Surgeon P. H. Fox, Bombay, are detailed to proceed to England during the present trooping season.

Surgeon-Major Alexander Thomson, M.D., died at Aldershot on the 28th ultimo, at the comparatively early age of 45. Dr. Thomson entered the service as Assistant-Surgeon, September 30th, 1863; became Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. He was engaged in the war with the Boers in 1881.

Surgeon R. H. Cox has been appointed Surgeon to the Coldstream Guards, *vice* J. Magill, M.D., who has been promoted Surgeon-Major. Mr. Cox's entry into the Army Medical Staff dates from the 30th of January last.

Surgeon-Major H. R. Greene is granted retired pay, with the honorary rank of Brigade-Surgeon. His commissions are dated: Assistant-Surgeon, September 30th, 1860; Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. Mr. Greene has the medal for the Afghan war of 1878-80; the medal and clasp and Egyptian bronze star for the Soudan Expedition in 1884, under Sir Gerald Graham, when he was present at the action at El Teb, and for which he was mentioned in despatches; and a clasp for the Nile Expedition in 1884-85, when he was engaged in the hospital at Wady Halfa.

Surgeon-Major J. F. Brodie has also retired with a step of honorary rank. He ranked as Assistant-Surgeon from October 2nd, 1865; as Surgeon, from March 1st, 1873; and as Surgeon-Major, from October 2nd, 1877. He served in the Afghan war in 1878-80, and has the medal for the campaign.

Surgeon-Major Vivian Wearne has likewise retired with the rank of Brigade-Surgeon. He entered the service as Assistant-Surgeon, March 31st, 1865; became Surgeon, March 1st, 1873; and Surgeon-Major, February 14th, 1878. He has no war-record.

Surgeon-Major W. P. Smith, serving in the Madras command, has been ordered to proceed to England on the 3rd instant.

Deputy Surgeon-General G. L. Hinde, C.B., having arrived at Bombay from England, is appointed Administrative Medical Officer, Poona Circle.

Deputy Surgeon-General William Skeen, M.D., died on April 2nd at Aberdeen, in his fifty-fourth year. He entered the Army Medical Service, March 8th, 1855; became Surgeon, December 13th, 1859; Surgeon-Major, March 1st, 1873: Brigade-Surgeon, August 2nd, 1880; and Deputy Surgeon-General, November 1st, 1884. Dr. Skeen served with the expedition against the Mandingoes, on the West Coast of Africa, in 1861. In 1881, he was in the war with the Boers, and was Senior Medical Officer at the defence of Prætoria.

Deputy Surgeon-General Alexander Guthrie died at Fort Pitt House, Rochester, on March 3rd, at the age of 53. Dr. Guthrie entered the Army Service as Assistant-Surgeon April 28th, 1854; became Surgeon June 20th, 1865; Surgeon-Major March 1st, 1873; Brigade-Surgeon November 27th, 1879; and Deputy Surgeon-General May 7th, 1882. During the Indian Mutiny in 1857-58, Dr. Guthrie served with the Rifle Brigade, and he was present in the action at Cawnpore, at the siege and capture of Lucknow, and in the operations in the Trans-Gogra country in 1858-60. He served with Ross's Camel Corps in Central India, and received the Mutiny medal and clasp. He was also engaged in the war in Afghanistan in 1880, and had the medal for that campaign.

Deputy Inspector-General of Hospitals R. W. Read died at Salisbury on the 8th ultimo, in his sixty-eighth year. Mr. Read entered the army as Assistant-Surgeon, May 31st, 1844; became Surgeon, December 28th, 1855; Surgeon-Major, May 21st, 1864; and retired with the honorary rank of Deputy Inspector-General, July 7th, 1869. The Army Lists do not assign him any war-service.

Surgeon J. F. E. M'Craith died at Cairo on February 9th, at the early age of 26 years. He entered the Army Service January 31st, 1885, and was at once sent to Egypt, where he had since remained.

INDIAN MEDICAL SERVICE.

The undermentioned gentlemen have obtained leave of absence for the periods specified:—Surgeon-Major J. C. G. Carmichael, M.D., Bengal Establishment, Medical Officer to the 3rd Goorkha Regiment, for one year on private affairs; Surgeon-Major H. Boyd, Bengal Establishment, Medical Officer to the 45th Native Infantry, for one year on medical certificate; Surgeon S. Hassan, Bengal Establishment, officiating 26th Punjaub Infantry, for six months on private affairs; Surgeon W. K. Hatch, M.B., Bombay Establishment, Second Surgeon to the Jamsetjee Jejeebhoy Hospital, for one year on private affairs; Surgeon O. H. Channer, Bombay Establishment, Deputy Sanitary Commissioner of the Southern Registration District, three months privilege leave; Surgeon-Major S. O. Banks, Bombay Establishment, Civil Surgeon of Surat, for eighteen months on private affairs; Surgeon-Major M. L. Bartholomeusz, M.B., Bombay Establishment, for eighteen months on private affairs; Surgeon-Major D. O'C. Raye, M.D., Bengal Establishment, Professor of Anatomy at the Calcutta Medical College, for 225 days on medical certificate; Brigade-Surgeon H. Cayley, Bengal Establishment, for six months, on medical certificate in extension; Surgeon R. James, M.B., Bengal Establishment, in medical charge of the 5th Infantry Hyderabad Contingent, for one year on private affairs; Surgeon J. M'Cloghry, Bombay Establishment, for nine months on private affairs; Brigade-Surgeon C. K. Colston, Bombay Establishment, for six months on medical certificate.

The services of Brigade-Surgeon C. J. Jackson, M.D., Bengal Establishment, are temporarily placed at the disposal of the Military Department.

Surgeon-Major C. P. Costello, Bengal Establishment, in medical charge of the 5th Punjab Cavalry, is appointed Medical Storekeeper at Meean Meer, *vice* Brigade-Surgeon G. A. Watson, who has retired.

The services of Surgeon-Major A. Crombie, M.D., Bengal Establishment, Civil Surgeon of Dacca, are temporarily placed at the disposal of the Government of India, in the Home Department.

Surgeon-Major E. Sanders, Bengal Establishment, officiating Civil Surgeon of Jessore, is appointed to act as Civil Surgeon of Moorshedabad, during the absence of Brigade-Surgeon C. J. Jackson.

Surgeon J. Sykes, Bengal Establishment, second class supernumerary Civil Surgeon, on return from temporary military duty, is posted to the charge of Lucknow District.

Surgeon D. M. Jack, Bengal Establishment, second class Civil Surgeon, return from temporary military duty, is posted to the civil medical charge of Kheri District.

The services of Surgeon-Major C. W. S. Deakin, M.B., Bengal Establishm are replaced at the disposal of the Military Department.

Surgeon K. R. Kirtikar, Bombay Establishment, is directed to act as Sec Surgeon Jamsetjee Jejeebhoy Hospital, during the absence of Surgeon W Hatch, M.B.

Surgeon-Major D. E. Hughes, M.D., Bombay Establishment, Civil Surgeo Belgaum, is ordered to act as Deputy Sanitary Commissioner, Southern Regis tion District, in addition to his other duties, during the absence of Surgeon O. Channer.

Surgeon-Major A. Barry, M.D., Bombay Establishment, in medical charg the 2nd Bombay Lancers, has returned to duty from sick furlough.

Surgeons J. L. Corbett, M.D., S. H. Browne, M.D., E. Mair, M.B., J. A strong, L. R. Dawson, M.D., H. P. Yeld, J. C. Fullerton, and C. J Warden, of the Bengal Establishment; Surgeons P. H. Benson, M.B., J. I caster, M.B., and W. G. King, M.B., of the Madras Establishment; and Surg D. A. Patterson, M.D., J. S. Wilkins, and W. A. Barren, of the Bombay Es lishment, became Surgeons-Major on March 31st, having then completed tw years' service.

Surgeon R. N. Stoker, Bengal Establishment, Garrison Surgeon of Fort Att is appointed to the medical charge of the newly organised 1st Battalion of Goorkha Light Infantry; Surgeon G. Bomford, M.D., Bengal Establishm Garrison-Surgeon of Fort William, is appointed to the 2nd Battalion of the s corps.

Surgeon W. G. P. Alpin, Bengal Establishment, is appointed to the officia medical charge of the 19th Punjab Native Infantry, *vice* Surgeon-Major J. Johnson, M.D., proceeded on sick-furlough.

Surgeon H. E. Banatvala, Bengal Establishment, is appointed to the officia medical charge of the 32nd Punjab Pioneers, *vice* Surgeon G. S. Griffiths, has leave of absence.

Surgeon-Major W. Moir, M.A., M.B., Bengal Establishment, officiating Class Civil Surgeon, is to revert to 2nd Class, and to resume charge of the medical duties of the Meerut district.

Surgeon J. Sykes, Bengal Establishment, 2nd Class Supernumerary Civil geon, has been appointed to officiate as Superintendent of the Central Priso Agra, from the date he takes charge from Dr. Tyler.

Surgeon-Major A. J. Willcocks, M.D., Bengal Establishment, 2nd Class Surgeon, having returned from deputation-duty, has resumed charge of the medical duties of Nynee Tal.

Surgeon-Major J. C. Whishaw, M.D., Bengal Establishment, Civil Surgeon Superintendent of the Lunatic Asylum at Lucknow, is permitted to retire the service. Dr. Whishaw entered the service July 23rd, 1858, and became geon-Major, July 23rd, 1870. He does not appear to have seen war-service.

Brigade-Surgeon G. D. Riddell, Madras Establishment, has been ordere proceed to Suakin for duty as Principal Medical Officer, in relief of Brigade- geon Roberts, who is to return to Madras.

The services of Surgeon A. T. L. Patch, Madras Establishment, having b placed at the disposal of the Government of India, he is directed to proceed fo with to join the 1st Cavalry Hyderabad Contingent.

Surgeon F. H. Pedroza, Madras Establishment, is appointed to the mec charge of the 16th Native Infantry, *vice* Surgeon-Major H. G. Hall, wh ordered to do duty in the Eastern District, and to be in medical charge o Madras Infantry Depôt and European Artillery Veteran Company Hospital Pallaveram.

Surgeon C. B. Maitland, Bombay Establishment, is transferred to Suakin duty with the Indian Contingent.

Surgeon E. H. Beaman, of the Lancashire Hussars Yeomanry, whose resi tion was recently announced, is granted the honorary rank of Surgeon-Major, permitted to retain his uniform.

The undermentioned Surgeons of Artillery Volunteers are granted the hono rank of Surgeon-Major: J. Hunter and W. Hunter, 1st Argyll and Bute Pycroft, 1st Devonshire; F. W. Granger, 1st Glamorganshire: J. Prov M.D., 1st Lanarkshire; L. Armsrong, 1st Northumberland and Sunderland W. Scarth, 1st West Riding of Yorkshire.

The undermentioned Surgeons of Rifle Volunteers are granted the honorary r of Surgeon-Major: J. M'Alister, 1st Ayrshire; S. H. Munro, M.D., 5th Chesl W. Milligan, 2nd Derbyshire; J. Mackie, Jun., M.D., W. F. Murray, J Anderson, M.D., and G. P. Alexander, 2nd Forfar (Angus); A. K. Irv M.D., 1st Lanarkshire; J. Dunlop, M.B., 3rd Lanarkshire; R. Smart, M.D., Lanarkshire (Glasgow 1st Northern); D. Maclean, M.D., 6th Lanarkshire; E Roe, 4th Lancahshire; J. E. Foster, 2nd Volunteer Battalion of the Duk Wellington's West Riding Regiment (late the 6th West Riding of Yorkshire Vo teers).

Acting Surgeon F. R. Chapman, M.B., of the 2nd East Riding of Yorks Artillery Volunteers, has resigned his appointment, which dates from Jan 31st, 1885.

The following gentlemen are appointed Acting Surgeons to the Rifle Volun Corps specified: J. W. Davies, 3rd Volunteer Battalion of the South Wales derers (formerly the 2nd Monmouth); J. E. Brooks, 1st Shropshire; H. Shaw, 6th (West) Suffolk; G. R. Green, 1st West Riding of Yorkshire.

Medical Aid at Home.—The Ashton-in-Makerfield Charity Or nisation Society appears to have adopted a very useful scheme establishing a committee, of which the special feature is the provis of medical apparatus and other needful appliances, and relief to sick poor in their homes, after due inquiry. Surgical apparatus lent, nutritious articles of food provided, and in case of that being most necessary and suitable method, means of admission to infirma or convalescent hospitals. Societies such as this, conducted with precaution of due investigation in the homes of the poor, serve ma fold and most valuable ends. Nothing is more likely to relieve distress and to prevent demoralising pauperisation than organisati of this kind efficiently worked.

MEDICO-LEGAL AND MEDICO-ETHICAL.

QUESTIONS OF OBSTETRIC MORALITY.

C. writes:—What ought I, or any other man, have done under the following circumstances? A. B., the widow of a sergeant who died of cholera, under my care, a year or so previously, married, and became pregnant soon afterwards —*more viduarum militum Anglicanorum nuper defunctorum in Indis Orientalibus.* I was asked one night, or rather one morning early, by the surgeon of my then regiment, or one of his subordinates, to sit by her, in the absence of her husband and children, until she died. I was given, at the same time, to understand that the cause of her approaching death was hæmorrhage—from placenta prævia?—and I was further told that the child had not been delivered, alive or otherwise. Seeing no special signs of any hæmorrhage, while there was no competent nurse or other qualified person at hand for consultation or advice, I introduced my left hand, in the usual way, into the uterus, and found that the babe in it was alive and moving. I baptised it, as was my wont in those days, *secundum ritum ecclesiæ Catholicæ et Romanæ cujus filius indignus fui et sum*; and finding, by this time, that the mother was *in articulo mortis*, I withdrew my hand, and left both to their fate. Such a child could be of no use to such a mother under the conditions here described.

I was engaged, a year or so afterwards, to attend the wife of an officer in the W. W. Department, in the hills, in her confinement, and, meanwhile, I called on her with that view more than once in the interval. She was a delicate and not very juvenile primipara, and I was hastily summoned to her, late one night, by her husband, a man of 35 or 38 summers, who had a family by a previous marriage. She was so weak or exhausted when I saw her, that I suggested a consultation in the case, and a medical officer, who lived hard by, was summoned to my and her aid. He made light of the matter, hinted hysteria, and went his way. She died within two hours afterwards, and there was no *post mortem* examination. The cause of death was probably *deliquium animæ*, *alias* cardiac syncope, and there was no hæmorrhage at any time.

Just before she expired, and thinking it a pity that the child—whose movements *in utero* I could distinctly feel from without—should perish unaided, I introduced my hand into the womb, grasped a leg, and then told the husband through a lady in attendance) that I could, I thought, deliver the child, if he so desired. The answer I received was to this effect, "What could I do with it?" or the like; and interpreting this as a direction to leave things alone, I did so.

Now comes the question, Would these children have lived had I succeeded, as I think I might, in delivering them alive? and, secondly, What is the moral duty or professional obligation of the medical attendant under the contingencies here contemplated? Thirdly, has any enterprising German yet taken up the subject of "The Convulsive Disorders of the Fœtus *in utero?*" If so, what (*a*) is his *modus operandi?* (*b*) how does he distinguish a kick from a convulsion, or a tremor from a spasm *in utero?*

*** The grave point involved in the question submitted by our correspondent relative to "the moral duty or professional obligation devolving upon a medical practitioner under the contingencies" referred to, will, in our opinion, best be answered by interrogatories of like import, and bearing immediately on the subject. 1. With what object, it may be asked, is the Cæsarean operation usually performed, when the maternal parent is believed to be *in articulo mortis?* To save life or not? 2. Is it an absolute moral obligation on the part of a medical practitioner that he should in all cases endeavour to save life? Further: if it be deemed a moral obligation to "baptise the babe" *in utero*, "*secundum ritum ecclesiæ Catholicæ et Romanæ*," etc., was it not, also, the especial duty of the obstetrician in attendance to make every effort to save the life of the then living, but unborn, infant, and not to have stayed his hand in the delivery? Notwithstanding the parental response, "What could I do with it?" How far such an omission and silent acquiescence in the implied parental wish "to leave it to its fate, and let it perish unaided," constitute a grave default of professional duty, is, from our point of view, a matter for solemn thought.

PRACTITIONERS, CONSULTANTS, AND PATIENTS.

In reply to a further statement by our correspondent, A., that, "from the nature of the case in point, it was impossible to conceal from C. that an exceeding grave error had been committed by B." (in which error, it may be noted, A. himself admittedly shared), and that "C.'s going to town for further advice was the course in which B. coincided," we deem it right to observe that B.'s acquiescence in the course pursued, was neither sought nor obtained until his return home from the holiday-trip, too late to obviate A.'s injudicious proceeding. Our adverse view, therefore, of A.'s line of action in the case, as expressed in the JOURNAL of March 27th, is somewhat intensified, rather than modified, by the statement in his last communication.

ATTENDANCE ON WIDOWS OF PROFESSIONAL MEN.

TITIA.—If our correspondent will refer to the *Code of Medical Ethics*, second edition, page 53, Section 2, Rule 1, he will find that, medico-ethically, he is fully justified in insisting on his claim for professional services rendered to the well-to-do widow of a deceased brother-practitioner; and inasmuch as "the executor, through his lawyer, objects to pay A. on the ground of 'medical' etiquette," we would advise him to put the *Code* into his pocket, and personally, or otherwise, refer the solicitor to the professional rule by which the Faculty are guided in such and like cases.

SUING FOR MEDICINES.

CORRESPONDENT asks:—1. Has a gentleman who is qualified as a surgeon any legal right to recover for medicines? 2. Has a county court judge any legal right to allow a medical man to sue for medicines in opposition to the Act of Parliament; or, in other words, if a person is sued for medical attendance and medicines by a surgeon, can the county court judge allow the summons to be amended contrary to the Act?

*** 1. It was decided by the Court of Queen's Bench, in the year 1873, that a member of the Royal College of Surgeons, duly registered as such, but having no other medical qualification, cannot recover his charges for medicines administered in the cure of an internal disease not requiring surgical treatment, nor for advice and attendances connected therewith. That decision has not been in any way reversed or overruled, and is still law.

2. A county court judge has no power to allow a medical practitioner to recover charges for services which he was not qualified to render.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, April 6th, 1886.

Lunacy Acts Amendment Bill.—On the report of amendments on this Bill, the LORD CHANCELLOR, on the third clause, moved an amendment, the object of which was, as he said, to secure the real consideration by the justices of the question whether it were necessary for him to see the lunatic or not. He wished to put clearly and distinctly before the justice the duty of considering whether it was necessary to see the lunatic or not.—Lord HALSBURY thought this amendment was in the wrong direction. It had been decided that the system of private lunatic asylums should continue. He believed it was originally required that the initial step to place a man in an asylum should be very carefully watched, and he was certain that the feeling out of doors would be shocked at the notion that the person intrusted with the judicial investigation should be advised that it was not necessary he should see the lunatic. The amendment practically told the justice that he need not see the lunatic, unless there was something suspicious in the case. He could not help thinking this was mischievous, because those who had the care of a lunatic would see that there was nothing to excite the suspicion of the magistrate.—The Earl of SELBORNE said, in his view, it was not necessary in every case to require the judge or magistrate to see an alleged patient personally before granting a certificate, but he ought to have the power to do so if not satisfied. In Scotland, the Scotch laws allowed the sheriff, who was the officer charged with this duty, to exercise his discretion in the matter; and this had worked quite satisfactorily. He was prepared to acquiesce in the amendment, believing it was intended to call upon the judge or magistrate to exercise his discretion in every instance expressly on the question whether he ought to see the patient or not.—The LORD CHANCELLOR thought the noble and learned lord had rather misapprehended the object and effect of the amendment. He had inserted it in order to make the Bill stronger in the direction desired by the noble and learned lord, by calling on the judge, magistrate, or justice, to consider whether it was necessary for him personally to see the alleged lunatic.—The amendment was then inserted, and several consequential and verbal amendments were agreed to.—Lord HOBHOUSE said the amendments which had been already carried, with regard to what was now Clause 42 of the Bill, had rested upon three principles. One was, that the abrupt cessation of private asylums was calculated to injure the inmates of them. The next was, that there was a large class of the community who desired to have private asylums for their friends, and who did not see any public advantage in the abrupt cessation of those establishments. Thirdly, that there was a class of men who had embarked their fortunes and their lives in undertakings of this kind, and that they might be ruined, unless care were taken before their establishments were put an end to. The amendments which he had placed on the paper were entirely in accordance with those principles. In fact, they were intended to apply those principles to the specific cases to which they ought to apply, but to which they would not apply if the Bill stood as it was at present drawn. First of all, he took the case of a change of house after the passing of the Bill. He believed that the principle of granting a licence in respect of a particular house was a new principle, and that a grant had hitherto always been a personal affair. If a change of house were for the advantage of the patients, the case would be met by an amendment which his noble and learned friend on the woolsack had placed on the paper; but he did not see why they should not also consider the case of a change which was made for the benefit of the proprietor of the asylum. He understood that several of these properties were held upon lease, and, if the lease expired after the passing of the Bill, the freeholder would be able to put a terrible screw on the lessee, who could not continue to conduct his asylum in any other premises. He proposed to omit from the first line of subsection 2, clause 42, the words "at the passing of this Act."—The LORD CHANCELLOR said his desire was to see a gradual change from private asylums to public asylums. In the first instance, he had limited the power of renewal to the existing licences in respect of any house. Then it was pointed out to him that there were many cases in which large sums of money had been invested

in these houses, which were unsuited for other purposes, and that loss would accrue to individuals, if the licence terminated with the life of the existing licensee. Accordingly, desiring to limit the matter in some way, he came to the conclusion to meet those cases by providing that no licence should be granted in respect of a new house. His noble friend's amendment would render the process of conversion less rapid, and he did not think the proposal was necessary in order to meet the cases of vested interests.—The amendment was negatived.—On Clause 42, Lord HOBHOUSE moved an amendment providing that where a private asylum had been carried on by joint licences, the Lunacy Commissioners should have power to license them individually, so long as the aggregate number of patients allowed was not in excess of those in the joint licence.—Earl STANHOPE opposed the amendment.—The LORD CHANCELLOR was indisposed to agree to the amendment, as he wished to see the number of private asylums gradually diminish.—The amendment was negatived.—On Clause 67, the Earl of MILLTOWN moved to amend it by providing that any keeper who should have carnal knowledge of any female patient under his charge should be guilty of felony, and be liable to penal servitude for life as a maximum punishment.—The LORD CHANCELLOR thought that the offence in question was punished with sufficient severity already. Some injustice might be done by the proposal, as patients differed very much, many being practically sane, except that they had delusions on particular subjects.—The amendment was negatived. The report of amendments was agreed to.

The Idiots Bill.—This Bill passed through Committee without amendments.

HOUSE OF COMMONS.—Friday, April 2nd, 1886.

Contagious Diseases Acts Repeal (No. 2) Bill.—The House went into Committee on this Bill.—Mr. W. H. SMITH asked whether the contribution which had been made under the authority of the Acts, to certain hospitals, would be granted this year.—Mr. CAMPBELL-BANNERMAN said it was the intention of the Government to continue this year the contributions to which the right hon. gentleman had referred.—The Bill then passed through Committee and, having been reported without amendment to the House, was read a third time.

Tuesday, April 6th.

Ventilation of the House.—Mr. DUNCOMBE asked the hon. member for North-West Staffordshire, whether he would empower some competent sanitary engineer to investigate the causes of, and, if possible, provide some effectual remedy for, the disagreeable odours that constantly prevailed in the House and lobbies.—Mr. LEVESON-GOWER said a Committee was now engaged in investigating all the matters connected with the ventilation of the House, and it was expedient to await their report before taking any steps. He understood that the report, made last year by an official of the Board of Trade, was now before the Committee, and it would guide them in their deliberations. The Committee had only just commenced their sittings, and he could not say when the report might be expected.

OBITUARY.

SAMUEL GASKELL, F.R.C.S.ENG.

MR. SAMUEL GASKELL, for many years one of the Medical Commissioners in Lunacy, died lately at his residence, Walton, Surrey, at the age of 79. After receiving his medical education at Manchester and Edinburgh, Mr. Gaskell directed his early attention to the treatment of the insane, and was appointed, in 1840, to be medical superintendent of the large asylum for the county of Lancaster. At that period, the treatment of the insane in England was only just beginning to emerge from a long established system of ignorance and cruelty, and various barbarous modes of restraint were in general use. At the time when Conolly was carrying out the non-restraint system at Hanwell, Gaskell doing the same at Lancaster, and with equally beneficial results. His efforts soon became known to the late Earl of Shaftesbury, who, on the first vacancy at the Lunacy Board in 1849, secured Mr. Gaskell's appointment. This was the first instance in which a gentleman practically acquainted with the treatment of large numbers of the insane, and the management of asylums, had been appointed a Commissioner in Lunacy. He resigned his appointment in 1866.

A correspondent writes: Mr. Gaskell was a remarkably well informed and painstaking official. He was not popular at the institutions which it was his duty to visit, on account of the thoroughness of his inspections. Proprietors and superintendents who did not look too minutely into details for themselves were greatly surpr and not greatly pleased, to find the dignified Commissioner loo into beds and cupboards, and all manner of uninvestigated places conscientious workman never despises details. Both at the Lanc Asylum and at Whitehall Place, Mr. Gaskell helped forward the g and general movement in the treatment of the insane, which ceeded the new lunacy law of 1845. At the Lancaster Asylum, w Mr. Cleaton, the present Commissioner of Lunacy, was his assis Mr. Gaskell adopted the then novel system of non-restraint, an did more in his attempts to develop in his patients those facu or parts of faculties, of the mind which were not involved in th structive processes of disease. His late chief, the Earl of Shaftesb has left on record the surprise and admiration which which he served, under Mr. Gaskell's care, a number of female lunatics, ea whom had a young child under her care, with such beneficial re that Lord Shaftesbury declared to his audience that he then and t resolved that Mr. Gaskell should be the next medical colleague w he would receive at the Board of the Commissioners.

After his appointment as Commissioner, Mr. Gaskell carried by his strenuous advice and support, a practical reform in the ma ment of the insane, of which we believe he was the originator. T who are old enough to remember the management of the luna even in the best asylums, forty years ago, will not need to b minded of the abominable nuisances of wet and dirty beds, the li the stench, and the foulness which were to be met with in the e morning of every day of many of the wards. In a county asy wet and dirty beds were counted by hundreds. Mr. Gaskell ceived the idea and carried out the plan of preventing this abom tion by improved nursing. He caused each patient, who was l to be wet or dirty, to be aroused, and placed in a condition to a to needs of urination and defæcation at stated intervals, with result that wet and dirty beds were reduced to units where they been counted by scores, or even by hundreds. This, in itself, v vast step in asylum management, but it does not quite stan itself, seeing that it has led, too gradually perhaps, to a revol in the system of night-nursing in asylums, which is now quite different footing to the prefunctory pretence of night-watching nursing, with which we were more or less satisfied twenty years with the general result of decrease of suicides, decrease of noise violence at night, and a very general increase of the comfort and being of the inmates of all well-managed public asylums and hosp for the insane.

It should never be forgotten that what is called the non-rest system is not alone the abolition of mechanical restraint, but it connotes a revolution in the treatment of the insane in a number of particulars, the neglect of which would render restraint, standing by itself, of comparatively little value. On the more important of these adjuncts to non-restraint was the proved night-nursing, instituted by the late Mr. Gaskell.

In his unofficial life, Mr. Gaskell was a genial and lovable n with a strong vein of fun and humour in him; and his nume friends deeply regretted the sad accident which closed his official greatly narrowed his social career.

INDIA AND THE COLONIES.

INDIA.

THE ZENANA MEDICAL MISSION AT LUCKNOW.—Now Lady Dufferin's scheme for affording female medical aid to women of India is attracting much attention, the report the Lucknow Zenana Medical Mission of last year is of special inte The new hospital for females and children was only ope for eight months before the end of the year, and, du that time, ninety-one in-patients were treated. A large numbe these were children, who were brought by their mothers for treatm and the latter were much pleased at being allowed to remain them. The patients comprised forty-four Hindus and thirty-t Muhammadans, the remainder being native Christians and E sians. The Hindus were of all castes, and the necessary rangements were made to avoid any interference with their judices. Amongst the Muhammadan patients were several resp able Begums; and, as the system of "purdah" is invariably str observed, they one and all expressed themselves as highly sati with their treatment. In addition to the hospital, there are two pensaries under the charge of the mission, where no fewer than 6 cases were treated by the lady medical officers.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLAMORGAN COUNTY LUNATIC ASYLUM.

the accommodation provided by Glamorganshire for its pauper e is most inadequate in extent, is shown by the fact that, out of 04 patients whose names were on the asylum books at Bridgend ecember 1884, no fewer than 159—namely, 44 males, and 115 es—were boarded at other asylums, at an expense to the county 4,461 for the year. It is, therefore, satisfactory to learn that ional accommodation is in course of preparation at Parc Gwyllt. ngst improvements in this asylum may be noted the ventilation e dormitories by the introduction of large numbers of Tobin's , the erection of new workshops, and additional provision for e in case of fire. It is also intended to erect six external stair- at certain points, where the inmates might be cut off by a fire the only outlet available.

1884, 178 cases were admitted, including 42 cases of acute mania, 4 of acute melancholia. The prognosis in most of the admissions extremely bad, owing to the delay in sending the patients for ment. Only about 5 per cent. of the inmates of the asylum garded as "probably recoverable." There were 64 deaths dur- ne year, being at the rate of 9.8 per cent. on the average number nt. In 49 cases, *post mortem* examinations were made. Twelve s were attributed to general paralysis, 10 to phthisis pulmonalis, 7 to "atrophy of brain." A male patient, who had a severe k of typhoid fever, and who made a good recovery from the e, improved mentally; not a few similar instances are on l; and a case occurred recently at Bethlem Hospital.

the epileptics and actively suicidal patients are under the super- n of special night-attendants, whose vigilance is tested by the l of an electric apparatus. Beer is not included in the dietary her patients or attendants; working patients are allowed milk. use of milk as an ordinary and economical article of diet in ms might probably be extended much further with advantage. ot in winter, about 280 patients walk daily beyond the airing- s.

ong the statistical tables, the absence of Table IIA is much to be ted. Tables VI, VIII, and IX should be completed by the ad- n of information respecting patients remaining in the asylum.

ROYAL INFIRMARY, GLASGOW.

the annual report prepared by the directors of the Glasgow Infirmary, it appears that during the past year there were 368 patients admitted than in the previous year, the respective ers being 4,945 in 1885, and 5,313 in 1884. There were 487 s among the patients in 1885, as compared with 496 in 1884, the tive mortalities being 9.8 per cent. in 1885, and 9.3 per cent. in The average daily number of indoor patients was 503, the same the previous year; but the average period of residence was 26.30 as compared with 34.1 days in 1884. A feature worth noticing a diminution to a considerable extent of accident cases treated on-resident, there being 1,247 in 1885, and 1,490 in 1884. In Dispensary Department, 37,170 cases were treated as outdoor its, being an increase of more than 800 on the previous year. cially, the institution is susceptible of improvement, as the ary expenditure exceeded the ordinary and extraordinary incomes ,726, which had to be met from capital.

DUNDRUM CRIMINAL LUNATIC ASYLUM.

pears, from the last report of this asylum, that in 1885 there were atients confined, being six above the normal number; the accom- ion for males being overcrowded by eighteen beds, while there twelve vacancies in the female divisions. The inspectors of ic asylums state that thirty additional beds for the male re necessary, as also an increase of the day-room and dining-hall modation, and the construction of suitable workshops. The l mortality at Dundrum, from the opening of the asylum in has been remarkably low. The percentage in the year under leration was below that in the community at large, and scarcely d of the amount in ordinary hospitals for the insane. Of six es who escaped, three were permanent; and the reasons assigned is unusual number are two, namely, the paucity of male attend- and the unsafe condition of the boundary-walls of the asylum. gards the first, it may be remarked that, at the Broadmoor n for criminals, the proportion of warders to patients is about six; at the insane-prison at Perth, one to five and a quarter; Dundrum, only one to twelve.

EAST RIDING LUNATIC ASYLUM, BEVERLEY.

THE most important event at this asylum, during 1884, was the outbreak of enteric fever, which attacked nearly one-sixth of the population of the institution; namely, thirty-nine patients, and nine attendants and nurses, ending fatally in the cases of six patients and one attendant. The field used by the asylum for sewage-irrigation was in dangerous proximity to the well and reservoir of the Beverley Waterworks Company, from which the asylum is supplied; while "the pipes conducting the water to the building were laid below the land, along the surface of which were the channels for the passage of the sewage." It is surprising that such an arrangement was ever tolerated in an asylum recently constructed. The committee have done well to decide "to remove the sewage-irrigation area to a part of the asylum estate far from, and on a different watershed from, the well of the Waterworks company." The fact that the medical superintendent has had to report unfavourably, not only of the drainage and sanitary arrangements, but also of the working of the steam, hot-water, and heating apparatus, would seem to indicate grave defects in the original construction of the asylum.

The epileptics on each side, about thirty in all, "sleep in a dormitory in which also are collected the suicidal patients. In these dormitories in either division, an intelligent patient sits up during the night, and the night attendants make the room their headquarters when not on their rounds" (extract from Commissioners' Report). Surely this arrangement cannot be regarded as either desirable or safe?

The percentage of recoveries on admissions (excluding transfers), during 1884, was 40.5. It would be interesting to know whether any of the patients who suffered from typhoid fever were benefited mentally. The percentage of deaths on average numbers resident was 10.2. The total death-rate for the whole period the asylum has been opened, which is miscalculated as 9.97 per cent., was really 11 per cent., which is above the average. More care should be taken in calculating the average numbers resident; if the males and females were 146 and 128 respectively, it is clear that the total was not 275. In both Tables II and III, the "average numbers resident during the 13 years" are given as 128+119=249!

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE WATER-SUPPLY OF CAIRO.

SIR,—For the information of the profession at home, and especially those who take an interest in the progress of sanitation abroad, it may be interesting to record a few facts, showing the share taken by the military and army medical authorities, in bringing about such a necessary improvement as a purer water-supply to a city of the size of Cairo. It is the case, as stated in your note in the JOURNAL of February 20th, that a company was established some years since, having a monopoly of supplying the city with water for a period of eighty years. The intake, or "Prise d'Eau," is situated close to the mouth of the Ismaileyeh Canal, and below the large and populous barracks of Kasr-el-Nil. As long as this channel was clear, a good and plentiful supply could be obtained, but the operation of the "Barrage du Nil," which is a large engineering structure, whose arches can be dammed, extending across both arms of the Nile, just below their divergence, has been to raise the level of the river, during the period of the year when it is lowest, about two mètres, and thus, by a deposit of mud, to silt up and render useless the water-company's intake. The works are situated on the banks of the Ismaileyeh Canal, about a mile from the Nile, and the mouth of this canal is also blocked with mud, rendering the water stagnant; there is a supplementary intake from the canal, and the latter had to be utilised. There were soon, therefore, many complaints regarding the quality of the water-supply, and Dr. Grant Bey, by carefully collected statistics, proved that fevers, dysentery, etc., were most prevalent wherever the company's pipes were distributed. A slight increase of febrile disease was, about the same time, noticed among the troops quartered at Abbasseyeh; the latter gave rise to an extended investigation, including frequent chemical examinations of the water. Very strong representations were made by Lieutenant-General Sir F. Stephenson, commanding in Egypt, and those latter resulted most satisfactorily; for the Council of Ministers have already voted the sum of £6,000, as a first instalment, to meet the expense of making a new intake, the plans for which have been in existence for more than a year.

This intake will be in the form of a pipe, of sufficient calibre, dipping into the river above the bridge over the Nile and the barracks, so that it will not be liable to become temporarily inefficient, either from the deposit of mud, or the rise and fall of the river, both of which conditions must be taken into account in all such schemes. This matter was brought prominently forward more than a year ago, and it was promised that something should be done; but, like many other important matters with which the Egyptian authorities have to deal, the usual policy of "laisser aller" was followed; but there was perhaps another reason, since the President of the Council of Ministers is also a principal shareholder in the company, which, by the way, pays exceptionally large dividends. While it is impossible to deny that the discussion of the subject by the journals, notably the *Bosphore Egyptien* and *Egyptian Gazette*, has contributed to the accomplishment of so desirable a sanitary improvement as the introduction of a pure water-supply for a city of over 300,000; still, I think the credit is mainly

due to the pressure brought to bear on the Egyptian authorities by the salutary threats of the general commanding the army of occupation. Probably nothing, save the fear thus induced, would have made the Egyptian Government move in the matter; the latter cannot see that every death of a British soldier prevented means pecuniary gain to the state, thus lessening the cost of the army of occupation.

One of the conditions of the agreement under which the water-company hold their monopoly, is the odd one that the government are bound to bring pure water to the pumps of the former; hence, the country is charged with the expense of the new intake, all tending to the pecuniary advantage of the shareholders. It is thus that things were wont to be done in Egypt; it is hoped the future will see an improvement.—Yours truly, VERITAS.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ST. JAMES'S, WESTMINSTER.—Dr. Edmunds may be congratulated on the very satisfactory report presented to the vestry of this parish. The net mortality for the year 1884 was 476 deaths, or a rate of 15.94 per 1,000, the lowest for the last ten years. The zymotic mortality was thirty-eight, including ten deaths from measles and sixteen from whooping-cough. Of fever, small-pox, and diphtheria 104 cases came under notice during the year, but these figures, of course, represent only a proportion of the total cases occurring.

SCARBOROUGH RURAL DISTRICT.—The year 1884 was remarkable in this district for the low death-rate of 12.4 per 1,000, inclusive of a rate of 1.28 per 1,000 of mortality from zymotics. Five non-fatal cases of small-pox at Scalby, a slight outbreak of measles, and eight or nine mild cases of scarlet fever at Hutton Bushell, two fatal cases of typhoid fever at Thirlso and at East Ayton comprise all the infectious cases with which Dr. Cuff has to deal in his report for the year. Some works of sewer-ventilation were carried out at Scalby, new drains were laid at Hutton Bushell and other villages, and new wells were sunk, or existing ones were cleaned out, in various parts of the district.

MEDICAL NEWS.

ROYAL COLLEGES OF SURGEONS AND PHYSICIANS.—The following gentlemen passed their second examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 5th instant, and when eligible, will be admitted to the pass-examination.

J. E. Briscoe, student of Yorkshire College, Leeds; S. W. Morgan, Hedley Hill, H. F. Mole, and J. T. Grey, of Bristol Medical School; Thomas Watts, Oliver Eaton, Patrick Rowan, J. H. Barker, B. Wiseman, J. Halliwell, Aubrey Conway, J. Ambrose Cooke, and E. H. Robinson, of Owens College, Manchester; S. Farrage Gibbs, H. N. Crossley, H. E. Knight, C. H. Roberts, and F. E. A. Colby, of St. Bartholomew's Hospital; R. A. Bremner, and J. E. F. Hosking, of Guy's Hospital; H. E. Skyrme and Samuel Davey, of the London Hospital; A. S. Milner and B. F. F Jackson, of Charing Cross Hospital; G. E. Weary and J. Tertius Clarke, of St. Thomas's Hospital; R. T. Gravely, of St. Mary's Hospital.

The following gentlemen passed in Anatomy only.

A. C. Gaskin, H. C. Titterton, C. Ridley Pigg, and T. F. Clemson, of Owens College, Manchester.

The following gentlemen passed in Physiology only.

H. K. Ramsden, of Owens College, Manchester; Masha A. Khan and E. J. Reynolds, of London Hospital; G. H. Humphreys, of St. Bartholomew's Hospital; H. Vermaak and G. Saint Johnston, of Birmingham; J. Robinson, of Yorkshire College, Leeds; W. Hague, of Owens College, Manchester; W. Jenner Best, of London Hospital.

Seven candidates were referred for six months and nine for three months.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on April 3rd, and when eligible will be admitted to the pass-examination.

J. L. Owen, H. Roberts, G. H. Wilson, F. W. Vernon, G. A. O'Brien Reid, and W. P. Johnstone, students of Edinburgh University; R. C. Wakefield, of Glasgow; J. J. Hanley, of Dublin; W. W. Margemont, of Ceylon Medical College; H. H. Holt, of Yorkshire College, Leeds; H. B. Williams and F. Caut, of Owens College, Manchester; G. A. Waring, of Belfast; G. H. Douthwaite, of Birmingham.

Passed in Anatomy only.

Algernon J. Horton, of Birmingham; A. H. Barstow; W. A. Thompson and J. S. Vassalli, of Yorkshire College, Leeds.

Passed in Physiology only.

R. B. Morris, E. A. Humphreys, Thomas Boulton, and R. H. Read, of Owens College, Manchester; J. T. Harty, of Cork; G. J. Wontersy, of Ceylon and Edinburgh University; S. F. Barber, of Sheffield Medical School; W. H. Webster, of Edinburgh; R. T. Wightman, of Sheffield Medical School.

Six candidates were referred for six months and fifteen for three months.

The following gentlemen passed on the 6th instant.

W. Twyford, J. E. Platt, H. Ramsden, S. F. Mawson, A. H. Marsh, W. Nuttall, A. E. Brindley, H. Langdale, T. A. Goodfellow, and H. C. Faulke, of Owens College, Manchester; W. S. Lang, of Edinburgh University; G. D. Freer, of Birmingham; R. G. Sheldon, of Liverpool; A. D. Tripp, of Guy's Hospital; Frederick Barber, of St. Thomas's Hospital; H. C. Fox and J. Smith, of Middlesex Hospital; J. L. Firth, of King's and University leges; O. M. Jones, of London Hospital.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlem passed their Examination in the Science and Practice of Medic Surgery, and Midwifery, and received certificates to practise, on Th day, April 1st, 1886.

Hodge, William Theodore, M.R.C.S., Middleton, Tamworth.
Hubbard, Daniell Lovett, 4, The Grove, Clapham Road, S.W.
Nevins, John Ernest, 3, Abercrombie Square, Liverpool.
Rake, Herbert Vaughan, Fordingbridge, Salisbury.
Wheatley, James, Edgeston, Huddersfield.

MEDICAL VACANCIES.

The following vacancies are announced.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications April 10th.

CAISTOR UNION.—Medical Officer and Public Vaccinator. Salary, £30 annum. Applications by April 10th.

CITY OF ABERDEEN.—Medical Officer of Health. Salary £300. Applicat by April 14th, to W. Gordon, Town House, Aberdeen.

FAREHAM UNION.—Medical Officer. Salary, £35 per annum. Applica to J. M. Stedham.

GATESHEAD DISPENSARY.—Assistant-Surgeon. Salary, £120. Applica by April 12th to J. Jordan, Newcastle-on-Tyne.

GENERAL HOSPITAL, Birmingham.—Assistant Surgeon. Honorarium, Applications by April 30th, to H. Fox.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—H Physician. Applications by April 21st, to W. T. Grant.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Ophth Surgeon. Applications by April 21st, to W. T. Gant.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Br ton. Resident Clinical Assistant. Applications by April 17th, to E Dobbin.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—J Resident Medical Officer. Salary, £50 per annum. Applications by 28th, to A. Hope.

LIVERPOOL DISPENSARIES. — Three Head Surgeons. Salary, £200 annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liver

LIVERPOOL DISPENSARIES. — Six Assistant-Surgeons. Salary, £80 annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liver

LONDON TEMPERANCE HOSPITAL, Hampstead Road. Registrar and Ch formist. Salary, £50 per annum. Applications by April 12th, 1886.

MIDDLESEX HOSPITAL, W.—Assistant Dental Surgeon. Application April 27th, to A. O'Donnel Bartholeyns.

NORTH CAMBRIDGESHIRE HOSPITAL, Wisbech.—House-Surgeon. Sa £130. Applications by April 18th to W. E. Schofield.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead, N.W.— dent Medical Officer. Salary, £40 per annum. Applications by April 17 L. Hill, 216, Tottenham Court Road, W.

PORTSEA ISLAND UNION, Landport District.—Medical Officer. Salary per annum. Applications by April 14th, to S. R. Ellis, St. Michael's Portsmouth.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—Physi Applications to J. J. Austin.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Physician. plications by April 22nd.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon. A cations by April 22nd.

WILLITON UNION, Somerset.—Medical Officer and Public Vaccinator. Sa £80 and extras. Applications by April 12th to W. H. White.

MEDICAL APPOINTMENTS.

COMBES, Reginald H., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Me Officer to the North-West London Hospital.

THOMPSON, Henry, M.R.C.S., L.R.C.P., L.M., late Assistant-Surgeon, appoi Surgeon to the Hull Royal Infirmary.

WATTS, Alfred Thomas Guy, M.R.C.S., L.S.A., appointed House-Surgeon to Belgrave Hospital for Children, Gloucester Street, Warwick Square.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. which should be forwarded in stamps with the announcements.

BIRTHS.

BATCHELOR.—On March 2nd, the wife of H. T. Batchelor, Esq., Queenstown, Colony, of a daughter.

COTTELL.—At Old Brompton, Kent, on the 30th March, the wife of Surgeo Cottell, Medical Staff, of a daughter.

EVANS.—On the 24th ultimo, at 21, Charles Street, Cardiff, the wife of Frederick William Evans, of a son.

DEATHS.

MELLIS.—On March 26th, John Mellis, M.R.C.S.Eng., J.P., of Fraserburg pulmonary thrombus, in his seventy-seventh year.

RIDLEY.—On March 30th, suddenly, at 10, Lime Street, Preston, aged 52, Jo Simpson Ridley, M.D., M.R.C.S.England, L.M., L.S.A., Medical Offic Fulwood Workhouse, Preston, for upwards of twenty years. Deeply regr and highly esteemed by all who knew him.

OYAL COLLEGE OF SURGEONS OF ENGLAND.

he quarterly meeting of the Council on Thursday, April 8th, it announced that the Jacksonian Prize for last year was awarded to Bruce Clarke, for his essay on the Diagnosis and Treatment of such tions of the Kidney as are amenable to direct surgical interference.

ie subject of the Jacksonian Lecture for 1887 was announced as ws: "On the Pathology, Diagnosis, and Treatment of Tumours ie Bladder."

ie subject of the next Collegial Triennial Prize was announced as ws: "On the Structure and Functions of the Ganglionic System erves in Man, to be illustrated by reference to Comparative Ana- ."

r. John Marshall moved, and Sir James Paget seconded, the fol- ng resolution:

iat the Council have considered the resolution, carried at the ing of Fellows and Members, held on the 17th December last, in to a communication from the Council, bearing date the 16th of previous month, which resolution is as follows:

That the answer of the Council is not satisfactory, and that the ncil be respectfully requested to reconsider the subjects:

1. Of the representation of Members of the College; and

2. Of submitting, for approval, any alterations proposed to be made ie constitution or the relations of the College, or in any of its ws, to a meeting of the Fellows and Members."

iat the Council, in reply to this resolution, have to make the wing statement:

As regards the subject of the "representation of the Members ie College."

hilst fully recognising the gravity of the question of the repre- ntation of Members of the College (presumably in or upon the ncil), the desire of Members to be so represented, and the advan- of uniting in harmonious relationship all the constituent elements ie College, the Council still retain the opinion already expressed hem, "that it is not desirable to diminish the privileges of the owship, by depriving Fellows of the exclusive rights of electing to Council, and of being eligible to become Members thereof."

ntertaining this view, the Council are unwilling, and, indeed ple, consistently, to take proceedings for making any organic ge in the constitution of the College which would impair the ent status of the Fellows, by whom alone they have been elected fice as the governing body of the College.

ie two methods of widening the basis of the Fellowship, one election and the other by examination, just agreed to by the ncil, by means of which it is hoped that the acquisition of the owship and its concomitant rights, by Members of the College, will acilitated, involve no organic or constitutional change in the rnment of the College.

ie Council are quite aware, however, that these new proposals do constitute a complete response to the desire of Members to a share epresentation in or upon the Council. At the same time, they ld point out that no detailed plan, formulated by the two bodies ually interested in the question, that is, the Fellows and the Mem- , by means of which a share of representation might be assigned ie latter, has yet been presented to the Council.

he Council are quite prepared to give careful attention to any jointly authorised plan, approved by a majority of each body, would found their decisions concerning it, not merely upon a ideration of the relative interests of the Fellows and Members, also upon a due regard to the position and future welfare of the ege.

That, in reference to the other subject, namely, that of submit- questions to general meetings of Fellows and Members,

he Council have to reply that, whilst they still adhere to the ion that it is unnecessary, and would, as a rule, be impracticable, fer certain questions to the consideration of a general meeting of Fellows and Members, they wish to state that, in accordance with r declared view, "that they would be glad to consult the Fellows Members when larger questions arise, such as those which concern constitution of the College," they would take care to report the lusions at which they might arrive, in regard to any plan pre- ed to them concerning the representation of Members, to a special ting of Fellows and Members.

he Council, however, could only regard such a meeting as con- ative, and not as possessed of a direct power to veto or alter decisions.

he following amendment to the first two paragraphs was moved Ir. Lund, and seconded by Mr. Macnamara: "That the Council ereby rescind so much of the resolution, passed at the meeting of Council held on November 12th, 1885, as relates to the non-desirability of Members participating in the election of Fellows as Members of Council; and do substitute, in the first paragraph of the said resolution the following words, namely, 'That it is not desirable to diminish the privileges of the Fellowship by depriving Fellows of the exclusive right of being eligible to become Members of Council.'"

The amendment was rejected by 17 to 4, and the original motion was carried.

Mr. Henry Cayley, of Calcutta, and Mr. George Yeoman Heath, of Newcastle-on-Tyne, were elected Fellows of the College, under the provisions of the charter relating to members of twenty years' standing.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. A clinical evening. Cases will be shown by the President, Dr. Ord, Dr. Stephen Mackenzie, Dr. Purcell, Mr. John Morgan, and others.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Sedgwick: The Chemical Pathology of Respiration in Cholera. Mr. Knowsley Thornton: Two Cases of Splenectomy.

WEDNESDAY.—Royal Microscopical Society, 8 P.M. Mr. G. Massee: Structure and Evolution of the Florideæ.—The British Gynæcological Society, 8.30 P.M. Specimens will be shown by Dr. Greig Smith, Dr. George Elder, and others. Dr. Robert Barnes: Vicarious Menstruation.—Hunterian Society. Mr. Bryant: Cystic Tumours of the Breast. Epidemiological Society of London, 8 P.M. Dr. James Cameron: Observations on a Certain Malady occurring among Cows at a time when the Milk produced by them disseminated Scarlatina. Dr. Buchanan, F.R.S.: Certain Alleged Injuries by Vaccination in North Germany.

THURSDAY.—Harveian Society of London, 8.30 P.M. Clinical evening. Dr. Broadbent: Case of Bulbar Paralysis. Dr. Stephen Mackenzie: An Unusual Case of Pemphigus. Mr. A. J. Pepper: A Case of Excision of the Knee-Joint. Mr. Winslow Hall: Specimen of Congenital Malformation of the Heart. Also cases by Mr. Jonathan Hutchinson, Dr. Hughlings Jackson, Mr. Juler, and Mr. Noble Smith.—The Parkes Museum of Hygiene, 8 P.M. Lecture by the Rev. F. Lawrence on Eremacausis: Sanitary Burials.

FRIDAY.—Society of Medical Officers of Health, 7.30 P.M. Professor Bischof: Dr. Koch's Gelatine Peptone Test for Water.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A Strand, W.C.

QUERIES.

Shelter from the East Wind.

Mr. J. Firth (Worthing) writes:—Will you be so good as to give me, in common with your many readers, some account of the most equable climates in England sheltered from the east winds, other than noted health-resorts like Bournemouth, Hastings, Torquay, etc.? Are there not some villages in some favoured spots that would give these advantages? Sufferers from bronchitis, asthma, emphysema, etc., would welcome such tidings. It is a question that is often asked. Is it possible to get the matter taken up seriously by offering a suitable reward or prize? If you see your way to helping this matter on, I will subscribe £2 2s., or more.

*** A similar question about places sheltered from the east wind was asked some years ago, and could not receive a satisfactory answer. No information is available except about the well known health-resorts, where returns of sickness and mortality, and meteorological records, have been kept for a series of years. Practitioners who cannot send their patients to such places, must select those within the immediate knowledge of themselves or of their friends. Special invalid comforts, and what our correspondent asks for in "modern treatment," can ordinarily be had only at established health-resorts. It is possible that an appeal, such as our correspondent proposes should be made, might elicit some information about spots little known, but which may have just as good climates as any of the health-resorts that are at present popular. It would be very desirable to have such knowledge. How far it could be made available, must always depend on local circumstances.

ANSWERS.

English Practitioners in France.

In reply to "M.D.Edin.," Dr. M. Ryan (Harcourt Street, Dublin) writes as follows:—I went to France, holding five British qualifications in medicine, surgery, and midwifery. I wished to practise, but found I could not do so upon the strength of my qualifications without incurring the probable penalty of 1,000 francs (£40) for each offence, with a power to add imprisonment. In the first instance, I sought information from the English Ambassador, Lord Lyons, who kindly gave me some advice. I then bought the Act of Parliament relating to medical practice in France by Englishmen and foreigners. I therein found to be correct the information given to me by Lord Lyons and others, that I must undergo examinations upon two separate days, and that the examinations were to be held in the French language. I underwent the examinations, one before a medical examining board, and the other at an hospital, where I passed through a clinical examination. I had to write a thesis in French upon a subject given by the examining board on the first day. Candidates were sent into an adjoining room, and supplied with writing materials. I then obtained a qualification to practise within certain limits, either amongst my compatriots or the natives.

There is an exception which exempts foreigners from undergoing examination in France, wherein the Minister of Public Instruction will cause a licence to be granted if the applicant, licensed to practise medicine or surgery in his own country, can prove that, in war-time, he has rendered signal professional service to the French Army; but this, I need hardly say, is rarely sought for.

"M.D.Edin." must, in the first instance, transmit his medical papers to the Minister of Public Instruction, or, what is better, as I found from experience have copies of his diplomas written out and sworn to before the Mayor or Préfet, and forwarded to the Minister. I thought, at one time, my diplomas were lost, so great difficulty had I to get them returned—a copy is no loss.

All subsequent proceedings will be plain to "M.D.Edin." when a reply is obtained from the Minister of Public Instruction.

Dr. S. Davies (Daraw, Upper Egypt).—Duly received, and shall have attention.
Dr. Oliver, Mr. A. E. Barrett.—Shall have early attention.

NOTES, LETTERS, ETC.

Alcoholism among Medical Men.

In reply to the letter of Dr. Fourness Brice in the Journal of March 27th, the writer of the article on "Medical Mortality" sends the following: Permit me to remind him that I did not write "ship-surgeons and their assistants," but "overworked practitioners in mining and manufacturing districts, and the class from which ship-surgeons and assistants are largely recruited." I intended no "stab in the dark" at any particular class, and least of all at men like the complainant, whose long service is evidence of the confidence reposed in them by those under whom they serve; but merely that if, as Dr. Ogle shows, a large number of medical men do die of diseases, such as cirrhosis, caused by excess in alcohol, they are probably mainly among those three classes. It is no fancy, but a well known fact, that men whose irregular habits prevent them getting on in private practice do seek a livelihood as "assistants" to others, or "go to sea." The stress laid on "sober habits" in the advertisements of, or for assistants and letters in the Journal from marine surgeons complaining of the harm done to their class by the black sheep who creep in through agencies, are enough to justify my contention that, if intemperance prevail among medical men, it must be chiefly among the unsuccessful, and among those engaged in the roughest class of practice among the poor.

A Medical Club.

X. writes:—Many of the London clubs are open to medical men, but taking our profession, with its members, surely it can afford to support one; I need not adduce arguments in its favour, they must be patent to all, but I would suggest that the representative body of the British Medical Association, with the largest number of members of any of the learned professions, might see it to its advantage to open one. The work of this Association, with its new and successful insurance society, commands a central and substantial habitat. If a club were added to the two, there can be no reason why it should not be a success. The Association numbers 11,000 members; if each member would subscribe one guinea, a fund could be available to build or purchase a house. Each subscriber should be a member. A yearly subscription should be afterwards charged. The Association would then secure a home; the members a place to go to; a great consideration for country members.

Erratum.—In the report on the discussion which followed the reading of the papers on Suprapubic Lithotomy at the Royal Medical and Chirurgical Society (Journal, April 3rd, p. 644), the name of Mr. Charles Stewart was inadvertently substituted for that of Dr. Garson.

Sewage-Farms.

In reply to Dr. Alfred Carpenter's letter in the Journal of March 13th, we l received the following communications, which have been delayed by their le and pressure on space.

Dr. Edward F. S. Green (Woodside, South Norwood) writes:—If I read Carpenter's letter correctly, it seems that he is quite impatient of anyone suggests anything opposed to sewage-farming, is opposed to any discussio to its being detrimental to health, and holds up the statistics of the hea returns as a sufficient proof for his strong views.

I think, however, that this continual reference to the absence of statistics proving the inocuousness of sewage-farming, is apt to encourage a false imp sion of security; and I am led to this belief by the action of the corporatio Croydon, in respect to the extension of the present sewage-farm at South N wood. It is difficult to believe that they would act so if they were not pressed with the belief that a sewage-farm could cause no injury to health perhaps they may go so far as Dr. Carpenter himself, and consider it an ad tage, as far as health is concerned, to a neighbourhood.

Owing to the lease of the lands of the South Norwood Sewage-Farm soon ex ing, and to make provision for the increasing population, the Farm Commit recommended certain lands adjoining to be bought, and, after a favourable sideration of the matter, the corporation applied to the Local Governm Board for a provisional order to compel the sale of these lands. The neces business in connection with the purchase was then transmitted to the L Committee to carry out. They, finding that there would be very considera opposition to the provisional order, threw over the plans of the Farm C mittee, without consulting that committee, and entered into private contr for the purchase of other lands. A member of the Farm Committee stated, public meeting, that the alterations were passed towards the end of the m ing of the corporation, when many of the members had left; and that, so from his committee having had any notice of the alteration, he himself thou that the plans before the corporation meeting were those of the Farm C mittee, and it was only at a meeting of the ratepayers in this district, tha heard of the Legal Committee's action. This gentleman, I may state, is on the principal men of the Farm Committee, and has taken a very great inte in the farm.

Now, the lands of the Legal Committee's choice extend into the midst very thickly populated district; on one side, which will have a frontage quarter of a mile or more, it comes to within 150 feet of the main thorough from South Norwood, to Woodside—namely, Portland Road—and the ho are continuous the whole distance on this road. On the east side, the l runs quite close up to the gardens of the houses in Apsley Road, and, bel this, where there are spaces between the houses, right up to the Harring Road itself. Now, this land, the Farm Committee have expressly stated, is fit for sewage purposes. One paragraph of their report, as published in *Norwood News* for February 27th, runs thus: "This Committee . . . consi that the substitution of other lands, without reference or consultation with committee, is a matter of regret; and the committee further consider that lands substituted are not available for the purposes of the Norwood sewage- posal, more especially as the land is, in the opinion of this committee, too the inhabited houses in and abutting on the South Portland Road." Accord to the same paper, endeavours were made to limit the extension to within yards of the Portland Road, but the Council would not agree to consent to limitation whatever. I may state that South Norwood is represented on Council in the proportion of 8 to 48. Provided, therefore, that the L Government Board consent to the purchase of these lands, they may be all u for irrigation purposes. The subsoil of the land is heavy clay, and the sur soil is not more than 9 or 10 inches deep. That portion of land nearest So Norwood is very low, and, at the corner adjoining the Portland Road, is bel the crown of that road, and, I am told on good authority, is on a dead level w the land of the present sewage-farm where the effluent sewage escapes, a therefore lower than where the sewage enters on the farm.

Now, the system adopted at this farm is one of simple irrigation, and, acco ing to the evidence of Mr. James Mansergh, C.E., given before the Local Gove ment Inspector, "the sewage practically only passed over the surface, and purification was only effected by its percolation through the plants, by oxi tion, and by the assimilation of plants, and without the advantage of filtrat through a mass of earth as the Beddington land enjoyed."

Now, I ask you, is it not reasonable to suppose that, with such a system sewage-farming, where the means of filtration are so very slight, and with character of the ground I have mentioned, it is a dangerous experiment to tend the sewage-farm into such a densely populated district, and so very n the houses and main thoroughfare in that district? I feel sure, therefore, t any discussion in connection with sewage-farming is not out of place, even i only prevents public bodies from acting without consideration.

Statistics can be made to prove anything; and when you consider that of present sewage-farm only two acres are in the Norwood parish, and that th two acres are only used in cases of storms; that the farm has on one side cemetery, on the other the road going to the cemetery from Anerley, with very few houses at Elmer's End, and on the other sides a brickfield, and gre fields, so that really only one corner comes near South Norwood, I thi that question as regards statistics may bear modification. Many complai were made at the public meeting by persons of all classes as regards the sme arising from the farm; and, as this is the case when it is situated at or about extreme east corner of the district, what may we expect when it is extended in our midst, and under our very noses?

S. F. writes:—With reference to Dr. Carpenter's remarks in the Journal of Mar 20th, drawing attention to the proceedings of the International Medical C gress on the above subject, the propositions referred more particularly the Beddington Farm, which is of a sandy soil, totally different from the s clay soil of the South Norwood Sewage Farm.

In the discussion, Dr. Corfield pointed out the necessity of the sewage pa ing through the soil (as at Beddington) and not over the soil (as at South N wood); and in this Mr. Edwin Chadwick, C.B., entirely agreed.

Dr. Carpenter, moreover, concludes his report by saying that a number small areas should be aimed at, rather than immense depôts of sewage; must therefore be adverse to increasing the present area of the South N wood Farm.

The sore-throat described as sewage-farm throat, not being a fatal diseas would of course not influence the death-rate, but the lowness of the death-ra shows that the house-drainage is perfect, and that the sore throats do not ar from bad house-drainage; were it otherwise, the death-rate from zymotic disea would be greater.

to the diminished vitality, the hundreds of empty houses point to the in-ants leaving the neighbourhood, from a feeling of depression, and that the ity does not agree with them.

the summer months, for more than half a mile radius round the South wood Sewage-Farm, according to the direction of the wind, there is a most ning odour, so much so that people are obliged to close their windows; is ving in such a stink likely to depress the nervous system, and to diminish ity?

wage-irrigation in rural districts, and on suitable soil, may be a convenient of disposing of sewage; but in the centre of a populous district, and on a soil, sewage-irrigation is a mistake.

ndon and its suburban sewage would be best got rid of by carrying sewers n to the coast, and, by means of pipes on piers going out to deep water, ing the sewage into the sea with the outgoing tide.

ith reference, however, more particularly to the South Norwood Sewage-n, is it just and honest of the Croydon Corporation to endeavour to perpe-e and increase what the inhabitants in the neighbourhood of the farm con-as as an intolerable nuisance, merely that the Croydon ratepayers may porarily save a few pence in their sewers-rate, they having every facility opportunity for turning their drainage into the West Kent sewers?

is to be hoped that the Local Government Board, instead of sanctioning the owing of money for the purpose of increasing the area of the South Nor-l Sewage-Farm, will order the present farm to be closed, and thus compel Croydon Corporation to send their sewage into the West Kent Sewer, where ll cease to be a nuisance to anybody.

The Truth about Alcohol.

EVEREND DAWSON BURNS, D.D. (Honorary Secretary to the London Temper-Hospital), writes:—I have to thank you very warmly for the article in your NAL, on "The Truth about Alcohol." As having been concerned in the estab-ent of the London Temperance Hospital, I am specially interested in that por-of the article which relates to the medical use of alcohol. It might be pre-tious in me to controvert your *dicta* as to the value of alcohol in certain dis-; but I would draw attention to the fact that two of the diseases you particu-name—pneumonia and typhoid—have been treated in the Temperance Hos-with marked success, without any use of alcohol. It is instructive to notice the same supposed necessity now claimed for alcohol in the treatment of a l number of diseases, was claimed a few years ago for its use in the treatment sease in general. Experience has shown the fallacy of this opinion, once y held; and we are not without hope that more extended experience will that alcohol can be advantageously dispensed with in the cases where it is supposed to be of peculiar service. Two methods of treatment cannot be ted with one patient at the same time, so that it cannot be absolutely de-ined which method would have been best in any particular case; but a com-on of cases substantially similar can be made, and it is to this comparison, and scientifically conducted, that we look for such a change in the medical f alcohol as will render it exceptional, or lead to its exclusion altogether. not contended that alcohol is not productive of any good, but we are of ion that equal good may be secured by other agents, and that the moral fits arising from its absence should lead to its omission where an efficient native can be had. Again thanking you for your article, which cannot fail exceedingly useful to professional readers and others.

Dr. Collier's "Lieutenant Mary."

. COLMAN COLLINS (Nottingham) writes:—I have read Dr. Collier's *Lieutenant Mary* with a great deal of genuine pleasure; and I can sitatingly corroborate your criticism in the BRITISH MEDICAL JOURNAL of uary 13th. The book will particularly interest medical men and their families. analysis of the different types of country practitioners is very skilfully ged. The work is rather a story than a novel, but it is a story that is d with a good deal of literary skill." Its tone throughout is pure; there is ndering to depraved tastes, no mawkish sentiment, no double meaning, no ent inuendo. Its pages are studded with philosophical gems, its chapters rimming over with wit and humour, deep pathos, and the results of keen rvation. The author's ideas are vigorous and healthy; his sentiments are , and modestly expressed. He arrests his reader's attention from the and keeps his sympathies enlisted to the end.

m sure many medical men would, with considerable benefit to themselves, inspiration from its pages. In that glass of medical fashion and mould rm, Dr. Florian Sambuci, they would see a good example of the pushing, rtising, diplomatic, clever, successful, but unprofessional practitioner of cine.

. Collier has so reasoned out some of his philosophical problems as to make sk—

"Whether, after all,
A larger metaphysics might not help
Our physics."

Eczema and Vaccination.

HAUGHTON writes: The JOURNAL of March 27th contains a letter on two rent cures of eczema by vaccination. There can be no doubt that eczema sometimes disappear, as it also sometimes appears, soon after this opera-; but it is a little too soon to report the cases as "cured."

an illustration, I may mention that, about a week ago, I went to visit a nt, and was shocked to find that her husband had died meantime of pneu-a from a slight chill, not arising from any imprudence. He had formerly under my care for eczema, which had been much aggravated by the opera-of vaccination, which he had had performed for the express purpose of g this complaint. He had seen this recommended in a book by Dr. Joseph ; but in his case the result was unfortunate. Ultimately, the disease went ; but an asthmatic condition supervened, which I believe never left him; which, no doubt, must have rendered him more susceptible to chest ks of a more serious nature.

ay also mention that a patient of mine who was suffering from eczema, ing my treatment too slow, went up to consult the late Mr. Startin, and ned apparently cured. She also had an asthmatic condition, with slight h, and a singing in her ears, as a result of this "cure." As it was not factory, I again undertook her case, and affected a permanent cure.

view is that the mere disappearance of symptoms which depend on im-ies in the system, is often attended with increased danger; and that the er remedy is to aim at elimination of the said impurities. It is said of an ent French surgeon that, when his patient died, after the successive re-l of every symptom for which he had prescribed, he exclaimed, "Mon ! il est mort gueri !"

Given up by the Sea.

CONTRARY to our custom, in relation to the many agreeable and commendatory communications which we have the frequent fortune to receive, we print the subjoined kindly letter, believing that the oddity of the circumstances and the *spirituel* humour of the writer will interest many of our members, who always highly appreciate the good opinion of our transatlantic brethren. The letter is from Dr. W. G. Eggleston, of Chicago, assistant-editor of the *Journal of the American Medical Association*, who writes under date March 22nd, 1886:—By this mail, I forward to you the copy of the BRITISH MEDICAL JOURNAL of March 6th, just received to-day. While, perhaps, ordinarily you do not regard your great JOURNAL as a curiosity, the copy of March 6th is one in several respects. In the first place, it was a part of the inanimate crew of the ill fated *Oregon*. It may be that it is the first number of the JOURNAL that has visited the bottom of the ocean, and then returned—to come to "the rowdy West," and return to England. Having been in the United States almost a whole week, it is surely well qualified to bring out a book after its return home, on *My Impressions of America*; and, should it do so, I am sure that it would be a most readable and valuable book—for everything that it says is readable and valuable. Possibly, also, by the time it reaches 161A, Strand, W.C., it will be the first of its great family to have crossed the Atlantic twice. For these reasons, I return the wanderer, with my best wishes for the safety and prosperity of all its successors, and of all interested in them; and with the hope that another copy of its issue may be sent to take the place that no other journal can fill.

Maternal Impressions.

MR. ALFRED E. BARRETT (Holland Park) writes: While the correspondence on the above subject is still recent, I will, with your permission, put on record three cases occurring under my own observation.

A patient whom I had attended previously with healthy children was confined at the full time of a child with double cataract; in all other respects healthy and well developed. During the early months of pregnancy, the patient had lost a child, and grieved and cried very much about it; and when she found that her baby was blind, she at once attributed the defect to her inordinate grief.

A woman confined of her first child called my attention to one of the hands, from which one finger was wanting. It looked as if a very neat amputation had been made of either the middle or ring finger. On inquiry, she told me that the boy who brought milk every day from the time of her marriage had lost a finger, and although she was not frightened, she had constantly noticed it when he was handing the milk to her; and she attributed the child's deformity to that cause.

The third case was one where the cause (if such it were) took place in the later months of pregnancy, and I myself witnessed the occurrence. The patient, a lady belonging to the higher ranks of society, of a quick and excitable temperament, about the seventh month of gestation with her second child, was stooping near the fireplace, and, suddenly rising, struck her head with considerable force against the marble chimney-piece, receiving the blow on the vertex. She was almost stunned at the moment, but soon recovered, and went her full time. The baby had beautiful clear eyes, but was quite amaurotic. The vertex appeared flattened, and the child proved to be idiotic. This lady has now ten well developed healthy children.

Post hoc is not always *propter hoc*, but in the above cases, the prelude to the effect appears to me to be sufficiently marked to be worthy of record.

Cucaine.

DR. J. LINDSAY PORTEOUS reports two cases where cucaine has proved very useful for saving the patient from pain. He applied it to a caruncle of the female meatus urinarius, of the size of a large horse-bean, of a deep red colour, slightly lobulated and irregular on the surface. It had caused great pain during micturition. A strong solution was painted well over the surface of the growth, especially at the base. After waiting six minutes, the mass was seized with hooked forceps, pulled down, and snipped off with a pair of scissors. The patient showed no signs of discomfort, and felt nothing but the application of the brush. The slight bleeding which followed was stopped by the application of caustic, which likewise was not felt. Dr. Porteous applied the same solution to three large prominent hæmorrhoids in a man aged 50, who did not wish to take chloroform. About ten minutes were allowed to elapse before operation, which was done by transfixing each hæmorrhoid separately, and tying it in the usual manner. The patient did not once wince, and said that he hardly felt any pain, even when the threads were tied, which is undoubtedly the most painful part of the operation.

Cider and Perry.

MR. W. COX (Winchcombe) writes:—Since writing to you in answer to the inquiries of "Eczema," I have had so much correspondence with my brother members as to show me that there exists the greatest ignorance with regard to cider. All sorts of wild nonsensical ideas have been suggested. For example: "Isn't it a very sour drink?" "Isn't it lowering?" "Is there any goodness in it?" "Will it keep well?" etc. I have tried to answer privately all inquiries on the subject, but I consider the information should be more general.

There is no sort of doubt, in districts where cider is made, amongst all classes, that it is far and away the most wholesome thing a man can drink, and that it is a great pity it is not more widely known and appreciated. Consultants would do well to order it to their patients, but with the injunction that they get it direct from a cider district. It is a genuine drink, made with no sort of adulteration whatever, nothing but the expressed juice of apples and pears. I say this without fear of contradiction; because, if there should be a farm where it is tampered with, the fact is known immediately through the gossip of the labouring classes, and the owner's sale is spoiled; not only that, but we, in a cider-making district, can detect it at once by the appearance and taste. It keeps well too, and improves. I have drunk prime cider three, four, and five years old. It is not so acid in its reaction as is beer, and it causes no acid eructation or heartburn, such as ale is apt to do: nor does it bring on that heavy, sleepy, headachy condition that is common after beer-drinking; one feels fresh and bright and invigorated after drinking it. It is a capital diuretic, and oftentimes acts better in this way than any of the officinal drugs; more es-

pecially some particular sorts of perry. The liver also is very often kept in a regular state by its use, when other remedies have been found unsuitable. It is, at the same time, a good stimulant. In this district it is of a dry character, but in some districts it has a more sweet full-bodied taste, so that cider ought to suite all fancies. It can almost always be procured at about one shilling per gallon, and as such is a most economical beverage when compared with ale, cheap claret, acid sherry, or such like things that are constantly offered one to drink at lunch or dinner. Both cider and perry can most easily be bottled in the spring-time. It also makes the most excellent "cup" imaginable.

Trusting you will pardon my prolixity on a subject that seems, to my mind, to require ventilation, and repeating my offer to supply anyone in their own barrels from my farm.

Inversion of the Uterus following Labour.

Mr. C. H. Butlin (Camborne) describes the following case.—On December 15th last I was summoned, in a great hurry, to see a woman who was said to be very low. The child was said to be born. I asked if there was profuse hæmorrhage; the messenger said there was not. When I arrived at the house, I found the woman pale and faint, but there was no sign of profuse hæmorrhage. I placed my hand upon the abdomen, and at the same time made traction on the cord; and in a few moments there protruded what I supposed to be the placenta. I placed my hands around it so as to remove it entire, telling the woman to cough; and became aware, from the weight and from the smooth feel of the fundus, that it was the uterus. It was very easy for any person, in the habit of attending cases, to distinguish, but I can hardly see how a beginner would become aware, except from the collapse of the patient. I could not remove the placenta by traction on the cord, and I peeled it from the surface of the uterus. There was hardly any hæmorrhage. I now soaked my arm in hot water, and applied lard, and then made my fingers into a cone, and thrust them against the uterus, which had attained the size of the fœtal head, and, by a gentle kneeding motion, easily returned it, by reinverting it, until the cervix was round my wrist. I had now to use pretty much, and rather prolonged, force, before I felt the top of the uterus slip away from my fingers.

The woman had a little brandy and water, and about half a drachm of extractum ergotæ liquidum; also another dose of the same amount in two hours. In a few days she was downstairs and doing her work. I should not think the case sufficiently important to publish; but the disastrous termination of that recorded in the Journal of March 13th seems to show that your correspondent fell into the same error as I did, namely, that of making a depression in the uterus, and thus causing it to be invaginated on itself. His account does not state whether there was partial reduction or not; but I can imagine that it might be very difficult to effect even partial reduction through the vaginal outlet, unless the whole uterus be grasped in the hand so as to have the advantage of compression, kneading, or whatever manipulation appears necessary. After partial reduction, the uterus would only be obstructed by itself, not by the structures around the vagina.

South Africa as a Field for Medical Practice.

T. J. L. writes:—From time to time I have noticed letters appearing under the above heading. I have practised at the Cape a considerable time, I think I can pretty nearly state what are the present prospects of a medical man contemplating a trial at the Cape.

In the first place, all the chief towns, such as Cape Town, Port Elizabeth, Grahamstown, and King William's Town, are overdone, and the struggle is quite as severe as at home. At Kimberley diamond fields, there is a long list of medical practitioners. Now, at the outlying districts and small villages, it is only too well known that every opening is filled, in most cases every village having two or more medical practitioners. The practitioners for the work required in these parts must be capable of great physical endurance, able, in cases of necessity, to do, either in the saddle or in a Cape cart, his sixty or more miles a day, over wagon-tracks. He must be prepared to act in any emergency, entirely upon his own resources, surgical or medical; and in case he fails in one instance (when first commencing his practice), his work and success is blighted or done. He is expected to be a thorough gentleman, but it is advisable that he cast aside all ideas of those refined and frequent social gatherings to which men in the profession are generally accustomed in the old country; and now, in the present depressed state of the country generally, it is indeed hard work to even make both ends meet. I question very much, taking the medical practitioners as a body, whether they are paying expenses, certainly not making sufficient to save. Times are not merely bad at the Cape generally, but there is a total collapse; and, seemingly, the country is going from bad to worse.

I should strongly urge no one to think of going out there in the hopes of an opening occurring for practice. The happy times once experienced are gone by, and the melancholy lists of bankrupts, with empty houses in almost every town and village (one empty in every six you can safely say), and, still worse, the fact of property being absolutely unsaleable, tell us how bad times really are. The only thing remaining is the climate, and certainly consumptive patients rally wonderfully out there, if they go up country, that is to say, beyond the Orange River.

I should say that, of the entire number of medical men who go to South Africa, one half return in a very short time to the old country, or seek other openings for practice. One half of the remainder go to the bad (drink usually) and the other half, one-fourth of the entire number, do, or did fairly well years since, when the country was in a flourishing state; but it is in a sad way just at present.

Warts in Children.

Dr. George H. R. Dabbs (Shanklin, Isle of Wight) writes:—I was about to ask this query of your readers, "Has any connection ever been traced between the existence of warts on the hands of children, and the presence of phimosis needing circumcision?" when I happened to turn to Dr. Neale's invaluable *Digest*, and at page 39 I found this note "Onanism produces them in girls' fingers, Durrant. L. 2, 49, page 250," so that the question has clearly been raised in another way. Why I contemplated the query at all was, because in two cases, in which I had performed circumcision for other reasons, the operation was followed by a disappearance of all the warts on the hands and fingers of the children operated on, although I had not operated with this object. In cases of warts in male children for the future, I shall always look for phimosis.

W. Elder, M.B.—Shall be published at an early date.

F.R.C.S.—The communication is unsuited for publication in our columns.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, etc., RECEIVED.

A Selection from Chess Problems. Composed during the past thirty years Charles White, Surgeon-Major, Army Medical Staff. London: Simpk Marshall, and Co. 1885.

Diseases of the Mouth, Throat, and Nose. By Dr. Philip Scheck. Translated Dr. P. H. Blaikie. Edinburgh: Young J. Pentland. 1886.

Materia Medica and Therapeutics (Vegetable Kingdom, Organic Compounds, A mal Kingdom). By Charles D. F. Phillips, M.D. London: J. and Churchill. 1886.

Lord Clive, Warren Hastings, History of the Popes, Lord Holland. By L Macaulay. Edited by G. T. Bettany. London and New York: Ward, Loc and Co. 1886.

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A System of Practical Medicine. By American Authors. Edited by Willi Pepper, M.D., and Louis Starr, M.D. Vol. iv. London: Sampson Low a Co. 1886.

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REPORT
ON
PASTEUR'S RESEARCHES ON RABIES AND THE TREATMENT OF HYDROPHOBIA BY PREVENTIVE INOCULATION.

By M. WILLIAM VIGNAL,
Collége de France, Paris.

Part II.

CULATION WITH RABID VIRUS A PROPHYLACTIC TREATMENT FOR NIMALS.—*A Prophylactic for Hydrophobia.—Statements of MM. altier and Gibier negatived by M. Pasteur.—Virulence of Virus ttenuated by Passage through a Series of Monkeys.—Virulence of irus increased by Passage through a Series of Rabbits and Guinea-igs.—Virulence of Virus brought to a Maximum in Rabbits persists; if used for Inoculating Dogs, it produces Fatal Rabies.—Attenuated Virus from Monkeys regains its Maximum Virulence after assage through a Series of Rabbits.—Virus of Different Degrees of irulence obtained.—Inoculation with Rabid Virus described: Virulence of Virus gradually increases.—Method of Rendering Dogs efractory to Madness.—Possibility of Prophylactic Inoculation for ydrophobia suggested.—Commission of Inquiry appointed by the inister of Public Instruction: Report: Twenty-three Dogs successfully Inoculated.*

Prophylactic against Hydrophobia.—On May 19th, 1884, M. Pas- [1] stated to the Academy of Sciences that he had advanced a step her in his experiments, for the purpose of rendering animals retory to the virus of rabies by inoculation with an attenuated is.

tatements of MM. Galtier and Gibier negatived by M. Pasteur.— ore giving the result of those researches, as they are described in Pasteur's note, we believe it to be necessary to refer again to M. ier's experiments. This experimenter had injected a rabid virus the veins of sheep, and observed that these animals did not contract rophobia, but were, nevertheless, refractory to the disease, even igh a fresh inoculation were made. M. Pasteur, on November 1, 1882 (*loc. cit.*), said that the result of his own experiments not furnished him with facts proving the truth of M. Galtier's ements. M. Paul Gibier stated, in a note sent to the Academy of nces, June 11th, 1883, that the virus of rabies is attenuated by the ience of a temperature of 40° to 46° Centigrade. This experiment repeated by M. Pasteur, and demonstrated by him to be erroneous. epting MM. Galtier's and Gibier's statements concerning attenu- virus, now recognised to be inexact, we believe that no others des those of M. Pasteur have been made.

irulence of Virus attenuated by Passage through a Series of Mon-.—In the note to which we have referred, M. Pasteur states that, if a ikey be inoculated with virus taken from a mad dog, and a second ikey be inoculated from the first, and a third from the second, so on through a successive series, the virus becomes attenuated in successive monkey, until finally it becomes incapable of pro- ng rabies in dogs by hypodermic injection. It may happen that ulation with this virus, after trephining, also fails; nevertheless, animals are rendered refractory to the disease.

irulence of Virus increased by Passage through a Series of Rabbits Guinea-Pigs.—The virulence of rabid virus is increased after ing through a successive series of rabbits and guinea-pigs by in- ation. Thus, it must be concluded that directly opposite pheno- a take place in these animals from those which operate in the nal economy of monkeys. M. Pasteur, as we have previously ed, judges of the virulence of the virus by the inverse proportion ne incubation-period.

irulence of Virus brought to a Maximum in Rabbits persists; if for Inoculating Dogs, it produces Fatal Rabies.—When the virus abies has, in rabbits, reached its maximum of virulence, and it is used for inoculating dogs, its virulence persists, and is much e intense than virus taken direct from a mad dog. If this virus be injected into the veins of a dog, it invariably produces rabies, resulting in death.

Attenuated Virus from Monkeys regains its Maximum Virulence after Passage through a Series of Rabbits.—In order to restore to the virus from monkeys (the attenuated virus) its original virulence, it must be passed, by inoculation, through a successive series of rabbits. The attenuated virus then finally regains its maximum of virulence.

Virus of Different Degrees of Virulence obtained.—M. Pasteur then stated that he believed, by logically reducing these facts to practical application, he had succeeded in rendering dogs refractory to hydrophobia. He had thus obtained virus of rabies of different degrees of virulence, some not fatal, yet rendering the economy insusceptible to the effects of more active virus. These more active virus, in their turn, preserve the economy from the effects of deadly virus. ("Les uns non mortels preservent l'économie des effets des virus plus actifs, et ceux-ci des virus mortels." (*Loc. cit.*, p. 1230.)

Inoculation with Rabid Virus described: Virulence of Virus gradually increases.—M. Pasteur gave the following description of inoculating with rabid virus. A rabbit is inoculated with rabid virus taken from a rabbit dead from hydrophobia, and having passed through an incubation-period several days longer than that of the shortest period observed in rabbits—perhaps from seven or eight days. When this second rabbit dies, the virus taken from it is used to inoculate a third rabbit, and so on through a successive series, until it occurs that each rabbit contracts hydrophobia after seven or eight days' incubation. After every successive passage through a rabbit by inoculation, the virus becomes more virulent; that is to say that the incubation-period becomes shorter and shorter. Thus a series of virus of increasing virulence is obtained.

Method of rendering Dogs Refractory to Madness.—Each time the virus is passed from one rabbit to another, a certain dog is also inoculated with it. This animal finally becomes capable of resisting the influence of a deadly virus, and is rendered refractory to hydrophobia, even though rabid virus taken from a mad dog be injected into its veins, or inoculated on the cerebral surface.

Possibility of Prophylactic Inoculation for Hydrophobia suggested.—These experiments may be called the scientific experiments of anti-rabid inoculation. Evidently they are not generally practical, but they indicate the possibility of arriving at a practical method of inoculation for animals, constituting a prophylactic for hydrophobia. This is also M. Pasteur's view. He said: "My first attempt encouraged my hopes for success, inasmuch as the incubation-period is long. I, therefore, have reason for believing that a condition, refractory to the influence of hydrophobia, can be determined before the disease consequent on the bite of a mad dog be manifested." (*Loc. cit.*, p. 1231.) He then stated that he had written to the Minister of Public Instruction, to be furnished with the means to enable him to repeat his experiments before a Commission, composed of members of the Academy of Sciences, and of the Academy of Medicine, in order to satisfy the Commission that the experiments just described tend to obtain a prophylactic for hydrophobia.

Commission of Inquiry appointed by the Minister of Public Instruction: Report: Twenty-three Dogs successfully Inoculated.—M. Pasteur's request was granted. The Minister named a Commission, composed of MM. Béclard, Paul Bert, Bouley, Tisserand, Villemin, and Vulpian. On August 6th, 1884, the Commission sent to the Minister of Instruction its report on M. Pasteur's experiments. This was published on August 8th,[2] and contained the following statements. "The results observed by the Commission may be thus summarised. Nineteen control dogs were experimented on. Among six dogs bitten by mad dogs, three were seized with hydrophobia.[3] There were six cases of hydrophobia among eight dogs after venous inoculations; and five cases of hydrophobia among five dogs consequent on inoculation after trephining. The twenty-three dogs inoculated, and then tested, all escaped hydrophobia. In the course of the experiments, a dog rendered refractory to rabies by inoculation, died on July 13th from diarrhœa, with black motions, which set in at the beginning of July, when the dog was in the infirmary of M. Bourrel, a veterinary surgeon, who had in his keeping some mad dogs. Some of M. Pasteur's experiments, made before the Commission, were done at M. Bourrel's establishments. In order to ascertain if the dog, which died after suffering from diarrhœa, had died from hydrophobia, inoculations were made with portions of its medulla oblongata. On July 13th, three rabbits and a guinea-pig were inoculated. On August 4th, they were

ur la Rage; par M. Pasteur, avec la collaboration de MM. Chamberland et (*Comptes Rendus de l'Académie des Sciences*, tome xcviii, p. 1,229).

[2] *Journal Officiel de la Republique Française.* Lettre et rapport presentée au Ministre de l'Instruction Publique par le Commission chargée de contrôler les Experiences de M. Pasteur, sur le Prophylaxie de la Rage, p. 4228, et suiv.

[3] Every bite from a mad dog does not produce hydrophobia, especially when the dog bitten has a long hairy skin. The virus on the teeth of the mad dog is wiped off, and is not lodged in the wound.

in perfect health, but had, nevertheless, passed the period when hydrophobia appears, in animals of their species, after cerebral inoculation."[4]

[*To be continued.*]

ABSTRACTS OF

THE LUMLEIAN LECTURES

ON

THE ELECTRICAL CONDITION OF THE HUMAN BODY; MAN AS A CONDUCTOR AND ELECTROLYTE.

Delivered at the Royal College of Physicians, London, April, 1886.

By WILLIAM H. STONE, M.A., M.B.Oxon., F.R.C.P.,
Physician to St. Thomas's Hospital.

Lecture I.

After thanking the President of the College for allowing him the use of the noble library for his lectures, and for the permission to ask the attendance of his scientific friends, Dr. Stone commenced his lecture by emphatically disclaiming the idea that his lectures were intended to be devoted to "Medical Electricity." The term itself was incorrect, and was of ill-omen, as recalling the meretricious devices by which it had been sought to recommend electricity, empirically, as a therapeutic agent. It was too true that, up to the present time, it had not fulfilled expectations, which were only reasonable in the case of so powerful a force. It was a convenient physiological stimulant, and a good test of muscular irritability, but it had been accepted with too little examination as a mere agent in physiological research.

The Importance of Absolute Measurements.—The importance of placing the physiological and medical application of electricity on a physical basis of absolute measurement being admitted, the imperfections of the methods until recently available were pointed out. Methods which depended upon the use of the galvanoscopic frog or the induction coil were not suited to solve the problems presented. Professor Hughes had recently pointed out that the telephone might be used as a galvanoscope, thus replacing the galvanoscopic frog by an instrument constructed upon principles which were thoroughly understood.

To show the applicability of the telephone to such uses, a double wire was carried along the gallery, and connected in multiple arc with six independent derived circuits, each containing a telephone. On joining up the line with the secondary coil of a Dubois-Reymond induction sledge, and starting the chronometric interruptor, it was quite easy to hear all over the room the feeble click of making, and the powerful click of breaking, circuit. As the secondary coil was run along the sledge, these were diminished in intensity, the former soon fading out, but the latter persisting till the secondary was 500 mm., or more from the primary coil. A physiological experiment was thus reproduced, physically, without the interposition of animal tissue, whether nerve or muscle.

Early Estimations of Resistance.—In investigating the electrical reaction of the human body, as in all other cases, the first point to determine was its resistance, the reciprocal of conduction. This problem had engaged the attention of many experimenters since the time of Volta. The first serious systematic attempt was made by Edward and William Weber, but Dubois-Reymond had published, in 1860, an elaborate memoir on the resistance of the uninjured human body; that distinguished observer, however, had been compelled to admit that the variations in the results obtained were so great and inexplicable, as to reduce their value to a minimum. The Webers, and all those who followed them, had taken it for granted that a current of high tension and of alternating character might be substituted indifferently for the constant current of a battery in the measurement of this unit, or even combined with it in an arbitrary way. This error the lecturer believed he had been one of the first, if not the very first, to detect; it was of a serious character, as would be noted in the subsequent lectures. The earlier observers had also neglected the effects of what is termed "polarization," or the establishment by electrolysis of a counter electromotive force, which acts as increased resistance.

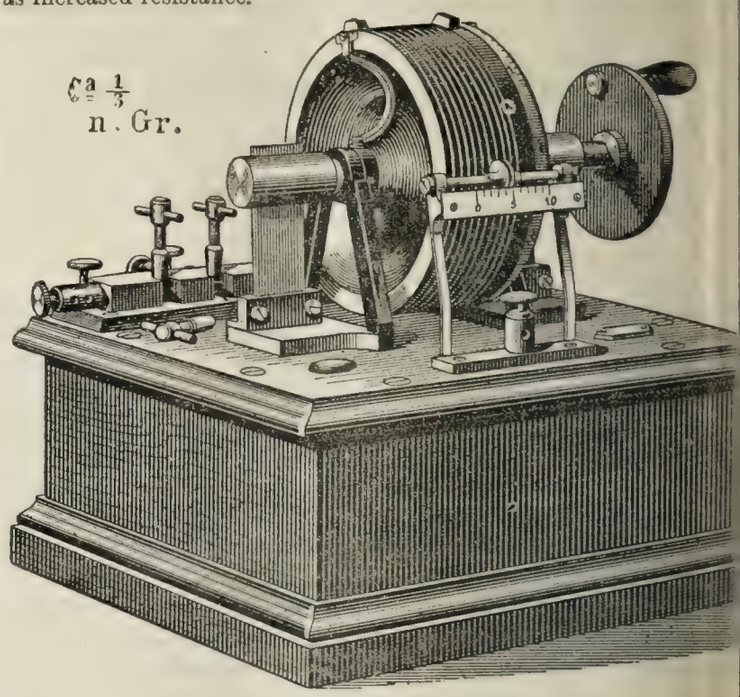


Fig. 1.—Kohlrausch's Meterbridge.

Du Moncel's Approximate Estimation.—Comte Du Moncel had obtained a nearer approximation to the real resistance of the human body than had been previously reached. In an experiment made on his wife, he found it from wrist to wrist, at first equal to 330 kilometres of telegraph wire, equivalent to 3,500 ohms, but gradually sinking to 2,200 ohms. He used small platinum electrodes ($1\frac{3}{4} \times 1\frac{3}{4}$ inch) with the result that the skin beneath them was electrolysed, and deep



Fig. 2.—Hartmann's Demonstrating Aperiodic Galvanometer.

ulcers were produced, of which the Countess Du Moucel, now an old lady, bears the marks to this day. Herein lay the first difficulty; the human body, considered from an electrical point of view, was a mass of fairly good conducting material, enclosed in a remarkably bad

[4] The experiments which M. Pasteur made in the presence of the Commission were not precisely those he had proposed to the Academy of Sciences. The Commission had slightly modified the proposed programme contained in the note of May 19th, 1884.

ducting cutaneous envelope; secondly, the body rapidly electro-ed, and became a secondary battery of no inconsiderable power.

In measuring resistance, therefore, it was necessary, first, to eliminate tact-resistance; the resistance of the skin might be from 8,000 to 000 ohms, but the real and essential point to be ascertained was very much smaller resistance of the deeper tissues. To obtain d electrical contact, it was necessary that the poles should be in-tely large, as compared with the current; in practice, this con-ion could be fulfilled, either by immersing the feet or hands in hs of brine in contact with an electrode of lead, having a surface rom fifty to a hundred square inches, or by wrapping a flexible p of lead round the hands or feet, previously soaked in brine. In s way, the resistance of the skin was reduced to zero. Determina-ns might be made with advantage in four directions: from hand hand, from foot to foot, from hand to foot, or from the nape of neck to the feet; but, in every case, it was essential to choose e definite anatomical points from which to measure. Such were nd in the prominence of the ulna at the inner side of the wrist, the lower edge of the external malleolus. A line could be drawn n one of these points to the other with great accuracy. The rent was furnished by a chromic-acid battery, each cell having an tromotive force of two volts. The determinations were made by ns of Wheatstone's bridge of special form (as shown in Figure 1), a Thomson's or Wiedemann's galvanometer.[1] To obviate the effects polarisation, a commutating key was introduced into the battery uit, and a double contact key into that and the galvanometer uit. By this means, the constant current could be sent in osite directions at will for very short periods, not sufficient to luce any serious polarisation. Even thus, however, the later lings were somewhat different from the earlier, owing to counter-tromotive action, usually slightly higher. Results of three typical rminations by this method are shown in the following table.

—	Height.	Ulna to Malleolus.	Foot to Foot.	Foot to Hand.
	Ft. ins.	Ft. ins.	Resistance.	Resistance.
T.....	5 6	5 9¾	945 ω	1320 ω
S.....	6 3	7 0	930 ω	1027 ω
ungarian Giant"	7 8	8 7	930 ω	1032 ω

ll these resistances were far below any before given, and it was resting to note that the shortest subject presented the greatest stance; an illustration of the law that, in the normal human body, rded as a machine, as is the length of the osseous levers, so is the ional area of the motor muscles. This law afforded an explanation he almost complete identity of the electrical resistance, increased th being balanced by increased size of the conductor. This hod of determining resistance was illustrated by an experiment; althy adult male being the subject, and a determination obtained foot to foot; the feet being immersed in brine-baths and in con-with large leaden electrodes. By means of the demonstrating gal-ometer, it was shown that, when a resistance of 1,160 ohms. was oduced, the two branches of the Wheatstone's bridge were balanced, the needle remained at zero. The difficulty created by polarisa-was, however, only partially overcome by using momentary and nating contacts. It was due to chemical change occurring in the , and constituting a force which might diminish, but usually in-sed the resistance. Dubois-Reymond had apparently failed to in congruous results on this account.[2] It was suggested to the rer by Professor Oliver Lodge, at the Southport meeting of the ish Association, to use the induction-coil, with a telephone as a anometer. At this method he had laboured for a year, with the rkable result that the resistance thus obtained was only one-half o-thirds obtained by the other. It immediately became apparent there was present an enormous and hitherto unsuspected cause ror; for the measurements of resistance obtained by alternating nts passing through the human body were beyond all chance of umental error, less than those given by a constant source. The epancy was so great, that Dr. Stone feared they must be, for pur-s of measurement, discarded; though their explanation would be ned in the third lecture, and the physiological interest of the was considerable.

n excellent form of the latter, for demonstrational purposes, as made by s. Hartmann and Brann, of Frankfort, for the lecturer, was shown. (Fig. 2.) e says: "I have not considered it indispensable on my part to occupy my-n obtaining perfectly correct measurements of the resistance of the human" (*Thierische Elektricität*, Band ii, p. 194.)

Mance's Second Method.—Sir Henry Mance, Superintendent of the Persian telegraph system, had recently brought forward a method[3] of eliminating the error due to polarisation, which interfered with the determination of the exact position of a fault in a submarine cable. For the purposes of this investigation, the body might be regarded as a faulty submarine cable. The determinations could be made with an ordinary Wheatstone's bridge, but a special modification was more convenient. The essential point in the method was that, instead of cutting the currents short, instead of using alternating currents, polarisation was allowed to do its worst; and then a second observation was made, under quite different conditions, with a rapidly changed pair of proportional coils. The method was, in the main, one of computations, and could be expressed by the formula

$$x = \frac{R_1 (2r + P_2) - R_2 (2r + P_1)}{P_2 + R_2 - P_1 - R_1}$$

in which R_1 and R_2 represented the two readings obtained with two proportional coils, each of proportion P_1 and P_2, and the resistance of the battery might, in these experiments, be neglected, as very small compared to the other factors. After performing the process of cross-equation, the adventitious was thus eliminated from the real resistance, and the resultant x might safely be taken as the real resistance of the human body, free from that of its polarisation.

By omitting the resistance of the battery, Sir Henry Mance's formula might be simplified as follows:

$$x = \frac{(R_1 \times P_2) - (R_2 \times P_1)}{P_2 + R_2 - P_1 - R_1}$$

The operation could be more conveniently done on a skeleton form like the following, taking the usual 100 and 1000 ohm branches of the bridge.

Let $R_2 + 1000 - (R_1 + 100) = C$
,, $2r + 100 \times R_2 = B$
,, $2r + 1000 \times R_1 = A$
then $x = \frac{A - B}{C}$

An experiment was made on the same patient as before, by means of a beautiful instrument, on Sir H. Mance's principle, with the result of limiting the rise from polarisation to only 7 ohms; from 1160ω to 1167ω, exactly what had before been determined in the laboratory.

It was thus clear that, by this method, satisfactory results could be obtained. But, to confirm them, independent determinations on another method were kindly made by Mr. Lant Carpenter, and his able assistant, Mr. Wilkinson, at the School of Electrical Engineering, in Princes Street, Hanover Square, with EMF's of 2 and 4 volts. These were compared with a determination with 8 volts made by Dr. Stone on another occasion; the subject tested in the three cases being the same. The following were the very concordant results, exhibited as a diagram.

EMF volts.	Foot to Foot Resistance.	C in Ampères.
2	1st minute R = 1195ω 4th minute R = 1230ω	.0016
4	4th minute R = 1155ω	.0034
8	1st minute R = 1130ω 4th minute R = 1160ω	.0069

The table shows not only the EMF, current, and resistance, but also, in the first and third observations, the rise of resistance from polarisation, and in all three the decreased resistance with higher battery-power.

Resistance previously Over-estimated.—Dr. Stone then pointed out that it followed from these observations that the resistance of the human body was very greatly less than had formerly been supposed; and that it was practically the same, irrespective of height, when measured from foot to foot, though considerable alterations might be noticed in extreme leanness or obesity, or in diseased conditions of the tissues. A practical point of some importance was established—namely, that it was not safe to count on the non-conductivity of the epidermis rendering powerful currents innocuous. More numerous accidents than was generally suspected had already occurred; and, as

[3] "On a method of eliminating the effects of polarisation and earth-currents from fault tests."

the use of the electric light spreads, their number might not improbably be multiplied. The limit of safety could hardly yet be said to be known; and, on this point, it had been remarked by Mr. Cuninghame that the Board of Trade were still sadly at sea.

Alterations in Disease.—It had been generally assumed (Dubois-Reymond, Moncel) that the human body acted as a fluid-conductor, but Dr. Stone had made a few observations which cast doubt on this assumption. In dropsy, resistance was diminished. In one case, where determinations were made before and after the sudden onset of dropsy, the resistance fell to one-half. In degenerated tissues, where muscle was replaced by fibrous tissue, resistance fell. In six cases of old hemiplegia, Dr. Stone found that the hemiplegic side offered less resistance—that is, was a better conductor than the sound side. The difference in the several cases was 420ω, 350ω, 360ω, 120ω, 550ω, 730ω—far too large a divergence for mere observational errors.

Alterations in Metallic Impregnations.—The effect of metallic impregnations had been tested. It was found that lead had a slight, and mercury a marked, influence in diminishing resistance. In a case of copper-impregnation, observed in a coppersmith, whose right arm was chiefly exposed to the impregnation, the right side conducted better than the left. From the urine of this patient, three milligrammes of metallic copper were recovered by electrolysis, and kindly measured by Dr. Bernays in the chemical laboratory of St. Thomas's Hospital.

Alterations in Pyrexia.—In conclusion, Dr. Stone said that he was not yet prepared to speak positively with regard to the influence of temperature. In one case of ulcerative endocarditis, the resistance had been observed to be greater during periods of pyrexia; but opportunities of making such determinations under favourable circumstances, without unkindness to the patient, were obviously very rare.

At the second lecture, Dr. Stone proposed to take up the subject of Polarisation; and at the third, that of Induced Currents and their peculiarities.

British Medical Benevolent Fund.—The applications for relief, which came before the Committee of this Fund, at their monthly meeting, held on March 30th, presented some features of unusual interest. The number of cases submitted for consideration was twenty-seven, rather above the average; and of these, twenty-two received grants varying from £18 to £6, according to circumstances; £15 was voted to the honorary local Secretary at Liverpool to aid a subscription, now in course of raising, for a medical man, aged 61, temporarily incapacitated by illness. A lady, aged 70 (London) received a grant of £18 in equal monthly instalments of 30s.; £10 was given to a member of the Committee, to be used for clothes, to enable a medical man, who had been for some months laid up with obstinate sciatica, to obtain a situation as assistant (London); £10 to enable a lady to return to her situation as a governess in Russia; £12, at the rate of £1 a month, was voted to a lady, who has been a helpless invalid from paralysis for over three years; £10 was voted to a widow, whose son is completely invalided by chronic abscesses (Stratford-on-Avon); £18 was sent to the honorary local Secretary at Bradford, for a widow with six children, whose ages run from 15 to 2; £12 to the wife of a medical man, who has been deserted by her husband (London). Valuable aid was given to the Committee in deciding applications by the able and exhaustive reports furnished by the various honorary local secretaries, whose local knowledge enabled them to really sift cases, and inform the Committee of the exact position of the applicants, and the best mode of administering relief. In all, £260 was ordered to be distributed, and the number of applicants suffering from real distress relieved by these grants amply justifies the existence of this charity, and appeals most strongly to the profession for aid in its objects. The Committee would draw attention to the cosmopolitan nature and reach of the fund; cheques were sent to various parts of London; to Manchester, Liverpool, Oxford, Torquay, Southsea, Goole, Oldham, Glasgow, Alfreton, Blisworth, Crail in Fifeshire, Stratford-on-Avon, and Bradford. A glance at the report shows that the amount annually distributed to the objects of its benevolence has grown from nothing in the first year, to a sum only just short of £3,000 in the year ending December 30th, 1885, in grants and annuities; and the Committee wish to point out that no distinction is made by them, help being freely given to any applicant who may be eligible and properly recommended; and they earnestly and confidently appeal for increased subscriptions to enable them to render this, the jubilee year of the fund, the most remarkable since its foundation in 1836.

The Earl of Powis has been re-elected President of the Shrewsbury Dispensary for the ensuing year.

THE CROONIAN LECTURES

ON

SOME POINTS IN THE PATHOLOGY O RHEUMATISM, GOUT, AND DIABETES.

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Lecture III.

Mr. President and Gentlemen,—The metabolic function of t liver may be interfered with in diverse ways. From the stimulati effect of food during digestion in the stomach or duodenum, t things should take place in the liver: dilatation of the vessels of t gland, and certain changes in the gland-cells—results which may compared to those obtained from the submaxillary gland by stim lating the chorda tympani; the metabolic events being depende upon the absorption and transformation of certain constituents of t blood by the hepatic cells, and this action controlled by the ner fibres in connection with these cells. But these two processes, v cular dilatation and metabolic activity, are independent of each oth The vessels may dilate; but, if the terminal portions of the nerves the secreting cells be paralysed, the blood will pass through the gla more or less unchanged; and the same effect will be produced paralysing the nerve either at its central origin or along its cours We know that, as regards the innervation of the tongue and t sense of taste, there are nerve-filaments which respond only to par cular kinds of stimuli; so it is not unreasonable to assume that di tributed to the liver-cells there are various nerve-filaments, one s regulating the transformation of saccharine, the other the nitrogenc elements conveyed to the cells by the portal circulation; and, either set were paralysed, we should have the metabolism of the co responding elements interfered with. How far the secretory pow of the liver-cells is influenced by the vagus, is not very clear; b the vessels are under the control of the dominant vaso-motor cent which is located in the medulla oblongata, where also we have th nucleus of the vagus. If, then, there be a want of harmony betwe the vascular dilatation and the action of the liver-cells, if blood co taining the products of digestion be passing through the liver larger quantity than the cells can act upon (whether that inaction b due to exhaustion of the cells themselves, or to exhaustion of th secretory nerves in connection with them), then there will be impe fect metabolism, and consequently the formation of uric acid in th manner which I have described. So far as the imperfect metabolisn of the saccharine elements is concerned, we have illustrations of wha I mean in the results which take place from the "diabetic puncture," or, as shown by Dr. Pavy, from section of the sympathetic filamen ascending from the superior thoracic ganglion, or from the removal the superior cervical ganglion.

There may be also imperfect metabolism of nitrogenous material, i another way; namely, if too much be introduced into the portal ve from the alimentary canal. The portion then which is least readil acted upon (namely, the glycocine) will not be transformed, and s the formation of uric acid is promoted. We see the same thing co stantly, even when the liver is in a healthy and normal condition, it have too much work imposed upon it; that is, if more nitrogenou material be introduced into the portail vein than can be transforme in the gland. And so an occasional indulgence at the table is ver generally succeeded by the appearance of urates in the urine. If th liver-cells be already exhausted by long continued over-stimulatio with how much greater difficulty will the perfect metabolism of nitr genous food be effected!

In either of these modes, then, arising from defective changes i the liver, uric acid may be formed in excess, and then eliminated, it may circulate as a poison in the blood. Why, in some cases, is eliminated as urates or as uric acid in the urine, or as renal vesical calculi, without any arthritic symptoms? Why, in other does it develop the arthritic symptoms to which we give the name gout?

If the kidneys are sound, as in the majority of people below midd

, the uric acid, unless in large excess, will be excreted ; it is thrown directly it is formed, and there is little overflow of the product to the circulation. If the urine have a neutral reaction, it will appear urates of ammonia, soda, etc. If, however, other acids, such as lactic d, be formed at the same time, and eliminated by the kidneys, the e will be separated, and uric acid, as such, be excreted, and, according the amount, will give rise to gravel, or to renal or vesical calculi. t gradually the kidneys may become weakened or diseased ; and n, as the blood passes through them, the acid is formed, a portion ses on, and is not eliminated. As it is an abnormal product, we making no violent assumption in saying that it will act as an irrit upon some portion of the nervous system. We have seen how tinctly the similar body, caffein, acts as a stimulant to certain porns of the nervous system. According, therefore, to the susceptility or sensitiveness of different portions, will be the outward nifestations of this irritation. Such a susceptibility or sensitiveess of the nervous system is constantly observed in different indiiduals. In some, the nerve of smell is much more easily stimulated certain odours than in others. In some, again, the nerves of taste ognise differences in flavour which are totally imperceptible to ers. In children, too, and in persons in enfeebled health, how dily is pyrexia developed by irritation of the nerves of the intese or of the digestive glands, from improper diet.

If the nucleus of the vagus be the sensitive spot, then gastric uniness, asthma or cardiac irregularities might be developed.

Dr. Buzzard has suggested that in locomotor ataxy "the frequency the coincidence of gastric crises with the osseous lesions gives sonable ground for the hypothesis that the latter may depend on an invasion of a part of the medulla oblongata closely adjacent the roots of the vagi. It is only as a working hypothesis that I ke the suggestion. Is there something which we may call proionally a trophic centre for the osseous and articulatory system in immediate neighbourhood of the roots of the vagi ?

"As I have suggested on a previous occasion, the discovery of such entre would materially help us to explain the remarkable associan of cardiac complications with the joint-affection of acute rheutism, as well as the sweating characteristic of this disease, and occasional hyperpyrexia which occurs in it. And it might o help to throw light upon the obscure pathology of arthritis formans."[1]

In a subsequent paper he further adds: "In a communication ought before the Pathological Society of London, in February, 1880 (*Transactions of the Pathological Society*), I made the suggestion that gastric crises depend upon irritation of the nuclei of the vagus by erosis. At that time, I had no anatomical evidence to offer in port of the hypothesis, which was based upon the paroxysmal aracter of the attacks, so completely in accord with that characterng the attacks of lightning-pains. It appeared evident to me that sclerosis, which, when it attacked nerves of common sensation, duced pain, came to invade the nucleus of the vagus, it might be pected to give rise to symptoms like those of the gastric crises. ring the meeting of the International Medical Congress in London, ofessor Pierret, of Lyons, has shown me sections of the medulla ongata which he has lately made from a case of tabes with gastric ses. I was greatly interested in his demonstration that the fasciulus gracilis, in immediate relation with the nuclei of the vagus, nibited distinct sclerosis."[2]

Professor Roy and Dr. Graham Brown have recently stated[3] that, n the curarised dog stimulation of one uncut vagus with an inced current, causes contraction of the bronchi of both lungs, the traction being usually powerful, but to this there are exceptions. tion of one vagus usually causes a marked expansion of the bronchi the corresponding lung, which may be preceded by a slight tempoy contraction, apparently due to the stimulus of the section. Stilation of the peripheral end of one cut vagus always causes a much re powerful contraction of the bronchi of both lungs, than when uncut nerve is stimulated with the same strength of induced rent." They have also stated that these and other experiments ble them to understand how asthma may be produced.

If portions of the spinal cord in connection with the nerves disuted to the joints be more than usually sensitive, this sensitiveness susceptibility being either inherited or acquired, then stimulation irritation of these portions would lead to changes in the respective ts similar to those which result from nerve-wounds, or from injuries the spine. At first, the uric acid might produce little effect ; but, with repeated or constant stimulation, these portions of the spinal cord would become more susceptible to the action of the morbid products, and so nutritive changes or inflammation would be developed in the joints connected therewith.

Suppose for a moment that the portion of the nervous system most susceptible to the action of the uric acid is the vaso-motor centre, the domination portion of which, as we know, is located in the medulla oblongata, what effects should we expect to follow ? The most powerful vaso-motor nerves are those which act upon the blood-vessels of peripheral parts, for example, the toes, fingers, and ears, while those that act upon central parts seem to be less active[4] ; consequently, we should expect the toes and fingers to be first affected ; and, just as by stimulating the sympathetic nerve of the sublingual gland we have contraction of the vessels and altered secretion from the gland, so in the toes and fingers we should have contraction of the vessels, and the metabolism of the parts more or less modified. In addition to contraction of the vessels caused by impulses affecting the blood-supply, there are impulses affecting directly the activity of the protoplasm. The constructive metabolism about the joints is stimulated, whilst the blood-supply and destructive metabolism are lessened, and so there is increased development or growth about the part. Further, the blood which goes to the part contains sodium urate ; consequently, this deposited along with the other substances, in the metabolism o inflammatory changes which take place in the tissues around the affected part.

But, whilst the vaso-motor centres may be directly stimulated by the irritant, they may be also stimulated by irritation of the efferent or sensory nerves. Stimulation of the centripetal end of a divided efferent nerve causes increased blood-pressure. Have we not here, then, an explanation of the phenomena of a gouty paroxysm ? The uric acid stimulating both the sensory nerve, and, through it or independently, the more active portion of the vaso-motor centre, causes pain in the joint and contraction of the vessels ; the pain increases with the continued stimulation, but, after a time, the nerve is exhausted or paralysed (as we know to be the case from continued stimulation of other nerves, as, for instance, in tetanising a muscle). The vessels now dilate, destructive metabolism is stimulated; there is relief from pain, and, with the relief, another indication of paralysis of the sympathetic shows itself, namely, more or less perspiration.

A similar explanation may, I think, be given of the mode in which arthritic symptoms result sometimes from nerve-wounds. The wound may be such, that the sensory or efferent fibres in the nerve are injured, whilst the vaso-motor and other fibres are intact. From the irritation set up, either by the cicatrix or otherwise, the sensory fibres are stimulated, and, through it, the vaso-motor centres in the manner I have just described as occurring in gout; but, as uric acid is not the irritant, and is not circulating in excess in the blood, there is no deposit of this substance in the metabolic changes taking place in the joint.

And further, if irritative, inflammatory, or degenerative changes take place in the spinal cord anywhere along the course of the sensory nerves, by which the sensory nerves are stimulated, this would lead to stimulation of the corresponding portion of the vaso-motor centres, and so to the development of those symptoms which we know under the name of arthritis deformans, or rheumatoid arthritis. In this way, we can easily understand how dysmenorrhœa may be the starting point of this joint-affection, a clinical fact which has been recorded by Dr. Ord.

Among the peculiar local affections in connection with gout, we have, as pointed out by Dr. Graves, congestion of the lobes of the ear ; a singular affection of the teeth, which consists in an insuperable desire to grind them ; the occurrence of *tic doloreux* of several branches of the fifth pair ; daily paroxysms of intense heat of the nose, which continues for three or four hours, the part becoming first of a bright and then of a purplish red colour. All these symptoms may, I think, be ascribed to irritation in that portion of the nervous system where the roots of the fifth nerve and the vaso-motor centre are in close proximity, namely, in the medulla oblongata. To this spot I shall have to refer again.

But, independently of any functional or organic change in the liver or in its nervous connections, there is a third way in which uric acid may be developed. And that is from the excessive formation of glycocine in the muscular tissue—in the manner I have already referred to as the result of what is commonly called a feverish cold. This glycocine, passing in the blood to some glandular organ—the liver or spleen it may be—is there conjugated into hydantoin, and afterwards further transformed into uric acid. When the nervous

[1] "On the affection of Bones and Joints in Locomotor Ataxy, and its Associa with Gastric Crises," by T. Buzzard, M.D., BRITISH MEDICAL JOURNAL, 1881, i, p. 383.

[2] *Transactions of the International Medical Congress*, 1881, vol. ii, p. 27

[3] *Proceedings of the Physiological Society*, May 10th, 1885.

[4] Landois and Stirling, *Physiology*, 1885, p. 893.

system and the kidneys are sound, this product is eliminated by the kidneys, and the attack subsides.

But suppose the individual who is exposed to damp or cold has been previously reduced in strength, is tired out or exhausted, that is to say, his vaso-motor system, or some portion of it, is in a weak state, the weakness being either developed from bodily or mental exhaustion, or it may be, inherited. Then, following the chill, there would be the same effects produced as I have described when referring to the effect of cold applied to the skin; but, the vaso-motor centre being enfeebled, the nerves regulating the vessels of the muscular area would be more completely paralysed by the external cold; and when reaction, induced in some degree by the lactic acid, set in on the surface of the skin, there would be less power in the muscular nerves to recover from that paralysed condition. More than this—so far as these vaso-motor elements are concerned—the morbid products are still circulating in the system; and, the vaso-motor centre not having recovered itself, the continued stimulation by glycocine or uric acid on that exhausted centre, no longer excites it, but gives rise to further exhaustion, and consequent further dilatation of the vessels in the vascular area connected with it, and more complete falling asunder of the molecular elements of the tissue.

Let me illustrate what I mean by reference to the sciatic nerve.

"Division of the sciatic nerve of a mammal causes dilatation of the small arteries of the foot and leg. Where the condition of the circulation can be readily examined, as, for instance, in the hairless balls of the toes, especially when these are not pigmented, the vessels are seen to be dilated and injected, and a thermometer placed between the toes shows a rise of temperature amounting, it may be, to several degrees."[5] "But the dilatation so caused, after a few days, disappears; the foot on the side on which the nerve was divided, becomes not only as cool and pale, but frequently cooler and paler than the foot on the sound side. If the peripheral portion of the divided nerve be stimulated with an interrupted current immediately, or very shortly, after division, the dilatation due to the division gives place to constriction; the sciatic nerve acts then quite like the cervical sympathetic, except perhaps that this artificial constriction cannot be maintained for so long a time, and is very apt to be followed by increased dilatation. If, however, the stimulation be deferred for some days, until the dilatation has given place to a returning constriction, the effect is not constriction, but dilatation; the nerve then acts, so far as its vaso-motor fibres are concerned, like a muscular nerve, and not like the cervical sympathetic."[6] So also with regard to the mylohyoid muscle. Section of the nerve produces dilatation, but the dilatation is transient. The vessels speedily return to their former calibre; and then it is found that stimulation, of whatever strength, of the peripheral portion of the divided nerve, brings about not constriction, but dilatation.

If, then, the vaso-motor fibres of the muscular nerves have been weakened, the result would be that the normal stimulating effect of uric acid on the vaso-motor elements connected with motor nerves generally would be transformed into a depressing or paralysing effect, the vessels of the muscular area would be still further dilated, the molecular constituents of the tissue would be loosened, hydration and oxidation would go on causing fresh development of heat, there would be the continuous formation of glycocine and lactic acid, the glycocine giving rise to uric acid, which, accumulating in the system, produces its deleterious effect in modifying the function of the nervous system; the lactic acid dilating the smaller arteries,[7] and stimulating the sweat-centres, passing off in part by the skin. With increased stimulation of the paralysed centre of the muscular nerves, complete dilation of the vessels in the muscular area will take place; the molecular constituents of the tissue now fall completely asunder, the $CH_2\begin{cases}OH\\CN\end{cases}$ and $C_2H_4\begin{cases}OH\\CN\end{cases}$ being entirely hydrated into glycollic acid and lactic acid, with the rapid production of heat, and the heat is further developed by the ready oxidation of these products. In this way, to some extent, the so-called hyperpyrexia of rheumatic fever is produced.

But, whilst uric acid affects in this way the vaso-motor fibres of muscular nerves, it also affects the nutrition of the joints. I have endeavoured to explain how it does so in gout, producing first of all contraction of the arteries and constructive metabolism, by the stimulating effect of the poison on the sensitive nerve-centres, followed by dilatation of the arteries, and destructive metabolism when the centres are exhausted. In rheumatism, however, the dominant centre is exhausted, to begin with, and so we have destructive metabolism and vascular dilatation, preceded by very slight, if any, constructi metabolism and contraction of the vessels. In gout, the uric acid the result of modified innervation of the liver, or exhaustion of t hepatic cells, and so there are non-transformation of the glycocine, a the consequent formation of uric acid. In rheumatism, the glycoci results from changes in the vascular area, and in the metabolism the muscles; and, along with its formation, there is also t formation of lactic acid, by hydration, both from the cya alcohol $CH_2 . CH_2\begin{cases}OH\\CN\end{cases}$ and the cyan-alcohol $CH_3 . CH\begin{cases}OH\\CN\end{cases}$. T nutrition of the joint is modified, as above described, by the uric ac but the nutrition is further modified by the presence of the lactic a in the blood, producing dilatation of the arterioles, more particular of those in the cutaneous area.

In this manner, then, I venture to suggest, are the characteris changes about the joints in acute rheumatism developed.

Again, if the dominant vaso-motor centre be in an enfeebled or e hausted state, and irritative, inflammatory, or other changes ta place in the spinal cord along the course of or adjacent to the senso nerves by which these nerves are stimulated, we should have, qui independently of the presence of uric acid in the blood, destructi metabolism and vascular dilatation about the joints; the extre effects of which are seen in Charcot's disease accompanying locomot ataxy. Regarded in this light, Charcot's disease bears the same lationship to arthritis deformans that rheumatism does to gout.

In a similar way, also, I would explain the joint-affection known gonorrhœal rheumatism. Here we have prolonged irritation of t sensory nerves of the urethra, acting through an enfeebled or weaken vaso-motor centre; and, in this way, the nutrition of the joints connection with that centre is modified.

I have referred to that portion of the sensory tract in the medu oblongata in the neighbourhood of the nucleus of the vagus, the ro of the fifth nerve, and the dominant vaso-motor centre, as the pa which controls the nutrition of the joints, and which is more partic larly affected by external cold. The following facts give support this view, and can be explained on the same hypothesis.

Cases occur in which the solitary local affection, associated with feverish cold, is an outbreak of herpes on the lips, nose, or buc mucous membrane, the so-called *Febris herpetica*. "We find a sha attack of fever in a child or young person, without any local caus we expect the onset of some serious disease, but our anxiety is so allayed; in a few days, there unexpectedly appears on the lips, nos or cheeks, a closely packed group of vesicles, which at once remov our uncertainty, and shows us that we have to do, not with the ear stage of one of the more serious fevers, but with a feverish cold, whi will end favourably in a day or two."[8] Here we have, as the result "catching cold," disorder of nutrition, showing itself in parts suppli by branches of the fifth nerve, namely, the labial and nasal branch of the superior maxillary nerve.

Rheumatism not unfrequently, after a short interval, follows to sillitis. Attention was prominently called to this, a few years ag by Dr. Kingston Fowler, and I have seen several instances where has occurred. Now, we may assume either that the condition of th central nervous system in the individuals so affected is such tha slight injurious influences, such as the effect of a slight chill, or ex posure to cold, acting upon the central nervous system, will produc an attack of quinsy, whereas more severe injurious influences wi cause rheumatic fever; or we may assume that, in quinsy, the co tinued irritation of the sensory nerves distributed to the tonsils pr duces exhaustion of some portion of the dominant vaso-motor centre and as, in quinsy, uric acid is largely developed, this, acting on th enfeebled centre, exhausts it still more, and developes the arthrit symptoms of rheumatism in the manner which I have describe Either hypothesis will illustrate my argument. The tonsillar nerve are derived from the fifth nerve—the middle descending branch fro Meckel's ganglion—and from the glosso-pharyngeal portion of th eighth nerve. This branch of the fifth, to which I have referred, derived from the larger root of the nerve, which may be traced back t the lateral tract of the medulla oblongata immediately behind th olivary body, and is connected with the grey nucleus at the back pa of the medulla between the fasciculi teretes and the restiform columns The deep origin of the glosso-pharyngeal may be traced through th fasciculi of the lateral tract to a nucleus of grey matter at the lowe part of the floor of the fourth ventricle, external to the fasciculi teretes. Both these nerves receive filaments from the superior cervica ganglion of the sympathetic.

The occurrence of arthritis in the course of hemiplegia, a point t

[5] Foster's *Physiology*, 4th edition, p. 199.
[6] *Ibid.*, p. 209.
[7] Gaskell; *Journal of Physiology*, vol. iii, p. 18.
[8] Ziemssen's *Encyclop.*, vol. xvi, p. 241. London. 1877.

ıich I referred in my second lecture,[9] would at first sight appear tagonistic to a theory which ascribes the joint-symptoms to urotic changes in the medulla oblongata. But it only requires a tle reflection to show that it gives the strongest support to the eory. Following apoplexy, there is descending sclerosis of the eral columns, which proceeds slowly. When it shows itself in the edulla, irritation may be set up around the degenerating portion; d this, extending to the grey matter and anterior cornua, may set the arthritic symptoms which sometimes show themselves in from teen days to a month after the apoplectic seizure.

As regards megrim, Dr. Edward Liveing[10] writes: "There can be question, then, I think, as to the frequent connection of megrim, ıether in its blind, sick, or simply hemicranial forms, with a gouty ıthesis, and its occasional replacement by fits of regular gout." me years ago, I endeavoured to prove[11] that megrim was due to so-motor disturbance—to uncontrolled action, or, as I should now r, to stimulation of certain branches running from the superior vical ganglion of the sympathetic followed by exhaustion. Dr. ig, in a recent number of the *Practitioner*,[12] asks the question: May not excess of uric acid in the blood cause such vaso-motor irriion?" Certainly; and in persons who are subject to megrim, ose sympathetic ganglia have this sensitive constitution, the causes ich will lead to the formation of uric acid in the system, will, with erable certainty, develop an attack of this particular disorder.

Again, with regard to chorea: if the vaso-motor fibres proceeding m the upper cervical ganglion to form the carotid plexus have, ough prolonged stimulation, become exhausted or weakened, there uld be, as the result of that exhaustion, vascular dilatation and cumvascular change in the track of the middle cerebral artery. t there would also be nutritive changes in the nerve-cells of the ain, and exhaustion of their metabolic powers. We should, in fact, ve a similar condition produced to that of the submaxillary gland, en the chorda tympani is stimulated after the injection of atropine; d, as far as the nerve-cells are concerned, the same result would be oduced as ensues from embolism. Their co-ordinating action would paralysed in both cases, and such changes would produce the incolinated movements of chorea. Nor is it difficult to suppose that lden shock would give rise both to vaso-motor paralysis, and to inıition of the assimilating power of the nerve-cells. Dr. Dickinson made out very clearly that it is in the tract of the middle cerebral ery, and in the posterior and lateral parts of the grey matter, and the upper portions of the spinal cord, that vascular dilatation and cumvascular change take place both in chorea and diabetes; d I venture to suggest that they are induced in the manner I have licated.

Will the theory I have here advanced offer any explanation of the fting character of the rheumatic affection? My application of the ory is as follows. Vaso-motor centres are distributed throughout whole spinal axis. "They can be excited reflexly, but they are o controlled by the dominating centre in the medulla oblongata."[13] Now this general vaso-motor centre in the medulla oblongata is lly a complex composite centre, consisting of a number of closely gregated centres, each of which presides over a particular vascular a."[14] Some of the nerve-cells or some portions of this dominating tre may be more readily exhausted by the continued stimulation of irritant circulating in the blood than the others; and, after the elopment of the irritant (uric acid) in the system, it will, of rse, produce exhaustion, first in these particular cells and in the sidiary ganglia in connection with them, and so lead to dilatation the vascular area directly under their control. The other cells in dominating centre, and the subsidiary ganglia in connection with m, possessing a healthy tone, will be stimulated to action in the mal manner, and contraction will take place in the vascular areas nected with them. This action itself would have the effect of ving more blood to the paralysed vascular area, and intensifying symptoms there. But, with continued stimulation of these lthy centres, exhaustion will sooner or later be induced; further nulation increases the exhaustion, and then dilatation of the sels under their control will be induced; with this dilatation in a w area, the amount of blood in the parts primarily affected will be ened, and simultaneously will the symptoms which were associated h this increased blood-supply be modified or removed.

f at any time a joint has suffered injury in any way, this joint l be more sensitive than natural, perhaps more easily fatigued; and we can readily understand that this condition must be associated with some change in that part of the central nervous system which controls the nutrition and sensation in the joint; that this spot in the central nervous system will be more sensitive—more easily acted upon by irritating causes than other parts; that, by the irritation, the nerve-cells in the part will be more easily exhausted; and therefore, in rheumatic individuals, this particular joint will be the one first affected, and perhaps solely affected, in all attacks of rheumatism.

The following most interesting case, which recently came under my observation in Cambridge, illustrates, I think, very well the development of arthritic mischief from irritation of the central nervous system, the irritation being chiefly localised in the medulla oblongata, and affecting the vaso-motor centre.

J. W., aged 54, a labouring man, was working on a stack in the dusk of early morning on December 24th, 1885, when he fell, dropping about eight feet, on to his left side. He walked home, with pain and difficulty, a distance of over a mile; he went to bed, lay there drowsy and without appetite, very helpless, and only just able slowly to move his limbs. After remaining a week in this condition, he was carried into Addenbrooke's Hospital on December 31st, 1885, under Mr. Wherry, to whom I am indebted for an opportunity of seeing the patient, as well as for the notes of the case.

When admitted, he was drowsy and stupid, and answered questions in a dull manner when roused; cutaneous sensation seemed everywhere perfect; movements of the limbs were very slow, difficult, and painful; turning over in bed was a struggling, tedious process. The grip of the hands was very feeble, especially the right; no rigors, no sweats; no bladder symptoms. Bowels confined.

His health had always been good, and he was working daily up to the date of his accident.

January 1st, 1886. Some swelling of the left wrist and fingers, and both ankle-joints, with pain on movement, and tenderness; relieved by an opiate. Heart-sounds normal. Evening temperature, 101.6° Fahr.

January 2nd. Marked swelling and redness of left wrist-joint and of the joints of the first and second fingers, with œdema, and angry red appearance of the back of the wrist. Slight swelling also of the right wrist and finger-joints. It was extremely tender, and looked as if it would suppurate. Beads of sweat on left forehead; a few small herpetic vesicles are seen along the course of the left supra-orbital nerve; tears and secretion excessive in conjunctival sacs of left eye; pulse 80; considerable œdema of both ankles. Patient is drowsy, and sleeps, except when roused by pain. No general sweating; urine, acid. Bowels open by calomel. Evening temperature, 101.4°.

January 3rd. Redness and swelling in left wrist continues, as well as in both ankles; drowsiness and stupor; muco-pus in conjunctival sacs of left eyelids, not in the right. The knees usually drawn up in bed, of which movement he does not seem conscious; he can put them down by an effort. Morning temperature, 100.2°; evening, 101.8°.

By Dr. Latham's suggestion, he was cupped at the root of the neck behind, in two places, about two ounces of blood drawn; no relief that night. Evening temperature, 101.8°.

January 4th. He seemed better, and in less pain. Morning temperature, 100.2°; evening temperature, 101.6°.

January 5th. Less pain and tension in the joints; morning temperature, 99.2°. His manner still stupid and dull. Two cups were applied near the lower cervical vertebræ, and two near the lower dorsal vertebræ, and about four ounces of blood drawn. He was ordered to take at once five grains of calomel, and one grain of opium, and a black draught the following morning, if necessary. Evening temperature, 101°.

January 6th. Better. Morning temperature, 100°; wrists and ankles less swollen. Bowels open three times after the calomel. Evening temperature, 101°. Ordered tinct. opii ℥xx, at bedtime.

January 7th. Wrists and ankles better. Complains of pain in right knee, with some tenderness, but there is no swelling. Morning temperature, 100.4°; evening, 100.8°. Ordered four blisters, $1\frac{1}{2} \times 1\frac{1}{2}$, to four spots along the spine, to be kept open with savine ointment. Opiate to be taken every night.

January 9th. The right foot and ankle more painful and swelled. The other joints better. Morning temperature, 101.2°. Ordered a blister, 4×3 inches, over the lower dorsal vertebræ. Evening temperature, 101.8°.

January 10th. Feels better; has had a good night, has no longer the dull stupid manner, mind clear; was ordered tinct. opii ℥x three times a day; the blister to be kept open with savine ointment.

From this time, continuous improvement took place. The evening and morning temperatures fell daily until the 19th, when the evening

[9] British Medical Journal, April 10th, page 676.
[10] *On Megrim and Sick-headache*, 1873, pp. 404-5.
[11] *On Nervous or Sick-headache*, Cambridge, 1873.
[12] March, 1866, p. 181.
[13] Landois and Stirling's *Physiology*, London, 1885, p. 854.
[14] *Ibid.*, p. 898.

temperature reached the normal point, and the blistered surfaces were allowed to heal.

There was some œdema about the affected joints after the redness and pain had passed away, but this entirely disappeared by the 23rd. There was still at this date a little tenderness and thickening about the left wrist. The unilateral sweating of the face was noticed from time to time.

February 2nd. The patient's condition much improved. Is sitting up. Has lost all pain, except now and then in left wrist. There is some thickening and stiffness about the joints which were affected, and his grip is still weak, though very much stronger than before.

Dr. Dyce Duckworth, in an extremely suggestive and able essay,[15] contends that gout is a primary neurosis, and that the portion of the nervous system specially involved is situated in some part of the medulla oblongata. I hope that what I have advanced will tend not only to confirm this view, but also—to use the words of Sydenham, which he quotes—to clear up and explain some of "the difficulties and refinements of the disease itself."

Having indicated the way in which the symptoms of rheumatism and gout may be produced, let me now appeal to clinical experience, and show how far the results obtained from the practical treatment of these disorders supports the view I have here advanced as to their pathology.

If uric acid is the poison, the treatment for both diseases resolves itself into this: to prevent the formation of this substance, and, when formed, to promote its elimination from the system. The kidneys will in time effect the latter if we satisfy the first condition, and we may do this by seizing upon or eliminating the glycocine from the system; for, as this is an essential constituent of uric acid, by removing it we prevent the further formation of that body, and so remove the irritating substance by which the action of the central nervous system is perverted.

In gout, this may be effected, in some measure, by benzoic acid. When benzoic acid is swallowed or introduced into the alimentary canal of a mammal, whether herbivorous or omnivorous, it appears in the urine as hippuric acid, $C_9H_9NO_3$. The urine of adult herbivorous mammals contains no uric acid, this substance being replaced by hippuric acid, which varies in quantity both according to the food of the animal, and according to the amount of work or exercise it has taken. Hippuric acid is also found, though in much smaller quantity, under normal circumstances, in human urine. Now hippuric acid may be decomposed, by boiling it with strong hydrochloric acid, into benzoic acid and glycocine.[16]

$$CH_2\begin{cases}NH\,.\,C_7H_6O\\COOH\end{cases} + H_2O = C_6H_5\,.\,COOH + CH_2(NH_2)COOH$$

hippuric acid — benzoic acid — glycocine

This action may be reversed; and, by heating benzoic acid and glycocine in a sealed tube to 160° C., hippuric acid is formed.[17] It may also be formed by injecting benzoic acid and glycocine, or bile, into the blood of a living animal.

According to Kühne and Hallwachs[18], benzoic acid, injected alone into the jugular vein, is not converted into hippuric acid, but it is if injected into the portal vein. Meissner and Shepard,[19] however, state that, after injecting benzoic acid into the jugular vein of a rabbit, at first benzoic acid alone appeared in the urine, then more and more hippuric acid, and lastly hippuric acid alone. These experimenters maintain that hippuric acid is formed in the kidneys alone; but benzoic acid appearing first alone in the urine in the above experiment would hardly bear out that view, and Salomon,[20] after introducing benzoic acid into the stomach of a nephrotomised rabbit, obtained a decided amount of hippuric acid from the muscles, liver, and blood. Again, when benzoic acid is injected into the portal vein of some animals at least, it appears as hippuric acid in the hepatic vein.[21] Hippuric acid also appears in the urine, when benzoic acid is swallowed or introduced into the alimentary canal. Here it meets with the glycocine in the bile; and, as they pass into the liver, these are conjugated with elimination of water, forming hippuric acid.

$$C_6H_4\begin{cases}H\\COOH\end{cases} + CH_2\begin{cases}NH_2\\COOH\end{cases} = C_6H_4\begin{cases}H\\CO\,.\,NH-CH_2-COOH\end{cases} + H_2O.$$

benzoic acid — glycocine — hippuric acid.

The molecule CO . NH, when the substance forms part of the tissu is transformed[22] into CNOH, and then living hippuric acid would represented by the formula

$$C_6H_4\begin{cases}H\\CNOH\end{cases}\qquad CH_2\begin{cases}\\COOH\end{cases}$$

having a constitution of the same character as that of the molecu of living albumen. But benzoic acid, after passing through the liv may be transformed in the tissues in two ways, into hippuric aci either by being conjugated there with glycocine, or combining wi the antecedent of glycocine.

In my previous lecture, I endeavoured to show that this antecede of glycocine is methene cyan-alcohol $CH_2\begin{cases}OH\\CN\end{cases}$, which, acted up by acids, would form glycollic acid; but, if first treated with ammon forms a cyan-amide, and then, hydrated with acids or alkalis, for glycocine.[23]

When this substance and benzoic acid, therefore, are brought gether in the tissues we should have

$$CH_2\begin{cases}OH\\CN\end{cases} + C_6H_4\begin{cases}H\\COOH\end{cases} + 2H_2O = CH_6\begin{cases}OH\\COOH\end{cases} + C_6H_4\begin{cases}H\\COO\,.\,NH_4\end{cases}$$

methene cyan-alcohol — benzoic acid — glycollic acid — ammonium benzoate

the latter of which, when dehydrated, being converted into ben nitrile,[24] this becomes

$$CH_2\begin{cases}OH\\COOH\end{cases} + C_6H_4\begin{cases}H\\CN\end{cases} + {}_2H_2O = C_6H_4\begin{cases}H\\CNOH\end{cases} + 2H_2O$$

$$CH_2\begin{cases}\\COOH\end{cases}$$

glycollic acid — benzonitrile — hippuric acid[25]

the formula which I have just shown to be that for living hippur acid.

It is in this way that benzoic acid acts. It seizes upon the glyc cine or its antecedent, and so prevents the formation of uric acid; passes out in the urine as hippuric acid, and gouty patients undoub edly derive benefit from its use. Dr. Golding Bird prescribed it conjunction with phosphate and carbonate of soda, with cinnam water, as a vehicle in gout. Dr. Garrod says, "I can confident affirm that I have already obtained great advantage in the treatme of these diseases (gout and gravel) from the employment of the be zoates."[26] Doubt has been expressed whether the benzoates diminish the uric acid excretion or not. Cook[27] states that in healthy individual the administration of benzoic acid does not st the formation of the normal amount of uric acid, but masks its pr sence in the urine and interferes with the murexide test. The lat experiments of Dr. Noel Paton,[28] however, clearly demonstrate "th benzoate of soda really does diminish the uric acid secretion." an abnormal state of things, when there is an excessive amount

[15] *Brain*, vol. iii, 1880, pp. 1-22.

[16] Watt's *Dict. of Chem.*, vol. iii, 1865, p. 158.

[17] *Ibid.*, p. 156.

[18] *Jahresb.*, 1859, S. 638.

[19] Meissner and Shepard, *Untersuchungen über das Entstehen der Hippursäure.* Hannover, 1866.

[20] W. Salomon, *Zeitschr. für phys. Chemie.*, S. 365, 1879.

[21] Foster's *Physiology*, 4th edition, 1883, p. 441.

[22] *See* BRITISH MEDICAL JOURNAL, April 3rd, page 632.

[23] *See* page 633.

[24] Watt's *Dict. of Chem.* vol. i, p. 563.

[25] Glycollic acid and benzonitrile can, in the laboratory, be transformed in hippuric acid, by converting the benzonitrile in benzoic acid and ammonia, th combining with the glycollic acid to form ammonium glycollate, which, wh heated, is transformed into glycocine; and then, on combining this with benzo acid, hippuric acid is formed in the usua way.

[26] *Lancet*, April, 1883, p. 673.

[27] BRITISH MEDICAL JOURNAL, July 7th, 1883, p. 9.

[28] *Journal of Anatomy and Physiology*, January 1886, pp. 26—32.

cocine passing unchanged into the blood, the benzoic acid seizes
n this and converts it into hippuric acid; and so, if glycocine be
essary for the formation of uric acid, the amount of the latter must
correspondingly lessened. The remedy, however, must be given
sufficiently large doses, doses large enough to absorb all the glyco-
e, and then it may not only prevent the further formation of uric
l, but, as Cook's experiments show, it may render the uric acid
ady existing in the blood more soluble, and therefore more readily
minated by the kidneys.

alicylic acid, or oxybenzoic acid $C_6H_4\begin{cases}OH\\COOH\end{cases}$ is another
edy which acts like benzoic acid, and this also has been found by
Noel Paton[29] to diminish the excretion of uric acid. When ad-
ministered internally, it passes off by the urine as salicyluric acid—
t is, it combines, in its passage through the system, either with
ocine or its antecedent, for, on treating salicyluric acid with
ing hydrochloric acid, it is resolved into salicylic acid and
cocine.

$$C_6H_4\begin{cases}OH\\CO\,.\,NH-CH_2-COOH\end{cases}+H_2O=C_6H_4\begin{cases}HO\\COOH\end{cases}+CH_2\begin{cases}NH_2\\COOH\end{cases}$$

salicyluric acid — salicylic acid — glycocine.

sequently, in the system, by seizing either upon glycocine or its
ecedent, salicylic acid takes away an essential constituent of uric
l, and so prevents the formation of this body.
s the salicyluric acid passes into the living system, the CO . NH
ld be transformed into CNOH, and the above formula for salicy-
c acid would become

$$C_6H_4\begin{cases}OH\\CNOH\end{cases}\qquad CH^2\begin{cases}\\COOH\end{cases}$$

salicyluric acid

if salicylic acid combine with methene cyan-alcohol, the ante-
nt of glycocine in the tissues, it would then undergo similar
nges to those I have described for benzoic acid.

$$C_6H_4\begin{cases}OH\\COOH\end{cases}+CH_2\begin{cases}OH\\CN\end{cases}=\begin{matrix}C_6H_4\begin{cases}OH\\CNOH\end{cases}\\CH_2\begin{cases}\\COOH\end{cases}\end{matrix}$$

salicylic acid — methene cyan-alcohol — salicyluric acid

n gout, uncomplicated with contracted kidney or albuminuria,[30]
ylic acid is often of service.[31] But it is in acute rheumatism
it shows its special power, acting truly, when properly adminis-
d, as a distinct specific. Here is a disorder which, under different
tment, may exist for weeks stationary, so to speak, in its in-
ity, the great heat and nervous and vascular excitement, and pain
swelling exactly of the same amount to-day as they were weeks
; a disorder which, less than fifty years ago, was said to be
ten such in itself, and such in its appalling incidents, as to need,
a time to time, that medicine should put forth the full compass of
its powers. Every organ, or system of organs, which either
ctly or indirectly can receive the impression of remedies, are,
a time to time, called to bear all that they can possibly endure;
it is often only when the powers of medicine are pressed even to
verge of destroying life that life is saved."[32]
nd now, with or without the administration of a purgative, as
occasion requires, the patient is placed fully under the influence
alicylic acid, and in from forty to sixty hours, not unfrequently
shorter time, the pains in the joints have subsided, the limbs
be freely moved, and the bodily temperature has reached the
mal condition. But more than this—and here the remedy shows
signal power—in no case of rheumatism that has come under my
during the last six years, either in hospital or in private practice,
there been developed, where the heart was previously sound, any
liac complication, such as endocarditis or pericarditis. If this
can be maintained and ensured, we have, indeed, in our hands, a
most potent remedy. Cardiac complications constitute the chief
danger of acute rheumatism, and the danger, if the disease is taken
in hand soon enough, may, with our new remedy, be averted.

But certain conditions must be observed to ensure success in the
administration of the remedy. They are as follow.

First, the true salicylic acid obtained from the vegetable kingdom
must alone be employed. If you have to give large doses, avoid giving
the artificial product obtained from carbolic acid, however much it may
have been dialysed and purified. An impure acid will very quickly
produce symptoms closely resembling delirium tremens.

Secondly, give the acid without any alkali or base. A very good
form is to mix 100 grains with 15 of acacia powder and a little
mucilage. Allow the mass to stand and harden, and then divide into
thirty pills.

Thirdly, place the patient fully under the influence of the drug—
that is, let him have sufficient to produce cerebral disturbance—that
is, buzzing in the ears or headache, or slight deafness; with the de-
velopment of these symproms, the temperature and the pain in the
joints will begin to decline. To an adult, I generally administer three
doses of 20 grains (six pills), at intervals of an hour, and, if the head
remain unaffected, a fourth dose at the end of another hour; and then
repeat the 20 grains every four hours, until the physiological effect of
the remedy shows itself. In the majority of cases, from 80 to 100
grains are enough. In severe cases, 140 to 150 may be required.
Afterwards, about 80 grains a day are sufficient; and, as the tempera-
ture declines, smaller quantities will develop their physiological effects,
60 or even 50 grains being then sufficient to produce cerebral disturb-
ance. It would appear that, as long as the rheumatic poison is circu-
lating in the system, the physiological effect—that is, the effect it pro-
duces in the healthy organism—does not show itself; acting as an
antidote, the greater the amount of poison, the larger must be the dose
of the remedy; but, as soon as the formation of the *materies morbi* is
stopped, then the excess of the remedy acts as it would in the healthy
organism, and its peculiar physiological effects are developed. It is a
very striking illustration of the difference between the therapeutic effect
of a remedy and its physiological action.

Fourthly, give the patient from 40 to 80 grains daily for ten days,
after all pain and pyrexia have passed away.

Fifthly, let the patient's diet consist entirely of milk and farinaceous
food for at least a week after the evening temperature has been normal.
On the other hand, if the patient have meat and soup, you may look
forward with fair probability to a relapse.

Sixthly, take care to maintain a daily and complete action of the
bowels. Calomel is the best purgative, from 2 to 5 grains at night,
followed in the morning, if necessary, with a saline draught. This is
the most important adjuvant to the action of salicylic acid, and I will
presently explain to you why this is the case.

Seventhly, let the patient be enveloped in a light blanket, and
with no more bedclothes than are sufficient to keep him from feeling
cold. The object of the treatment now is to cool the patient—not, as
in former times, to sweat the poison out of him; and the cooler
he is kept, the sooner will the temperature be lowered. In fever,
increased heat increases the metabolism, just as in a cold-blooded
animal.[33]

These are the seven rules upon which I act. I have given the true
salicylic acid, where there have been both aortic and mitral mischief;
and I have also given it in rheumatism complicated with pericarditis,
and, as yet, I have seen no bad result from it. Of course, in cases of
pericarditis, accompanied with delirium, the use of the remedy requires
caution; you cannot tell when the system is saturated with the remedy,
and you must therefore trust to smaller doses and other means for
controlling the disease. Further, if pericarditis or endocarditis, pneu-
monia, or pleurisy, have been developed, the remedy is powerless over
the mischief which is done; it will neutralise the poison producing
the mischief, so as to stop its extension; but the inflammatory exuda-
tions will undergo their usual changes, unabbreviated in their course.
We see the same thing in tonsillitis. Given early enough, salicylic
acid will stop the mischief; but, if exudation of lymph have taken
place, salicylic acid is powerless to cause its absorption.

There is another important point to be noticed here. In my
first lecture I showed that, from condensation of two molecules of
$CH_2\begin{cases}OH\\CN\end{cases}$, lactic acid and carbonic acid could be formed.[34] By
seizing, therefore, upon this antecedent of glycocine, salicylic acid
lessens the formation both of uric acid and of lactic acid.

During the administration of even large doses of salicylic acid in

Loc. cit., p. 25.
Paton's experiments show "that this drug has really an irritating action on
kidneys," *loc. cit.*, p. 25.
See Dr. Dyce Duckworth's remarks on the use of salicylate of soda in gout.
-Book of Treatment for 1884, p. 81.
Dr. P. M. Latham's *Works*, New Sydenham Society, vol. i, p. 112.

[33] Stirling and Landois, *Physiology*, page 451.
[34] See BRITISH MEDICAL JOURNAL, April 3rd, page 635.

rheumatism, a certain amount of uric acid is still sometimes excreted by the kidneys. How is this to be explained?

As the molecular constituents of albumen fall asunder, the molecule $CH_2\begin{cases}CNOH\\CNOH\end{cases}$ may become detached, and, as it passes from the living tissue, the CNOH would be transformed into CO – NH, consequently the above molecule would be converted into hydantoin $CH_2\begin{cases}CO-NH\\ \quad\ |\\NH-CO\end{cases}$ which, having little affinity for salicylic acid, would pass on to the glands, and, conjugated with urea or biuret, pass out of the system as uric acid.

I have referred to the necessity of keeping up daily and sufficient action of the bowels. The benefits resulting generally, in rheumatism, from the so-called purgative plan of treatment, have always been recognised by the older physicians as striking and satisfactory. By the judicious use of cholagogue purgatives, we eliminate the bile from the intestines, and so remove from the system a quantity of glycocine, which, if re-absorbed, would lead to the consequent formation of uric acid. Calomel is unquestionably of service here. Doubts may exist as to whether it promotes the flow of bile from the liver, or not; but when the bile gets into the intestine, calomel will cause its evacuation. "The conclusion seems inevitable, that mercurial purgatives given to healthy persons cause the escape of large quantities of bile from the alimentary canal."[35] Referring to the three modes of treatment—by venæsection, by opium, and by purgatives—which were in vogue at the time, Dr. P. M. Latham says, with regard to the last: "As this plan of treatment works prosperously day after day in its immediate effects, so day after day it gives an earnest of the remedial impression it is exercising upon the whole disease. It abates the fever, it softens the pulse, it reduces the swelling, and it lessens the pain. In short, in subdues the vascular system like a bleeding, and pacifies the nervous system like an opiate; and often, in the course of a week, the acute rheumatism is gone. In three days, there is often a signal mitigation of all the symptoms; and in a week I have often seen patients, who have been carried helpless into the hospital, and shrieking at the least jar or touch or movement of their limbs, risen from their beds, and walking about the ward quite free from pain.

"Of this plan, often so striking in its operation, and often so satisfactory in its results, I have some further remarks to make. It is called the purgative plan; yet its purpose is achieved by calomel and purgatives conjointly. The purgatives would not answer the end without the calomel; of that I am quite certain; neither would the calomel answer without the purgatives, unless it produced of itself ample evacuations from the bowels. It is probable, in short, that the remedial efficacy of the plan resides essentially in the calomel; in calomel, however, not as mercury, but as itself—calomel. If the specific effect of mercury—salivation—arise, it is not only beside our purpose, and against our wish, but it begets a serious hindrance to the use of calomel in sufficient quantity for the end in view. Thus the whole plan is frustrated. Having begun one plan of treatment, we are obliged to take up with another. Time is lost, the case is perplexed, the disease is prolonged, and the patient perhaps injured."

* * * * * * *

"Now, if in the treatment of acute rheumatism, you were to choose one indication and abide by it, and were to trust one class of remedies, and to it only, you will find more cases that admit of a readier cure by the method now described, than by either of the two former. You would find the aggregate of morbid actions and sufferings, which constitute the disease, more surely reached and counteracted, and more quickly abolished by medicines operating upon the abdominal viscera only, than by those which influence either the blood-vessels only, or the nerves only. You would find in calomel and purgatives, a better remedy than either venæsection or in opium."[36]

In the earlier attacks of gout, too, I have often seen marked relief follow the administration of calomel and a saline cathartic. Where there is high arterial tension, as in the gouty paroxysm, this may be distinctly lowered by these remedies. They check the further formation of uric acid, which is stimulating the vasomotor centre, and causing the increased arterial tension, by eliminating the bile from the intestines. In some persons, calomel has a depressing effect, and, when the kidneys are unsound, is injurious in its action. Where calomel is inadmissible, a gentle laxative, such as rhubarb, is often of service. When the object is simply to unload the bowels in a debilitated subject, it is the best purgative. It is said to act chiefly by increasing the peristaltic action of the bowels throughout their entire extent, but especially that of the duodenum. According to Ruth[illegible] ford, it is a cholagogue. Sir Henry Halford recommended, as prophylactic remedy against gout, a few grains of rhubarb, wi[illegible] double the quantity of magnesia every day; or some light, bitter i[illegible] infusion, with tincture of rhubarb, and about fifteen grains of bicarb[illegible] nate of potash.

The saline cathartics probably act only by causing serous evacu[illegible] tions, and, in that way, carry off from the blood some of the pois[illegible] contained in it. They may also act beneficially, perhaps, by relievi[illegible] a congested liver.

The diet is another important point to be attended to in the trea[illegible] ment both of gout and of rheumatism. It should be simple a[illegible] nutritious; jellies and food containing gelatine should be avoided, this substance furnishes glycocine. Animal food will not, itself, pr[illegible] duce uric acid in a healthy system, as is shown in its absence in t[illegible] urine of the carnivora; but from all kinds of meat a certain amount glycocine will be produced, and, even if all the rest of the nitrogeno[illegible] portion, after being absorbed into the system, were converted in[illegible] urea, this would necessitate an increased elimination of urea, and co[illegible] sequently a greater tax on the powers of the kidneys. If these powe[illegible] be weakened, there will be, with an increased call upon the organ[illegible] less power to act; and not only will the urea, but, still more, t[illegible] uric acid, accumulate in the blood. The striking benefit and increas[illegible] urinary secretion, which result in some forms of albuminuria from[illegible] skimmed-milk diet, that is, the simplest of all diets, very well illu[illegible] trate what I mean here. The presence of urea in the blood may, i[illegible] its action on the nerve-centres, determine an increased blood-supp[illegible] to the kidneys, and so, in a healthy state of things, an increased secr[illegible] tion; but, if the secretory portion be damaged, or the nerve-force co[illegible] trolling it defective, an increased flow of blood to the part, producin[illegible] a congested condition of the organ, would not expedite, it wou[illegible] rather hinder, the work of the secretory portion. The simpler t[illegible] diet, then, the less tax there will be upon the kidneys, and the bett[illegible] they will do their work. Let the diet, then, be chiefly farinaceou[illegible] with just sufficient nitrogenous food to satisfy the wants of the sy[illegible] tem; and, in the acute attacks, let that be in the form of milk, dilut[illegible] even, if necessary.

The explanation which I have here offered of the symptoms of gouty paroxysm, helps us to understand the beneficial action of colch[illegible] cum in this disorder. According to Dr. Lauder Brunton,[37] this dru[illegible] paralyses the sensory nerves, the motor nerves and muscles bein[illegible] unaffected. It seems to act best when the bowels are previously acte[illegible] upon. If in gout, then, uric acid during the paroxysm be stimul[illegible] ting the sensory nerves, and, through them, the more active portio[illegible] of the vaso-motor centre, and we paralyse the sensory nerves wit[illegible] colchicum, the uric acid no longer produces its effect, and th[illegible] paroxysm ceases; but colchicum has no effect in preventing the form[illegible] tion of uric acid, and, after the paroxysm, we must endeavour to pr[illegible] vent its recurrence, by putting a stop to the formation of the poiso[illegible] which we may effect by eliminating the bile from the intestines b[illegible] mercurial or other purgatives, by giving benzoic or salicylic acid, an[illegible] by suitable diet. In large doses colchicum will cause purging, bu[illegible] marked symptoms of collapse supervene, so that it is not safe t[illegible] administer the remedy in this way.

It remains for me to say a very few words with regard to th[illegible] pathology of diabetes, and to explain why I have classed it togethe[illegible] with gout and rheumatism. If the function of the liver be interfere[illegible] with, so that there is imperfect metabolism of glucose as it passe[illegible] through the organ, this would be a satisfactory explanation of th[illegible] origin of the disease, and we should expect in such cases that th[illegible] urgency of some of the symptoms would be lessened by careful die[illegible] abstention from saccharine and starchy food. But there are othe[illegible] cases in which the diet seems to have much less effect in controllin[illegible] the symptoms; it is this form that I wish briefly to discuss.

I have endeavoured to show that in acute rheumatism, by th[illegible] separation of the cyan-alcohols $CH_2\begin{cases}OH\\CN\end{cases}$ and $C_2H_4\begin{cases}OH\\CN\end{cases}$ from the res[illegible] of the albuminous chain, we have glycocine, and glycollic and lacti[illegible] acids formed; the glycollic acid being oxidised into CO_2 and wate[illegible] the lactic acid, in some measure, being oxidised into these products[illegible] and in some measure passing off by the skin. But suppose that[illegible] whilst the vaso-motor fibres of the muscular nerve are paralysed an[illegible] the vessels dilated, the molecules $CH_2\begin{cases}OH\\CN\end{cases}$ are detached and hydrate[illegible] into glycollic acid, but only partially oxidised, the result would b[illegible] that the glycollic acid would be transformed into carbonic acid an[illegible] methyl aldehyde and water.

[35] H. C. Wood, junr., *Treatise on Therapeutics*, 2nd ed., 1877, p. 435

[36] Dr. P. M. Latham's *Works*. New Syden. Soc., vol. i, p. 123, 124.

[37] *Pharmacology*, 1885, pp. 968-9.

$$CH_2\begin{cases}OH\\COOH\end{cases} + O = CO_2 + H.CHO + H_2O$$

glycollic acid — menthyl aldehyde

ndensation of six molecules of the aldehyde may then take place, in plants, forming glucose

$$6H.CHO = C_6H_{12}O_6$$

methyl aldehyde — glucose.

urari, as I have already stated, we can put a stop to muscular con-ction, that is, to the oxidation of the muscular elements and to mation of CO_2 when the muscular nerve is stimulated. If then the sue be, so to speak, partially urarised, the aldehyde is not oxidised, t condenses into glucose. In urari poisoning, sugar appears in the ne, though "the exact way in which this form of diabetes is brought out has not yet been clearly made out."[38]

Let me carry you one step further in the comparison between eumatic fever and diabetes. If in rheumatic fever the central rt of the nervous system connected with the muscular nerves so enfeebled that there is complete dilatation of the vessels the muscular area, and a falling asunder not only of the lecules $CH_2\begin{cases}OH\\CN\end{cases}$, but also of the molecules $C_2H_4\begin{cases}OH\\CN\end{cases}$ $C_3H_6\begin{cases}OH\\CN\end{cases}$ then, by the hydration and oxidisation of these, perpyrexia would, in some measure as I have suggested, be veloped. But if the complete oxidation of these molecules were erfered with, the $CH_2\begin{cases}OH\\CN\end{cases}$ would give rise in the manner ve indicated to glucose. By hydration, $C_2H_4\begin{cases}OH\\CN\end{cases}$ would be con-ted into lactic acid, which, if not completely oxidised into bonic acid and water, would be first oxidised into carbonic acid l aldehyde.

$$C_2H_4\begin{cases}OH\\COOH\end{cases} + O = CH_3.CHO + CO_2 + H_2O$$

lactic acid. — aldehyde.

aldehyde by condensation forming para-aldehyde, a remedy re-tly introduced as a hypnotic. Hence the commencing drowsiness some stages of diabetes.

f the molecules fall still more completely asunder, and the mole-e $C_3H_6\begin{cases}OH\\CN\end{cases}$ become detached and hydrated into oxybutyric acid, only partially oxidised, then from one form of this acid, acetone uld be formed

$$C_3H_6\begin{cases}OH\\COOH\end{cases} + O = CO_2 + H_2O + CO(CH_3)_2$$

oxyisobutyric acid — acetone

ich appears in the urine towards the termination of the disease. then, in hyperpyrexia, there is detachment of the molecules from benzene nucleus, with their hydration and rapid oxidation; reas, in acetonæmia, there are detachment and hydration, but im-fect oxidation of the molecules. That is to say (if this theory is rect, and such experiments were possible), by urarising an indi-ual suffering from rheumatism with pyrexia, the urine would be-ne saccharine; if hyperpyrexia were present, by urari the disorder uld be transformed into acetonæmia.

Now, you will find that, in some forms of diabetes, salicylic acid f the greatest service; whereas, in others, no good results from use.

Given in doses of from ten to twenty grains three times a day, I e frequently seen it produce marked improvement; and Dr. den, of Sudbury, has shown me notes of cases, about to be pub-ed, where rapid amelioration of the symptoms has resulted from ase.

he urine in these cases contains often, in addition to glucose, an ss of uric acid, and the patients suffer from neuralgic pains in the ts and limbs. It also, not unfrequently, contains some substance ch dissolves cuprous oxide, and so more or less interferes with the lication of Fehling's test. What this is, has not yet been deter-ed. My friend, Mr. Pattison Muir, kindly examined some speci-ns, and made out that it is some substance which readily dissolves ic phosphate. Possibly it may be glycollic or lactic acid. If her examination should prove this to be the case, it would go a way to support my view of the origin of this form of diabetes.

[38] Foster's *Physiology*, 4th edition, p. 425.

I have thus endeavoured to indicate some of the changes in the nervous system, the blood, and the tissues, which may take place in diabetes, rheumatism, and gout, and to enlarge upon the text furnished by a far-seeing pathologist,[39] when he wrote: "Disturbance in the nervous system, in some part and form, may be regarded as a factor in every case of gout. There are reasons enough for thinking that changes in the nervous centre determine the locality of each gouty process, while changes in the blood and tissues determine its method and effects; and that thus we may explain the symmetries of disease in gout—sometimes bilateral, sometimes antero-posterior—and thus it metastases."

My task is done. It only remains for me to thank you, Mr. President, and the Censors, for giving me an opportunity of placing my views before the College; and to thank the distinguished Fellows and Members who have listened to me. I have brought together a number of facts, and endeavoured to draw certain inferences from them. The inferences may be wrong, but the facts remain; and I trust that in this way, at least, I may have helped to a better understanding of these disorders.

ON THE DIFFERENTIAL DIAGNOSIS OF DISTENSION OF THE FALLOPIAN TUBES.

By JOHN W. TAYLOR, F.R.C.S.,
Out-Patient Surgeon to the Birmingham and Midland Hospital for Women.

THE title of Dr. Horrock's paper "A Pelvic Tumour," seemed to invite friendly suggestion or criticism. But the further consideration of a particular case, the exact nature of which may probably never admit of absolute proof, will be unprofitable: while the broad question of the differential diagnosis of a distended Fallopian tube from uterine myoma is an important one, and its discussion may be eminently profitable.

And because I do not quite agree with Dr. Horrocks in the leading features of this differential diagnosis, I desire to point out what, in my experience, are the chief marks of similarity and difference between the two diseases.

1. Menorrhagia may be common to both diseases, but in uterine myoma it is painless, in tubal disease it is very painful.

2. Moderate enlargement of the uterus (from 3 to 3½ inches) is present in tubal distension accompanied by hæmorrhage (as in most cases where metrorrhagia is a prominent symptom); an enlargement beyond this may generally be expected in myoma.

3. The tumour formed by distension of the Fallopian tube is always single or double, and is always posterior to the uterus; nodular myoma is usually multiple, and the situation of the outgrowths variable.

4. The tumour formed by a distended tube, even when chronic and quiescent, is always very tender to touch, whether that touch be from the examining finger of the surgeon, or from the passage of scybala through the rectum; a myomatous nodule, unless inflamed, is comparatively insensitive. Probably, for a similar reason, dyspareunia is a very general symptom of tubal disease, but is almost unknown in myoma.

5. The outline or shape of a distended tube is fairly constant, in possessing a longer and a shorter axis; that of nodular myoma is round or quite irregular.

6. The tumour caused by a distended tube varies in its firmness or consistency, and at some time or other will show signs of elasticity or fluctuation; that of nodular myoma remains hard.

7. Both a distended tube and myoma of the posterior uterine wall may sink lower in the pelvis by causing retroflexion of the uterus; but, apart from this, the former, although adherent, tends to sink slowly by its own weight; the latter reaches a lower point only by increased growth.

8. When pregnancy occurs, the uterine enlargement being caused chiefly by the development of the muscular tissue of the uterus, a myoma of this tissue will be much more likely to be raised by the growing uterus than a distended tube, which is only adherent, and often but lightly, to its peritoneal investment.

In the case referred to in my paper of March 20th, the tube has remained in its original position during the progress of the pregnancy.

The only other condition that is likely to be confounded with distension of the Fallopian tube is cyst or abscess of the ovary. A special form of cystic disease of the ovary is often, perhaps generally, combined with occlusion and distension of the tubes; and if the latter

[39] Sir James Paget, *Clinical Lectures and Essays*, 1879, p. 382.

be correctly diagnosed in these cases, this is sufficient for every practical purpose. But ovarian abscess or cystoma of the ovary in an early stage, the associated tube remaining normal, needs rather careful differential diagnosis from a distended tube. I have found the chief point of difference to be this; that, in cyst or abscess of the ovary, a space can be found between the tumour and the uterus unoccupied by any swelling; in distension of the Fallopian tube, the tumour is continuous with the uterus. By this means I have on two or three occasions diagnosed a cystic condition of the ovary only, when tubal disease has been expected: a diagnosis which has been confirmed by operation.

THE IMMEDIATE REDUCTION OF DEFORMITIES.

By NOBLE SMITH, F.R.C.S.Ed.,
Surgeon to All Saints' Children's Hospital.

In the JOURNAL of April 10th, reference is made to experiments lately performed, as proving that "the rapid method of treatment of orthopædic deformities" will be followed by good results. I am able to verify the fact, inasmuch as I have adopted this plan of treatment, in operating upon patients for the last five years, and have, upon several occasions, advocated the complete, or nearly complete, restoration of the parts to their normal position, directly after subcutaneous tenotomy.

This plan not only simplifies the after-treatment, to an immense extent, but the results are more satisfactory. For instance, I have not met with a single case of relapse, a result which not unfrequently occurs when the usual plan of allowing the tendon to unite, while the parts remain in the deformed, or nearly deformed, position is followed. The apparatus for after-treatment, in cases thus dealt with, need not be so complicated or expensive as is usually thought requisite, and, in most cases of wryneck, no apparatus whatever, except a stiff collar, is required.

Caution, however, is necessary that actual union is obtained. Care must be taken not to apply too much pressure upon the place of separation, and the tendon must be examined from time to time, and the parts brought nearer together, if the separation seem too wide. This supervision cannot take place when plaster-of-Paris bandage is used, and I have seen disastrous results from thus fixing the foot in the natural position, after tenotomy for talipes equinus. Severe talipes calcaneus resulted from excessive lengthening of the tendo Achillis. There need be no fear of such an unfortunate effect, if moveable splints be used, and the progress carefully watched.

This plan of immediate reduction of deformity, after tenotomy, is surely deserving of much greater attention than it has at present received. The results are excellent, and, in cases of club-foot and wryneck, the tediousness of after-treatment is very materially lessened, or entirely removed.

A CASE OF IMPERFECT ABORTION: SAPRÆMIA: RECOVERY.

By W. S. A. GRIFFITH, M.B., F.R.C.S.,
Physician to Out-patients at the Samaritan Hospital; Obstetric Tutor, St. Bartholomew's Hospital.

The following case illustrates the dangers of imperfect abortion, and the satisfactory results to be obtained when the usual method of treatment is thoroughly carried out.

M. A., aged 45, the mother of thirteen children, the last five years old, came to the out-patient room at the Samaritan Hospital, complaining that she had not been well since her last miscarriage, twelve months previously; since then, she had suffered from profuse menorrhagia, and, for the last two months, a continuous bloody discharge, now fœtid, with bearing-down pains, which had obliged her to give up work, much against her will.

On vaginal examination, the uterus was found much enlarged, retroflexed, and the cavity so open as easily to admit a finger to the fundus. The cavity was occupied by blood-clot and a mass of decidua, which was adherent only to the anterior wall and the fundus. The hæmorrhage after this examination was so considerable, that it was determined to remove the mass immediately; and, without much difficulty, this was done, the anterior lip of the cervix being seized by a vulsellum-forceps. The uterus was then gently irrigated with hot water, to which a little tincture of iodine was added, and the patient sent to the ward at the Dorset House branch.

Two hours later, the patient, who had had rigors, was found to have a temperature of 105°, and a large-volumed pulse of 128; the sk was very hot, and she complained of intense thirst.

The uterus was still patulous, and contained blood-clot, whic with two minute fragments of decidua, was removed; the uterus w again thoroughly irrigated, and a tampon of wool, smeared with iod form and eucalyptus-vaseline, inserted into it. Six grains of quini were given; and a draught containing a drachm of the liquid extract ergot, and two grains of quinine, was ordered to be given twice that eve ing, and three times a day afterwards. Two hours later, the temperat had fallen to 102°, and, an hour after, to 101°, and the pulse to 10 she was sweating profusely, and was much more comfortable.

The following morning the temperature was 99°, and the pulse 8 the tampon was removed from the uterus, and another inserted in the vagina.

From this time, convalescence proceeded uninterruptedly, and inv lution of the uterus, which had been delayed for twelve month rapidly took place; the uterus became rigid, and was no longer retr flexed, and, on the fourth day, its cavity measured barely thr inches. There was no hæmorrhage after the uterus was once co pletely emptied.

The rapidity with which involution took place precludes the p babability of there having been any chronic metritis set up by the p longed retention of decidua; and, except at the seat of attachment, t mucous membrane of the uterus appeared to be natural, and free fro inflammation.

Sapræmia is believed to be a septic condition produced by the a sorption of septic material, which, unlike that causing septicæmia pyæmia, has no power of growth and propagation in the blood, an therefore, produces effects only in proportion to its amount; and whe as in this case, its source is easily within reach, and the sep matter can be readily and completely removed, it is most amena to antiseptic treatment.

PHYSIOLOGICAL MEMORANDA.

THE VOICE AS A STRINGED INSTRUMENT.

To Mr. Stoker belongs the merit of having restated the theory p forth by Ferrein, in 1741, and since refuted and exploded the most eminent investigators, that the human vocal organ is a string instrument.

The "reasons—anatomical, pathological, and vocal"—which M Stoker adduces in support of his opinion, are all exceedingly wea It will be sufficient to contravene a few of them under each of h headings.

Anatomical.—"The vocal cords are two strings of yellow elas tissue, etc."

Answer.—The vocal cords—otherwise called vocal bands, lips, ligaments—are not of the nature of strings at all, in the gener acceptation of the word, that is, slender cords or ropes, attache in the case of a violin, at each end, and free all round; but, every student should know, they are triangular ledges attache not only at each end, but exteriorily, where they are broadest, to th thyroid cartilage, along their whole length, and free only at their th inner and approximating edges.

2. "They are covered with extremely fine and closely adhere mucous membrane, without any submucous tissue, and which incapable of being thrown into wrinkles or folds, that would interfe with perfect vibration."

Answer to this "reason" is best afforded by asking, What would b come of the vibrations of the string of a violin or violoncello if it we brought into contact along the whole of its length with some su stance, as is the free inner edge of the vocal ligament with the thyr arytænoideus muscle?

Pathological.—1. "When the cords cannot approximate from th interposition of mucus, tumours, etc., huskiness or loss of voi ensues; it is analogous to pressing the fiddle-string with the finge without applying the bow."

Answer.—It appears almost needless to point out that the "husk ness, or loss of voice," in such a case, is not apparent until, and in spi of, application of the motive power, that is, the breath; on the othe hand, "pressing the fiddle-string with the finger," does not in th least interfere with the production of tone, so soon as the motive powe thereof—the bow, is applied; it merely affects the pitch.

Again: "In case of paralysis of one cord, there is loss of volum or power, though weak notes can be correctly produced."

Answer.—While absolutely denying the accuracy of this statement as applied to musical voice, I would ask, where, if true, is th

ogy? To render it relevant to the string theory, we should be what sort of a note—not to say tune, and quite irrespective of lume or power"—can be produced by one vocal cord only, with-o-operation of the other, as compared to that to be obtained by ing on one string only of a violin.

ocal.—"On stringed instruments alone, such as the violin and ncello, and by the human voice, can 'portamento' notes be pro-d, etc."

swer.—This statement is correct, so far as it goes; but it by no is follows that, therefore, the human voice is a stringed instru-. It would be as logical to assert that, because bats can fly, fore they are birds.

it enough of categorical refutation. The whole of Mr. Stoker's ment is a *petitio principii*. The two great facts against his theory, h are absolutely unanswerable, are these: 1, that it is mani-y impossible for strings, as short as the vocal ligaments, to pro-the resonant low tones of deep bass voices; and 2, that the scale anges produced by the tension of strings, is totally different from of the same process applied to the vocal ligaments. This has, and over again, been proved by experiment, notably, many years by Johannes Müller; and until Mr. Stoker can produce better evi-e than that contained in his memorandum, he had better leave natter where it now stands, by a universal consensus of scientific on.

LENNOX BROWNE, F.R.C.S.Ed., etc., Surgeon to the Royal Society of Musicians. 36, Weymouth Street, W.

GEORGE STOKER's arguments in favour of the string instrument y of vocalisation (JOURNAL, April 3rd, p. 641) appear to my mind what defective. Is it possible that any string of the length of ocal cord could produce the deep tones of the basso-profundo? , with a double-stringed instrument (as would be the case under Stoker's theory), is it impossible to sound two notes simul-usly?

at the vocal cords are the initial sound-producers, as is the case e reed in the clarionet, no one will dispute; but, it appears to hey are no more responsible for the note than is the reed of the net, this being determined solely by the variations in the calibre apacity of the tube, which, in both cases, conduct the sound-s to the air.

Stoker says that "on stringed instruments alone, such as the and violoncello, and by the human voice, can 'portamento' be produced;" but, given a reed-instrument as a plain tube ut the arbitrary finger-stops or keys, and let the note be deter-d by the movement of the finger, introduced into the lower end e tube, and (by its movement) regulating the tube-capacity, it be found that "portamento" can be effected as perfectly as in ase of violin or voice.

hould like to know Dr. Stoker's theory as to whistling, where tamento" can be perfectly practised, and where the vocal cords no assistance whatever towards the production of the sound.

HARWOOD CASSON, Worksop.

OUT stopping to do more than suggest that the term "instrument" t applicable to the voice, but to the organ which produces the I venture to point out a few reasons which lead me to consider atement, "the voice is a stringed instrument," advanced in the NAL of April 3rd, to be inaccurate.

oubt whether it is worth while to institute comparisons of this t all; but, if it is, then we are bound to select that comparison satisfies most requirements; and, as I hope to show, the analogy en the vocal organ and a stringed instrument carries us a very way indeed.

far from the anatomical appearance of the so-called vocal cords sting a resemblance to the strings of a musical instrument, the opening of a dead larynx seems to me enough to dispel any idea. A musical string is a body whose length is very great in rtion to its cross section, and which is attached only at the ex-ties of its vibrating portion. Nothing could be more unlike the cords. Moreover, no strings could be worse adapted for being vibration by a blast of air than the short, thick, heavy strings ich alone the vocal cords could be compared, as contrasted with of the Æolian harp. On the other hand, when we consider the cords as elastic bands placed in a current of air, and breaking current into puffs capable of forming a musical tone (as does the of a harmonium or that of an oboe or clarionet), we have the st analogy between the vocal organs and a reed-instrument, so sound-production is concerned.

regards difference in pitch, the fact that the method by which the pitch of the vocal instrument is altered during playing, has a superficial resemblance to that by which the pitch of the violin is altered in tuning, is very little foundation for calling the former a string-instrument.

The vocal organ is primarily a wind-instrument, and may be most nearly described as a reed-pipe, having a reed adaptable to all variations of pitch within its range (that of the singing voice), and an adaptable pipe acting as a resonator to reinforce the overtones necessary for the different qualities of tone.

I forbear from adding much that might be further advanced in support of this view.

In truth, the vocal organ has no counterpart among artificial musical instruments. It soars supremely over them all; it is not a violin, it is not a trumpet, it stands by itself as the organ of the human voice.

J. DUNDAS GRANT, M.A., M.D., Senior Assistant-Surgeon Central London Throat and Ear Hospital.

THERAPEUTIC MEMORANDA.

INTOLERANCE OF QUININE: HYPERÆSTHESIA.

CASE I.—I was called to see a patient at an hotel, and found a gentleman, about 40 years of age, well built, recovering from a very severe attack of dyspnœa, which, apparently, had threatened to become fatal. The attack was sudden, and was accompanied by well marked urticaria which appeared, in patches about the size of half a crown, all over his body. I ascertained that the cause of this disturbance was a dose of "neuralgic drops," which, on inquiry, was found to contain about 2½ grains of quinine. He had never been able to take quinine, and had before been attacked somewhat similarly on attempting to do so. Surely this has some bearing on the question of urticaria causing asthma.

CASE II.—Into the arm of a well-developed girl, aged 22, I subcutaneously injected one-twelfth of a grain of morphine. To my horror, she immediately turned deadly pale, threw back her head, and in a few seconds respiration ceased, and she was pulseless. Smelling salts were applied, although for the minute there was no perceptible respiration. She was to all appearance dead, but shortly began to recover. As soon as she could swallow, brandy was administered. Presently her eyes turned up, all colour left her face, and she became violently convulsed. She recovered again, and, beyond feeling severe pain at the place of puncture, and the pain, for the relief of which I gave the injection, she was quite herself. Shortly she began to experience the usual effects of the morphine, of which I only gave a small dose, as it was her first experience of the drug. I considered the symptoms to be the result of shock, due to the perforation of an over-sensitive skin; especially as I found, on inquiry, that she had previously fainted on being vaccinated.

FREDERICK A. FLOYER, M.B.Camb., London.

OBSTETRIC MEMORANDA.

INVERSION OF THE UTERUS.

IN the JOURNAL of March 13th, Mr. Runnalls records a case of inversion which, unfortunately, proved fatal. It may interest some to have notes of a similar case which recovered.

It was a middle-aged multipara, whom I had attended once previously, and on that occasion the labour was a simple one. A month or two ago, I again attended her; the child was born, and I placed my hand over the uterus, and felt it contracting; but as the placenta did did not come, and the patient informed me "that once before the after-birth had grown to her side, and the doctor had been obliged to remove it," I asked the nurse to place her hand over the abdomen, intending myself to introduce the hand and remove it. On introducing two fingers, however, into the vagina, I found a good part of the placenta already there, and so used traction on the cord, which readily brought away, not only the after-birth, but also a large body, which proved to be the inverted uterus; the membranes seemed attached to the surface, and these I pulled off. On placing my hand on the abdomen, no uterus could be felt, and the fingers could be passed well down into the pelvis, owing to the thin abdominal walls; but no trace of a contracted uterus could be felt. My patient now became very pale, her pulse almost ceased, and she said she was going to faint. I gave her a teaspoonful of brandy, and, feeling that no better time than the present could exist for reduction, as the faintness would relax the muscular tissues, I placed both hands against the fundus, and pushed it back into the vagina; then, with the three fingers of the right hand,

I followed the fundus up the vagina, and had the good fortune to effect complete reduction without any trouble, beyond a certain amount of pressure. There was no bleeding. The contracted uterus could now be felt by abdominal palpation. The faintness passed off, and my patient made an usual recovery. M. G. Biggs.

VIBURNUM PRUNIFOLIUM IN ABORTION.

I should like to answer one or two remarks of Dr. Leith Napier's upon my cases treated by viburnum.

1. I take it that the signs of impending abortion are regular pains, softening of the external os, and a bloody or muco-sanious discharge. My experience shows these, generally, to be followed by the emptying of the uterus.

2. When the ovum is presenting, I do not give viburnum, but endeavour to hasten the delivery.

Viburnum is most useful in checking false pains, and in relieving of pain even when not successful in preventing miscarriage. I have had two interesting cases lately. One was that of a lady, five months pregnant, who was recovering from a perinephritic abscess, and in whom rhythmical contractions came on. It was most important to prevent abortion, and two-grain doses, every three hours, completely relieved her. Her husband, a medical man, watched the action of the drug with great interest. The other case was one in which drachm doses of Parke Davis' liquid extract completely relieved the pains and stopped the hæmorrhage, and yet, two days afterwards, abortion took place.

Chlorate of potash I have used in habitual miscarriage, but my paper only referred to the immediate treatment, when the symptoms had appeared; and I certainly feel more confidence in viburnum than in any drug I have heretofore used.

W. Macfie Campbell, M.D., Liverpool.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

CIVIL HOSPITAL, ST. HELENA.

PERFORATING WOUND OF INTESTINE: RECOVERY.

(Under the care of Mr. Frank S. Watson, Colonial Surgeon.)

On the evening of December 28th, 1885, E. S., aged 11, a well built, healthy looking lad, was struck in the abdomen with the neck of a broken bottle. He did not faint, and was able to walk home, a distance of two miles, and down a rugged hill, with only the assistance of his brother. Pain was evidently great, but there was no collapse.

When admitted a little later, he was in a drowsy condition, but easily roused, and answered questions rationally. The pulse was 112, and the temperature 101° Fahr.

There was a wound about an inch in length, situated obliquely at a point where a line, drawn horizontally from an inch above the umbilicus to the left side, would be met by another line drawn vertically from an inch posterior to the anterior superior spinous process of the ileum. No protrusion of intestine had occurred, but there was oozing of a dark sanguineous fluid, having a distinct fæcal odour. A probe readily passed behind the abdominal walls into the intestine; the wound was a punctured one. The patient stated that his bowels had not acted for three days previously. He was ordered ten minims of tincture of opium every four hours, perfect rest, and a diet consisting of one pint of milk daily. A large charcoal-poultice was applied to the wound. On the following morning, the temperature was 102°; in the evening, it was 101°. There was a discharge of fæces through the wound, and signs of peritonitis localised around the seat of injury.

On December 30th, the temperature was 101°. There was no discharge of fæces.

On December 31st, the temperature was 99°; and on the following day, it was normal, and there was no pain or tenderness.

On January 3rd, an escape of gas through the wound occurred during examination.

The opium was withdrawn on January 8th.

He continued to do well, and, on January 12th, the bowels were freely opened twice naturally, and without any pain or discomfort.

On January 13th, the bowels again acted naturally and freely. The wound was perfectly healed.

On January 18th, he was discharged, cured.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 13th, 1886.

George Pollock, F.R.C.S., President, in the Chair.

The Chemical Pathology of Respiration in Cholera. By Will Sedgwick, M.R.C.S.—After some introductory remarks on cyan in relation to choleraic collapse, the author referred to the early servations of Dr. John Davy and Mr. Finlayson, on the absol reduction of carbonic acid in the air expired by cholera-patients Ceylon during the epidemic of 1819; and to those of M. Rayer, on absolute reduction of oxygen absorbed in the cases observed by I in Paris during the epidemic of 1832. Such observations sim proved that the pulmonary interchanges of gases was diminish whilst those of M. Doyère, made during the epidemic of cholera Paris in 1849 and 1854, demonstrated that the amount of oxy absorbed, although absolutely diminished, was relatively much lar than the amount of carbonic acid eliminated, and was always ab the standard proportion observed in the interchange of these ga during health. Attention was directed to the absence of any satisfied demand of the blood for oxygen; to the failure of the v common to cholera, and to gastro-intestinal cases simulating chole and to the influence of the disease on the dyspnœa of phthisis. T contraction of the lungs, observed after death during collapse, resul from absence of blood and of air, and was referable to diminish supply of carbonated blood during life. Percussion during collap as was first shown by Professor Griesinger, gave, in consequenc small area of cardiac dulness. The relative excess of oxygen accoun for the integrity of the mental faculties; for the contracted state the left ventricle after death; and for the emptiness of the brach and other large arteries which had been observed during advan periods of collapse. As carbonic acid was a lower compound than u the production of the former was greatly diminished, whi that of the latter was stopped, during well marked collap Owing to the reduced production of carbonic acid, there w diminished animal-heat during collapse; whilst the rise of te perature, which occurred shortly before and also after death, w dependent on the accumulation of previously unconsumed oxygen. Dr. B. O'Connor said that he had not been quite able to understa to what cause Mr. Sedgwick attributed the rise of temperature af death. He gathered that some accumulated oxygen was set free af death; but he had not heard any reference to its conversion into c bonic acid, which might, no doubt, be what led to the formation heat after death.—Mr. Sedgwick replied that he had meant imply that a combustion of this sort did take place. It was the fi occasion on which the subject of the interchange of gases in chol had been experimentally investigated. The state of collapse was oft called asphyxia; patients turned blue, it was true, but no direct e dence of the defective oxygenation of the blood in collapse had be brought forward. It was, indeed, somewhat of a surprise that expe ment should show that the supply of oxygen was not defective, bu on the other hand, in excess of the carbonic acid eliminated. He foun parallel to it in the condition of hybernation, which was not morbi but in which 1.3 per cent. of the normal amount of carbonic acid w given off, whilst 2.5 per cent. of the normal amount of oxygen w absorbed. This relative excess of oxygen absorbed was to be notic in all states of collapse, not in cholera alone.

Two Cases of Splenectomy. By J. Knowsley Thornton, M.I C.M.—This paper contained a detailed record of a case of splenecton for cystic spleen in a girl, aged 19. The pedicle was ligatured wi silk, and the ligatures cut short. The operation was performed wi full antiseptic precautions. The patient made a complete recover and was now in much better health than before the operatio Another case of splenectomy, for hypertrophy of the spleen, was al related. In this case, there were retraction of a small artery from ti middle loop of the three ligatures, hæmorrhage into the omentu with remarkable general oozing, and cyanotic condition of the patien who apparently rallied from the operation, but died from intern hæmorrhage in five hours and a half. Tables of eleven succes ful, and twenty-three unsuccessful, splenectomies, with fo successful partial splenectomies, were appended, with remarks c the causes of success and failure. All the cases in whic leukæmia was present were fatal; and operations under the circumstances were, the author contended, unjustifiable.—Th President asked Mr. Thornton if he had seen lately the girl on whom h had operated successfully, and had found her in good health. He cou

but suppose that the spleen had some function in the healthy omy. He referred to an enormous spleen in the Museum of St. rge's Hospital, which, as far as he recollected, was about two feet ength, and very solid. It was taken from the body of a patient, seemed to have died of simple exhaustion.—Dr. ANGEL MONEY arked that, in the case of animals who survived after the removal he spleen, a second spleen, or rather, mass of splenic tissue, was id in its place.—Mr. BRUCE CLARK inquired if any clear reason been made out why leukæmic patients did badly.—Mr. RNTON said that, as regarded the present condition of his own , he had no personal evidence to offer; but he had heard of the from a lady, in whose service she now was, and who had been kind igh to make inquiries for him. She was reported in robust health w weeks ago, and fully able to do her work as a domestic servant. menstruation was regular. It had been noticed in cases of ex- n of the spleen, in animals, that it was sometimes followed by tter wind," that is, increased power of keeping up a good pace in ning, and by increased appetite. He had noticed a very large ap- e in his patient, before she left the hospital; and that was reported ntinue. In one case, among the eleven successful cases he had lated, the woman had borne a child, without any unusual discom- after the operation; in another, perfectly good health was re- ed, at least nine years after the removal of the spleen. The æmic cases uniformly did badly, he imagined, after these opera- s, for the same reasons as after all other operations, namely, their ral weakness, and the inefficient coagulation of their blood. The day on which he had operated on his first case, he met a dis- uished physiologist, who had just been lecturing on the functions he spleen, and mentioned his operation to him. "Why, she is d to die," his friend had exclaimed; but he was glad to say that xperiment had proved more favourable.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 9TH, 1886.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

rythema Nodosum, especially dealing with its Connection with matism.—Dr. STEPHEN MACKENZIE read a paper on this subject. paper commenced with the narration of the case of a young an, who was admitted into the London Hospital with erythema sum. Whilst under treatment for this, symptoms of a moderately e attack of acute rheumatism developed, with doubtful signs of t-affection. Two slight relapses of the rheumatic symptoms cred. The discrepant statements of writers on the subject were known, and the occurrence of this case led the author to collect for forming an opinion as to the connection between erythema sum and rheumatism. By the assistance of Drs. Hadden, Car- on, Arthur Davis, and James Anderson, particulars of 108 cases ythema nodosum were collected from the records of St. Thomas's, s, St. Bartholomew's, and the London Hospitals. Analysis of cases gave the following facts. There were eighteen males and y females, or five females to one male. The greatest incidence of lisease was found to occur in the second and third decennia, next e fourth and first decennia, whilst few occurred in and after the decennium. The age incidence was very similar to what occurred heumatism. In seventeen cases, or 15.7 per cent., there were nt well marked symptoms of acute or subacute rheumatism. In of these cases, the rheumatism was stated to have preceded the ema, in two the erythema preceded the rheumatism, in two rythema and rheumatism appeared concurrently, and in the re- der the sequence was not recorded. Besides these cases, there seventeen others in which arthritic pains were present, appa- y distinct from the pain in the limbs in which the eruption was nt. In three of these, there was a history of previous rheu- m, in four there was evidence of heart-disease or disorder, besides hroat in the attack in two, and a family history of rheumatism o. Though the evidence of the rheumatic nature of these last teen cases was not so strong as in the first seventeen, the author red that they ought really to be included in the rheumatic cate- If this were done, it gave 17 + 17 = 34, or 31.4 per cent., with toms of rheumatism occurring with erythema nodosum. Further, relve cases in which no rheumatic symptoms accompanied the k of erythema, the patient had previously suffered from rheu- m. In six cases, recurrences were noted. In one case, the nt, who died in the sixth attack of acute rheumatism, had had ema nodosum with three of the attacks. Sore-throat (including ases of tonsillitis), which often preceded and accompanied rheumatism, was present in twelve cases, though not specially inquired for; and in eleven cases there was a family history of rheumatism. A matter of great importance in establishing the connection between erythema nodosum and rheumatism was the condition of the heart. Some important evidence was given. In twenty cases, some definite lesion was present; ten of these were included in the group of cases in which rheumatism accompanied the attack of erythema, but in ten others, and three doubtful lesions, there was no arthritis accompanying the attack, though in some there had been previous rheumatism. Most important of all was the fact that a heart-lesion, presumably endocarditis (with, in one case, pericarditis), developed in five cases during the attack of erythema nodosum. In three of these, there was accompanying affection of the joints, whilst, in two, the joints were not affected in the attack. The author submitted that these facts justified the following conclusions. 1. Erythema nodosum was frequently associated with definitely rheumatic symptoms, for example, arthritis, sour sweats, sore-throat, etc. 2. Heart-disease (endocarditis) might arise during an attack of erythema nodosum, both in cases in which arthritis was present, and in cases in which there was no affection of the joints. 3. These conclusions justified the inference that erythema nodosum was frequently, if not generally, an expression of rheumatism, even when no other definitely rheumatic symptoms were present.—Dr. WILKS had seen many cases of erythema associated with rheumatism. He would like an exact definition of the term erythema nodosum. It might be questioned what was the real constitutional condition termed rheumatism; he was not sure that all the so-termed cases were truly rheumatic. Did Dr. Mackenzie consider his cases such, or did he think they were cases of obscure blood-disease, of which the cause was unknown, with joint-affection?—Dr. CARRINGTON thought that Dr. Mackenzie's cases did not prove that there was any relation between erythema nodosum and rheumatism. Were the systolic apex-murmurs any evidence of rheumatism at all? Certainly, the pulmonary murmurs were often associated with marked anæmia alone. Were the murmurs noted by Dr. Mackenzie functional or hæmic?—Dr. S. WEST said that, though it was very common to find erythema nodosum in many cases of acute rheumatism, yet there was no doubt that the percentage of heart-cases in erythema nodosum was very much less than it was in the case of rheumatism. Perhaps, taking all the cases of rheumatism together, those associated with some form of heart-trouble formed 50 per cent. of the whole; in erythema nodosum he did not think such cases would be more than 2 per cent. of the whole number.—Dr. CROCKER asked what was suggested as the nature of the connection between rheumatism and erythema nodosum; was it by means of the blood-vessels, or the nervous system; or was it not a local connection? In erythema multiforme, the rash was often found in the neighbourhood of the painful joints. He had seen a man with simple synovitis have distinct erythema papulatum, limited to that joint. Erythematous eruptions were generally bilateral and symmetrical. These arthritic troubles were not all rheumatic.—Dr. MACLAGAN said that Trousseau asked: "What is erythema nodosum?" and answered the question by saying: "*C'est la rheumatisme.*" The majority of cases of erythema nodosum had perhaps more to do with rheumatism than with any other complaint. There was a disposition to call any cases of joint-affection rheumatism. He narrated the case of a girl who had erythema nodosum. Her sister had rheumatism, a brother had chorea, and the original patient herself had since, also, had chorea. But, in many cases, there was no connection of the kind.—Dr. HINGSTON FOX asked if the varieties of the lighter forms of erythema should be classed together, or separated. In many families, acute rheumatism and scarlatina were apt to attack different members. In a case recently related in the BRITISH MEDICAL JOURNAL, scarlatina and rheumatism were shown to have coexisted in the same person. What was the pathological connection between erythema nodosum and rheumatism? Hebra had taught that the patches of erythema occurred over the region of distribution of the lymphatics.—Dr. O'CONNOR said there were many cases of erythema nodosum not connected with rheumatism. As regarded the nervous element in acute rheumatism, Dr. Laycock taught that it was an essentially nervous disease.—Dr. ANGEL MONEY thought Dr. Barlow's account of acute rheumatism contained in the second volume of the BRITISH MEDICAL JOURNAL for 1883, was admirable. He thought the cases of erythema, occurring in the first decade of life, were more frequent than Dr. Mackenzie had made out. He had never seen a case of true heart-disease develop in either of his cases. He had known a heart-murmur develop, and then afterwards cease. But he had never known a case of true heart-disease develop itself during the continuance of erythema.—Dr. MACKENZIE, in reply, said that he had had no prepossessions in making his inquiries. As to what one called

rheumatism, Dr. Wilks's criticism was just. The term was a good clinical one, and must be so used. All understood what was meant by the term acute rheumatism. These cases he had cited were as well entitled to be called rheumatism as any ever met with. Many of the patients underwent relapses. The cases he had mentioned and reported in his paper were not liable to a biassed interpretation, as they were under different physicians, and were reported in their wards. As to the eruption, it often occurred in the vicinity of the joints, but the joint-affection often preceded the eruption; and they did not run together, showing that they were not dependent one on the other. As to Dr. Carrington's objection, he remarked that, in one case, the patient had pericarditis, which was certainly not a functional disease. He had purposely excluded all the forms of erythema, except those of E. nodosum, as that, he thought, was a definite fact. In a large proportion of cases, the rheumatism occurred during the attack of erythema nodosum. He thought the connection between erythema nodosum and rheumatism was a close one. The cases were valuable; and, when they were read, he believed the conclusion at which he had arrived was likely to be more fully concurred in.

Three Peculiar Cases of Pneumothorax.—Dr. SAMUEL WEST read this paper, of which the following is an abstract. *Case* 1. Three months ago, the patient had sudden dyspnœa while in bed. There was no cough before, but cough and expectoration came afterwards. He was at work the day before the attack. Ten days before admission the dyspnœa gradually grew worse, with pain in the side. Pneumothorax of the right side, with effusion, was found. Tapped; 41 ounces sero-purulent fluid withdrawn. Pressure was high. Tapped again fourteen days later; 22 ounces removed. Complete recovery. The patient was living and well, and in active work three years afterwards. *Case* 2. Phthisis of nine months' duration. Pneumothorax of the right side occurred in hospital. Death, two days later, was chiefly due to choking, by contents of a large cavity forced by compression of the lung into the bronchi. *Case* 3. Sudden attack three weeks before admission. Cough only for two months; that is, five weeks before the attack. Admitted for dyspnœa and hæmoptysis. Pneumothorax of the right side with effusion was found. Paracentesis, and 28 ounces of sero-purulent fluid withdrawn. Paracentesis, 36 ounces of pus, three weeks later. Spontaneous discharge of pus by the puncture, occurred a few days later. Free incision. Two days after, hæmorrhage from the pleura by the incision, and hæmoptysis for a few days. Death from exhaustion about twelve days later, without further hæmoptysis. REMARKS.—*Upon Case* 1. (*a*) The cause probably phthisis. (*b*) Pressure high. (*c*) Composition of the gas. (*d*) The nature of the effusion. (*e*) The dilatation of veins. (*f*) Prognosis in pneumothorax. *Upon Case* 2. The chief cause of the dyspnœa in the case, namely, the discharge of the contents of cavities into the bronchi, was not often described. *Upon Case* 3. Aneurysm of the pulmonary artery and pneumothorax were rarely associated. They were, as it were, opposed processes. The proposed treatment of profuse hæmoptysis by the artificial production of pneumothorax was criticised.

Case of Lithotrity at a Single Sitting in a Boy 10 Years Old.—Mr. W. J. WALSHAM read a report of this case. George L., aged 10, was admitted into St. Bartholomew's Hospital, July, 1884, under the care of Mr. Willett, who, on leaving for his holiday, transferred him to Mr. Walsham. He had a stone in the bladder, for which Mr. Walsham performed lateral lithotrity in August, 1884. The boy made a good recovery, and was discharged without signs of stone. He was readmitted in February, 1885, in Mr. Walsham's care, with a return of his symptoms; and, on the 26th of that month, Mr. Walsham, at one sitting, crushed and removed the stone, the larger fragments of which weighed 15 grains, and consisted of oxalate of lime. The boy had no bad symptoms, and left his bed within three days of the operation. Mr. Walsham remarked that, although, in this boy, both the cutting and the crushing operations were successful, a comparison of the results of the two was most striking. After the cutting operation, although he had no bad symptoms, he had to remain in bed for over three weeks, and, for the first few days necessarily suffered some inconvenience from the passage of urine through the wound; whereas, after Bigelow's operation, although he was kept in bed for three days for precaution's sake, he was practically convalescent on the morning after the operation. The chief objections that had been raised to lithotrity in children were, to quote the words of an eminent Indian lithotritist, Surgeon-Major Fryer, "that the genito-urinary organs are undeveloped, the bladder small, the urethra narrow, and the mucous membrane of both extremely sensitive and subject to laceration." That the genito-urinary organs were undeveloped, and that the bladder and urethra were smaller than in adults, were, of course, facts; but Mr. Walsham questioned whether they were objections to lithotrity in children. The undeveloped condition of the genito-urinary organs, by which, presumably, was meant, as concerned lithotrity, the undeveloped condition of the prostate, Mr. Walsham regarded as a positive advantage, as one of the chief difficulties in lithotrity in adults, was referable to an enlargement of this organ; nor did he regard a small bladder, of course within limits, as a very serious objection, many lithotritists, Sir Henry Thompson among the number, preferring to work with the bladder containing only two or three ounces of urine; and there were but few bladders, even in young children, that would not contain at least this amount. But even granting that the bladder was smaller than could be desired, it was more likely to be in a healthy condition than in adults; and if a little more injury were done to the mucous membrane, the forces of repair were all in favour of the child. With regard to the narrowness of the urethra, he had not the least difficulty in passing a No. 12 evacuating catheter, after the meatus had been incised; and Dr. Keegan had found that the urethra of boys between four and six years would admit the passage of a No. 7 to No. 8 evacuating catheter, and the urethra of boys between eight and ten, a No. 9 to No. 12. With these tatements, from some experiments Mr. Walsham had made on the size of the urethra in children, he entirely agreed. Mr. Walsham, moreover, questioned the extreme sensitiveness and liability to laceration of the urethra in children, and Dr. Keegan went so far as to pronounce this dictum as one of the time-cherished delusions in surgery, which, like other delusions, must in the end give way to practical experience. Dr. Keegan had performed the operation forty-two times, in India, on boys under 12; and the success which had attended his cases showed that, even if such laceration occurred, it did no serious harm. Twenty of the patients were under the age of six; one was only one year and nine months. The smallest stone weighed 5 grains, from a boy aged 11; the largest 236 grains, which consisted of oxalate of lime, from a boy aged 6. Mr. Walsham, in the light of this experience of Dr. Keegan and others, in India, questioned whether lithotrity at one sitting ought not, as a rule, to be the operation undertaken in boys, whatever their age, as it had now become the operation in adults.—The PRESIDENT thought that the rule on this subject which had hitherto obtained could not, in future, be so strictly held. It turned upon the power of the lithotrite, and the size of the urethra for the passage was delicate, and easily lacerable. Therefore, he thought a large stone should not be crushed. Laceration of the urethra, he thought, was more injurious than a clean cut. The frequent passage of the lithotrite and evacuating-catheter down the urethra was a matter of serious importance. But, with a stone of fifteen grains only, he thought anyone might crush. At Guy's Hospital, out of 170 cases under 10 years of age, in which lithotomy had been performed, there had been only two deaths, both of which were hardly due to the operation itself. All these cases had been cut by the lateral operation, and had the straight staff used upon them, and the stones were of all manner of sizes. With small stones and a healthy urethra, he had used lithotrity in children.—Mr. HUTCHINSON had always thought that lithotomy for children was the proper operation. He had, in his early days, seen sad results with a surgeon who lithotrised children: the fragments often becoming impacted. All surgeons, he thought, would now adopt lithotrity for small stones. With lithotomy, too, there were undoubtedly some disadvantages which Mr. Walsham had cited.—Mr. BRUCE CLARK said that, as to the size of the urethra in children, he had often been struck with its large size. Recently, a child came to hospital with an impacted calculus, which was forced out with a little squeezing. The stone was of the size of a No. 16 evacuating-catheter, English measurement; and Mr. Clarke, in that case, easily passed a No. 12 catheter quite up to the bladder.—Mr. PARKER asked if there was any real evidence that lateral litnotomy interfered with the ejaculatory ducts.—Mr. WALSHAM said that Langenbeck and Mr. T. Smith held that opinion.

Living Specimens.—The following living specimens were exhibited: By Mr. BELLAMY: Excessively Large Vascular Tumour in the Upper Extremity of a Child.—By Mr. S. PAGET: Synovial Cyst of the Leg in connection with Disease of the Knee.—By Dr. S. WEST: A case of perfect recovery after operation for Pneumothorax in a labourer.

BEQUESTS AND DONATIONS.—Mr. John Smith, of Bishops-Lydeard, has bequeathed £10,000 to the Royal Medical Benevolent College, Epsom.—The Swansea Hospital has received another anonymous donation of £600 in bank-notes.—The British Home for Incurables has received £400, under the will of Mr. William Goldsmith.—The Halifax Infirmary has received £200, less duty, under the will of Miss Jane Elizabeth Ackroyd, and a similar amount under that of her sister Miss Lavinia Ackroyd.

HTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, APRIL 8TH, 1886.

NATHAN HUTCHINSON, F.R.S., F.R.C.S., President, in the Chair.

Death of Mr. Streatfeild.—The PRESIDENT referred to the loss the iety had sustained by the death of Mr. Streatfeild, who had acted Treasurer since its foundation. The President paid a high tribute Mr. Streatfeild's moral qualities, as well as to his surgical attainnts.—Mr. BRUDENELL CARTER moved that a letter of condolence uld be addressed by the President, in the name of the Society, to s. Streatfeild.—The motion was seconded by Mr. COWELL, and ried unanimously.

Coloured Drawing by a Colour-blind Artist.—Mr. EDGAR BROWNE wed a drawing made from a copy by a colour-blind man. He had itted the red, and had substituted a rusty red for the green. The ient was unaware of his defect.

Persistent Pigmentation after Jaundice.—Dr. SEYMOUR TAYLOR wed a patient who had had jaundice eighteen or nineteen years ago. e lower lids on both sides had been pigmented, but on the left side pigmentation had disappeared; the lower lid was of a dark-green our, and in the subconjunctival tissue of the lid there was a dark d of pigmentation, which did not affect the tarsal area.—The PRESENT had never seen a case where the pigment had the same slaty our and the same distribution. The condition was quite distinct m chromidrosis.

New Formation of Pigment on the Anterior Surface of the Iris.—. NETTLESHIP showed drawings and microscopic sections of four es where a new formation of pigment had occurred on the anterior face of the iris. In each eye there was a patch of pigment on the front he iris; the new pigment had the same appearance as the natural a, with which it was found, in a case which was examined micropically, to be continuous. In this case the new pigment was everyere covered by a thin but distinct colourless layer, varying in ckness, and often showing scattered round nuclei or corpuscles; s lamina was continuous with the altered anterior basement-membne of the normal iris; where the pigment was present, the proper sue of the iris was atrophied. In all the cases previous iritis had urred, and the colour of the rest of the iris was the same as that of other eye.—Mr. LAWFORD showed a similar condition in a less anced stage; the eye had undergone iridectomy for glaucoma.—. W. A. BRAILEY thought Mr. Lawford's case fully explained by ropion of the pigment of the posterior part of the iris, common in anced cases of glaucoma. By it the pigment was rolled forwards o view. He regarded Mr. Nettleship's cases, however, as of quite a ferent character, as, in them, the eye appeared to be otherwise mal. The appearances in Mr. Nettleship's plate in the *Transacns*, vol. v, were not consistent with ectropion from glaucoma, but bably agreed with those he showed on this occasion; if this were so, . Lawford's case belonged to a different category.—Mr. JULER ught the case was an example of a condition, where the pigment of iris had come forward in the manner suggested by Dr. Brailey.—. LANG said that, in these cases where the pigment appeared in a cirar band around the pupil, the iris was also everted, but that, where distribution of the pigment was irregular, there was no eversion the sphincter.—Mr. NETTLESHIP said that in one case of which had specimens there was atrophy, but no curling up of the incter.

Staphyloma of the Choroid.—Mr. LANG showed a patient who had a ge eyeball with increased tension, deep cup, and staphyloma of the oroid extending upwards and outwards. Vision was lost. There s some reason to suppose that the eye had been injured.

Relapsing Cyclitis.—The PRESIDENT related the case of a woman o was the subject of a relapsing cyclitis. The symptoms, at first, re apparently syphilitic; there was iritis, with ciliary congestion, es on the mucous membrane of the lip, and a dusky eruption. rther inquiry, however, elicited that she had had a similar attack the other eye two years before. The eruption had persisted for two rs; it bore a certain resemblance to chilblains, and was worse in ater. He thought that, in most cases of relapsing cyclitis, we had do, not with syphilis, but with a condition in which there was a dency to rheumatism, to gout, and to chilblains.

Pupillometer.—Mr. W. H. JESSOP showed a new pupillometer conucted on the same principle as a wire-guage.

Herpes Facialis affecting the Eye.—Mr. WALTER H. JESSOP read a per based on four cases of herpes facialis affecting the eye. In the first e, the herpes followed the track of the external division of the ra-orbital nerve; the eye was affected with iritis, keratitis punctata, d increased tension; recovery, with perfect vision, occurred quickly. the second, herpes along the lacrymal division of the ophthalmic nerve was followed by keratitis punctata and interstitialis. In the third case, there were herpes along the frontal and lacrymal divisions of the ophthalmic nerve, early anæsthesia of the cornea, and superficial keratitis. In the fourth case, the herpes followed the course of the infra-orbital nerve, and there were phlyctenular ulcers on the cornea. It was pointed out that herpes facialis followed the distribution of the fifth nerve, and that, when the eye was involved, the branch affected was usually the ophthalmic, but sometimes the superior maxillary. The most usual distribution was along the frontal, but there was no recorded instance of the nasal being the only branch affected, nor of the nasal and lacrymal branches being simultaneously attacked, while the frontal escaped. The fourth case was, he believed, the only recorded instance of the cornea being affected in herpes infra-orbitalis. Mr. Hutchinson had pointed out that the eye was affected if the oculo-nasal branch were attacked. The most common ocular complications were swelling of the lids, conjunctivitis, and increased lacrymation; the cornea might become affected by superficial ulceration, phlyctenulæ, interstitial keratitis, or keratitis punctata; and neuro-paralytic keratitis had been recorded. Serous or plastic iritis might occur; and the pupil, though generally contracted, had been found sometimes dilated. The chief affection of the fundus was papillitis. The tension was said to be generally lowered. Palsy of the extrinsic muscles, and paresis of accommodation, had been recorded. After referring to the *post mortem* evidence of neuritis, and dilatation of the ophthalmic artery, Mr. Jessop expressed the opinion that all the ocular symptoms, with the exception of the rarest, might be explained by supposing a dilatation of the vessels due to irritation of the sensory nerve. Vascular dilatation lasting some time would especially influence such a structure as the eye. If the whole attack were due to the neurotic storm, the different nerves would be affected nearly simultaneously, and the ocular symptoms would be coincident with the cutaneous eruption, which was not the case. Mr. Jessop attributed to Mr. Hutchinson the credit of first separating herpes accompanying the ophthalmic division of the fifth nerve from erysipelas.—The PRESIDENT said that it was a mistake to suppose that herpes zoster did not occur in apparently healthy persons. His observation, to which reference had been made, was, that the severity of the disease was in proportion to the severity with which the tip of the nose was affected; and, if the disease occurred in the latter situation, the eye suffered. It was desirable to bear in mind that the true definition of zoster was a neuritis, often attended by skin-disease; there were many cases where neuritis occurred, and caused pain, but no skin-lesion.

Hæmorrhagic Glaucoma treated by Trephining.—Mr. SPENCER WATSON showed drawings from a case of hæmorrhagic glaucoma, in a man, aged 64; the sclerotic was trephined, and the choroid was accidentally perforated; the tension became normal, and so remained for three months, but without any improvement in vision. The tension, however, again rose, so that the result was most unsatisfactory.—Dr. W. A. BRAILEY said that, in those cases where pain was severe and vision hopelessly lost, the best treatment was to stretch the supratrochlear nerve.—Mr. MCHARDY thought the case showed conclusively that the operation of trephining was liable to fail entirely to relieve the distressing tension in these cases. He had been astonished by the ease with which the supratrochlear nerve could be found in the living subject.—Mr. EDGAR BROWNE had stretched the supratrochlear nerve in two cases, without noticing any diminution in tension.—Mr. SPENCER WATSON said, in reply, that since the operation pain had not recurred.

Iritis Serosa occurring rapidly after Wound of opposite Eye.—Mr. EDGAR BROWNE narrated the case of a gentleman struck in the left eye by a branch. He travelled to Liverpool from Cumberland; and when first seen the cornea was hazy, the iris was muddy, and in the anterior chamber was a thorn, which had wounded the periphery of the iris. The thorn was extracted next day, but the lens was already opaque on the surface, and the iris was covered with lymph; that night he had violent pain in the right eye, due to iritis. This iritis of the right eye fluctuated, and keratitis punctata appeared in both eyes, though the wound healed well. He eventually recovered, with good vision. Mr. Browne believed that the keratitis punctata was not due to the injury, but had arisen independently, or had, at the most, but a very indirect connection, setting up, perhaps, atrophic disturbance, which determined the onset of an impending keratitis.

Central Guttate Choroiditis.—A paper, by Mr. L. WERNER, of Dublin, was read by the SECRETARY. Its object was to point out that the "infiltration vitreuse de la rétine et de la papille," described by Dr. Masselon, was, in reality, the same disease as central guttate choroiditis. A drawing of the latter condition, published by Mr.

Nettleship in the *Transactions*, vol. iv, showed a condition exactly resembling Dr. Masselon's drawings; the descriptions were practically identical, both authors describing the same small scattered dots of choroidal disease, apparently caused by deposit, equally distributed in both eyes, with retention of vision.—The PRESIDENT did not consider that the preservation of vision was a constant part of these cases, though the diminution of vision was not proportional to the amount of lesion.—Mr. ADAMS FROST quoted a case where vision was unaltered.—Mr. JULER referred to a case, previously recorded, where there was some disturbance of pigment, which supported the view that the affection was seated in the choroid.—Mr. NETTLESHIP had recorded the cases referred to by Mr. Werner, for the reason that vision was not affected, though the patches were so numerous; as a rule, vision was affected. It was possible that the seat of these so-called colloid nodules might determine whether vision was affected. Where they occurred in the optic nerve, as was occasionally the case, vision was more liable to be affected, even though the number of nodules was small. He, of course, laid no claim to novelty in his paper, and the honour of first describing the condition belonged to Messrs. Hutchinson and Waren Tay (*Ophthalmic Hospital Reports*, 1875).—Mr. WAREN TAY said this disease was not necessarily central. Now and then a case was observed in which similar spots were purely peripheral, without the vision being affected. The patients need not be senile, for precisely similar spots were seen in quite young people. In the first cases noted, vision was affected, but most observers had since seen cases where vision was unaffected.—The PRESIDENT had had an opportunity of comparing the condition noted in a drawing five years ago with the condition of the eye at the present time; there had been no alteration, and vision had slightly improved. Mr. Waren Tay had been the first person to call his attention to this condition, and the paper in the *Ophthalmic Hospital Reports* was founded on these first cases.

Two Cases of Glaucoma treated successfully with Convex Lenses.—Mr. GEORGE E. WALKER gave an account of these cases. CASE I.—In a man, aged 33, the left eye had been excised after two iridectomies for glaucoma. The right eye subsequently showed similar symptoms, and Mr. Walker ordered him to wear continuously spectacles with a 36-inch focus, which just neutralised his hypermetropia. When last seen, at the end of three months, vision was normal, and the eye free from pain. CASE II.—A man, aged 55, since childhood, had been liable to headache on attempting to read; in 1877, he began to have attacks of great pain in the eyes and head, with blindness. In 1883, he was told he had chronic glaucoma; iridectomy was done in the left eye, which speedily became blind. On October 28th, 1885, Mr. Walker found vision imperfect, the field narrowed, and tension increased. Vision was improved by a 20-inch convex lens; after using this glass for a fortnight, pain had ceased, vision had improved, and the field had increased. He remained well up to the day of the meeting (162 days). On the previous day (April 7th), Mr. Walker had introduced homatropine, in order to examine the fundus. He travelled to London, and on the following morning was found to be suffering from acute glaucoma. With rest in bed, and fomentation, he improved so rapidly that, two hours before the meeting, he was in a fair way of recovery. The patient said that the attack resembled previous attacks; and, though inopportune, it afforded an opportunity of proving that the previous attacks were of the same nature, though more severe. Mr. Walker maintained that these two cases, together with the previous one which had remained well since shown to the Society in 1884, afforded conclusive proof of the truth of his theory of the production of glaucoma, and gave corroborative evidence that the ciliary body was not merely an engine of accommodation, but also a pump, or lymph-heart, for the purpose of forcing waste fluid from the anterior chamber into the vein. [Mr. Walker has supplied the following additional particulars respecting Case II.] On arriving at his hotel after leaving the meeting, he found a note scrawled on a tailor's touting circular, wretchedly printed, No. 6 type, to the effect that the patient could, at 8.30, read it easily. He slept well, and next morning read smaller type fluently, tension being now normal. He bore the journey to Liverpool; and thence, after a short stay, to his home, twenty-six miles off, and back to Liverpool the next day. On April 11th, at 36¼ feet, he made out accurately, in a bad light, Snellen 30. At the patient's own request, Mr. Walker sent him on Friday morning, April 9th, to the Secretary of the Ophthalmological Society, Dr. Brailey, who very kindly thoroughly examined him, both as to his former history and present condition.

MEDICAL MAGISTRATE.—Dr. John Roberts, of Menai-Bridge, late of Manchester, has been placed on the Commission of the Peace for the County of Anglesey

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 12TH, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

CLINICAL EVENING.

Evisceration of the Eyeball by Mules's Method.—Mr. R. BRUDENE CARTER showed a case where this operation had been successfully pe formed.

Spontaneous Dislocation of the Patella on Flexion.—Mr. JOH MORGAN showed a girl whose patella became displaced outwards o flexing the knee-joint, returning to its proper place on extensio The condition was of old standing, if, indeed, it were not congenita The general explanation of such cases was that it was due to paralys of fibres of the quadriceps extensor, but he thought that probably was attributable merely to a laxity of the ligaments.

Bony Union after Fracture of the Patella.—Mr. A. PEARCE GOU showed a man, sent to him by Dr. Batterham of the Wolverhampto Infirmary, in whom a transverse fracture of the patella, the result a fall, treated by the immediate application of a plaster-of-Par bandage, had been followed by what was apparently bony union, th fragments being immovably fixed.—Mr. JESSETT and Mr. ALLIN HAM, Junr., expressed their satisfaction with the results obtained b them in the treatment of fractures of the patella by this method.

Myxœdema with Flexures.—Dr. ORD showed a woman who e hibited the typical features of myxœdema, and, in addition, flexu of the hands, etc., was present. These flexures were not very ob stinate, and were probably functional in character. No affection the sensory functions.—Dr. STEPHEN MACKENZIE asked whether th flexures relaxed during sleep.—Dr. BEEVOR called attention to a ce tain tremulousness in the patient, and mentioned that Mr. Horsel had found similar tremors in animals, whose thyroid gland he ha removed.—Dr. HERON alluded to the lapse of time which occurre between a question and the answer, and said that patients ha assured him that they understood the questions quickly enough, bu were conscious of an inability to reply promptly.—Dr. DREWIT asked Dr. Ord whether there was any heredity in this case.—Dr. ORD in reply, said that the spasm relaxed during sleep. The tremo noticed by Dr. Beevor were probably due merely to excitement. H had know at least three cases which appeared to be hereditary.

Disseminated Sclerosis.—Dr. ORD showed a woman who had sym ptoms of disseminated sclerosis, and who, besides, suffered from osteo phytic arthritis of the joints of the hand. He expressed an opinio that the two sets of symptoms were but two manifestations of th same lesion.—Dr. BEEVOR suggested that this case was possibly on of commencing paralysis agitans.—Dr. ORD, in reply, repudiated thi idea.

Lateral Sclerosis.—Dr. STEPHEN MACKENZIE produced a lad wit marked symptoms of lateral sclerosis, of two years' standing. Th most curious feature was a fact noticed by Mr. Rawes, House Physi cian at the London Hospital, that, while the patellar reflex was ex aggerated, there was no ankle-clonus. This he explained by the loca lisation of the spinal lesion.

Amputations at Knee-Joint.—Mr. PURCELL read notes, and showed drawings, of two cases where amputation at the knee-joint had been performed for sarcomatous growths of the leg, and pointed out th advantages attaching to the non-removal of the patella and car tilages.

Hereditary Tremors.—Dr. SAMUEL WEST read the history of a cabman who had suffered since his earliest years from constant tre mors, not affecting the tongue, eyes, or facial muscles. The most in teresting feature of the case was that, on inquiry, his mother and grandmother appeared to have been subject to similar tremors. Further, the patient was one of ten children, and all of them suffered in a varying degree from the same thing, and the condition had been reproduced in his own six children.—Dr. STEPHEN MACKENZIE alluded to a similar case, except that the history had not been so carefully ascertained.—Dr. ANGEL MONEY mentioned the frequency with which chronic chorea was transmitted, and the liability, on the part of motor disorders, to be handed down to the offspring.

STOCKPORT AND DISTRICT MEDICAL SOCIETY.—The first meeting of this Society was held on January 28th, at the George Hotel, Stockport, when rules were passed, and the following officers elected. *President*, Dr. John Howe (Marple); *Vice-President*, Dr. Henry Heginbotham (Stockport); *Secretary*, Dr. J. Johnson Bailey (Marple); *Treasurer*, Dr. Kenneth Maclean (Stockport). The members, numbering between thirty and forty, afterwards dined together.

REVIEWS AND NOTICES.

"REATISE ON AMPUTATIONS OF THE EXTREMITIES AND THEIR OMPLICATIONS. By B. A. WATSON, A.M., M.D., Surgeon to the ersey City Charity Hospital, to St. Francis's and to Christ's Hos- tal, at Jersey City, New York. Illustrated by upwards of 250 ngravings, and 2 full-page plates. Philadelphia: P. Blakiston id Son.

's treatise is a fine "encyclopædic monograph," to use the author's expression, of a class very familiar to the student of American ature. As in most transatlantic works on medicine and surgery, read much about the practice and conclusions of well-known iorities, but little about those of the writer. On the other hand, e is an almost total absence of statistics. The veneration of in- uity and mechanical skill, so universal in the United States, is vn by the devotion of one hundred and forty pages to a chapter rtificial limbs, whilst the chapter on special amputations contains one hundred and nine. Indeed, general questions and matters accessory to the main subject fill up by far the greater part of work, to the prejudice of more familiar topics immediately perti- to amputations, such as the relative merits of primary and ndary removal of limbs.

he historical introductory chapter is superior to most productions is class, for not only is the reader informed about Celsus, Galen, higenes, Heliodorus, Paré, and Wiseman, but at the same time the hor never fails to comment on the progress of amputation as an and the latest contrivances, such as Davy's levers, are not ne- ted. The blending of the records of historical and contemporary tice in a systematic work, is a good principle, to which Dr. TSON has done well to adhere. Even details, such as the preser- on of periosteum, are treated in this manner. The occasional results following the abuse of improvements on the whole bene- l, are carefully noted. Thus we are told with what reluctance eons performed amputations, prior to the introduction of Morel's niquet, and how a perilous reaction followed the appearance of instrument in the operating theatre, so that in 1738 a surgeon, at Hôtel Dieu, performed amputation of both thighs for simple tures. A second reaction rapidly followed; more limbs were saved; Bilguer went so far as to forbid amputation in the Prussian Army ical Service. From this extreme measure resulted great experi- in gangrene, disastrous to patients, though advantageous to pos- y. In the chapter on conditions affecting the results of amputa- s, the opinions of Sir James Paget are extensively quoted. Dr. son very rightly lays great stress on the advisability of detecting e forms of renal disease where albumen is not found in the urine. are glad to find, at page 73, some opinions, based upon the hor's own practice. He finds that moderate beer-drinking pre- oses to septic infection, more than does moderate indulgence in its. The flap or circular amputation controversy is very carefully sidered. Dr. Watson prefers the circular amputation with cuta- us flap, in all cases where the surgeon is entirely free to choose, here exist any special danger of septic infection or gangrene which not successfully be combated by other means; he adds that the sculo-cutaneous flap operation supplies those conditions most favour- to immediate union, especially in the thigh and arm, and there- it ought to be preferred, unless this advantage be counterbalanced he danger arising from complications frequent to this method of ation. The chapter on special amputations is, as we have already erved, relatively meagre, and the absence of statistics is not to be mended. We must compliment the author on an excellent draw- (Fig. 105) showing the arterial supply to the inner ankle and r side of the heel, based upon eighty dissections.

here is a great deal said about antiseptic dressings, and the work edicated to Sir Joseph Lister. The chapters on complications, r-treatment, and kindred topics, are deserving of credit, more ecially the passages on erysipelas and gangrene. Groeningen's uable work, *Ueber den Shock*, was published too late to prove of vice to Dr. Watson; who, however, writes ably on that subject, judging from a passage in page 500, appears to agree, to a certain nt, with Groeningen in insisting upon a distinction between re- on and the inflammatory fever often falsely considered to be the f phenomenon of that condition. The German writer is still more otical as to reaction.

n the middle of the *Treatise on Amputations* stands the long pter on selection and application of artificial limbs, to which the hor attaches much importance, and not without reason. It contains an account and drawing of the truly ingenious iron hand of Goetz von Berlichingen, immortalised by Goethe; and describes the latest inventions of Bigg and other living surgical mechanicians. We may note Gripouilleau's "working man's arm," and the useful contrivance for using the knife, scythe, and other instruments which can be fitted on to it. This leads to a general question too often overlooked in our medical schools. Students are not taught enough about crutches and wooden legs; and a large number pass their qualifying examinations triumphantly, and commence practice, without ever having heard of a "Nelson knife" or similar contrivance for the use of one-armed persons at the dinner-table. It is certainly the duty of the surgeon to afford as much information as possible to the lame and halt under his care; and many who dislike or disuse a "horrid dead hand," as they often term the best mechanical contrivance, are delighted if a medical adviser remind them that there is a simple contrivance to be bought at the cutler's which can be used as a knife and fork simultaneously, when held in the unamputated hand. Moreover, though an amputation is not very frequent in practice, patients who have lost their limbs elsewhere often consult a local medical man about artificial appliances.

The *Treatise on Amputations* forms a handsome volume; the paper is good, and the type exceedingly clear. It will prove a valuable work of reference for the hospital surgeon, and the chapter on appliances will render it useful to the general practitioner.

THE EDUCATION AND EMPLOYMENT OF THE BLIND. By T. R. ARMITAGE, M.D. Second Edition. London: Harrison and Sons. 1886.

THIS is a work full of information on the subject of which it treats. There are about 30,000 blind in the United Kingdom, and probably fully 300,000 in the colonies and dependencies; so that the question of their education and employment is one of very great national importance, especially when it is considered that most of them are poor, and, if untrained, must depend on public or private charity for their support. A workman who is able to maintain himself and his family, immediately loses this power of self-maintenance if he be unfortunate enough to lose his sight; and in former times, blindness and begging were always associated together. It is one of the achievements of the last hundred years that this need no longer be so; and the object of the present work is to give a concise history of the movement, and to point out the defects which at present exist in our systems, and the means of remedying them. A short account is also given of every institution for the blind in the world, and a chapter on the prevention of blindness. This work, however, is not a mere compilation. Dr. ARMITAGE, in recording the history of the last fifteen years, gives results to which no man has contributed more than himself. He was in consulting practice up to 1860; then gradually increasing loss of sight, from atrophy of the optic nerve, caused him to retire from active practice, in order, if possible, to save the remnant of sight which remained. In this he was successful; and, in 1866, he joined the committee of the Indigent Blind Visiting Society. He soon found that great ignorance existed on all questions relating to the education of the blind. Every institution had its own peculiar method, and was generally uninformed as to those pursued in other schools. The Bible was embossed in five different systems of raised print, in many of which the same signs were used to represent different letters, and scarcely any other book had been printed. The first question to be settled was the best method for reading and writing. After two years' investigation and experiment, a system invented by M. Louis Braille, a blind teacher in the Paris School, was adopted as the best for educational purposes, and for the intelligent blind of all ages; while Moon's system was retained for those, the delicacy of whose touch had been destroyed by hard manual labour. This view has now been generally adopted and acted on in all civilised countries, except in some of the States of North America, where a modification of the Braille system is used. The great advantage of this system is, that it is equally adapted to reading and to writing, and that the blind can read their own writing rapidly by touch; so that this admirable system is to the blind just what ordinary writing is to the seeing. It can be easily acquired by persons of any age, as long as they have average touch and average intelligence. We would strongly recommend any of our professional brethren who have patients with loss of sight, to advise them to communicate with Dr. Armitage as to the best way of learning to read and write by touch. It is very easy; and many of those who have acquired it say that the independence gained by the power of reading and writing themselves, is so great a blessing as to be second only to the restoration of sight. As the system of reading and writing has now become uniform, a literature

has been created which amounts to about sixty standard works in print, and about 300 in manuscript, besides the Bible and a large library of music. The educational question among the blind may now be considered settled, and the association, over which Dr. Armitage presides, is grappling with another difficulty. This is, that the great majority of those who have been trained in our schools do not become self-supporting after they leave, and in many cases are no better off than if they had received no training. The experience of Germany shows that this is a state of things which ought not to exist. And as a matter of fact, the great majority of the former pupils of those German schools in which the Saxon system prevails, are able to live without charitable aid. The vast importance of this question is self-evident. For the details, we must refer our readers to the book; but we cannot conclude without cordially wishing Dr. Armitage and the British and Foreign Blind Association the same success in their attempts to improve the condition of blind workers, that they have already had in the educational question.

NOTES ON BOOKS.

A Short Note on Peritoneoclysis, Hypodermoclysis, and Vesicoclysis in Cholera (a paper read before the Bombay Medical and Physical Society, February 6, 1885.) By Brigade-Surgeon CAMERON MACDOWALL, Bombay Army. London: J. and A. Churchill, 1886.—The treatment of cholera has hitherto been so exceedingly unsatisfactory, that practitioners who have to deal with the disease are ready to try any system which appears to offer any hope of success. During the stage of collapse, when the body has been drained of fluid by the profuse evacuations of the first stage, one of the chief obstacles to the establishment of reaction must be the viscid state of the blood; the injection of saline fluid into the veins has, as is well known, been frequently resorted to, with very remarkable, though only temporary, advantage. Brigade-Surgeon Macdowall advocates the injection of fluid, by preference a nutritive fluid, into the peritoneum; Dr. B. W. Richardson was apparently the first to use such injections in a case which finally recovered, and it says something for the method, perhaps, that it suggested itself independently to Brigade-Surgeon Macdowall, who has witnessed many epidemics of the disease. There is good reason to believe that, if proper precautions be taken to avoid injury to the viscera, and to provide pure fluids, no injurious effect, at least, need be produced by this method, which is more than can be said for all the methods of treatment which have been suggested. In one case, in 1874, Brigade-Surgeon Macdowall introduced fluid into the system by an entirely different route. It has been said that dropsical patients sometimes recover from cholera, cured also of their dropsy; the suggestion, therefore, was made to produce an artificial dropsy by injecting fluid into the subcutaneous tissue of the limbs. In the case recorded, "the voice, the urine, and even the appetite returned, as also the colour of the dejecta;" but the patient, who had for years suffered from cardiac dyspnœa, died on the second day. The fluid used for injection into the peritoneum or subcutaneous tissue ought to be either defibrinated blood (perhaps serum), or water containing common salt in the proportion of about .5 per cent. The injection of fluid into the bladder does not appear likely to be of much avail, and is condemned by the writer of this pamphlet.

Forty-Third Report to the Legislature of Massachusetts relating to the Registry and Return of Births, Marriages, and Deaths in the Commonwealth for the Year ending December 31st, 1884. Boston: 1885.—This is a business-like and well arranged public document, containing a vast number of statistical facts as to the movement of population in Massachusetts, but not demanding any detailed notice at our hands. The prefatory remarks of Dr. Frank Wells are capable and to the point, but they do not represent much more than a summary of the tables. By what to English eyes looks at first sight a somewhat odd arrangement, the statistics are divided into four sections—births, marriages, divorces, deaths, the introduction of the third section affording the means of elaborate calculations as to the rates of divorces to marriages, and the length of the married life of those divorced. The approximate birth-rate of the year was 23.86 per 1,000, the marriage-rate 8.51, and the death-rate 18.15 per 1,000. In 1884, 437 women gave birth to 879 children, of which number 864 were twins and 15 were triplets. This is the largest number recorded in a period of 20 years, and 288 more than in 1865. Another comparison with 1865 is a very unsatisfactory one. In that year the rates of illegitimate births was 8.9 per 1,000. It is now 18.4 per 1,000. Dr. Wells draws attention, however, to the fact that by the last census, only 50.61 per cent. of the entire population of Massachusetts are of native born parentage. The marriage-rate is the lowest sin 1845, with the exception of the period between 1875 and 1879. I Wells explains the diminution in marriages and in births on t ground that "the tendencies of modern life lead to a physical deterio tion and an individualism, both of which militate against the la families of former years." In 1884, two women were married Massachusetts at the age of 13 years, six at 14, and thirty-one at A fourth marriage of a male at 31 took place to a female at 30, and fifth marriage at 64, to a widow of 38. During a period of 20 yea 9,402 divorces have been decreed in the State, of which 67.8 per ce were on complaint of the female. The rates of divorces to marria during this period has been 1 in every 33.1. Nine persons (females but 1) died at the age of 100 years and upwards. Of t total deaths, 21.1 per cent. were from zymotic diseases, 23.8 per cen from constitutional diseases, 39.6 per cent. from local diseases, 10 per cent. from developmental diseases, and 4.5 per cent. from vi lence. Dr. Wells thinks the fatality from brain-diseases, "which increasing rapidly from year to year," demands very serious co sideration.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting of the College was held on Monday, Apr 12th, Sir William Jenner presiding.

The REGISTRAR read the terms of a draft-agreement between th College and the Royal College of Surgeons, with reference to the joint property, the new Examination Hall. The agreement contain a provision under which either College may give six months' noti to the other of withdrawal from the partnership, the College recei ing such notice having then the option of purchasing the other ha of the property at a value to be fixed by arbitration. The agreeme was unanimously accepted by the Fellows.

A report was received from the Council on the question of conferrin degrees in medicine and surgery. The report recommended simply th addition of an examination in arts, and suggested that all who passe this examination, and the present qualifying conjoint examination i medicine, surgery, and midwifery, should be entitled to the degre of M.B. and Ch.B.; further requirements to be afterwards enacted fo the higher degrees. After some discussion, it was resolved, on th motion of the Registrar, to submit this report to the Joint Committe of Delegates from the two Colleges, with the express understandin that this College reserves completely its judgment on the questio until the report of that Committee is laid on the table.

The Croonian Trust Committee submitted a scheme for the futur administration of the enlarged income of this Trust. They suggeste that the Croonian Lecturer should, as heretofore, be appointed annu ally, but that he should be eligible for reappointment on tw succeeding years; that his course should consist of not less tha three, and not more than six, lectures; and that he should b required to discuss one or more subjects in anatomy, physiology, and pathology, in their bearing upon therapeutic science, with a view t the more efficient prevention, control, and cure of disease. Half o the income of the fund to be allotted to the lecturer, and the othe half (about £100 annually) to be devoted to payment for such original researches or inquiries as may appear to the College to be most urgently called for, special provision being made for the systematic recording and tabulating of the experience obtainable from the prac tice in the wards of the various hospitals.

Dr. BRISTOWE moved amendments by which the Croonian Lecture ship would remain as at present, and two Croonian professors would be appointed annually, one to discuss subjects connected with path ology, the other to devote himself to questions relating to the treat ment of disease.

Dr. OGLE laid before the Fellows letters from Professors Burdon Sanderson and Odling, advocating the inclusion of animal chemistry as an alternative subject for the Croonian Lectures.

After some discussion, the debate was adjourned.

BRITISH HOME FOR INCURABLES.—The annual festival dinner of the British Home for Incurables was held, at Willis's Rooms, on April 14th. His Royal Highness the Duke of Connaught, who took the chair, made a forcible appeal in aid of the funds of the charity, saying that, with some experience in charities, he could sincerely state that a charity for incurables seemed to him to appeal more directly to the heart than any other. Donations to the amount of £987 were announced.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SCRIPTIONS to the Association for 1886 became due on January t. Members of Branches are requested to pay the same to their spective Secretaries. Members of the Association not belonging Branches, are requested to forward their remittances to the eneral Secretary, 161A, Strand, London. Post-Office orders ould be made payable at the West Central District Office, High olborn.

The British Medical Journal.

SATURDAY, APRIL 17th, 1886.

ENUCLEATION OF THE EYEBALL.

CLEATION of the eyeball is so seldom followed by any ill effects, it is generally considered to be one of the safest of operations. ered, however, throughout ophthalmic literature, are cases in h symptoms of meningitis have appeared after the operation, and arge majority of these have terminated fatally. In view of the that exenteration has recently been proposed as a substitute for leation, on the ground of its greater safety, the attention o halmic surgeons has naturally been directed to the dangers of leation, and three important papers have recently appeared upon subject (Deutschmann, *Archiv für Ophthal.*, Band xxxi, Heft 4; ecker, *Annales d'Oculist*, January—February, 1886; Nettleship, read before the Ophthalmological Society, February 4th, 1886, BRITISH MEDICAL JOURNAL, February 13th). All the cases rto published, in which severe cerebral symptoms have followed leation, have thus been collated; and, although these probably sent but a fraction of the cases that have actually occurred, still rtant conclusions may be arrived at from their consideration.

ere are no statistics on an extensive scale to show the frequency which this complication occurs; but it is significant that both d Graefe and de Wecker, in 600 consecutive enucleations, had an st identical percentage of fatal cases; namely, 3 and 3.3 per Deutschmann gives twenty-six cases, in which enucleation of ye was followed by severe cerebral symptoms. De Wecker adds ase, which is not included in these, and Nettleship four others; , in the discussion which followed the reading of his paper, three tional cases were recorded, one by Mr. Lawford (for Mr. Tay), two by Mr. McHardy. We have thus a total of thirty-four ; if, however, we confine our attention to those in which menin- ollowed a simple enucleation, three of these must be excluded; f Deutschmann's (Case 5), as the operation was complicated by emoval of an orbital tumour; de Wecker's, in which it is not n that the symptoms were due to meningitis; and one of Mc- y's, in which the eye was not enucleated in the ordinary manner, as torn out by the patient. Of the thirty-one remaining cases, y-seven were fatal; in twenty of these a *post mortem* examina- vas made, and purulent meningitis found in all: while in the ning seven fatal cases, as well as in the four which recovered, mptoms are said to have been sufficiently pronounced to place agnosis beyond doubt. In nearly all the cases the symptoms on within forty-eight hours of the operation. The earliest sym- were pain in the head, a high temperature, and sometimes a rigor. The condition of the wound affords no indication of danger; in most it is stated to have been doing well, and, in the few cases in which the cerebral symptoms appeared later than usual, to have healed.

In all three papers, the question is considered as to whether the presence of suppuration within the enucleated eye increases the risk of meningitis. Since von Graefe, in 1863, put on record two cases in which enucleation during suppurative panophthalmitis was followed by fatal meningitis, there has been a very prevalent belief that there was especial danger in enucleating in this condition. There are no means of knowing to what extent this belief has limited the performance of the operation, and therefore it is impossible to guage the significance of the fact that suppuration was, or had been, present in about half the cases. Deutschmann has no doubt that the presence of panophthalmitis increases the liability to meningitis, and he attributes this to two causes; (1) that the inflammatory œdema of the orbital tissues affords a more favourable nidus than the normal tissues for the propagation of septic organisms; and (2) that eyes in this condition are, more often than others, ruptured during enucleation. Both Deutschmann and de Wecker attach considerable importance to this rupture of the globe, considering that the tissues of the orbit become in this way inoculated with the septic contents of the eye, and that the inflammation thus set up is propagated to the meninges of the brain. As a matter of fact, rupture of the globe is stated to have occurred in a considerable number of the cases, and may have done so in others.

Although there is a general consensus of opinion that the starting point of the mischief is a septic inflammation of the wound, there is no such agreement as to the path by which the inflammation is propagated to the brain. No uniform evidence upon this point is afforded by the necropsies that have been made. In no fewer than nine out of twenty examinations, a careful search failed to discover any connection between the orbit and the inflammation of the meninges; some of these examinations included a complete microscopic examination of the optic nerve and its sheaths. In only two of the cases was there any evidence of orbital cellulitis. In two, the optic nerve and its sheaths showed definite inflammatory changes, which, in one, reached to the chiasma, and a short distance (how far was not ascertained) down the other nerve; in this case, micro-organisms were demonstrated in the nerve-sheath, and in the pia mater over the chiasma. In two other cases, the condition of the optic nerve was consistent with its being inflamed; but the examination was not complete. In one case, although there was no general orbital cellulitis, there was pus along the course of the sixth nerve, extending to the cavernous sinus, while both in the latter and in the superior longitudinal sinus there were thrombi; in this case, also, the presence of micrococci was proved. In the remaining five cases, the details as to the local conditions are defective. There is nothing in the area of the brain which is affected, to indicate the manner in which the inflammation has been set up. The convexity was chiefly affected in almost as many instances as the base; and when the meningitis was basal, it was not more pronounced on the side of the excised eye than upon the other. Nettleship suggests, in explanation of the convexity being affected, that the extension from the base may have taken place along the veins; the current of blood, always sluggish, being stagnant, or even reversed. The optic and the sixth nerves appear, so far, to be the only paths by which the extension of inflammation has been traced.

There are, however, many possible channels. In acute cellulitis, and after severe injuries to the orbit, it is well known that the periosteum may become implicated; and if the roof of the orbit be involved, meningitis may be set up; but this direct transmission could not take place when, as in most of the cases we are considering, there is no general cellulitis. The orbital veins form an extremely ready channel of communication with the intracranial cavity; and, although phlebitis of the orbital veins has not been demonstrated in any of the cases, this does not acquit the veins of being the conveyors of septic substances from the wound to the cerebral sinuses. Indeed, the rapid onset of the meningitis, the frequency of thrombi in the cavernous and superior longitudinal sinuses, and the absence of pathological changes along other connecting paths, render it not improbable that the veins are very frequently the portal through which the brain is reached.

It is alleged in favour of exenteration, that it is less liable to be followed by meningitis, because in it fewer of the communicating channels are opened; and this claim is endorsed by de Wecker. We do not propose now to discuss the merits of extenteration; but it may be pointed out that, although in it the optic nerve-sheath may not be opened, yet the suprachoroidal space, which is in free communication with it, is laid open in its whole extent, while the exposed mouths of the venæ vorticosæ open into the cavity of the globe. The views at present held, as to the pathology of inflammation, would point to the adoption of antiseptic precautions at the time of operation and subsequently, as the surest way of averting complications; a view strenuously supported by de Wecker, in the paper referred to. It must be confessed, however, that the operation of enucleation does not appear to have been more often followed by untoward results, in the days when no attention was paid to maintaining asepticity of the wound, and when it was a not uncommon practice to introduce a sponge into the orbit, immediately after the operation, without any antiseptic precautions whatever. The suggestion of Mr. Priestley Smith, that arrangements should be made to allow free drainage from the orbit, will probably prove a very salutary one. In a case recorded by him, in which symptoms of meningitis came on after enucleation, an immediate improvement in the patient's condition took place as soon as the wound had been freely washed out, and free drainage allowed.

IODIDE OF SODIUM *versus* IODIDE OF POTASSIUM.

THE disadvantages attending the employment of the iodide of potassium have long been noticed and commented upon in England; but, probably from the fact that the other iodides have never come into anything like general use here, these disadvantages have been supposed to result from the exhibition of an iodide as such, and therefore likely to follow the administration of iodides of other bases than potassium. The subject has, however, been taken up and studied of late in a more scientific manner, especially abroad, and we are thus enabled to judge on other than empirical grounds the relative advantages of the different iodides.

The object with which any drug is given is, or should be, the relief of certain definite symptoms; but it need scarcely be remarked that no drug, so far as one is enabled to judge, ever corresponds so exactly to any particular morbid condition as to cover that particular pathological area and no more. The effect of the drug overlaps the diseased area, so to speak, and produces, or is apt to produce, a train of symptoms not only unnecessary and undesirable, but oftentimes positiv injurious. Now, when iodide of potassium is given in any beyond qu small doses—and large doses have lately been recognised as indispensa to the relief of many cases where no improvement has been effec by the smaller doses—various troublesome consequences are to noticed, first among which is an extreme depression. We may h recall the well-known fact that potassium, and all salts into t composition of which it enters, exert this depressing influence, low ing the blood-pressure and slowing the heart. So marked is t action on the heart that large doses (one ounce and upwards) wo probably cause dangerous, if not fatal, syncope, were it not for t fact that its emetic action is so far constant in these doses, as obviate the risk of its being absorbed in quantities sufficient to sh its power in this direction. The depression, nevertheless, is alwa present to some extent, and must often be undesirable. Sodium a its salts are comparatively exempt from this ill effect; and, therefo *ceteris paribus*, the use of the sodium iodide is indicated where we think proper to employ large doses of an iodide, or where t state of the patient is such as to render further depression unadvisab In support of the argument that the depression is the effect of t salt, as a potassium compound and not as an iodide, the following e periments may be adduced. When muscular tissue is cut out of t living body and placed in a 2 or 3 per cent. solution of a potassi salt, the chloride, for example, the muscular fibres immediately lo their irritability. If this exposure to the potassium salt be n continued for too long a time, immersion in a solution of sodium chlori will restore to the muscle its irritability. Further, if healt muscular tissue on removal from the living body be immersed in solution of chloride of sodium, its irritability will be preserved for much longer period than if it be immersed in pure water (Kühn The salt-frog, common in the physiological laboratory, is a practic instance of the stimulating action of solutions of sodium chloride up the living animal tissue.

Second in the list of inconveniences following the employme of iodide of potassium comes the collection of symptoms, catar of the conjunctival, naso-pharyngeal, and respiratory muco membranes, and headache, known as iodism; and this is n uncommonly accompanied by catarrh of the gastro-intestinal muco membrane, giving rise to epigastric pain and discomfort, dyspepsi and diarrhœa. An analytical study of the physiological effect of th drug will show that the catarrh of the gastro-intestinal mucous mem brane is probably due to the potassium of the salt, which produces th effects alluded to above, on coming into contact with the muscul walls of the stomach during absorption. For this reason, the dru will often be tolerated, if the precaution be taken to give it largel diluted with an alkaline mineral water. The coryzal symptoms a probably due to the iodine component of the salt; it is only of min importance so far as the general health of the patient is concerne and is variously accounted for by different authorities. The only theor as to its etiology which we shall mention is the one advocated in th latest edition of Nothnagel and Rossbach. According to these author ties, the catarrh of the nasal and respiratory mucous membranes occu only when either free iodine is used externally together with th iodide of potassium internally, or when the potassium iodide whic is used is impure from the presence of some free iodine; in eithe case, it is the direct irritation of the free iodine, either in the proce of excretion or when inhaled as a vapour, which causes the catarrh

iis be so, these effects will be avoided by care being taken to nister a pure potassium or sodium iodide. What has been said the cause of the catarrh will hold good for the eruption also ; atter is the external manifestation of an irritation of the in- nent, just as the former is of irritation of the mucous mem- es.

are ignorant, it is true, of the exact mode of action of the es, and of the iodide of potassium in particular ; our employment is empirical, and we are reduced to the vague] designation of cific" to describe its therapeutical effect. If this be the case in ing of its action in cases of tertiary syphilis, how much more cable is it when employed as an "alterative" or "resorbent,' its *modus operandi* can scarcely be guessed at. Be this as it whatever effect can be attributed as a "specific" to iodide of sium can probably with equal justice be credited to the other es, and particularly to iodide of sodium ; while, as we have en- ured to show, the inconvenience resulting from the employment iodide in large doses, is minimised by the substitution of sodium tassium salts. The same remarks apply with few reservations e analogous salts of bromine. Such authorities as Nothnagel Cossbach assert that they have used the sodium iodide almost sively for some years past where the drug had to be given for a time, with results equal to those obtained from the iodide of sium ; and Dr. H. W. Berg, of New York, has used it with ir good results in cases of pregnant women under the influence philis.

sum up then, we may claim for sodium iodide that (1) it can be therapeutically for almost all, certainly the chief, purposes for potassium iodide is used, and with similar beneficial results ; at sodium iodide is more assimilable than the iodide of potassium, locally to the digestive organs, and to the general system ; (3) as a result, many of the local and general undesirable effects are produced by the potassium iodide do not follow the use of odium iodide. It is to be hoped, therefore, that the sodium will be used by those whose clinical advantages allow an ex- e trial of the drug, so that a more extended experience may m that which a limited experience seems to claim for this

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. McWILLIAM has been appointed Assistant Professor of Physi- at University College.

E Library of the Royal Medical and Chirurgical Society be closed from Good Friday to Easter Monday, both days ive.

E Library of the Royal College of Surgeons of England will be on Friday and Saturday, the 16th and 17th instant, for the ses of the Final Examination for the Membership ; 280 candi- having entered for this examination.

RELIMINARY MEETING of the Royal Commission, appointed to on M. Pasteur's method of preventing the development of phobia in persons bitten by rabid dogs, was held on Thursday, house of Sir James Paget.

E PRINCESS OF WALES has written to the Mayoress of Birming- who was president of the local branch of the National Aid y, tendering to all the ladies who worked for the branch Her Highness's warmest and most sincere thanks for the valuable nce rendered, not only in money, but in kind and in time.

THE fifteen years' period of office of Dr. Theodore Williams as Physician to the Brompton Hospital for Diseases of the Chest having expired, the Committee of Management, on the recommendation of the Medical Committee, unanimously re-elected him, on April 6th, for a further period of five years.

ON Wednesday last, a large and influential deputation from South Wales had an interview with Earl Spencer, at the Privy Council Office, for the purpose of seeking Government aid towards the foundation of a medical school and a faculty of engineering, in connection with the University College of South Wales and Monmouthshire, at Cardiff.

AT the annual meeting of the Birmingham Medical Institute on March 25th, the following officers were elected. *President:* Mr. J. V. Solomon. *Vice-Presidents:* Dr. Savage, and Mr. C. A. Newnham. *Honorary Secretaries:* Mr. Gilbert Barling, and Mr. Wood White. *Honorary Librarians:* Dr. Saundby, and Mr. Bennett May.

COLONIAL EXHIBITION.

WE are informed that His Royal Highness the Prince of Wales has approved a suggestion made by Dr. J. H. Aveling, that donation-boxes, to collect a general fund for the London hospitals, should be placed in the Colonial Exhibition ; and that steps are being taken to obtain the fullest advantages from this important concession.

THE EPIDEMIC OF MEASLES.

THERE seems to be, at the present time, a considerable epidemic prevalence of measles throughout northern Europe. The number of cases encountered in this country every day appears to be far above the average, and the number of adults affected by the disease appears to be unusual. Telegrams from Berlin show that nearly every member of the Imperial family has been affected in turn, the last sufferer being the Crown Prince.

THE MEDICAL SCHOOL OF THE LONDON HOSPITAL.

RAPID progress is being made with the new buildings of the London Hospital Medical School, and there is no reason to doubt but that they will be ready for use at the opening of the winter session next October. No pains or expense have been spared to make the new buildings complete in every department ; and it is said that, when finished, they will form the largest school-buildings in London.

DR. GEORG VARRENTRAPP.

THE town of Frankfort-on-the-Maine has lost one of its greatest benefactors, Dr. Georg Varrentrapp. He it was who, by his persistent utterances about the sanitary state of the town, and the necessity of comprehensive hygienic measures being undertaken, persuaded the authorities to sanction and to lay down a system of sewerage known as the Schwemm-Siele. Besides this, he was most active in his efforts to improve the sanitary condition of schools. He also established a journal in the interests of hygiene, which was the first of its kind published in Germany. This has now reached its seventeenth volume. Dr. Varrentrapp died in his native town of Frankfort on March 15th, at the age of seventy-seven.

VACCINATION AND SMALL-POX.

IN order that the valuable and well-considered remarks on vaccination, and the changed incidence of small-pox, embodied in Dr. Buchanan's last annual report to the Local Government Board, may be made as widely known as possible, the Board have just had those remarks reprinted, and copies forwarded to every member of the House of Lords and House of Commons, and to every board of guardians, public vaccinator, health-officer, etc., throughout the country. It is to be hoped that these remarks, which were running the serious risk of being lost sight of, like the great majority of Blue Books, may be carefully digested by every member of Parliament, before Sir Josep

Pease's motion, as to the compulsory clauses of the Vaccination Acts, comes on for debate. Dr. Buchanan's report has already been referred to at some length in this JOURNAL.

REFORM OF THE UNIVERSITY OF LONDON.

LORD JUSTICE FRY has lost no time in urging upon the Senate of the University of London the advisability of putting their house in order, lest some worse thing should befall them. At the meeting of the Senate on Wednesday last (April 14th), the following motion, moved by him, was carried, after some discussion: "That a committee be appointed to consider and report upon the communication of the Executive Committee of the Association for promoting a Teaching University for London, with power to confer with the Committee of that Association, and with any Committee of Convocation, or with other persons, as they may think fit." Convocation will shortly have an opportunity of showing with which party its sympathies range, in an election of a member of the Senate in the room of Sir Joseph Dalton Hooker, who has resigned.

THE PRESIDENCY OF THE COLLEGE OF PHYSICIANS.

THE election of the President of the Royal College of Physicians takes place next Monday (April 19th). All that has occurred in the last week, confirms the view which we then expressed, as to the wisdom of the re-election, by unanimous consent, of Sir William Jenner, who would, it is well understood, accept such nomination. It has been suggested that there is no alternative, inasmuch as other senior Fellows, otherwise qualified, could not be depended on to carry out, loyally, steps for cementing and giving full effect to the tendencies to union between the two Colleges. But this is, of course, absurd. Accepted facts and agreements are loyally understood by all reasonable men, in succeeding to executive offices; and there is not the slightest reason to suppose that they should not be so in this instance.

ON THE TRANSPLANTATION OF TEETH.

EXPERIMENTS have recently been made by Dr. Younger, of San Francisco, on the subject of the transplantation of teeth, with a view to their growth in the new position. It would appear that, if proper precautions be taken to secure perfect apposition and cleanliness, the operation is often attended with success, and possesses many advantages over the use of false teeth. The inflammation of the gums, however, is somewhat persistent, and constitutes a drawback, from the inconvenience which results therefrom. Recourse to this method is more particularly indicated when the teeth to be replaced are front teeth, and essential both for appearance sake, and for perfect articulation.

FORGERY OF BIRTH AND VACCINATION CERTIFICATES.

ON Saturday last, John Broome, formerly registrar of births and deaths in Upper Holloway, was charged, at the Central Criminal Court, with forging certificates of birth and of vaccination, with the object of defrauding the guardians of the parish of St. Mary, Islington. It appeared that the accused had been accustomed to return certificates of births which had not taken place; and, in order to conceal the fraud when making his monthly returns to the vaccination-officer, to send in certificates of vaccination, to which the signatures of medical men were forged. Several medical practitioners, whose names had been used in this way, deposed that the certificates had not been signed by them. The accused was found guilty, and sentenced to six months' imprisonment with hard labour.

TYPHUS FEVER AT SALFORD.

SEVERAL cases of typhus fever have recently occurred among the members of a gipsy caravan at Pendlebury, on the borders of Salford, and have been admitted to the Wilton Hospital in the latter town. This is a matter of some concern to Salford, with its 200,000 inhabitants. For years past, typhus has appeared in the borough at short intervals, and it has required continual watchfulness on the par the health officer and the sanitary authority to prevent, by mean prompt isolation, the individual cases from becoming centres of fection. Despite these efforts, there occurred in Salford, in 1885 cases of typhus; in 1884, 35 cases; in 1883, 15 cases, etc. The that the latest cases have been brought from Pendlebury is the n significant when it is considered that the Swinton and Pendleb Local Board have no hospital for infectious diseases, although t district contains about 20,000 inhabitants.

HONOURS TO LONDON SURGERY.

THE Council of the Royal College of Surgeons of Ireland have un mously offered the Honorary Fellowship of the College to Sir Spe Wells, who has accepted the distinction, which has hitherto b very rarely conferred, and only upon very distinguished men. ceremony of conferring the honorary diploma is fixed for the 2 instant, when it is expected that Sir James Paget, Sir Spencer We and other recipients of the diploma, will be present. We are also a to congratulate Sir Spencer Wells upon receiving fresh proofs of ap ciation of his work, not only from Ireland, but from America, as, month, the St. Louis College of Physicians and Surgeons conferred him the honorary diploma of Doctor of Medicine of the College, recognition of the fact that he hath largely contributed to the vancement of the science and art of medicine." These internati courtesies are very pleasant; and we should like to see a fuller re nition, by our own learned societies, of the work of our Irish American brethren.

MEDICINES FOR INTERNAL AND EXTERNAL USE.

BY a notice recently issued in the District of Potsdam in Prussia is ordered that the directions to be affixed to medicines for inte use shall be written on white paper, and to those for external us bright red paper, on which writing with black ink is easily legi The latter must also be distinctly marked "external." An or regulating the colour of the paper to be used has existed since 18 but its provisions have gradually been transgressed; hence the n regulations. Such regulations as that to which allusion is now ma are scarcely calculated to obviate the danger of mishap. Differe in the colour of paper is useful, so far as it goes; but it appeals the sense of sight alone; and, as we have already urged, it should substituted or supplemented by an appeal to the sense of touch, b difference in the configuration of the bottles used respectively for " ternal" and "external" medicaments.

REGISTRATION OF SANITARY SCIENCE CERTIFICATES.

WE publish, in the column devoted to Public Health communicati the announcement of the formation of an association of medical pr titioners qualified in sanitary science. We believe there are now al two hundred members of the medical profession holding such certificat from universities and corporations, whose medical degrees are registra We proceed by steps in this country, and many things are allowed grow by a sort of natural development, which elsewhere are the obj of State legislation and regulation. Sanitary science certificates ha undoubtedly now a claim to State recognition, and deserve more c sideration at the hands of vestries and local authorities, who have duty of conferring health-appointments, than is often accorded them. Obscure and unqualified persons are now frequently appoint by dint of local intrigue.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

A QUARTERLY meeting of the Medico-Psychological Association w held on April 8th, in the Great Central Hotel, Carlisle, Dr. Campbell, Garlands, Carlisle, presiding; there was a large representative atte ance from Scotland and the North of England. Papers dealing w important points in lunacy and the treatment of insanity were re by the Chairman, Dr. Keay, Dr. Campbell Clarke, Dr. Ireland, I

is, and Dr. Greenless, and considerable discussion followed. On motion of the Chairman, seconded by Dr. Macleod, of Beverley, following resolution was passed: "For the safety of insane nts, as well as those brought into contact with them, it is de- le that, previous to removal to the asylum, it should be the duty e relieving officer effecting the removal to ascertain satisfactorily such patients are not in possession of articles likely to cause injury emselves or others." It was further agreed that copies of this ution be forwarded to the Parliamentary Committee of the Asso- on, as well as to the President of the Local Government Board the Commissioners in Lunacy.

E FIFTY-FOURTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

understand that the arrangements for the forthcoming annual ing at Brighton are well forward. Owing to the lamented death r. Austin Flint, it has become necessary to find another gentle- to read the Address in Medicine. The choice has fallen on Dr. ngs, of Washington, United States, who has signified by telegraph willingness to accept the office. The international character of meeting will thus be still maintained. It is also hoped that ssor Charcot will be present, and will take part in the discus- . To turn to another side of the picture, we hear that Sir nas Brassey has placed his world-renowned yacht, the *Sunbeam*, e disposal of the Association for four days during the meeting. sea-going members, a trip in the *Sunbeam* in August will be de- ful, especially if its distinguished owner (who has expressed a to do all in his power to promote the success of the meeting) be himself to be present. On Wednesday, August 11th, Sir Julian smid has invited the Association to an afternoon garden-party t. Ann's Well, the old chalybeate spring of Brighton. The ex- ons already arranged include visits to St. Leonard's, Hastings, ridge Wells, Eastbourne, and Chichester; and to Arundel Castle, nvitation of his Grace the Duke of Norfolk. We shall give er particulars as time goes on. For the present, signs such as show that the local executive is actively at work; and that not they, but the profession and residents of the town and county, d to do their utmost to render this an agreeable as well as an rtant meeting. From all accounts, it bids fair to be both.

DR. HEYWOOD SMITH.

have received a prospectus of Dr. Heywood Smith's private hos- for ladies, which has been founded—as was at the time intimated d be done—to indemnify him in some sense for the action taken e Hospital for Women in respect, perhaps, to the circumstances of Armstrong case. On the Council of Reference are Dr. Alexander, iverpool, Mr. Howard Barrett, M.R.C.S., the Rev. P. J. Clifford, , LL.D., B.Sc., the Rev. Hugh Price Hughes, Mr. C. S. Read, Mr. ey Rider, Mr. Samuel Young Shepherd, Mr. Samuel Smith, Mr. T. Stead, and other persons of influence and repute. Warrington e, Maida Vale, W., has been fitted as a hospital, and it includes wards and wards for nominal payments, and also for patients he higher scale customary in home hospitals. The Secretary Superintendent is Mr. Mann. Many hostile opinions were ex- edregarding the course taken by Dr. Heywood Smith, and his indis- ons were acknowledged and severely visited. There are few now will not wish him success in ministering to this new hospital.

ELECTRICITY IN PHYSIOLOGY.

STONE, in his Lumleian Lectures, has certainly not wanted the ge of his opinions. He has approached the study of the elec- l conditions of the human body from the purely physical side, has exposed unsparingly the fallacies, into which he believes iologists have been led, by neglecting thoroughly to understand hysical characteristics of the force which they have used. His ention is, that a force, whose phenomena are undoubtedly very complicated, and but imperfectly understood, has been used for the study of phenomena even more complicated and less understood. The science of electricity, partly, it must be admitted, under the stimulus of commercial necessities, has, in recent years, made great progress, and some of its discoveries and inventions, it is said, place in the hands of physiologists new and more accurate instruments of research, and refined methods of eliminating fallacies. Modern students of medicine are increasingly overwhelmed with details about the electrical phenomena of muscles, and so forth, and Dr. Stone's lectures may, perhaps, serve to suggest to teachers of physiology the advisability of ceasing the customary annual increment of facts of this class, which so remotely affect practical medicine, until their truth is a little better established.

EXTRAVAGANT VISITATIONS.

THE Branch Council for England of the General Medical Council had before it, at its last meeting on April 6th, the report drawn up by the Committee appointed to consider the methods hitherto adopted in the visitations of examinations, and the principles and method of conducting future visitations. With regard to the first point, the Branch Council adopted a report which dwelt on the great and rapidly increasing expense of visitations conducted on the present method, and especially, as we have already shown, the very great cost of the visitation carried on last year. This last visitation, which was entirely confined to the universities, cost over £2,250; the average cost for each body was over £200; and the average payment to each visitor was nearly £70. "'But what good came of it at last?' quoth little Peterkin. 'Nay, that I cannot say,' quoth he; 'but 'twas a famous'" visitation; and the Branch Council thinks that another visitation is not necessary. The logical sequence, it is true, is not very evident, and the recommendation practically amounts to a verdict of not guilty (of extravagance), but don't do it again. With a gentle humour, which is, perhaps, not altogether unconscious, the Branch Council further recommends that, in future, the visitations should be so conducted as to give effect to the law under which they are made, that is to say, that they should be directed primarily to ascertain whether the courses of study, and the examinations held, are calculated to secure the possession, by persons obtaining qualifications, of the requisite knowledge and skill for the efficient practice of their profession. This, which is all that the Medical Council is really called upon to do in the matter, could be easily accomplished at small expense by a visitor appointed by each Branch Council, or by two or three appointed by the Council itself.

THE SEWAGE OF LONDON.

DR. FRANKLAND, F.R.S., the highest authority on water-pollution, has expressed a strong opinion as to the inadequacy of the scheme of the Metropolitan Board. The accumulated experience of a quarter of a century has incontestibly shown that, while precipitation processes mitigate the nuisance, more or less, they invariably fail to remove it, unless the stream into which the treated sewage flows is non-tidal, and of comparative enormous volume. Both these favourable conditions are, however, conspicuous by their absence, in the case of the Thames in dry weather. On the other hand, intermittent filtration through land, as recommended by the Rivers Pollution Commission, and by the Metropolitan Sewage Commission, has everywhere proved effective for rendering sewage perfectly innocuous, for all except dietetic purposes. No doubt there is the difficulty of obtaining a sufficient area of suitable land; but, while he does not underrate this difficulty, he cannot believe it to be insurmountable. To purify a daily volume of 150 millions of gallons of sewage from 1,600 and 2,000 acres of land would be necessary. Recent investigations have demonstrated that the purifying action takes place near the surface of the land, and it is, therefore, not necessary, as was supposed during the existence of the two Commissions above mentioned, to drain the soil six feet deep, a discharge of two feet below the surface being amply sufficient. Surely

it cannot be impossible, he suggests, to obtain, at a reasonable cost, 2,000 acres of land near the present outfalls, and capable of drainage to the depth of two feet. From personal observation, Dr. Frankland declares that there is a considerable area of very suitable land close to the northern outfall. The initial cost of this method of treatment might be somewhat greater than that of the scheme recommended by the Board's committee, but the remedy would be effective ; whereas the precipitation scheme, if carried out, can only result in disappointment, and the waste of the ratepayers' money.

VENTILATION OF THE HOUSES OF PARLIAMENT.

CONSEQUENT on a survey of the main sewer under the Palace of Westminster, made by Mr. L. H. Isaacs, M.P., and the evidence of other experts, the following interim report of the committee on the subject has been presented by Sir Henry Roscoe. "The Committee on the Ventilation of the Houses of Parliament desire to report to the House of Commons the results to which they have already arrived, partly from their own investigations, and partly from evidence received on the important question submitted to them. The committee are convinced that the air of the Palace of Westminster is subject to contamination by sewer-gas, emanating from the low level sewer of the main drainage of the metropolis, with which the system of drainage of the Palace is in direct connection. Undoubted evidence has been obtained that sewer-gas from this source passes into the drainage system of the Palace in times of flood ; and, under the circumstances, owing to the absence of proper ventilation in the low level sewer above referred to, and to other causes, the committee are convinced that a complete reconstruction of the main drain passing under the Houses of Parliament, and an entire alteration of the means of discharging the sewage from the Palace into the main low level sewer, are urgently required for the safety of the members of the Legislature, and of the officers residing within the precincts of the Palace. The committee will be prepared, in due course, to report in detail as to the measures which, in their opinion, may best accomplish these necessary objects. Such works, however, can only be conveniently executed when Parliament is not in session. In view of the urgent nature of the case, the committee are of opinion that immediate steps should be taken to carry out temporary but effective measures for preventing, as much as possible, the recurrence of the evils complained off. The committee, therefore, beg to recommend to the House that Her Majesty's Board of Works be instructed, with the co-operation of the members of the committee, at once to carry out certain remedial measures which the committee are now prepared to suggest, and which, in their opinion, will effect the desired result."

SUCCESSFUL SPLENECTOMY.

AT the meeting of the Royal Medical and Chirurgical Society, last Tuesday, a paper by Mr. Knowsley Thornton was read, which was of remarkable interest, as embodying an account of the first successful case out of twelve operations for the complete removal of the spleen, which have been performed in England. The operation was performed almost exactly two years ago, on April 22nd, 1884, for the relief of a painful and rapidly growing splenic tumour, in a girl of nineteen. It proved to be one of the multilocular cysts, which are very rarely found in the spleen, and which had reached a dangerous stage ; for the walls of the cyst had in one part become so thin, as to be quite transparent, and rupture might have followed any trifling accident. The specimen was shown to the Pathological Society, soon after removal. No traces of any hydatid origin could be discovered. The patient was anæmic, but the increase in the proportion of colourless corpuscles was not great, and there was no enlargement of the thyroid or other glands. The operation was strictly aseptic. There was a speedy recovery, interrupted by a relapse in the third week, with some fever and phlebitis; but, in seven or eight weeks, good health was re-established, and what is very important to notice, has been continued up to the present time ; so that the physiologist has a rare opportunity of studying the working of the human economy, when deprived of one of its large visceral org whose functions, in spite of much study, remain somewhat e matical. Mr. Thornton was able to give the very satisfactory re of his patient, that, after recovery from the immediate effects of operation, she had spent nearly two years in comfort, and, apparen normal health ; into any more minute physiological points he had no opportunity of entering. In the very interesting tables of previ operations, which he presented along with his paper, there w thirteen for simple hypertrophy, of which nine recovered. The f splenectomy in England, that by Sir Spencer Wells, in 1865, was simple hypertrophy ; but the patient died in a week, with a la thrombus in the heart. M. Péan was quite successful in 1867, in removal of a spleen containing a very large cyst, which held more th five pints of viscid fluid. That was the first success since a rat doubtful case by Ferrerius, in 1711, and by Zaccharelli, in 1540. the many cases, now reaching a total of about twenty, in which operation has been recorded, as having been resorted to in cases undoubted leukæmia or leucocythæmia, it has invariably been fat and Mr. Thornton was no less emphatic than other authorities, in condemnation, under such circumstances ; and, though these, unf tunately, are by far the largest number of cases in which great sple enlargement is associated with fatal disease, yet a small residuum mains of cases of great pain, such as sometimes accompanies wand ing spleens, and sometimes of great danger, as in cystic disease, which the advances of abdominal surgery offer us some hopes of p manent relief.

PRESENTATION TO DR. FERGUS.

AT the end of the recent term at Marlborough College, a meeting the school was held to take leave of Dr. Fergus, after his thirty-se years' connection with the college as its medical officer, and to prese him with a silver tea-service. The head-master, Mr. G. C. Be opened the proceedings by a speech, in which he testified to the infin good done by Dr. Fergus in the school ; to his devotion, skill, co ness in critical moments, and his equanimity. He said that a su was being collected, from old Marlburians and others, for a larg testimonial to be presented, probably next Prize-day, to Dr. Fergu and for a portrait of the doctor to be placed in the college. The te service then to be presented was from the present members of t school. The presentation was made by the Senior Prefect, Mr. A. B. Williams, who said, on behalf of the school, how great was t pleasure it gave them to make this presentation to their old frien though it was but a slight token of their affection and esteem. D Fergus thanked the boys for their handsome present, which he felt su would be equally appreciated by Mrs. Fergus.

CHOLERA AT GIBRALTAR IN 1885.

THE health officer of Gibraltar, Surgeon-Major F. P. Staples, has ad dressed to the Sanitary Commissioners of that place an interestin report on the cases of cholera which occurred on the Rock in the cours of last autumn. Inasmuch as the cases numbered only 34 in al and the largest number, in any one day, was two, their occurrence ca hardly be described as an epidemic ; but it is nevertheless importan that as detailed particulars as possible should be placed on recor concerning them. This, Surgeon-Major Staples has been at grea pains to accomplish in the report before us. He has nothing speciall novel to record as to the exciting causes or behaviour of the disease which seems to have been found, as usual, in association with dirt overcrowding, impure water, and unwholesome food. The reporte lays much stress on the "epidemic influence" of the year, the effect of which he thinks he detects in the mortality generally. But on a comparison of the deaths at Gibraltar with those of the neighbour ing Spanish town of Linea, he sees much reason for satisfaction At Gibraltar, with a population of 18,000, there were 20 death from cholera, and a general death-rate of 27.4 per 1,000. A Linea there were 206 deaths from cholera, and a general death-rat

9.4 per 1,000. The first cholera case occurred at Gibraltar August 6th, and the last on October 13th, which dates correspond r closely with those of the commencement and disappearance he disease from Linea, as well as with those of the great emic of 1865, investigated by Dr. Sutherland, and with the com- cement of the minor epidemic of 1860. Surgeon-Major Staples happily, no sympathy with those who would enforce quarantine ibraltar, "as the one place in the world where it is possible to y out the strict principle of non-communication." As he well ob- es, no doubt this would be possible if the fortress were placed in ate of siege, and any person crossing the neutral ground fired upon ur advanced sentries. The most rigid cordonists are hardly pre- d for this; for, if so, they are brought face to face with a position ven greater magnitude than cholera, namely, the want of food. s obviously necessary, then, he argues, to admit supplies from ea, and at once the non-communication becomes relative, and not lute, and insufficient to exclude that inscrutable influence by ch cholera is propagated: for the fruit and vegetables, and the s and the milk, and other articles of human consumption, must e from homes where cholera prevails, and pass through the hands hose who have been employed in ministering to the wants of the . Surgeon-Major Staples does not, of course, advocate a perfectly stricted intercourse with the outside world in time of cholera. erience shows that choleraic persons from the neighbouring terri- seek an asylum at Gibraltar, and they tend to embarrass the tary administration, necessarily, at such a period, taxed to the ost of its capability, as well to set up new foci of infection. By ns of strict medical inspection, the authorities can, however, in a guarantee of the state of health of those admitted into the ison, and also a sufficient means of excluding those who, from r appearance, may be considered likely to be, or to become, the ect of the disease. A better result is to be expected from that sure in Gibraltar than from the impossible and unnecessary sys- of the cordon and quarantine; and it is to be recommended, also, this additional reason, namely, that it accords with the know- e—limited as that is—which we possess of cholera, whereas those r measures, directed against the unknown cause of cholera, are cted to effect what experience has shown abundantly they have r done, namely, the arrest of the geographical march of the se.

RIFICATION OF WATER: ITS BIOLOGICAL AND CHEMICAL BASIS.

paper thus entitled, which was read before the Institution of l Engineers on the 6th April, Dr. Percy F. Frankland describes nethod for detecting the relative freedom from micro-organisms fferent waters, or of the same water at different times, by Koch's ss of cultivation upon films of nutritive gelatine. Perhaps the weak point in Dr. Frankland's deductions, from the observed ts obtained by his process, is that he asserts that the number of onies" of organisms produced upon the film are a direct indica- of the actual number of organisms present in the original water, "colony" being supposed by him to originate from a single nism. Now, it is clear that several organisms might be collected one spot of the film at the moment when the water was poured it; and from these, but one colony would result. However, there s little doubt that the number of colonies must be an indication e relative abundance of organisms in the water from which they erived. Several very important practical results are arrived at, mphasised in the paper. For instance, it has been found that coarse-grained filtering materials, such as sand, are efficient in ving micro-organisms from water, although the channels which therein are too large to arrest mechanically the passage of these te bodies. The same filtering agent, however, cannot be used a indefinite time, for the organisms diffuse out of it after awhile, become once more distributed through the water. Dr. Frankland a five of the London water-companies, and classifies them accord- ing to the excellence of their provision for water-purification in four particulars, namely, 1, storage-capacity for unfiltered water; 2, thick- ness of fine sand for filtration; 3, rate of filtration; and, 4, frequency of renewal of the filter-beds; and he finds that the number of micro- organisms found in the water supplied by these companies is smaller in proportion to the perfection of their arrangements in these four points combined. It is to be hoped that the nature as well as the number of the organisms present in drinking-waters may be studied more universally than hitherto, by the aid of Dr. Frankland's process, which seems to be simple and practicable.

THE GROCERS' COMPANY AND BIOLOGICAL SCIENCE.

A CITY company officially represented at a lecture on Physiology is surely a sign of the times. So, too, is a lecture, not on the art of dining, but on a novel and somewhat abstruse physiological research, conducted with funds provided by the company. The audience which assembled to hear Dr. Wooldridge's lecture at the University of London, on April 13th, contained this unusual element; for, in the seat of honour beside the vice-chancellor, were the master and certain members of the Court of the Grocers' Company, and the furs of city magnates were mingled with the plainer robes of the leaders of the medical world. The occasion, therefore, had a special character on this account, but the story which Dr. Wooldridge had to tell had an interest of its own, from the physiological point of view, and may come to have important practical applications in pathology. The peculiar substance which he has isolated from the blood produces clotting within the vessels, with the most extraordinary rapidity, and it has already been found to be notably increased in quantity under certain diseased conditions. Sir James Paget, in a few well chosen phrases, after the lecture, congratulated the Grocers' Company on the public spirit which they had shown in expending a thousand a year in the endowment of research. No immediate practical application of Dr. Wooldridge's observations was perhaps possible; but, said Sir James, when a scientific research comes to have a practical application, it ceases to stand in need of the generosity even of a rich city company.

SCOTLAND.

A CASE of small-pox has occurred at Arbroath. The patient, who was one of a family of six persons, has been removed to the Epidemic Hospital.

THE recent epidemic of measles at Johnstone, though on the decline, is proving more fatal to those attacked, and as many as thirty deaths have been already registered in connection with the outbreak. It has been definitely decided to erect a hospital for infectious diseases in Johnstone.

THE death is announced of Mr. Thomas Moir, who, for nearly twenty-five years, has acted as registrar and assistant clerk to the Senate of Glasgow University. Mr. Moir was highly esteemed by the University professoriate, and his loss will be much felt in connection with the work of the Senate.

ABERDEEN UNIVERSITY COURT.

AT the meeting of this Court, held on April 12th, a resolution was adopted, urging that the influence of the University should be employed to induce the Government to bring in an Universities (Scotland) Bill, different from the Bill of last year in the following particulars; in the entire removal of terms which may imply finality; in recognising more liberally the claims of the Scottish universities; and in admitting the claim of the University of Aberdeen to consideration in respect of the extension of its buildings.

MR. JONATHAN HUTCHINSON.

We learn with satisfaction that the University of Glasgow has resolved to confer the honorary degree of LL.D. on our eminent associate, Mr. Jonathan Hutchinson, a former editor of this JOURNAL. Mr. Hutchinson is not a member of the University. The distinction intended is, therefore, the more marked, and does honour to the University as to the recipient.

QUEEN MARGARET COLLEGE, GLASGOW.

This College is still continuing to fulfil very successfully the same purpose, in the movement for the higher education of women, as Girton College and other similar institutions in England. Of the various classes held during the past winter session, one of the most numerously attended was the course of instruction in physiology, conducted by Professor McKendrick, with the aid of Dr. McGregor Robertson. Following the Cambridge system of mingling systematic lectures with practical work, there were forty-two systematic lectures, and fifteen lessons in histology and the use of the microscope. The class numbered seventy-two ladies; and, by suitably arranging them in divisions of moderate size, they were enabled to study, with some degree of thoroughness, the functions of nutrition, and to be trained in the examination of the tissues and the mounting of sections of the more important organs. We understand that none of the students worked at this class with the view of studying medicine, but simply as a branch of culture. There can be no doubt that such instruction has a high educational value, apart altogether from any supposed practical advantages; and the success that has attended this course of lectures, and the aptitude shown by the ladies in microscopic manipulation, must be very gratifying to Professor McKendrick, and will, no doubt, encourage him to render available again this important branch of general education to the pupils of Queen Margaret College.

GLASGOW PHILOSOPHICAL SOCIETY.

At the last meeting of this Society, a valuable communication was made by Mr. John Murray, Ph.D., Vice-President of the Royal Society of Edinburgh, on The Physical and Biological Conditions of the Seas and Estuaries about North Britain, in which he dwelt on the great changes of climate which might be brought about in extra-tropical regions by small changes in the configuration of continental land, and the consequent alteration in the direction of oceanic currents. He considered that these produced very great effects at the present time, and had as certainly produced as great, if not greater, effects in past times. Not only was Mr. Murray's paper interesting from the subject-matter of it, and the original line of investigation that it drew attention to, but it was accompanied by a generous offer that we hope the people of Glasgow will not lose sight of. In replying to the vote of thanks awarded him for his paper, Mr. Murray referred to the Marine Biological Station, recently established at Cumbræ, and he said that, if the Philosophical Society would build and maintain a suitable laboratory in that district, for the purpose of examining the physical conditions as to temperature, etc., and the marine flora and fauna of the Firth of Clyde, he thought he could say, on behalf of those interested in the station, that they would hand over a dredging ship worth about £1,000, and dredging apparatus and plant presently at the Marine Station, to the value of about £500, almost as a present to the Society. As was remarked by Professor McKendrick and other members, it would be a splendid piece of a work for a Society such as theirs to take up; and as the financial reasons seem to be the chief bar to this being done, now that these have been somewhat smoothed away by Mr. Murray's handsome offer, we shall hope to see the proposal accepted, as the establishment of a permanent marine laboratory on the shores of the Clyde would be in every way creditable to Glasgow.

At the Annual Meeting of the Dover Hospital Directors it was stated that the number of patients treated during the year was 4,459, and the expenses of the institution had been kept within the income, which was £1,137 for the year.

IRELAND.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

In announcing the retirement of Mr. FitzGibbon, from his candidat for the vice-presidency of this college at the annual election n June, we inadvertently fell into an error, which was also committ by our contemporary the *Medical Press and Circular*, by stating th there would, consequently, be no contest for the office. We sho have mentioned that Dr. William Frazer is still a candidate, and regret having made the omission, especially as Dr. Frazer announc his intention of coming forward some time prior to Dr. Corley doing so.

THE MEATH HOSPITAL.

The annual meeting of the Governors of the Meath Hospital a County Dublin Infirmary was held last week. The total number patients treated in the hospital during the year was 11,833. T statement of accounts showed that the income for the year w £4,397 13s. 6d., and the expenditure £4,317 2s., leaving a balance £60 11s. 6d.

VOLUNTEER AMBULANCE CORPS: QUEEN'S COLLEGE, BELFAST.

At a meeting, held in connection with the formation of a volunte ambulance corps, at Queen's College, Belfast, the report of the ten porary Committee was read, in which it was stated that the corps h received every aid and encouragement from the College Council a the military authorities; also, that arrangements were almost comple for commencing drill on Monday, May 10th. Professor Redfern w unanimously elected honorary commandant, and Dr. Thomas Sincla was elected commandant of the corps.

THE BELFAST BOROUGH ANALYST.

Dr. Hodges, analyst for the Borough, last week, in a communicatio to the Board of Guardians, draws their attention to the agreemen entered into between them; namely, that he should examine a articles of food, etc., at a fee of one guinea for each sample, and th he should be supplied each month with samples of milk for analysis It appears that the very unusual course has been adopted, by th master of the workhouse, of making an analysis of the milk supplie by the contractors, and when he found it below the standard, it wa sent to Dr. Hodges, with a view of having a prosecution. Dr. Hodge very justly complained of this infringement of the agreement entere into, and the matter has been referred to the Visiting Committee, fo their consideration.

HEALTH OF BELFAST.

During March, the average maximum temperature was 41° Fahr. there were 23 days of easterly winds, while rain or snow fell on 1 days, with a rainfall of 2.08 inches. The prevalence of biting easterly winds, with, latterly, a good deal of wet and a close atmos phere, have been important factors in causing such a high mortality from affections of the respiratory organs. Dr. Browne, medical office of health, states that, from the very low death-rate from zymoti affections, it is evident that the excessive general rate is kept up b those diseases which are principally due to atmospheric causes, and by the privations which the poor suffer. The general death-rate wa 31.7, of which diseases of the lungs gave a rate of 14.4, or almost one-half of the entire deaths for the month.

A NURSING ORGAN.—A new periodical, devoted to discussion o subjects connected with nursing of the sick, has been started in America, with the not inappropriate title of *The Nightingale*. The editor is Dr. Sara E. Post.

PRESENTATION.—A beautifully illuminated address, framed in oak, together with a pair of brass candlesticks and an inkstand, has been presented to Mr. Stenson Hooker, L.R.C.P. and S.Ed., on his leaving Midhurst, by the members of the Midhurst Literary Institute, of which he was the honorary secretary.

THE ADDRESS IN MEDICINE AT BRIGHTON.

a numerously attended meeting of the Council, held in Exeter Hall, and, on Wednesday, April 14th, 1886, Dr. FOSTER, M.P. (President Council) reported the death of Dr. Austin Flint (New York), who had sented to deliver the Address in Medicine at Brighton in August t. He was sure that every member of the Council would feel h him that, in this untimely removal of that distinguished Ameri- physician, the loss had been one which would not only be felt the Association, as members of a common profession, but would affect the medical profession throughout the civilised world. Dr. stin Flint had kindly consented to come to the annual meeting at ghton, and delight with his eloquence, and instruct by his scien- knowledge. That treat which had been looked forward to with nuch pleasurable anticipation, unfortunately could not now be en- ed, and he (Dr. Foster) thought it only right, on the present asion, to express sorrrow at Dr. Austin Flint's removal from the ere of usefulness which he so long adorned. The President of the ncil moved: "That this Council has heard with sincere sorrow he death of Dr. Austin Flint of New York, and beg to express r sense of the great loss which the medical profession throughout civilised world has sustained by his untimely death."

Dr. WITHERS MOORE (Brighton), President-elect, seconded the olution, having been largely instrumental in Dr. Flint's appoint- nt as a reader of the Address in Medicine. He was sure that Dr. nt's death was a matter of great regret to all the Members of the ncil, and that they would all desire to show their earnest pathy with the members of his family in the great loss they had tained in addition to the loss sustained by the medical profession. he motion was carried.

The PRESIDENT reported that Dr. Withers Moore had taken imme- te steps to fill the gap made by the death of Dr. Flint. He com- nicated with Dr. Foster on the subject; and, after deliberation, it thought well to apply in the first instance to Dr. Billings, who, ome would remember, delighted the whole medical profession of country, and many distinguished foreigners, by the splendid ress which he delivered on the occasion of the International dical Congress in London, in 1881. Dr. Withers Moore wrote to , and received a reply, by telegram, consenting to deliver the dress. Dr. Foster therefore asked for approval of the action taken the President-elect of the Association and by himself.

Dr. WITHERS MOORE had written to Dr. Billings, expressing great ow on hearing of the death of Dr. Flint, and asking him to de- r the address. He had received a telegram from him, and on sday a letter, in which he said he felt it a great compliment, and eat manifestation of brotherly feeling on the part of the British dical Association, that another American gentleman should be ap- nted to read the Address in Medicine; and that he would gladly e to read the Address.

The PRESIDENT OF THE COUNCIL moved: "That Dr. Billings be uested by this Council to deliver the Address in Medicine in ust next."

Dr. WITHERS MOORE seconded the resolution, which was carried.

SYPHILIS IN CAPE COLONY, 1885.

e Director-General of the Medical Department of the Navy has warded us a communication by Mr. Henry Hadlow, Fleet-Surgeon, the recent great increase of syphilis in Cape Colony. A Con- ious Diseases Act was repealed there eleven years ago, and the st forms of venereal disease gradually made their appearance, and ength became so widely disseminated that a debate and resolution the subject, in the legislative council, two years since, aroused the lic interest, and paved the way for renewed legislation on the part he House of Assembly.

great extension of railways up country took place after the repeal he Acts, and syphilis spread, coincidently, far and wide amongst half civilised and savage populations along the new lines. The cted natives invariably concealed their condition until they were ught to death's door by some of the more loathsome and dangerous plications, observed when the disorder attacks new races, or care- , ignorant, and dirty barbarians. The mortality is very high, and ne district a fifth of the entire coloured population is known to be hilitic, and a far larger proportion of concealed cases must exist. repugnance of the House of Assembly to legislation was not, ever, overcome until it was discovered that the disease was spreading, so much among the adult, as among the infant white population. Native nursemaids are largely employed, and white children play amongst the native lads and girls in up-country farms, after eating and drinking with them. The result has been shown in the appearance of primary symptoms on unusual anatomical localities in white children, followed by severe constitutional syphilis.

The Reports of District Surgeons for 1884, presented by command of His Excellency the Governor to both Houses of Parliament, confirmed these terrible reports. The farmers took to discharging syphilitic native labourers, so that the natives in the country began to apply for medical relief earlier than before, and this acted beneficially to a certain extent. Unfortunately, the discharged labourers flocked into the towns, and the results were most disastrous. Several district surgeons declare that they very frequently see cases of syphilis propagated by other means than marriage or any sexual vice. Here it must be noted that it is difficult to prove the seat of the primary sore in the advanced secondary or tertiary cases, which formed a very large proportion of the total number under treatment. The District Surgeon at Caledon reports: "I have also treated an unusually large number of private patients suffering from the disease. Only a week ago, I was consulted by a farmer for his little girl, about two years old, and found the child suffering from severe secondaries. On inquiry, I discovered several other members of the same family similarly affected. Now, these children have contracted the disease from a coloured nurse." From Oudtshoorn and other districts come similar reports. In some very sad cases, white ladies have become infected through suckling their own children, who had already been partially reared by native wet-nurses. One case of this kind, at Port Elizabeth, ended fatally. At Richmond, a coloured girl, aged 11, in charge of several white children, was found to be suffering from both syphilis and gonorrhœa.

The result of this terrible report of the district surgeons was the passing, in 1885, almost without opposition, of a new Act. This Act contained compulsory clauses of a very stringent character.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.
ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 14th, July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 25th, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

A general inquiry into THE THERAPEUTIC VALUE OF HAMAMELIS has now been issued. A report will be made to the Section of Therapeutics in the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time

without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

NORTH OF ENGLAND BRANCH.—The spring meeting will be held at Roker, on Wednesday, April 21st. Members intending to read papers, show specimens, etc., are requested to communicate with the Honorary Secretary (Dr. DRUMMOND, Newcastle-on-Tyne) as early as possible.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting of this Branch will be held at Carmarthen, on Wednesday, April 21st next. Members wishing to join the Branch should send in nomination papers by the end of March. Members desirous of reading papers, etc., should send titles to one of the Honorary Secretaries. Further particulars in circulars. Signed, A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at Erith on Friday, April 30th; F. Spurrell, Esq., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District, A. W. NANKIVELL, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than April 15th.

OXFORD AND DISTRICT BRANCH.—The next meeting will be held at the Radcliffe Infirmary, Oxford, in the afternoon of Wednesday, April 28th. Members are asked to send to the Honorary Secretaries notice of any business, cases, or papers, or candidates for election, on or before Monday, April 19th. Advantage will be taken of the meeting to present Dr. Tuckwell with a testimonial. There will be a dinner at 5s. a head (exclusive of wine) after the meeting.—Honorary Secretaries, Dr. DARBISHIRE, W. L. MORGAN, Esq., Oxford.

YORKSHIRE BRANCH.—The spring meeting of the Yorkshire Branch will be held in the Medical School at Leeds on Wednesday, May 5th, at 3 P.M. Gentlemen intending to read papers are requested to communicate with the Secretary, ARTHUR JACKSON, Sheffield.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The next meeting of the Branch will be held in 198, Union Street, Aberdeen, on April 21st, at 8 P.M. Business.—1. Notes on Cascara Sagrada, by Dr. Urquhart, Aberdeen. 2. Case of Operation for Club-Foot, with exhibition of patient, by Dr. Garden. 3. Note on a Case of Hæmatoma of Labium, by Dr. Edmond. 4. Exhibition of specimens: (1). Dissection of Flat-Foot, by Professor Ogston. (2). Hydrocephalic Child, by Dr. Ruxton. (3). Hydrocephalic Child with Spina Bifida, by Dr. Ruxton.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

BATH AND BRISTOL BRANCH.—The fifth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, April 22nd, at half-past seven o'clock, E. C. Board, M.R.C.S.Eng., President. Messrs. Burroughs, Wellcome, and Co., will give a demonstration On Digestive Ferments and Dietetics. Mr. Freeman will show A Case of Gritti's Amputation at the Knee. Mr. Richardson Cross will show Two Cases of Evisceration of the Eye, and a Case of Ligature of the Carotid for Intraorbital Hæmorrhage. The following communications are also promised:—1. A Case of Ulcerative Endocarditis, terminating in Meningeal Hæmorrhage, Dr. E. Field. 2. A Case of Intestinal Perforation, Mr. G. S. Pollard (specimen will be shown). 3. A Case of Hemiplegia with Hemiæsthesia, Mr. S. Craddock (the patient will be shown).—R. J. H. SCOTT, E. MARKHAM SKERRITT, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE spring meeting was held at Dover, on Thursday, March 25th; Dr. CHARLES PARSONS in the chair. There were present twenty members and two visitors.

Election of Chairman.—Mr. Sadler, of Canterbury, was chosen chairman for the annual meeting, to be held next month, at Canterbury.

Representatives on Council of Association.—Dr. C. Holman, Dr. Parsons and Mr. Hodgson, were nominated to serve on the Council of the Association for the coming year.

Papers.—The following papers were read.

1. Dr. Bowles, of Folkestone, read an introductory paper "On Prognosis of Heart-Valve Disease of Five Years' Standing." Dr. Tyson, Ormsby, Gogarty, and Parsons, took part in the discussion.

2. Mr. A. G. Osborn and Dr. Ormsby read, conjointly, a paper "On a Case of Cystic Omental, simulating Ovarian Disease; Laparotomy, Drainage, and Result."

Dinner.—The members afterwards dined together at the Hotel.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING.

THE fifty-fourth Annual Meeting of the British Medical Association will be held at Brighton, on August 10th, 11th, 12th, and 13th, 1886.

President: W. T. Edwards, M.D., F.R.C.S., Physician to the Glamorgan and Monmouth Infirmary, Cardiff.

President-elect: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President of the Council: Balthazar Foster, M.P., M.D., F.R.C.P., Professor of Medicine in Queen's College and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by Surgeon-General John S. Billings, M.D., Director-General United States Army Medical Department, Washington.

An Address in Surgery will be delivered by Frederick Abel Humphry, F.R.C.S., Surgeon to the Sussex County Hospital.

An Address in Public Medicine will be given by E. D. Mapother, M.D., Consulting Medical Officer to the City of Dublin.

The scientific business of the meeting will be conducted in nine Sections, as follows, namely:

MEDICINE.—*President*, W. H. Broadbent, M.D. *Vice-Presidents*, Frederick Bagshawe, M.D., Hastings; Joseph Ewart, M.D., Brighton. *Honorary Secretaries*, Francis Warner, M.D., 24, Harley Street, London; Henry Seymour Branfoot, M.B., 42, Norfolk Square, Brighton.

SURGERY.—*President*, John Eric Erichsen, F.R.C.S., F.R.S., London. *Vice-Presidents*, Frederick William Jowers, M.R.C.S., Brighton; Joseph Ward Cousins, F.R.C.S., Southsea. *Honorary Secretaries*, William Johnson Walsham, F.R.C.S., 27, Weymouth Street, London; Wm. Loughby Furner, F.R.C.S., 2, Brunswick Place, Brighton.

OBSTETRIC MEDICINE.—*President*, Alfred Meadows, M.D., London. *Vice-Presidents*, Constantine Holman, M.D., Reigate; Frederick W. Salzmann, M.R.C.S., Brighton. *Honorary Secretaries*, Charles J. Wright, M.R.C.S., Lynton Villa, Virginia Road, Leeds; Alban Doran, F.R.C.S., 9, Granville Place, W.

PUBLIC MEDICINE.—*President*, Richard Patrick B. Taaffe, M.D., Brighton. *Vice-Presidents*, Sir Charles Alexander Cameron, M.K.Q.C.P., Dublin; Charles Kelly, M.D., Worthing. *Honorary Secretaries*, W. Brown, M.R.C.P.Edin., Carlisle; William Joseph Tyson, M.D., Folkestone.

PSYCHOLOGY.—*President*, Thomas Smith Clouston, M.D., Edinburgh. *Vice-Presidents*, Charles A. Lockhart Robertson, M.D., Brighton; Joseph Raymond Gasquet, M.B., Brighton. *Honorary Secretaries*, Charles Spencer Waller Cobbold, M.D., Earlswood Asylum, Redhill; James M. Moody, M.R.C.S., Surrey County Asylum, Cane hill, Purley.

PATHOLOGY.—*President*, Julius Dreschfeld, M.D., Manchester. *Vice-Presidents*, James Frederick Goodhart, M.D., London; Heneage Gibbes, M.D., London. *Honorary Secretaries*, John E. Ranking, M.D., Mount Ephraim Road, Tunbridge Wells; John Caldwell Uhthoff, M.D., 9, Brunswick Place, Brighton.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Thomas Lauder Brunton, M.D., F.R.S., London. *Vice-Presidents*, John Mitchell Bruce, M.D., London; Edward Mackey, M.D., Brighton. *Honorary Secretaries*, Cornelius William Suckling, M.D., 108, Newhall Street, Birmingham; John Theodore Cash, M.D., Drumearn, Earlsfield Road, Wandsworth Common, S.W.

OPHTHALMOLOGY.—*President*, Chas. Oldham, F.R.C.S., Brighton. *Vice-Presidents*, Louis Tosswill, M.B., Exeter; George Anderson Critchett, F.R.C.S.Edin., London. *Honorary Secretaries*, Frank Henry Hodges, F.R.C.S.Edin., 17, Horse Fair Street, Leicester; Arthur Nicholson, M.D., 98, Montpellier Road, Brighton.

TOLOGY.—*President*, G. F. Hodgson, M.R.C.S., Brighton. *Vice-sidents*, Alphonso Elkin Cumberbatch, F.R.C.S., London; Edward swell Baber, M.B., Brighton. *Honorary Secretaries*, Henry Albert ves, F.R.C.S.Edin., 6, Grosvenor Street, W., London; Patrick liam Maxwell, M.D.Edin., 10, Lower Mount Street, Dublin. *Honorary Local Secretaries:* Thomas Jenner Verrall, M.R.C.S., 95, stern Road, Brighton; Alfred Scott, L.R.C.P., German Place, ghton.

TUESDAY, AUGUST 10TH, 1886.

2 P.M.—Meeting of 1885-6 Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 11TH, 1886.

30 A.M.—Meeting of 1886-87 Council.
10 A.M.—Second General Meeting. Address in Medicine.
5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione*.

THURSDAY, AUGUST 12TH, 1886.

30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Surgery.
5 P.M.—Sectional Meetings.
0 P.M.—Public Dinner.

FRIDAY, AUGUST 13TH, 1886.

10 A.M.—Address in Public Medicine.
11 A.M.—Sectional Meetings.
4 P.M.—Concluding General Meeting.
8 P.M.—Reception.

SATURDAY, AUGUST 14TH.

Excursions.

SPECIAL CORRESPONDENCE.

PARIS.

Discoveries concerning the Pancreas and Spleen.—On Successive and Spontaneous Thrombosis simulating Miliary Tubercle.—Summer Diarrhœa of Children.—Statistics of the Bichat Hospital.—The Dangers of Nitric Acid.—Destruction of Microbes by Heat.—Typhoid Fever traced to Imperfect Sanitation.—Cholera in Finistère.—Vaccination and Revaccination.—General News.

At a recent meeting of the Academy of Medicine, M. Gauthier, Professor of Chemistry in the Paris Medical Faculty, stated that two discoveries had quite recently been made, one in Germany, and the other in the laboratory of the Paris Medical Faculty. Both of these discoveries confirm the theories on which his researches on leucomaines are based. M. Kossel published, in the *Zeitschrift für Physiologische Chemie* (March 11th, 1885), a memoir on a new base called adenine, which he had extracted from the pancreas and spleen, but which, he believes, is present in all vegetable and animal cells. The principal feature of interest in this alkaloid is its being isomeric with hydrocyanic acid, and its symbol is exactly the quintuple of that of the latter. According to Kossel, adenine proceeds from the physiological decomposition of a complex albuminoid substance called nucleine, of which the cellular nuclei are composed. When nucleine is isolated, it may be decomposed into albumen, phosphoric acid, and adenine, by being submitted to the influence of water. Another point of interest is that adenine, treated with nitrous acid, is transformed into hypoxanthine or sarcine. Henceforth, in medical science, the following important general law must be taken into consideration: that, not only the most highly organised cells constantly manufacture poisonous substances, but that their nuclei and protoplasm have a ground-work, consisting of an aggregation of most potent toxic molecules. M. Gamgee, a pupil of Professor Gauthier, has, by his researches on the pancreas, confirmed his teacher's discoveries. He has discovered in the spleen a potent poison, present under normal conditions, and exercising a powerful influence on the medulla oblongata, followed by asphyxia and collapse. It also paralyses motor nerves. This poison, injected under the skin of guinea-pigs and frogs, produces death, accompanied by phenomena similar to those observed when death results from muscarin and digitalin. M. Dastre, of Alfort, observed he did not seize the drift of M. Gauthier's discovery. If the pancreas and spleen contain a terrible poison, how is it that animals fed on these organs are not poisoned? It is suggested that the poison mentioned by Professor Gauthier and M. Gamgee was the result of the chemical agents used. Professor Gauthier answered that adenin is isomeric with hydrocyanic acid, but is not the same properties. There is also another important fact. All living cells contain a substance isomeric with hydrocyanic acid. Animals fed on pancreas and spleen do not die, because the parenchyma of these organs contain a very small quantity of adenin. Kossel extracted only five grammes of this substance from 75 kilogrammes of pancreas.

At a recent meeting of the Medico-Surgical Society, M. Renaut read notes of a case of spontaneous thrombosis, which simulated miliary tubercle. The patient, a girl, aged 18, was admitted into his wards with a temperature of 40° C. (104° Fahr.). She was partially delirious during twelve days. Her delirium did not present any special features. Soon afterwards, she had a stitch in the right side; the sputa were rusty, and accompanied by all the symptoms of limited induration of the inferior lobe of the right lung. These symptoms of pneumonia soon disappeared. Gradually, the fever also disappeared, and, on the thirtieth day, there was phlegmasiæ of the right lower limb. M. Renaut diagnosed miliary tuberculosis. On the forty-fifth day after she was taken ill, all the symptoms of meningitis, typical of granular tuberculosis, were present. At the necropsy, nothing was observed but a few tubercles at the apex of one of the lungs, and a caseous bronchial gland, slightly pressing on the aorta, which explained the systolic *souffle* observed during life. A thrombus obliterated the right femoral vein; there was also a hæmoptoic infarct in the pulmonary region, where induration was diagnosed. The infarct proceeded from thrombosis of the fine branches of the pulmonary artery. The heart was healthy. There was also complete thrombosis of the superior longitudinal sinus. The pulmonary lesions could be accounted for by an infarct proceeding from the femoral vein. The femoral thrombosis, and that of the superior longitudinal sinus, remained unexplained. M. Renaut carefully sought, at the necropsy, for indications of pneumonia, either old or recent, but failed to find any.

The *Journal de Médecine* of March 27th states that Dr. Guaita considers summer diarrhœa in children to be a zymotic affection, due to the presence of a microbe called into existence by unsuitable food. He prescribes from 4 to 6 grammes of benzoate of soda, in 100 grammes of water, to be taken in ten days. On the third day, the child should be slightly purged with magnesia; afterwards a fresh dose of benzoate should be given. Whilst under treatment, the child should not be given anything but lemonade and a little good wine; milk and broth are forbidden. Suckling children may have the breast twice in twenty-four hours. Benzoate of soda is used by Dr. Huchard and M. Danet in bronchial affections.

At a recent meeting of the Surgical Society, M. Terrier made known the statistics of the operations he had performed at the Bichat Hospital. In 223 operations, among which were 25 ovariotomies, 5 abdominal hysterectomies, 4 vaginal hysterectomies, 2 Battey's operations, 2 laparotomies, and 2 amputations of the thigh. The entire number of deaths amounted to 28.

M. G. Lechartier has presented a communication to the Académie des Sciences on the danger of explosions and fire from nitric acid. A certain number of explosive substances, such as dynamite and gunpowder, cannot be manufactured without using nitric acid. The same danger is incurred in transporting this acid from place to place, and handling it, as there is with sulphuric acid. Several such instances have occurred in France. An uncovered truck, full of jars of nitric acid, took fire just as it reached the railway station of Caulness, Dinan. A month later, a truck, also containing jars of nitric acid, was shunted in the Brest railway station, isolated from all merchandise, and remained there several days, when it took fire. It was ascertained that the fires were due to a jar of the acid breaking, and, the straw round it catching fire. Nitric acid should not be packed in straw, nor exposed to the sun and air.

At a meeting of the Société de Médecine Publique et d'Hygiène Professionelle de Paris, Dr. Grancher communicated the result of his experiments on the resistance offered by microbes to the heat of disinfecting stoves. They are as follows. The moist-vapour stove of MM. Geneste and Hersche is an excellent disinfecting apparatus. With this stove, a temperature of 106° Cent. is easily obtained; microbes are undoubtedly destroyed, though they be imbedded in mattresses. The dry-air stove, of the same manufacturers, is not so completely disinfecting as their moist-vapour stove. With this apparatus the bacteria of charbon, its spores, the tyrothrix scabiei, and bacillus subtilis, are not destroyed. The hot-air stove at the Hôpital des Enfants Malades is a still more imperfect disinfecting stove.

At a recent meeting of the Société de Médecine Publique, Dr. Airy read notes on a case of typhoid fever, which occurred last year, in a private house in the Rue de la Faisanderie, Paris. The house was recently built, and the sanitation was, to all appearance, excellent. Suddenly, terrible smells were perceived, which were discovered to

be emanations from the poultry-yard, which was badly constructed. Its soil was permeable, and constituted, close to the house, a sort of open sewer, cut off from any outlet.

At the same meeting, M. Henri Ch. Monod, prefect of Finistère, read an instructive memoir on the cholera epidemic at Guloinec, in 1885. The author has collected a mass of exact data, furnished by documents and other sources of information; well drawn up synopses, indicating the people who were attacked, their contaminated dwellings, sanitary conditions under which they lived, age, and position in life, etc.

M. J. Besnier, in a recent work, states that children vaccinated at birth, and subsequently revaccinated, exhibit an increasing vaccinal receptivity from 7 to 20 years of age. After 20 years of age, this receptivity is diminished. Children vaccinated at birth, and subsequently contracting small-pox, exhibit an increasing variolic receptivity from 7 to 20 years of age, when it diminishes.

The Minister of Marine has decreed that the maritime prefects and directors of all establishments, workshops, etc., in connection with the navy, are to ensure the vaccination of all the workpeople. No one will be engaged except on those conditions, and will be dismissed on refusal to comply with them.

The Sultan has decided to send a commission to M. Pasteur's laboratory to study his method of inoculation for hydrophobia. The members of the commission are Zocros Pacha and Hussein Bey, medical men, and Husni Pacha, veterinary surgeon. Zocros Pacha will present M. Pasteur with the Order of Medjidie and £400, a subscription from the Sultan for the Pasteur Institute.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE REPEAL OF THE CONTAGIOUS DISEASES ACTS.

Sir,—I rejoice that the Contagious Diseases Acts are soon to be totally repealed. Dr. Quain and Mr. Puleston, M.P., may blame the "common sense and want of right feeling" of the British electors. I venture to assert that the repeal of the Acts has been brought about by the most intelligent electors in the kingdom of all creeds, professions, and political sympathies, assisted, I am glad to state, by an ever-increasing number of medical men. In its moral, social, and religious tendency, it is difficult to understand how anyone can justify the Acts.

"For the life of me," I cannot see why Dr. Quain places venereal diseases, the result of vice, on the same platform, and would treat on the same principles of action, as rinderpest, pleuropneumonia, etc., in animals; cholera, typhoid fever, etc., in man. "Prevention is better than cure," but vice must ever meet its just pains and penalties. By all means check the spread of venereal diseases, and strive to prevent the flagrant temptations to immorality in our towns by stricter enforcements of our Police Acts, etc., also raise a higher standard of social purity.—Yours, etc.,

John Brown, L.R.C.P.Lond.

Bacup.

LOCAL CLIMATES: EAST WINDS.

Sir,—Mr. J. Frith's inquiry relative to inland places sheltered from the east wind, and the small amount of information you are able to give on the subject, shows how desirable it is that medical men should study, in a systematic manner, the peculiarities of the climate of their respective districts. A few months ago, I tried to induce the Collective Investigation Committee to take up this subject, and submitted to it a scheme for carrying it out; but, for some reason, it was not adopted, and I am endeavouring to carry it out myself by means of a cheap Diary or Day-book of Meteorology and Phenology, which is now being issued by Messrs. Sonnenschein and Co., and which will, I hope, meet the conditions which Mr. Frith seeks to obtain by the suggested offer of a prize.

The diary is practically an almanac, which shows the average meteorological and phenological (biological) phenomena for each day of the year, derived from observations extending over the past twenty years, and its object is to form a standard of the climate of the inland parts of England, with which to compare all local variations. The meteorological data embrace the mean maximum in the sun and in the shade, minimum in the shade and on the grass, and the accumulated temperatures for every day of the year; the monthly mean barometrical readings; the daily, monthly, and accumulated rainfall; and the direction of the wind. The phenological data refer to the first opening of leaves and blossoms of plants and trees, the ripening of fruits and seeds, and the change and fall of leaves; the migrations, etc., of birds; and the appearance of butterflies and other insects, especially of an injurious kind, etc. The diary includes the larger scheme of the Phenological Committee of the Royal Meteorological Society, and the smaller scheme of Dr. Hoffmann, of Giessen, together with the interesting chart of the latter author, showing the blossoming of spring-flowers throughout Europe. For strictly medical purposes, I think Dr. Hoffmann's scheme (requiring observations of about thirty common and well known plants and trees) the best, as it requires little botanical knowledge, and will interfere least with the time and occupations of busy men. The meteorological observations are not absolutely necessary, although it is desirable to obtain the maximum and minimum shade-temperature, the rainfall, and the direction of the wind—data which can sometimes be obtained from the nearest meteorological station, and are often supplied by local newspapers.

With regard to Mr. Frith's inquiry for places sheltered from the east wind, I think the best are found on the lee sides of thick belts of trees, especially of fir-trees, as our hills are rarely sufficiently high and precipitous to afford such protection, except near the sea-coast. We may baffle and break up the east wind, and so rob it of its sting, and this is best done by trees, but we cannot exclude it, even from our houses. The eucalyptus globulus is very sensitive to the east wind; and a few years ago, while trying to acclimatise it in the country, I received notices of its survival in a great variety of situations. It survives ordinary winters and springs on the south coast from the Isle of Wight to Cornwall, and inland in the wooded districts of Kent, Sussex, and Surrey. The largest and oldest tree was in North Wales, and it did well on the west coast and on some of the islands of Scotland, and I received reports of its healthy growth in many parts of Ireland. A few years ago, on going from east to west I was very much struck by the mildness of the spring climate in the districts round Morecambe Bay; and I think there must be many sheltered nooks on the Welsh coast, and as far inland as Shrewsbury, Worcester, and Cheltenham, which have never been explored, or, at any rate, not made known to us who dwell on the eastern side of our island, and have such painful experience of the east wind. An inquiry into local climatic conditions by collective investigation would have interests and advantages, for those engaged in it, which few other subjects possess; as it would be of direct value to the individual as well as of general value to the profession, and it will grow in interest and value from year to year.

In conclusion, I must add that I hope Mr. Frith will persevere in his idea of offering a prize as an impetus to starting an inquiry of this kind, and there should be as little delay as possible, as the season of east winds is upon us.—I am, sir, your obedient servant,

Bolton Row, Mayfair. Charles Roberts.

VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS, IRELAND.

Sir,—You are misinformed as to this election. Dr. Fitzgibbon has retired, and I believe I have every prospect of succeeding to the Chair, for which I was candidate before Dr. Corley announced his name. I have the support of a large number of the Fellows and of several of my colleagues on the Board of Examiners, with which I have been connected for some years.—Yours very truly,

W. Frazer, F.R.C.S.I.,
Member of Council, Royal Irish Academy, etc.

Testimonial.—On Saturday, April 3rd, Sir Andrew Clark presided at a meeting, held in the King Edward Institute, Spitalfields, for the purpose of presenting Dr. Dundas Grant, Chairman of the late East London Industrial Exhibition, with a testimonial, in recognition of his work in connection with that Exhibition. After an address, in which he explained the origin and career of the Exhibition, and the part which Dr. Dundas Grant had taken in it, Sir Andrew Clark presented the testimonial, which consisted of a time-piece, set in a handsome marble frame of Egyptian pattern, together with a fine illuminated address on vellum. Dr. Grant, who was received with applause, thanked the contributors and Sir Andrew Clark. A testimonial was also presented to Miss Grant, as a memento of the many and valuable services she had rendered to the Industrial Exhibition. Dr. Grant replied on behalf of his sister. The proceedings closed with a vote of thanks to the chairman.

MEDICO-LEGAL AND MEDICO-ETHICAL.

E IN LUNACY: WILMER *v.* AYLWARD AND OTHERS.

his case, concluded on April 6th before Mr. Justice Manisty and a ial jury, in the High Court of Justice, Queen's Bench Division, plaintiff, a widow, claimed damages from several officials of the sh of Kensington, including medical officers, on the ground that had been taken to, and for some time detained in, the lunatic l of the workhouse infirmary; she, at the time, as she alleges, being a lunatic, and the requirements of the statute not having complied with in the act of placing and keeping her there.

is unnecessary, in this place, to enter upon the question of the ntiff's sanity or insanity at the time, the jury having found for he defendants except the relieving officer, and apparently against only in consequence of his mode of procedure in dealing with case. With this finding of the jury, the chief interest centres n the infringement of the Lunacy Acts which led to a verdict of 0 damages, with costs, against the relieving officer; a verdict ch would be ruinous to most men in that position, should they be ed upon to pay, from their own resources, not only the damages, also the heavy costs of so long a trial.

n the summary in the *Standard*, the judge is reported to have ed that the unfortunate position the relieving officer occupied in rence to the law was this, that when directed by the justice to g the plaintiff before him at the workhouse, the relieving officer, stead of waiting for the next day, thought it right to take her he workhouse, and place her in the lunatic ward on the evening re, so that she might be ready to see the magistrate on the fol- ng morning." So far as the judge "could make out in the con- on of law and orders that there were upon this question, what relieving officer did was not in accordance with law." The jus- "also seemed to have mistaken the law, for on the next day he e attended," and made an order, remanding the plaintiff for ral days, for the assistance of a second justice. "In that he wrong. The proper course would have been, then and there, for justices to inquire into the matter; and, if they thought fit, to e an order for" the plaintiff to be taken to the workhouse, and to tetained there. Though it is not referred to in the reports of the we have seen, we believe that the judge had in view, and the was virtually decided upon, the wording of 16 and 17 Vict., 97, sect. lxviii—a long and complex section, dealing with two or e different classes of cases, under one of which that of the plaintiff ld be ranged, as concerns its legal aspects and the mode of pro- ire necessary for placing persons so situated under care. The ds are: "It shall be lawful for such justice, by order under his d and seal, to require any constable of the parish or place, or any ving officer or overseer of the parish where such person is alleged e, to bring him before any two justices of the same county or ugh," etc.

y the Lunacy Acts Amendment Act, 1885, provisions have re- ly been made for urgency cases, when a relieving officer and others it necessary to deal promptly with and take them to the work- se, without the order of a justice. By this Act, passed later than occurrences forming the basis of the above suit, great benefits accrue to patients, whose cases, if urgent, need not be damaged lelay, as heretofore has been the case; and some protection will fforded to relieving officers and others who endeavour conscientiously o their duty. This short Act virtually embodies clauses 12 and 13 of "Lunacy Acts Amendment Bill, 1885," as amended in Commit- ; and, of these, Clause 12 (a new clause in the *amended* Bill, and contained in the original Bill) was practically of the same effect art of the recommendations of our Parliamentary Bills Subcom- tee for 1885, as published at column 2, p. 1074, of this JOURNAL May 23rd, 1885, and relating to Section ix, Subsection 3, of the inal Bill (1885): recommendations which, previously to amend- t of the Bill, had been communicated to the then Lord Chancellor in ge of the Bill, and the principle of which it is gratifying to find rporated in the statutes.

he case which has given rise to the foregoing remarks is another stration of the extreme desirability of simplifying and harmonising lunacy laws, and of the need of a Bill to consolidate the latter; we trust that the Lord Chancellor's Lunacy Acts Consolidation Bill be proceeded with, and completed during the present session.

APPOINTMENTS AND THE SALE OF PRACTICES.

—Kindly inform me how I should act in the following case.

A. and B. have been in practice for many years in a country town. A. has ld several appointments, and, in selling his practice to C., includes these appointments in the value of the practice. Is B. justified in applying for any of these open posts, or should he allow C. to take them without opposition?—I remain, yours faithfully, A MEMBER.

*** There cannot, we think, be the slightest doubt whatever that B., as an independent resident practitioner, would be perfectly justified in becoming a candidate for the "open posts" alluded to by our correspondent; and, further, that unless the appointments in question are secured to C. by election, or otherwise, A. cannot fairly "include them in the value of the practice."

NON-RESIDENT DISTRICT MEDICAL OFFICERS.

SIR,—A. has been medical officer of a district for eighteen years, and appointed annually in consequence of his non-residence in the district, but he has a consulting-room there, where he calls daily. In consequence of some grumbling on the part of the overseers, the distance of A.'s residence from his district is made a grievance, and the Board of Guardians are solicited to appoint a medical man who lives nearer than A., but, like him, not in the district, and not much nearer. For the first time in eighteen years the Guardians advertise the appointment, and B. is elected. Both A. and B. have consulting-rooms in the district, where they attend: A. every day, B. three times a week. As the road has not stretched since the time of A.'s first election to the office, it is difficult to say (in the absence of any complaints from the sick poor) why "distance" is made the grievance now. B. has always been on friendly terms with A., and the latter is astonished at B. putting up for the appointment. Is this a friendly action on the part of B., and how is A. to meet B. in future?—Yours faithfully, EXCELSIOR.

*** Unless the Board of Guardians had just cause for dissatisfaction with his attendance on the sick-poor, our correspondent, after a faithful discharge of his professional duties in the district for a period of eighteen years, may very fairly complain of their action in appointing a like non-resident practitioner as medical officer.

Though, strictly speaking, B.'s application for the office is not *de facto* a breach of medical etiquette, it, nevertheless, seems to indicate a lack of true professional brotherhood; and, moreover, is more or less subversive of the cardinal principle of doing unto others as we would be done by. Before condemning B., however, it is essential to ascertain whether, and how far, he was misled by the unusual advertisement respecting the appointment (such not having appeared for nearly eighteen years), and was thereby impressed with the belief that A. had resigned, and was, in consequence, induced to apply for the supposed vacancy. If A. were especially desirous to retain the office, we are inclined to think that a neighbourly call upon, and a friendly explanation to B. of the facts of the case, might have induced him of his own free will and accord to withdraw his candidature. Be that as it may, we would, in response to A.'s last question, advise him to maintain an amicable rather than estranged attitude towards his successful opponent, unless there be sound and valid reasons for a contrary policy; for hostile action in such a case would not only be morally wrong, but tend to embitter the future without redressing the past.

CHANCERY LUNATICS.

SIR,—Will you kindly inform me as to the power and duty of a committee of the person and property of a chancery lunatic, and especially on the following points?

Has the committee the power over his charge so as to—1. Insult him, not only privately, but in the presence of others? 2. Treat with indifference justifiable complaints and requisitions? 3. Say "act for yourself on certain business matters, and then consult me as appeal?" 4. "Boycott" the charge from living in certain towns because of family connections, etc? This is the most important.—Yours sincerely, V. X.

*** We are not aware of any statutory limitation to the power of a committee of the person, but abuses of power like those mentioned by our correspondent will be remedied by appeal to the Lord Chancellor, or to his officers, the visitors of lunatics. Any complaint respecting the treatment of a chancery lunatic should be addressed to J. M. Wode, Esq., Chief Clerk, Visitors of Lunatics Royal Courts of Justice, London, E.C.

PUERPERAL MALADIES AND EXTRA FEES.

POOR-LAW writes:—A poor woman is confined by a midwife, and the third day after the patient became very feverish, and the midwife becomes alarmed, sends to the relieving officer, says she believes it is a case of child-bed fever, and asks for an order on the parish doctor. The doctor attends, and finds it is a case of puerperal fever, and the patient in a short time dies. Can the medical officer claim the fee payable for a confinement?

*** In our judgment, this case is one where the medical officer has given such attendance as would justify an application for a fee, as it comes within the category of at, or immediately after child-birth, but it is not improbable that, if the Board of Guardians refused to pay, that the Local Government Board would sustain the Board thereon.

In the JOURNAL, March 6th, page 469, it will be found that we published the decision of the department in the case of Mr. Haynes, of the Evesham Union, who had been called to a case of phlegmasia dolens, and who claimed a fee (JOURNAL, February 20th, page 370). The Board of Guardians, on the advice of the clerk, would not pay, and the Local Government Board sustained the objection, at the same time stating that, if the Guardians reconsidered their decision, and granted a fee, they—that is, the department—would accede to it. We would advise that our correspondent should write to the Board of Guardians, stating the circumstances, and the risk that had been encountered by a gentleman engaged in general practice having to attend such a case, and asking that the Guardians would take the matter into their consideration, and grant a fee, at

the same time intimating that the department would confirm the same, if voted by the Board.

PUBLICATION OF ETHICAL CASES AND COMMENTS.

INQUIRER.—In referring to our correspondent's renewed protest in the matter of his professional dispute with Dr. G., and in which we believe him to be medico-ethically right, we also (with considerable regret for the necessity) deem it our duty to enter an emphatic protest against his breach of a well understood and acknowledged rule that, prior to the reprint and circulation of any comment, note, or other document (in their widest sense), it has ever been held as an essential point of honour to solicit and obtain the assent thereto of the writer or author; a rule, however, that, in the case of our correspondent, has been altogether ignored, with the evident view to serve his own private ends rather than the true interests of the faculty, and, at the same time, to endamage his opponent. How far the adoption of such means will tend to conserve his real interests we are not, under the circumstances, over-solicitous to inquire; and we would further remind him that our answers to correspondents, which, in not a few instances, are furnished at no inconsiderable trouble, are given for the private information of the members and the faculty, and are not intended for circulation, and ought not to be reprinted without permission; otherwise it would, we fear, sooner or later, become necessary to close our columns to such and like querists. When, moreover, a member seeks our professional decision, we take it to imply, as a necessary postulate, that he intends to abide thereby, and not to evoke legal intervention, as threatened, or is actually impending in the case of "Inquirer."

NAVAL AND MILITARY MEDICAL SERVICES.

VOLUNTEER MEDICAL STAFF CORPS.

THE following Royal Warrant for the formation of the Volunteer Medical Staff Corps has been published.

VICTORIA R.—Whereas it has been represented to Us that it is expedient that a corps be formed with a view to the further development of the medical organisation of the Volunteer Force. Our will and pleasure is that the corps be formed accordingly; that it be designated "The Volunteer Medical Staff Corps," and that the corps be added to the schedule attached to Our Warrant of September 29th, 1881, as amended by Our Warrants of November 28th, 1882, and June 28th, 1884, under the head of Volunteer Corps, and that the provisions contained in Our aforesaid Warrant of September 29th, 1881, shall apply to it accordingly. It is Our further will and pleasure that Article 723 of Our Warrant of June 10th, 1884 shall, with the exception of the last paragraph relating to non-commissioned officers of Royal Engineers employed as drill instructors to Engineer Volunteers, be cancelled, and the following substituted:—*723. A soldier serving with the permanent staff of a corps of Light Horse, Mounted Rifle, Artillery, Rifle Volunteers, or Volunteer Medical Staff Corps on his army engagement, shall receive pay at the same rate as if serving in the following ranks with a battalion or corps of the corresponding arm of the Regular Forces. (1.) If holding the rank of battery sergeant-major, battery quarter-master sergeant, troop sergeant-major, colour-sergeant, second class staff-sergeant Medical Staff Corps, or any higher rank, when transferred or attached to the Volunteers, he shall receive pay as garrison battery sergeant-major of Royal Artillery, troop sergeant-major of Cavalry, colour-sergeant of Infantry, or second class staff-sergeant of the Medical Staff Corps. (2.) If holding a lower rank than those specified above when transferred or attached to the Volunteers, he shall receive pay as sergeant; but, if continuing to serve beyond twenty-one years, he shall receive pay as garrison battery sergeant-major of Royal Artillery, troop sergeant-major of Cavalry, colour-sergeant of Infantry, or second class staff-sergeant, Medical Staff Corps. A soldier serving with the permanent staff of a Volunteer Medical Staff Corps shall receive extra duty pay and departmental pay under the conditions prescribed in Articles 622 to 628*a*. Given at Our Court at Windsor, this 13th day of March, 1886, in the forty-ninth year of our reign. By Her Majesty's Command,

H. CAMPBELL BANNERMAN.

THE NAVY.

FLEET-SURGEON WM. CONOLLY, M.D., has been placed on the retired list of his rank. He entered the service as Surgeon, September 25th, 1856; became Staff-Surgeon, July 27th, 1867; and Fleet-Surgeon, December 25th, 1878. Dr. Connolly served in the China war (medal); in the war in New Zealand in 1860, where he had medical charge of the Naval Brigade at Taranaki (medal); and during the Zulu war in 1879 he was Fleet-Surgeon of the *Euphrates* (medal).

The following appointments have been made at the Admiralty during the past week:—T. J. HARAN, Inspector-General of Hospital, to Plymouth Hospital; G. H. MADELEY, Staff-Surgeon, to the *Phaeton;* ROBERT TURNER, Staff-Surgeon to the *Hotspur*.

MEDICAL STAFF.

SURGEON HUGH RAYNER, M.B., is appointed Surgeon to the Grenadier Guards, *vice* G. B. Stuart, M.B., promoted. Mr. Rayner joined the Medical Staff of the Army on January 30th last.

Surgeon-Major E. J. BOULTON is granted retired pay with the honorary rank of Brigade-Surgeon. He entered the service January 19th, 1860; became Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1875. Mr. Boulton served in the Royal Navy during the operations in the Baltic in 1855 (medal). He was also in the Zulu war in 1879, and was present in the action at Gingindhlova, and at the relief of Ekowe (medal with clasp).

Surgeon P. G. WOOD, M.D., is promoted to be Surgeon-Major. His commission as Surgeon bears date September 30th, 1873. He served in the Egyptian war in 1882, and was at the battle of Tel-el-Kebir (medal with clasp and Egyptian bronze star).

Surgeons L. B. WARD; W. B. MILLER, M.D.; G. B. HICKSON; JOHN PRENDERGAST; J. A. SMITH; JOHN MARTIN; J. J. GREENE, M.B.; N. M'CREERY; J. GORMLEY, M.D.; and J. E. V. FOSS, M.D., whose first commissions date March 31st, 1874, are also promoted to be Surgeons-Major. Of these gentlemen Messrs. Miller, Prendergast, Smith, Martin and Foss, were engaged in the war Egypt in 1882, and have the medal and Egyptian bronze star. Mr. Prendergast having also the clasp for Tel-el-Kebir, and two clasps for El Teb and Tamai 1884, when he was severely wounded. Messrs. Wood, Greene, and Gormley in the recent Afghan war; Mr. Ward having the clasp for Ali Musjid. Messrs. Hickson, Greene, M'Creery, and Gormley served in the Nile Expedition in 188 Mr. Smith was also in the campaign on the North-West Frontier of India in and was wounded in the engagement at Aimul Chabootra; and Mr. Gormley the medal and clasp for the Perah Expedition in 1876.

Surgeon G. H. K. M. O'CALLAGHAN, having returned from field-service, mah, is placed on general duty, Poona Circle, Bombay command.

Deputy Surgeon-General C. G. LOGIE, M.D., died on April 6th, at Queborough Terrace, London. He entered the service as Assistant-Surgeon, Oct 5th, 1841; became Surgeon, November 26th, 1852; and Surgeon-Major, Oct 5th, 1861; he retired on half pay, with the rank of Deputy Surgeon-Gen October 23rd, 1875. Dr. Logie was formerly Surgeon to the Royal Horse Gua and latterly to the East Kent Yeomanry.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON J. HOUSTON, M.D., of the Madras Establishment, has ret from the service, which he entered as Assistant-Surgeon, August 4th, 1855, taining the rank of Brigade-Surgeon June 15th, 1881. He has no war record.

Surgeon-Major R. T. LYONS, M.D., Bengal Establishment, has also retired. joined as Assistant-Surgeon July 23rd, 1858, and became Surgeon-Major in two years therefrom. Dr. Lyons has the North-west Frontier medal with clasp the campaign in 1863, and the medal for the recent Afghan war.

Surgeon-Major JAMES KELLY, of the Bengal Establishment, has likewise tired, his first commission bearing date March 31st, 1865, and that of Surg Major, March 31st, 1877. He also was in the late war in Afghanistan.

Brigade-Surgeon G. A. WATSON, whose retirement was recently announced, been granted the honorary rank of Deputy Surgeon-General.

Surgeon-Major H. POTTER, M.D., Bengal Establishment, is promoted to Brigade-Surgeon. He entered the service July 23rd, 1858. He served in Indian Mutiny campaign in 1858-59 (medal), and in the war in Egypt in (medal and Egyptian bronze star).

The services of Surgeon C. P. LUKIS, Bengal Establishment, are tempora placed at the disposal of the Government of the North-west Provinces and Ou

Brigade-Surgeon C. J. J. JACKSON, M.D., is appointed Deputy Surgeon-Gene with temporary rank during the absence on leave of Deputy Surgeon-Gen A. J. Dale, M.B.

Surgeon G. H. PEEVOR, Bengal Establishment, is appointed to the med charge of the 25th Punjab Infantry, *vice* Surgeon-Major J. Armstrong.

Surgeon C. H. BEATSON, Bengal Establishment, is appointed Garrison-Surg Fort William, *vice* Surgeon G. Bomford, M.D.

Surgeon R. H. CHARLES, M.D., Bengal Establishment, is appointed Garris Surgeon, Attock, *vice* Surgeon R. N. Stoker.

Surgeon R. J. TAAFFE, M.B., Bengal Establishment, is appointed Garris Surgeon, Chimar, *vice* Surgeon G. H. Peevor.

Surgeon A. O. EVANS, Madras Establishment, is directed to proceed to Suak by the first opportunity, and report himself to the Principal Medical Officer th for duty.

Surgeon E. W. REILLY, Madras Establishment, is appointed to the medi charge of the wing of the 29th Native Infantry at Sumbulpore.

THE undermentioned Surgeons of Militia have been granted the honorary rank Surgeon-Major:—J. P. WADDY, 3rd Battalion of the Royal Irish Regiment (Wexf Militia); JOHN RICHARDS, 4th Battalion of the Royal Welsh Fusiliers (Denb and Merioneth Militia); J. CORBET, 3rd Battalion of the Seaforth Highland (Highland Rifle Militia); and G. P. BATE, M.D., 5th Battalion of the Rifle Briga (Queen's Own Tower Hamlets Militia).

Surgeon I. MASSEY, M.D., of the South Nottingham Yeomanry, has been grant the honorary rank of Surgeon-Major.

The undermentioned Surgeons of Volunteers have also been granted the ho rary rank of Surgeon-Major:—O. C. MAURICE, 1st Volunteer Battalion of t Royal Berkshire Regiment (late the 1st Berkshire); R. J. B. CUNYNGHAME a F. CADELL, Queen's City of Edinburgh; DAVID MACEWAN and ALEXANDER CA BELL, 1st Forfar (Dundee); J. P. PURVIS, 2nd Volunteer Battalion of the Ro West Kent Regiment (late the 3rd Kent); and S. M. HOPSON, 3rd Volunteer B talion of the Norfolk Regiment (late the 3rd Norfolk); J. RODGER, M.D., Aberdeen Artillery; S. GOURLEY, 4th Durham Artillery; F. G. BENNETT and AMBLER, M.D., City of London; R. T. DANIELL, 2nd Middlesex; A. D. DAV SON, M.D., 1st Volunteer Battalion Gordon Highlanders (late 1st Aberdeen); F. ROBERTSON, M.D., 1st Dumbarton; A. FERGUS and J. E. BRODIE, 8th Lana (the Blythswood); J. T. POWELL, M.D., 24th Middlesex; and T. THOMPSON, Volunteer Battalion Warwick Regiment (late the 1st Warwick).

Mr. F. M. MACKENZIE has been appointed Acting-Surgeon to the 1st Inverne Artillery Volunteers.

JOHN BLAIR, Esq., M.D., is gazetted Captain in the 7th Lanarkshire Volunteer

Mr. JAMES CAGNEY, M.A., M.D., is appointed Acting-Surgeon to the 20 Middlesex (Artists') Volunteers.

Surgeon CHARLES NATTRASS, M.D., of the 3rd Durham (Sunderland) Volunteer has resigned his commission, which dates from January 17th, 1872; he is grant the honorary rank of Surgeon-Major, and is permitted to retain his uniform.

Surgeon HENRY PENFOLD, M.D., 1st Volunteer Battalion of the Buffs (late t 2nd Kent Volunteers), has also resigned with the honorary rank of Surgeon-Maj and permission to retain his uniform; his commission bore date March 20t 1875.

Mr. J. W. JACKSON has been appointed Acting Surgeon to the Tower Hamle Riffe Volunteer Brigade.

A CENTENARIAN.—On March 19th, the 101st birthday of widow, Josephine Rostrovska, was celebrated at Aviches, near Lill with great pomp. She was formerly a surgeon's assistant (*Hilfs-Chirurgin*) in the army, and took part in the Russo-Polish war; for whic she received the decoration of the Order of Stanislaus.

OBITUARY.

AUSTIN FLINT, M.D., LL.D.,

sor of the Principles and Practice of Medicine, and of Clinical Medicine, in Bellevue Hospital Medical College, New York.

IEF notice of the life and professional career of the eminent ican physician who, had death not prevented, would have ered the Address in Medicine at the forthcoming annual meeting e British Medical Association, will no doubt be interesting to of our readers. Our information is chiefly derived from recent ers of our transatlantic contemporaries.

. Flint was born at Petersham, Massachusetts, on October 20th, His ancestor, Thomas Flint, of Matlock, in Derbyshire, settled ncord in 1638. The family to which Dr. Flint belonged have been known as medical practitioners of high repute in his e State. His great grandfather, Dr. Edward Flint, was a physician assachusetts in the early part of the last century; his grandfather, Austin Flint, practised in Leicester, Massachusetts, and died in at the age of 90; and his father, Joseph Henshaw Flint, was geon of reputation in Northampton, and afterwards at Springfield. . Austin Flint received his medical education at Harvard College, e he graduated as M.D. in 1833. At first he practised medicine orthampton (Massachusetts) and Boston; but, in 1836, he re- d to Buffalo, New York. In 1844, though still residing in lo, he was appointed to the chair of Institutes and Practice of cine in Rush Medical College, Chicago, but retained the office a year. In 1847, in conjunction with Dr. James P. White and rank H. Hamilton, he organised the Buffalo Medical College, in h he was Professor of the Principles and Practice of Medicine 1852, when he was appointed to the analogous chair, and to that nical Medicine, in the University of Louisville. In 1856, he re- d to Buffalo, and took the chair of Pathology and Clinical cine in the Medical College. In 1858, he became visiting cian to the Charity Hospital at New Orleans, and taught clini- edicine. In 1861, he removed to New York, having been elected ssor of the Practice of Medicine and Clinical Medicine to Bellevue ital; and also Professor of Pathology and Medicine in the Long d College Hospital. The latter professorship he resigned in 1868; e retained his connection with the Bellevue Hospital and its ge, up to the time of his death.

. Flint took an active part in the formation of the American cal Association, nearly forty years ago. At one of the earliest ings, held in Philadelphia, he brought forward a resolution re- ending that the medical profession in the different States should avour to induce their legislators to pass laws sanctioning and ding for dissection; in regard to which, at that time, medical ls in the United States laboured under great difficulties. At the ng of the Association at Cincinnati in 1850, he was Chairman of Section of Practical Medicine. At the annual meeting at Cleve- Ohio, in 1883, Dr. Flint was President of the Association, and ered an excellent address. He was chosen to preside over the ing of the International Medical Congress to be held at Washing- n 1887.

. Austin Flint's contributions to medical literature extend over years, and are of a very high order of merit, being based on al experience, and characterised by an agreeable and polished His contributions to the *Buffalo Medical Journal*, which he led in 1846, and for ten years edited with marked ability, cted much attention. In 1852, he presented to the American cal Association an essay on the Variations of Pitch in Percussion Respiratory Sounds; and, in 1859, one on the Clinical Study of Heart-sounds in Health and Disease. For these, he received prizes of the Association. The investigation of the physi- igns of disease of the thoracic organs was a subject to which voted much attention throughout his life; and, in 1881, he read, e meeting of the International Medical Congress in London, a on the Analytical Study of Auscultation and Percussion, with nce to the Distinctive Characteristics of the Pulmonary Signs. eading of this paper led to the appointment, at the suggestion e late Dr. Mahomed, of a Committee to report on an Uniform enclature of Auscultatory Sounds in the Diagnosis of Diseases of hest. Of this Committee, Dr. Flint was appointed Chairman; the report was presented at the meeting of the International cal Congress in Copenhagen in 1884. Among numerous other es by Dr. Flint were papers on Diabetes (*Buffalo Medical Journal*, 1848); on Serous Effusions into the Arachnoid Cavity (*ibid.*, 1849, and April, 1850); on Pleuropneumonia complicated with arditis (*ibid.*, February, 1850); a Report on the Epidemic of Cholera at Buffalo in 1849 (*ibid.*); an Analysis of Fifty-two Cases of Typhoid Fever (*ibid.*, 1850); Reports on Continued Fever (1852); Clinical Reports on Dysentery and Chronic Pleurisy (1853). At the annual meeting of the British Medical Association in 1882, he contributed a paper on the Self-limited Duration of Pulmonary Phthisis; and, in 1883, one on Early Tapping in Ascites. He also contributed a paper on Mitral Cardiac Murmurs to the *International Journal of the Medical Sciences* for January, 1886. These are only a few of his contributions to medical literature; many, which the limits of our space prevent us from mentioning, lie dispersed in the pages of American periodicals. A collection of his writings, by such an institution as the New Sydenham Society, would be a valuable work.

Dr. Flint was the author of a *Treatise upon the Principles and Practice of Medicine;* which, first published in 1866, has gone through seven editions. The author was engaged during last winter in revising it for another edition.

Of the intimate relations which had, in recent years, grown up between Dr. Flint and the British Medical Association, and which had culminated in his being selected to deliver the Address in Medicine at the next annual meeting, we have already spoken. It is not too much to say that no men have done more, by their character as gentlemen, no less than by their professional eminence, to produce in the minds of British medical men a favourable impression of their transatlantic brethren, than Austin Flint and Samuel Gross.

To use a common expression, Dr. Flint may be said to have died in harness. Two or three weeks before his death, his energies were greatly strained by the delivery of a lecture at the Bellevue Medical College after a fatiguing day of professional work. For some days he felt the strain, but recovered his usual energy, and delivered the last lecture of his course, following it up by a class-examination. After this, he attended the College examinations, which were concluded on March 12th, and attended the Faculty meeting in the evening. He returned home, apparently in excellent health and spirits; but, about midnight, was attacked with cerebral apoplexy, which, at 2 o'clock on Saturday, March 13th, put an end to his useful and honourable life.

JOHN MELLIS, M.R.C.S.Eng., J.P., Fraserburgh.

BORN in 1819, at the farm of Pennan, of which his father had been tenant for many years, Mr. Mellis, after studying in Aberdeen, went to London, and passed as Member of the College of Surgeons before attaining his majority. He acted as assistant in the village of New Pitsligo till 1845, when he left for Fraserburgh. On leaving Pitsligo, he received a presentation of plate. During the rest of his busy life, he conducted an extensive practice, and was justly regarded as a most successful obstetrician, and a more than average country surgeon. Many years ago, he operated for various eye-affections, and, in hernia, with excellent results. He had wide experience in the cholera epidemics of 1855 and 1866; and it will be long ere his devotion to the sufferers of these times will be forgotten. He afterwards took a prominent part in all sanitary matters connected with Fraserburgh, and the adjoining district. Notwithstanding the demands of his profession, he contrived to take a large share in the public business of the town and district. For over a quarter of a century, he sat as a member of the Police and Harbour Boards, and twice filled the office of a magistrate. He was also a Justice of the Peace for the county, and a member of the Confirmation Licensing Committee. As a Road Trustee, he did much for the improvement of the streets of Fraserburgh.

In 1859, at the commencement of the volunteer movement, with his usual public spirit, he warmly embraced the proposal to form a local artillery corps. On its formation, he was elected lieutenant, and became captain in 1864. On his resignation, in 1875, he was presented with a handsome piece of plate by the officers and men of the corps, and was permitted by the War Office to retain his rank. His old comrades carried his coffin to the grave. Mr. Mellis was also an enterprising farmer.

He was elected President of the North of Scotland Medical Association five years ago. His medical work was more practical than literary; yet he lectured with much acceptance on his favourite topic, "Sanitation," to Fraserburgh audiences on several occasions. His last public appearance was at the local Burns' Club on the last anniversary, when he filled the chair; and, in proposing the toast of the evening, he delivered a speech on the character and genius of Burns, which evinced not only a thorough grasp of his subject, but marked poetic discrimination.

Mr. Mellis was one of the best known and most highly respected citizens of Fraserburgh. At times impulsive and hasty in speech, he had no bitterness or rancour; and if at any time he felt he had said

too much in enforcing his views, no man was more ready to make speedy and ample amends. He was followed to the grave by a very large and representative number of people.

The cause of his death, which occurred on March 26th, was pulmonary thrombus.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ASSOCIATION OF MEDICAL PRACTITIONERS QUALIFIED IN SANITARY SCIENCE.

At a largely attended meeting, held on April 9th, 1886, the above Association was inaugurated.

It was proposed by Dr. H. F. Parsons, and seconded by Dr. Louis Parkes, that the body be called "The Association of Medical Practitioners qualified in Sanitary Science." This was carried unanimously.

The main object of the Association is to obtain the registration of sanitary science degrees, and certificates of universities and corporations whose medical degrees and licences are, at present, registerable.

Among others who have joined the Executive Council of the Association are Messrs. P. Hinckes Bird, F.R.C.S.Eng. ; D. B. Finlay, M.D.Glas. ; A. Newsholme, M.D.Lond.; Louis C. Parkes, M.D.Lond.; H. F. Parsons, M.D.Lond. ; C. E. Saunders, M.D.Aberd. ; W. R. Smith, M.D.Lond. ; W. E. Steavenson, M.D.Cantab. ; J. F. J. Sykes, M.B.Ed. ; E. F. Willoughby, M.B.Lond. ; D. S. Davies, M.B.Lond. (Clifton); R. Bruce Low, M.D.Ed. (Helmsley); and J. F. W. Tatham, M.B.Dub. (Salford). The Honorary Secretaries are J. Edwin Cooney, L.R.C.P.Ed., 20, Vereker Road, West Kensington, S.W., and H. A. Fotherby, L.R.C.P.Lond., St. George's Infirmary, Fulham Road, S.W.

ARE SANITARY SCIENCE CERTIFICATES WORTH HAVING?

Sir,—The above question is one which has been frequently asked within recent years, and at the present time is especially being asked. The answer to the question now undoubtedly is that, beyond a mere personal feeling of abstract pride, they are not worth the labour, the time, and the expense devoted to their attainment; they do not confer any material advantage on the possessor; they have not fulfilled the object for which they were first instituted. These certificates are, in fact, bills of credit, for which much good money is paid in, but which are too often dishonoured when presented to boards of electors. What is the result? The result is that, notwithstanding the vast and ever-growing importance of sanitary science, and the great responsibilities attaching to public health appointments, the number of men who present themselves for these tests of systematic study is ridiculously small. Men naturally fight shy of devoting energy to what produces no result, of investing in what gives no return; and those few who have, in spite of all this discouragement, come forward and undergone an examination taking up the best part of a week, requiring several months' preparation in many subjects quite alien to the ordinary medical curriculum, and costing from at least ten to fifteen guineas, do so because they live in hopes that the old order of things will be changed, and because they feel confident that the universities, the medical colleges, and the educated public will not allow the injustice to continue for ever. I have thrown in my lot with these sanguine ones, and have joined in the cry which for months past has been going on in the medical press, feebly at first, but every day gaining fresh strength. The grievance requires no further demonstration: the medical journals, and those who have any knowledge of the merits of the case, one and all, acknowledge its truth. The question of remedy is the crucial point to be decided. I proposed, as you are aware, the formation of an association of those interested to work out the problem; and, though I am now ready to admit with the medical press, and with many whom Mr. Cooney and myself have communicated, it could not be formed on the permanent lines I suggested, yet some organised expression of our views I deem to be essential to the bringing about of any satisfactory result. Registration for these degrees and certificates is a reasonable demand, and would, I feel sure, do much, if not meet the case entirely. In this opinion, I have good reason to know I have the concurrence of more than one whose position in the public health service must command respect, and to this end a decided movement will undoubtedly be made, and, I feel very hopeful, with success, not only on account of the justice of the cause, but also owing to the influence of those who are, and will be, ready to lead it.

In conclusion, I submit the following grounds on which registration of sanitary science certificates might be based.

1. Sanitary science degrees and certificates are given only after an examination as severe as, if not severer than, those of ordinary medical licences.

2. The non-registration of these degrees and certificates reduces their practical utility to a minimum, the public and corporate bodies underestimating or being ignorant of their value, owing to their non-appearance in the *Medical Register*.

3. As long as ten years ago, the subject of sanitary science was regarded as of sufficient importance by the universities and medical colleges to the extent of granting certificates, and, more recently, of degrees, coupled with the ever-increasing importance of hygiene, and responsibilities connected with he appointments.

4. Whereas the number of medical men who have qualified in sanitary sci is unduly small, notwithstanding the vast importance of this branch of m cine, it is thought that "registration" of these degrees and certificates conduce to make them more popular, and hence, by increasing their utilit will encourage the study and advancement of hygiene, and be productiv public benefit.

5. The official recognition of them, all things being equal, would tend t crease the authority of the medical officer of health over his subordin which, at present, is too often wanting (especially where surveyors an spectors of nuisances happen to hold certificates themselves).—Yours diently,

Henry A. Fotherby

Saint George's Union Infirmary, Fulham Road, S.W.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in Registrar-General's Weekly Return, which have an estimated populatio 9,093,817 persons, 6,052 births and 3,862 deaths were registered during the ending Saturday, April 3rd. The annual rate of mortality, which in the two ceding weeks had been 29.3 and 26.4 per 1,000, further declined during the under notice to 22.2. The rates in the several towns, ranged in order from lowest, were as follow:—Wolverhampton, 12.4; Sunderland, 15.6; Norwich, Hull, 18.8; Leeds, 18.9; Halifax, 19.3; Bradford, 19.7; Salford, 20.0; Old 20.0; Bristol, 20.1; Newcastle-upon-Tyne, 20.5; Preston, 21.6; London, Birmingham, 22.1; Cardiff, 22.3; Birkenhead, 22.4; Portsmouth, 23.0; Sheff 23.2; Liverpool, 23.6; Nottingham, 24.9; Derby, 25.0; Manchester, 25.6; Le ter, 25.8; Huddersfield, 25.9; Plymouth, 27.9; Brighton, 28.7; Bolton, 28.8: the highest rate during the week, 31.4 in Blackburn. The death-rate in twenty-seven provincial towns averaged 22.3 per 1,000, and slightly exceeded rate recorded in London, which, as before stated, was 21.9 per 1,000. The deaths registered in the twenty-eight towns during the week under notice cluded 157 which were referred to whooping-cough, 97 to measles, 36 to diarr 30 to "fever" (principally enteric), 19 to diphtheria, 19 to scarlet fever, 1 to small-pox; in all, 369 deaths resulted from these principal zymotic dise against 427 and 406 in the two preceding weeks. The zymotic death-rate equal to 2.1 per 1,000. In London the zymotic rate was 2.3, while it did exceed 1.9 per 1,000 in the twenty-seven provincial towns, and ranged fro in Norwich, Wolverhampton, and Huddersfield, to 3.6 in Birmingham, 3. Portsmouth, and 5.9 in Blackburn. The fatal cases of whooping-cough, w in the two preceding weeks had been 195 and 164, further declined during week under notice to 157, and caused the highest death-rates in Newcastle-u Tyne, Portsmouth, and Birkenhead. The deaths referred to measles, which been 103 and 128 in the two previous weeks, declined to 97, and showed largest proportional fatality in Birmingham, Plymouth, and Blackburn. Th fatal cases of diarrhœa differed but slightly from recent weekly numbers. deaths referred to different forms of fever, which had been 32 and 28 in the previous weeks, were 30 during the week under notice; this disease was pro tionally most fatal in Preston. The 19 fatal cases of scarlet fever showed a fur decline from the numbers returned in the two previous weeks, and were fe than in any week on record; only 5 deaths were referred to this disease in Lon during the week under notice, 3 in Manchester, and 3 in Leeds. The deaths f diphtheria, which had risen in the three preceding weeks from 18 to 28, decli again to 19, of which 8 occurred in London, 2 in Bristol, 2 in Birmingham, an in Manchester. The fatal case of small-pox was recorded in Liverpool. number of small-pox patients in the Metropolitan Asylum Hospitals, which been 7 and 8 at the end of the two preceding weeks, further rose to 11 on Sa day, April 3rd; four new cases were admitted to these hospitals during week, against 2 and 5 in the two preceding weeks. The death-rate from disea of the respiratory organs in London during the week under notice was equal 6.4 per 1,000, and was slightly below the average. The causes of 83, or 2.1 cent., of the 3,862 deaths registered during the week under notice in the twen eight towns were not certified, either by registered medical practitioners or coroners.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, April 15th, 1886.

Lunacy Acts Amendment Bill.—The Lord Chancellor, in movi the third reading of this Bill, referred to a petition presented fro the Corporation of Newcastle. He described the clauses in the B which empowered the building or creation of asylums for paying tients, as clauses which were not likely to involve the local authoriti in any pecuniary obligations or loss. He thought that, on the whol the power which was given would be found advantageous, rather th the reverse, from a pecuniary point of view. He felt, however, th there might be some reasonable ground for the objection taken; tha whereas power was given to the justices to determine whether su buildings should be erected, or whether they should take part in su erection, the administration of the funds in towns was vested in t Town Councils. He proposed to move an amendment to provide tha where these asylums were to be created for paying patients well as non-paying patients, the powers of the Bill should not exercised except with the consent of the Town Councils.—T Bill was read a third time. On the question that the Bill pass, t amendment the Lord Chancellor had indicated was agreed to. T Bill then passed.

London Hospital Medical College.—The Hospital Scholarsh of £20, for proficiency and zeal in Clinical Medicine, has been awarde to Mr. G. C. W. Wright; and that of £20, for proficiency and zeal Clinical Surgery, to Mr. H. G. Lys.

MEDICAL NEWS.

YAL COLLEGES OF SURGEONS AND PHYSICIANS.—The following amen passed their second examinations in Anatomy and Physi- at a meeting of the Board of Examiners on the 7th instant, and eligible, will be admitted to the pass-examination.

srs. T. E. Ferward, H. Harper Hulbert, and T. P. Cowen, students of the Medical School, St. Thomas's Hospital; E. Beddoe Hulbert and Harry Davis, of University College; J. T. Clapham, W. G. Willoughby, Ransom Pickard, W. F. Cholmeley, Bedford Price, A. R. Poulter, G. H. D. Robinson, H. G. G. Cook, and C. Evelyn Ormerod, of St. Bartholomew's Hospital; Percy J. Kingston, Oakley E. Higgens, William Henvy, and F. W. Lewitt, of St. Mary's Hospital; Maxwell Le Cronier, W. M. Davidson, and H. Higgins, of St. George's Hospital; H. C. H. Parham, P. J. Duncan, and E. J. Appleton, of Charing Cross Hospital; T. Boswell Beach, of King's College; Louis Beckett, of London Hospital.

ssed in Anatomy only.

n E. W. Bennett, of the Middlesex Hospital.

ssed in Physiology only.

erick Bell, of St. Bartholomew's Hospital; R. H. Tompsett and Harry Gervis, of St. Thomas's Hospital.

ssed on the 8th instant in Anatomy only.

l Ogle and W. S. Heberden, of St. George's Hospital; R. J. Hutchinson, of London Hospital.

e following gentlemen passed on the 12th instant.

. Edelsten, B. C. Oldham, Robert H. Elliot, Alfred Willson, J. C. Shaw, A. W. L. Jones, S. Browning Smith, C. E. Hutt, and J. A. Hayward, students of St. Bartholomew's Hospital; L. H. Bennett and C. H. Duncan Morland, of St. George's Hospital; E. Ashley Falkner and B. H. Deare, of Middlesex Hospital; J. R. Plant, of Westminster Hospital; J. W. Higginson, of University College; P. C. Thomas and E. A. Roberts, of St. Thomas's Hospital; A. E. Baker, of Charing Cross Hospital; H. S. Ballance, of King's College; Arthur M. Hickley, of St. Mary's Hospital; H. B. Bolus, of Guy's Hospital; W. S. Fenwick, of London Hospital.

ssed in Anatomy only.

. Jones, of St. Mary's Hospital; E. R. Steeten, of St. George's Hospital; F. E. Marshall, of King's College.

ssed in Physiology only.

alman Ilott, of Charing Cross Hospital; E. D. Y. Pode and F. R. S. Milton, of St. Thomas's Hospital; A. C. Davies, of University College; Charles Spurrell, of Guy's Hospital.

YAL COLLEGE OF SURGEONS OF ENGLAND.—The following gen- n passed their primary examinations in Anatomy and Physiology meeting of the Board of Examiners on the 8th instant, and eligible will be admitted to the pass-examination.

srs. W. H. L. Copeland and H. S. Tuppen, students of Cambridge University and St. Thomas's Hospital; Montagu Tench, J. Kynaston Couch, J. A. T. Woodgate, and F. G. Parsons, of Middlesex Hospital; A. E. Norburn, R. Devereux Mothersole, and C. Price-Jones, of Guy's Hospital; A. H. Cheatle, of King's College; England Brogden, of St. Bartholomew's Hospital; W. S. Sharpe, G. Coleridge Davis, and Alexander Lewer, of St. Mary's Hospital; F. Grange, of Charing Cross Hospital; W. B. Ransom, of Cambridge and University College; W. Harris Best, of London Hospital; A. J. Adkins and C. J. Martin, of St. Thomas's Hospital.

ssed in Anatomy only.

ee Green, of Toronto University; John Griffiths, of St. Mary's Hospital; A. H. Blunt, of St. Thomas's Hospital.

ssed in Physiology only.

V. Turnor, of St. George's Hospital; P. Christian de Wet, of St. Thomas's Hospital.

e following gentlemen passed on the 9th instant.

L. Liston, student of Owens College and St. Mary's Hospital; J. Mansbridge and William Morrison, of Charing Cross Hospital; E. T. Larkam and J. W. Gill, of Middlesex Hospital: F. R. P. Taylor, of Westminster Hospital; C. S. Dowdell, of University College; Arthur Fagan, of the London Hospital; A. E. P. Hughes, of St. Thomas's Hospital.

ssed in Anatomy only.

). Kell, of University College; E. A. Nicholletts, of the London Hospital; Herbert Fraser, of St. Thomas's Hospital; Reginald Hedley and James Smith, of Bristol Medical School; Mallard Martin, of Sheffield Medical School; John Robertson, of Guy's Hospital.

ssed in Physiology only.

V. Anderson, of University College; A. E. Howse, of King's College Hospital; J. M. Fry, of Westminster Hospital; D. J. Aaron, of London and Madras; A. W. Gray and R. S. M. Groves, of Birmingham School of Medicine; F. R. Hird, of Yorkshire College, Leeds; W. J. Watkins, of Bristol Medical School; J. A. Wood, of University College.

NG AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At rdinary meeting of the President and Fellows, held on Friday, 2nd, 1886, the following Member of the College was elected, ballot, to the Fellowship.

iam Raymond Kynsey, M.K.Q.C.P., 1880, Principal Civil Medical Officer, and Inspector-General of Hospitals, in Ceylon.

e following Licentiate in Medicine of the College, having com- with the by-laws relating to Membership, pursuant to the Supental Charter of December 12th, 1878, has been duly enrolled a ber.

es Charles Harding Peacocke, Lic. Med. 1877, A.M.S.

At the Quarterly First Professional Examination for the Licence in Medicine, held on Monday, April 5th, and following days, thirteen candidates presented themselves, of whom the undermentioned were successful.

Miss Mary S. Acworth, London; James K. McGuckin, Dublin; Miss Margaret. M. Smith, London.

At the usual monthly examinations for the Licences of the College, held on Monday, April 5th, and following days, the undermentioned candidates passed.

For the Licences to Practise Medicine and Midwifery:—Edward G. Browne, Dungannon; Alexander Gordon, Dublin; Andrew Harris, Stewartstown, co. Tyrone; John Keany, Manorhamilton, co. Leitrim; Frederic Mercer, Hington, near Liverpool; Michael J. Ryan, Limerick; Joseph A. Tooner, Manchester.

For the Licence to Practise Medicine only:—Clarence E. L. Gilbert, London; Charles W. Graham, Liverpool; Henry C. Groves, Dublin; Richard R. Leeper, Dublin; Charles W. Thompson; Leeds; Charles H. Wild, Bootle, Liverpool.

For the Licence to Practise Midwifery only:—George H. Foot, M.D.R.U.I., Cork

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SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, April 8th, 1886.

Burnside, Eustace Augustus, 30, Richmond Road, Bayswater, W.
Pain, Francis, M.R.C.S., Stratfield House, Thurlow Park Road, Dulwich, S.E.
Whitten, Samuel, 13, Fairfield Road, Bow, E.

The following gentleman also on the same day passed the Primary Professional Examination.

Conolly, Charles Hamilton, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BOOTLE BOROUGH HOSPITAL, near Liverpool.—House-Surgeon. Applications by April 26th to The Chairman.

BRADFORD FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION.—Dispenser. Salary, £65 per annum. Applications by April 24th to Mr. D. J. Stone, 80, Arcadia Street, Manningham, Bradford, Yorkshire.

CASTLEBLAYNEY UNION.—Medical Officer. Newtownhamilton Dispensary. Salary, £135 per annum and fees. Election on April 24th.

COUNTY ASYLUM, Whittingham, Preston.—Junior Assistant Medical Officer Salary, £100 per annum. Applications by April 26th.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E. Dental Surgeon. Applications by April 29th.

ESSEX AND COLCHESTER HOSPITAL.—Physician. Applications by April 28th to C. E. Bland.

EXETER DISPENSARY, Queen Street, Exeter.—Honorary Surgeon. Applications to R. Challice.

FRENCH HOSPITAL AND DISPENSARY, 10, Leicester Place, Leicester Square.—Resident Medical Officer. Salary, £60 per annum. Applications to F. Sorel.

GENERAL HOSPITAL, Birmingham.—Assistant Surgeon. Honorarium, £100. Applications by April 30th, to H. Fox.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—House-Physician. Applications by April 21st, to W. T. Grant.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Ophthalmic Surgeon. Applications by April 21st, to W. T. Grant.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 17th, to Henry Dobbin.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—Junior Resident Medical Officer. Salary, £50 per annum. Applications by April 28th, to A. Hope.

HULME DISPENSARY, Manchester. Honorary Physician. Applications by April 30th to the Honorary Secretary.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary £120 per annum. Applications by May 8th.

LISNASKEA UNION.—Medical Officer. Maguiresbridge Dispensary. Salary, £95 per annum and fees. Applications to Mr. E. Law, Honorary Secretary. Election on April 20th.

LIVERPOOL DISPENSARIES.—Three Head Surgeons. Salary, £200 per annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liverpool.

LIVERPOOL DISPENSARIES.—Six Assistant-Surgeons. Salary, £80 per annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liverpool.

MIDDLESEX HOSPITAL, W.—Assistant Dental Surgeon. Applications by April 27th, to A. O'Donnel Bartholeyns.

MONKWEARMOUTH DISPENSARY AND ACCIDENT HOME, Sunderland.—House-Surgeon. Salary, £70 per annum. Applications by April 22nd to T. R. Blumer, Avenue House, Roker Avenue, Sunderland.

NORTH CAMBRIDGESHIRE HOSPITAL, Wisbech.—House-Surgeon. Salary, £130. Applications by April 18th to W. E. Schofield.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead, N.W.—Resident Medical Officer. Salary, £40 per annum. Applications by April 17th to L. Hill, 216, Tottenham Court Road, W.

PARISH OF ST. LEONARD, SHOREDITCH.—Resident Assistant-Medical Officer. Salary, £100. Applications by April 27th to Robert Clay, 213, Kingsland Road, E.

PEWSEY UNION.—Medical Officer. Salary, £40 per annum, and extras. Applications to S. B. Dixon.

ROYAL BERKS HOSPITAL.—Assistant-Surgeon. Applications by May 4th to J. F. Hugo.

ST. SAVIOUR'S UNION, Surrey.—Dispenser. Salary, £60 per annum, and 12s. weekly. Applications by April 22nd to H. C. Jones, John Street West, Blackfriars Road.

TOWNSHIP OF MANCHESTER.—Resident Medical Officer. Salary, £140 per annum. Applications by April 28th to George Macdonald.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Physician. Applications by April 22nd.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon. Applications by April 22nd.

WEST RIDING LUNATIC ASYLUM, Wakefield.—Pathologist and Assistant Medical Officer. Salary, £100 per annum. Applications by April 22nd.

MEDICAL APPOINTMENTS.

AIKMAN, Alfred, M.B., appointed Honorary Assistant Medical Officer to the Hull Royal Infirmary.

BALDWIN, Thomas A., M.D., appointed Honorary Assistant Medical Officer to the Hull Royal Infirmary.

CHAPMAN, Herbert Frederick, L.R.C.P., M.R.C.S., appointed Medical Officer to the Richmond Union.

HANN, H. F., L.R.C.P.Ed., M.R.C.S.Eng., appointed Public Vaccinator to the Portsea Island Union.

HIRD, Thomas Alfred, M.D., appointed Medical Officer to the Coventry Union.

HOWLITT, Edmund H., F.R.C.S., appointed Honorary Assistant Medical Officer to the Hull Royal Infirmary.

KNOTT, Charles, M.R.C.P.Ed., M.R.C.S.Eng., appointed Medical Officer to the Portsea Island Union House.

O'KELL, J. B., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Leicester Infirmary and Fever House.

PIGEON, Henry W., F.R.C.S., appointed Honorary Assistant Medical Officer to the Hull Royal Infirmary.

PETCH, Richard, M.D., appointed Honorary Medical Officer to the York County Hospital.

RICHARDSON, J. B., M.R.C.S.E., and L.S.A., appointed Medical Officer and Public Vaccinator to the Castle Bytham District of Bourn Union.

ROCKLIFFE, William C., M.A., M.B., M.D.Dublin, M.R.C.S.Lond., L.S.A., appointed Ophthalmic Surgeon to the Hull Royal Infirmary.

THOMPSON, Henry, M.R.C.S., L.R.C.P., L.M. late Assistant Surgeon, appointed Surgeon to the Hull Royal Infirmary.

TURNER, Richard, M.B., appointed Honorary Medical Officer to the York County Hospital.

WARREN, Philip Somerville, L.R.C.P.Ed., L.R.C.S.Ed., and L.M., Retired Surgeon, R.N., appointed Medical Officer and Public Vaccinator to No. 5 District Hollingbourn Union.

WHEELER, Charles, M.R.C.S.Eng., appointed Surgeon to the Royal South London Dispensary, Lambeth.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

DEATHS.

BRAMWELL.—On April 10th, at 23, Drumsheugh Gardens, Edinburgh, Effie, youngest daughter of Byrom and Martha Bramwell, in her 11th year.

FOSBROKE.—On April 12th, at Bidford, George Haynes Fosbroke, M.R.C.S. and L.S.A., in his 75th year.

FOWLER.—On April 8th, at Brockett Hall, Torquay, Elizabeth Clara Emily (Lilly), only daughter of Oliver H. and Caroline Fowler, of Cirencester.

THE HOSPITALS ASSOCIATION.—At the annual meeting of the Hospitals Association, on April 14th, the customary report was presented, and Sir Andrew Clark was elected President for the ensuing year. Sir Andrew Clark, in replying, said that the Association would, he felt sure, eventually advance the true purposes of the hospitals, in healing the sick and advancing medical knowledge. The information which the Association might lay before the country might be very valuable; and there was, perhaps, no other society or corporate body which had the means of doing it so well as that Association. He concluded by expressing the very warm hope that the future of the Association would be prosperous.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Mr. John H. Morgan: Case of Littré's Hernia. Dr. Day: Two Cases of Simple Meningitis in Children; their Difficulties in Diagnosis.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Lockwood: 1, Congenital Fatty Tumour from Sole of Foot; 2, for Mr. W. Adams, Fatty Tumours from Palm of Hand; 3, Abnormality of Colon. Dr. Sharkey: Meningeal Hæmorrhage. Mr. E. H. Fenwick: Stone impacted in Prostatic Urethra. Mr. Arbuthnot Lane: The Pathology of Rheumatoid Arthritis. Mr. R. Williams: Colloid Cancer of an Uterine Fibro-myoma. Dr. Charlewood Turner: Specimens of Pulmonary Thrombosis. Mr. R. W. Parker: Obliterative Tracheitis and Bronchitis in Congenital Syphilis. Dr. Dalton: Tumour of the Ventricle from a case of Diabetes. Mr. Mansell-Moullin: Primary Sarcoma of Spermatic Cord (card). Dr. Silcock: Glandular Epithelioma from the Lung of a Dog (card).

OPERATION DAYS AT THE LONDON HOSPITA

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (thalmic Department); and Royal Westminster Ophthalm P.M.: Metropolitan Free; St. Mark's; Central London Oph mic; Royal Orthopædic; and Hospital for Women.—2.30 Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bart mew's (Ophthalmic Department); Royal Westminster Oph mic.—2 P.M.: Westminster; St. Mark's; Central London thalmic.—2.30 P.M.: West London; Cancer Hospital, Br ton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal Lo Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Barti mew's; St. Mary's; St. Thomas's; Royal Westminster Oph mic.—2 P.M.: London; University College; Westmins Great Northern Central; Central London Ophthalmic.— P.M.: Samaritan Free Hospital for Women and Children Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. Geor —1.30 P.M.: St. Bartholomew's (Ophthalmic Departme Guy's (Ophthalmic Department); Royal Westminster Opht mic.—2 P.M.: Charing Cross; London; Central London thalmic; Hospital for Diseases of the Throat; Hospital Women.—2.30 P.M.: North-west London; Chelsea Hospita Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 Royal London Ophthalmic.—1.15 P.M.: St George's (Opht mic Department).—1.30 P.M.: Guy's; Royal Westminster thalmic.—2 P.M.: King's College; St. Thomas's (Ophtha Department); Central London Ophthalmic; Royal South don Ophthalmic; East London Hospital for Children.—2.30 P West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmi 1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Cha Cross; London; Middlesex; Royal Free; Central London thalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; S M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; F Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. T 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, T F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.3 Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throa Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

Salicylate of Soda.

for the best vehicle for administering salicylate of soda. Personally, he s that the simple solution in water has no very objectionable flavour, but patients are very much of a contrary opinion.

sks what are the best modes of administering nutrient enemata.

Medical Visitor under the Lunacy Acts.

ENS asks with whom the appointment of medical visitor, under the Lunacy Amendment Bill, will rest, supposing same to become law.

The appointment will rest with the justices for the county or borough abled in general or quarter sessions; the provisions of 8 and 9 Vict., c. 100, not being repealed by the Act.

Gouty Infiltration of the Penis.

3. writes: A person subject to gout, the wrong side of 50, has a thickening oying the upper surface of the penis; when erection, or partial erection place, the organ is curved backwards; there is no pain nor difficulty in urition, but the glans and body appear to be atrophied to some extent. al desire is not impaired, but intercourse has not been practised since the nt condition has existed, now some years. It appeared to come on ually after a prolonged gouty attack.

Sanitary Hospitals.

HN DEANS (Bournemouth) asks where he can find information on sanitary tals, the ratio of the sick accommodation to the population of the district, he ratio of administration staff to sick accommodation.

Medical Circulating Library.

ASKS if any of our readers can tell him, from personal experience, which consider the best medical circulating library for a country member to sub- e to?

Cottage-Hospitals.

A. DANIELL (Aberavon, Taibach) asks for information as to the cost of lishing a cottage-hospital in a town of about 5,000, and also what it would r each bed per annum.

We would recommend our correspondent to apply to Mr. Alfred Napper, hichester Place, Guildford, Surrey, who is the chief authority on the ct.

A Health-Resort Wanted.

BER will be glad if any gentleman will kindly inform him of a pleasant try town in the south or south-east of England possessing a dry and ng air, the climate of the north-east coast being unsuitable to a rheumatic itution.

Certificates of Illness for School-Children.

writes: I am frequently asked by parents for certificates in cases where ren are unable to attend school through illness. I understand that the ficate of a parent or guardian is all that is necessary; but, as some of the ol attendance officers insist on a certificate signed by the medical man, I d be glad to know if I can, in such cases, charge them (that is, the school dance officers) a fee for the same?

Absent Nipples.

NILE M.D. asks for advice as to the best plan to treat a young married lady child) who is most anxious to nurse her own baby, but in whose case, un- nately, the nipples (both) are quite rudimentary, all but absent. Is there orm of artificial nipple which could be tried, and where is it to be procured, at is to be done under the circumstances?

Careful attempts may be made to draw out the nipples by a breast-pump, the application of an exhausted soda-water bottle. This may be done during gestation and after labour. Ordinary nipple-shields can be used empting to suckle.

Practice in Australia.

N asks for some hints as to practice in the large towns of Australia. He is ous to find some way of communicating with a good firm of medical men in e Australian town with a view to the purchase either of a practice or of a part- ip. He is a graduate of the University of London, has passed the first ex- ation for the Fellowship of the Royal College of Surgeons, and has had con- able experience.

Our correspondent will find several letters regarding practice in Australia rious numbers of the BRITISH MEDICAL JOURNAL, during the last few hs.

ANSWERS.

ODES (Glossop).—The paper shall have early attention.

A Medical Club.

F. RIDEAL (27, Margaret Street, W.) writes, in reply to "X," that he has for some time past, and is now, engaged in the organisation of a club suit- for members of the medical profession. Several energetic medical men are g a very great interest in this matter; and if "X," or any others equally ested, would like to assist further in its development, he should be pleased ceive their names.

Practice in Switzerland.

(JOURNAL, April 3rd, page 669) has to apply to the *Conseil d'Etat* of the n of Switzerland in which he wishes to practice; of course he must show iplomas. The *Conseil d'Etat* will ask for the opinion (*préavis*) of the Faculty edicine, if there is one in the canton. If this opinion be favourable, he d be allowed to practice in that canton, but not all over Switzerland; for, entitled to practice in the whole country, he has to pass the federal ex- ation in any one of the *facultés*.

A. CORDES.
neva.

Arsenic in Scarlet-Fever.

DR. WALTER G. WALFORD, Finchley New Road, in reference to Dr. Chevallier's letter in the JOURNAL for February 20th, states that in the JOURNAL, July 5th, 1884, is a communication from himself on this subject, in which he stated that he had tried it very many times as a prophylactic, and with great success. Nearly two years have elapsed since Dr. Walford wrote on the subject, and he sees every reason to adhere to his opinion as regards scarlatina, though he has some reason to modify it as regards other diseases.

During an epidemic of measles last year among the patients of the St. John's Wood Provident Dispensary, Dr. Walford repeatedly tried arsenic as a prophylactic, but the success was only very partial; this may partly be due to the indifference with which the mothers of the patients regarded the results of the experiments, apparently often not giving the arsenic as directed. Arsenic does not always render a person insusceptible of the vaccine virus, and Dr. Walford thinks it needless to dwell on the recognised value of arsenic as a prophylactic against ague. He believes that it is also successful in one or two other diseases.

SURGEON-MAJOR F. P. STAPLES (Gibraltar).—Thanks for report. We shall be glad to receive the series regularly.

Botany at the Conjoint Examination.

MR. J. H. TROUT (Birmingham).—Is our correspondent correct in stating that Botany is not one of the subjects of examination by the Conjoint Board of the Royal Colleges of Physicians and Surgeons? There was an examination in it in January last. He should consult the last educational number of this JOURNAL (September 12th, 1885), or obtain a copy of the regulations for the conjoint examination, together with a synopsis of the range of the examination in Botany, which will be supplied on application.

NOTES, LETTERS, ETC.

Slow *v.* Quick Combustion Grates.

DR. ERNEST H. JACOB writes: I do not think the question of slow *v.* quick combustion grates is decided either by the criticisms of the "Engineer," or the letter of Mr. Clark in your issue of March 20th. That grate is best for ordinary use which combines three qualities, namely, a high thermal equivalent by radiation, with a minimum of trouble in attention and regulation. It is frequently advisable to adopt a less perfect article for the sake of collateral advantages, notably so in the burning of gas, where the best burner for general use is frequently not that which gives the highest value in the testing house, while, if ventilation is to be secured as well, as in the sun-burner, a jet by no means good as regards lighting power is generally chosen.

The quick combustion grate must be small, is difficult to regulate, if a small fire be required, and necessitates constant attention. The slower burning fire, whether with solid base or close ash-pit, is comparatively larger, burns for a longer period without attention, while, if necessary, almost any rapidity of combustion may be obtained from it by poking. I have recently substituted a grate on the "Abbotsford" plan for an ordinary grid in a room constantly used, and, during the recent cold weather, the room has been perfectly comfortable, with the same expenditure of coal as with the former grate which would hardly raise the temperature above 50°.

The question, however, is complicated by the inexact use of the words slow and quick combustion. There are grates with solid bottoms and close ash-pits, where the combustion is much quicker than in some grid grates. What we really want is an estimate of the size and temperature of the burning mass which will best heat a room, securing as well the advantages mentioned above. The rapidity of combustion depends on the length of chimney and the amount of fire-surface exposed to the air, almost as much as whether air passes through from the bottom or not. The slow combustion-grate causes a less rapid draught up the chimney, and correspondingly decreases the cold currents which make it so unpleasant to sit by many fires in cold weather.

I am inclined to think the best fire-grate is one where the body of fuel is large, the combustion slow, and the spare heat is utilised by an air-chamber behind the grate, after the manner devised by Desaquliers in the last century, and popularised by Galton in this. By this method, all cold draughts can be prevented, while, in moderate weather, when the windows are open, it is easy to close the hot-air opening.

*** We are inclined to agree with much that Dr. Jacob says. It is, however, a matter of urgency that the slow combustion stoves to which he refers should be tested in a thoroughly scientific and practical manner. This class of grates is being largely introduced into modern houses, and it would be of much benefit to the community if tests were made and publicly reported by a competent and disinterested body, like the National Smoke Abatement Institution. What we want is "facts" to guide the makers and users of grates, and we see no means of effecting this guidance except by determining authoritatively whether "slow combustion—that is, solid bottom grates—are correct in principle or not. Will our correspondents who are so much interested in the issue help the object by a donation to the funds of the Smoke Abatement Institution, in order that the practical tests suggested may be carried out?

The Medical Acts Amendment Bill.

DR. M. N. GANDEVIA (Bournemouth) writes: As the Medical Acts Amendment Bill is about to be introduced to Parliament, permit me to express a hope that some provision will be made to enable British qualified practitioners to place on the *Register* such titles or degrees as they may acquire by examination from a foreign or colonial university of well known reputation. Whilst there are some valid reasons why foreign licentiates or graduates should not be allowed to register their qualifications without undergoing an additional test in Great Britain at one of the colleges or universities, there is absolutely no excuse to deprive British qualified practitioners, whose names are already on the *Register*, of the right to place against their name, as additional qualifications, such titles as they may have obtained in a legitimate and honourable way from foreign or colonial universities.

Now is the time for the numerous British practitioners who are alumni of the University of Brussels to unite, agitate, and secure a just and fair recognition of their degree, obtained after as searching, vigorous, and impartial an examination as the most exacting censor may desire.

Maternal Impressions.

Mr. Charles Vokes (Birmingham) writes: A few weeks ago I attended Mrs. M. during her fourth confinement. After the child was born, I found that the index, middle, and ring fingers of one hand were webbed. When the mother noticed them the next day, she told me that when she was nearly half her time gone, one of the pigeons which her husband kept in the yard flew on to her shoulder; it startled her a little at the time, but not very much, and thought no more about it, and was very much surprised to find the child's hand as described.

Dr. G. A. Abrath requests us to state that, in addition to being a graduate of the University of Heidelberg and a licentiate of the Apothecaries' Society of London, he also is a licentiate of the Royal College of Physicians of London.

Typho-Malarial Fever.

I am glad to find so good a discussion of the subject of typho-malarial fever in your issue of February 13th. My experience in South Africa leads me to believe that the very name enteric, which is given to any fever in this country, is not the enteric of Europe. It is a malarial fever, and, when complicated with enteric lesions, becomes very infectious, often complicated with dysentery, enlargement of liver and spleen; and, in one case, both lungs were found implicated in the general congestion, the right being gangrenous. This very fatal form of fever is well known in this country, cases proving fatal in a few days without perforation. Even in these cases the spleen is found enlarged, and when there is an increasing admission from simple continued fever, several of these cases are seen to crop up by change of disease, and I find that quinine, given as a prophylactic before the fever season sets in, has checked it completely, in such hot-beds as Rorke's Drift, of this fever. The antiseptic treatment of the discharges from these patients will tend greatly to lessen the secondary cause of this disease, which resembles more nearly the enteric of Europe. F.

Aseptic Catheter for Washing out the Bladder.

Dr. J. Foulis writes: In using my instrument, if Mr. Penny will only turn on the tap controlling the antiseptic reservoir as soon as the catheter enters the bladder, so that the urine and antiseptic lotion may escape together from the end of the instrument, he will find that, although the patient may very violently cough or sneeze, air cannot enter the bladder through the instrument as long as the antiseptic solution is flowing. This simple precaution makes my instrument absolutely safe as regards the entrance of air into the bladder after the urine has ceased to flow from the end of the instrument. It is the surgeon's fault if the catheter be not perfectly clean or aseptic before it enters the bladder. After it has entered the bladder, an intelligent control of the tap of the antiseptic reservoir will completely prevent the possible dangers to which Mr. Penny has referred.

A Case for General Sympathy.

Mr. Henry C. Burdett writes: It may be within the remembrance of your readers that, in 1883-84, I brought under their notice the distressing case of the wife and two small children of Dr. Cedric H. Sturford, B.A., a member of the Medical Department in British Guiana, and that about £500 was collected, and invested for their benefit. Dr. Sturford's residence in a very unhealthy district (La Retsnite) brought on a serious illness, which produced such an effect on his nervous system, that he lost his reason, and has since died. The interest on the sum raised only produces £35 a year, and Mrs. Sturford is striving to maintain herself and her children by giving lessons in singing, for which she is exceptionally well qualified. No doubt people who want their children to sing well would be glad to avail themselves of an opportunity of having them taught from the commencement by one of Signor Randegger's pupils, which Mrs. Sturford is. Her terms are five shillings a lesson, and all further particulars may be obtained by applying direct to Mrs. Sturford, 43, Mimosa Street, Fulham Road, S.W.

I desire to thank you once more, on Mrs. Sturford's behalf and my own, for the great assistance you have kindly rendered in this matter, and I hope that those who have children of a suitable age will give Mrs. Sturford a trial, in their own interests as well as from feelings of sympathy.

Alcohol in Hospitals.

Mr. R. Kershaw, Secretary to the Central London Throat and Ear Hospital, writes: Referring to the letter of Mr. George Sturge under the above title in your issue of March 27th, may I be allowed to place on record in your Journal that the authorities of this hospital, although making no pretence to dogma on the question of temperance, have carried on a successful practice, with a low rate of mortality, without the use of alcohol?

The medical officers agreed to adopt this practice at the suggestion of the senior surgeon on the opening of the in-patient department in 1877, not from any restriction placed on them by the committee in this respect, but from the fact that, while alcohol might be considered at least a predisponent in the causation of many of the special forms of disease here received, it was found to be seldom necessary as an aid to remedial treatment. One thousand three hundred and eighteen in-patients have been admitted in the ten years ending March 25th, 1886, and the total cost of stimulants has amounted to £10 14s. 2d. In the past year, £1 1s. 9d. was the expenditure on 238 patients, and the amount was credited to three patients, one—a tracheotomy case—having port-wine administered; a second—carcinoma with paroxysmal dyspnœa, brandy; and the third, specific ulceration of the larynx with dysphagia of solids, stout to a small amount, that is, a pint and a half in all. The death-rate has been 2 per cent.

Rural Superstitions.

T. A. C. writes: A curious incident occurred to me the other day, illustrating the hold that superstition still has over the poorer classes in country districts. I was called to see a child, about three years old, who had had the ill luck to have her clavicle fractured. After having carefully put up the fracture in the orthodox way, I was naturally somewhat disgusted on my next visit, at finding the child's arm hanging free, and the bandage reapplied in a very domestic fashion. The mother's explanation was, that the child had disarranged the dressing in bed, and they had put it on again as best they could. As a matter of fact, it afterwards transpired that a spiritualistic friend had dropped in, and, seeing the child, suggested an easy and speedy method of cure. In accordance with his advice, the bandages were removed, and a local "medium" was brought to rub, and spiritualise into its original integrity, the injured bone. This incident did not surprise me as much as it might have done, had I not known that charms for ringworm and erysipelas also enjoyed a high repute among the same classes.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Sinclair, Belfast; Dr. McWilliam, London; Mr. Barling, Birmingh Dr. R. J. Ryle, London; Mr. T. Drapes, Enniscorthy; Our Berlin C spondent; Dr. Gramshaw, Gravesend; Dr. H. Sutherland, London; Logie, London; Mr. W. Tyrell Brooks, Oxford; Mr. J. A. S. Brews Bootle; Mr. E. Beaumont, Gipsy Hill; Mr. J. Fairmann, Sheffield; Mr Davies, Swansea; Dr. A. T. Myers, London; Mr. E. F. S. Green, South wood; Mr. Rushton Parker, Liverpool; Dr. J. W. Moore, Dublin; Mes Street Brothers, London; Mr. E. Macdonald, Manchester; Mr. W. H. H wicke, Harwich; Mr. C. F. Rideal, London; Mr. R. Catharns, Junr., Lond Dr. Maxwell, Woolwich; Dr. Tatham, Salford; Dr. S. Guttmann, Berlin; E. Clarke, Lewisham; Mr. J. Raby, Totnes; A Beginner; Mr. Wm. Broster, Southampton; Mr. W. H. Winney, London; Mr. L. Hall, Lond Mr. J. K. Thornton, London; Sir Edmund Lechmere, London; Dr. G. Be Berne; Dr. Kitching, Enfield; Mr. H. Campbell, Carlisle; Dr. McBride, E burgh; Mr. J. E. Cooney, London; Dr. J. H. Aveling, London; Mr. J. Rho Glossop; Dr. A. E. Baldwin, Chicago; Dr. E. Penny, Alfreton; Dr. Suth land, London; Dr. W. Philson, Cheltenham; Mr. R. G. Price, Treorchy; F. J. Kilner, Bristol; Mr. Chicken, Nottingham; Mr. G. A. Cardew, Chelt ham; Mr. G. A. Harris, Simla; Dr. D. Mackay, Inverness; Dr. J. Oli London; Mr. G. Stillingfleet Johnson, London; Dr. Thomas, London; Mr. A. Hayes, Bedford; Mr. H. C. Hastings, East Dereham; Professor Gairdn Glasgow; Mr. C. Roberts, London; Dr. L. Phillips, Birmingham; Mr. Brown, Bacup; Right Honourable Sir Lyon Playfair, London; Dr. B. Fost Birmingham; Dr. Heywood Smith, London; Mrs. W. C. Rockliffe, Hull; T. C. Railton, Old Trafford; Mr. W. Donovan, Erdington; Mr. J. Willia Bethesda; Mr. R. J. H. Scott, Bath; Dr. Orchard, Pendleton; Rogers, London; Dr. Irving, Heanor; Mr. W. H. Pigeon, Hull; Messrs. Brothers and Co., Philadelphia; Dr. A. Cordes, Geneva; Mr. C. A. Wig Portishead; Dr. McCaw, Portglenone, Belfast; Mr. J. Clendinnen, Cosel Dr. J. H. Stallard, San Francisco; Mr. D. J. Hamilton, Aberdeen; Mr. Herma Besser, London; The Secretary of the Central London Throat and Ear H pital, London; Mr. R. Bryden, Uffculme; Mr. T. Jenner Verrall, Brighton; Paris Correspondent; Mr. W. Frazer, Dublin; Mr. J. A. Marston, Londo Mr. J. M. Booth, Aberdeen; Mr. C. E. Bland, Colchester; Dr. J. S. Hold Sudbury; Mr. W. Adams Frost, London; Dr. Mickle, London; Mr. E. Wh Wallis, London; Mr. A. Valentine, Methven, N.B.; Dr. M. N. Gandavi Bournemouth; Mr. C. M. Jessop, London; Dr. W. Thorburn, Manchester; A. Devonald, Llangennech; Mr. Shirley Murphy, London; Dr. Galton, Upp Norwood; Dr. Churton, Leeds; Mr. W. Hewitt, Prestwick; Mr. M. R. Behrendt, Burringham; Mr. L. Humphry, Cambridge; Mr. J. Sc Battams, Shadwell; Dr. C. Stawell, Bagnalstown; Mr. E. W. Russell, Londo Dr. J. Roberts, Menai Bridge; Mr. B. W. Conway, Manchester; Mr. S. Sne Sheffield; Dr. Soutter, London; Mr. Howlett, Hull; The Secretary of Royal Medical and Chirurgical Society, London, etc.

BOOKS, etc., RECEIVED.

The Springs of Conduct: an Essay in Evolution. By C. Lloyd Morgan. Londo Kegan Paul, Trench, and Co. 1885.

Reference Handbook of the Medical Sciences, embracing the entire range Scientific and Practical Medicine, and Allied Science. By Albert H. Bri M.D. New York: Wood and Co. 1886.

Transactions of the Obstetrical Society of London. Vol. xxvii for 1885. Londo Longmans, Green, and Co. 1886.

Prison Despotism: a Personal Narrative. By Dr. McCook Weir. Londo National Publishing Company. 1886.

Method of Case-Reporting for Clinical Clerks. By T. Churton, M.D. Leed McCorquodale and Co. 1886.

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REPORT
ON
PASTEUR'S RESEARCHES ON RABIES AND THE TREATMENT OF HYDROPHOBIA BY PREVENTIVE INOCULATION.

By M. WILLIAM VIGNAL,
Collége de France, Paris.

Part III.

JLATION WITH ATTENUATED RABID VIRUS AS A PROPHYLACTIC EATMENT FOR THE HUMAN RACE.—*Inoculation with Rabid Virus cially prepared as a Prophylactic Measure for the Human Race. ncubation-Period shortened by Successive Inoculation in the same cies.—Experiments with the same Virus carried on during Three rs.—Method of attenuating the Virus in Dry Air.—How to soon der a Dog Refractory to Hydrophobia.—First Inoculation of a man Subject for Hydrophobia.—Order of Inoculations.—Virus Rabid Spinal Cords prepared in Dry Air.—Micro-Organisms rete a Substance Hostile to their Development.—Interpretation of nomena Observed.—Details concerning Inoculation.*

culation with Rabid Virus specially prepared as a Prophylactic re for the Human Race.—M. Pasteur continued to carry on his hes, when, as he said in a subsequent note (October 26th, 1885 e Academy of Sciences, there arrived a moment when he was t forced to apply his method to the human subject (July 4th, Before taking this momentous step, he perfected the method d experimentally demonstrated before the Hydrophobia Com- n already mentioned. As he admits himself, his method was scientific than practical. "Its application to twenty dogs might esulted in only rendering fifteen or sixteen refractory to hydro- a." It was also necessary to keep the dogs under observation g three months, in order to be perfectly certain of the success of noculation. As some time is required for this method of pre g rabid virus, it evidently could not always be in readiness for ating after a bite from a mad dog. M. Pasteur perfected his ments to such an extent, that they resulted in furnishing a ylactic for hydrophobia, both prompt and practical, applied to a erable number of dogs. Its succes was highly satisfactory. nethod, which M. Pasteur therefore thought capable of being ap- to human subjects, was based on the following facts.

ibation-Period shortened by Successive Inoculation in the same s.—If a rabbit be, after trephining, inoculated under the dura with a fragment of a rabid spinal cord removed from a mad ydrophobia always appears, after an incubation-period which, average, covers fifteen days. If this virus, by the same d of inoculation, be passed on to a second rabbit, from a second bird, and so on through a successive series, it is soon observed he incubation-period manifests a tendency to become shorter in bbits inoculated in succession. After from twenty to twenty-five sive inoculations, from rabbit to rabbit, the incubation-period is d to eight days, and remains at this through a further series of wenty to twenty-five successive inoculations, when the incuba- eriod is limited to seven days, which remains invariable until a r successive series of inoculations, amounting to ninety, has ffected. M. Pasteur had arrived at the ninetieth rabbit of the ries inoculated, when he made the communication we are now g, in which he further stated that there was, perhaps, a scarcely tible indication of an incubation-period a little shorter than days.

eriments with the same Virus carried on without Interruption r Three Years.—These experiments were begun in November, A period of three years had elapsed between that time and the t this communication was made, without the slightest inter- n in their course. No other virus had been used than that ed from rabbits dead from hydrophobia after successive inocula- therefore M. Pasteur had always at his command perfectly irus, always, or very nearly, identical. This, M. Pasteur de- scribes as the essential condition of his method. The cords of these rabbits are virulent throughout their entire length, and equally so.

Method of Attenuating the Virus in Dry Air.—If a few centimètres be removed from the spinal cords of rabid animals, every antiseptic precaution being observed, and if they be suspended in dry air, the virulence slowly disappears, and finally becomes extinct. The time necessary to effect a thorough disappearance of the virulence depends somewhat on the thickness of the pieces of cord, and especially on the surrounding atmosphere. The lower the temperature, the more lasting is the virulence. These facts constitute the scientific features of the method.

How to soon Render a Dog Refractory to Hydrophobia.—These facts being established, M. Pasteur described in detail the method to be adopted, in order to render a dog refractory to hydrophobia, in a comparatively short time. In each a series of jars containing air dried by means of fragments of potash placed in them, a piece of fresh spinal cord, taken from a rabbit dead from hydrophobia after several days' incubation, is placed every day. Every day, a Pravaz's syringe full of sterilised broth, with which a fragment of one of these dried spinal cords has been mixed, is injected under the skin of a dog. The first injection is made with a fragment of cord prepared some days before, in order to be sure that it is not at all virulent. Previous experiments have demonstrated the degree of virulence of the cord. The following days portions of cord are used, which have been more recently prepared, and have remained two days less in the bottles. The last injection is made with virulent spinal cord, which has remained one or two days only in the bottles containing dry air. The dog thus treated is rendered refractory to hydrophobia. Virus may be inoculated under the skin, or on its cerebral surface after trephining; and rabies will not be contracted. By practising this method, M. Pasteur rendered fifty dogs, of all ages and races, refractory to hydrophobia, without one failure.

First Inoculation of a Human Subject for Hydrophobia.—M. Pasteur had so far succeeded in his experiments, when, on July 6th, 1885, Joseph Meister, sent by Dr. Weber, from Alsace, arrived at his laboratory in the Rue d'Ulm. This child had been bitten by a mad dog, in fourteen different places, on the hands, legs, and thighs. In the animal's stomach, straw, hay, and wood were found—the ordinary signs of canine madness. M. Pasteur consulted MM. Vulpian and Grancher. They considered Joseph Meister to be almost sure to die from hydrophobia. M. Pasteur, therefore, decided to apply to Meister the method of vaccination, which had often succeeded with dogs; but not without suffering acute anxiety. The fifty dogs rendered refractory to hydrophobia had not been, it is true, bitten by a mad dog before attaining that condition; but M. Pasteur knew, by previous experiments, that dogs previously bitten were easily made refractory to hydrophobia. The members of the Hydrophobia Commission had witnessed experiments demonstrating this.

On July 6th, 1885, M. Pasteur inoculated Joseph Meister, under the skin, with a Pravaz's syringe half full of sterilised broth, mixed with a fragment of rabid spinal cord, taken from a rabbit which had died on June 21st. The cord had, since that date, been kept in a jar containing dry air—that is, fifteen days. The subsequent days, Meister was inoculated according to the following table.

July 7 ..	9 A.M. ..	Marrow of 14 days		July 11 ..	11 A.M. ..	Marrow of 6 days	
,, 7 ..	6 P.M. ..	,,	12 ,,	,, 12 ..	,, ..	..	5 ,,
,, 8 ..	9 A.M. ..	,,	11 ,,	,, 13 ..	,, ..	..	4 ,,
,, 8 ..	6 P.M. ..	,,	9 ,,	,, 14 ..	,, ..	,,	3 ,,
,, 9 ..	11 A.M. ..	,,	8 ,,	,, 15 ..	,, ..	,,	2 ,,
,, 10 ..	,, ..	,,	7 ,,	,, 16 ..	,, ..	,,	1 ,,

Thus Meister was inoculated thirteen times in ten days. At present, M. Pasteur only makes ten inoculations, one every day. He has suppressed the first three as useless; but it is easily conceived that, when treating Meister, he acted with excessive prudence. The fragments of cord used for the first inoculation were not virulent; this was ascertained by inoculating rabbits after trephining, with the same material as that used for the boy; all these animals escaped hydrophobia. The inoculation-fluid used on July 11th, 12th, 13th, 14th, 15th, and 16th, produced hydrophobia in rabbits. Each successive inoculation was made with a more virulent fluid than the preceding one. The last inoculations of Meister were made with a rabid virus taken from a mad dog, and rendered more virulent by being passed by inoculation from rabbit to rabbit. This virus produced hydrophobia in rabbits after seven days' incubation; and in a dog, not inoculated for hydrophobia, after an incubation-period of eight or ten days.

As Joseph Meister is in perfect health, and it is now more than nine months ago since he was bitten by a mad dog, and then inoculated by M. Pasteur, it may be concluded that he has escaped what appeared to be an imminent danger. The wounds were numerous

and serious; and the dog was proved to be mad. It is probable that the child would have died from hydrophobia forty to sixty days[1] after he was bitten. He has, therefore, been preserved from an almost certain death, and has, it may now be concluded, not suffered in any way from M. Pasteur's inoculations with rabid virus, as a preventive for hydrophobia. M. Pasteur admits that this method of inoculation as a preventive treatment for hydrophobia may be interpreted in many ways. At present, he abstains from formulating any interpretation of it. He only explains the aim of the experiments which he is carrying out, in order to arrive at a scientific explanation of certain phenomena.

Virus in Rabid Spinal Cords prepared in Dry Air.—M. Pasteur rejects the supposition that submitting the rabid spinal cords to the influence of dry air has the effect of gradually lessening their virulence, and finally entirely destroying it. He has ascertained certain facts which negative this belief, as he will later demonstrate. Experiments made on rabbits proved to M. Pasteur that the cords prepared in dry air were poorer in quantity of virus, but not in quality. Thence the following suggestion, contained in his communication: "Can it be admitted that inoculation with a virus of always the same degree of virulence probably produces a condition rendering the animal inoculated refractory to hydrophobia, if, at each daily inoculation, an increasing quantity of virus be used? This is an interpretation of the facts obtained by my experiments which I am now testing." (*Loc. cit.*, p. 711.)

Micro-organisms Secrete a Substance Hostile to their Development.—M. Pasteur appears more inclined to consider the bearing of the following facts. A great many microbes appear to produce certain substances which are hostile to their own development. In 1880, M. Pasteur had already indicated that the micro-organism of cholera in fowls secretes a poison dangerous to itself. The bacillus of measles in pigs presents the same phenomena. M. Reulin, in 1870, showed that the aspergillus niger secretes a substance which partially arrests its development, if its cultivation-fluid do not contain iron.

Interpretation of Phenomena Observed.—These phenomena led M. Pasteur to consider the probability of the constituent parts of rabid virus being composed of two distinct substances; one living, capable of developing in the nervous system; another, deprived of vitality, but, if present in a sufficiently large proportion, capable of arresting the development of the former.[2] Although a great deal has been written in the daily papers and elsewhere concerning the manner in which M. Pasteur inoculates for hydrophobia, we nevertheless believe that a clear and accurate account of these inoculations will not be misplaced here. A great many errors have slipped into the non-scientific descriptions.

When the patients arrive at the laboratory in the Rue d'Ulm, they are received either by M. Pasteur, or by one of his assistants; and their names and addresses are taken. A certificate from a veterinary surgeon or medical man is required, stating that the dog was mad. Their wounds are examined. If they have not been bitten on the face or hands, and their clothes be not lacerated by the animal's teeth, so that the virus has not passed into the wounds, they are sent back. Although M. Pasteur asks for a certificate, yet, when one is not forthcoming, and the dog has been lost sight of, and there is reason to believe that the dog is mad, he inoculates. For this, evidently, no voice can be lifted against him in blame; it is only humane to place these people beyond danger, especially as it is highly probable that the dog which inflicted the bite was mad.

The following incident is a proof that M. Pasteur acts wisely. A few days ago we were at his laboratory, when there arrived an elderly woman with a little boy. Both had been bitten, under the following circumstances. A collie dog, belonging to Colonel H., living forty miles from the village where the woman and the boy resided, rushed along the streets, in an excited condition, attacked the old lady, inflicting several deep wounds on her leg, then bit the boy, also badly. The animal was killed, after having also bitten a dog and a horse. The medical man who brought these patients to M. Pasteur, could not say whether the dog was mad or not; its dead body had been thrown he did not know where. He proposed writing to ask for more precise detail, directing that, if the animal's dead body could be found, a necropsy should be made. Had M. Pasteur refused to treat the woman and child, he would very probably have been blamed by the very same voices that now blame him for inoculating people, when he is not sure that they have been bitten by mad dogs. If a death occurred among those who were bitten, and had not been able to produc certificate, and therefore had not been inoculated, M. Pasteur wo perhaps more bitterly reproach himself than could his present crit who ask "if his patients are mad?" In order to have statistics solutely accurate, a certain number of people would probably doomed to a dreadful death, and certainly to undergo terrible anxi M. Pasteur humanely prevents this by inoculating, whenever i probable but not certain that the dog is mad, and that the bite mi therefore be dangerous.

Details concerning Inoculation.—The inoculations are made at o'clock A.M., at M. Pasteur's laboratory in the Rue d'Ulm, by Grancher. M. Pasteur calls in the patients one after the other, not haphazard, as has been asserted. When an entire series is sembled, Dr. Grancher makes the inoculations, one day in the ri hypochondriac region, another in the left, and so on alternately. T precaution is observed to prevent irritation or inflammation cor quent on the introduction of the virus. The last inoculations sometimes followed by a slight œdematous redness; but a phlegm nous condition has never resulted, nor have abscesses ever appear The dose for adults is a Pravaz's syringeful (about a cubic centimè of virulent mixture; for children, the syringe about half or th quarters full, according to their age. In a room close to the where M. Grancher inoculates, M. Terrillon dresses the wounds sulting from the bites. When the wounds are of so serious a nat that the sufferers are obliged to be treated at a hospital or in t own lodgings, M. Pasteur, or one of his assistants, goes to make inoculations. The treatment covers a period of ten days. Every d an injection is made with rabid spinal cord of increasing virule For the first injection, a spinal cord which has been preserved in air during ten days is used; for the second, one that has been so prep during nine days; and so on until, for the last inoculation, one that been so prepared during one day is used. In effecting the inoc tions, everyone has his separate duty. An assistant, who prepares inoculation-fluid, fills the syringes according to series, and gives t to Dr. Grancher. Thus his duties are limited to filling the syrin with fluid of the requisite virulence—a duty requiring his en attention.

ERRATUM.—At page 673, column 1, lines 9 to 11, *for* "one cubic centimètr rabid medulla was mixed with sterilised broth, and injected into the veins dog," *read* "a cubic centimètre of a mixture composed of sterilised broth rabid medulla oblongata was injected into the veins of a dog."

LOST AND STARVING DOGS.—The number of dogs admitted to Temporary Home for Lost and Starving Dogs, Battersea, during past year, was 25,578, being an increase of 10,806 as compared w 1884. This increase, says the annual report of the institution, due mainly to the police-order for the seizure of all dogs not un control. The lethal chamber had admirably fulfilled all the pre tions made in its favour. The outbreak of rabies, which occur during last year, extended to a degree never before reached in the perience at the Home. As large a number as sixty dogs, suffer from that terrible disease, were killed during 1885, which was j four times the number of cases discovered there in 1884. Of the fifty-four were males, and six females. Upon the suggestion of Queen, the committee had decided to keep the dogs brought to th for five days instead of three, as provided by the Act, which wo bring up the average number kept from 500 to about 800. A reso tion, moved by Professor Corfield, approving of the means of de afforded by the lethal chamber, was agreed to.

POLLUTION OF THE RIVER LEA.—Mr. Abel Smith, M.P., presi at the sitting of the Select Committee on April 10th. Mr. G. Eachus, engineer to the Edmonton Local Board of Health, gave e dence. He had noticed an increased pollution of the river during past few years. He did not recommend the use of filter presses, suggested by the Metropolitan Board, because they were expensi and the sludge left a deposit behind it, which was almost certain find its way into the filters, notwithstanding all care. The main wa of the entire district was, in his view, an improvement of the subs drainage, and the widening and deepening of the New Cut. As immediate and temporary remedy for the existing pollution of Lea, witness would suggest a thorough flushing of the river. T pollution of the river increased from and after 1867, when the wa companies began to draw larger supplies of water; and he believed pollution was consequent upon this action of the companies. T right thing to be done was, that the water companies should larg increase their reservoir storage capacity. Mr. William Croft, survey to the Tottenham Board of Health, gave evidence, and the Commit adjourned to May 14th.

[1] According to statistics, forty to sixty days is the length of the incubation-period in hydrophobia. A longer period is excessively rare.

[2] Il se pourrait que ce qui constitue le virus rabique soit formé de deux substances distinctes, et qu' à coté de celle qui est vivante capable de pulluler dans le système nerveux, il y en ait une autre non vivante, ayant la faculté, quand elle est en proportion convenable d'aniter, le development de la première." (*Loc. cit.*, p. 771.)

TWO LECTURES
ON
UMOURS OF THE LARYNX; THEIR PATHOLOGY, SYMPTOMS, AND TREATMENT, WITH ILLUSTRATIVE CASES.

ted from a Course of Lectures delivered during the Winter Session of 1885-86 at the Glasgow Royal Infirmary.

By DAVID NEWMAN, M.D.,

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Lecture II.

LEMEN,—You will remember that, at my last lecture, I called attention to the following points. At the beginning of the hour, icated to you the distinctions which characterise tumours and ate them from growths of inflammatory origin. After making a emarks on the subject of etiology, I discussed with you at some h the pathology and symptoms of benign tumours; and towards nd of the lecture I described in detail the more common varieties ple or homologous tumours.

day I shall endeavour, with the aid of the patients and specimens before you, to describe the two malignant tumours which may the larynx. These are the sarcomata and the carcinomata; and may be divided into the intrinsic and the extrinsic, according as are limited or not to the cavity. Growths occupying the or of the larynx and attached to the false vocal cords, the true cords, e parts immediately below them, should be included under intrin- mours; whereas those growing from the aryteno-epiglottic folds, the epiglottis, or from the interarytenoid fold are more properly bed as extrinsic. This division, as I will point out to you ly, is, when operative interference is contemplated, of great clini- portance.

me now say a few words regarding the sarcomata. These ors are constructed on the type of embryonic connective tissue, may or may not undergo development towards an adult form. y be broadly stated that, the more closely the tumour resembles ucture embryonic connective tissue, the more malignant it is to be; in other words, the malignancy of the growth is in an se ratio to the development of its tissue. Thus the round-celled na is more malignant than the spindle-celled, and the spindle- more so than the fibrous or fasciculated.

comata in the larynx generally originate in the submucous con- re tissue, rapidly attain a considerable size, and usually invade e structures with which they come into contact; as a rule they are , smooth, or slightly lobulated, and commonly they are covered with l mucous membrane, but, in some instances, the capillaries e surface become distended, and impart to the membrane a dark The surface may present a papillomatous appearance, but deep tion is seldom met with in these growths. The mode of develop- of the primary growth is easily followed, and the rapidity of crease depends upon the nature of its histological elements. it is soft and rich in cellular elements, the growth is rapid and mour vascular; whereas, when its texture is more fibrous, its tency greater, and the cells spindle-shaped, the increase in bulk ch slower.

ides rapid growth, one of the most pronounced characteristics of comata is the tendency which they have to continuously invade rrounding tissues. Masses of round or spindle-shaped embryonic ctive tissue cells form and become incorporated with the neigh- g parts, so that, in their mode of growth, they closely resemble matory new formations. The tumour moulds itself to the l tissues, but at the same time the cells which form it replace, e extent, the histological elements of the existing structures. sarcomata, there is no proper stroma of connective tissue, so he blood-vessels are in immediate contact with the cells. The atic supply is not abundant, and consequently the lymphatic s have little tendency to become enlarged, and secondary meta- formations are rarely met with associated with these laryngeal s.

specimens which I now show you illustrate sarcomata. This as removed from the body of an old man who came into the al last winter, and is an example of the alveolar variety.

en the patient was seen for the first time, he stated that the first symptom that attracted his attention, was pain in the region of the larynx. Within the last few days, however, the pain had commenced to radiate to the ears and lower part of the face. This symptom, he said, had been present for about twelve weeks. During the first few weeks, there had been no great interference with speech or respiration. About six weeks ago he complained of difficulty in deglutition and slight dyspnœa; and since that time the symptoms had gradually become more marked, so that, on admission, there was almost complete aphonia, unless when the patient made a special effort; only then did he succeed in producing a vocal sound. There was no great interference with the passage of air through the larynx during inspiration, and expiration was comparatively free. On palpation of the neck, I found the larynx to be distorted, the alæ of the thyroid cartilage, particularly the left, being pressed forwards and away from the middle line.

On laryngoscopic examination, the tumour appeared as an ill-defined swelling, occupying chiefly the left side of the larynx, but also involving the right vocal cord, and the base of the epiglottis. The opening of the glottis was seen to be considerably diminished in size, and pressed to the right side. The aryteno-epiglottidean folds were indurated and œdematous, and the base of the epiglottis was so swollen that it was with difficulty that the interior of the larynx could be seen. The mucous membrane of the larynx was smooth, and in no part was there any evidence of recent or old inflammatory changes.

When seen at the dispensary, the patient was so weak and reduced in health that I directed him to be admitted into the hospital immediately, not only on account of the disease of the larynx, but also in order that his general condition might be attended to. The patient was admitted at once to Ward X, and, when placed in bed, the house-physician found him to be so exhausted, that he considered it advisable not to submit him to a careful examination in the meantime, as it was evident, from a physical examination of the chest, that he was suffering from hypostatic congestion of the lungs. The patient gradually became weaker, and died on the evening of admission.

A *post mortem* examination showed that he had been suffering from chronic tubular nephritis; dilatation of the right ventricle, and hypertrophy and dilatation of the left ventricle, without valvular disease; hypostatic congestion of the lungs, and nutmeg liver.

On examination of the larynx, the tumour was found to be about the size of a walnut, and was situated between the alæ of the thyroid cartilage and the mucous membrane of the larynx, all the intervening tissues having been infiltrated by the neoplasm. It did not extend above the thyroid cartilage, nor below the cricoid cartilage, on its posterior aspect. In front, however, it passed up as high as the lower third of the epiglottis; and the anterior part of the thyroid cartilage was infiltrated and perforated by the tumour, and a small portion of it was found occupying the space in front of the crico-thyroid membrane. The great bulk of the tumour occupied the left side of the larynx, but some of the tissues in front and to the right were also found to be invaded. The right vocal cord particularly was involved, and the lower third of the epiglottis measured fully a quarter of an inch in thickness. No secondary formations were discovered. On section, the substance of the tumour was found to be of an uniform moderately firm consistency, a whitish-yellow colour, and, on microscopic examination, was found to present the characteristic appearances of an alveolar sarcoma. The tumour possessed a distinctly alveolar arrangement, some of the alveoli being occupied by three or four embryonic cells, while others contained a great number of large cells closely resembling epithelium in appearance. At some parts, the tumour was composed of simple round and spindle-shaped cells, without any distinct tendency to an alveolar arrangement; while, at other parts, the masses of cells were intersected by delicate strands of connective tissue, which divided the cells contained in the larger alveoli into small clusters. At one part of the section examined, several myeloid cells containing numerous nuclei were seen, and almost at the same point, a distinct osseous trabecula was found. The trabecula was not situated, as far as could be discovered, close to or in contact with cartilage, but appeared to be in the substance of the tumour. This is the only part where the elements of the tumour showed a tendency to form osseous tissue.

This form of sarcoma is closely related to the carcinomata, and it is frequently extremely difficult to declare whether such tumours should be placed amongst the sarcomata or the carcinomata. The principal points which distinguish this form of sarcoma from carcinomata are these: (1) the stroma and the cells are intimately interwoven; (2) the blood-vessels run amongst the cells and in the stroma; (3) metastasis is usually by the blood-vessels; and (4), as a rule, the lymphatics are not involved. On the other hand, in cancer, the stroma and cellular elements, which are epithelial in their origin, are easily separated from one another, the blood-vessels run in the stroma only, and metasta-

sis is primarily by the lymphatics. Both growths are, however, equally malignant, but cachexia is seldom observed so early in the sarcomata as in the cancers.

I have another specimen here which I wish you to look at. It is one of historical interest, and was placed in the museum by my predecessor, the late Dr. Foulis. It is also one of sarcoma, but not precisely the same as the last preparation. It is the first larynx excised in this country for malignant disease. On examining the parts, you will find that the tumour is situated on the under surface of the left vocal cord, and forms a pendulous mass, which hangs into the trachea as far down as the first ring. From the upper part of the tumour, an extension has taken place upwards, and it presents a soft pale appearance. Its structure is that of a spindle-celled sarcoma. This larynx was excised by Dr. Foulis, on September 10th, 1877, and you will find a detailed account of the case in the *Lancet* for October 13th, 1877, and January 26th, 1878. I shall have occasion to refer to this case again, when we come to consider the operation of laryngectomy.

[*To be continued.*]

SOME REMARKS ON THE VENEREAL DISEASE, CHIEFLY IN REFERENCE TO ITS EVOLUTION.

By F. LE GROS CLARK, F.R.S.,
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I HAVE read Mr. Hutchinson's Lettsomian Lectures on Syphilis, and, I need not add, with interest; for everything that Mr. Hutchinson writes repays a thoughtful perusal. There are points in these lectures which recall a very early period of my career, when, as an articled pupil of Mr. Travers, I was engaged in assisting to collect materials for his address to the Hunterian Society, at the close of his year of presidency. His subject was the venereal disease, in the broadest acceptation of the term. This address was published, though I believe its circulation was limited; and I have a copy before me, presented by the author, in acknowledgment of the trifling help I was, as a youth, privileged to afford my honoured master.

Mr. Travers's first proposition is, that the secretion of an inflamed mucous membrane is competent to excite a similar condition in a healthy mucous surface with which it is brought into contact; and this he illustrated by examples of inflammatory leucorrhœa causing suppurative ophthalmia in newly-born children, and even purulent discharge from the male urethra. There is, no doubt, more susceptibility to such infection in some individuals than in others, as is exemplified in the communication of gonorrhœa; and this is probably even a more potent factor in the issue than the virulence of the secretion. I may add that the specific nature of gonorrhœal ophthalmia is, at least, questionable. I have certainly seen as fatal consequences from suppurative ophthalmia occurring, where there was no suspicion of specific infection.

The next step considered by Mr. Travers is the production of a sore. This condition, as he argued and as I apprehend few will question, may result from the simple application and retention of gonorrhœal matter from the vagina on an excoriation or cutaneous crevice of the glans penis or prepuce. The secretion from the ulcer consequent on this lesion may, when absorbed, infect the system, producing mild secondary symptoms, manifested chiefly in the throat and on the cutaneous surface, and sometimes affecting the joints.

The more virulent form of primary sore—the excavated ulcer with hardened circumference—Mr. Travers regarded as a constitutional sore, the product of a system already impregnated with poison; or, to use his own words, "a gonorrhœal sore in a fresh subject produces, by absorption, constitutional symptoms of the first order (those referred to above); and communicates a similar sore, having the same tendency to propagate the first order of symptoms. But a gonorrhœal sore, occurring in a person already the subject of the first order of symptoms, becomes a constitutional sore, and secretes a matter capable of producing the second order of symptoms (those from hard chancre) in the individual, and of communicating the matter of chancre to another." Of course Mr. Travers meant that this is the way in which a chancre was originally, and may still be produced; and no doubt individual susceptibility greatly influences the result. Probably also the maximum of intensity of the poison is not reached until it has passed, under favouring circumstances both constitutional and antecedent, through several individuals.

These views were not original; for Hunter, as is well known, regarded gonorrhœa and syphilis as modifications of one and the same poison. But I suppose Mr. Travers thought it desirable to recall public attention to these opinions, whilst he illustrated the views he entertained by his own experience.

There are some points in connection with this subject on which I will venture to make a few remarks, more in the form of suggesti than of authoritative opinion, and certainly not in a spirit of contr versial criticism; for I must candidly admit that I have not at ha any statistics sufficiently comprehensive to carry weight; and I a aware how little value is attached—and perhaps justly so—to opinio thus unsupported.

First, concerning what is generally understood by constitution influence. This is exemplified in numberless ways in modifying t characteristics of disease; and I can see nothing extravagant in t supposition that a simple inflammatory product may be thereby co verted (to use Mr. Hutchinson's word) into a specialised form of di ease; and again that this specialised form should, in course of tim assume a specific type; more permanent in character because it h reached its maximum development in that particular direction. I such evolution time is an essential ingredient; as well as the charact of the infecting matter and the susceptibility of the recipient; bot of which are dependent on inherited or acquired diathesis. This exemplified in the circumstance that two individuals, deriving syphi (I use the word in an extended sense) from the same source, are n necessarily affected to the same degree, or even in exactly the same wa

The study of ordinary septic inflammation from decomposing or di eased animal-matter affords an analogous illustration; the suscept bility of the recipient greatly influences the result. Here likewise, I know by repeated personal experience as well as from observatio there is a period of incubation (if I may so term it) before what ma be regarded as the zymotic action commences. In these instances t interval is short compared with that in the case of most specif poisons, perhaps because the affinity between the poison and the ci culating fluids is closer in the former than in the latter. But th period of incubation in what are termed specific diseases is not such to admit of their being thus classified under one general law. It true that some of the exanthemata are approximately regular as r gards the interval between exposure to infection and the manifest tion of disease; but they differ in this respect from one another. Y I think that in a few, as probably in syphilis, there is a direct rat between the virulence of the poison and the length of time it is pr sent in the system before it is developed. Certainly a chancroid (b which I mean a soft sore) has a shorter period of incubation than chancre; and I think it a subject worthy of further investigatio whether there is not a more or less regular association between th length of incubation and the subsequent severity of the constitution affection. That the interval alluded to varies very much in differe instances cannot be doubted; and the simplest, and, as I believe, th true, explanation of the conflicting evidence on this point is afforde by the admission that there are many grades of the same disease; th mildest of which is developed after a short interval, whilst the severe forms are more delayed; the intensity perhaps bearing, as I have re marked, a direct relation to the length of incubation. The case of th self-vaccinated medical man, mentioned by Mr. Hutchinson, illu trates the latter class.

My creed, then, derived from observation, is that there may b superficial sores—mere ulcerated excoriations—which heal withou constitutional treatment, and leave no after-consequences; that ther are other superficial sores which appear after a varying period of incu bation, and, though possessing none of the special characteristics o chancre, namely, induration and exedent ulceration, yet may entai mild secondary symptoms; that there is a third class, the genuin chancre, with a longer period of incubation, and entailing, more cer tainly, severer and more complicated secondary symptoms, which ar far less amenable to treatment. Between these last two or constitu tional varieties of the disease there is no hard and fast line to b drawn; the gradations between the extremes being many, and deter mined by circumstances both personal and extraneous, of which th quality of the imparted virus is the most influential. I believe tha mercury is competent to save a patient from the constitutiona sequences of even a hard chancre; at the same time I should not fee justified in promising immunity from secondary complications in any case, where even a short interval only had elapsed between exposure t infection and the local development of the disease; though the sor were superficial and devoid of surrounding induration.

I believe it is an admitted fact that secondary symptoms sometimes occur without any history of primary disease except gonorrhœa; and the suggested explanation is that a primary lesion must have existed out of sight, in some part of the urethra. Now, the phenomena attending the communication of gonorrhœa are more intelligible where the recipient is the female than the converse. The orifice only of the male urethra is exposed; and the canal is not only swept in the act of coition, but frequently irrigated afterwards by the current of urine. How much more difficult, then, it is to conceive that the

tion of a chancre can be conveyed retrogressively along the ra for some distance, so as to produce a sore by direct contact: not even helped by ciliary movement. I think that this explanation must be a mistake; and that any sore so existing is simply an ation of the inflamed mucous membrane, commencing in the les; the induration sometimes felt being inflammatory deposit in ubmucous areolar tissue, such as we meet with in the initiatory of insidious urethral abscess from a similar cause. I believe as there are virulent and non-virulent sores, so there are specific simple discharges from the urethra; the former alone being ble of entailing after-consequences, either by direct absorption the mucous surface, or from an ulcerated lesion. I may also re- that the interval between exposure and infection varies in rrhœa: probably—but I do not express any opinion on the point re may be some relation between the latent period in this case though not in the same sense, and the poisonous quality of the ing matter. I may add that I do not remember to have met any case which suggested to me the presence of a hard chancre e urethra.

ain, does the quantity of virus, as well as its quality, influence esult? It is said to do so in vaccination, and appears to do so me specific fevers. In syphilis this inquiry could be answered by experiment. I am not disposed to attach much importance to question: certainly quality is more potent in determining the issue. e presence of syphilis in the system is not unfrequently evinced he character which a casual ulcer assumes; one, that is, which is esult of an accidental lesion of the skin: and the secretion from ulcer would, I apprehend, possess the infecting properties of a ry syphilitic sore. The undesigned experiments supplied by nation leave little doubt on this point.

t the introduction of a non-specific poison from an extraneous e is not a *sine quâ non* in the production of septicism; it may me-bred: and this fact illustrates, in a remarkable way, the in- e exercised by the intrinsic condition of a patient over some l exciting cause of mischief, which in a healthy subject would almost unnoticed. All hospital surgeons know the class of nts amongst whom they may expect this poison-generating tend- The discharge from a festering wound not only diffuses its n throughout the system of the sufferer, but is qualified to im- ts fatal virulence to others, when brought into contact with any l breach of surface.

m not aware whether surgeons are generally agreed as to the nce of a breach of surface being an essential condition for the ction of a chancre. There is, probably, in most instances, some l abrasion or fissure of the skin; but I do not think this is by neans necessary, at any rate at the time of sexual intercourse. I hend that, in the majority of cases, want of cleanliness is suffi- to account for the result without previous lesion of skin. The ting secretion of a sore, left undisturbed in contact with the deli- urface of the penis or vagina, is competent to do the mischief. requency of chancre at or near to the frænum preputii is pro- due to slight laceration of this part. The first localisation of isease at the original seat of lesion, in these specialised or specific l poisons, is not the less remarkable because it is a recognised of every-day occurrence. What occurs in the interval—fre- ly long—between infection and development? Is the local ty the manifestation of reaction, or is the constitution unimpli- until after the localised poison is matured? I am not aware these questions have been satisfactorily answered; though at- s have been made to solve them by the early destruction of re. My own opinion may be expressed by the admission that I never had faith enough to try this experiment.

regards the exhaustion of susceptibility to syphilis after the ttack, I believe the solution of this problem must be sought in onsideration of many complex questions associated with the past y of the disease and the antecedent condition of the patient in ase. A mild attack, chancroid, does not secure immunity: pro- , as I believe is the case with some of the exanthemata, a severe is, when really cured, a better but not certain safeguard against nd attack.

allied question is, whether a strongly pronounced manifestation condary symptoms is any security against the later development ernal organic complications. I cannot answer this question; think it not improbable that such is the case, as I am disposed ard the cutaneous affections especially as, in a measure, elimi- e. But here again much depends on the virulence of the poison he condition of the recipient; and it is very difficult to reach atisfactory conclusion on an abstract question, where the neces- lata are so complex.

Why is a chancre hard in its circumference and at its base; and why does it present that peculiar excavated character under ulceration? I think that analogy will help us, in a measure, to understand these conditions. I may remark that I am scarcely disposed to admit that a chancre is, unless exceptionally, a sloughy sore, as it is often described. Yet this distinction is hardly worth notice, as it is merely one of degree and not of kind. The excavation is usually accomplished by molecular disintegration, that is, ulceration; it rarely attains the state of slough, though more often the rapidity of the molecular destruction reaches the intermediate or phagedenic stage. The plastic infiltration which constitutes the indurated circumference of the ulcer would, but for the breach of surface, include the whole of the local disease, and has its analogue in non-specific inflammatory infiltration under other circumstances; and notably so in carbuncle. Under the action of the localised specific poison the affected tissue loses its vitality, and disintegration is the result: in some instances this is slow, in others rapid. Mr. Travers speaks of the tempered character of this destructive phagedenic action at the time he wrote, as compared with his earlier experience; and he attributes the improvement to the use of mercury, although, he adds, that has been obtained probably at the sacrifice of vigorous health in the population, consequent on the excessive and injudicious use of this mineral. I think, indeed, I may say that syphilis has lost some of its severer characteristics within my memory; especially in its secondary stage. Exaggerated examples of rupia were of far more common occurrence fifty years ago than they are now: and so, it appears to me, was destruction in the primary sore. This is hopeful as regards the future. I may here venture to eulogise the perchloride preparation of mercury, in combination with bark: and I am old-fashioned enough still to confide in sarsaparilla, given with the perchloride, as best adapted to many cases, in which the disease has reduced the patient to a state of pitiable suffering and emaciation.

Why is mercury so potent an agent in this disease? There can be no doubt that, as a rule, the progressive activity of the syphilitic poison is incompatible with the active presence of mercury in the system. To whatever cause we may conjecture that the expellent agency of the mineral is due, of one thing I may speak with tolerable certainty; namely, that it is not by its swift and powerful operation that the desired result is accomplished; but by the continuous administration of small doses for a lengthened period, extending beyond the external manifestation of the disease, until the latent tendency to its recrudescence is abolished. We should hear less of what are termed tertiary symptoms or remote sequelæ, if this principle received more attention. The inconstancy of the indications, in different subjects, of the active presence of mercury, renders it difficult to establish any rules as to the dose. A red margin to the gums is quite sufficient, but even this may be absent though the mercury is doing its work; and we must be guided rather by the general symptoms. For a long continuance I prefer small doses—say half a drachm to a drachm—of the perchloride in the day, on which I have known patients thrive and gain flesh. For rapidity of action the iodide is to be preferred.

Of phagedæna I saw a good deal during my early career: in fact we were then rarely without a case in the Magdalen Ward of the Hospital; for it was almost exclusively among females that it occurred. The type of the disease was so associated with the locality whence the victims came, that they were known as Swan Alley cases. Mr. Travers gives a graphic description of this disease, and of the class of patients amongst whom it occurred. The locality was near the Docks, and the wretched girls, ill-fed and plied with gin, lived amid filth and excessive debauchery, until their miserable condition compelled them to seek for admission into the hospital. We were not accustomed to regard these cases as syphilitic, but as due to the combination of the causes which I have enumerated. Certainly they did not require, indeed they could not have borne, any specific treatment. Bark and opium, with a generous diet and regulation of the secretions constituted the general management of these patients; whilst the local treatment usually resolved itself into the free application of strong nitric acid to the ulcerated surface. In most instances if properly applied, after cleansing the ulcer of disorganised *débris*, the effect was rapid and satisfactory, and the healing was often speedy. I have seen a considerable portion of the femoral artery laid bare by this destructive ulceration: yet most of the cases, if uncomplicated and taken in time, recovered under the simple treatment I have described; and, so far as I remember, without the occurrence of secondary symptoms. I may add that I do not recollect any instance in which the disease spread from one patient to another in our foul ward.

Of the occurrence of bubo in connection with chancre and soft sore I would only remark that my impression is that enlarged glands are

met with as often in one as the other, but that suppuration is more rare in chancre. It might be interesting to ascertain whether this evinced sympathy of the lymphatic glands in any way modifies the later consequences of the disease; whether the local suppuration is, in any degree, eliminative. I believe it so acts in the case of some animal poisons: for example, dissecting wounds have usually more serious consequences, that is, more rapid and severe constitutional effects, when the lymphatic glands are not involved, and the poison passes, unchallenged, into the circulation. They appear to arrest or to modify the poison; and their suppuration seems to act eliminatively.

I think I can say most positively that I have treated many cases of soft sore as the first disease contracted; that mercury is frequently needed for their cure; and that they are sometimes very obstinate before they heal.

The doctrine assumed and argued out by Mr. Travers, in reference to the venereal disease, is simply that of evolution, governed by circumstances which are, in great measure, personal, but also dependent on environment. The presence of certain conditions is essential to the production of the disease in any type; and these are the same that favour its progressive development in its more virulent forms. The conditions referred to would seem to exist especially amid a densely populated and civilised people, whose culture is not measured by the standard of moral refinement or personal cleanliness. Yet, even with these disadvantages, medicine and sanitary measures have done something towards the devolution (I use the word as the reverse of evolution) of the disease, if I may draw any conclusion from the contrast between the more exaggerated forms of syphilis when I entered the profession and those of the present time: for, as regards the treatment of the disease in hospital practice, I cannot say that there is much change of opinion as to the use of mercury since I began to study. It is true that instances of profuse salivation then came under our notice; but such practice was not initiated nor pursued in the hospital; and inunction and fumigation were more generally used as the means of introducing mercury into the system. Sarsaparilla had a high reputation, which has since been, as I think, unjustly denied to it: for it seems to be now entirely ignored. The treatment by iodide of potassium dates from a period more recent than that of which I have been speaking: in it we have a very valuable remedy in secondary affections. But such cases as were then of common occurrence are, as I have remarked, according to my observation, comparatively rare now. I refer especially to exaggerated forms of rupia, phagedenic ulceration of the thigh and abdominal wall, and extensive exfoliation of the skull and other bones; the last-mentioned having been, as I think, not unfrequently due to the abuse of mercury, especially in strumous patients.

I am free to admit that my opinions on these subjects have been, in a measure, influenced through life by the impressions I received thus early; and may, therefore, appear obsolete to the present generation. Yet there is nothing irrational or fantastic in the application of the theory of evolution to disease. Time and circumstance are the requirements of the advocates of this law; and I believe that, with the command of these essentials, a process of devolution may likewise be accomplished. I may add that there is no inconsistency in this application of the theory of evolution with the assumed germ-origin of many diseases; for the specific type and virulence of the poison seem to depend more on some occult attribute of the micro-organisms than on any striking variety in their physical development.

The culture of Pasteur is effecting, rapidly and artificially, what Nature, under favouring circumstances, can and may achieve in time. I apprehend few surgeons of experience would deny that simple tumours sometimes assume a malignant character, and that there are various grades of malignancy. We may some day discover how to reverse this progressive order of evolution, and thus solve the great surgical problem of the day,—the cure of cancer.

These may seem flighty speculations to indulge in, without even the plea of novelty to recommend them. But it is, I think, the wholesome tendency of youth to specialise; and it is the privilege of maturer years to generalise, as exemplified in Mr. Hutchinson's valuable lectures. The time may come when a more enlarged and general recognition of the law of evolution in disease will lead to some unlooked for revelations, and to the discovery of some more efficient means of not only abating the intensity, but of limiting the variety, of infectious and hereditary maladies; and this must be by denying the requirements of evolution, and favouring those of its reverse.

There surely is no more difficulty in thus simplifying the origin of infectious disease,—for example, in tracing a hard chancre, with all its constitutional sequelæ, to a purulent discharge from a mucous surface as its progenitor,—than in recognising the alliance between man and a monad. If in each case there are missing links to be supplied, I apprehend they are nearer to hand in the former instance than in the latter.

THE THERAPEUTICS OF THE NEUROSES.

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It is necessary to make a few preliminary remarks.

1. Although neuroses are devoid of any recognised pathological anatomy, there can be no doubt that they are evidences of depraved or disordered nutrition, or, at least, of abnormally altered relations between nerve-cell and supplying blood-vessel.

2. Neurotic patients frequently inherit from one or both parents the tendency to their peculiar nervous state; but a large number of neurotic phenomena occur in persons who have inherited no such history. They are met with after overpressure of study in the young, overwork of any kind in the adult, monotony of occupation, anxiety, hygienic conditions abnormal both as regards the healthiness of the environment and the proportion of brain-food to brain-work; and they mean partial starvation of the nervous centres.

A few of the chief neurotic symptoms are: dilated pupil; extreme mobility of the iris; a form of amblyopia that is reflex, of vaso-motor origin, induced by irritation of some of the branches of the fifth nerve or of filaments from the abdominal or pelvic organs, carried to a vaso-motor centre, and causing constriction of the arteria centralis retinæ or probably sometimes of the vessels supplying the angular gyrus; hemiopia, associated with anæsthesia, and depending on disordered blood-supply to the posterior portion of the internal capsule; various forms of anæsthesia, often very localised, manifestations of a temporarily impaired circulation in the cortex or in the internal capsule, often due to the concentration of the patient's attention on parts elsewhere, or to her thoughts being directed to her emotions or to exalted aspirations; some forms of headache, especially migraine, and the so-called nervous headache often induced by late watching; insomnia, particularly the form engendered by late intellectual work for some considerable period, and relieved by placing a patient to sleep in a nearly upright position, and administering food during the night—or by the administration of ergot; tinnitus, which may often be reflex, and carried up to the tympanum by way of the inferior cervical ganglion; abnormal acuteness of hearing, from ephemeral dilatation of a vessel supplying some of the auditory nuclei, or still more frequently the temporo-sphenoidal convolutions; vertigo, either seeming to depend on slight alterations of pressure in the labyrinth, short of Menière's disease, or when there is a temporary deficiency in the circulation of the middle lobe of the cerebellum; occasional abnormalities of depraved or deficient taste and smell. Motor phenomena in neurotics are so numerous that it is difficult to omit any abnormality of movement from this class; tremor, as of the eyelids; rigor without elevation of temperature; convulsions, either epileptiform, or without complete loss of consciousness, and accompanied by movements of limbs either semi-voluntary or automatic; opisthotonos; hysterical vomiting, with no reflex connection with the pelvic viscera; some varieties of chorea and of hemichorea; paralysis, too universal to depend upon organic lesion, or localised, as of a finger, hand, or arm; contractions, such as torticollis, varieties of talipes, bent arm, the body resting on the heels from flexion of the legs on the thighs: these and many other advanced motor phenomena depend on emotion, and are produced by emotional irritation of vaso-motors in various regions of the brain and cord.

The hyperæsthesiæ of skin, such as are seen in some neurotics of unsound mind; hyperalgesiæ, such as clavus, and the obscure infra-mammary pain, the tenderness of the hysteric spine, are due to dilatation of vessels in the sensory centres. In speaking of these phenomena, it need scarcely be said that we exclude all cases in which the will of the patient is sufficiently strong to effect a cure. Sir James Paget's expression of an hysterical person, "She cannot will," will serve to include all cases of neurasthenia in neurotic patients.

Amongst the psychical phenomena, it would be necessary to mention every manifestation of emotion. The subjects of "temper-disease" are probably invariably neurotic. Great excitability may be the rule, reaching on one side even to mania, especially religio-erotomania; whilst in some cases, the melancholic tendency obtains, with concentration of thought on anything connected with the patient herself, especially her physical ailments.

sympathetic phenomena, some connected with the eye have been dy referred to. Blushing, pallor, palpitation, faintness, irregu- y of heart, neurotic angina (in each case unassociated with organic n), various hyperæsthesiæ of the abdominal cavity, colic, gas- ia, enteralgia, hepatalgia, nephralgia, inertia of bowels, disordered tions, some forms of diarrhœa, meteorismns, and phantom tumour, ll connected with emotional action on the circulation ; either by of the vaso-motor centres in the medulla, of the subordinate es in the spinal cord, of the cervical ganglia, or of the great ganglia e abdomen.

nongst sympathetic phenomena may be placed the copious pale of the hysterical, and the various neuroses of the extremities. ese, one of the most remarkable is the symmetrical gangrene of xtremities, occurring without blocking or disease of arteries.

any given patient, it is so difficult to exclude all possible causes levation of temperature, that the existence of neurotic pyrexia is an open question. But when, in a highly neurotic patient, free tuberculous and gouty taint, with all organs seemingly free from , the thermometer, under the careful watchfulness of the physi- himself, registers a decided elevation, the question arises whether is such a thing as a functional paralysis of the heat-inhibitory es. That such centres exist, seems now positively proved by ological observation. Their very locality is more or less accur- ascertained. Their functional disturbance was some time ago a sub- f discussion at the Academy of Medicine in Paris. We believe that functional disturbance, brought about by an irritable condition of aso-constrictors, is a fact, and one that can be explained in no way than by vaso-motor action. It is, of course, wholly outside ill of the patient. May not the high temperature met with in tatus epilepticus be the outcome of a similar causation ?

is seen, therefore, that the protean phenomena in neurotic nts are due to an abnormal excitability of the sympathetic nerves ganglia. Given this excitability, the sympathetic system is d upon directly by emotion, reflexively by irritation, or by slight ional disturbance affecting a ganglion, or any nerve-twig leading ganglion. Although, therefore, the different neuroses may nd a treatment that varies according to the organ affected, yet eatment is likely to be effectual that does not act on first prin- s, and endeavour to subdue, generally by means of nerve-tonics, norbid excitability.

one seeks a term that will express the predisposing cause for tic phenomena, one must use some word that will mean "star- n of nervous centres." This may be either a cell-condition *igine*, or a cell condition induced by a disorder of vessel. Remedy may therefore take the form of better nutriment to the cells and farinaceous food), or of means that will improve arterial and so foster a normal osmosis. Pretty frequently both classes nedies are called for, and, in some cases, neither will be really cious, until the patient is removed from an environment either of ssing circumstances, or of a malarial or other toxic atmosphere. Weir-Mitchell system for treating hysterical persons goes mainly e principle of brain-feeding, though also making a point of re- og them from hurtful surroundings. How useful the excess of food is in the treatment of many forms of mental disease, them- s only modifications of neurotic phenomena, need hardly be said. omote the normal nutrition of the whole brain, is only another of saying that the intellectual centres must not fail in their itory influence on the emotional ; that the controlling centres of ical action in the body, and thereby of animal heat, must exer- their due function ; that those which present undue vaso-motor riction or dilatation must be kept in their normal state of bal- ; that the seats of sensory perception shall be neither too acute or ulled, a condition probably largely under the influence of the ation ; that the voluntary motor area shall be, in its whole ex- governed by the will ; and that each movement shall be properly linated with its associates.

sides the question of food, that of the promotion of a normal ation takes first rank. We are speaking, of course, of cases in there is no coarse lesion. In such patients, the occurrence of tic phenomena may be prevented by exciting a better condition of -action, by increasing arterial tension, or by obtaining both these s. Ammonia, ether, iron, digitalis, strophanthus hispidus, llaria majalis, strychnine, belladonna, and, in very moderate , alcohol, stimulate the heart. It is nearly certain that, in a degree, alcohol in small doses really stimulates the heart, over bove its paralysing effects on the vaso-constrictors. In a much er degree, arsenic and jaborandi are heart-stimulants. Arterial on isincreased by ergot, belladonna, the bromides, the acids, squill, ar bean, strychnine, nitrate of potash, casca bark, and turpentine.

But over and above brain-feeding, and increase of cardiac action, or of arterial tension, there is something that takes place in the walls of vessels under the influence of such agents as arsenic, the salts of zinc, caffeine, nux vomica, guarana, etc., that seems to prevent undue constriction and undue dilatation of vessels, especially probably the smaller arterioles and the capillaries; the effect of which influence is to promote a normal osmosis, the taking in of supply from vessel to cell, the giving out effete material from cell to venule.

These three modes of action on the higher nervous centres may be considered as of equal efficacy in respect to the sympathetic ganglia. The great semilunar ganglia are of the highest importance with reference to the abdominal and pelvic nerves ; scarcely less so with reference to the heart itself. But not these only. Every sympathetic centre in the brain and the medulla oblongata, in each segment of the spinal cord, in the vast chain of ganglia on each side of the vertebral column, in the structure of the heart, the stomach, the intestine, the uterus, connected with the liver, the spleen, the pancreas, the kidney, on every vessel of a small or medium size, demands, like the brain itself, a rich nutrition, a normal circulation, an easy access from cell to vessel, to vessel from cell. Each ganglion, however insignificant, is under the control of those above it, and may itself be the centre of a reflex arc. It is on their well-being, in every ramification of the body, except perhaps in the pulmonary (as opposed to the bronchial) tissue, that nutrition in the highest sense belongs ; a nutrition that, whilst usually dependent on the whole chain of ganglia, from the lowest at the periphery to the highest in the cerebral cortex, yet, in the case of acephalous monsters born alive, is shown to be possible under the control of the sympathetic ganglia alone.

It would be tedious to examine each neurotic phenomenon with reference to therapeutics, especially as large groups of them vanish sometimes under the administration of some one remedial agent. In some, the remedy used seems to exercise a tonic effect upon the nerve-nuclei in the medulla oblongata. Guarana in migraine, quinine, arsenic, gelseminum, in neuralgia of the fifth nerve, are instances of this. Does not digitalis act in steadying the heart by giving power to the nucleus of the vagus, the heart's inhibitory nerve ? In many diseases, quinine acts as an antipyretic by its antiseptic properties ; but where no septic influence can be supposed, does it not reduce hyperpyrexia by its tonic influence, on heat-controlling centres in the cortex of the brain ? Is not the hyperpyrexia of hysteria—sometimes so marvellous in its intensity—best met by lines of treatment that bring back the normal power to all portions of the nervous system, and thus to these heat-controlling centres ? In the palpitation dependent upon spinal jar, where no organic change has taken place, no ordinary means are of any avail, unless the jarred portion of spine, from which arise the nerves that supply the cervical ganglia, particularly the inferior cervical ganglion, has been allowed a prolonged period of rest. In this neurosis, the cardiac symptoms are frequently associated with a sense of constriction of the thorax, cramp of limbs, and sense of general terror and distress, that show the intimate relations existing between this portion of the spinal cord and the centres above and below it. In the treatment of all visceral neuroses, it is almost an axiom to look last at the organ that seems disordered, and to fix attention, first on the general conditions of the nervous system of the patient, whether that condition be congenital or acquired ; and secondly, on the region from which may have started the reflex irritation of the particular organ.

The important points in all neuroses are the abnormal influence of emotion, and the excitability of nerves and ganglia to reflex irritation. As the channel for the transmission of emotion is eminently a vaso-motor one, and as excitability to reflex irritation is evidence of deficient tone, it stands to reason that so-called sedatives are poor treatment. The tendency should be to give tone to the nerves and ganglia, vaso-motor and other ; at first, perhaps, by ergot, by hazeline, by acids, by abundant food ; and, later on, by iron, paying attention all through to mental influences.

In certain circumstances, a tonic treatment is not enough for reflex vomiting. A peculiarly difficult form to treat is the vomiting of phthisis, in which, presumably, irritation of the pulmonary branch of the vagus is carried to the medulla, and reflected down both on its gastric branches and on the phrenic nerves. This, even if very obstinate, may be met by hypodermic use of cucaine, though the *rationale* of its effect is not well known. It may act by causing anæsthesia of the pulmonary branches of the vagus, or by rendering the centre of the reflex arc less easily excited. In the latter case, it may have a tonic effect by its constricting power over vessels.

It would not be right to call chorea invariably a neurosis. Some cases, and generally those the least amenable to treatment, depend on organic lesions ; but, in the large majority of cases, no such lesion exists ; and in them a sedative treatment acts very imperfectly, as compared

with a tonic. The salts of most of the metals are useful in this relation, and those of arsenic and zinc pre-eminently so. In low-lying districts with a damp soil, the consensus of large bodies of medical men is in favour of iron; and doubtless in this respect the particular therapeutical agent will vary with the surrounding circumstances; but the principle is the same.

Then, again, as to the imperfectly known neuroses of the extremities:

1. A tingling is met with of all the extremities, both hands and both feet; sometimes with a normal appearance of the skin, sometimes with a waxy blanching. It is a neurosis, but a neurosis depending upon a great variety of causes. The tingling is a reflex manifestation of irritation at a distance, in the stomach, uterus, intestine, etc.; perhaps sometimes from the peripheral nerves themselves, exercising a paretic effect either on portions of the cortical sensory area or on the cervical and lumbar bulbs, or on all these coincidently, or on the vaso-motor ganglia on the vessels themselves; or it may be due to deficient heart-power, and then is accompanied by the waxy blanching of the skin, and with more or less local loss of temperature.

2. Cases are met with in which both cerebro-spinal and sympathetic nerves are involved; and pain, heat, and vascular congestion alternate with pallor, cold, and absence of pain.

3. There is a state of semi-paralysis of the blood-vessels of the extremities, causing flushing of the feet, and generally pain and tenderness. Pain may precede the vaso-motor phenomena. The feet are more commonly affected than the hands.

4. There may be a great coldness of the feet, or of the fingers, associated with contraction of the vessels of the extremities. It is possible that this condition is closely allied to the first variety, and may depend on deficient *vis à tergo;* but it has been thought to be due to overexcitation of the vaso-motor centre.

5. A further stage of this, even if it may not be considered a separate variety, is one in which symmetrical gangrene is the direct result of contraction of vessels. In all these varieties, the vessels themselves are neither occluded nor diseased. It would be against experience to say that these neuroses occur only in patients who have inherited a neurotic tendency. They seem frequently to be set up by the circumstances of the environment. Some varieties are associated with dilatation of vessels, and in these the use of ergot and of nerve-tonics is essential; but in the forms that own a constriction of vessels, the opposite treatment would hardly be successful. Friction, gentle galvanic currents, tonics, the removal of the sources of reflex irritation, and a due regard to a sufficient *vis à tergo*, will do more than paralysing drugs, or even than the application of external heat.

In the same line of thought, much might be said on many of the neuroses; on exophthalmic goître, which, in some of its phenomena, may be included in this category; on diabetes insipidus, often recovered from under ergot and galvanism; on vaso-motor insomnia; on heat-exhaustion and heat-fever, in the first of which depression of nerve force must be met by strengthening remedies, in the latter, the paralysis of heat-controlling centres by quinine; on the non-organic forms of angina pectoris, in which the recurrence of the attacks would be badly met by sedatives and antispasmodics.

A CASE OF HÆMORRHAGE INTO THE CRURA CEREBRI, WITH REMARKS.

By EDWIN RICKARDS, M.B.Oxon.,
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W. C., aged 64, was brought to the hospital from a lodging-house, where he had been for a fortnight. He was a very reticent man, seldom speaking to his fellow-lodgers, and he was addicted to drink. The day before admission into the hospital, it was noticed that he was unsteady in his gait, and that his right eyelid was partially dropped; it was, however, thought that he had been drinking. He went out into the town, and came back by himself. He needed no assistance in going to bed. The following morning, his right eye was closed, and the left eyelid drooped; he was very drowsy, and, when he tried to walk, he staggered. He was admitted into the hospital that day (February 3rd). Though drowsy, when roused he was violent in his language, and pugnacious, using his right arm far more freely than the left. He only spoke when questioned, and then generally answered incoherently. He would not take food, saying there was poison in it. There was a slight but decided loss of power in the left limbs. As far as could be ascertained, the reaction to faradism was the same on both sides of the body. There was a loss of expression on the left side of the face, and the conjunctiva of the left eye did not seem quite so sensitive as that of the right. The right eye was completely closed; between the eyelids on the left side, there was just a chink. The orbicularis palpebrarum acted well on both sides. He was too irritable to be examined further.

On February 4th, the left eye also was closed. He was more rational and tractable, and took food; in other respects, the same. He gave his right name. His head was always turned to the left side of the body, though he was able to move it freely. When the eyelids were raised, the eyeballs were seen to move freely in every direction; there was no strabismus; the pupils were equal, and acted to light and to accommodation; they were not contracted nor dilated. He could count fingers correctly with both eyes, separately and together. There was very slight but decided loss of motor power in the left limbs; he only used these limbs to make a special effort. When the hand of an observer was placed on any part of his body, he would exhibit great power with his right hand to remove it, and failing he would then use his left hand, which comparatively possessed very little power. The sensibility of the left side was diminished, but not destroyed; the prick of a pin was not felt nearly so acutely on the left as on the right side. The tongue, when protruded, did not deviate to one side. The reflexes were normal; there was no ankle-clonus. Being asked if he had pain in his head, he put his hand to the back of his head. There was no pyrexia. He passed his urine in the bed.

From February 4th to February 14th, his condition remained unchanged. He lay in a semi-conscious, unintellectual state, with his eyes closed. He passed fæces and urine under him. When roused, he took food. His bowels acted only under the influence of large and repeated doses of aperients. On February 14th, he became comatose. On February 15th, he somewhat rallied. The limbs on both sides were flexed and stiff, but not rigid. The loss of power and sensibility of the left limbs was slightly increased, though he could move them and feel the prick of a pin. On February 17th, he passed into a state of profound coma, and died.

Post Mortem Examination.—The brain weighed 52 ounces. The membranes were thickened, especially at the base. There was not an excess of cerebro-spinal fluid, and the convolutions did not appear to be flattened; the vessels of the brain were atheromatous; no thrombosis or aneurysm was discovered. On section, the brain seemed congested, and its substance somewhat softer than natural. On laying open the lateral ventricles, they were seen to be dilated, and to contain over five ounces of clear fluid. On removing the fornix and velum interpositum, at the back of the third ventricle, and in the inner and upper part of the crura cerebri, a blood-clot was found. It was not symmetrically placed, the right crus being damaged by it to a much greater extent than the left. The clot occupied the inner half of the right crus, and extended downward to the locus niger; only the inner and upper fibres of the left crus being affected. The clot, situated beneath the iter or tertio ad quartum ventriculum, compressed to occlusion the canal against the corpora quadrigemina. There was no blood in the canal, or in the fourth ventricle. The anterior surface of the clot was free in the third ventricle, being covered by the ependyma only; the posterior border was about a line in front of the anterior edge of the pons Varolii. The clot measured from before back superficially $\frac{9}{20}$ inch, but below the surface $\frac{13}{20}$ inch; it was $\frac{3}{4}$ inch from side to side, $\frac{7}{20}$ inch from above downwards in its deepest part, namely, in the right crus. That part in the upper strand of the left crus was about a line thick in its thickest part. The central portion of the clot was of lighter colour, and less firm than the rest. There was nothing noteworthy about the other viscera, except that the lungs were congested, especially the left.

Remarks.—In this case it seems probable that at first (February 2nd) the hæmorrhage was confined to the right crus, causing partial ptosis on the right side and unsteady gait, either by rupture of nerve fibres or by pressure that the hæmorrhage subsequently (February 3rd) increased in that crus, producing complete ptosis on the right side and extended into the left crus, giving rise to ptosis on the left side. that the mental condition was due to the accumulation of fluid in the lateral ventricles of the brain, caused by the upward pressure of the clot on the iter a tertio ad quartum ventriculum, the communication between the lateral ventricles and the spinal canal being thereby cut off, or by indirect pressure on the veins of Galen. It would seem phenomenal that the impairment of sensibility of the left side of the body was not greater, seeing how large an amount of the upper part of the right crus was destroyed, and that the hæmorrhage, by compressing the inferior strata of the right crus did not cause greater paralysis of motion on the left side. Doubtless the pressure on the inferior part of the right crus was not so great as it would have been had the clot been enclosed in the crus. Its upper surface was not covered by fibres of the crus, and evidently during life the pressure from it was upwards. and tilted up the corpora quadrigemina.

The rarity of affections of the crura cerebri makes it desirable that ry case should be recorded. The diagnosis of crural hæmorrhage ms to depend mainly upon the presence of paralysis of the third ve on the side of the lesion with partial or complete paralysis of tion, and sensation of the limbs and face on the opposite side. h were the conditions in Dr. Weber's case, the best recorded case the kind, given in his Remarks on hæmorrhage into the crura, in *Medico-Chirurgical Transactions* for 1863.

The symptoms would naturally be modified by the part of the crus cted. In Weber's case, it was the crust of the left crus which was the t of the hæmorrhage; there was paralysis of the third nerve on the left e, and the paralysis of the limbs and face on the right side was mplete as to motion, partial as to sensation. In the above case, the norrhage was into the tegmentum of both crura, extending on the ht side down to the locus niger, the paralysis of motion, as was to expected, was partial, amounting to double ptosis, and slight loss of wer in the left limbs and face; the acuteness of sensation of the left e was somewhat diminished. The case shows that, in crural norrhage, the levator palpebræ may be paralysed, while the other scles supplied by the third nerve may be unaffected.

ACUTE RHEUMATISM WITH ENDOCARDITIS; PARTURITION: RECOVERY.

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F., aged 32, married, came under my care in July, 1883, with pain the joints. She was a dark-haired woman, and was about eight a half months pregnant with her first child.

n my first visit she was lying propped up in bed, in evident pain, ing been ill three days. Her condition was then as follows. The ht wrist was red and swollen, and contained fluid. She could not ve the left arm for pain, and could not bear the hand touched; the nd and third metacarpo-phalangeal joints were red and swollen with d. Both knees and both ankles were swollen, and fluctuation ld be made out in all. The temperature was 103° Fahr. at 4 P.M., pulse 140. She was perspiring freely; there was no cardiac mur-r. Ten grains of salicylate of soda were ordered to be taken every r for four hours, and then every two hours; and cotton-wool was pped round the joints, and placed over the cardiac region.

Two days of this treatment produced a very good effect; for, though left shoulder became affected, the patient was very much easier, was able to sleep a little at night. The temperature fell to 100° r., and the pulse was 112.

n July 20th, the fifth day of illness, some giddiness was com-ned of after the medicine, which was, therefore, only given every e hours that day, and the interval was increased to six hours the t day.

n July 23rd, the eighth day of illness, at noon she had no pain. bowels were open after castor-oil. Temperature 100.2°; pulse 96, y irregular and weak. The urine contained albumen. There was ht roughness with the first cardiac sound as heard at the apex. salicylate of soda was discontinued, and half an ounce of brandy ered to be given four times in the twenty-four hours.

n July 24th, the patient felt better; the pulse at 1 P.M. was 90, much steadier and stronger; the temperature was 98° Fahr. On ultation of the heart, a presystolic murmur was heard at the apex.

n the 25th, the murmur was very well marked; the temperature only 99° at 3 P.M., and the pulse (88) strong and regular. The ne was free from albumen.

n the 26th, labour-pains came on about 5 A.M., and continued all . The joints were still painful, especially the knees. The mur-was loud and high pitched; temperature 99°, pulse 86, fairly good, 1 A.M. The patient was delivered at 10.30 P.M. The labour was, as informed, not particularly difficult, but the patient became very t. The child, a girl, was healthy.

The following day, the 27th, the patient felt much better as far as pain in the joints was concerned (the nurse said the rheumatism ned to go all at once), but complained of very sharp pain over cardiac region. Temperature 100.8° at 4 P.M.; pulse very irregular.

n July 28th, the patient was much better; a belladonna plaster relieved the pain over the heart; temperature 101.4° (3.30 P.M.), se still very irregular.

n August 1st, the pulse was regular, but very quick—120. Tem-rature 101°, at noon. The cardiac murmur was distinct, and higher itch.

n August 3rd, in the evening, the left shoulder was painful, and the patient was much emaciated. The heart-murmur was distinct, and was heard up the sternum, and between the shoulders. There was heaving pulsation felt over the heart; temperature 102°, pulse 128 (intermittent). When she lay down quickly there was considerable cardiac dyspnœa.

On August 8th, the temperature in the evening was 104° Fahr., after two rigors during the day, which was accounted for by tenderness and induration in the left breast. Examination of the heart showed the apex-murmur to be less distinct, but a loud systolic *bruit* was heard at the base, and conducted up to the aortic cartilage, and was also heard over the pulmonary cartilage.

By the 12th, the fear of suppuration in the breast had passed, and the temperature was down to 99.8°. The patient was in every respect much better. The lochia, which at first had been very scanty and offensive, were now more abundant and high-coloured; on the 13th, their quantity had diminished. On the 15th, both heart-murmurs were much less distinct, and the patient was taking solid food. She was sitting up for the first time on the 22nd. On August 31st, the murmurs were almost inaudible; temperature 98.8°, pulse 84; and the patient was described as feeling well, and having a good appetite.

By September 17th, fifty-five days (nearly eight weeks) after the first appearance of a murmur, and fifty-three days after her confinement, there were no heart-murmurs audible. The baby was healthy and well, having completely recovered from an attack of ophthalmia neonatorum.

I had another opportunity of seeing the patient in April, 1884, when I was able to satisfy myself of the undamaged state of the heart. There were no murmurs, and the sounds were loud and clear.

REMARKS.—There are several points of interest in this case, apart from its satisfactory termination. Although this was the first confinement, the delivery of the child was not attended with any great difficulty, notwithstanding that the condition of the joints was such as to cause pain on the least attempt at movement.

Any attack of acute rheumatism causes anxiety as to the ultimate effect on the heart, however satisfactory the conditions under which we are able to keep our patient; and we are accustomed to enjoin perfect rest, and avoidance of the least exertion which might throw extra work on that organ. In the above case, parturition occurred while the inflammatory condition of the endocardium was active, and there was fear lest the severe strain on the heart might increase the mischief.

Before labour came on, there was some transient albuminuria, which may be referred rather to the pregnancy than to the rheumatism. After the confinement, the rheumatic pains were lost or forgotten, but sharp pain over the cardiac region showed that the extra work had not been without effect on the injured heart.

The subsequent history of the case is one of gradual but steady improvement, broken only by a threatening of milk-abscess in one breast, which was fortunately averted. It is noticeable that the stages of convalescence after delivery were later than is usual in normal confinement. The temperature, which usually falls about the fourth to the eighth day, was persistently above 101° Fahr. for more than a fortnight after delivery, the febrile period being further prolonged, by the inflammation of the breast, from the thirteenth to the seventeenth day.

The systolic murmur, which was heard over the base of the heart, was probably of hæmic origin, and not dependent on organic changes in the valves.

The effect of salicylate of soda in this, as in every case of acute rheumatism in which I have used it, was satisfactory in reducing the temperature, and relieving the pain; and, though it may not have shortened the illness, it enabled the puerperal complication which followed to be treated under more satisfactory conditions.

ON WASH-LEATHER SKIN.

By P. H. EMERSON, B.A., M.B.Cantab., Southwold, Suffolk.

IN the BRITISH MEDICAL JOURNAL for March 8th, 1879, Dr. David Ferrier first recorded a peculiar condition of the skin, in which certain metals marked it with black lines; this condition he termed "wash-leather skin." Dr. Ferrier tried numerous experiments with a view to discovering the cause of this phenomenon, and he came to the conclusion that "it would appear that, though the property of taking on metallic markings belongs to the skin, to a greater or less extent, in the healthy state, yet in certain conditions, especially in that of œdema, which may not be otherwise evident, this property is greatly intensified, and may be of some diagnostic value." With a view of eliciting any new facts, I observed fifty cases in the wards of King's College Hospital, a table of which I append. It will be seen that, since only fifty cases are recorded, there is a liability of error, which,

Table of Fifty Cases observed in the Wards of King's College Hospital.

No.	Name.	Age.	Sex.	Previous Illness.	Chronic Disease.	Occupation.	Alcohol.	Skin.	Skin Disease if any.	Present Illness.	Date of Illness.	Temp.	Drugs.	Perspiration Acid or Alkali.	Mark.	Metal.	Surface of Body where most visible.
1	G. H. H.	33	M	Scarlatina	Diabetes	Warehouseman	Beer at meals	Dry	—	Diabetes mellitus	5th month	97.4	Codeia: strych: quin.	—	Invisible	Silver	
2	S. S.	44	M	Variola	Chronic Rheumatism	Labourer	Intemperate	Moist	—	Acute renal	5th week	98	Scam: jalap: scop: eth.	—	,,	,,	
3	C. G.	19	M	Acute Rheumatism. Bronchial Pneumonia	Cardiac	Machinist	Temperate	,,	—	Cardiac	9th week	97.2	Digitalis	Faintly acid	,,	,,	
4	E. D.	16	M	Renal	—	Servant	,,	,,	—	Acute renal	12th week	98.4	Ferrum: strychnine	Acid	,,	,,	
5	E. W.	39	M	Scarlatina	Atheroma	Accountant	Total abstainer	,,	—	Hemiplegia	8th month	97.2	Ferrum	Faintly acid	,,	,,	
6	W. P.	51	M	Bright's	Chronic Bright's	Cabinetmaker	Temperate	,,	—	Cardiac	5th week in hospitl.	98.6	Digitalis: pot: acet: scop: nit: amyl.	—	,,	,,	
7	G. F.	54	M	—	—	Labourer	,,	,,	—	Intestinal obstruction	3rd week	97.8	—	Faintly acid	,,	,,	
8	W. W.	54	M	Ague	Chronic Diarrhœa	Blacksmith	,,	,,	—	Diarrhœa	13th mnth	98.2	—	—	,,	,,	
9	R. E.	60	M	Gout	Bronchitis. Gout	Housekeeper	Intemperate	,,	—	Chrn. bronchitis	3rd month	97.2	Digit: scop: pot: acet.	Faintly acid	,,	,,	
10	J. G. B.	30	M	Acute Rheumatism. Asthma	Hypochondria	Verger	Temperate	Dry	—	Hypochondria	8th week	98	—	—	,,	,,	
11	J. W.	17	M	—	—	Bookbinder	,,	,,	—	Enteritis	1st week	98.2	Quinine	Acid	,,	Silver & gold	
12	G. G.	45	M	Acute Rheumatism. Scarlatina	Subacute Rheumatism	Van driver	,,	Moist	—	Acute Rheumatism	9th week	99	Pot. iod: pot. bicarb.	,,	,,	,,	
13	T. B.	34	M	Acute Rheumatism	—	Waiter	Intemperate	,,	—	,,	3rd week	101	Sodii Salicyl.	,,	,,	,,	
14	G. B.	21	M	—	—	Printer	,,	Dry	—	Pleuritis	4th week	99.4	,,	,,	,,	,,	
15	S. V.	24	M	Scarlatina	—	Carpenter	Temperate	,,	Dry eczema	Asthma	12th year	96.3	Morph: Atropine	,,	,,	,,	
16	R. A.	47	M	Acute Rheumatism	Cardiac	Labourer	,,	Moist	—	Cardiac	3rd week	97.4	Digitalis: Iron	Faintly acid	,,	,,	
17	T. F.	32	M	Scar. Measles.	Lumbago	Coachman	,,	Dry	—	Sciatica	8th week	98.2	Potass: iodid.	Acid	,,	,,	
18	R. W.	25	M	—	—	Carman	Intemperate	Moist	—	Phthisis	6th week	101	Linctus.	Neutral	,,	,,	
19	J. B.	43	M	Ague	Phthisis	Porter	,,	,,	—	,,	4th week	100	Morph: atrop: benz.	—	,,	,,	
20	T. S.	22	M	—	—	Printer	,,	,,	—	Febricula	2nd week	98.8	Quinine	Faintly acid	,,	,,	
21	J. S.	46	M	Acute Rheumatism. Scarlatina. (?) Pneumonia	Renal	Law writer	,,	—	—	Renal	3rd week	97.4	—	—	Visible	Silver	Below ribs to sacrum.[1]
22	W. B.	10	M	—	—	Schoolboy	Temperate	—	—	Acute Rheumatism	3rd day	101.2	Sodii salicyl.	Acid	Invisible	Silver & gold	
23	D. S.	64	M	—	—	Stonemason	,,	Moist	—	Erysipelas	4th week	100.2	Liq. ferri perchlor	—	very mrkd	Silver	Over lumbo-sacral region.[2]
24	W. S.	41	M	Acute Rheumatism	—	Beerseller	Intemperate	,,	—	Hemiplegia	16th mnth	97.8	Quinine: potass. iod.	Neutral	,,	Silver[3]	
25	G. G.	42	M	Dysentery	—	Soldier Labourer	Temperate	,,	—	Plumbism	6th week	97.4	Syr. ferri. iod.	Faintly acid	Invisible	Silver & gold	
26	C. K.	66	M	Typhus. Gall Stones	—	Shoemaker	Intemperate	Dry	Psoriasis	Intercostal Neuralgia	4th week	97.4	Tinct. gelsem.	Neutral	,,	,,	
27	E. C.	29	M	Acute Rheumatism. Pneumonia Renal	—	Pillmaker	Temperate	,,	—	Enteric fever	3rd week	97.2	Quin. nit. hydroch. acid	,,	,,	,,	
28	S. M.	19	M	—	—	Shoemaker	Intemperate	,,	Lupus	Lupus	4th week	98.2	—	Faintly acid	,,	,,	
29	C. A.	50	M	Acute Rheumatism. Enteric. Ague	Subacute Rheumatism	Scene shifter	,,	Moist	Psoriasis	Pyloric obstruction	2nd week	97	Morphine	,,	,,	,,	
30	W. P.	10	M	Variola (?)	—	Schoolboy	Total abstainer	,,	Eczema	Chorea	,,	98.2	Chloral hydr.	Neutral	,,	,,	
31	H. J. H.	16	M	—	—	Blacksmith	Intemperate	,,	—	Anæmia	,,	99	—	,,	very mrkd	Silver[4]	
32	R. L.	44	M	—	Phthisis	Printer	,,	,,	—	Phthisis	4th month	97	Ol. morrh: Quin.	,,	Invisible	Silver & gold	
33	S. W.	46	M	—	Psoriasis 12 years	Printer's laborer	Temperate	Dry	Psoriasis	Psoriasis	2nd week	98.2	—	Acid	,,	,,	
34	E. B.	48	F	—	Alcoholism	Farm labourer	Intemperate	Moist	—	Alcoholism	8th week	99.4	Potass. iodid.	Neutral	,,	,,	
35	E. W.	32	F	Acute Rheumatism. Bronchitis	Cardiac	Theatre dresser	,,	,,	—	Cardiac	4th week	97.4	Digitalis	—	,,	,,	
36	E. P.	27	F	—	—	Charwoman	Temperate	,,	—	Enteric	2nd month	98.3	Quin: potass. brom.	Faintly acid	,,	,,	
37	P. B.	50	F	—	—	Needle worker	Intemperate	Dry	—	Compression of inferior vena cava	5th week	96	Potass. bromid.	—		,,	
38	E. N.	41	F	Acute Rheumatism. Bronchitis	Bronchitis	Servant	,,	Moist	—	Bronchitis	3rd week	98	Digitalis : scop.	Faintly acid	,,	,,	

[1] Slight œdema. Bedsore imminent. [2] Bedsore imminent (water-bed) [3] Bedsore imminent (no water-bed) [4]

No.	Name.	Age.	Sex.	Previous Illness.	Chronic Illness.	Occupation.	Alcohol.	Skin.	Skin Disease, if any.	Present Illness.	Date of Illness.	Temp.	Drugs.	Perspiration: Acid or Alkali.	Mark.	Metal.	Surface of Body where most visible.
39	E. S.	37	F	Acute Rheumatism	Cardiac	Hawker	Temperate	Moist	—	Hæmatemesis	3rd week	99.	Morphi: cod liver oil	Faintly acid	Invisible	Silver & gold	
40	K. B.	23	F	—	—	Draper	,,	,,	—	Pleurisy	1st week	99.1	Opium	Neutral	,,	,,	
41	E. C.	30	F	Variola	—	Housemaid	,,	,,	Herpes	Phthisis	1st month	100.	Sodæ bicarb.	Faintly acid	,,	,,	
42	M. B.	15	F	Fever (?)	Diabetes	Helps in home	,,	Dry	—	Diabetes mellitus	2nd week	102.	Codeia	—	,,	,,	
43	M. A. C.	56	F	Pleurisy	—	Laundress	,,	Moist	—	Scarlatina	2nd day	101.2	—	—	,,	,,	
44	M. N.	24	F	Acute Rheumatism	Cardiac	Housekeeper	,,	,,	—	Cardiac	5th week	98.2	Digitalis	Faintly acid	,,	,,	
45	E. S.	18	F	Measles	,,	Barmaid	Total abstainer	,,	—	Compression of cord	5th month	98.3	Sodii salicyl.	,,	,,	,,	
46	E. S.	27	F	—	—	Cook	Intemperate	,,	Eczema	Eczema	3rd week	98.3	Unguents.	Acid	,,	,,	
47	A. R.	15	F	Measles	—	—	Temperate	Dry	—	Hemiplegia	5th week	98.1	—	Faintly acid	,,	,,	
48	A. C.	33	F	Scarlatina	—	Tailoress	,,	Moist	—	Dementia	6th week	99.	Ammon. bromid.	—	,,	,,	
49	E. B.	21	F	,,	—	Housemaid	,,	,,	Scrofulous ulcer	Scrofulous ulcer	3rd week	96.	—	—	,,	,,	
50	E. F.	55	F	—	Lupus	Straw bonnet-maker	,,	Dry	Lupus	Lupus	,,	99.	—	—	,,	,,	

varying between the two extremes, is considerable. Bearing this in mind, therefore, the conclusions arrived at must be regarded as approximate only.

An analysis of the table shows the following facts.

Age.—The peculiarity does not seem confined to any age, for in the four cases cited the ages were respectively 46, 61, 41, and 16. I have seen it in cases younger than 16, and older than 61, not recorded in the table.

Sex.—It occurs more generally in the male sex.

Previous Illnesses.—In two of the cases there is a previous history of acute rheumatism; this point is interesting, for, acute rheumatism being a disease which leaves permanent injury to particular tissues, especially those of the heart, it may not be improbable that this disease (the pathology of which is involved in obscurity) profoundly modifies the skin as well as other tissues. Could this fact be more certainly established, it would do something to help the theorists who maintain the "neurotic" origin of the disease, and also it would not be incompatible with the "chemical" theory of the origin of the disease; for the *materies morbi*, flowing through the capillaries of the skin, might easily modify and alter the nutrition of the surrounding tissues. At any rate, the fact that two of the cases have previously had acute rheumatism is noteworthy.

Chronic Illnesses.—I have under this subhead included chronic illnesses from which the cases observed were actually suffering at the time. In Case 1, the patient was suffering from renal disease, and in another case from phthisis; in fact, in these particular cases, these were the diseases for which the patients were admitted. As Dr. Ferrier has already shown, œdematous skin takes on this property, and my observations showed that often the skin of phthisical patients does so too. In several cases of phthisis previously experimented upon, but not here recorded, I obtained the markings most distinctly. It is probably due, in phthisical cases, to derangement rather of the trophic fibres than of the sensory fibres; whereas, in renal cases, it is probably *vice versâ*, or mayhap a mixture of the two.

Occupation.—From this, we do not get much information; two were indoor livers, and two outdoor livers. The same remark applies to the exercise taken.

Alcohol.—Two were intemperate. This may determine gradual changes in the skin, but in these particular cases nothing definite can be said, as the cause is sufficiently accounted for in the renal disease and phthisis; and there are no positive facts to register, as many of the cases observed were intemperate, and yet there was no marking visible.

Dryness or Moisture of the Skin.—In three of the four cases, the skin was moist; and this I have observed to be the rule, though there are exceptions. This is, therefore, additional evidence corroborating Dr. Ferrier's experiments, which showed it was not due to chemical action. The alkalinity or acidity of the perspiration does not affect the matter, for we do not find either causing it.

Drugs and Diet have no effect. — *Meteorological Conditions* have no effect.

The Metal used.—Silver gives the mark much more readily than gold. Gold will not give the mark in all cases. It is desirable to use silver.

Disease.—In referring to chronic diseases affecting the skin, two were cited as cases of renal disease and phthisis. Curiously enough, in the two remaining cases, one is directly connected with the skin, that is, erysipelas, and the other indirectly, that is, hemiplegia. Dr. Ferrier's case cited was also of nervous origin.

Temperature.—In two it was subnormal, in two supranormal; thus it does not seem to have any influence in the matter.

Remarks.—It is most interesting to note that in all cases the markings were most pronounced in the lumbo-sacro-gluteal region, and that in three cases precautions had been taken to prevent bed-sores, two patients being on water-beds.

The chief conclusions arrived at are these. 1. As a rule, wash-leather skin does not occur in the healthy. 2. It does not occur in many diseases, being observed only four times in fifty cases of illness. 3. It occurs in patients suffering, as a rule, from diseases which directly or indirectly affect either the trophic or the secretory nerves of the skin, such as renal disease, phthisis, erysipelas, and hemiplegia. 4. Silver is the best metal to use for bringing out the marks. 5. It may precede, and in the cases cited does precede, bed-sores. 6. It is of diagnostic value in testing the vitality of the skin, and the site for experiment is the lumbo-sacro-gluteal region. 7. So far as one can judge at present, it may be of value in foretelling bed-sores; and, should this be thoroughly established, it would be of great use, for the proper precautions might be taken as soon as the black line is diagnosed; this, at present, seems to be its only probable use.

I have been unable to find any reference or mention of it in the literature of the trophoneuroses of the skin. The condition of the skin does not seem in any way akin to that seen in erythema, for there is no evident vaso-motor disturbance; nor to that in urticaria, eczema, herpes, etc., for there is no eruption. It seems to be in no way connected with glossy skin, myxœdema, or abnormal pigmentation. As stated above, it seems only connected with bed-sores; and it would be of great interest if observations could be obtained on cases of bed-sores following severe spinal or cerebral lesions, for the connection in the cases observed is rather with simple decubitus, the result of pressure and malnutrition, than with acute decubitus. It seems in no way connected with symmetrical gangrene or Raynaud's disease. The pathology of the phenomenon is difficult to discover. It seems, however, to be the effect of a lesion of the trophic fibres, and of a paralytic lesion rather than an irritative one, for in no cases has there been a history of pain, spasm, etc. With these few facts, it seems probable that it may be the combined result of (1) general malnutrition, due to hydræmia, etc.; (2) injury to the trophic fibres of cutaneous nerves from pressure, and consequent changes in the skin due to a hyperæmic paralysis leading

to degenerative changes; and the reason of its being most marked in the lumbo-sacro-gluteal region may be due (1) to the comparatively small number of vessels in that region; (2) to pressure from decubitus. Further investigation of the subject is at any rate desirable; for the study of any phenomenon, however apparently insignificant, may in time lead to important discoveries.

MALTHUS'S LAW AND TUMOUR-GROWTH.

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Mr. Jonathan Hutchinson has asserted several propositions, under this head, in a short pathological memorandum, on March 20th last, beginning "Malthus's law of population-increase, by geometrical progression, applies to the growth of tumours. The larger they have become, the more rapid is their rate of progress." If this law be ever really applicable, it can only hold in the case of tumours that are solid from the commencement and throughout. Whether, even in these cases, it exist or not, I cannot say; but that it cannot in a great many cystic tumours, and in numerous solid tumours that have become cystic in part, is evident. For Mr. Hutchinson says of their progress: "It is a process of cell-multiplication; and the more numerous the cells, the greater the result of their doubling." To be of any service in clinical practice, such law should, at least, be generally applicable. That, however, it can never be; because of a feature in the life of tumours, an apparent rate of growth, that entirely transcends the real rate. I allude to the adventitious effusion into solid tumours of serous or colloid fluids, or liquid or solidified blood. These effusions are quite common in malignant tumours of all kinds, especially the sarcomata, as well as in solid benign tumours composed of, or containing, cystic structures capable of serous and sanious distension; and are also met with in the simplest solid benign tumours. It is quite a common history, of this or that tumour, that it has steadily grown in size during so many weeks, months, or years after first notice; but has increased with rapidity during the few days, weeks, or months preceding a certain inspection. Even apart from cases in which cystic or hæmorrhagic effusion is discoverable to the touch or trocar, there is always a proportion of cases in which this effusion, previously unsuspected, is first made apparent when the tumour is laid open. Many a benign tumour, that has remained stationary for a period, by sudden increase becomes inconvenient, and may be thought to simulate malignancy. After removal, or otherwise, or laying it open, the cause is perceived in effusion, that may or may not have been previously suspected. Such rapid increase may overdistend the coverings of the tumour; and so, by ulceration and bursting of the skin, lead to protrusion and a kind of fungation of the growth, another feature that may be thought to simulate malignancy. Even a malignant tumour, on rapidly becoming enlarged, is easily supposed to have assumed a character of unwonted or hopeless inveteracy; such increase being found, on dissection, to be merely due to adventitious effusion; whereas the tumour, in its solid portion, is sometimes seen to have been little more than stationary. These adventitious effusions are no part of the increase proper to the tumour-tissue; but they are a clinical reality that should always be taken into account under circumstances of rapid enlargement.

I, therefore, cannot see that "it is important to remember this law," or that "it may help us, in prognosis, in emphasising the importance of early treatment," or, for the matter of that, in any way at all; since the rate of a tumour's apparent growth is no sure guide to the rapidity of its real increase.

CLINICAL MEMORANDA.

SHOULDER-JOINT FRICTION AND INCIPIENT PHTHISIS.

My object in this brief communication is to draw attention to a certain physical sign that not unfrequently leads to error. As the first physical sign of incipient phthisis is frequently a mere adventitious sound heard over some part of the apex of the lung, and as the friction produced in the shoulder-joint, by breathing, often imitates very closely these pulmonary adventitious sounds, it is not difficult to understand how mistakes in diagnosis should occur.

I think that there are good grounds for believing that lives are sometimes rejected at insurance-offices, from a want of knowledge on this point.

The sound produced at the shoulder-joint is almost always of a dry quality, rather creaking than crepitation; but its character varies considerably. It is difficult to prevent its occurrence in those subjects in whom it is heard; so that fixing the joint hardly aids one much in the diagnosis. But the sound is always loudest over the joint itself and is better conducted along the bones than along the muscles, over which it is usually faintly heard; but in some instances it may even be audible over the pectoralis major below the clavicle. An important point in the diagnosis is the character of the breath-sound at the apex of the lung; when mere joint-friction is heard, there is of course no prolongation or increased loudness of the expiration. This friction sound, simulating pulmonary adventitious sounds, was first pointed out to me, and, so far as is known, was first drawn attention to, by Dr. Gowers, in his class of clinical medicine at University College. It is of frequent occurrence, and especially, I think, in patients who have suffered from "rheumatism." I have not heard it often in children and less often in women than men. There can be no doubt that the practical physician must have become acquainted with the sound even though he may not have formulated his opinion thereon. If this note should lead to its wider recognition, my end will have been answered.

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A FOREIGN BODY IN THE VERMIFORM APPENDIX.

In the report of a meeting of the Clinical Society of London, held on December 11th, 1885, I find a statement, made by Mr. Bryant, to the effect that he had heard Sir William Jenner express his disbelief in the vermiform appendix ever becoming the seat of a foreign body. Mr. Symonds also stated that, of twenty-four recorded cases, twenty-three were due to concretions, and only one to a foreign body. I am thus induced to place on record a case which came under my observation recently.

The patient was a young man, aged 23, and had, for several weeks, been complaining of abdominal pains, referred chiefly to the umbilicus. Besides this, there had been a general failure of health. He had not taken to his bed till the day before I saw him, and on which he died, and had been going to his office to the last. His condition had become suddenly worse on the day before he died. Dr. Mackellar and myself were asked to see him by Dr. Kingdon, and he died in our presence. His later symptoms were vomiting of bilious matter and those of general peritonitis. His bowels were freely opened the night before he died. There was nothing to point to any particular portion of the intestinal tract, and the general agreement of opinion was in favour of perforation from an unknown cause. On *post mortem* examination, I found general peritonitis, with numerous adhesions, some of which were partially organised. In the vermiform appendix, there was a perforation, but no collection of pus in its neighbourhood. In the pelvic cavity, I found a cherry-stone, which had evidently set up all the trouble.

The case is of considerable interest, partly as showing that there is some foundation for the name of cherry-stone catcher, as applied to the appendix in the dissecting-room, and also in showing how long peritonitis may exist without causing very serious inconvenience. The probability is, that an abscess had formed at the seat of irritation; and from it the peritonitis had extended, and become general. The climax was brought about by the bursting of the abscess, and the accession of the acute attack. No doubt, the presence of the general chronic peritonitis diverted the attention from the real seat of trouble.

R. Haynes Lovell, L.R.C.P.Lond., M.R.C.S.Eng.,
Sydney, New South Wales.

SURGICAL MEMORANDA.

REMOVAL OF FOREIGN BODIES FROM THE EAR.

I wish to suggest another mode of extraction of foreign bodies from the ear, which has never yet failed me, and seems simpler and better than the "best," as recommended by Mr. Hutchinson. I do not offer it as new, and certainly not as my own; but I have used it for years, and with constant success, even after the failure of others. Yet the article in the Journal of April 10th would lead to the inference that it is not generally practised.

A large syringe holding four or six ounces, a basin of rain-water soap-suds as hot as can be borne, and a steady hand, are all that is required. With this simple apparatus, I have, over and over again, removed cherry-stones, beads, buttons, slate-pencils, etc., from the ears of children, and always without pain; nor has it ever failed me. The injection of a few syringefuls will generally suffice.

I can imagine a substance so forcibly driven into the ear that this method would not dislodge it; but then neither would the loop.

J. H. Gramshaw, M.D., F.R.C.S.

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REPORTS

OF

OSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ANTRIM INFIRMARY.

UND DEPRESSED FRACTURE OF RIGHT PARIETAL BONE : TREHINING ; REIMPLANTATION OF THE TREPHINED PORTION : RECOVERY.

nder the care of Mr. GEORGE ST. GEORGE, Surgeon to the Infirmary.)

[Reported by Mr. GEORGE WARING, Resident Pupil.]

, AGED 2½ years, was admitted on July 31st, 1885. There was lacerated wound of the scalp, extending from just above the nd of the right eyebrow upwards and backwards to the middle parietal bone of the same side. At this point there was a sed fracture, the fragments of bone being driven deeply through ra mater into the brain substance. The child was quite con- and screaming loudly.

St. George having enlarged the scalp-wound, with antiseptic tions, a small disc of bone was removed, the depressed portions arefully raised, and one small fragment removed. The tre- disc (in size about that of a sixpence), which, during the inter- d been placed in a weak solution of carbolic acid and warm was carefully reimplanted, and a fine drainage-tube of decalci- icken-bone introduced. The scalp was laid down and secured w points of fine carbolised catgut sutures, and dressed with e gauze.

child, on its recovery from the anæsthetic, began to scream as loudly as ever. Ice was ordered to be applied to the

ust 1st. He had passed a very restless night. There had been niting; the right eyelid was a little puffy. Calomel, half a grain, lered every six hours.

child progressed so favourably that, on August 10th, the parents d him to their own home, a few doors from the hospital, against geon's wishes. The wound was nearly all closed, except at the ngle, where there was a slight discharge from where the drain- e had been. The wound was now dressed with iodoform and intment.

he next day, the parents returned with the child, who was nd stupid, with flushed face, dilated pupils, and hot dry skin. nperature was 100° Fahr., and the pulse was full and bound- The ice was re-applied, and a purge and calomel again .

August 12th, the bowels not having acted, he was given an of soap and water, which operated.

August 14th, erysipelas declared itself; the calomel was then l, and the child was placed on five-minim doses of liquor rchloridi every three hours. He improved steadily from this he erysipelas disappearing after two days, when the wound ssed with iodoform and boracic lint until August 31st, when discharged, and attended for a week as an extern patient.

as shown at the meeting of the North of Ireland Branch of the Medical Association, on February 10th, 1886, when the wound te healed, and all the brain was completely covered by bone. ow a healthy, intelligent child.

ARKS BY MR. ST. GEORGE.—The reimplantation of trephined s first introduced by Professor Macewen, of Glasgow, in cases h he had trephined for the cure of epilepsy ; but I think this is t time that reimplantation of the trephined disc has been at- l in cases of fracture of the skull. The advantages to be de- rom it are, the protection to the exposed dura mater, and the ent immunity—at least, as much as possible—from inflamma- the delicate membrane lying beneath. The question of tre- ; early in cases of depressed fracture of the skull, where there yet, no symptoms of compression, has been, and still is, a isputed one ; but I am drawn forcibly to the opinion that, in cases ound depressed fractures of the skull, even though at the time ay be no symptoms of compression, yet, if there be laceration dura mater, one errs (if it be an error) on the safe side, by ing and removing those fragments which must, sooner or later, rritation of that membrane and effusion, and necessitate tre- ; at a stage when the patient is unfit to bear it

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 20TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Congenital Fatty Tumour.—Mr. C. B. LOCKWOOD showed several fatty tumours, removed from a child 13 months old ; those situated in the sole of the foot were not encapsuled, but those at the malleolus had a capsule. Though it had been said that the unencapsuled fatty tumours were malignant, the microscopical examination made by Mr. D'Arcy Power gave no support to this view. The tumours had been noticed to increase in size, and were quite symmetrical in deposition. Mr. Lockwood also showed a second specimen of fatty tumour, from the palm of the hand, removed by Mr. W. Adams.—Mr. ADAMS said the tumour was beneath the muscles of the finger, and interfered with the usefulness and the appearance of the hand. The patient was a young lady, aged 24.—Mr. ROGER WILLIAMS had seen a case of congenital fatty tumour in the palm of the hand ; he had also seen cases where congenital fatty tumours were situated at the nape of the neck, and near the clavicle. He had seen two other cases of congenital fatty tumour.—Mr. R. W. PARKER said that, as a rule, congenital lipomata were not encapsuled. He inquired whether there was any ground for the statement that congenital fatty tumours occurred where fat was not normally present.—Mr. JOHN MORGAN related the case of a fatty tumour in the palm of the hand in a young child. The place of origin of these tumours was a matter of great interest. Mr. Howard Marsh had observed to him that congenital fatty tumours generally occurred in connection with bone, but this was not supported by his own case, or by those shown by Mr. Lockwood.

Abnormality of Colon.—Mr. C. B. LOCKWOOD showed an anencephalic monster in whom the colon had not descended, but was lying close to the right lobe of the liver, while the testicle was in the scrotum. He thought that a systematic examination of anencephalic monsters for other abnormalities would yield interesting results. As a rule, where the colon did not descend, the testicle also remained undescended.—Dr. NORMAN MOORE suggested that, perhaps, the long bands of tissue occasionally found in the abdomen, which were difficult to account for as due to inflammation, might be remains of the bands between the testicle and the colon.—Dr. WILKS said that peritonitis was not uncommon in still-born children ; and in syphilitic children it was often seen. Many conditions, such as non-descent of the testes, and some malformations, were not improbably due to intra-uterine peritonitis. He referred to one case in the adult, where, at an operation, it was found that the cæcum was turned over, and attached to the left side. This must have occurred during intra-uterine life.—Mr. C. B. LOCKWOOD thought that many of the conditions, which it was the custom to call abnormalities, were really due to intra-uterine disease.

Meningeal Hæmorrhage due to Rupture of Aneurysm of Left Middle Cerebral Artery.—Dr. SEYMOUR J. SHARKEY showed a specimen from a married woman, aged 51, who survived her admission into St. Thomas's Hospital for five days. Six months before, she had an attack of gout in her feet, and attended at St. Thomas's Hospital as an out-patient. On September 10th, while doing some washing, she felt suddenly ill, and vomited. She lay down upon her bed for a short time, and then tried to get up, but fell in her attempt to do so. She was then found to have lost the use of her right arm and leg. She became unconscious, and remained so until admitted two days later. On admission, she had right hemiplegia and hemianæsthesia, and aphasia. She was drowsy, had a brown dry tongue, and partial loss of control over the evacuations. She died one week from the day on which she was taken ill. At the *post mortem* examination, chronic renal disease was found, and hypertrophy of the left ventricle of the heart. Slight extravasation of blood was seen in the membranes covering the anterior half of the left hemisphere of the brain, and at the base, and a large hæmorrhage occupied and distended the left Sylvian fissure. It had formed a hollow cavity in the temporo-sphenoidal lobe, and had exerted great pressure on the other parts of the brain, which form the boundaries of the fissure. It had separated the convolutions of the operculum from those of the island of Reil, and had flattened the lenticular nucleus and internal capsule, so much so, that the knee of the latter was obliterated, and its posterior and anterior divisions formed almost a straight line. The blood had not, however, ruptured into the substance of the brain. The source of the hæmorrhage was a small aneurysm of the main trunk of the Sylvian artery. The case was an interesting example of the effects of pressure in interrupting the functions of the nervous system. The loss of sensation might,

perhaps, be put down to the disorganisation of the hippocampal convolution, but the motor paralysis and aphasia seemed to have no other explanation than the pressure of the effused blood upon the island of Reil and neighbouring convolutions, and upon the central ganglia and internal capsule. It would have been impossible to distinguish the case clinically from one of hæmorrhage into the substance of the brain, in the region of the internal capsule.—In reply to Dr. O'Connor, Dr. Sharkey said that the reflexes on the paralysed side were diminished; and, in reply to Dr. Wilks, that the condition of hemianæsthesia was only shown by the absence of ordinary sensation on the right side.

Hydatid Cyst of Recto-vesical Pouch.—Mr. Hurry Fenwick showed a specimen removed from the body of a man, aged about 50. The patient presented a tumour, of the size of a fœtal head, in the flank. The bladder was not affected, but pain was severe. The man refused operation, and died in a few days. A bilobed hydatid cyst was found between the bladder and the rectum. A hydatid cyst was also found in the liver. About fifty cases of hydatid tumour in this situation were on record. The most probable explanation of the occurrence of these cases was leakage from a cyst in the liver. In a few cases puncture of a cyst in this situation had given great relief.—Dr. Norman Moore had met with two cases in which a cyst in this situation, unsuspected during life, was found after death. In both cases, death was due to rupture of the cyst during examination. In neither of these cases were there hydatids in any other part of the body; there was, he added, no reason why the larvæ of echinococcus should not become fixed in any situation; they were occasionally met with even in the limbs.—In reply to Mr. Ernest Clarke, Mr. Fenwick said that the man's death was due to a combination of morphine and drink.

The Pathology of Rheumatoid Arthritis.—Mr. Arbuthnot Lane referred to a paper in the *Transactions* of the Society (1884), in which he had attempted to prove that Charcot's disease was rheumatoid arthritis, altered by modifications in the vitality of the osseous and nervous systems. He now stated his belief that rheumatoid arthritis was not a disease, and that the pathological conditions which were regarded as the expression of this disease were the result of force frequently applied, or suddenly, as by a heavy blow. In previous papers, he had shown that the transmission of pressure produced many important changes in the bones and joints. In the less movable articulations, as in those of the spinal column and pelvis, it caused the destruction of the articular cartilages, or fibro-cartilages, intervening between the bones and the formation of marginal osteophytic growth, so as to form larger bosses or processes of bone, which frequently fused with similar processes from adjacent bones, and so obliterated the joints. It also caused the development, along the lines of tension, of processes of bone which extended along the ligaments, or over the fibro-cartilages, and frequently united with similar projections from the neighbouring bones. He described instances of these conditions, all of which were regarded at products of (so-called) rheumatoid arthritis. In more movable joints, as in those of the extremities, pressure exercised repeatedly, and over a long period, produced changes identical in character with those just described, but altered in appearance by the greater mobility of these joints. These were the gradual removal of the articular cartilages, covering the opposing surfaces of bone; an increase in the thickness of the articular lamella of bone, and its progressive eburnation on the complete removal of the cartilage. Coincident with these changes, bone was deposited on the margins of the articular surfaces, producing an extension of their area. The opposing eburnated surfaces of bone, by their friction upon one another, mutually destroyed each other, and, by this means, a very considerable alteration in the shape of the articular ends was produced. To obviate, or rather to oppose, any displacement of the altered bones, a compensatory osseous growth occurred along the margin of the articular surface, and frequently in the ligaments; and, should the mutual trituration of the bones result in displacement, accompanying the gradual displacement, there was an abundant formation of new bone. The amount and rapidity of these changes varied much in different individuals, and depended on the vitality of the osseous system. If a movable joint were struck a violent blow, the changes produced were similar to those just described, but they progressed with much greater rapidity. Instances of this last condition, in the case of the hip-joint, were sometimes described as rheumatoid arthritis due to injury, and in others as interstitial change in the neck of the femur producing shortening. These changes, which were all described as rheumatoid arthritis, rheumatic gout, or arthritis deformans, he maintained, were due to injury. The reason that so-called rheumatoid arthritis was common among man, as compared with the lower animals, was that he often bore burdens whose weight was tra mitted at great mechanical disadvantage; and his joints, as the or shoulder, and the first metatarso-phalangeal, were much more posed to injury than in the lower animals. In animals which carr or dragged heavy burdens, as horses, pressure-changes were frequen seen. This was less frequently the case with animals, portions whose bodies were exposed to violent strain in the pursuit of th prey. He classified the results of the transmission of force un three headings, the first two of which he had already described; the effect of pressure repeated very frequently, and over a long peri during the lifetime of an individual; (2) the influence of heavy p sure applied at one time, as by a heavy blow; (3) the effect of press exerted, during many generations, upon a part. This he believed be a most important factor in the process of evolution; and he exe plified this by comparing the changes in the pelvis and lumbar sp of the coalheaver, with the similar parts of the mylodon, and w the fusion of the last lumbar vertebra with the first sacral, which v occasionally seen in man, and not uncommonly in the higher ap He then compared the condition of backward displacement of t fifth lumbar vertebra, which he had described, with a condition dissociation of the first sacral vertebra in man, which he h found very frequently, and argued that these conditions w due to the similar transmission of superjacent force.—D Norman Moore declined to believe that all these changes w traumatic; degenerative changes in the joints were very comm Most people past middle life who had emphysema of the lungs wo be found to have degeneration of the joints; so, in patients who h degenerating arteries and kidneys, the joints were always degenerat quite independently of the occupation. The sterno-clavicular joi was, in his experience, the rarest to be affected by the so-cal "rheumatic affection." A similar line of argument to that used Mr. Lane might be applied to the occurrence of urate of soda in joint of the great toe.—Mr. C. B. Lockwood inquired whether fr ture of the first costal cartilage was as common as Mr. Lane forme supposed, or whether he was now prepared to admit that rheumat arthritis frequently occurred in that situation.—Mr. Charl Symonds, while agreeing with Dr. Moore that degenerative chan were seen with great frequency in old people, questioned whether t term degenerative change was accurate; he believed the changes w really proliferative. He failed to see how the changes attributed rheumatic arthritis, and seen in persons who had not worked, were be distinguished from the changes described by Mr. Lane as due injury.—Mr. W. Adams thought that these changes must be traced some general constitutional or central nervous change.—The Pre dent thought that clinical evidence showed that these changes w not due to pressure alone. They might be noticed to develop in be ridden persons.—Mr. Lane said that his hypotheses were found in t dissecting-room, and verified in the *post mortem* room. He felt qu convinced of the accuracy of his facts; in particular, he had been co firmed in his view with regard to the frequency of fracture of the fi costal cartilage.

Colloid Cancer of Uterus.—Mr. Roger Williams showed a specim of uterine fibromyoma which had become the seat of colloid canc The patient was aged 43. The specimen was referred to the Morl Growth Committee.

Thrombi in the Pulmonary Artery.—Dr. Charlewood Turn showed three specimens of thrombi in the pulmonary artery, due autochthonous thrombosis. The first specimen showed two elongat thrombotic masses in branches of the pulmonary artery, adherent, their peripheral extremities, to points of bifurcation. The larger o was an inch and a half in length, and had no adhesions, except at t bifurcation of the vessels; it had grown towards the heart; the smal was one inch long; both were quite free. In the other lung, t small pedunculated vegetations, which appeared to be an incipie stage of the same lesion, were seen. The patient was a woman, ag 37, who died after removal of the uterus, on account of a suppurati fibroid tumour opening into it. The second specimen showed o adherent thrombotic masses in the branches of the pulmonary arte of the left lung. The thrombi were firmly adherent, and covered smooth membrane, continuous with the endarterium. Several branch of the right pulmonary artery were also obstructed. The patie was a woman, aged 27, who died from valvular disease of t heart, and extensive sloughing of the integument of the foot. The was thrombosis, also, of the inferior vena cava and right fem ral vein. The third specimen showed thrombi in the pulm nary artery of a boy aged 10, who died of heart-disease. T specimens illustrated the analogy between the lesions found the heart and in the pulmonary artery. In the first specime the vegetations resembled those commonly seen on the valv

eart. In all the specimens, the thrombi seemed to have been lesion of the lining membrane of the vessel, and not to have rom stagnation of blood, though there was probably an in- tendency of the blood to coagulate, attributable in part to ion of septic matter, and in part to enfeeblement of circula- The specimens were compared with those of acute aortitis it the last meeting of the Society, and were thought to indi- e mode of origin of *ante mortem* clots in the heart, and of hagic infarcts in the spleen, kidneys, and other organs, in here no source of emboli could be found, and also, in greater legree, in cases of endocarditis.

Specimens.—Dr. MANSELL-MOULIN: Primary Sarcoma of ic Cord.—Mr. A. Q. SILCOCK: Glandular Epithelioma from g of a Dog.—Dr. HANFORD: Supernumerary Nipple in a Man aph).—Dr. GOODHART: Hæmorrhage into Liver-Substance al rupture) from Contusion.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 7TH, 1886.

J. W. BLACK, M.D., Vice-President, in the Chair.

ens.—The following specimens were shown. Dr. W. S. A. H: Naegele Pelvis. Dr. JOHN PHILLIPS: Infant, aged 1 old, with fusion of the Phalanges of the Right Index and Fingers (living specimen). Dr. JOHN PHILLIPS (for Dr. (R): Hæmato-salpinx with Ovarian Cyst. Dr. BENINGTON: cele in a New-born Child.

ntraction, Inhibition, and Expansion of the Uterus.—Dr. WS DUNCAN read a paper with this title. The uterus proper, dy, was chiefly considered, but not to the entire exclusion of x uteri and vagina. Contraction was temporary, and followed ation and return to original dimension. It might be morbid in duration, in rhythm, or in extent. Contractions were to be present in childhood, and in the whole of menstrual especially in menstruation. They were morbid in dys- œa spasmodica, and might be tetanic. The rate might be hour. Contraction perhaps occurred in a fibroid, certainly it, and especially at menstrual periods. The healthy ons of pregnancy, to which Dr. Braxton Hicks had much attention, were considered. They might be and painful. Then came the contractions of abortion, ge, and labour at term, and in the puerperal state. The ement of labour was then discussed; it was not the com- nt of contractions, but of inhibition and of retraction. The os uteri was not the weakest part, but the fundus; at least, g to mechanical principles. Stretching of fibres did not ex- e commencement of labour. The uterus grew, and it was ex- y growth and a very slight force. The analogy of urination fæcation with labour was considered. The necessity of in- of the circular fibres of the lower segment of the uterus was Morbid changes of inhibition were pointed out. Lastly, r of arresting and inducing contraction was mentioned.—Dr. had had under his care, in the London Hospital, a case t analogous to the examples of painful uterine contractions egnancy, which Dr. Duncan had related. It was that of a vith fibroids of the uterus, who suffered from severe paroxys- ne pains throughout the intermenstrual period, these pains y absent during menstruation. She was treated with ergot, gravated the pains. The cervix uteri was then dilated, after e pains ceased, and they were absent for two of three months. n returned, and the cervical canal was again dilated, and the e again removed. After this, he lost sight of the patient. HAMPNEYS said that the antagonism existing between site poles in the uterus had been called polarity by d he thought it was a convenient and concise term. ght that spontaneous yielding of the cervix could not be face of the following facts. In labour, with contracted e head was sometimes arrested above the brim; the mem- esented in the shape of the finger of a glove; but, in spite of ditions, the cervix was found by the hand (introduced, per- the sake of turning) hanging flabby and relaxed, almost as had already occurred. Again, it sometimes happened that cœ refused to dilate, and remained rigid, however strong the ht be. Under these circumstances, great retraction might , and Bandl's ring might be felt high up, the lower uterine being greatly thinned. The expansion which should possess pole of the uterus was replaced by contraction, and the s a dead lock. In such a case, in presence of accidental ge, he had turned, brought down a foot, and (apparently from reduction in the contents of the uterus) the cervix relaxed. He thought it could not be maintained that the external cervix was stronger than the internal. He would ask Dr. Duncan whether he had been able to distinguish the contractions of the vagina from those of muscles near it. Painful labour-pains during pregnancy were like those of other hollow viscera, in which disorderly contractions produced colic.—Dr. BRAXTON HICKS wished to point out a fact not alluded to, namely, that, during the last six weeks of normal pregnancy, the os and cervix were, in a large number of cases, patent enough for one or two fingers to be readily passed in. When proceeding to induce labour at seven and a half or eight months, he was often able to employ at once the largest size of Barnes's bags. The subject of the paper could not be fully discussed without this fact being taken into account. —Dr. HORROCKS said that physiologists had formulated a law that, whenever a muscle contracted, its opponent relaxed. This law was applicable to all muscle, voluntary or involuntary. He illustrated the law by reference to various groups of muscles. The sphincter of the orifice of a cavity was the opponent of the walls of the cavity. Hence the cervix uteri relaxed when the fundus contracted. This was a physiological process known as inhibition, and, doubtless, had some nerve-centre in the spinal cord or sympathetic plexuses presiding over it. If the longitudinal fibres in the cervix assisted in opening the cervical canal, they were, no doubt, acting when their opponents, the circular fibres, were relaxing. Were there any means of affecting this inhibition and contraction by drugs or electricity? In his hands, electricity had failed to bring on labour. Chloroform, chloral, and opium might, to some extent, inhibit uterine muscular action, but not electricity.—Dr. BOXALL distinguished two varieties of rigidity, muscular and fibrous. One or both were frequently operative, and they were often combined. The treatment must vary in the two cases. In omitting to relegate the rigidity to its cause, might possibly be found the varying results obtained by electricity.—Dr. W. S. A. GRIFFITH, referring to the effect of electricity on the uterus, remarked on the great differences of opinion held by different observers; most of whom, however appeared to agree with Dr. Horrocks that it was of little value in causing or increasing uterine contraction. Dr. Kilner, in a paper read two years ago, pointed out the value of the interrupted current in diminishing the pain of labour-pains.—Drs. GALABIN, GRAILY HEWITT, G. ROPER, and CLEVELAND, also made remarks.—Dr. MATTHEWS DUNCAN, in reply, said that he was much fortified in his own views by the general concurrence of the gentlemen who had spoken. Some supposed differences of opinion were the result merely of different meanings of terms.

Mitral Stenosis in Labour.—Dr. GEORGE COATES described this case. The patient was aged 22, and had suffered from rheumatic fever, but had no suspicion of heart-disease. She had suffered from anæmia and breathlessness. The labour began on October 23rd, 1885. On the 24th she felt faint several times. On examining the heart, a presystolic murmur at the apex was detected. In the evening the os uteri was fully dilated, and she showed signs of exhaustion. The forceps was put on and delivery accomplished. The pulse varied in the next two hours from 180 to 130, then it fell to 108, and in the morning to 76. The murmur disappeared on and after the tenth day. On November 13th she had a rigor, and sharp pain in the left breast, and one elbow. She was treated for acute rheumatism, and recovered. The murmur quite disappeared.—Dr. HERMAN thought Dr. Coates's case interesting and instructive. He would be largely guided in the management of heart-disease, during pregnancy, by Dr. Angus Macdonald's writings; but he thought that author took too unfavourable a view of the prognosis. Published cases and consultation cases contained too large a proportion of bad cases. Dr. Coates's case showed that pregnancy and labour might be gone through safely.—Dr. CHAMPNEYS said that Dr. Coates's case differed in many respects from those which had been recorded, and those that he had seen. There was no aggravation of symptoms at end of pregnancy, no distress during labour, and no alarming symptoms soon after, when the blood pressure fell. Dr. Macdonald's work was founded on a very few observations, and recorded cases were valuable. Stenosis was supposed to be the most dangerous form of mischief under the circumstances. —Mr. E. S. TAIT recorded a similar case to that of Dr. Coates, but without the rheumatic attack after delivery.

A BRIDEGROOM AGED 116.—According to the *Kievlanen*, in Pereislavl there lately died a Jew, named Sribnyi, aged 117, who up to his last remained hale and sound, possessed an acute memory and sane intellect, and even, a few months before his end, contemplated marrying a ninth time. His eldest son was only 82 years old, but looked much older.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 19TH, 1886.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

Case of Littre's Hernia.—Mr. JOHN MORGAN read the notes of a case of this form of hernia, occurring in a woman aged 64. The patient had always enjoyed good health, but had been losing flesh for a year or two past. She was of a constipated habit, and was in the habit of taking purgative pills. Seven days before she was seen by Mr. Morgan, she had taken some purgative medicine for the relief of the constipation, and this resulted in an action of the bowels. This, however, was followed by an attack of constipation of unusual obstinacy, medicines and enemata being resorted to without avail. She was then attended by Mr. Humphries, of the St. George's Dispensary, who called in Mr. Morgan to see her; and her removal to Charing Cross Hospital was deemed advisable. The most careful examination revealed no sign of any hernia, but there was a vaginal prolapse, containing intestine, easily reduced. The patient vomited, and was extremely feeble and emaciated. The vomit became decidedly stercoraceous, and Mr. Morgan decided to perform an exploratory laparotomy. This he did, but from the collapsed condition of the colon, inferred that the obstruction was higher up. As the condition of the patient did not appear such as to enable her to support further operative measures, the wound was closed. The patient died a few hours later. At the necropsy, a small portion of the circumference of the ileum was found to have prolapsed into the femoral canal, but it was not constricted. Mr. Morgan pointed out that, in these cases, the lumen of the gut not being materially obstructed, the regular passage of fæcal matter might take place; and the symptoms were generally milder, and longer in declaring themselves. The abdomen, moreover, was seldom enlarged or distended.—Mr. FREDERICK TREVES protested against the error which had crept into text-books with regard to the name of the surgeon who was said to have first described this form of hernia. It was not Littré, but Littre; the confusion having evidently arisen from a certain similarity of the name with that of the celebrated lexicographer. He considered that, in these cases, it was probably Meckel's diverticulum which slipped into the canal; and he dissented from the stereotyped symptoms given by the text-books as indicative of this form of hernia. Although the lumen of the gut was not obliterated, yet, as peristaltic movement could not take place, paralysis of that portion of the gut resulted. He advocated the employment, in all cases of strangulated hernia accompanied by stercoraceous vomiting, of copious warm-water irrigation of the stomach by means of the stomach-pump, such a procedure tending to diminish the collapse, and removing fæcal matter from the stomach. Mr. Treves called attention to the fact that the symptoms of strangulated hernia depended rather on the nervous disturbance than on the mechanical obstruction of the gut, as evidenced by the case of a man with an artificial anus, in whom strangulation of the gut, lower down, was followed by all the symptoms of strangulated hernia.

Two Cases of Meningitis.—Dr. DAY read very detailed notes of two cases of meningitis in children simulating tubercular meningitis, but in whom no tubercle was found at the *post mortem* examination.—Dr. ISAMBARD OWEN expressed a desire for further evidence as to the existence of meningitis; and Dr. ROUTH suggested that one of the cases was possibly typhoid fever; adding, however, that the differential diagnosis of cerebral diseases in children was impossible, except after prolonged observation.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, APRIL 8TH, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Specimens.—Mr. JEFFREY exhibited a large biliary calculus, of the size of a pigeon's egg, passed *per anum*. Mr. GARRARD exhibited a breast removed for cancer.

Popliteal Aneurysm: Ligature of Femoral Artery: Cure.—Dr. KEELING introduced a patient, aged 32, for whom he had ligatured the femoral artery for popliteal aneurysm with a most satisfactory result. Flexing the limb, and the application of a tourniquet, had been tried at first without benefit. The artery was tied with a catgut ligature, and antiseptic precautions were adopted. The patient, who was the subject of cardiac disease, made an uninterruptedly good recovery.—Remarks were made by the PRESIDENT and Mr. GARRARD.

Perforating Ulcer of Stomach.—Dr. BARTOLOMÉ related particulars of a case in which death resulted from perforating ulcer of the stomach. The patient, a woman, had been suddenly seized with severe abdominal pain after partaking of a hearty tea, and death resulted in twenty hours. For some time previously she had complained of pain below the ensiform cartilage, but the symptoms, Dr. Bartolomé said, not characteristic of gastric ulcer. The specimen was exhi showing a large perforation in the posterior wall of the stomach.

Malignant Disease of Throat: Laryngotomy: Pyæmia: Pneum Death.—Mr. KILHAM related this case. The patient was a man, 53. He was admitted into the workhouse on January 16th, wit tensive cancer of the soft palate, uvula, both sides of the fauces ar base of the tongue, and large swellings at the angles of the jaw, of six months' duration. Laryngotomy was performed on January for urgent dyspnœa. On February 2nd, the right shoulder b painful with effusion, and, on the 4th, the left had commenced. February 7th, he began to suffer with pneumonia, and died o 10th. At the *post mortem* examination, a large abscess was under the right sterno-mastoid muscle; both shoulder-joints cont pus. The epiglottis was involved in the malignant disease, an submaxillary glands were indurated.

Fever.—Mr. BROWNING read a paper on this subject. He comm with a brief review of the opinions held by Cullen, Watson, Ad and Alison. Admitting that, in typhus and typhoid, there was difficulty in making a differential diagnosis, yet the reader paper alleged that there were a certain number of cases in whic characteristic of each were not so clearly marked, and diagnos came a difficulty. He put two questions: first, Whether i possible to have typhus fever without a rash of any kind, and, did it often occur? secondly, Whether there was any specific fo fever known as typhoid which was not enteric, that is, Peyer's pa unaffected? His experience inclined him to give an affirmativ swer to the first question; and he believed he had seen cases wit marked features of typhus, the rash being absent. He felt less to give a definite reply to the second query.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 7TH, 1886.

JAMES HARDIE, F.R.C.S.Eng., President, in the Chair.

Movable Knee-Joint after Excision.—Mr. ANDREW BOUTFL showed a boy who had recovered with a movable knee-joint afte cision. In May, 1884, the case was brought under the notice Society. An opinion was then expressed that, in twelve months location would supervene. Mr. Boutflower said that he brough case again under notice, in order to show that the limb was as pe and useful as it was two years ago, and that no dislocation occurred, the only difference observable being a wasting of the e sor muscle, which was accounted for by the removal of the patell

Neurectomy.—Mr. BISHOP showed a case of intractable neural the intercostal nerve, following traumatism, which had been cur neurectomy. A woman, aged 34, fell through a manhole ten ago, and ever since had noticed a lump in her right breast. In it began to be painful, and it was removed at her request in M As soon as the small wound healed, neuralgic pain in the breast complained of, and, the scar being somewhat depressed, this was Pain still continued; the breast became hot and heavy, subjecti and later, herpes, rapidly ulcerating, showed itself upon it. Va remedies were used, but without result. In consequence of her sistent demands, the whole breast was removed in September, Still the pain continued, and the herpes, along and on each si the scar, became worse. General remedies were tried afresh, w anodyne applications were freely used externally, but no relief obtained; the actual cautery was also used, but without result. February, 1886, the fourth intercostal nerve was cut down upon i posterior axillary line, and half an inch removed. The nerve was f outside the external intercostal muscle; it was in a state of neu On recovery from chloroform, the pain had disappeared, and had on April 14th, returned. The patient was increasing in weight, was in very good spirits.

Measuring-Tape.—Dr. RANSOME exhibited an improved differe tape-measure, intended for rapid measurement of the two sides o chest simultaneously, the expansion on breathing being noted a same time. It was made for him by Messrs. Ellis, Son, and mour, of Sheffield, at a cost of ten shillings.

Encephalocele.—The PRESIDENT mentioned two cases of opera for encephalocele.

Closure of Communication with Rectum after Colotomy.—Mr. P. J mentioned a case where the communication with the rectum had closed after left lumbar colotomy. The operation was rendered n sary by particles of fæcal matter passing into the segment of gut b the artificial opening, and giving rise to great inconvenience, o to a fistula existing between the rectum and bladder. The opera consisted in detaching the mucous membrane from a prolapsed

of gut, and from the lower margin of the colotomy opening; ing it on itself and attaching the raw surfaces by means of catgut, rwards bringing together the surfaces denuded of mucous mem- ne. No fæcal matter passed beyond the artificial opening after procedure had been carried out. The patient's condition was equently very decidedly improved.

riedreich's Disease.—Dr. BURY read a paper on Friedreich's dis- , and discussed its affinities. His remarks were illustrated by an esting group of cases.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MARCH 17TH, 1886.

ALEXANDER OGSTON, M.D., President, in the Chair.

eningitis after Ear-Disease.—Dr. MICHIE (Cove) read notes of e cases of meningitis following disease of the middle ear. The was that of a child 14 months old, who had occasionally suffered purulent discharge from the right ear. After the discharge had d sixteen days, it suddenly stopped, and cerebral symptoms super- d. The child became careless of everything around, lay in bed the head extended and the eyes staring, took nourishment only pressed, and had disturbed nights. The breathing became ral, the temperature rose to 101° Fahr., and the pulse to 130. bdomen became retracted, and tremors of the fingers and toes noticed. Towards the end, retinal hæmorrhages were seen with phthalmoscope, and convulsions occurred ten hours before death, h resulted in ten days after the occurrence of brain-symptoms. The ment consisted in the administration of grey powder and bromide tassium, and the application of iodoform ointment to the shaven . The second case occurred in a lad, aged 13, who had suffered purulent tympanitis of the right ear for six months. Severe suddenly set in in the right ear, and he became pale and un- ious for a few minutes; but, on recovering, he was able to walk . During the next four days, the pain became intense, especially the mastoid. The tonsils and pharynx were inflamed; the watch eard only on contact, and the perforation in the membrane was ed with granulations. The pain diminished; the patient was for two days, when, after injudicious exposure, the pain re- l with increased severity, with intermissions and violent exacer- ns, rendering the patient delirious. During the intermissions, gradually became shorter, he was calm and rational. A pro- d rigor, followed by deep coma, came on three hours before , which took place three days after the second attack. The patient was a woman, aged 20, who had suffered since hood from purulent discharge from the left ear. In 1883, a us was removed from the left ear. In September, 1885, along pharyngeal catarrh, severe pain set in in the left ear and mas- egion, accompanied by high fever, vomiting and rigors; it was partially relieved by a discharge of fœtid pus. After a fortnight, were marked prostration, and an œdematous condition of the s of the affected side and lower half of the ocular conjunctiva, ed five days later by a herpetic eruption over the whole left side face. During the same time, the right side of the face became rly affected. The herpes ran its usual course, disappearing irteen days. The tongue got dry and leathery, the intellect e confused, and there was marked hyperæsthesia and occasional m. In the fourth week the hyperæsthesia diminished, and atient became comatose. The discs became hyperæmic, and extravasations were noted. The coma gradually deepened, eath took place on the thirty-first day. Treatment consisted quent syringing with warm water, fomentations and sedative ations externally, and bromide of potassium internally.

noscopy.—Dr. MACKENZIE DAVIDSON demonstrated the prac- retinoscopy, as used for ascertaining and correcting errors of tion, and illustrated its use by means of Frost's artificial eye.

e of Epithelioma of the Vulva treated by Paquelin's Thermo y.—Dr. MILLER (Banff) contributed the notes of this case. failure with nitric acid, the cautery was successful in destroying alignant growth. The patient was 70 years old, had a family y of cancer, and had suffered from the affection for two months. oform was given during the operation, and a hypodermic injec- f morphine after it, and the patient made rapid recovery.

nited Fracture of the Neck of the Femur.—This specimen Dr. HART had excised from an elderly patient after death. Though g standing, there had been no attempt at union of the frag-

a-uterine Fœtation.—Dr. MICHIE exhibited the skeleton of an terine fœtus of eight months, which he had removed piecemeal *per rectum*. The manipulation was difficult and protracted, but the patient made a good recovery.

Hemichorea.—Dr. MACKENZIE BOOTH showed a patient suffering from hemichorea and partial hemiplegia, after acute rheumatism. The patient, a boy, aged 16, had an attack of acute rheumatism on Christmas day, 1885, which lasted eight days, and was confined to the house for a month after it. In the beginning of February, 1886, choreic movements began in the face, arm, and leg on the left side, and at the same time the face was drawn to the right, and there was a distinct loss of power in the left extremities.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

WEDNESDAY, MARCH 24TH, 1886.

G. F. HODGSON, M.R.C.S., in the Chair.

Micro-organisms and Disease.—Mr. EDGAR CROOKSHANK read a paper upon this subject. After commenting upon the wide-spread interest taken in researches in connection with bacteria, it was observed that the conclusions drawn therefrom had been met by some with incredulity, and even ridicule; by many with overwhelming enthusiasm; but by the majority with guarded opinion, and the hope of great results in the future. Incredulity was banished by a practical acquaintance with the subject; and he, therefore, regarded enthusiasm as a much more dangerous element to cope with. Popular excitement was raised by expressions of great and immediate expectations; and, if not fulfilled, discredit was cast upon researches hitherto accepted as complete. The subject must be regarded as in its infancy; and the chemist, pathologist, and clinical physician must unite in endeavouring to solve the problems which arose in connection with the exact part played by bacteria in morbid processes, and their relation to symptoms and the course of disease. He drew attention to the extreme care and precision with which such researches must be conducted, and the cross-examination to which micro-organisms were subjected before they could be considered to be the *causa causans* of a particular disease. The methods of obtaining artificial cultivations were then given, with a description of nutrient gelatine, nutrient agar-agar, and other media, both liquid and solid. The preparation of plate-cultivations was demonstrated, and various chromogenic and pathogenic microbes, growing in test-tubes, were exhibited. In conclusion, the life-histories of the bacillus of anthrax, bacillus of septicæmia in mice, of micrococcus tetragonus, and of bacillus tuberculosis, were sketched, as examples of bacteria which answered the questions formulated by Koch, and could, therefore, be regarded, without any doubt, as the *causa*, if not the actual *materies morbi*. A large demonstration of microscopic preparations followed. About forty microscopes were provided, of which half were provided with powers varying from a $\frac{1}{12}$ to a $\frac{1}{25}$. Among the preparations, which excited great interest, were sections of a tumour from a cow, with presence of actinomyces; sections of kidney, spleen, and skin, with bacillus of leprosy; preparations of sputum, and sections of liver of hen, and lymphatic gland of rabbit, with bacillus tuberculosis; sections of kidney, lung, liver, and preparations from cultivations on gelatine-plates, on potato, and in bouillon, showing bacillus of anthrax; sections of lung, kidney, and spleen, with micrococcus tetragonus; sections of kidney with mycosis, produced by aspergillus; sections of liver and kidney, with bacillus of septicæmia in mice; preparations of comma-bacilli; and many preparations of non-pathogenic species.—Remarks were made by the CHAIRMAN, to which Mr. CROOKSHANK responded.

On the Management of Incomplete Abortion.—In this paper, Dr. EDIS, after drawing attention to the difficulty of these cases, and the great need for early examination and diagnosis, showed a variety of instruments designed for the treatment of the various symptoms.

Case of Purpura.—Dr. MACKEY showed a boy who had nearly recovered from an attack of purpura. The case exhibited, in succession, all the symptoms from which the varieties of purpura had been named; and Dr. Mackey thought the disease was probably, in all the cases, the same, but that, at different times, different symptoms were predominant.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 2ND, 1886.

R. E. CARRINGTON, M.D., President, in the Chair.

Stricture of the Urethra.—Mr. JOHNSON SMITH read a paper on stricture of the urethra. He dealt with the various methods of treating the stricture by dilatation, and advocated gradual continuous dilatation. He laid great stress on the utility of a hot bath, and the internal administration of opium, before attempting to pass an instru-

ment in cases where great difficulty might be expected.—A discussion followed, in which the PRESIDENT, Dr. PURVIS, Mr. LOCKHART, Mr. MOORE, Dr. MOORE, Mr. J. P. PURVIS, Dr. JOHNSTON, and Dr. ERNEST CLARKE, took part.

Paroxysmal Hæmoglobinuria.—Dr. ERNEST CLARKE showed the urine of a patient under his care in the Miller Hospital. The patient was aged 35, married, had suffered a great deal from rheumatism, and was admitted into the hospital to have some adhesions in the elbow-joint broken down. While in the Hospital, she had two attacks of hæmoglobinuria, with an interval of a week. The attack consisted of a rigor, during which the temperature rose to almost 102° Fahr. ; this was followed by a rapid fall of the temperature to normal, accompanied by profuse sweating, and shortly followed by the passage of porter-coloured urine. The urine gave the blood-test with guaiacum, and precipitation of albumen with heat and nitric acid. Under the microscope no blood-discs were seen, but only masses of yellow pigment. The patient had lived the first fifteen years of her life in Cambridge, and latterly in Lewisham—both somewhat aguish districts. She had never had any other form of ague. The last few years she had been subject to these attacks after exposure to severe cold. She had sometimes had an attack at night when in bed. The patient wore an anxious expression, and her skin had a very "earthy" appearance. The special interest of the case lay in the fact that the patient was a female, and that she had the attacks at night. It was also interesting to note the association of rheumatism.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, MARCH 12TH, 1886.

T. EVELYN LITTLE, M.D., President, in the Chair.

Dislocation of the Humerus with Fracture of the Great Tuberosity.—The PRESIDENT described this case.—Mr. E. HAMILTON said the case was interesting, as showing a departure from the general rule of the small portion of the tuberosity being involved in these fractures. In other joints, when a fracture occurred, they saw scales of bone broken off instead of the ligaments and muscles giving way.—Professor BENNETT said the specimen exhibited was of very great importance from its rarity, and from the fact of its being completely dissected. Until recently, it had been a difficulty to his mind as to whether or not fractures of the great tuberosity should be divided into two groups: (1) fractures that occurred from direct injury to the tuberosity with subsequent subluxation of the humerus, and (2) complete dislocations, with tearing of the attachments of the muscles. The case now adduced showed that there were dislocations completed by the tearing of the muscles, and cases of primary fracture of the tuberosity. Dr. Little's case certainly justified the recognition of a second group of cases in which the tuberosity was torn off, and not broken off by direct comminution. The evidence now proved that the dictum that there was only a ligamentous union should not be accepted, but that treatment should be directed towards obtaining osseous union, if possible. He had a case under treatment which was not a dislocation in the true sense, but a fracture of the great tuberosity with a subluxation inwards. The patient was an old woman, and yet a very complete union took place. In the records of this injury published in France and America, Mr. Adams's case was omitted, and Professor Smith's teaching, that only ligamentous union occurred, was recognised. Tearing of the tuberosities was, no doubt, of very rare occurrence.—The PRESIDENT, in reply, said he was struck by Professor Bennett's remark that, in the neighbourhood of the joint, portions of bone resembling scales were often found broken off instead of the ligaments. It had struck him, in several cases, that the capsule of the joint had not been ruptured, and he had often known surprise to be expressed at that, but the breaking off of the bone saved the ligaments from rupture.

Ulcerative Endocarditis limited to the Right Side of the Heart.—Dr. WALTER SMITH exhibited the viscera of a man, aged 44. He had served in India for thirteen years, and enjoyed good health, except for several attacks of ague in the last two years ; he was temperate. Eleven days prior to death, a systolic blowing murmur developed towards the apex of the heart and persisted, and the existence of ulcerative endocarditis was conjectured. At the *post mortem* examination, the aortic and pulmonary valves were competent and normal in appearance ; the tricuspid valve was covered with enormous (one inch and a half) cauliflower excrescences and vegetations, some hanging by a narrow pedicle close to the free edge of the valve. Close to one curtain of the valve was a ragged cavity in the heart-muscle, about half an inch in length ; the surface was rough and uneven ; there was a patch of granular exudation upon the endocardium of the right ventricle ; no disease of the pulmonary artery was found ; a number of small firm thrombi were entangled in the recesses of the musculi pectinati of the right ventricle. The case was obscure in its origin and clinical course, and the limitation of endocarditis to the right side of the heart was noteworthy.

Endocarditis.—Dr. C. J. NIXON communicated another case of endocarditis. The specimen did not present any features of peculiar interest, but was a good example of the changes that were met with in endocarditis. The viscera were removed from a lad, aged 20, who was admitted into the Mater Misericordiæ Hospital on December 20th, 1885. Six months previously, he had an attack of rheumatic fever in which his heart was affected. Afterwards, he complained of some difficulty of breathing, especially on exertion ; but it was only a few night before his admission to hospital, that serious symptoms presented themselves. He then had a rather sharp attack of hæmoptysis and came to the hospital for treatment. He was remarkably anæmic and had considerable dyspnœa and orthopnœa ; his urine was small in quantity, and slightly albuminous ; and he had general anasarca and a moderate amount of ascites. On examining the heart, Dr. Nixon found the usual signs of well marked mitral regurgitation. Occasionally, in addition, a feebly pronounced presystolic murmur was heard. In the course of the case, the symptoms that usually developed towards the late stages of mitral disease were present ; the most marked symptom that called for treatment being sleeplessness. Towards the end the lad passed into a condition of drowsiness, which merged into coma, and he died on December 30th, ten days after his admission. His heart was enlarged, and weighed 14 ounces. On the left side were well marked evidences of mitral valvulitis of a rather extensive character. The anterior flap of the mitral valve was partially disconnected from its chordæ tendineæ, and, at the extremities of the ruptured cords, a precipitation of fibrin had taken place. In one place the precipitation of fibrin was attended with calcification. He (Dr. Nixon) had been for a long time in the habit of teaching that heart disease might be regarded, so far as concerned the development of its symptoms, as eminently paroxysmal.—The PRESIDENT remarked that whether the disease occurred on the right or the left side of the heart a vegetative affection of the endocardium was present.—A discussion ensued, in which Dr. NIXON, Dr. WALTER SMITH, Dr. HENRY KENNEDY, and Mr. DOYLE, took part.

Cirrhosis of the Liver.—Mr. STORY showed, on behalf of Dr. John William Moore, a specimen of hypertrophic chronic interstitial hepatitis (cirrhosis of the liver), fatal through hæmatemesis. The patient was a foreman painter, aged 53. There was a history of "nipping," extending over many years. There were large deposits of fat round the viscera and in the subcutaneous areolar tissue. There was moderate ascites. The stomach and intestines were deeply stained with disintegrated blood-extravasations and clots. The liver was extremely granular, and was of the character called "hobnail." It was of very dense consistence, cut like leather, and weighed 64 ounces. There were evidences of perihepatitis and perisplenitis. The kidneys and other viscera were blanched. The hæmatemesis set in on March 3rd, 1866, with great violence, and recurred again and again, finally causing death on March 10th. There were tarry stools from time to time.

THE CONTAGIOUS DISEASES ACTS.—At a conference of members of the National Association for the Repeal of the Contagious Diseases Acts, held at Westminster Palace Hotel, and presided over by Mr Stansfeld, M.P., the present position and prospects of the agitation for repeal were fully discussed, and the following resolution agreed to: "That this conference protests against the longer continuance on the statute book of the Contagious Diseases Acts, 1866-69, after their condemnation by the last House of Commons, and their partial suspension by successive Governments since then. That it is of opinion that these Acts ought now to be repealed ; and that the members of this conference pledge themselves to support, by every means in their power, their leaders in the House of Commons in taking whatever measures may appear, to their judgment, the best for securing their prompt and unconditional repeal." The conference was very numerously attended.

CLIFTON DISPENSARY.—At the general meeting of the Clifton Dispensary, on April 6th, Mr. Goodwyn, one of the governors, in alluding to the retirement of Dr. J. D. F. Parsons, Resident Medical Officer, said that he had served them faithfully for twenty-four years, and was now incapacitated by old age. He, therefore, proposed that he should have the equivalent of a year's salary and house-rent—that is, £200. This was seconded by Canon Mather, supported by the Rev. C. H. Wallace, the Chairman, and carried unanimously.

REVIEWS AND NOTICES.

ES ON ANÆSTHETICS. By ARTHUR S. UNDERWOOD, M.R.C.S., D.S.Eng., Lecturer on Dental Anatomy and Physiology, and sistant-Surgeon at the Dental Hospital of London. First Edition. ndon: Claudius Ash and Sons. 1885.

small and unpretending, but interesting, work will well repay sal by the many who are called upon to administer anæsthetics. The ing chapter contains, besides some introductory remarks, a short his- of anæsthetics; in which the writer naturally shows how deep is the of gratitude to the dentists which the whole world owes for their vements in first advocating the scientific use of anæsthetic agents, subsequently in reviving the use of nitrous oxide when the vledge of its valuable properties had become well-nigh forgotten. ie second chapter, general considerations respecting the effects of thetic vapours on the nervous system are stated; and some useful concerning the taking of food and stimulants by the patient e an operation, are quoted. The administration of nitrous oxide and the precautions which the administrator should observe, by the next chapter. The writer's experience on this subject is rally large, and he remarks that it is the main object of the book. otes that few states of health or disease contra-indicate the use of with which conclusion most anæsthetists will be found to agree. apter is devoted to M. Paul Bert's experiments, in which nitrous gas was given under pressure with oxygen. Ether and its ad- stration engage a short chapter; which, in a future edition, we ve, the author intends to enlarge considerably. At present, the nistration with Ormsby's inhaler is alone mentioned; the leathern and Clover's inhaler are not noticed. The useful A C E mixture missed in less than one page. Notes on chloroform occupy the chapter, of which the greater part is taken up by a description e experiments of M. Bert, respecting the effects of atmospheres loroform of definite percentages; from which he obtained his esthetic dose," "fatal dose," and "workable area" between the ormer.

. UNDERWOOD endorses the opinion that so-called deaths chloroform are due to fright, on commencement of the tion when the patient is insufficiently anæsthetised, or the ad- stration of too strong a dose of chloroform, and remarks that is little or no danger of cardiac syncope during the *careful* ad- stration of the anæsthetic. The italics are ours; but we believe notwithstanding the very favourable testimony of Sir Joseph r in support of this opinion, the pendulum of professional opinion wly but surely swaying in the opposite direction.

e final chapters describe the physiology of anæsthesia, showing the in which the various faculties of the nervous centres are affected by hetics, together with its reversal during recovery. In the ap- x, quoted cases, with illustrations and descriptions of apparatus, few other matters, are placed together. The work, as its name es, is a collection of "notes," many of which are valuable and l, rather than a text-book on anæsthetics. In its present shape, ikely to be somewhat more serviceable to dentists than to prac- ers engaged in general surgery. The latter would appreciate information respecting the methods of administering each hetic, and the particular cases for which the anæsthetist should this or that anæsthetic agent. The writer will do well, if er edition is called for, to introduce "notes" on these and some important points.

, CUCAINE, AND ITS SALTS: their History, Medical, and Eco- nic Uses, and Medicinal Preparations. By WILLIAM MARTIN- LE, F.C.S. London: H. K. Lewis. 1886.

author of this little book, whose name is already well known is joint authorship of the *Extra Pharmacopœia*, has col- l into these pages notes of the information that has at ent times, and especially during the last eighteen months, been shed respecting the cuca plant, and its very popular alkaloid. He to have made a good selection of his quotations, and has fur- d an interesting series of notes. The earlier chapters of the are devoted to the accounts of the plant, and its use by the ns of Bolivia, Peru, and neighbouring nations, that are contained writings of the historians, who treat of the Spanish conquests uth America, in the sixteenth century, and of other Spanish llers from that date. Even in 1548, cuca was "more esteemed the best wheat." The cause of the superstitious veneration in the plant was held by the Indians is not to be wondered at, when one considers that it produced, or was thought to produce, in those who used it, insensibility to hunger and thirst, an addition to bodily strength and vigour, and some mental exaltation. The accounts by modern travellers of the addiction of the Indians to the coca plant, of its baneful effects when taken in excess, and Dr. Weddell's excellent notes, published in 1853, of the cultivation of cuca, and of its use by the Indians at that date, are also given by Mr. Martindale. The narratives of Scherzer, Fuentes, and others, all go to confirm the stories told by travellers of former times, of the great bodily exertions on very small allowances of maize, but with a supply of cuca leaves for chewing, undergone by the natives of Peru and Bolivia. The care which has to be taken in the cultivation of the plant, in the picking and drying of the three or four annual crops of leaves, and cuca in commerce, are described by the author. The use of cuca as a restorative and a beverage are noted; and the opinion of Gubler is quoted, that "cuca brings to the nervous system the strength with which it is charged, in the manner of a *fulminate*, with this difference, that it yields it slowly, not all at once." The various pharmaceutical preparations of cuca, including an extract, an infusion (resembling tea), and a wine, and its medicinal uses, and references thereto, are noted. Under this head, the use of the leaves made by Sir R. Christison, and others, in walking feats, which was duly chronicled in the BRITISH MEDICAL JOURNAL, for 1876, is quoted. Lastly, cucaine, its salts and preparations, of which more than two dozen are described, a full list of the uses of cucaine, and medical notes and references thereto, quite up to date, occupy the final chapters of this work. We have no space to do more than notice that Bignon recommends the benzoate, rather than the familiar hydrochlorate, for common use, on the ground that the former is quite painless when applied to the conjunctiva; whereas the hydrochlorate, at first, produces a smarting sensation, which precedes for some moments the anæsthetic effect; and that the benzoate produces a much more persistent anæsthesia than does the hydrocholate salt. Altogether, the opportune appearance of this little volume will be welcomed by the many who require concise and easily attained information on the subject of cuca and its alkaloid; and its author has supplied, by its publication, a much felt *desideratum*.

NOTES ON BOOKS.

An Inquiry into Several Methods of Administering Nitrous Oxide Gas. By F. HEWITT, B.A., M.B.Cantab., Administrator of Anæsthetics to Charing Cross Hospital, etc. 1886.—This is a reprint of an article that originally appeared in the *Medical Chronicle* for February, and which the author has now published in separate form. Dr. Hewitt enumerates the methods that have been suggested for the administration of nitrous oxide gas; he gives the results of experiments which he has made with reference to some of these methods, with the conclusions that may be drawn therefrom; and makes suggestions as to alterations in the present methods of administration which he would propose. The outcome of his experiments is, that he advocates the inhalation of pure nitrous oxide gas until some evidences of commencing anæsthesia appears. When such a stage is reached, the taps are arranged for the patient to breathe in and out of a supplemental bag, holding at the beginning of this stage a gallon and a quarter of the gas, until profound anæsthesia supervenes. By this method, the average amount of gas used by each patient, in one hundred cases, was found to be three and a half gallons; and, in every case, perfect anæsthesia was induced. The author believes that, by the adoption of this method, the whole of the blood becomes saturated with the gas—not a portion of it only—and that the stage of anæsthesia is consequently prolonged. He gives an ingenious explanation, upon physiological principles, of the grounds upon which he considers he may base his conclusions; and describes, with the aid of a wood-cut, the face-piece, by means of which the method of administration that he advocates may be achieved.

DONATIONS AND BEQUESTS.—Mr. Matthew Whiting has given £1,000 to King's College Hospital, through one of their nursing sisters, for the purpose of enabling them to keep open eighteen of their surgical wards through the coming year.—The annual report of the Chester General Infirmary acknowledges the receipt of £500 from His Grace the Duke of Westminster, out of the fees paid for viewing Eaton Hall; £500 under the will of Mr. R. Barbour, of Bolesworth Castle, and one hundred guineas in memory of Mr. John Rowe Dutton, from members of his family, besides many smaller amounts.—The Salisbury Infirmary has received £100 under the will of Mr. John Tregenwell, and £100 under that of Mr. Martin Sweetapple.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 24th, 1886.

THE BARTLETT CASE.

THE trial of Mrs. Bartlett, at the Old Bailey, for wilfully murdering her husband by the administration of liquid chloroform, terminated on Saturday last in her acquittal of the crime.

The trial was remarkable in many ways. It was unique in being the first case on record in which any person had been accused of poisoning another by liquid chloroform. It was full of dramatic incidents. It was remarkable in the fact that the Attorney-General claimed his undoubted right of reply to the Counsel for the defence; and so it happened that, although no witnesses were called for the defence, the prosecution had, with the exception of the summing-up of the judge, the last word with the jury. Among the dramatic incidents, one of the most striking was that the Attorney-General offered no evidence against the prisoner, George Dyson, who was charged with being an accessory before the fact. He was accordingly found not guilty, and formally discharged from the dock, to reappear, on the second day of the trial, as a witness for the prosecution.

Another incident was that, at the last moment, and after the Attorney-General had replied on the whole case, and nothing apparently remained but for the judge to sum up, Annie Walker, the nurse who attended Mrs. Bartlett in her single confinement, was again placed in the box, and gave evidence to the effect that both Mr. and Mrs. Bartlett informed her that this childbirth was the result of a single act of coition. But the most striking incident of all was that, while the foreman of the jury was making his prefatory remarks concerning suspicion before actually declaring the decision of the jury, and from the tone of which remarks it was evident that the verdict would be one of acquittal, the result was, by some means, telegraphed to the crowd outside, and the foreman's voice was completely drowned by the tremendous burst of cheering which arose from without. When the verdict was fully declared in the Court, a similar outburst took place there, and all efforts to quell it were, for a time, ineffectual.

To us, who do not pretend to understand the working of the law, the peculiar privilege which the Attorney-General claimed is an anomaly, which may work well in some cases, but which, undoubtedly, did not in this. According to the judge, it is a privilege which only the Attorney-General and the Solicitor-General can claim, and they can claim it only when they personally appear in and conduct a case for the Crown. In the case before us, the Attorney-General by no means clearly formulated, in his opening speech, any theory, excepting that the introduction of chloroform into the stomach by another person was possibly "preceded by an external application, by which t person was lulled into a state of stupor." Mr. Clarke, for t defence, was therefore compelled more or less to fight shadows; a the Attorney-General actually attempted, in his final reply, to intr duce a new theory, which, up to that point, had not been suggest in the remotest degree. Of course, Mr. Clarke interposed, and protest vigorously; and the episode told strongly against the case for t prosecution.

Turning to the actual evidence, we feel that it is not our provin to dilate upon the peculiarly unwholesome aspect of the whole cas especially the repulsive relations existing between Mr. and Mrs. Bar lett and Mr. Dyson. We cordially agree with the judge, in h tremendous censure of Mr. Dyson's con duct; and we regret that should have found it necessary to interpose while a medical witne was giving his evidence, and to say that if he (the witness) wou think less of his own personal share in the matter, and more abo the solemn inquiry, it would be much better. We further regret th the judge, in his summing up, felt compelled to again allude to th witness, and to state that he, the witness, seemed to be imbued wi a spirit of romance and sensationalism, and that they could not safe trust the impressions which he formed, although there could be n doubt that the witness meant to speak the truth. It is but righ however, to say that all the other medical witnesses and exper gave their evidence in such a manner as to merit the commend tion alike of the judge, and of the prosecuting and defending couns Mr. Edward Beal's searching cross-examination, before the magi trate, of Dr. Green and Dr. Stevenson, concerning the result of the *po mortem* examination, conducted by the former, and of the tests an processes employed by the latter, seemed to convince the counsel f the defence that no hypothesis of death by natural causes, or an question as to the general accuracy of the analysis, could be advance For, at the trial, the suggestion that the cause of death was by liqui chloroform was not in the least degree combatted, nor was an question put to Dr. Stevenson, impugning in the least degree th accuracy of his experiments.

Assuming, then, that death did take place by the swallowin of chloroform, how did the chloroform find its way into th stomach of the deceased? As the judge said, there is no theor against which numerous objections may not be raised. It migh have been taken: 1, by accident; 2, by design, by the decease himself; and, 3, administered with homicidal intent by anothe person.

The theory of it being swallowed by accident seems quite untenable since such an accident would cause anyone with such a nervous tem perament as the deceased was proved to possess to at once make great outcry. He would call Mrs. Bartlett, possibly rouse the whol household, and a medical man would be sent for. These remarks, in ou opinion, also apply to the theory started, without notice, by th Attorney-General in his reply, that Mrs. Bartlett might have give the deceased a fatal dose of chloroform, in conjunction with something else, and that it was gulped down in confidence.

We admit that, as late as January, Dr. Scott, writing in th *Therapeutic Gazette*, states that he has given chloroform in doses o a teaspoonful to children, and up to a tablespoonful to adults, pro ducing not harmful, but beneficial results. It must, however, be re membered that the few cases which he cites in any detail were prac tically in a state of unconsciousness, or on the borderland of delirium

nens from alcohol. The theory that the deceased took the chloro- with intent to kill himself is quite consistent with the facts of case, and with Mrs. Bartlett's story, with one important exception. bottle containing the remainder of the chloroform was never seen any single witness.

f it had been seen on the mantelpiece when Mr. Leach first saw dead body, there would have been the strongest presumption of . Bartlett's innocence, and her story would have been consistent h the facts throughout. But the bottle was not seen. More cannot be ; for, judging from the contradictory and confusing accounts about les and glasses given by Mr. Leach and Mr. Doggett, it is evident t no really systematic search for bottles was ever made; and a bottle ed on the wide mantelpiece, behind one of the ornaments, might ly have escaped notice. If it be admitted that the bottle might e been on the mantelpiece, it seems quite possible that ing the interval of Mrs. Bartlett's absence from the room, n she washed herself and changed her dress, the deceased might e swallowed the chloroform, resolutely have prevented himself n uttering any outcry, have become unconscious, have breathed torously, and finally have been discovered at about 4 A.M., by . Bartlett, to be dead, and, to her perceptions, cold.

he theory that the chloroform might have been administered to the ased, with criminal intent, by another person, raises many points consideration. It is unnecessary to discuss for a moment the possi- y for a slight woman like the accused to have given the chloro- , either in the liquid form by the mouth or by inhalation, to deceased against his will, and when he was awake or fully conscious. only remains to consider the probabilities of Mrs. Bartlett having able to have administered the liquid chloroform to the deceased when naturally asleep; 2, when more or less unconscious, under effect of chloroform by inhalation, successfully administered to ased while asleep; 3, when asleep under the influence of a nar- only; 4, when under the influence of a narcotic administered , then further rendered safely unconscious with chloroform by lation.

With regard to the first consideration; any attempt to pour id chloroform down the throat of a person naturally asleep, would antly awaken that person, and there would probably be a violent ry and disturbance.

With regard to the second; there would be the initial difficulty etting the patient under, without awaking him. It was proved nctly in the evidence, and by reference to recorded authority, this is a matter of extreme difficulty with adults, even in the ls of skilled operators. How much more so would it have been e hands of Mrs. Bartlett! Assuming, however, that the attempt successful, the only period, under these circumstances, during h the chloroform would be likely to be quietly swallowed, if simply ed into the mouth, is that so-called stage of inhalation, when e is insensibility to pain; when reflex irritability is impaired, to a ter or less degree, and becomes gradually feebler, until all reflex n is held completely in abeyance, thus reaching the next so- d stage, during which the actual act of swallowing could not be rmed. If chloroform were successfully given by inhalation to a ing adult, the period of excitement and incoherence before in- bility to pain would probably not ensue; and when pain could be felt, the pouring of liquid chloroform into the mouth d probably arouse the person operated upon. Dr. Stevenson, before the coroner, estimated the quantity of chloroform, originally swallowed, to be about one ounce; and, judging from the context, he meant one fluid ounce. It is highly probable that before a person, in the stage of chloroform-narcosis by inhalation most favourable for swallowing, would get this amount into his stomach, he would make an inspiration, and so draw some of the chloroform into his air-passages. It is certain that this would occur when reflex irritability was entirely lost. It is within the experience of everyone who has seen any operations on the tongue, soft palate, or adjacent parts, that the patient makes no attempt to swallow any blood lying at the back of the throat, when he is fully under the influence of an anæsthetic, and that the blood does not flow down the collapsed œsophageal tube. Trendelenburg's tampon was devised to obviate the inspiration of blood into the air-passages, during such operations. It is within our own personal experience and observation, that, when chloroform had been poured into the mouths of animals lying on their backs, and under the influence of an anæsthetic to such a degree as to cause apparent insensibility to pain, on making the *post mortem* examination, thirty-eight hours after death, much more chloroform was found in the lungs than in the stomach, in a case in which the reflexes were existent when the chloroform was poured in; and none was found in the stomach in a case in which all reflex irritability was lost. In both cases, the trachea, bronchi, and portions of the lungs were intensely inflamed, and there were many small patches of extravasation throughout the whole of the trachea and bronchi.

In the case of the deceased Bartlett, the larynx, trachea, and lungs were absolutely normal. Of course, all the difficulties enumerated as occurring after the successful administration of chloroform during sleep could be overcome by the use of a tube and funnel, or a syringe with a long nozzle; but there was no evidence that Mrs. Bartlett possessed such apparatus, or had, for her, the extraordinary knowledge of physiology requisite for the use of the tube at least.

3 and 4. The same difficulties would present themselves in the administration of liquid chloroform after the administration of a dose of a narcotic alone, or followed by chloroform given by inhalation; and there is no evidence that Mrs. Bartlett had ever had in her possession any narcotics, excepting those mild doses which were prescribed for the deceased, and which were shown, in evidence, to have little effect.

To sum up, it seems to us more reasonable to suppose that, taking into account the fact that there was an entire absence of the least inflammation in the air-passages, or evidence of the presence of chloroform in them, the theory that deceased voluntarily swallowed the chloroform is nearer the truth than that Mrs. Bartlett should have blundered into the successful committal of a capital crime through a fortunate, or rather unfortunate, concatenation of circumstances.

Since the above was written, a letter from the foreman of the jury has appeared in the columns of the *Times* and the *Daily Telegraph*. From this, it appears that eleven of the twelve were in favour of a verdict of not guilty, with a rider that "we were of opinion that, considering the state of health Mr. Bartlett was in, or imagined he was in, and the state of mind the evidence showed him to be in, he administered the chloroform to himself, with a view of obtaining sleep or committing suicide;" but the twelfth juryman would only consent to a verdict in the form in which it was given; and the majority, rather than subject Mrs. Bartlett to all the agony and expense of a second trial, gave way upon the point.

DR. LATHAM'S CROONIAN LECTURES.

In the Croonian Lectures recently delivered at the College of Physicians by Dr. Latham, full reports of which have appeared in the last three numbers of this Journal, "Some points in the Pathology of Rheumatism, Gout, and Diabetes," were discussed in a most able, interesting, and instructive fashion. Dr. Latham's investigation bore chiefly on the question from the side of physiological chemistry, in which he is an expert; but the vaso-motor system, which has of late assumed much importance, and which, on account of the very limited accurate knowledge we possess regarding it, affords a splendid field for all manner of ingenious hypotheses, also, of necessity, came in for a large share of his attention.

As Dr. Latham truly observes, there is still much about the pathology of rheumatism, gout, and diabetes, which is obscure and unsettled; and, accordingly, the subject is an attractive and interesting one for investigation. In his recent lectures, he has certainly made a fairly successful attempt to afford a clearer insight into these disorders by an examination of the changes supposed to take place during their progress. There are many symptoms in common in the three diseases; and, in each, certain changes show themselves in the blood as the result of abnormal metabolism, either in the muscular or in the glandular tissues.

It has been found that a large number of animal products, such as leucin, glycocin, and lactic acid, may be artificially prepared in the laboratory by oxidising the various alcohols, and thus forming their corresponding aldehydes, and then combining the latter with hydrocyanic acid. These cyan-alcohols are very unstable, for, when treated with ammonia, they form a series of unstable cyanamides that easily undergo condensation, and conversion into imido-nitriles. In these cyanogen compounds, the lecturer suggests, we have substances possessing some of the properties that belong to living tissue, such as those of undergoing molecular change and of condensation; and if, as he pertinently asks, from these substances we can obtain the various products that result from the disintegration of albumen, may not albumen itself be simply a compound of these elements? Dr. Latham then tries to show that albumen is a compound of cyan-alcohols united to a benzene nucleus, these alcohols being derived from the various aldehydes, glycols, and ketones, or formed in the living body by the dehydration of the amido-acids; and that, from the body so constituted, all the different substances may be obtained which have been extracted from albuminoid tissues. Although we cannot say we agree throughout with the lecturer, yet it must be confessed there is much ingenuity displayed in his speculations, and these in themselves are often highly suggestive. Taking albumen, then, as having a molecular constitution allied to the cyan-alcohol compound referred to above, Dr. Latham supposes that the amido-acids, glycocin, leucin, etc., in passing from the alimentary canal to the liver, are dehydrated, orming a series of cyan-alcohols, and attached to a benzene nucleus; that they then pass into the circulation, and give rise in the tissues, partly by condensation, and partly by hydration and oxidation, to the various effete products that are eliminated from the system chiefly in the form of carbonic acid and urea.

In his second lecture, Dr. Latham takes up the question, "What, in rheumatism, is the starting-point of the morbid process?" Now, while he regards lactic acid as being formed in excess in this disease, and its presence as being a modifying factor of the symptoms in some degree, he does not look upon it as the chief agent in producing them; in fact, the excessive formation of the acid, instead of being th cause, is itself, he says, merely one of the symptoms of the disease.

It is now a matter confirmed by clinical observation, that lesions i the spinal cord or along the course of the motor nerves may give ri to changes in the joints, closely resembling, in many cases, the co ditions seen in subacute rheumatism, and in others producing, as i Charcot's disease, rapid disintegration of the bony tissue. But, i all the cases, we have changes taking place in the joints produced the result of causes acting on the nerves peripherally or centrally. T Dr. Latham's mind, the phenomena of rheumatism are suggestive an irritating cause acting upon portions of the central nervous syste and the *materies morbi* he tries to prove to be uric acid, which ma possibly have its origin in an excessive formation of glycocin in th muscular tissue. For between glycocin and uric acid a close relatio ship exists. By heating glycocin and urea together, for example, uri acid can be obtained; and the formation of the latter body in th animal economy may, therefore, be thus explained: Glycocin, co jugated with cholic acid as glycocholic acid, is poured out in the bil The glycocin, as well as taurin, are afterwards absorbed from th intestine, and, together with the other amido-bodies, leucin an tyrosin, certain products of the tryptic digestion of some of the albu minous food, reappear in the urine as urea, the conversion occurring most probably, in the liver. But, suppose the metabolism of th glycocin to be interrupted, while that of the taurin and leucin is co tinued, then we should have in the gland glycocin and urea, bodi whose conjugation, we have seen above, results in the development uric acid; and that such a conjugation may occur in the organism we have every reason to believe. Nor is it difficult to understand that if the final conjugation of these bodies takes place in the kidney with the formation of very slightly soluble ammonium urate, a portio of the latter may not be excreted, but remain in the blood; and meeting there with soda, may be converted into sodic urate, the for in which it is deposited about gouty joints.

The imperfect metabolism of glycocin is, therefore, the primary and essential defect. The fault lies in the "sluggish" liver whose cells, from overwork, become inactive or destroyed, or whos secretory nerves are paralysed somewhat from excessive stimu lation. When, therefore, any want of harmony exists between th muscular supply and the activity of the hepatic cells, imperfect meta bolism will ensue, with the consequent formation of uric acid. This imperfect metabolism may likewise depend upon the ingestion of too much material; and, if the liver-cells be already exhausted by long continued over-stimulation, complete metabolism will be effected with still greater difficulty. The excess of uric acid, generated in one o other of these ways, from defective changes in the liver, may then b eliminated; or it may circulate as a poison in the blood, appearing in the one case simply as urates or uric acid in the urine, and develop ing in the other the arthritic symptoms of gout. Much would appear to depend upon the condition of the kidneys. If these organs are sound, as in the majority of people below middle-age, the uric acid unless it be in large excess, will be excreted; but, if they have become weakened or diseased, the elimination will be incomplete, and an irri tation of some portion of the nervous system will be produced in conse quence, the outward manifestation of which will vary with the centre most sensitive to the morbid stimulation. Thus, if the sensitive spot be the nucleus of the vagus, we can easily understand the development of gastric uneasiness, of asthma, or of cardiac irregularities. Or, if we

ose the vaso-motor centre to be the part affected, its branches lying such peripheral parts as the toes, fingers, and ears—which most susceptible to centric morbid stimulation—will be the first to fected, and accordingly bring about vascular constriction and ed metabolic activity. The constructive metabolism about the s is stimulated, although the blood-supply and destructive meta- m are lessened, and an increased development or growth about the is the consequence. And as the blood going to the affected part ains sodic urate, this salt will be deposited along with the other ances poured out into its tissues.

it the vaso-motor centres may be stimulated indirectly, as well rectly. Peripheral irritation of efferent or sensory nerves may this. Increased blood-pressure, we know, can readily be ced by stimulating the central end of a divided sensory nerve; as Dr. Latham very fairly concludes, we have here an explanation gouty paroxysm. The uric acid, by stimulating both the sensory and the more active portion of the vaso-motor centre, causes in the joint, and contraction of the vessels; with continued ulation, the pain increases, and the nerve ultimately becomes ysed; the vessels now dilate, and destructive metabolism is ulated; relief from pain next occurs, and, with it, more or less piration, which is another indication of the paralysis of the sym- etic.

Independently, however, of any functional or organic change in the or in its nervous connections, as Dr. Latham points out, there is a way in which uric acid may be developed. This is from the excess- formation of glycocin in muscle, the result, it may be, of a feverish The glycocin thus generated undergoes certain changes in the or spleen, being ultimately transformed into uric acid, which, the nervous system and the kidneys are sound, is eliminated by atter, and the attack subsides. But if the vaso-motor system of patient be in a weakened state, as the result of exhaustion or itance, then, following the chill, there would be more or less lete paralysis of the nerves regulating the vessels of the mus- area, and, when reaction set in on the surface of the skin, there l be less power in the muscular nerves to recover from their para- condition. Further, the exhausted vaso-motor centre, not having ered itself, its continued stimulation by glycocin or uric acid no r excites it, but causes further exhaustion, with consequent er dilatation of the vessels in the vascular area in connection it, and more complete breaking down of its tissue-elements.

t uric acid also affects the nutrition of the joints. How it does n the case of gout, has already been mentioned. In rheumatism, ver, the dominant vaso-motor centre is exhausted, in the beginning, accordingly there are destructive metabolism and vascular dilata- While in gout the uric acid results from a modified innervation liver, or exhaustion of the hepatic cells, leading to non-trans- ation of the glycocin, and the consequent formation of uric acid; eumatism, on the other hand, the formation of the glycocin de- upon changes in the vascular area, and in the muscular meta- n, lactic acid being formed at the same time. The nutrition of oint will, therefore, be modified, not only by the uric, but also by actic acid, dilatation of the arterioles being produced, more par- rly of the cutaneous area.

ving indicated the way in which the symptoms of gout and rheu- m may be produced, Dr. Latham appeals to clinical experience ow how far the results obtained from the practical treatment of these disorders support the views which he has advanced as to their pathology. His remarks on the action of benzoic and salicylic acids are important in their practical bearings; and the seven rules he lays down to ensure success in the administration of the latter remedy, which he recommends to be given in the form of pure natural salicylic acid, are well worth the attention of every practitioner of medicine. In gout, he prescribes the use of colchicum during the paroxysm; but afterwards, and to prevent its recurrence, mercurial or other purgatives, benzoic or salicylic acid, and a suitable diet. The good results to be obtained in some forms of diabetes from the action of salicylic acid, as well as its mode of action, are likewise discussed.

Although, in certain respects, Dr. Latham's lectures may be somewhat too abstruse, from a chemical point of view, for any but scientific physicians, yet we believe their perusal will repay every thoughtful practitioner of medicine; for Dr. Latham has, we think, succeeded in his endeavour to indicate some of the changes in the nervous system, the blood, and the tissues, which may take place in diabetes, rheumatism and gout. He has, further, brought together a number of facts, as he says himself, and drawn certain inferences from them, which, whether right or wrong, will certainly help to a better understanding of the diseases in question.

DR. WOOLDRIDGE'S RECENT RESEARCHES ON COAGULATION OF THE BLOOD.

Both in its chemical and physiological aspects, coagulation of the blood has important physiological and pathological relations; and, although many facts are now known which throw much light on the changes which take place, the phenomena have by no means been fully explained. The earlier researches of Buchanan and Schmidt tended to prove that fibrin was formed from two proteid bodies, paraglobulin and fibrinogen, by the action of a special fibrin-ferment, which was liberated by a disintegration of the white blood-corpuscles. Hammarsten, however, has shown that paraglobulin plays no part in the formation of fibrin, fibrinogen being the only precursor of that body. So simple a statement of the chemical changes in coagulation does not, however, explain all the phenomena observed, as Dr. L. C. Wooldridge has shown in the extended experiments which are the subject of this article.

Living blood, as is well known, consists of plasma and corpuscles. Shed blood soon coagulates, forming a clot (fibrin and corpuscles) and serum (containing albumen and paraglobulin). The question of the composition of living plasma is that which is the most important in studying the changes in coagulation. The method used in the investigation has the object of preventing coagulation. Thus, if blood be drawn into an equal quantity of 10 per cent. sodium-chloride solution, it will not coagulate; nor will drawn blood coagulate, if, during life, a solution of peptones be injected into the vessels. In the latter case, if the blood be repeatedly centrifugalised, the corpuscles are completely separated, leaving a clear plasma, the reactions of which can be studied. If this peptone-plasma be cooled to 0° Cent., a body is separated which consists of what has hitherto been considered as the "Blutplättchen," or hæmatoblasts, a body which is a proteid, and which, although uncoagulable on the addition of fibrin ferment, will coagulate on adding the lymph-corpuscles. Wooldridge, therefore, considers the hæmatoblasts, not as organised bodies, but as proteid precursors of fibrin.

After the separation of this body, peptone-plasma gives only a small clot on the addition of fibrin-ferment, though it may be made to become quite solid if it be diluted four times with water, and a stream of carbonic acid be passed through the liquid. The plasma, therefore, contains a small amount of ordinary fibrinogen, coagulable by ferment, and a large amount of another precursor of fibrin. This statement is confirmed by the investigation of blood which has been prevented from coagulating by sodium chloride, and from which the corpuscles have been removed. The resulting plasma gives only a slight clot with fibrin-ferment, and the supernatant liquid is found to give no precipitate with heat up to 90° Cent.; whereas, if fibrinogen were present, it ought to be precipitated at 56° Cent.; yet this plasma gives a dense clot on diluting four times, and adding fibrin-ferment. These results are more remarkable when we consider that albumen is present, and ought to come down at 70° Cent.

The most important part of Dr. Wooldridge's researches, and that on which he laid special stress in the Croonian Lecture before the Royal Society, and in the lecture delivered before the Vice-Chancellor of the University of London, and the Master of the Grocers' Company, deals with the agents which hasten coagulation, and they are important from their pathological, and even, perhaps, therapeutical significance.

By uncontrovertible experiments, it has been shown that lecithin, which is a phosphorised fat, has a marked effect in bringing about coagulation. Thus, if dog's blood be drawn into dilute sodium chloride solution, at a temperature of about freezing point, it is found that it will coagulate if lecithin be present in an emulsified state, whereas coagulation is delayed for many hours, if the low temperature be maintained, and lecithin be absent. This is not all, however; an "active lecithin" may be obtained from lymph-glands, blood, testis, brain, and yeast; and, if the fluid of lymph-glands, from which all corpuscular elements are removed by centrifugalising, be injected into the vessels, there ensues more or less rapid intravascular clotting—an action which is dependent on the lecithin associated with the fibrinogen. This important result may, in the future, aid in the elucidation of the pathological changes in the blood occurring in thrombosis; but it has another bearing, of a much more practical nature. Wooldridge has shown that this body (lecithin-fibrinogen) is developed to the greatest extent when the animal has a diet containing an excess of fat; so that it may, in the future, be proved that a fatty diet would tend more materially to the consolidation of an aneurysm than a starvation one, the essence of Tufnell's treatment. Moreover, so active an extract may be obtained, that it may be used by injection to cause clotting in the sac of an aneurysm. However this may be, Wooldridge's results throw a new light on the phenomena of coagulation. The chief points which have been shown are, that the "Blutplättchen" are not organised bodies, but a coagulable proteid; that lecithin has an important function in initiating coagulation, the white corpuscles and fibrin ferment playing only a secondary part, so that the phenomena would be more akin to "crystallisation" than to fermentation; and that lymph-glands contain a body which causes intravascular clotting.

It is announced that it has been decided to erect a mural monument to Dr. Austin Flint in Bellevue Hospital, New York.

M. Vulpian has been elected Secretary for life to the Academy of Sciences, in place of M. Gamin, recently deceased.

A committee, headed by M. Pasteur, and formed for the erection of a statue to the illustrious chemist, J. B. Dumas, in his native town of Alais, has fixed August 1st for a competition of sculptors.

Dr. E. G. Janeway has been appointed Professor of the Principles and Practice of Medicine in Bellevue Hospital Medical College, in succession to the late Dr. Austin Flint.

The fifth German Medical Congress took place in Wiesbaden last week. It has been a brilliant one in wealth of material. The special subjects for discussion were Diabetes Mellitus; the operative treatment of Pleural Exudations; and the treatment of Syphilis. In addition, twenty-two original communications on various medical subjects were announced.

The Reading guardians have been applied to by Dr. Sanderson, Professor of Physiology at Oxford, that the bodies of unclaimed paupers might be handed over, under the provisions of the Anatomy Act, to the School of Anatomy of the University, as there is a dearth of subjects for the dissecting-room; but they have, we regret to learn, just declined the request by seven votes to six.

VENTILATION OF THE HOUSES OF PARLIAMENT.

Samples of the air in the sewers of the Houses of Parliament have been taken, which are to be analysed, and further samples will be taken when the works indicated by Sir H. Roscoe have been carried out.

TRICHINOSIS IN SOUTHERN BAVARIA.

A severe case of trichinosis has occurred in the person of a medical man in Ammersee. It is thought that this is the first case of the disease south of the Danube. The meat, which was the cause of the infection, was obtained from Thuringia.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

We understand that an interesting feature of the forthcoming festival of the Royal Medical Benevolent College at the Holborn Restaurant, on Tuesday, May 11th, is that the music will be entirely in the hands of members of the medical profession, including such distinguished amateurs as Dr. Lavies, Mr. Critchett, Mr. Hepburn, etc., Mr. Wilhelm Ganz presiding at the pianoforte.

ROYAL SOCIETY.

Among the fifteen names, selected from a list of sixty-two by the Council for election, on June 4th, as Fellows of the Royal Society, it is satisfactory to find those of three members of the medical profession whose claims to this coveted distinction are based, in each case, on good work done for the profession. Surgeon-Major Timothy Lewis, of Netley; Dr. Pye-Smith, of Guy's Hospital; and Mr. Victor Horsley, of University College, were the fortunate candidates. Mr. Warrington, well known for his researches on nitrification, and on the purification of waters, was also selected by the Council on the same day.

THE HOSPITAL SUNDAY FUND.

Sir Sydney Waterlow, and, subsequently, Sir E. Hay Currie, presided at a special meeting, this week, of the council of the Hospital Sunday Fund, to consider a number of suggestions which have been made with a view of increasing the amount of the fund this year. Among the suggestions was one that a large number of public meetings should be held throughout the metropolis, including a large one to be held in the City in the week previous to Hospital Sunday; and the special meeting, yesterday, resolved to form a subcommittee with the view of approaching and endeavouring to induce, among others, the following gentlemen to take part in some of the meetings, namely,

s Royal Highness the Prince of Wales, His Royal Highness the ke of Cambridge, Lord Salisbury, Lord Randolph Churchill, the ght Hon. G. J. Goschen, Sir Charles Trevelyan, Mr. Henry Irving,

THE PRESIDENT OF THE LONDON COLLEGE OF PHYSICIANS.

E are glad to be able to congratulate the College of Physicians on e re-election of Sir William Jenner, who, as we anticipated, has con- ited to serve for a further term. We have already stated the asons which induce us to believe that this selection is one which is every way beneficial to the College and the profession. In the im- rtant questions which will be under debate during the coming year the interests of London medical schools and of the profession, for nferring a suitable diploma on students who have passed conjoint aminations; and for bringing fully qualified holders of the joint loma of the Colleges into their rightful position, Sir William nner may, we believe, be counted upon for forward and liberal action. s eminent position and long experience give the greatest weight to s views; and, in assenting again to fill the post, which he has cupied now for a series of years, Sir William Jenner has added to e obligations which he has already conferred upon the College and e profession.

THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

R attention has been called to the fact that the statement recently rrent, that Mr. John Smith, of Bishops-Lydeard, has bequeathed 0,000 to the Royal Medical Benevolent College, Epsom, may pos- ly give rise to misapprehension that, with "such a windfall," this stitution cannot be in present want of money. The real facts of the se, however, we are officially informed, are, that what Mr. John ith has really bequeathed is the *reversion* of his estate after the ath or re-marriage of his widow, still young. The amount never likely to be so much as £10,000, and it may easily be thirty forty years before the College gets a shilling of it.

ST. MARY'S HOSPITAL RESIDENTIAL COLLEGE.

E are pleased to hear that the home which the authorities of St. ary's Hospital have established for their students has proved a great ccess. The accommodation provided at the commencement of the nter session has already become insufficient, and another house in estbourne Terrace has been added to that already occupied. The cial feature of the St. Mary's College, as compared with the other stitutions of the kind already existing, appears to be that there is re a judicious blending of the collegiate system with a family home- e, an arrangement of immense value to the student, and calculated improve his social as well as his academic surroundings. The sistance given to the students by the demonstrators is, again, no re cramming, but an honest attempt to smooth over the difficulties ich beset the student's early career. We commend the enterprise those members of the St. Mary's Hospital staff who have set so cellent an example to other schools, and we wish them all prosperity.

CIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

E quarterly court of the Directors of this Society was held on ednesday, April 14th, the President, Sir James Paget, in the chair. o new members were elected, the deaths of five were reported, in- ding that of Mr. Cooper Forster, a Vice-President. Applications relief were read from sixty widows, nine orphans, and three phans on the Copeland Fund, and a sum of £1,280 was recommended distribution at the next court. One fresh application was read, d a grant at the rate of £30 *per annum* made. The deaths of five dows were announced. A legacy of £50 from the executors of Miss ne had been received. It was resolved to recommend for election the annual general meeting, as a Vice-President, Sir William Bow, man, F.R.S., in the place of Mr. Cooper Forster, deceased; and Messrs. T. H. Smith, Merriman, Vasey, Hutchinson, and Drs. Potter and Godson as directors, in the place of the six senior, who retire. The annual general meeting was fixed to take place at 5 P.M. on May 9th.

THE VACCINATION LAWS.

On Thursday, April 15th, a deputation from the London Society for the Abolition of Compulsory Vaccination waited upon the Right Hon. James Stansfeld, M.P., to urge upon the Government the necessity for an alteration of the vaccination laws. Mr. Tebb, who introduced the deputation, said that, although the society cordially approved Mr. Picton's motion for the abolition of penalties altogether, they thought they would be most likely to succeed in the present House of Commons by proposing a clause under which no person, having signed a declaration that he conscientiously objected to vaccination, should be subject to penalties for refusing to allow his children to be vaccinated. The strength of the anti-vaccinators in the present House of Commons was much greater than in the past. Mr. Stansfeld, in reply, said it now was and always had been his opinion that, however great the merits of vaccination, there was no advantage to be gained by making people martyrs. He very much doubted, however, whether the House of Commons would grant the concession asked for. The subject, however was one well worthy of considera tion, and he would bring the matter before his colleagues. He would suggest that, as the matter was one for inquiry, the anti-vaccinators should endeavour to obtain the appointment of a Royal Commission. We are of opinion that a Royal Commission would be the best means of investigating the numerous alarmist statements with which the press is flooded, and of bringing out once more in a clear manner, the inestimable benefits of vaccination and re-vaccination. The results of the German vaccination law could be compared with our own.

THE PROGRESS OF PROVIDENCE.

The abstract report of the quarter's progress of the Mutual Medica Sickness, Annuity, and Life-Assurance Society, which we publish in another column, shows continued prosperity and rapid development on a sound basis. The quarter shows an increase added to reserve of twelve hundred pounds, the increase for the year being nearly five thousand pounds. During the two years of its work, the Society has accumulated a reserve of ten thousand pounds. The rate of growth of membership, under these satisfactory conditions, naturally quickens; thirty-one new members having been enrolled during the first quarter of the present year. It is characteristic of ordinary human nature, that once it is known that further enrolments are no longer needed, except as a matter of pure benefit to those who join, they become more rapid. In other words, nothing succeeds like success. The payments to sick members during the quarter amounted to £323, for a great variety of illness and accidents, and the letters received from members, expressing their sense of the immense value to them of the operations of the sickness and annuity fund, are most gratifying. Two insurance-claims have been paid during the quarter. All the departments of the fund show an excess over the actual reserves estimated, and the management fund has an economised reserve showing less than half the moderate expenditure originally allowed for.

THE HYDROPHOBIA COMMITTEE.

The Committee appointed by the Local Government Board to inquire and report upon M. Pasteur's method of preventing the development of rabies in persons bitten by rabid dogs, comprises Sir Henry Roscoe, M.P., Sir James Paget, Bart., Dr. Richard Quain, F.R.S., Professor Burdon Sanderson, F.R.S., Dr. Lauder Brunton, F.R.S., and Mr. Fleming, Principal Veterinary Surgeon of the Army. Mr. Victor Horsley, M.B., F.R.S., Professor-Superintendent of the Brown Insti-

tute, has been requested to act as Secretary. The Committee is unpaid, but we understand that a sum not exceeding £300 has been placed at its disposal, to defray the expenses of the inquiry. Sir Henry Roscoe, Professor Burdon Sanderson, and Dr. Lauder Brunton will proceed to Paris at once, and will place themselves in communication with M. Pasteur and his assistants.

A QUACK REMEDY FOR HYDROPHOBIA.

Our Paris correspondent writes:—A French peasant, Emmanuel Balmonnet, has been fined twenty-five francs (£1) for illegally practising as a druggist under the following circumstances. The Balmonnet family have, "for centuries," sold a remedy for hydrophobia, known as Bouteille de Lucay, so named after their parish. Notwithstanding the reputation which this remedy enjoys in the neighbouring districts, Balmonnet was tried and found guilty on the above charge. Balmonnet's counsel called several witnesses to give evidence to the efficacy of the remedy. Among them, were mayors and other local magnates; also, M. Joseph Bonjeau, of Chambéry, the well known discoverer of ergotine. The magistrate disregarded the question of the merits of the remedy, and considered only the right of the vendor to sell it.

TURKISH BATHS FOR THE PREVENTION OF HYDROPHOBIA.

We have received an account of the lad J. Mitchell, who has taken forty Turkish baths, in lieu of undergoing the preventive inoculation of M. Pasteur. We do not think that there is any ground whatever or believing that Turkish baths, in any number, are capable of neutralising the action of a specific blood-poison of slow incubation, and we consider that those who have counselled this proceeding have taken a very serious and undue responsibility. There is no reason whatever for putting faith in the so-called "Buisson" treatment, more than the other thousand and one specifics which have failed. We have more than once had before us the evidence as to this "treatment," and regard it as valueless, and the Turkish bath as a delusion and a snare for the purpose. The course adopted in this case seems to us lamentable and misguided.

HYDROPHOBIA IN RUSSIA.

In the *Russkaia Meditzina*, No. 8, 1886, p. 141, Dr. A. Bürtzeff, of Totma, Valogda Government, writes that, on November 22nd, 1885, seven adult men were bitten by a rabid wolf, which rapidly visited different parts of the town, and then escaped. All the patients were immediately attended to at the local hospital, their wounds being washed out with a strong solution of carbolic acid, and then energetically cauterised with caustic potash in substance; in addition, ligatures, lotion of caustic potash, and chloral hydrate in scruple-doses internally, were used. In three of the patients, hydrophobia appeared on the thirty-fourth, thirty-sixth, and thirty-eighth days; the cases ending fatally in thirty-seven and a half, seventy-one, and sixty-five hours. Subcutaneous injection of curare did not give the slightest relief in any of the patients. According to Dr. Bürtzeff, the symptoms and course of the disease closely tallied with those described by Dr. Bristowe (see British Medical Journal, April 21st, 1883, p. 760); that is, there were present intense pain in the wounds; general hyperæsthesia; violent dyspnœa of the muscles of deglutition and respiration; thirst, with inability of swallowing either solids or fluids; affective insanity, etc. In two of the patients, a tendency to bite everybody, and to gnaw everything within their reach, was observed. The remaining four patients bitten are still in good health. In conclusion, the author lodges a complaint against the freedom with which wolves, rabid and healthy alike, are allowed to run and ramble about the town, no measures to prevent this being taken by the authorities. Probably, the latter will be aroused when a sagacious wolf bites or devours one of their number. Till then, the wolves will remain unmolested, and privileged in their possession of freedom.

M. PASTEUR ON HYDROPHOBIA FROM THE WOLF.

M. Pasteur has embodied, in a second paper read to the Académie des Sciences, on April 12th, the results of his prophylactic treatment of hydrophobia up to that date. Up to March 1st, 1886, he had had 350 patients; in the six weeks following, up to April 12th, he had 376 more, making a total of 726. Of these, there had come from France 505, from Russia 75, from Algeria 40, from England 25, from Germany only 5; and others from all parts of the globe, from Finland to Brazil. The point to which M. Pasteur wished especially to draw attention was that, out of these, 38 had been bitten by mad wolves, 688 by mad dogs. Among those bitten by mad wolves, there had been three deaths before April 12th, and he did not guarantee the safety of the remaining 35. He was very anxious to distinguish the bite of the mad wolf from that of the dog; for he had received several communications on the results of the bite of mad wolves, which led him to think it was more serious and more rapid in its action than in the case of mad dogs. His information, when it is put into a tabular form, shows the following results.

Reference.	No. of Persons Bitten.	No. of Deaths.	Length of Incubation.
Register of deaths at St. Julien de Civry, in Burgundy in 1706.	9	9	One died on the same day, the others after an average of 41 days.
M. Lutil Thimécour, *Revue Scientifique*, 1806.	9	9	One in 24 hours, the rest "after a short time."
Dr. Champion, in a paper read to Institut de France, 1813.	19	11	From 7 to 70 days.
MM. Cailletet and Mariotti, in 1849	1	1	32 days.
Dr. Bompaire, Millan, Aveyron, in 1866.	3	3	Average of 28 days.
From a newspaper, *Le Charentais*, November, 1874.	2	2	25 and 30 days.
Dr. Niepa, in a recent letter, gives a report of deaths in 1822.	4	4	Average of 18 days.
Register of deaths in Avallon in 1811	5?	5	Average of 17 days.

This shows 42 deaths, out of 51 cases observed. Now, M. Pasteur has received 38 cases, and only, as yet, lost 3, instead of about 31, as the above table would have led him to expect. The length of incubation of hydrophobia after a bite from a wolf seems certainly much shorter than after a bite from a dog. This is an important point, as M. Pasteur did not receive his Russian wolf-bitten patients from Smolensk until fourteen or fifteen days after the bite, and would have wished to begin their treatment at least eight days earlier. He used the medulla oblongata of the first Russian patient who died for inoculation in dogs, rabbits, and guinea-pigs, and did not find that the strength of the poison was any greater from the wolf than from the dog; but the greater mortality from the bite of wolves he attributed to the number and character of the bites.

EXCISION OF THE PYLORUS.

A case of resection of the pylorus, terminating fatally, is related by Dr. Van Sterson in the *Weekblad* of January 2nd. He remarks that he has mentioned it intentionally, not to discourage or deter others from the operation; but from his own conviction that, when local and general circumstances are favourable, he believes the operation to be distinctly indicated. In the case mentioned, the patient died from want of strength to resist the shock of the operation, having previously suffered from vomiting and diarrhœa. The patient was a woman, aged 51. When put under chloroform, the narcosis was calm and regular. A tumour was found in the pyloric region; there were no adhesions and no ulceration. The tumour affected the pylorus alone, and was very hard; on microscopic examination, it appeared to consist of a "tubular carcinoma," or "non-typical adenoma." After the tumour had been cut out, the stomach was found to be perfectly empty, a sponge, which had been introduced, returning quite clean. The mucous membrane of the stomach was not ulcerated. The cut ends of the duodenum and the stomach were very carefully sutured together; a couple of camphorated ether injections were given to the patient, and she was

n a warm bed. She roused sufficiently to be able to answer ions, and to state that she felt no pain, but her pulse was scarcely ptible. Camphorated ether injections were continued every er of an hour, but in two hours and a half death occurred. There een no particular difficulty in the operation, and no subsequent ; but the patient had not sufficient vitality to survive the shock.

IE ADDRESS IN MEDICINE AT THE ANNUAL MEETING OF THE ASSOCIATION.

appointment of Dr. J. S. Billings, to deliver the Address in cine at the annual meeting in Brighton, has called forth ex- ions of satisfaction on the part of several of the chief medical dicals in the United States. The *New York Medical Record*, of 10th, in announcing the fact, says: "No better man could been selected to represent American medicine on such an occa- It is an honour well deserved, and we congratulate Dr. Billings dingly." The *New York Medical Journal*, of the same date, s: "It is very gratifying to know that the Address in Medicine l to be delivered before the British Medical Association by an ican, and by so distinguished, and, in every way, so capable a sentative as Dr. Billings. In view of the disappointment, in d to this matter, that was added to the general sense of our loss e death of Dr. Flint, Dr. Billings's succession to the position is ularly satisfactory. It will be recognised in this country that lection is an exceedingly graceful act on the part of those on i it devolved to make a choice."

THE HOSPITALS' ASSOCIATION.

annual meeting of the members of this Association was held on esday, April 14th, at the rooms of the Society of Arts, John t, Adelphi, Sir Andrew Clark, Bart., M.D., in the chair. The t, which was read by Mr. T. Almond Hind, the joint honorary ary, stated that the progress of the Association, during the last had been steady and continuous ; they had opened a central at Norfolk House, Norfolk Street, Strand, for the collection, fication, and arrangement of figures and facts, bearing upon the nistration of hospitals and asylums, and their publication in a to make them available for use. Sectional committees had been uted, and it was intended forthwith to issue a journal devoted to bjects of the Association. Mr. Burdett moved the adoption of eport, which was seconded by Mr. Fell Pease, M.P., of Darling- nd agreed to. On the proposition of Major-General Keatinge, ., V.C., Sir Andrew Clark, Bart., F.R.S., was unanimously d President of the Association. A cordial vote of thanks to the man for presiding brought the meeting to a close.

SCOTLAND.

a meeting of the Town Council, held last week at Johnstone, Ren hire, it was decided to erect a fever hospital for the town, as the of such an institution has been felt.

UNIVERSITY OF EDINBURGH.

ie recent examinations at the University of Edinburgh, seventy- candidates passed the first professional examination in Chemistry, ıy, and Natural History. The second professional examination v going on, and a considerable number of candidates are being ined. When the lists are complete, we will publish them.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.

NG the month of March, 115 patients were treated in the wards e Royal Hospital for Sick Children, Edinburgh, of whom 61 were e hospital on February 28th, while 54 were admitted during the h ; 31 were dismissed cured or recovered, and 10 relieved. The ge number of indoor cases was 62. In the dispensary depart- 444 out-patients were treated, and twenty children were vacci- nated. Of 235 new cases, 187 were from Edinburgh, 37 from Leith, and 11 from the country. The total number of patients who were treated during the month was 579.

UNIVERSITY OF ST. ANDREW'S: INSTALLATION OF LORD RECTOR.

On Saturday last, the ceremony of installation of the Lord Rector of St. Andrew's University, Dr. Donaldson, took place in the hall of the United Colleges. There was a large gathering of students, who, while waiting, conducted themselves in the usual time-honoured fashion. Professor Mitchell, the Senior Professor, presided, and the members of Senatus were present. After a prayer in Latin, the formal ceremony was gone through, which included the placing of the Principal's robes, and the giving to him of the keys of the University. The whole ceremony did not occupy half an hour.

THE OVERLAPPING OF CHARITIES.

An important step is being taken in Edinburgh with regard to a subject which, although not exclusively medical, is of much importance to the profession in a city like Edinburgh, where medical charities abound. A committee has been at work on the subject of the overlapping of charities ; and the following resolutions, proposed by the committee, have been unanimously adopted. 1. That a charity clearing-house be established in a central position in the city, where confidential and reliable information shall be available daily to all persons interested in the proper disposal of charity relief. 2. That all societies, and others known to be intrusted with the administration of charity funds, be invited to exchange information confidentially with the clearing-house officials (one or more), with a view to prevent assistance from being given to the undeserving. 3. That a subcommittee be appointed to endeavour to find suitable premises for a central office, and one or more gentlemen to act as *interim* honorary secretaries, who shall be provided with a clerk or messenger. 4. That a subcommittee be appointed to consider and adopt some means for informing and interesting subscribers, ratepayers, and others, in the objects of the clearing-house. 5. That, as preliminary expenses require to be provided for, a subcommittee be appointed to procure subscriptions. 6. To endeavour to obtain a copy of the latest annual report, and a special schedule of all the charity and benevolent institutions in the city. We hope this institution will be successful in stopping indiscriminate medical charity.

THE GLASGOW EAR HOSPITAL.

The annual meeting of the supporters of this institution was held on April 14th, and a satisfactory report was read and adopted. The important step taken last year, in the removal of the hospital to larger and more central buildings, has proved in every way beneficial, and the more suitable accommodation for in-door patients, has allowed of about fifty patients receiving the benefits of in-door treatment. The out-door patients numbered 806, a very large proportion of whom were children. There has also been a good attendance of students in connection with the teaching department of the hospital, so that in this important branch of its work, there has been no falling off. We observe that the finances of the institution are not as flourishing as they might be ; but another year will, we hope, see an improvement in these.

THE EPIDEMIC HISTORY OF GLASGOW.

The subject under discussion at the last meeting of the Glasgow Philosophical Society, was the epidemic history of the city during the past hundred years ; and it was introduced in a very full and able paper by Dr. Glaister, who went into the chief outbreaks of disease that have visited Glasgow during the century from 1783 to 1883. We do not propose to follow Dr. Glaister's detailed account of these various epidemics. We merely desire to draw attention to the paper as one of a class that we regard as specially useful. It is most desirable that the inhabitants of our large towns should have some know

ledge of the epidemics that have, from time to time, appeared in their midst, sometimes attacking all classes of the community, and carrying off large numbers of the inhabitants. In this way, they learn something of what modern sanitary science has done for them. They realise more fully that not only have some pestilences almost entirely disappeared, but others have been rendered much milder than formerly; and with these facts before them, they are induced to give that hearty and intelligent co-operation which is a powerful help to the authorities in their efforts to mitigate the spread of these epidemic diseases. On these grounds, we are glad that Dr. Glaister has brought the past history of their epidemics before the people of Glasgow, for the results already achieved are most encouraging, and in every way justify the observations made by the different members on the great value, to the city, of the operations carried on by the Sanitary Department.

UNIVERSITY OF ABERDEEN: MEDICAL GRADUATION.

THE April graduation ceremonial took place on Saturday, April 17th, in Marischal College, Aberdeen, when Principal Geddes capped the graduates. Ten gentlemen were promoted to the degree of M.D., while on thirty-four were conferred the degrees of Bachelor of Medicine and Master in Surgery. Mr. John C. G. Duffus, M.A., and Mr. John D. Thomson, M.A., obtained their degrees in medicine and surgery with "highest academical honours." The next professional examination for degrees in medicine commences on July 17th.

THE PROFESSORSHIP OF PHYSIOLOGY AT ABERDEEN.

THE vacancy in the Chair of Physiology at Aberdeen, caused by the migration of Professor Stirling to Manchester, has been filled up by the appointment of Dr. J. A. McWilliam to be "Professor of the Institutes of Medicine in the University of Aberdeen." The appointment has been made by Her Majesty, on the recommendation of the Secretary for Scotland. Professor McWilliam, who, at the present time, holds the post of Assistant-Professor of Physiology in University College, London, where he was formerly Senior Demonstrator, is a distinguished *alumnus* of the University in which he has now been appointed Professor. Dr. McWilliam has published numerous researches on the functions of the heart in various animals which are of the first importance, and there is good reason to expect from him much more good scientific work, and a long career of usefulness as a teacher at Aberdeen.

THE IAN CHARLES HOSPITAL.

THE Ian Charles Hospital at Grantoun-on-Spey, which was built and equipped by the Dowager Countess of Seafield, and which is also maintained by her at a cost of £200 *per annum*, has now been in working order for ten months, and is evidently most successful in accomplishing the desire of its benevolent founder and supporter. There have been fifty cases treated in it, without one death. No infectious diseases are admitted to the hospital. In order that it may not be of the nature of an entire charity, and therefore repugnant to many who would desire to benefit by it, a small fee is charged the patients, and about £20 has been received from this source.

TYPHUS FEVER AT GREENOCK.

DR. WALLACE records, in his last report, a serious prevalence of typhus fever at Greenock. During the four weeks ended February 27th, no fewer than twenty-four cases of this fatal disorder were recognised and reported. Dr. Wallace admits that the number of cases of typhus is certainly startling, but he explains that eight of these were sent into the hospital from Port Glasgow, three from Langbank, and one from a Russian vessel from Port Royal, South Carolina. In the last case, the disease showed itself a few days only before entering the Clyde. As the ship's accommodation was good, it was difficult to account for the occurrence of the disease. The cases from Langbank were unquestionably due to connection with Port Glasgow. Of the remaining twelve cases coming within the jurisdiction of the Greenock Local Authority, one occurred in the person of one of the sanitary officials, who had been engaged in removing the cases from Langbank, two in the cases of men who had been looking for work in Port Glasgow, one in a family one of the members of which was at work in a mill in Port Glasgow, six in a family having one of its members similarly employed, and two others in two different families having connection with the family last mentioned. Since September last, as many as fifty-nine cases of typhus have been sent from Port Glasgow into the hospital at Greenock; and of the number over and above those just specified as occurring in Greenock, namely four, an origin from Port Glasgow was traceable with tolerable certainty in the whole of them. The circumstances of the periodical prevalence, at Greenock and other Clyde ports, of a disease which has been banished from Southern towns by sanitary improvements might well, we think, form the subject of special Government investigation.

MEDICAL NOTES OF A VISIT TO ST. KILDA.

TOWARDS the close of last year, it was deemed necessary to send some assistance to the inhabitants of this lonely island in the Atlantic, as circumstances occurred which led to the belief that they were in a state of great destitution. In addition to the help furnished by private enterprise, the Government despatched an official to inquire into the condition of the islanders, and a formal report on the visit has been recently issued. Accompanying it are some medical notes by Dr. J. Acheson, R.N., of H.M.S. *Jackal*, who visited the island on the above occasion, and also once previously in the preceding year. From what he tells us, the diseases most prevalent amongst the St. Kildeans are rheumatism, dyspepsia, anæmia, palpitation, and debility. The prevalence of rheumatism, Dr. Acheson thinks, is due to the cold, wet climate, and the custom of going barefoot; and in connection with this point, he remarks that the wearing of flannel does not seem a preventative against the disease, as these people suffer severely, although they never wear any other material next the skin. The anæmia and palpitation occurs principally amongst the children of from eight to ten years of age, and presents all the symptoms of incipient scurvy, so that, probably, the insufficiency of fresh fruit and vegetables in the diet, has a good deal to do with it. Amongst the newly-born children, there is a great mortality during the first month, but the inquiries made upon this point did not elicit the cause or causes of it. From a consideration of the whole report now made public, and the memorandum embodying Dr. Acheson's observations on the health of this island population, we consider that their transference to the mainland, in accordance with their own wishes, is the most humane solution of the dangers and disadvantages that their isolated position at present gives rise to.

IRELAND.

BELFAST LYING-IN HOSPITAL.

THE Ladies' Committee of the Belfast Lying-in Hospital have made a special appeal for the necessary funds to erect an extern department for the treatment of diseases of women and children. A cottage house, with consulting rooms below, and a couple of small wards above, which latter are much needed for cases in the hospital requiring isolation, will only cost some £300, which includes the furnishing; and it is hoped that the necessary funds may be forthcoming without delay.

THE LATE SURGEON-MAJOR TAGGART, M.D., OF CARRICKFERGUS.

THE remains of this gentleman were interred last week in the New Cemetery, Carrickfergus. The coffin was carried from the residence of the deceased by six sergeants of the permanent staff of the 2nd Brigade, North Irish Division Royal Artillery, and deposited in the hearse, which was draped in violet and white. The funeral was one

e largest ever seen in Carrickfergus. The deceased, who was in 8th year, was coroner for the County Antrim and the town of ickfergus.

SANITARY STATE OF YOUGHAL.

O'FARRELL, an Inspector of the Local Government Board, has tly inspected this town, and, from the report furnished by him, pears that its sanitary condition is far from satisfactory. The -supply (deficient in quantity, and of very doubtful purity) is ed from three wells, which are surrounded by a porous soil, con- ng a large quantity of organic matter. They are liable at all s to contamination from the proximate sewers, as well as to pollu- by surface-soakage, and they necessarily afford an imperfect and quate water-supply for a town such as Youghal. The scavenging e streets is also stated to be very inefficiently performed, and the ary condition of many of the lanes deplorable.

ARTISANS' DWELLINGS.

Saturday, His Excellency the Lord-Lieutenant and the Countess erdeen opened a new block of buildings that have been built in icinity of the Phœnix Park, by the Dublin Artisans' Dwellings any. The block consists of 97 two-storied rooms, and 91 one- d cottages, comprising 661 rooms, and will accommodate 1,000 ns. The Company commenced its operations in January, 1877. number of dwellings since completed, and in course of erection, 370, and are capable of accommodating about 8,000 persons. ps the most useful result which has attended its operations is he Company has shown that houses for the working classes can pplied on the basis of commercial enterprise. A large num- f private individuals have followed the example of the com- From a report that the Chairman of the Company, Sir rd Martin, Bart., made to His Excellency, we are glad to learn he hygienic results obtained for the tenants are of a most satis- y character. Taking the average of the past five years, the -rate in the buildings has been only 18.5 per 1,000, as compared 31.2 per 1,000 in the city. There is one feature in the popula- of our dwellings which, we think, will have a very important g on the health of the future working classes of this city. In n, 10 per cent. of the entire population is composed of children 5 years of age, while in the Company's dwellings this class nearly 20 per cent. of the inhabitants, or double the normal rtion. No class will be more benefited by healthy homes than en of tender years; and, in its operations, the Company has endeavoured either to provide open spaces as playgrounds on n properties, or to select sites in the neighbourhood of such .

THE CHOLERA.

ITALY.

ppearance of cholera at Brindisi is confirmed. The disease is ed to have been brought by a Peninsular and Oriental steamer, is hypothesis rests merely on the report that the first victim laundress who washed some clothes which had arrived by one of ompany's boats from India. The subprefect and syndic have uspended from office for concealing the first cases. According latest bulletin, from April 17th midday to April 18th midday, ases occurred—two of which were fatal—and four deaths among eceding cases. A few other cases have occurred in the neigh- g towns.

Superior Sanitary Board of Italy has admitted that the cholera ndisi is of the Asiatic type, and has consequently ordered seven uarantine to be imposed at all Italian ports on arrivals from n the Adriatic coast. The spread of the epidemic is so far not , only six fresh cases having occurred during the last twenty- ours.

International Sanitary Commission in Egypt having imposed a rigorous quarantine of seven days on arrivals from Italy in consequence of the appearance of cholera there, the Peninsular and Oriental Company have obtained the consent of the Postmaster-General to a diversion of the India, China, and Australian mail service from the railway-route through Egypt to the Suez Canal, thus avoiding contact with Egypt altogether. Commencing, therefore, with last Friday's mails from London, which will be leaving Brindisi this (Monday) morning, the outward steamer will sail direct to Port Said, whence mails and passengers will pass through the Suez Canal without communicating with the shore of Egypt at all.

PROPOSED MEDICAL SCHOOL FOR WALES.

ON Wednesday, April 14th, a deputation from South Wales waited on Earl Spencer at the Privy Council Office, for the purpose of seeking Government aid towards establishing a Medical School and a Faculty of Engineering in connection with the University College of South Wales and Monmouthshire at Cardiff.

Among the members of the deputation were Mr. D. E. Jones, L.R.C.P. and F.R.C.S.Ed., Mayor of Cardiff; Dean Vaughan; representatives of the South Wales Institute of Engineers; the Principal of the University College of North Wales, and the Principal and other representatives of the University College of South Wales and Monmouthshire; and, on the part of the South Wales Branch of the British Medical Association, Dr. W. T. Edwards (President of the Association), Dr. Buist, Mr. Evan Jones (Aberdare), Dr. Price (Cardiff), Mr. H. N. Davies, Dr. Owen, Dr. Sheen, and Dr. John Williams (London).

A memorial was presented on behalf of "the Court of Governors, Council, and Senate of the University College of South Wales and Monmouthshire, the Mayor and Corporation of Cardiff, the South Wales Branch of the British Medical Association, the Cardiff Medical Society, the Medical and Surgical Staff of the Executive Committee of the Cardiff Infirmary, and the South Wales Institute of Engineers."

The following were the clauses of the memorial which had special reference to the establishment of a Medical School.

"1. Your memorialists beg to call the attention of the Government to the importance to the whole principality, and more especially to South Wales and Monmouthshire, of the foundation of a medical school and a faculty of engineering in connection with the University College of South Wales and Monmouthshire. 2. From the date of the formation of the scheme for the University College, the necessity and importance of founding these faculties have been present to the minds of all connected with the College, and the court of governors of the College, representing the whole of South Wales and Monmouthshire, has twice recorded its sense of the importance of proceeding to the teaching of medicine and engineering without delay. 3. The convenience and advantages, material and moral, of residence near home during the first years of professional study, constitute a strong argument in favour of a medical school for Welsh students at Cardiff; and in such a school, each student will receive more individual supervision from the professors, and be stimulated by more personal association with them than is possible during the first years of study in a large metropolitan hospital. 4. The medical faculties are, perhaps, the most successful in the Scotch and Irish Universities; and a like result may be expected in Wales, in which at present there is no medical school. 5. The University College of South Wales and Monmouthshire already provides teaching in many of the preliminary scientific subjects of medical education, and students intending to enter the medical profession already avail themselves of the advantages offered at that institution. 6. In Cardiff there is a hospital erected at a cost, including the site, of about £40,000, of such extent and dimensions as to entitle Cardiff to a school of medicine. 7. The South Wales Branch of the British Medical Association, representing the medical opinion of South Wales and Monmouthshire, has embodied its sense of the importance of the movement in the resolution appended. 8. A committee consisting of representatives of the Council and Senate of the College, of the South Wales Branch of the British Medical Association, the Cardiff Medical Society, and the medical and surgical staff of the infirmary, have prepared a scheme for a medical school, which shall initially prepare for the two first of the three professional examinations of the Joint Board of the Colleges of Physicians and Surgeons, and for the first M.B. examination of the University of London. 9. The scheme prepared by them has received the sanction of the Joint Board of the Colleges of Physicians and Surgeons."

After some further arguments in favour of the establishment of a Faculty of Engineering in the College, the memorialists asked that, for the purpose of founding the necessary professorships, an annual grant of £2,000 might be made by the Government, in addition to the £4,000 already granted to the College.

Lord ABERDARE, who opened the proceedings, said that, while in Scotland there were three very flourishing schools of medicine—in Edinburgh, Glasgow, and Aberdeen—there was in Wales no means of obtaining a medical education. It had been found that, of 1,585 medical men practising in Wales, over 300 had received their professional education in Scotland. It was thought that it would be a very great advantage to Welsh young men if they could receive a part, at least, of their medical education at home. What was proposed at Cardiff was to give the foundation of a good medical education, by

enabling the student to pass two years in the Welsh College. The remainder of his lordship's remarks had reference chiefly to the teaching of engineering.

Mr. HENRY RICHARD, M.P., spoke in support of the memorial.

Sir HUSSEY VIVIAN remarked that, in the mining districts of Glamorganshire, the Welsh language was still generally spoken; and that it was of vast importance that medical men in Wales should be Welshmen, able to speak their own language. He had found that most important; for, when it had been his duty to choose medical men in the mining districts, he had considered it absolutely necessary to appoint men conversant with the language of the people. Why should it not be possible to receive at Cardiff College the primary portion of a medical education?

Dean VAUGHAN supported the memorial.

The MAYOR OF CARDIFF believed that universities had generally originated in medical schools.

Dr. GRIFFITHS (Swansea) was in favour of the establishment of a medical school at Cardiff, which would be of enormous advantage to young men in commencing their medical education.

Dr. EDWARDS, president of the British Medical Association, said that, in Scotland and Ireland, the universities had been mainly supported by medical students; and he believed that the youth of South Wales would receive a very great benefit from a ready access to a school of medicine. They would have their preliminary education so far conducted as to fit students for the primary examination of the joint scheme of the Royal College of Physicians and Surgeons, and the intermediate examination of the University of London.

Other members of the deputation having spoken, Earl SPENCER replied to the arguments put forward. With regard to medicine, he acknowledged the importance of having young men educated in Wales instead of going to Scotland, and of having Welsh-speaking medical men to practise in Wales; and these matters should receive serious attention. At the same time, he pointed out that there might be a difficulty on the part of the Treasury in acceding to the request for an additional grant to Wales for educational purposes. The present grant to the colleges at Bangor, Cardiff, and Aberystwith was already three times as great as the original estimate.

Sir LYON PLAYFAIR spoke to the same effect, and stated that, when he had taken a part in the foundation of new chairs in the Scotch universities, the Treasury had always stipulated that one half of the endowment should be furnished by the locality. The Treasury might say the same in regard to Wales as they had said in regard to Scotland.

After some remarks from Lord Aberdare, the deputation withdrew.

FIFTEENTH CONGRESS OF THE GERMAN SURGICAL SOCIETY.

[FROM OUR BERLIN CORRESPONDENT.]

THE German Surgical Society held its fifteenth Congress in Berlin on April 7th, 8th, 9th, and 10th. The sittings were numerously attended by the most celebrated surgeons of Germany, and by many from abroad; and all present were unanimous in stating that the results of this Congress were of a highly important, interesting, and satisfactory nature. Seldom has the Society been represented in such numbers. Since the last Congress, four members have died, whilst eighteen new ones have joined the Society, which now numbers 360 members.

On Tuesday, April 6th, there was a social gathering of members in the Hôtel du Nord. Amongst those present at the Congress were Drs. von Bergmann, Volkmann, E. Küster, König, Hahn, Israel, Gurlt, J. Wolff, Sonnenburg, Rosenbach, Trendelenburg, Wagner, Thiersch, Czerny, Schönborn, Landerer, Rotter, Braun, Albrecht, B. Fränkel, A. Martin, Busch, P. Gueterbock, Fehleisen, Boecker, Genzmer, Oberst, Esmarch, Roth, Kraske, Biondi (of Naples), and many others.

The first sitting of the Congress was held on Wednesday, April 7th, in the Hall of the Royal Friedrich-Wilhelm University, under the presidency of Professor von Volkmann, who presided in the place of Professor von Langenbeck, the founder, and for many years President, of the Society. Volkmann opened the proceedings by expressing his deep regret that Langenbeck was unable to attend the Congress this year, owing to a serious affection of the eyes, from which he had long been suffering. He proposed a vote of thanks for the devotion and sacrifices Langenbeck had rendered to the Society, which was unanimously adopted; as was also a further motion appointing Professor von Langenbeck Honorary President. The meeting then proceeded to the order of the day. Professor von Volkmann was elected first President, Professor von Bergmann second President, and P[rofessor] Thiersch third President; Professors Gurlt and Schoenbo[rn] were chosen as Secretaries, and Professor E. Küster as Treasurer.

The subjects chosen for discussion were very numerous, and some them of the highest importance and interest. A few of the pape[rs] are selected for abstract.

Traumatic Tetanus.—The most interesting address on April 7th, w[as] by Professor ROSENBACH, of Göttingen, on the Etiology of Traumat[ic] Tetanus in Man. An animated discussion followed on Rosenbach['s] theory, which was to the effect that the cause of this form of tetanus w[as] a characteristic bacillus, which, when transferred to animals, produc[ed] the same symptoms as in man. The disease had been often observ[ed] in hospitals and on the battlefield, and had generally been attribut[ed] to neglect. From a patient in the Göttingen Clinic, Professor Rose[n]bach took, last January, some gangrenous matter, and inoculated upon a number of rabbits and mice; the next day, these animals di[ed] from tetanus in a few hours. The same result followed further expe[ri]ments, and Professor Rosenbach then tried to make pure cultivatio[n] of the infective matter, and, amongst various micro-organisms, [he] found a peculiar bristle-shaped bacillus. This bacillus Rosenbach co[n]sidered to be the cause of tetanus, and described its effect in this wa[y]. From the point of inoculation the poison spread through the bloo[d] vessels to all parts of the body, each bacillus producing a poison sim[i]lar to strychnine, which caused the tetanus. Rosenbach did not co[n]sider the investigations on the subject by any means concluded, a[nd] believed that many objections would be raised against his view.

Ectopia of the Bladder.—On Thursday, April 8th, Professo[r] TRENDELENBURG, of Bonn, spoke on the cure of ectopia of the bla[d]der by direct union of the sides of the fissure. He cited a case.

Nephrolithotomy.—Dr. LAUENSTEIN, of Hamburg, spoke on t[he] extraction of a large stone from the pelvis of the kidney, by means [of] Simon's lumbar section, with demonstrations. He introduced t[he] patient, who had been cured, and showed the stone extracted, whi[ch] weighed about 30 grammes. Drs. Küster and Israel related simil[ar] cases.

Rhinoplasty.—Professor KÖNIG, of Göttingen, spoke on operatio[ns] for depressed noses, and introduced patients. According to the o[ld] plan, only a piece of skin was cut from the forehead; this was foun[d] to shrivel up in time. König cut a narrow piece of the bone also o[ut] of the forehead with a chisel, and thereby obtained a firm support f[or] the skin. He had performed this operation several times within th[e] last four years, and in all cases the skin had, so far, remained pe[r]fectly firm, and the operations had been successful.

Compression-Fractures of the Tibia.—Dr. WAGNER, of Königshütt[e] spoke on "compression-fractures" of the upper end of the tibia[e] illustrating his remarks from observations that he had made among[st] mining populations, where such accidents frequently occurred. H[e] also announced that there was a connection between diseases of th[e] spinal cord and the tendency of the tibia to such fractures, and th[e] absence of pain in these fractures. On one occasion, a man brok[e] his leg, and came to him without feeling the slightest pain. He [at] once concluded, from observations previously made, that the patien[t] had some complaint of the spinal cord also, which proved to b[e] correct.

Transplantation of Skin.—Professor THIERSCH gave a very interes[t]ing address on the removal of skin from one part of the body, or fro[m] one body to another. One interesting feature in this discussion w[as] the suggestion, which had been successfully carried out, of removi[ng] flesh as well as skin from one part of the body to another; as, f[or] example, in the case of the loss of a lip, to take a piece of flesh fro[m] the cheek or arm, and transplant it to the lip, in order to replace th[e] one lost.

Operations for Stone in the Bladder.—In the afternoon, the chi[ef] subject of discussion was introduced by Professor KÖNIG, on operatio[n] for stone in the bladder. The subject had been postponed from la[st] year's Congress. König opened his address with a critical explan[a]tion of the two methods under consideration, the suprapubic and th[e] median operations, and propounded the following theses for discussio[n]: 1. The perineal median section is, as a preliminary operation for ge[t]ting rid of smaller stones, almost entirely free from danger. It i[s] further, quite sufficient for the removal of small and medium-size[d] stones, as well as common movable foreign bodies (bougies, pieces [of] catheter, etc.). If there be very large or numerous calculi, encyste[d] calculi, or foreign bodies of a particular kind, especially fixed metall[ic] bodies, the entrance into the bladder, obtained by this operation, is n[ot] sufficient. Although, as the history of the perineal section shows, th[e] greater part of this operation can be effected from the perineum, though only after breaking the stones, there is, in this prolonged em[-]ployment of force within the bladder, a great source of danger.

igh or suprapubic operation is in itself accompanied with spe-angers—namely, urinary filtration and its consequences, to which tain percentage of patients succumb. On the other hand, it s a free approach for examination, and for the removal of large s and of foreign bodies situated in a difficult position; and the dure, in this operation, for the removal of the foreign bodies, is ss dangerous than removal effected, under similar circumstances, the perineal section. From the above, the following conclusions drawn. Perineal median operation is the normal method for stones and movable foreign bodies. The high operation is pre-e in difficult cases.—A small pamphlet, containing these theses brief survey of the state of the questions on operations for calculi en, by Dr. KRAMER, was distributed amongst members.—Dr. R, of Marburg, advocated the high operation; and Dr. EBER-, of St. Petersburg, supported lithotrity.—Drs. BERGMANN and DELENBURG spoke in favour of the high operation; Drs. FÜR-EIM and SCHÖNBORN in favour of lithotrity.—Drs. VOLKMANN, , and SCHEDE took part in the further discussion.

re-lip.—On Friday, the first discussion was introduced by Dr. DI, of Naples, on hare-lip, a subject which has been much dis-l for several years at every meeting of this Congress. Biondi in favour of Albrecht's theory, with some modifications, and ollowed by Trendelenburg and Albrecht, and then by Stöhr, ropounded a theory which was calculated to meet the differences way. A specimen of a child's skull, with a hare-lip, having six r teeth, one on each side of the upper jaw-bones, and four on termaxillary bone, was shown. Each speaker tried to explain eculiar case according to the theory adopted by himself. Mensel, tha, explained his method of operating on hare-lip.

atment of Scoliosis by Massage.—Dr. LANDERER, of Leipzig, dis-l the treatment of scoliosis by massage. His view was curvature of the spine was due, essentially, to anomalies ie muscles which kept the spine straight. The point was, ore, to get rid of these anomalies, in order to restore ighly the activity of each muscle; and for this, massage etter than the form of gymnastics hitherto used. In order to ate the effect of massage, Dr. Landerer introduced a girl suffering his complaint. He did not permit the wearing of corsets, be they prevented the exercise of the muscles, and only rendered il worse; the success often produced by a corset was only tem-.—Dr. VOLKMANN stated he had adopted massage for some years oliosis, but that he also considered a corset necessary. At night tients wore no corset; in the morning, they were bathed, and had a douche, and then massage; the corset was worn from 11 A.M. till the evening. The causes of scoliosis, he said, were be sought for solely in the muscles.

he afternoon, the discussion on operations for stone in the bladder ntinued, in which Drs. Sonnenburg, Israel, von Bergmann, König, olkmann, Gussenbauer, Küster, Löbker, and Petersen took part.

nomycosis.—On Saturday, Dr. ROTTER, of Berlin, assistant of sor von Bergmann, produced several patients suffering from mycosis. He said that the origin of this disease was still wrapped darkness. During the last eight months, five cases had been l in the University Surgical Clinic. In two of these cases, the of the disease was clearly from decayed teeth.—Dr. ESMARCH that cattle sometimes got the disease from their food, and that ransferred it to human beings. In certain cases, this had been y established.—Dr. ISRAEL mentioned a severe case that he had om Russia. In the lungs of this patient was found, after his in the centre of a large cavity, a piece of a hollow tooth, which lf was noteworthy, as showing the existence of a foreign body lungs; and also as giving a satisfactory explanation of the of the disease there. Indeed, hollow teeth, as the hotbeds of ds of inciters to disease, deserved the greatest attention.—Dr. declared that in all cases of this disease he had always observed ie patients had either hollow, or, at least, very bad, old teeth.

ALBRECHT, of Hamburg, well known as an opponent of the ie of development, spoke on the "morphologic value of surplus and toes," and on "the morphological value of epispadias and adias."

as resolved to discuss at the next Congress, Strangulation of testines, Peritonitis, and Perforation of the Intestines.

ng the Congress, Professor Küster and Dr. Hahn offered to t members through the Königin-Augusta and Municipal Hos-respectively. Dr. Lassar invited members to visit his Dermato-Klinic, in the Karlstrasse; and Dr. Martin offered to show his Institution for Diseases of Women.

ie adjoining rooms of the Amphitheatre of the Royal Clinic, l instruments and bandages, pharmaceutical preparations, apparatus, and instruments for electric lighting, and several materials for bandages, from different manufactories in Berlin and other parts of Germany, were exhibited.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

THE quarterly combined meeting of the Executive and General Committees of this Society was held on Wednesday, April 14th, at 38, Wimpole Street, W. Mr. Ernest Hart presided, and there were present: Dr. W. M. Ord, Dr. T. M. Dolan (Halifax), Mr. T. V. Jackson (Wolverhampton), Mr. S. W. Sibley, Mr. F. Wallace, Mr. M. Greenwood, jun., Dr. R. Lord, Mr. J. Brindley James, Mr. E. Bartlett, Dr. G. W. Crowe (Worcester), and Mr. E. Noble Smith.

The quarterly report showed that the income for the three months ended March 31st had been £1,907 12s. 9d., of which £125 12s. 4d. was interest on investments. The total expenditure had been £708 7s. 8d., leaving an increase of £1,199 5s. 1d. on the quarter, and £4,904 5s. 10d. on the year. Altogether, premiums for two years had now been received, and the Society during that period had accumulated reserves of £10,228 9s. 3d. Of this, £9,174 was profitably and securely invested, and it was resolved to place a further £500 in Corporation Stocks. Steady progress continued, there having been thirty-one new members enrolled during the quarter.

Among the items of expenditure were sums of £200 and £100 on account of life-assurances, both having been paid immediately on the production of probate, and within one month of the deaths. For sickness, £323 8s. had been paid to thirty-six members, on account of 113 weeks' sickness. Many of the claims were for short, sudden sicknesses, due to the recent severe weather, and there were two for accidents. The members claiming were widely distributed, remittances having been sent to London, Wales, Scotland, Liverpool, Suffolk, Brighton, Manchester, Kent, Yorkshire, Newcastle, Buxton, Surrey, Malvern, Lancashire, Shropshire, Norfolk, Plymouth, Basingstoke, Bolton, Essex, Birmingham, Cornwall, etc. Although a substantial sum had been expended for sickness, the average rate of claim was considerably less than the tables provided for. Since the commencement, £1,850 had been paid to sick members, leaving a reserve, under that head, of £4,566. In connection with this branch of the work, it was stated that two new companies (probably attracted by the success of the Society) had been started, providing sick-insurances, but not confined to the medical profession. A comparison of the tables issued showed the rates charged to be considerably higher than those of this Society.

In view of the annual general meeting, to be held at Brighton in August next, a discussion took place as to certain alterations in the rules. It was ultimately resolved to recommend a modification of the annuity system, so as to take in the lives of members' wives, and in other ways popularise this branch, which was considered an important one; to make life-assurances operative as soon as membership is complete, instead of deferring them for twelve months; and to take power for investments in the stocks of the British Colonial Governments.

The principles and work of the Society are set out in detail in its last annual report, copies of which, with rates, forms of proposal, and all information, may be had of the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, London, S.W.

ROYAL COLLEGE OF PHYSICIANS.

As required by law, a meeting of the College was held on the 19th instant, the Monday before Easter, for the election of a President. Before the business of the day commenced, however, a ceremony of interest took place.

Sir RISDON BENNETT rose, and, speaking in the name of a considerable number of Fellows, requested the acceptance by the College of a portrait of the Registrar, Sir Henry Pitman, painted by Mr. Ouless, R.A. The picture itself is to be exhibited at the Academy, and, therefore, could not be shown to the Fellows; but a copy of it, intended for presentation to Lady Pitman, was uncovered, as Sir Risdon Bennett spoke of the wisdom and ability which Sir Henry Pitman has displayed as Registrar of the College.

The PRESIDENT (Sir William Jenner), in accepting the portrait in the name of the College, added his testimony to the value of the services which the Registrar has rendered for many years.

Sir HENRY PITMAN returned thanks, evidently with much emotion, for the honour thus done to him, which he felt to be the highest that the Fellows could have offered him.

The PRESIDENT then read his annual address, in which he men-

tioned the main medical events of the year, and added a brief summary of the lives and work of the deceased Fellows: Dr. Wells, of Reading; Dr. Shepherd, of St. Mary's Hospital; Dr. Heslop, of Birmingham, ; Dr. Wardell, of Tunbridge Wells; Dr. Russell, of Birmingham; Dr. Harris, of St. Bartholomew's Hospital; Dr. Gavin Milroy, who has left to the College the sum of £2,000 to found a lectureship in Public Medicine; Dr. Monckton, of Maidstone; Dr. Sutro, of Finsbury Square; Dr. Frederick Weber; and Dr. W. A. Guy, of King's College.

The ballot was then taken for the election of a President, when it was found that 89 votes had been given for Sir W. Jenner, 19 for Sir W. Gull, 10 for Sir A. Clark, 4 for Sir H. Pitman, 3 for Dr. Quain, and one each for Drs. Wilks, Habershon, and Fincham.

Sir WILLIAM JENNER having thus obtained more than two-thirds of the votes of the Fellows present, was declared elected, and, in a short speech, thanked the Fellows for the honour thus conferred on him for the sixth time.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.

ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

A general inquiry into THE THERAPEUTIC VALUE OF HAMAMELIS has now been issued. A report will be made to the Section of Therapeutics in the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

YORKSHIRE BRANCH.—The spring meeting of the Yorkshire Branch will be held in the Medical School at Leeds on Wednesday, May 5th, at 3 P.M. Gentlemen intending to read papers are requested to communicate with the Secretary, ARTHUR JACKSON, Sheffield

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—The annual meeting of t District will be held at the Royal Pier Hotel, Sandown, on Wednesday, A 28th; Daniel Beaton, M.D., President, in the chair. Agenda—1. A Report of Proceedings of the District during the past year. 2. An Address by the Preside elect, D. Lloyd, Esq. 3. Election of Officers, and Statement of Accounts. India-rubber Stamps for Clinical Notes: R. Robertson, M.D. 5. Observations the Use of Thallin in the Pyrexia of Phthisis: J. G. Sinclair Coghill, M.D. Uterine Polypus, removed by J. Groves, M.B. 7. A Case of Idiosyncrasy w regard to the Use of Tannic Acid: J. M. Williamson, M.D. 8. Gower's Hæm cytometer and Hæmaglobinometer will be shown by Dr. Mason. 9. Short Not with Temperature-Chart of a Case of Pelvic Abscess obstructing Sigmoid Flexu W. E. Green, Esq. Dinner at 6 P.M.; charge 6s., exclusive of wine.—W. E. GRE Honorary Secretary.

OXFORD AND DISTRICT BRANCH.—The next meeting will be held at the Ra cliffe Infirmary, Oxford, on April 28th, at 3 P.M. During the meeting, a tes monial will be presented to Dr. Tuckwell on his retirement from practice. Gent men who wish to dine must send in their names to either of the Honorary Sec taries before April 26th.—S. D. DARBISHIRE, M.D., W. L. MORGAN, Honora Secretaries.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the abo District will be held at the Prince of Wales Hotel, Erith, on Friday, April 30 at 4.30 P.M.; Flaxman Spurrell, Esq., in the chair. Papers already promised: Bryden, Esq.: A case of Facial Paralysis; Cases of Foreign Bodies in the E The dinner will take place at the above Hotel, at 6.30 P.M.; charge, 6s. 6d., clusive of wine. Gentlemen who intend to dine are particularly requested signify their intention to the Chairman, F. Spurrell, Esq., Less Ness Heat Belvedere, not later than April 28th. All members of the South-Eastern Bran are entitled to attend this meeting, and to introduce friends.—A. W. NANKIVE Honorary Secretary.

WEST SOMERSET BRANCH: SPRING MEETING.

THE spring meeting of the West Somerset Branch was held at t Railway Hotel, Taunton, on Thursday, April 15th, at 5 P.M. The were present thirteen members. Mr. J. BAIN SINCOCK, President, w in the chair (but, during a part of the meeting, in Mr. Sincock absence, Mr. G. R. Norris, the Past-President, took his place).

Representative on the Council of the Association.—Dr. W. M. Kell was elected as representative of the Branch on the Council of t Association for the ensuing year.

Medical Defence Fund.—A letter from the East Anglian Branc advocating the formation of a medical defence fund, in connectio with the British Medical Association, was read and discussed. A di ference of opinion on the subject being found to exist, no resolutio was passed.

Digestive Ferments, etc.—A letter from Messrs. Burroughs, We come, and Co., offering to send a chemical physiologist to deliver lecture, and give practical demonstrations with digestive ferment etc., free of cost to the Branch, was read. It was resolved to declin their offer with thanks.

Petition to the Privy Council.—A letter from Messrs. W. C. Steel and W. A. Ellis, as honorary secretaries of an Association of Member of the Royal College of Surgeons of England, asking for the assistanc of the Branch in forwarding the objects referred to in a petition whic they enclosed, was read. The petition was also read. Several mem bers signed the petition, which Dr. Kelly was requested to return t Messrs. Steele and Ellis.

Collective Investigation.—Inquiry papers, on the Value of Hamameli in arresting Hæmorrhage, were distributed by Dr. Kelly to the mem bers who would accept them.

Communications.—The following were made after dinner:

1. Mr. Hensman: A Case of Empyema treated by Paracentesis The patient, perfectly recovered, was shown.

2. Mr. Hensman: A Case of *Post Partum* Secondary Hæmorrhage caused by a Placenta Succenturiata. A preparation of the placent was exhibited.

3. Mr. Sincock: A Case of Uterine Fibroid: Successful Removal Preparation shown.

Discussion.—A discussion on the question, "Do you consider th Antiseptic Dressing of Wounds Advantageous in Country Practice? followed the above. Written answers from some absent members wer read by the Secretary, and a very good practical discussion on th question took place. Answers in the affirmative strongly predomi nated.

ABSTRACT OF PROCEEDINGS OF COUNCIL.

AT a numerously attended meeting of the Council, held at Exete Hall, Strand, London, on Wednesday, April 14th, 1886, Dr. Foster, M.P., President of the Council, in the chair, it was

Resolved: "That the financial statement for the year ending Decem ber 31st, 1885, certified by the auditors as correct, be received, approved and published in the JOURNAL, in accordance with By-law 26."

The remainder of the proceedings of the Council will appear in next week's JOURNAL.

BRITISH MEDICAL ASSOCIATION.

BALANCE-SHEET FOR THE YEAR ENDING DECEMBER 31st, 1885.

Dr.]	Liabilities.	£ s. d.	£ s. d.
riptions paid in advance			483 6 10
tisements ditto			181 7 3
Fund			25 0 0
ises Committee			200 0 0
ibutions			489 14 0
cting			28 7 0
aving			37 19 2
ing Journal			165 0 0
for Journal			397 17 9
ies, Copying, and Assistance			7 18 5
llaneous Printing			28 4 0
nittees			1 11 6
nery			30 8 3
Charges			6 7 6
rs			20 17 7
Taxes, and Insurance			45 15 4
and Type			14 11 11
Depreciation and Renewal Fund, as at 31st December, 1884		650 0 0	
dded for 1885		150 0 0	
			800 0 0
ses Redemption Fund, as at 31st December, 1884		775 0 0	
dded for 1885		150 0 0	
			925 0 0
			3,889 6 6
ıs Account, viz. :—			
nce on 1st January, 1885		21,399 8 9	
t brought from Revenue Account		3,313 0 9	
of excess of Assets over Liabilities			24,712 9 6
			£28,601 16 0

Cr.]	Assets.	£ s. d.	£ s. d.
Subscriptions—Amount due			1,397 2 1
Advertisements—Amount due			2,484 17 1
Sundry Sales—Amount due			157 16 8
Due from Hastings Memorial Fund			8 15 0
Alterations of Premises at Cost			1,157 11 11
Furniture and Fittings			281 15 9
Plant and Type at Cost			1,284 14 6
Postage of Journal—amount due			2 9 11
Interest due on Investments			291 12 3
Investments, viz. :—			
£5,132 0s. 6d. Consols at cost		4,967 10 0	
£2,000 L. & N. W. Railway 4 per cent. Debenture Stock at cost		2,231 7 0	
£1,780 Midland Railway 4 per cent. Debenture Stock at cost		2,013 1 6	
£1,767 G. W. Railway 4 per cent. Debenture Stock at cost		1,991 6 3	
£1,845 L. & S. W. Railway 4 per cent. Debenture Stock at cost		2,143 13 6	
£1,743 N. E. Railway 4 per cent Debenture Stock at cost		2,016 18 7	
£1,623 G. N. Railway 4 per cent. Debenture Stock at cost		1,868 9 0	
£2,000 Lancashire and Yorkshire 4 per cent. Debenture Stock at cost		2,309 9 6	
			19,541 15 4
			£26,608 10 6
Cash :—			
At London and Westminster Bank		1,934 13 8	
At Office		58 11 10	
			1,993 5 6
			£28,601 16 0

Revenue Account, Profit and Loss for year ending 31st December, 1885.

	£ s. d.
ial Expenses	3,098 5 5
ses of Printing Journal	9,307 16 6
Expenses	1,723 17 9
Salaries and Wages	1,650 1 0
iation Expenses :—	
ommittees—Scientific Grants (£305 6s. 6d.), Scholarships (£300), Collective Investigation (£600), Medical Reform (£102 8s. 4d.), Miscellaneous (£794 15s. 2d.)	2,102 10 0
Depreciation Fund	150 0 0
ses Redemption	150 0 0
ture, etc. (written off)	33 0 0
	£18,215 10 8
riptions, Losses from death, resignations, etc.	551 13 11
tisements Discounts and Allowances	1,632 18 8
	20,400 3 3
for year	3,313 0 9
	£23,713 4 0

	£ s. d.
Subscriptions	11,812 16 3
Advertisements	9,525 12 9
Sundry Sales of Journal	1,038 7 3
Sundries—Reading and Binding Covers	51 19 1
Reprints	107 7 6
Interest on Investments	643 2 9
Sale of Waste	13 2 6
Discounts allowed	262 5 9
Scientific Grants amount returned and unused	160 0 0
Collective Investigation Committee—	
Sale of Records £7 10 6	
Amount of Grant unused £90 19 8	
	98 10 2
	£23,713 4 0

Stewart Fund.

invested in 4 per cent. Caledonian Railway Debenture Stock, in the name of the British Medical Association.

		£ s. d.
.]—1885.		
.	To Balance brought down	55 18 2
l.	,, Interest one year £579	22 8 2
		£78 6 4
.]—1885.		£ s. d.
l.	By Balance carried down	78 6 4
		£78 6 4

Middlemore Fund.

invested in 4 per cent. North British Railway Debenture Stock, in the name of the British Medical Association.

		£ s. d.
.]—1885.		
	To Balance brought down	49 0 9
l.	,, Interest one year on £500	19 6 11
		£68 7 8
.]—1885.		£ s. d.
l.	By Balance carried down	68 7 8
		£68 7 8

Hastings Fund.

£477 invested in 4 per cent. London and North Western Railway Debenture Stock, in the name of the British Medical Association.

Dr.]—1885.		£ s. d.
Dec. 31.	To Cash. One year's Interest on £477	18 10 6
	,, Balance carried down	76 8 4
		£94 18 10
Cr.]—1885.		£ s. d.
Jan. 1.	By Balance	94 18 10
		£94 18 10

We have examined the foregoing Accounts with the Books and Vouchers of the Association, and find the same to be correct.

April 8th, 1886. Price, Waterhouse & Co.

44, Gresham Street, London, E.C.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Albuminuria probably consecutive to Scarlet Fever: Sudden Death.—On Ptomaines, Leucomaines, and the Microbian Theory.—Infantile Tuberculosis.—The Pulse in Different Attitudes and During the Menstrual Period.—A Sign of Death.—Obstinate Sciatica cured by Massage.—General News.—Obituary.

DR. DESCROIZELLES, Physician to the Children's Hospital, Paris, recently had under his care the following case, which presents some features of interest. The patient was a boy, aged 12. Three weeks before admission, he was seized with scarlet fever. This, according to the statement of his relatives, followed the usual course. A slight eruption appeared, and was preceded by sore-throat. The eruption quickly passed away. The child was kept in bed, but seemed quite well until seventeen days subsequent to the appearance of the fever; it was then observed that both cheeks were swollen. Three days later, he was admitted into the hospital. His face was œdematous, but there was complete absence of fever. For some days he had passed very little urine, namely, from 120 to 130 grammes in about twenty hours. It contained a very large proportion of albumen. The child was kept in bed, and his limbs were enveloped in cotton-wool. His face and extremities remained slightly œdematous. There was no fever, nor dilatation of the pupils. The lungs and heart appeared normal. The quantity of urine passed was scanty, as before admission, and contained a large proportion of albumen. On January 22nd, two days after admission, the child vomited slightly, and said he felt uncomfortable, but could not define his sensations. All of a sudden, he called out, became insensible, and died. The necropsy was made forty hours afterwards. It was observed that the pericardium was healthy, but that a thick layer of adipose tissue covered the inter-ventricular groove at the apex of the heart. The right lung presented an area of hepatisation; the liver was enlarged, and of a violet colour; but there were not any lesions which explained the boy's death.

At a recent meeting of the Academy of Medicine, M. Chatin read a paper by M. Husson, of Toul, on Ptomaines, Leucomaines, and the Microbian Theory. When a glucosic solution is exposed to the action of the air, the mycoderma vini, or mycoderma cerevisiæ, is developed according to the solution, whether it be of germinating barley, or wine "must." In both cases, there is alcoholic fermentation. The alcoholic fluid, left to itself, soon produces mycoderma aceti. The saccharine solution, mixed with caffeine, fixes the lactic ferment. Dilute lactic acid, in the presence of albuminoidal substances, developes the vibrio of butyric fermentation. Each modification of fluid is accompanied by the appearance of a fresh ferment. The ferment is not transformed, but the medium is modified, and fresh germs are developed. In order that these phenomena should take place, a favourable medium is essential. The different mucous membranes of the animal body secrete fluid in which a considerable number of living germs, by no means dangerous, secrete substances to which the economy is accustomed, and easily tolerates. When, owing to a morbid influence, the secretions of the mucous membranes are modified, new germs appear, and manufacture new products. These products may aggravate the pathological condition; but it is certain that the micro-organisms become impregnated with morbid elements withdrawn from their surrounding medium, and thus become the means of communicating diseases, not only by virtue of the toxic elements which they secrete, but also by those with which they are impregnated. Micro-organisms, like ferments, do not create a pathological medium, but select that which is favourable to their development. This is what happens in phthisis, puerperal fever, and pneumonia.

MM. Landouzy and Quérat, at a recent meeting of the Société Médical des Hopitaux, read a paper on Infantile Tuberculosis. They arrived at the following conclusions. Tuberculosis in infancy, from birth to the second year, is more frequent than is generally believed. It is generally localised, as a broncho-pneumonia; tuberculosis is transmitted to newly born infants either by contagion or heredity.

It is known that the pulse-beats are more frequent in an erect, than in a recumbent, position. Graves ascertained that with hypertrophy of the heart the number of pulsations was identical in both positions. M. Jorissenne has recently observed that, during pregnancy, the pulse does not vary with position. M. P. Louge, a house-surgeon, at Marseilles, has ascertained the same fact in connection with the menstrual period.

M. Lessenne, at a meeting of the Société Médicale d'Amiens, indicated a certain sign of death, simple and trustworthy. After pricking the skin with a needle, the puncture remains open, just as when a piece of leather is pricked. On the living body, even if the blood does not come to the surface, as would happen if the person were hysterical, the pin-prick closes at once, and does not leave the slightest trace.

Dr. Berne states, in the *Journal de Médecine de Paris*, that every therapeutic means failed to improve a case of sciatica of the left lower limb. The patient was 53 years of age, neither gouty nor rheumatic, but had suffered from piles since the age of 18. After the fifteenth massage, the patient could walk. After the fiftieth, he was able to resume his usual avocations, and could take long walks.

The deaths of several medical men have recently occurred. Among the deceased is Dr. Edouard Fourmé, Physician to the Institute for the Deaf and Dumb. He has written several works on the laryngoscope, voice, and speech, etc. He was also director of the *Revue Médicale Francaise et Etrangère*. Professor Bouchardat has died, aged 80. Dr. Bouchardat was the seventh Professor of Hygiene at the Faculty of Medicine. He was the author of several works. M. Gillette, hospital surgeon, has died, after a very short illness. Dr. Louis Thayon of Nice, recently expired, at the age of 40. Dr. Thaon was a Councillor-General. He specially studied tuberculosis, and this malady was the cause of his death. M. Thaon wrote many works. M. Clare-Saint, a house-surgeon, has died under curious as well as painful circumstances. In the wards of the Pitié Hospital, in which he pursued his studies, and performed his duties as dresser, there was an epidemic of pneumonia. M. Clare-Saint contracted it, and died. Seven other persons were also attacked.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The Infectious Diseases Hospital Question.—Assault on a Medical Man—Death of Mr. C. B. Cooper.—University College: Meeting of Council.—The High Death-rate.—The Liverpool Exhibition.—New Hospital for Widnes.—Proceeds of City Ball.

THE Infectious Diseases Hospital question has advanced another stage. At a meeting of the City Council, on March 15th, Dr. Hamilton carried a proposition for the erection of a hospital for infectious diseases, other than small-pox, at the South end. The Corporation owns some suitable land, and the building will be erected on this and on an adjoining piece of ground, 4,996 square yards in extent, which has been purchased. An expenditure of £100,000 has been sanctioned; but it is probable that the total cost will be about £90,000, distributed as follows: for the new hospital at the South end, £31,000; for the Netherfield Road Hospital, £10,000; for the East end Hospital, £19,000; and for the Convalescent Hospital at Hightown, £30,000. The inspectors and architect of the Local Government Board have signified their approval of the scheme; but the suggestion, that a third hospital should be provided in the eastern district of the city, was made by them.

De Tomanzie, the unqualified practitioner, who was recently tried at Chester for murder and acquitted, has been in trouble again. Last week, he appeared at the Police Court, in answer to a summons taken out against him by Dr. Wiglesworth, for an assault. The case was proved, and the defendant was fined £5.

Much sympathy has been excited by the death of Mr. C. B. Cooper, House-Physician at the Northern Hospital. Some time ago, his health began to fail, and he was advised to take a rest. But he continued his work, the result being a serious illness, which terminated fatally on March 14th. Mr. Cooper received his medical education in Liverpool. He was most highly thought of at the medical school, where he was deservedly popular; and his death, at the age of 24, is sincerely lamented.

At a recent special meeting of the Council of University College, a proposal to form a small botanic garden for the use of students was brought forward. The Council approved of an initial grant for laying out the garden, and a further sum for its annual maintenance. At the same meeting, the recommendation of Dr. Hope, as Lecturer on Hygiene to the Medical Faculty, was also approved, and his formal appointment confirmed. Dr. Hope is especially well fitted for this post, not only by reason of his scientific attainments, but also owing to the fact of his being the assistant medical officer of health for the city. The appointment, in consequence, gives general satisfaction.

For the week ending March 20th, the death-rate was 35.8 per 1,000; but, since then, it has returned to something like its usual figure.

a regard to the high rate of mortality during the cold weather, it been thought by many that the practice of spreading tons of salt ie streets, when covered with snow, has had an injurious influence ie public health. Dr. Bligh brought this up at a meeting of the th Committee; and, in answer to his remarks, the Chairman d that the question was fully discussed some time ago, and the mittee then arrived at the opinion that the advantages of sprink- salt far outweighed the disadvantages.

e arrangements for the exhibition are proceeding apace, and the ling is now in a state to admit of some of the articles being re- d. During a gale at the end of last month, a part of the un- ied structure fell, killing one man and injuring another. This is econd accident or the kind that has occurred since the com- ement of the work. A proposition for permanently retaining xhibition building as a "People's Palace," is being seriously dis- d.

e Local Government Board has signified its approval of the ded plans for the new Infectious Diseases Hospital, at Widnes; he building, which is urgently needed in the district, will now be eded with at once.

e City Ball realised a sum of £267 7s., which has been equally ed between the Consumption Hospital and the Woolton Conva- nt Institution.

CORRESPONDENCE.

☞ To Correspondents. ☜

orrespondents are reminded that prolixity is a great bar to publication; with the constant pressure upon every department of the Journal, brevity yle and conciseness of statement greatly facilitate early publication. We ompelled to return, and hold over a great number of communications, chiefly eason of their unnecessary length.

CHESTER AND SALFORD PROVIDENT DISPENSARIES.

,—Before replying to Dr. Stewart's letter, I should like to say a ore words about the provident dispensary system. It is true that c menced the correspondence in a local paper, under the *nom de* "Justitia;" but other medical men have taken part in it as A letter from "Surgeon," which appeared last week, is so much point, that I shall take the liberty of quoting from it. He "I make the following charges against the provident dispensary gers.

They have destroyed all kindly feeling between the profession nemselves.

They established these dispensaries by the co-operation of the l practitioners, and, having done so, deliberately broke every which they had made; (*a*) they ignored the wage limit; (*b*) irculated handbills with a single doctor's name on them, and ssed whole districts, irrespective of the class of persons upon their tout was calling; (*c*) they appointed one doctor only to ensary, although, according to the compact, any doctor who in the district was at liberty to join, and this compact was ary, as, where there were several doctors, a check could be kept h abuses as now exist; (*d*) they canvassed patients of private tioners, although the latter were in attendance at the time, and o persuade them to change their doctor and enter the dispen-

se dispensaries are affiliated to the Manchester Infirmary and hospitals, and the medical men attached to them possess the ge of sending patients to these institutions for treatment. A nths ago, a case of chronic bronchitis and asthma was sent into irmary to prevent the patient from falling into my hands. I of several other cases sent from Pendleton to the infirmary, one of chronic phthisis, that had been under my care for months. ot just to the medical practitioners of Manchester, that the in- should be made use of as a means of mollifying and pleasing sfied provident dispensary patients. I should like to direct the on of the staff to this part of my letter.

ve declined to give the honorary secretary to the Pendleton ent Dispensary the names and addresses of the cases I have ned, because there is no rule in existence stating what circum- should qualify or disqualify a person from becoming a member. ion-limitation of income is one of the principal grievances medical men have against the provident dispensary system. tewart is of opinion that the Provident Dispensary is self- tive of abuse, owing to the inconvenience of procuring and obtaining medicine at the dispensary. This excuse does not apply to patients visited at their homes; and out-patients will not object to attend at the dispensary once or twice a week, and then send their children for medicine as often as they require it. Dr. Stewart cites case No. 1 in support of what he says. This patient was visited at her house, and not being satisfied, called in another medical man. I am unable to perceive how this case can support Dr. Stewart's assertion. The question of the medical attendance of the wage-earning classes is not to be solved by attending them for almost nothing, and allowing them to have their physic for a penny a bottle. Medical men who endeavour to make money by this kind of practice, regardless of how it may affect their neighbours, are, I consider, the chief offenders in reducing what some enthusiasts call a "noble profession" to a penny trade.

I agree with Dr. Stewart in regretting that out and home recommend patients do not care to join the provident dispensary. It was for this class of persons that these dispensaries were instituted, but they have failed to obtain them as members in any number. I suppose it was for this reason that the 30s. a week limit of wages came to be abolished. Last year, there was an increase in the number of recommend patients at the Pendleton Dispensary, notwithstanding that 500 new members joined the Pendleton Provident Dispensary. From this, it is evident that members of the Provident Dispensary are not recruited from among those who seek charitable medical relief at our hospitals and dispensaries. It is probable that sometimes members of the Provident Dispensary are compelled by long illness, or from want of employment, to apply for parish relief. I suppose this is what Dr. Stewart means, when he says he has attended parish patients in the Provident Dispensary. I have never heard of a parish patient joining the Provident Dispensary.

Dr. Stewart concludes his letter by asking "On what grounds do practitioners readily give their professional services for a fixed sum per member *per annum* (medicine included) to clubs, to the income of whose members there is no limit or restriction whatever, and, at the same time, object to women and children being treated on the same principle." Members of clubs are adult males—picked lives. Each candidate, before being made a member, has to undergo a medical examination by the club-surgeon. This is sufficient to exclude those who are unhealthy, and who do not possess a sound constitution. There is, therefore, usually little sickness among club members, and the remuneration which the medical man receives for his services is fairly satisfactory. Most medical men will agree with me, when I say that three-fourths of a general practitioner's work consists of attending to cases of sickness among women and children. Men, women, and children are admitted indiscriminately as members of the Provident Dispensary; but this is not all. A person, commencing with an acute illness, can, on the payment of five shillings, receive immediate attendance from the dispensary, and this attendance is continued at dispensary charges until the patient recovers. I need not say that this method of obtaining medical attendance during an illness is highly appreciated by those who are not regular subscribers to the Provident Dispensary.—I am, your obedient servant,

Claremont Place, Pendleton. Thomas N. Orchard.

THE REPEAL OF THE CONTAGIOUS DISEASES ACTS.

Sir,—Mr. Brown, in the Journal of April 17th, rejoices at the repeal of the Contagious Diseases Acts. "For the life of me" I cannot understand, or enter into the feelings of any medical practitioner, who has seen much practice, who could express such an opinion. I come to this conclusion; first, from the fact that almost all other diseases may destroy the sufferer, but there are few that can carry with them their dire effects, and social and domestic misery, down to the third and fourth generation; and, secondly, that it is quite an Utopian idea that in our large towns and cities, or in any large community, amidst the many temptations to which our sons are exposed, immorality can be stamped out. I admit Mr. Brown's suggestion that "vice must meet its first pains and penalties," but it is hard upon our children and children's children, that they should not be protected, as far as possible, from the result of a few moments' weakness in the lives of their progenitors.

We should take the common-sense view of life; and, with the knowledge that a terrible and irreparable danger stares us in the face, we should guard and protect, as far as in us lies, the results of the unnatural state of existence which the claims of Society, and extravagance of living, have brought about.

Our ancestors mostly married early, and were content with small means. "The girls of the period" are not suited to such conditions, and young men are therefore deterred from entering upon a life often ending in anxiety and penury. It was revolting enough to find ladies of education and position sitting in Council upon so disgusting a

matter as the Acts of Parliament relating to the subject, and I cannot help thinking that Virtue was robbed of much of its sentiment by such proceeding.

There are only two objections that I have ever heard alleged against the Acts; first, that it was a degradation (God help the mark!) to the women to compel a periodical medical examination, forgetting that these very women were only too willing to expose themselves to anybody for a trifle; and, secondly, that they were aids to licentiousness. To my mind, the repeal is only another evidence of the universal tendency to democratic licence.—Yours, etc.,

Hampstead. H. Cooper Rose, M.D.

P.S.—It is a singular coincidence that the same number of the British Medical Journal should publish the jubilant letter of Mr. Brown, and the terrible description of the spread of syphilis in Cape Colony consequent upon the repeal of the Contagious Diseases Act eleven years ago. The Cape Government have just passed a new Act, with very stringent regulations.

MEDICO-LEGAL AND MEDICO-ETHICAL.

INQUEST ON A CASE OF MISADVENTURE.

An inquest was held on Friday, in last week, on the body of a druggist's assistant named Hibbard, aged 54, who met with his death under somewhat peculiar and painful circumstances. The evidence adduced at the inquiry went to show that, on March 27th, the deceased, feeling unwell and remaining in bed, requested his wife to go to a Dr. Money for medicine. This she did, but, instead of seeing the "doctor himself," it appears she saw Dr. Money's assistant, to whom, supposing him to be the doctor, she described the symptoms, and from him received a bottle of medicine, some of which she gave to the deceased. As the deceased got worse, Dr. Money was sent for; but Dr. Money's assistant came in his place, and asked the deceased what was the matter with him, to which he replied he thought it was the medicine. Dr. Money's assistant thereupon, it was stated, took out the prescription from his pocket, and said: "I see I have made a mistake. I'll make him up a draught. Get a half-pint of stout, and divide into two parts. Also divide the draught into two parts. Put one of the parts of the draught into the stout, and give it to the patient. If he does not get sleep, give him the other part about three hours afterwards." These instructions were carried out, and, as the deceased did not get sleep, the other draught was administered. The deceased died the same day, about a quarter-past eight. Dr. J. F. Money, who saw the deceased shortly before death, stated that he found the deceased in a dying condition; and, from the symptoms, he was of opinion that the cause of death was narcotic poisoning. Dr. Phillips, the divisional surgeon, who made a *post mortem* examination, said the cause of death was asphyxia, caused by the draught of medicine, which he considered was not a proper one. Absalom W. Head, who stated that he was the assistant to Dr. Money, said he saw the deceased on Monday, and was of opinion that he was suffering from delirium tremens. He did tell the widow of the deceased that the deceased was to have half of the draught at the time; but on his way home he altered his mind, and made up a draught that should be taken in three parts. He wrote out a label so as the widow could read it. He examined the deceased, but did not think he was suffering from heart-disease. In the absence of Dr. Money, it was part of his duty to visit the patients. The Coroner, in summing up, condemned the system of putting unqualified assistants in charge of branch dispensaries, and said he always meant to do his best to put them down. The jury, after a short deliberation, returned a verdict of manslaughter against Mr. Head, who was committed for trial on the coroner's warrant, and was subsequently charged at Worship Street Police Court, bail being accepted. The defence was that the fatal mistake had been made by the non-observance of the instruction on the label of the bottle.

MEDICAL ETIQUETTE.

In replying to the special query of our correspondent C. as to the course which the respective disputants should have pursued in the case in question, it will be especially relevant to remark that, in all breaches of professional etiquette, or matters of ethical dispute, it is desirable and essential, prior to an appeal in our columns for redress, that the accusant should, either in person or by note (unless there be valid reasons to the contrary), communicate with the accused on the subject of complaint, and courteously solicit an explanation; failing which, an expression of our opinion may then be fairly sought.

In the case under consideration, our correspondent will have noted the *gravamen* of the charge lies in the undenied allegation that Mr. C., although cognisant of the fact that Dr. B. was the family medical adviser, and had very recently been in attendance upon the mother and child, and, moreover, had recommended that the operation in question should be deferred for a time, nevertheless not only proceeded to perform it without consultation with, or even a simple intimation to, the family medical attendant, but also called in another practitioner to assist him. So marked and unethical a proceeding entails, in our opinion, something more than a mere passing expression of regret. Further morally incumbent as it is upon the faculty at large, it is especially so that members holding an official professional position should, as far as may be, be free from all taint or suspicion of unethical tendencies.

FEES FOR MEDICAL ATTENDANCE ON CLERGYMEN.

Sir,—I have just received the subjoined: "Dear Dr. ——, I have been so frequently a patient of yours lately, that I am obliged to ask a question which has occurred to me before: Is it not the custom in the profession to attend the local clergy either gratuitously or at reduced rates?—Yours very truly, etc." Will you please state, in your next issue, your opinion on the point raised? or, if you prefer not doing so, will you allow some of my professional brethren to state in your columns, what their custom is? I may say that my own rule, for the last fifteen years, has been to attend gratuitously all underpaid incumbents and all curates (unless they were men of private means), but to charge ordinary incumbents as ordinary patients, that is, in our neighbourhood, 3s. 6d. a visit, or in exceptional cases, 5s. The writer of the above is an unmarried vicar, whose income, according to the Clergy List, is £500 a year.—I am, sir, yours truly,

X. Y. Z.

*** "X. Y. Z." has, we opine, been somewhat of an unobservant, or, mayhap, a non-reader of our answers to correspondents, or he could scarcely have failed to observe that the "point raised in his note has been answered in our columns again and again. Nevertheless, we willingly accede to his request, and quote for his guidance the following parenthetical extract from the *Code of Medical Ethics*, second edition, ch. ii, sect. 7, page 79. "In respect to charges for professional attendance on the clergy, beneficed or unbeneficed, and their families, there is no special general rule other than the simple 'unwritten' or (a time-honoured and 'true Samaritan' principle, alike applicable to those classes), by which the faculty have long been self-guided, namely, although fully and justly entitled to a commensurate remuneration for professional services, accordant to the patient's position in life; nevertheless, to make greater or less reduction, according to the circumstances of the individual case to such as may fairly be classed among the 'poor clergy' (beneficed or unbeneficed)—specially so-called—in contradistinction to the well-endowed and independent clergy; which latter should be charged as ordinary and not exceptional patients."

That an unmarried beneficed clergyman, with an income of £500 a year should seek eleemosynary (for it is nothing less) medical aid from a practising member of a hard worked and underpaid profession, is, to our mind, "passing strange."

PUBLIC VACCINATORS.

Public Vaccinator writes that a neighbouring practitioner, for the past twelve months, has been vaccinating a large number of children of the working class at his own surgery (from tubes) gratis. He thus deprives "Public Vaccinator" of all the cases thus vaccinated, and, moreover, does not put anything into his own pocket. "Public Vaccinator" asks whether there is any legal remedy against such a practice as this, or whether the Local Government Board would interfere.

*** There is no legal remedy; but would not the neighbouring practitioner to whom you refer, listen to your representations?

Dr. S. G.—Whether the course pursued is libellous, or not, is a question for legal advice. It would scarcely be worth while to deal with it in that sense. With reference to the unauthorised reprint and circulation of our expressed views on the point in dispute, we think that it is a regrettable breach of a well understood and recognised rule of procedure in such cases.

Observer (Aylesbury).—The letter is no doubt most objectionable from a professional point of view, as addressed by a medical man to a lay paper. It would convey a wrong impression to any reader who had not learnt from the daily papers that the invitations were issued according to the result of the drawing of lots, where every Member of the College of Surgeons who cared to apply had an equal chance, whatever his standard of professional honour.

UNQUALIFIED ASSISTANTS.

Mr. H. A. Allbutt (Leeds) writes:—"J. B. F." had better disguise himself as a working-man, and visit my Hunslet branch, and there get advice and medicine. He will, perhaps, then be satisfied that the fees are not cheap dispensary fees, but are the ordinary fees charged by the neighbouring practitioners. I trust this reply will be sufficient to convince those gentlemen who will persist in thinking that I degrade myself by low fees.

*** Mr. Allbutt also complains that he has received objectionable anonymous letters, but intimates that he has a clue to their authors.

The Weston-super-Mare Improvement Commissioners have, upon the recommendation of the Sanitary Committee, increased the salary of Mr. C. V. Hitchens, the medical officer of health, from £60 to £80 *per annum*, in consequence of the area of the district having been increased.

Medical Magistrates.—Dr. Owen Elias Owen, of Llangefni, and Dr. John Roberts, of Menai Bridge, have been placed on the Commission of the Peace for the County of Anglesey.

The Bishop of Worcester has been re-appointed President of the Birmingham and Midland Skin and Lock Hospital for the ensuing year.

OBITUARY.

THOMAS PENNINGTON, M.R.C.S.Eng., L.S.A., Liverpool.

MR. THOMAS PENNINGTON, who for many years was in practice in Liverpool, died on April 11th. He retired from practice some years ago. Mr. Pennington, who was in his seventy-ninth year, had been for some time in failing health. The deceased gentleman was the second son of the late Rev. J. Pennington, rector of Lowton, in Lancashire, and was born in May, 1807. He first entered the medical profession under his elder brother, who had a large practice at Prescot for many years. Mr. Pennington became a licentiate of the Society of Apothecaries in 1828, and was admitted a member of the College of Surgeons in 1829. Settling in Liverpool, he soon obtained a very large practice in the city and neighbourhood. His reputation as a surgeon stood very high. He was exceedingly popular with the members of his profession, and was frequently asked to take public positions, but he was of a singularly modest and retiring disposition, and invariably declined all such invitations to assume public duties. In all works of charity, he was ever ready to co-operate, and to the poor in his district he gave freely his advice and assistance. He took an active interest in all movements connected with medical education, and was a liberal donor to the fund for the establishment of a chair of medicine in the Liverpool University. His death will be universally regretted by the members of the medical profession, and also by a wide circle of private friends, by whom he was held in great respect. On retiring from practice, he was succeeded by his nephew, Mr. T. R. Pennington, who had been long associated with him.

FREDERICK TICKELL PRINCE, M.R.C.S., L.S.A.

WE have to record with regret the death of this promising practitioner, at the early age of 41.

Frederick Tickell Prince was the descendant of a very old family, who settled and practised in Cambridgeshire and the neighbourhood for about 200 years as medical men. His father was the younger son of Mr. J. J. Prince, an eminent practitioner of Balham, who had been in practice at Sawston, near Cambridge, between forty and fifty years. Frederick Tickell Prince was born November 1st, 1844, and died April 13th, 1886. When eight years of age, he was sent to the Brentwood Grammar School, and afterwards to the Stepney Grammar School, as a private pupil; whilst there, he had two attacks of pleurisy with effusion, which rendered his after-life very delicate.

At the age of 18, he was sent to St. Bartholomew's Hospital; and, after having passed the necessary examinations, he was sent to the University of Cambridge, which he unfortunately had to leave, owing to his delicate health, and therefore never finished his curriculum. He then joined his father for a short time, and afterwards became house-surgeon to the St. George's (Hanover Square) Dispensary, where he remained several years. It was here that his best work was done. Indefatigable in visiting the patients at their own homes, accurate in keeping all the accounts of the institution, patient in diagnosis, cautious in treatment, and kind and attentive to all, Prince soon won the affections of all with whom he came into contact. To the Committee of the Dispensary, his advice, at various crises which happened to the charity, was invaluable.

But it was not alone in his profession that he was popular. Being fond of society, and gifted with a refined taste in art and music, he drew towards him many friends with similar tendencies. His musical evenings in the consulting-rooms of Mount Street, will not be easily forgotten by those who enjoyed them. Later, he became surgeon to the dispensary, and settled first in Berkeley Square, and finally in Curzon Street, Mayfair.

Only a few months ago, he married; but soon afterwards, his health appeared to be as delicate as in the days of his boyhood. After undergoing an operation, he went a long sea-voyage for his health, and had only just returned when he was seized, at the Great Western Hotel, with great difficulty of breathing and symptoms of aneurysm of the aorta, which carried him off in a few days.

His loss will be much felt by his friends, his colleagues, and more especially by the poor in the parish of St. George's, Hanover Square.

PRESENTATION.—A handsome silver inkstand has been presented to Mr. Jeffreys, of Chesterfield, in recognition of his generous efforts on behalf of Dr. Bradley. It bears the following inscription:—"Presented to Mr. Jeffreys, by a number of the subscribers to the Bradley Fund, to record their high sense of his generous, self-denying, and successful exertions on behalf of Dr. Bradley, March, 1886." The list of contributors contains the names of many leading members of the profession in London and the provinces.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, April 19th, 1886.

Sewer-Gas in the House of Commons.—In answer to Mr. BAUMANN, Sir H. ROSCOE said that the Committee on the Ventilation of the House brought under the notice of the proper officer of Her Majesty's Board of Works the desirability of at once carrying out the temporary measures, referred to in the interim report of the Committee, for effectually preventing the air of the Palace of Westminster from being contaminated with sewer-gas, emanating from the low-level sewer of the main drainage of the metropolis; and they had received the assurance of that officer that the proposed measures could, in his opinion, be executed before the House reassembled after the Easter recess. They had, moreover, reason to believe that the Board of Works did not look otherwise than favourably on the proposal.—Mr. BAUMANN said what he wanted to know was not whether the works could be done, but whether they would be done.—Sir H. ROSCOE said that the Committee had no power to order the works to be carried out.—Mr. LEVESON-GOWER said that the Board of Works fully recognised the importance of having the works done at once. No effort would be spared, and they were in hopes that the improvements would be finished by the time the House met again.

Veterinary Surgeons in India.—In reply to Mr. J. M'CARTHY, Mr. S. HOWARD said: As was stated to the House on March 12th last, in reply to a question from the hon. and gallant member for Holborn, a reduction in the veterinary establishment in India has been sanctioned by the Secretary of State in Council, on the recommendation of the Government of India. There is, however, so far as I am aware, no desire to alter the existing proportions of senior and junior officers in the department. There is, at present, no civil veterinary department in India, but the creation of a civil branch of the service is at present under consideration. No representation has been made by the Government of India that the number of skilled surgeons in the country is insufficient.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE HAMLET OF MILE END OLD TOWN.

A REPORT to the Home Office has been published in the form of a Parliamentary paper, on the sanitary condition of the hamlet of Mile End Old Town, being the result of an inquiry made by Mr. D. Cubitt Nichols, in accordance with the recommendation of the Royal Commission on the Housing of the Working Classes. The report states that it was arranged at a meeting held on January 11th last, at the Vestry Hall, Bancroft Road, that an inspection should be made of the alleged sanitary defects in 87 houses referred to in a list forwarded by the Mansion House Council to the Local Government Board, and also into the alleged sanitary defects in 508 houses referred to in an amended and enlarged list sent in by the Mansion House Council. In the above 508 houses, the whole of which, with some few exceptions, were occupied by tenants paying weekly rentals, the landlords being non-resident, there were, at the time of the inspection, 367 water-closets without water-supply, 72 water-closets with defective apparatus, 365 dust-bins wanting or defective, 168 defective gullies and sinks, 174 cases of defective paving to yards, and a large number of dirty and dilapidated houses. With regard to the defective water-supply, the contention of the vestry was that Section 81 of the Metropolis Local Management Act did not apply. This contention, however, was overruled by the decisions of legal authorities. The report further mentions the necessity for a better supervision by, and an increase in, the number of sanitary officers. There are 10,000 houses which may be placed under the regulations, and the length of public road is 33½ miles. With the old staff of one inspector, it was clearly impossible to exercise a proper supervision, and Mr. Nichols doubts if the present staff of two inspectors will be found sufficient.

THE EVESHAM BOARD OF GUARDIANS AND MR. HORACE E. HAYNES.

IT will be within the remembrance of our readers, that, in the JOURNAL of February 6th, 1886, in answer to a letter from Mr. H. E. Haynes, district medical officer in the Evesham Union, we expressed the opinion that he was entitled to claim £2 for his attendance on a

case of puerperal malady to which he had been called, and which the clerk disputed his title to receive. Subsequently, acting on our suggestion, Mr. Haynes applied for the decision of the Local Government Board thereon, when the Department concurred in the view held by the clerk; at the same time intimating that, if the board of guardians, under the special circumstances of the case, voted Mr. Haynes a gratuity, they, the Local Government Board, would sanction the payment. We now learn, from the *Evesham Journal* of April 10th, that, at the meeting of the board of guardians of the Evesham Union on April 4th, the clerk read a letter from the Local Government Board, from which we find that the sanction of the Department had been given to a gratuity of £1 to Mr. Haynes for his extra labours, etc., in attending for several weeks a poor woman affected with phlegmasia dolens.

At the same meeting of the board, a letter, from the Monmouth Board of Guardians, was read, asking the co-operation of the Evesham Board in petitioning the House of Commons in favour of a general reduction of the officers' salaries. This proposition was strongly urged on the board by the chairman, the Rev. Canon G. D. Browne, and, on being put to the vote, was carried by 15 to 5; that, too, in spite of the remonstrances of the local poor-law inspector, Mr. Long, who happened to be present at this board meeting. There is, fortunately, not the remotest probability that either the Monmouth Board, nor any other board, will succeed in the enterprise on which they have entered, of reducing the stipends of their ill-paid officers.

CONTRACTS AT TO SMALL-POX HOSPITALS.

J. R. writes: I shall feel obliged if you will be so good as to afford me information and direction in the following case. Small-pox having broken out in the district of which I am medical officer, the Town Council have rightly improvised a building as a temporary hospital for the reception and isolation of infective cases. The population of the town is about 4,000, and there is a health-officer. The question arises, who is supposed to take charge of this so-called hospital? Am I, as medical officer of the district, bound to attend any or all cases, paupers or otherwise, removed to this building? that is, is it a duty incumbent on the medical officer of the district to undertake these duties as a contingency necessarily attached to his office in certain emergencies, as the authorities appear to think; or is the sanitary officer of the council the proper person to undertake the charge of such hospital by, of course, arrangement? It seems to me that, between the medical attendant and the sanitary officer of such a hospital, things would not be as likely to be carried out satisfactorily as if under one sole direction. I am further of opinion that the board of guardians could not legally call on their district medical officer to undertake such work; at any rate, not without adequate remuneration. However, I should be glad of an authoritative ruling on the subject, if possible. I should also state that I have not yet represented the matter to the board, who, I believe, would readily endeavour to meet the case; but, as it is said to be the duty of the district medical officer, which I doubt, I wish your opinion on it.

May I also inquire what the rule is respecting the granting of certificates of health to children for the use of the board schools, without payment? Hitherto I have refused to give such certificates. Am I right or wrong?

*** Everything depends upon the contract made with the board of guardians. If the corporation appoint a medical officer to the hospital, we presume he would undertake the charge of all its inmates, as otherwise there might be friction. If, however, there be no medical officer, and the hospital be in our correspondent's district, we think he might be called upon to attend all pauper cases arising in his district and removed to his hospital; but, beyond this, a special arrangement should be made with him for his services. He is not obliged to give certificates for the purposes of the board school.

LOCAL GOVERNMENT BOARD LYMPH.

NEMO writes: I should like to know, through the medium of your valuable JOURNAL, whether any of my brother public vaccinators have been put to the same inconvenience as myself, and one or two of my friends, by the lymph on the last two or three occasions (at intervals of six months), supplied by the Local Government Board? Our experience is that the tubes are small in calibre, very fragile, and the lymph contained therein simply inert and worthless. We have quite sufficient trouble with the public, without being obliged to persuade them to come up oftener through failure at the start.

I think it would be much better to make a charge per tube, and send good material, than, as at present, to send valueless stuff, misleading alike the vaccinator and the vaccinated.

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed their second examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 13th instant, and, when eligible, will be admitted to the pass-examination.

Messrs. W. J. Foster, student of St. Mary's Hospital; J. G. Ogle, E. M. R. Bryant, and E. G. Carpenter, St. Bartholomew's Hospital; A. N. Boycott, H. G. Turney, and F. C. Abbott, St. Thomas's Hospital; B. M. H. Rogers, and A. Gale, of University College; K. W. Poole, F. S. Harris, and E. Burchell, of London Hospital; R. T. Hewlett, of King's College; W. H. Clarke, of Charing Cross Hospital.

Passed in Anatomy only.

Messrs. W. Metcalfe, and L. Cutler, of St. George's Hospital; H. W. Reynolds, and F. T. Long, of St. Bartholomew's Hospital; W. Gibson, of Guy's Hospital; E. H. Strong, and W. V. Eaves, of University College.

Passed in Physiology only.

Messrs. P. T. B. Beale, of King's College Hospital; D. Lawson, and C. L. How of Middlesex Hospital; C. Wilson, W. Thomas, W. H. Coates, and S. Blake, of London Hospital; N. A. A. Trenow, of St. George's Hospital; A. Boulton, of Charing Cross Hospital; F. Dugon, of Guy's Hospital; D. D'A. Wright, of University College.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College, at a meeting of the Court of Examiners, on the 19th instant.

F. C. Kempster, L.S.A., student of Westminster Hospital; F. O. Smith, L.K.Q.C.P.I., Queen's Road, S.E.; P. C. H. Strickland, West Dulwich; F. Pain, L.S.A., Dulwich, of St. Bartholomew's Hospital; A. L. Halyard, L.K.Q.C.P.I., Knatsford, of the Royal Infirmary, Manchester; Barker, M.B.Durham, Reeth, and A. C. A. Packman, Sheffield, of Newcastle and Sheffield; R. N. Fraser, M.D.Kingston, Westmeath, Ontario, Kingston University; A. A. Fletcher, M.B.Melbourne, of Melbourne University; T. Richards, Bristol, of Bristol General Infirmary; A. E. Nevin, L.R.C.P.Edin., Liverpool, and A. W. Hare, M.B.Edin., of Edinburgh University; H. Herbert, L.R.C.P.L.Leeds, of Leeds General Infirmary.

Two candidates were referred for three months, and 7 candidates for six months.

The following gentlemen passed on the 20th instant.

Messrs. H. V. Rake, L.S.A., Fordingbridge, student of Guy's Hospital; R. Riley, L.R.C.P.Ed., Bedworth, of Birmingham; F. Tyndall, L.R.C.P. Liverpool, and W. T. Thomas, M.B.Ed., of Liverpool Royal Infirmary; H. Bonnefin, L.R.C.P.Lond., St. Paul's Road, N.W., of University College Hospital; G. R. J. Fletcher, L.S.A., East Dulwich; J. A.Coleclough, L.S.A., Holloway; J. F. H. Clarke, L.S.A., Gerold Street, of Charing Cross Hospital; L. G. Guthrie, L.S.A., Phillimore Gardens, and G. A. Webster-Hibbart, of St. Bartholomew's Hospital; W. W. Paterson, M.B.Glasgow, Ayr, N.B., of Guy's, and Glasgow; W. Bigam, M.B.Durham, Sunderland, Newcastle Infirmary; W. S. Lang, M.B.Edin., of Edinburgh University; H. L. Green, of Pennsylvania.

Three candidates were referred for three months, 2 for six months, 1 for nine months, and 2 for twelve months.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, April 15th, 1886.

Baumgartner, Henry Spelman, Newcastle-on-Tyne.
Coleclough, John Arthur, 49, Penn Road, Holloway, N.
Evans, Charles Silvester, 3, Harbury Terrace, Fenterman Road, S.W.
Fletcher, George Rory John, "Croome," Kelmore Grove, East Dulwich, S.E.
Guthrie, Leonard George, 6, Phillimore Gardens, W.
Kempster, Felix Charles, Oak House, Bridge Road, Battersea, S.W.
Thomas, Thomas Nash, Lecka Solva, Pembrokeshire.

MEDICAL VACANCIES.

The following vacancies are announced.

BOOTLE BOROUGH HOSPITAL, near Liverpool.—House-Surgeon. Applications by April 26th to The Chairman.

BRADFORD FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION.—Dispenser. Salary, £65 per annum. Applications by April 24th to Mr. D. Stone, 80, Arcadia Street, Manningham, Bradford, Yorkshire.

BRADFORD INFIRMARY AND DISPENSARY.—House-Surgeon for three months. Salary, £12 per month. Applications by April 29th, to the Secretary.

CASTLEBLAYNEY UNION.—Medical Officer. Newtownhamilton Dispensary. Salary, £135 per annum and fees. Election on April 24th.

COUNTY ASYLUM, Whittingham, Preston.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications by April 26th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental Surgeon. Applications by May 10th, to G. A. Ibbetson.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.—Dental Surgeon. Applications by April 29th.

ESSEX AND COLCHESTER HOSPITAL.—Physician. Applications by April 28th to C. E. Bland.

GENERAL HOSPITAL, Birmingham.—Assistant Surgeon. Honorarium, £10. Applications by April 30th, to H. Fox.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—Junior Resident Medical Officer. Salary, £50 per annum. Applications by April 28th, to A. Hope.

HULME DISPENSARY, Manchester. Honorary Physician. Applications by April 30th to the Honorary Secretary.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary £120 per annum. Applications by May 8th.

LIVERPOOL DISPENSARIES. — Three Head Surgeons. Salary, £200 per annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liverpool.

LIVERPOOL DISPENSARIES. — Six Assistant-Surgeons. Salary, £80 per annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liverpool.

METROPOLITAN ASYLUM.—Resident Assistant Medical Officer. Salary, £1 per annum. Applications, addressed A. M. C., to Mr. Parish Dixon, Solicitor, 13, Gray's Inn Square, W.C.

MIDDLESEX HOSPITAL, W.—Assistant Dental Surgeon. Applications by April 27th, to A. O'Donnel Bartholeyns.

ATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury.—Junior House-Physician. Salary, £50 per annum. Applications by May 3rd.

ARISH OF ST. LEONARD, SHOREDITCH.—Resident Assistant-Medical Officer. Salary, £100. Applications by April 27th to Robert Clay, 213, Kingsland Road, E.

INXTON COLLIERIES.—Resident Surgeon. Stipend, £300 per annum. Applications to the Pinxton Collieries, near Alfreton, Derbyshire.

OCHDALE INFIRMARY.—Resident Medical Officer. Salary, £80 per annum. Applications by April 28th.

OYAL BERKS HOSPITAL.—Assistant-Surgeon. Applications by May 4th to J. F. Hugo.

OYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—Clinical Assistants. Applications by April 28th.

OYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—Junior Assistants. Applications by April 28th.

OWNSHIP OF MANCHESTER.—Resident Medical Officer. Salary, £140 per annum. Applications by April 28th to George Macdonald.

EST LONDON HOSPITAL, Hammersmith Road, W.—House-Physician. Applications by April 28th.

EST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon. Applications by April 28th.

ESTMINSTER GENERAL DISPENSARY.—Honorary Physician. Applications by May 8th.

MEDICAL APPOINTMENTS.

ALDWIN, T. A., M.D.(Dublin), L.R.C.S.I., appointed Assistant-Surgeon to the Hull Royal Infirmary.

ETTINGHAM, Charles E. S., appointed Medical Officer and Public Vaccinator to the Stogumber District of the Williton Union, Somerset.

OMBE, Charles Frederick, M.R.C.S., L.R.C.P.Ed., appointed House-Surgeon to the Sheffield General Infirmary.

EYGATE, W. H., M.R.C.S., appointed Medical Officer to the Fareham Union.

IESTLY, Percy, M.R.C.S., L.S.A., appointed Assistant House-Surgeon to the Sheffield General Infirmary.

UANCE, T. Coke, M.D., F.R.M.S., appointed Honorary Surgeon to the Sunderland Hospital for Sick Children.

OMSON, Theodore, M.A., M.B., appointed Medical Officer of Health, City of Aberdeen.

URNER, Nathaniel H., L.R.C.P.Lond., M.R.C.S.Eng., appointed Junior Resident Medical Officer to the Royal Free Hospital, W.C., *vice* H. W. Dodd, resigned.

ALKER, Jane H., L.K.Q.C.P., L.M., appointed Resident Medical Officer to the Wirral Hospital and Dispensary for Sick Children, Birkenhead.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

SARCE.—On the 14th April, at Lennox Villa, Hurstpierpoint, the wife of Henry Pearce, Surgeon, of a son.

MARRIAGE.

OLQUHOUN—MACMILLAN.—On March 2nd, at St. Matthew's, Dunedin, New Zealand, by the Rev. F. G. M. Powell, Daniel Colquhoun, M.D.Lond., M.R.C.P.Lond. (late Senior Assistant-Physician, Charing Cross Hospital), of High Street, Dunedin, to Christian Campbell Macmillan, daughter of Thomas Macmillan, of 31, Ridge Road, Hornsey.

DEATH.

OGIE.—On Tuesday, April 6th, at 47, Queensborough Terrace, W., of heart-disease, Cosmo Gordon Logie, Surgeon-General, late of the Royal Horse Guards Blue. Friends will please accept this intimation.

PRESENTATION.—Dr. and Mrs. Mackie, on the occasion of their aving Turvey, have been presented, by a number of friends, with a andsome silver teapot and cream jug, as a mark "of respect and ffectionate regard." Dr. Mackie, whose state of health compels him o seek a more congenial climate, will take up his residence in the Isle f Wight.

MEDICAL MAGISTRATE.—Professor R. J. Anderson, of Galway, and eechhill House, county Down, has been appointed a magistrate of he latter county.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

UESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Champneys: On the Development of Mammary functions by the Skin of Lying-in Women. Dr. Althaus: On Paraplegia from Pott's Disease, and its Treatment by the actual Cautery.

RIDAY.—Clinical Society of London, 8.30 P.M. Mr. Timothy Holmes: A Case Illustrating the Diagnosis of Interstitial and Subpleural Laceration of the Lung. Dr. Bristowe: A Case of Gummata of the Lung. Dr. Burnet: A Case of Hydatids of the Liver opening into the Right Lung; Excavation of the whole Lower Lobe. Dr. Percy Kidd: Aneurysm of the Aorta; Extravasation of Blood into the Posterior Mediastinum, compressing the Œsophagus and Vagus Nerves, and Rupture into the Abdominal Cavity, associated during Life with frequent Vomiting

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

ERGOTIN FOR HYPODERMIC USE.

M. N. G. writes: Will Dr. Robertson, or any of your readers, kindly inform me if I can obtain anywhere a stable ready-made solution of ergotin for hypodermic use, which will not spoil with time, and is not likely to cause local irritation, and is efficacious withal. Failing that, I would ask the following questions. 1. What is the best preparation for hypodermic use? 2. What is the quantity to be used? 3. With what, and to what, extent should it be diluted? 4. Is there any way of preventing the local irritation which is said to follow generally? 5. Is there any place of election for injection, or should it be in the mammary region in hæmoptysis, and in the hypogastric region in uterine hæmorrhage preferably, or would injection at the arm do just as well? 6. How often may the injection be repeated? 7. Are there any advantages in using sclerotic acid in preference to ergotin? 8. If so, what is the quantity to be used? 9. What makers' is the best? Detailed information on these points will be of use to many practitioners with whom the difficulty in trying treatments recommended often is (1) what to use, (2) how much to use, (3) how to use.

MEDICAL STUDY IN GERMANY.

A. V. writes: I wish to study medicine in Germany for some time, but am not well up in the language. Under these conditions, might one attend the practical classes there at any of the universities to any advantage? I have heard that most of the teachers in these classes are able to speak English, and that it is no uncommon thing for students to go there to study without a knowledge of the language.

N. T. asks for a suggestion as to a good book on diseases of children for the use of a busy country practitioner.

THE NOMENCLATURE OF DISEASE.

G. M. C. asks: Why is not the official *Nomenclature of Disease* issued by the General Medical Council? Surely it is a more representative body than the Colleges of Physicians and Surgeons of London.

ANSWERS.

SYNTAX should append his name to the criticisms which he offers of the skill of other practitioners.

A HEALTH-RESORT WANTED.

IN reply to "A Member," "M.B." asks: What better place could "A Member" have for an antirheumatic climate and surroundings than the town of Droitwich, with its powerful brine-baths, so efficacious in rheumatic affections, and very central, with a lovely country round it, and well supplied with railway accommodation? Any further information "A Member" might require, he would gladly give him.

MEDICAL CIRCULATING LIBRARY.

IN reply to "A.M.D.," Brigade-Surgeon E. D. Tomlinson recommends Mr. H. K. Lewis's library, which he has used for more than twenty years. He has always been well supplied with the latest editions of books, and has been courteously treated.

DR. T. P. HARVEY.—Quacks of this kind thrive upon notoriety. The man does not assume any medical title, and publicity in a professional journal would not affect him.

NOTES, LETTERS, ETC.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

IN the report of the discussion on Messrs. Barwell and Jacobson's papers at this Society, the name of Mr. Charles Stewart, as one of the speakers, was erroneously substituted in the JOURNAL of April 3rd for that of Dr. Garson.

PROPHYLACTIC ADMINISTRATION OF QUININE.

F. (Capetown), after thirty years' experience in every malarious climate, is firmly of belief that quinine given in three-grain doses, as a prophylactic, to any person for a month previously to his subjection to special malarial influences, will be attended with results which will surprise the giver. If only given when men are suffering from fever, the results will be as surprisingly disappointing.

SAFETY IN A RAILWAY CARRIAGE.

MR. E. GARRAWAY (Faversham) writes: The United Kingdom Railway Officers and Servants' Association, in issuing their annual statistics, record that, of eight hundred million passengers who travelled by rail in twelve months, one in twenty-two millions is killed from causes beyond his or her control. Assuming that our first parents were located in the garden of Eden six thousand years ago, then—had Adam purchased a season-ticket on the day of his creation, and taken a railway journey every day up to the present time, and, his life being prolonged, would so continue until the year of our Lord 56,158—it is probable that, in the course of that time, he would come to be killed. In other words, one may reasonably calculate upon being smashed up, upon an average, once in 60,273 years. True, this untoward event might happen to-morrow, but then the consolation remains that it would not come to one's turn to be killed again for 60,273 years more. Could any man sit by his own fire-side for this period without some calamity happening? Manifestly, the safest condition in life is the interior of a railway carriage. Take a perpetual ticket on a well-appointed line, beg the guard to lock you securely in a first-class compartment, and you will never die—at least, from accident.

SEWAGE-FARMS.

DR. E. F. S. GREEN (South Norwood) writes: Since I wrote to you on the proposed extension of the sewage-farm in this neighbourhood, the corporation have made certain alterations of their plans. They propose not to extend the farm nearer to Portland Road than 300 yards, and to extend the Albert Road in a parallel line to South Portland at that distance from it. The Albert Road will then be one of the boundaries of the sewage farm. This alteration is so far good in its way; but if they had also engaged not to extend it so far towards the Harrington Road, it would have been better. I enclose a map, taken from the newspaper, not for publication, but for you to see. It is difficult to find any authority as to how near a sewage farm can come into a populous neighbourhood with safety. Perhaps you could give me some information, taking into consideration the nature of ground, etc., as explained in my last letter.

THE LIBRARY OF THE ROYAL COLLEGE OF SURGEONS.

A FREQUENT SUFFERER complains, as many other correspondents have done before, of the intolerable inconvenience which results from the frequent closing of this library at a very short notice. When the new Examination Hall is completed, the inconvenience will no doubt cease. In the meantime, it is difficult to suggest how it can be obviated; although, perhaps, something might be done by collective action on the part of the Fellows and Members.

ERRATUM.—In the leading article on Enucleation, JOURNAL, April 17th, p. 747, line 21, for "3 and 3.3 per cent," read "3 and 3.3 per 1,000."

COMMUNICATIONS, LETTERS, etc., have been received from: Mr. T. Almond Hind, London; Mr. Gubb, London; Mr. H. F. L. White, Caxton; Messrs. R. E. Crompton and Co., London; Mr. P. Addis, Iver, Buckinghamshire; Dr. Henry Sutherland, London; Mr. R. Freeman, London; Mr. J. Parsons, London; Our Birmingham Correspondent; Mr. E. Garraway, Faversham; Mr. R. F. Rumsey, Burnham; Our Liverpool Correspondent; Mr. William Berry, Wigan; Mr. C. Atkin, Sheffield; Mr. David Berry, London; Mr. F. J. Kilner, Bristol; Mr. H. Percy Dunn, London; Dr. A. Flint, New York; Dr. W. Osler, Philadelphia; Dr. Norman Kerr, London; Mr. F. E. Pirkis, Nutfield; Dr. Kelly, Taunton; Dr. E. E. Meeres, Plymouth; Mr. G. F. Edwards, Ripon; Dr. T. N. Orchard, Pendleton; Mr. S. Plowman, London; The Secretary of the Local Government Board, London; Dr. G. N. Pitt, London; Mr. W. Adams Frost, London; Mr. J. J. O'Bryen, London; Dr. H. C. Rose, Hampstead; Dr. C. Stawell, Bagenalstown; Mr. Hadley, London; The Secretary of the Social Science Association; Messrs. Burroughs and Wellcome, London; Dr. Edge, Manchester; Mr. Dunscombe, Liverpool; Mr. H. L. Leigh, London; Dr. D. McKay, Inverness; Dr. Styrap, Shrewsbury; The Honorary Secretary of the Manchester Medical Society; Dr. Thin, London; Dr. Moir, Belize; Mr. G. Eastes, London; Mr. C. B. Keetley, London; Dr. T. A. Baldwin, Hull; Dr. Mackenzie, Glossop; Mr. J. Pearson, Sheffield, Dr. S. Martin, London; Dr. T. Coke Squance, Sunderland; Mr. W. W. Wagstaffe, Sevenoaks; Mr. J. Moore, London; Mr. H. T. Legat, Stockton; Our Edinburgh Correspondent; Mr. J. E. Hartling, Birmingham; Mr. J. Henry Trout, Birmingham; Mr. O. R. Travers, St. Leonards; Mr. F. Richardson Cross, Clifton; Mr. H. de Meric, London; Our Manchester Correspondent; Mr. G. Richmond Moore, Jersey; Dr. P. Horrocks, London; Mr. G. A. Harris, Simla, Punjaub, India; Our Aberdeen Correspondent; Our Paris Correspondent; Mr. Wm. Thorburn, Manchester; Dr. H. Radcliffe Crocker, London; Dr. Charles, Streatham; Mr. Emil Behnke, London; Dr. Maxwell, Woolwich; Mr. F. A. Eaton, London; Mr. John Trotter, London; Dr. A. T. Myers, London; Mr. A. M. Alcock, Innishannon; Mr. R. Chambers Owen, Halesowen; Dr. G. A. D. Mackay, Greenock; Dr. Gresswell, London; Our Glasgow Correspondent; Our Dublin Correspondent; D. G. A. Hetherington, St. John, United States; A Manchester Associate; Mr. C. H. Wells, London; Mr. T. M. Wright, Bottesford; Mr. A. W. Mayo Robson, Leeds; Dr. Tatham, Salford; Dr. C. Doyle, Southsea; Mr. R. Dacre Fox, Manchester; Mr. Shirley Murphy, London; Mr. H. S. Taylor, Guildford; Mr. A. E. Boulton, Horncastle; Mr. A. W. Nankivell, Chatham; Mr. T. Fletcher, Warrington; Dr. A. D. Leith Napier, Dunbar; Dr. Charteris, Glasgow; Dr. H. Page, Redditch; Dr. G. Stoker, London; Dr. Edwardes, London; Dr. Murrell, London; Dr. J. H. Keeling, Sheffield; Dr. Willoughby, London Dr. Joseph Rogers, London, etc.

BOOKS, ETC., RECEIVED.

On Asthma, its Nature and Treatment (Illustrated). By Horace Dobell, M.D. etc. London: Smith, Elder, and Co. 1886.

Manual of Operative Surgery. By L. A. Stimson, B.A., M.D. Second Edition (Illustrated). London: H. K. Lewis. 1886.

The Alkaline and Non-Alkaline Treatment of Acute Rheumatism. By C. S. Taylor, M.D., etc. London: H. Kimpton. 1885.

Compensation for Personal Injuries on Rail, Road, and River. By T. J. Wesle Bennett, F.R.S.L. London: Commercial Gazette. 1886.

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ABSTRACTS

OF THE

CARTWRIGHT LECTURES

N CERTAIN PROBLEMS IN THE PHYSIOLOGY OF THE BLOOD-CORPUSCLES.

livered before the Association of the Alumni of the College of Physicians and Surgeons, New York, March 23rd, 1886.

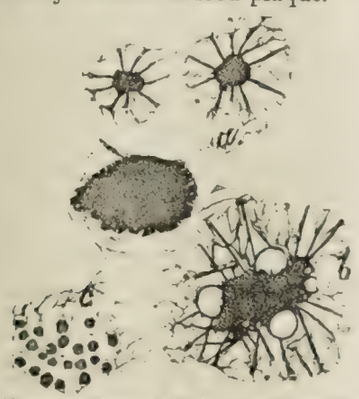
By WILLIAM OSLER, M.D.,
Professor of Clinical Medicine in the University of Pennsylvania.

Lecture I.—The Blood-plaque.

E origin and life-history of the corpuscles of the blood have been, l still are, among the great secrets of physiology. In no depart- nt of physiology has so much labour been spent with so little ap- ent result. While in other lines we have penetrated to the centre certain biological mysteries, the progress here seems painfully w; and the discovery, by Wharton Jones, in 1846, of the amœboid ver of the colourless corpuscles, the rediscovery, by Cohnheim, of ir migratory power, and the discovery of the blood-forming func- n of the marrow, may be said to be the most important additions our knowledge in this generation.

As regards the blood-corpuscles, the work of the past few years has n largely in two directions—toward the determination of the exist- e or non-existence of a third corpuscle in the blood, and in the dy of the histological processes attending degenerati n and re- eration of the corpuscles in disease. To these subjects the lectures e devoted.

Name.—The names which observers had given to this third cor- cle were unfortunately numerous. Donné called them globulins, mmerman elementary corpuscles. Later, the collected groups were erred to as "granular *débris*" or Schultze's granule-masses. Among more recent observers, Hayem gave the name of hæmatoblasts, and zzozero that of blutplättchen—blood-plate. Various writers had erred to this element as the third corpuscle, while in the research Kemp, just issued from the Biological Laboratory of Johns Hop- s University, the term "plaque" was used. To the terms, third cor- cle and hæmatoblast, there was the serious objection that these mes had been applied to other bodies which have nothing to do h the elements in question; the former, to the so-called invisible puscle of Norris, and the latter, to the nucleated red corpuscle of bone-barrow. The name hæmatoblast, moreover, carried with it tain theoretical conceptions regarding the functions of these bodies, ich might or might not be true. Dr. Osler, on the whole, preferred name which Bizzozero had adopted; but, as blood-plate, the glish equivalent of the word *bluttplättchen*, was not euphonious, would translate it by the word blood-plaque.



ig. 1.—*a*. Aggregations of plaques in human blood, forming the so-called granule-masses of Max Schultze. *b*. Disintegration of the plaques, with fibrin filaments and mucin-like spheres adhering to the mass. *c*. Isolated plaques.

Methods of Study.—To study the plaques properly, the blood must allowed to pass directly into a solution which, while preventing glutination, did not materially alter their form or characters. Or y might be observed while still within the blood-vessels. Suitable solutions for histological purposes were osmic acid 1 per cent., the fluids of Pacini, modified by Hayem, and of Bizzozero. Pacini's solution, as used by Hayem, consisted of sodium-chloride, 1 part; sodium-sulphate, 5 parts; corrosive sublimate, 0.5 part, in 200 of distilled water. Bizzozero's solution consisted of sodium chloride .75 per cent., tinged with methyl-violet. The examination was thus made. A single drop of the solution was placed upon the thoroughly cleansed finger-pad, and, with a sharp needle, or pricker, the skin was pierced through the drop, so that the blood passed at once into the fluid, which was then received upon a slide and covered; the plaques remained isolated from each other. The amount of blood allowed to flow into the drop must not be large, and should be quickly mixed. In many respects, the most suitable medium was osmic ocid, $\frac{1}{2}$—1 per cent., by which permanent preparations could be obtained. Good preparations might also be obtained by spreading rapidly a thin film of blood on a cover-glass, and then placing it at once in the osmic acid. Kemp recommended placing the blood-drop on a cover-glass, rapidly moving it about, and then washing off the superfluous blood with salt-solution. The plaques adhered to the cover, while the red cells were swept away. The cover was then quickly put in osmic acid.

For the study of the plaques in the circulating blood, it was necessary to employ the mesentery or omentum-plate, and similar measures adopted to those used in the study of the circulation of the blood in mammals.

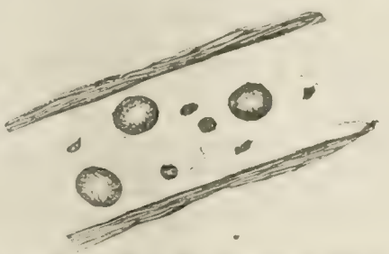


Fig. 2.—Plaques in circulating blood, omentum of guinea-pig. 18, 1, '83.

In the rapidly flowing current, no plaques could be distinguished; but, when the stream was slow, they could be seen here and there in the still layer with the white corpuscles, while, if the current became very feeble, they tended to collect at the periphery with the leucocytes. In a small venule, where the stream was slow, and only a few corpuscles passed, the best opportunity was afforded of seeing the plaques. They might be well studied within the vessels in the recently killed animal, or in man, in portions of tumours, etc., recently removed. The subcutaneous tissues of the new-born rat afforded the best situation in which to study the plaques while within the vessels. The rat having been killed by a snip of the scissors through the spine, portions of the mucoid connective tissue were spread thin upon the slip, either with or without saline solution. In the thin transparent vessels, the plaques were very distinct, and remained unchanged for hours. The blood-plaques, as seen in a vessel of the tissue of the scrotum half an hour after its removal, are shown in Figure 3.

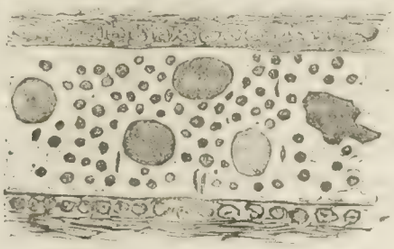


Fig. 3.—Plaques in small artery from subcutaneous tissue of scrotum of man, one hour after removal. Case of elephantiasis. They had collected in numbers at this portion of the vessel.

General Characters and Structure.—The plaques were described as

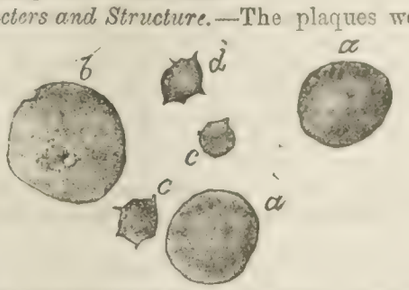


Fig. 4.—Isolated plaques in normal blood. Osmic acid 1 per cent.; one-twelfth im. (Zeiss). *a*. Red corpuscles. *b*. A white corpuscle. *c.c*. Plaques with slightly irregular margins. *d*. Plaque with faint granular appearance in centre, as if enucleated.

minute elements circulating in the plasma with the other corpuscles, and possessing such specific and distinct characters that they must be reckoned among the normal histological constituents of the blood. In man they measured from 1.5 to 3.5 μ, or from about one-sixth to one-half the size of a red blood-corpuscle. The majority of them measured from 1.5 to 2.5 μ. Occasionally a plaque might be seen measuring as much as 5 micromillimètres. When they were abundant, remarkable gradations in size might be measured. The plaque was a circular disc, with a smooth, well-defined margin. The majority did not show a bilateral depression, but forms were sometimes seen which resembled in outline very closely a miniature biconcave disc. The plaque consisted of a homogeneous, smooth, structureless protoplasm of a light grey colour. In the unaltered condition, no nucleus could be seen, but in the fluids used to conserve them, a collection of distinct granules might look like a nucleus; this sometimes, in dried preparations, stained a deeper colour in the hæmatoxylon than the remainder of the plaque, and was regarded by Hayem as a nucleus.

Changes in the Plaques.—Outside the vessels, the plaques were characterised by two peculiarities which had been a serious hindrance to their recognition as special elements of the blood, namely, the rapidity with which the protoplasms altered, and the tendency to adhere to one another, and to any substance with which they might come in contact. Within the vessels, however, they did not seem to be more prone to rapid decay than the red or white corpuscles, and in the young rat, kept at the ordinary temperature, Dr. Osler had seen them in the vessels quite distinct and clear twenty-four hours after death. He had also found them unaltered in the vessels of the pia mater in man, some hours after death. At first, the substance composing the plaque appeared homogeneous, but a change soon occurred, and the plaque presented a darker, more highly refractile portion, and a clearer substance; this darker portion was usually situated at the periphery, but it might be central, and then was not unlike a nucleus.

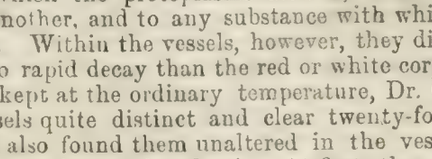


Fig. 5.—*a*. Changes in appearance of the plaque, due to separation of its protoplasm into a darker and clearer portion. *b*. Alterations in form of plaques examined in blood-serum, and watched for three hours.

It was as if a material had separated from the stroma, or bases of the plaque, just as the hæmoglobin of the red corpuscle might under the influence of reagents. Dr. Osler had studied, in 1873, the curious changes in shape which the plaques underwent. Within the vessel they were circular; but when at rest, they not unfrequently become ovoid, or prolonged, or slightly angular or crenated. These angular processes might increase greatly in length, and give a stellate appearance to the plaque. These alterations were probably induced by changes in the external conditions, and were not amœboid or vital in character. A very common change was the separation from the plaque of a mucin-like (?) material in the form of a pale sphere, which might remain attached to the cell, or separate from it (see Fig. 1, *b*). These spheres were due, doubtless, to the separation of some material from the substance of the plaque, and were identical with the spheres so often seen attached to spermatozoa in urine.

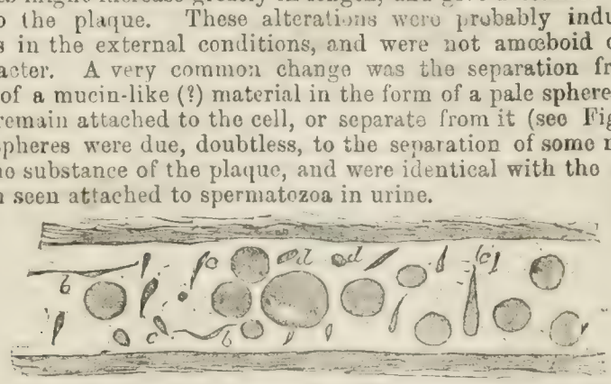


Fig. 6.—Alterations in the plaque while within the blood-vessels, sketched after three hours on the warm stage.

In marked contrast to the stability of the plaques within the vessels, was their rapid disintegration when withdrawn. At the ordinary temperature, and in the examination of the blood without any reagent, the plaques united with each other, and underwent a rapid change, termed by Eberth a viscous metamorphosis. This change was associated with the separation of fibrin, which seemed to arise first about the groups of plaques. Ranvier, who had noted this in 1873, spoke of these little granulations—*grains sarcodiques* of Vulpian—as centres of coagulation.

The Number.—The numeration of the plaques presented serious difficulties, on account of their extraordinary adhesiveness, and the numbers given were subject to revision. Dr. Osler found the number to range from 250,000 to 300,000 in the cubic millimètre, figures which corresponded to those of Hayem. Full-blooded, plethoric individuals had rarely more than 250,000 per cubic millimètre. The variation in the same individual might be considerable during the day, and the seemed to be increased after a full meal. Age had an important influence; in the infant and young child, the number might be double that of the adult. In advanced age, also, they seemed more numerous particularly if the individual were weak and debilitated.

The Plaques in Disease.—From the able and comprehensive paper of Riess to the more recent one of Afanassiev, there have been very many observations on the frequency and significance of these bodies in disease; but careful and painstaking enumerations in the various acute and chronic diseases were still lacking. A rough estimate of their increase and diminution might be made by any one well accustomed to their observation; but, for scientific accuracy, the hæmocytometer must be used, and means must be devised to overcome the presence serious source of error.

Dr. Osler had been led, by his numerous observations, to the following conclusions.

1. The plaques were increased in all chronic wasting maladies—cachexiæ—with or without fever; debilitated individuals, the subjects of phthisis, cancer, or other chronic wasting diseases, presented a marked increase. In phthisis, the number, per cubic millimètre might reach 500,000, or more; and the ratio of the plaques to the red rise as high as 1 to 5.

2. In acute sthenic fevers, the plaques were not increased in the early stages; but, as the disease advanced, and the patient became weaker and more debilitated, the increase was usually marked. This was well seen in typhoid fever, in which the number of plaques during the first week might not rise above normal, while in the third and fourth week there was usually a notable increase.

3. In the so-called blood diseases, the number of the plaques was variable. Many observers had remarked the great numbers in certain cases of leukæmia, but in others the increase was not apparent. So also, in lymphatic anæmia. In some cases of Hodgkin's disease, Dr. Osler had seen the plaques in extraordinary numbers; in profound anæmia, the plaques might be very scanty; and he had noted, in cases of pernicious anæmia, that the clusters of plaques might be almost absent, or much more scanty than in health.

No corroboration had ever been afforded of the view, very commonly held, that the plaques resulted from the degeneration of the red corpuscles. The majority of observers regarded the plaques as independent elements in the blood; others agreed with Hayem in thinking them young red corpuscles—hæmatoblasts.

Distribution of the Plaques in Animals.—Observations had so far shown that the plaques were constant constituents of the blood of mammals, and, with the exception of slight variations in size, the general features were the same in the various orders. In the oviparous they were nucleated.

Historical.—Dr. Osler said that the work which had been done in this department might be conveniently divided into three periods. The first embraced the time prior to the publication of Hayem's researches, in 1877; the corpuscles had been studied, notably by Donné, Zimmerman, and Max Schultze. In 1874, Dr. Osler had demonstrated the corpuscular nature of the granule masses, and shown that the bodies of which they were composed "were present as separate elements in the vessels, and showed no tendency to adhere together." In 1875 Ranvier called attention to their possible association with fibrin formation. The second period dated from the publication by Hayem, in 1877-78, of his researches; to him really belonged the credit of establishing the histological position of these corpuscles as constant blood elements. The third period dated from the publication, in 1882, by Bizzozero, of Turin, of an exhaustive article in Virchow's *Archiv* upon the *Blutplättchen*, and their relation to fibrin formation.

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DONATIONS AND BEQUESTS.—Mrs. Jemima Steuart Barclay, of Edmonton, has bequeathed £200 to the Tottenham Hospital, £200 to the Tottenham and Edmonton General Dispensary, and £100 each to the British Home for Incurables, the City of London Hospital for Diseases of the Chest, the National Hospital for the Paralysed and Epileptic, and the Royal Hospital for Incurables.—Mrs. Waite, of Low Skellgate, Ripon, has bequeathed £100 to the Ripon Dispensary, and £50 each to the Leeds General Infirmary, the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, the North Riding of Yorkshire Sea-Bathing Infirmary, and the Harrowgate Bath Hospital.

REPORT
ON
PASTEUR'S RESEARCHES ON RABIES AND THE TREATMENT OF HYDROPHOBIA BY PREVENTIVE INOCULATION.

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Part IV.

EPARATION OF THE INOCULATING FLUID.—*Rabbits Inoculated.—Antiseptic Precautions.*—NUMBER OF PREVENTIVE INOCULATIONS MADE BY M. PASTEUR.—*Classification.—The Interval of Time since Bites.—Statistics of Hydrophobia by Leblanc and others.—One Death only among M. Pasteur's Patients: Cause of Death.—Summary of Facts concerning the People Bitten.*—PEOPLE BITTEN BY MAD WOLVES.—*Statistics of Wolf Bites.—Difference in Effects of Hydrophobia: a Dog's Bite and a Wolf's Bite.*—CREATION OF INOCULATION ESTABLISHMENT FOR HYDROPHOBIA.—*Appendix.—Facts Concerning Bites from Mad Dogs: Cases Cited.—Former and Recent Experiments concerning the Virulence of the Nervous System in Rabid Animals.—Hydrophobia Produced by Swallowing Virus.—Inoculation with Blood.—Micro-organisms of Hydrophobia.—The Virulence of Rabid Virus Preserved in Pure Carbolic Acid.*

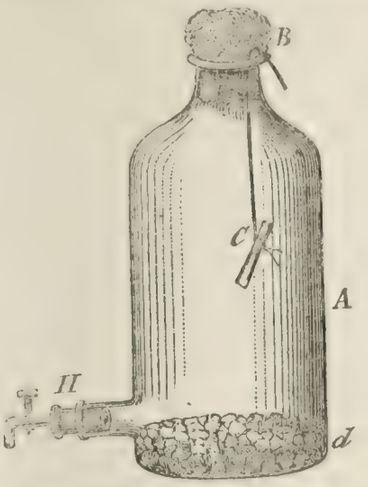
PREPARATION OF THE INOCULATING FLUID.—The inoculating fluid d by M. Pasteur is prepared as follows. The bottles containing dry , in which are preserved the rabid spinal cords taken from rabbits, e arranged, according to date, on a table in a room where the air is t disturbed. The assistant, whose duty it is to prepare the inocuing fluid and fill the syringes, takes the cords, one by one, from e bottles, by drawing up the strings by which they are suspended. e cords and the strings are passed through the flame of a spirit. mp, in order to destroy any germs that might have been deposited on em whilst the bottle was being opened. The threads are then cut, d the cords fall into a glass receptacle. These are then pounded by ing a glass rod, and veal-broth is added in quantity equal to four or e times the volume of the cord before it was dried. The fluid, thus epared, is turbid. The glass receptacle containing this fluid is vered by a paper which has been sterilised by heat. The ceptacle, the glass rod, and the broth, used in preparing the oculation-fluid, are previously carefully sterilised.

Rabbits Inoculated.—Rabbits are inoculated in the following manner, d their spinal cords are subsequently used to prepare the fluid above scribed. The animal is secured on a board, its back upwards. A rtion of its fur is cut away from its head; the skin is then incised, d one of the temporal bones is pierced by means of a trephine out six millimètres in diameter, with very fine teeth. This instrument is used so as to prevent the centre-pin from entering the brain, the crown from injuring it or the dura mater. When the piece bone has been removed, some drops of the rabid virus are injected to the arachnoid membrane. For this, a Pravaz's syringe is used, e needle of which is bent at a right angle. The dura mater is penetrated by the needle, and it reaches the arachnoid. The incision in e skin of the head is closed by a few sutures.

M. Pasteur inoculated the first rabbit with virus taken from a mad g. This virus was passed from rabbit to rabbit, and has been used, ithout interruption, for inoculations, up to the present time. It is timated that the virus has been passed through 130 rabbits. The cubation-period is rather less than seven days, as has been previously stated.

Antiseptic Precautions.—In trephining the rabbit's cranium, every ntiseptic precaution is observed, and the instruments are sterilised. any blood escape, it is immediately soaked up with sterilised paper. hese precautions are eminently necessary, inasmuch as antiseptic uids cannot be used, and yet the operation must be effected asepti-lly.

When the animal dies, the same antiseptic precautions are observed in removing its spinal cord, from which are taken fragments, to be suspended from a string in a bottle of the form here shown. Through-



A, Bottle containing dry air; B, thread attached to fragment of rabid marrow; C, caustic potash, to dry the air; *d*, sterilised wool; H, lower tap for allowing fluid to run away when necessary.

out these manipulations, every antiseptic precaution is observed, and caustic potash is placed in the bottle to dry the air it contains.

NUMBER OF PREVENTIVE INOCULATIONS MADE BY M. PASTEUR.—Since July 6th, 1885, M. Pasteur has applied his prophylactic treatment for hydrophobia to 688 people who have been bitten by dogs.

Classification.—We classify them as follows: 1 bitten on July 4th, 1885; 1 on October 14th, 1885; 98 before December 15th, 1885; 100 between December 15th, 1885, and February 15th, 1886; 488 from February 15th, 1886, to April 15th, 1886.

The Interval of Time since Bites.—Thus, since the period when the bites were inflicted, the following intervals of time have elapsed in the several cases: in 1, more than nine months; in 1, more than six months; in 98, more than four months; in 100, two months. The 488 remaining cases are in the period called dangerous.[1]

Statistics of Hydrophobia by Leblanc and others.—In order to estimate the importance of these statistics, it must be borne in mind that 95 out of the 100 people inoculated by M. Pasteur[2] had been bitten by dogs declared mad, either by a medical man or by a veterinary surgeon, or ascertained to be so at M. Pasteur's laboratory. According to statistics drawn up by M. Leblanc, in Paris, there occurs one death in six. This proportion was observed during six years. Thus, there are 16.66 per cent. of deaths. Other statistics state that the proportion of deaths is 15 to 25 per cent.

It is ascertained, by the statistics, that the incubation-period varies from forty to sixty days. Longer incubation-periods are rare.

One Death only among M. Pasteur's Patients: Cause of Death.—Among all the people inoculated, one has died, Louise Pelletier, a child 10 years of age, on the seventeenth day after the prophylactic treatment had terminated. She was bitten, on October 3rd, by a big mountain-bred dog. On November 9th, thirty-seven days after being bitten, she was brought to M. Pasteur. The wounds inflicted by the bite were very serious, in the axilla and on the head. The latter wound, notwithstanding most careful and skilful treatment, was in a purulent condition when she arrived at M. Pasteur's laboratory. It covered an area of twelve to fifteen centimètres, and the scalp was detached from the cranium.

M. Pasteur was desirous to determine the cause of the child's death, whether it was the virus from the mad dog, or the virus used for inoculation. He, therefore, removed a small quantity of the child's cerebral matter, with which he inoculated some rabbits. These rabbits were seized with hydrophobia, of the paralytic form, eighteen days later; other rabbits were inoculated from the spinal cord of the first rabbit inoculated from Louise Pelletier. These animals died from hydrophobia after fifteen days' incubation. Therefore, it is evident that Louise Pelletier died from the virus of the mad dog which had bitten her. If the virus of the inoculations had caused death, the incubation-period in the second series of rabbits would have lasted only seven days.

[1] The investigation made by the Comité d'Hygiène of France shows that, of 176 cases of hydrophobia, 123 die before the seventieth day subsequent to the bite; forty-seven between the seventieth day and the 130th; six after the 130th and before the 240th day.

[2] We have already stated that M. Pasteur only treats those people who have been bitten on the hands or face, or whose clothes have been torn and lacerated by the dog's teeth, so that the virus has passed into the wound.

Summary of Facts concerning the People Bitten.—M. Pasteur's experiments, detailed above, demonstrate that, among 688 persons inoculated, M. Pasteur's prophylactic treatment had proved inefficacious for one person only; 200 among these have reached either the ninth, sixth, fourth, or third months after inoculation. The remaining 488 are in different degrees of the incubation-period; M. Pasteur considers that, up to the time of writing this report (April 14th, 1886), there is every reason for looking forward to the most happy results.

These statistics, compared with those stated above, concerning the average number of deaths after bites from mad dogs, render any remarks from us unnecessary. It is probable that the death of Louise Pelletier can be explained by the serious nature of her wounds, and the long time that was allowed to elapse between the infliction of the bite and the application of the prophylactic treatment. But even if this probability be not admitted by some, no one will deny that every prophylactic treatment sometimes fails. Is the value of Jenner's discovery questioned because all who are vaccinated do not escape contracting small-pox?

People Bitten by Mad Wolves.—Besides the 688 people bitten by mad dogs, M. Pasteur has applied his prophylactic method to a number of Russians, sent to him to be treated for bites from mad wolves, and has now nineteen more under treatment. The first arrival consisted of nineteen persons who had been bitten on March 1st, in the environs of Smolensk. They were all severely bitten. Six among them were obliged to be surgically treated for their wounds, at the Hôtel Dieu. One of the six was bitten in fifty-four different places; others had part of their faces torn away; all had deep wounds on the head or hands, and also had their clothes torn.

Three of the nineteen Russians have died from hydrophobia. One death occurred at about the middle of the prophylactic treatment. At the necropsy, half of one of the wolf's teeth was found in a wound on the head; it had remained between the skin and the temporal bone. Part of the man's face was torn away. Two other patients had been submitted to a complete prophylactic treatment, and M. Pasteur had commenced on them a second period of treatment. One of these had deep wounds on the neck, reaching from one side to the other. The wolf had seized him by the neck. The other had a severe wound on the head; part of the cranium was fractured and depressed; he was also bitten on both arms and the left thigh. The last arrival of nineteen Russians have also been badly bitten by a mad wolf on the head and hands.

Statistics of Wolf Bites.—According to statistics sent to M. Pasteur, among forty-seven people bitten by wolves, there were thirty-six deaths.

M. Brouardel, in his article on Hydrophobia ("Rage")[3] published in the *Dictionnaire Encyclopédique*, makes the following statements. Fifty-eight persons were bitten by a mad wolf in the village of Eiranguliez en vic (Russia). M. Resen, who owned nearly the whole village, received the people who were bitten into his country-house, and cauterised their wounds with caustic potash. Among them, thirty-nine died from hydrophobia, which gives a percentage of deaths amounting to 67.24. In May, 1784, seventeen persons were bitten by a wolf, caught at Brive, in France. Ten died from hydrophobia, which gives a percentage mortality of 58.82.

Difference in Effects of Hydrophobia: a Dog's Bite and a Wolf's Bite.—The preceding facts show that the mortality resulting from the bite of a mad wolf is much more considerable than from the bite of a dog. The incubation-period is often much shorter. According to M. Pasteur, these different results are explained by the number of wounds inflicted, the depth of tissue injured, and the regions attacked by the mad wolf which seizes his victim, and bites his face and head. The necropsies of the three Russians, who died at the Hôtel Dieu, also the inoculation made with the spinal cord, taken from the first who died, show that the rabid virus of wolves and that of dogs have the same degree of virulence. The difference between hydrophobia consequent on the bite from a mad dog, and that of a mad wolf, results from the number and nature of the bites. Dogs, rabbits, and guinea-pigs were inoculated from the spinal cord of the Russian. These facts induced M. Pasteur to ascertain if, for wolf-bites, his prophylactic method might be modified, and more inoculations be made in a shorter space of time. He will communicate to the Academy, at a future date, the results of his investigation.

In all cases, and especially for wolf-bites, it is advisable to begin the prophylactic treatment as soon as possible. The Russians from Smolensk were six days travelling to Paris, and arrived at M. Pasteur's laboratory fourteen or fifteen days after they were attacked by the wolf. Thus their treatment might have been commenced eight days sooner than it was, and it is impossible to say how this might have influenced the course of events.

Creation of an Inoculation Establishment for Hydrophobia.—M. Pasteur wishes an inoculation establishment to be created at Paris, whither patients from all parts of Europe could be treated, as the delay involved by the journey to Paris would not be dangerous. The reasons which lead M. Pasteur to wish, at the present moment, for only one vaccine establishment, are well founded. He fears that, if these establishments were multiplied, errors, and perhaps fatal errors, might be made by persons in preparing the rabid virus; and these errors would be attributed to his method, before it be sufficiently tested to be universally held blameless. Professor Vulpian, who is best acquainted with the question of the preventive treatment of hydrophobia, said, a few days ago, at the Academy of Sciences: "It is necessary, and it will be so for a long time, that M. Pasteur's preventive treatment for hydrophobia should be applied in Paris, under his personal superintendence." In order to understand this, it is necessary to consider how delicate are the operations necessary for keeping up the stock of virus and preparing the inoculation-fluids. They require the constant and careful attention of a skilful manipulator, sufficiently patient to repeat every day the same manipulations, without once missing. Every day, fresh rabbits are inoculated; every day, fragments of rabid spinal cord are placed in dry air; every day, the fragments of spinal cord which have been too long prepared must be rejected; and all the operations, which precede those enumerated, have to be effected. Therefore, it is evident that each establishment must have two principals identical in skill, in case either one, from absence or ill health, be unable to perform the daily duties. The expense of such an establishment would far exceed that incurred by travelling to Paris, and remaining there the time required for treatment. Scientific men can qualify themselves, according to M. Pasteur's suggestion, in the vaccine establishment at Paris, in order to go to South America, some parts of North America, and Australia, in order to teach there the preventive method of inoculation for hydrophobia.

Appendix.—In this part of our report, besides giving the details of bites from mad dogs, which have been treated by M. Pasteur, we propose rapidly exposing certain facts in connection with hydrophobia, but which have not a direct bearing on preventive inoculation, and have been omitted in the body of our report.

Facts Concerning Bites from Mad Dogs: Cases Cited.—Jupille, from de Villers Parlay, aged 15, was seriously bitten, on October 12th, 1885, on both hands, by a mad dog, which he had seized to kill. This is the second patient treated by M. Pasteur. Subsequently, the following were treated.

Etienne Roumier, aged 48, was bitten on both hands, on November 4th, 1885, by a dog, ascertained to be mad by M. Moreau, a veterinary surgeon. Twenty-four hours after the accident, the bite was cauterised and dressed.

Chapot, aged 43, and his daughter, aged 14, were both bitten on the left hand, on November 6th, 1885. The daughter was more seriously bitten than her father. The wounds were washed out with strong solution of ammonia. The dog was declared to be mad, at the Lyons Veterinary School.

Françes St. Martin, aged 10, was bitten on the right thumb, on November 7th. The wound was washed with ammonia. The dog was declared to be mad, by M. Dupont, the principal of the Service Sanitaire des Épizoöties.

Marguerite Luzier, aged 13, was bitten on the leg by a mad cat, on November 11th, 1885. The wound was cauterised with carbolic acid. The child was so badly bitten, that it was necessary to send her to the Hospital for Children, in order to have her wounds treated.

Corbillon, aged 27, was bitten on November 12th, 1885. The dog was recognised to be mad by M. Chautereau, veterinary surgeon at Clermont. The wound was cauterised by hot irons, eight hours after the accident.

Bouchet, aged 5, was bitten on November 12th, on the left hand and thigh; the clothes were torn. The dog was declared mad by M. Coret, veterinary surgeon at Aubervilliers. The wounds were burned with hot iron three-quarters of an hour after the accident.

Madame Delcroit was bitten on November 6th, on the right foot. The wound was cauterised with hot iron, nine hours after the accident. The dog was recognised to be mad by M. Frélier, veterinary surgeon.

Plantin was bitten at the beginning of November, 1885, on the right hand. The wound was cauterised forty-eight hours after the accident. The dog was declared to be mad by M. Eloire.

Jeanne Pazal, aged 7, was bitten, on November 12th, by a dog, de-

[3] "Rage," *Dictionnaire Encyclopédique*, third series, Tome ii, p. 195. Paris, 1875.

clared by Dr. de Tindray to be mad. The child was taken to Dr. de Tindray forty-eight hours after the accident; he wisely decided cauterisation to be useless.

Mme. Achard was bitten on November 9th on the right foot. On November 12th, she was bitten on the right hand by the same dog, which was declared by M. Charloy, veterinary surgeon, to be mad. The wounds were not cauterised.

Mme. Alphonsine Legrand was bitten on the chin on November 6th, 1885, by a dog, declared by M. Decarme, a veterinary surgeon, to be mad.

Antoine Cattier, aged 43, was bitten on the hand on November 16th. The wound was cauterised with hot iron twenty hours after the accident. The dog was recognised by its master to be mad; it had the characteristic bark, it refused food, and gnawed and swallowed wood and other things.

On November 15th, M. and Mme. Teruat, Mme. Delzors, and Mme. d'Alibard, were all four bitten by a mad dog, recognised to be mad whilst alive, and also after death, by a veterinary surgeon. They were cauterised some time after the bite.

Dr. John H. was bitten on November 13th, 1885; he had two serious wounds on the lower lip. No cauterisation was made. The dog was recognised by Dr. H. to be mad.

Mme. Faure, a widow, was bitten on the leg on September 1st, 1885, at Alma, in Algeria, by the same dog that had bitten four children, one of which died at the Hospital Mustapha, in Algiers, two months after the bite. Dr. Moreau, of Algiers, described very minutely the symptoms of hydrophobia exhibited by the child. The other three children were sent to M. Pasteur, and their treatment was commenced in the middle of November.

Mme. Grèteau was bitten on November 14th, in two places, on the third finger, the pulp and the nail, which was cut in two. The dog was ascertained by Dr. Douand to be mad. The wounds were washed out with ammonia, and slightly cauterised.

M. Voisenet, aged 50, was bitten on November 16th in both legs, by a bitch, which was declared mad by M. Colas, veterinary surgeon. The wounds were slightly cauterised four hours after the accident.

M. Guichen, aged 67, was bitten on November 15th, on the left hand, by the same dog which had bitten Mme. Gréteau, mentioned above.

Walter H. (London) was sent to M. Pasteur by Sir James Paget. The wounds had been slightly cauterised. He was bitten on the hand on November 15th. His brother died, five years ago, from the bite of a dog, which was believed to be quite unimportant.

Calmeau was bitten, on November 15th or 16th, on the abdomen, thigh, and knee; his clothes were torn to shreds. M. Cola declared the dog mad. It was the same animal that bit Voisenet.

Jean Lorda, aged 36, was bitten on October 25th. He arrived at M. Pasteur's Laboratory on November 21st, twenty-seven days after the bite. The same dog bit two cows and seven pigs the day Lorda was bitten. These nine animals died mad; the pigs after a short incubation of fifteen days to three weeks. After the death of the pigs, Lorda became frightened, and went to Paris to M. Pasteur. One cow died thirty-four days after it was bitten, the other fifty-two days. The cows were thoroughly cauterised with hot irons immediately after the bites were inflicted. Lorda is in excellent health; he finished the course of treatment on November 28th, 1885.

Jullion was bitten on November 30th. The child, perceiving the dog approach him, began to cry. The dog bit him inside the mouth, on the palate, the upper lip, the right eye, and nose. It was impossible to cauterise. The dog was declared mad by M. Guillemard, veterinary surgeon.

Former and Recent Experiments concerning the Virulence of the Nervous System in Rabid Animals.—At the commencement of our report, we mentioned that M. Desboué had theoretically concluded the nervous system in rabid animals to be rabid; also that M. Galtier's experiments tended to negative this belief; but that, finally, the experiments of M. Pasteur and of his assistants, MM. Chamberland and Roux, absolutely proved the virulence of both the central and peripheral nervous system in rabid animals.

It is interesting to recall to memory Rossi's experiment, made in 1808. He inoculated a dog with rabies, by placing in a wound a piece of crural nerve which he had removed from a living mad cat. This experiment was quite overlooked, and probably, but for the experiments made by M. Pasteur and his assistants, would never have come to light.

Hydrophobia Produced by Swallowing Virus.—We have, in another part of our report, given a few words to Professor Galtier's experiments relative to the immunity from hydrophobia conferred by intravenous injections of rabid virus; and we also stated that the results of M. Pasteur's experiments did not confirm those of M. Galtier (Part I, p. 672). It may, nevertheless, be useful to state M. Galtier's conclusions, published with his note. They contain an important fact concerning the ingestion of rabid matter, and its relation to the transmissibility of rabid virus, hitherto little studied. "Rabid virus, injected into sheep's veins, does not produce rabies in them, but appears to render them refractory to the disease. Hydrophobia can be contracted by swallowing the virus. The actual seat of inoculation by this method is not ascertained, but it is nevertheless certain that any person or animal receiving into the digestive tract the virus of hydrophobia runs the risk of contracting the disease."

Inoculation with Blood.—Besides the prophylaxis for hydrophobia, at which M. Pasteur has arrived by his experiments already described, he has indicated another, which he appears to have abandoned, as he does not mention it subsequently. He says,[4] "By means of inoculations, under certain given conditions, made with blood taken from rabid animals, I have succeeded in greatly simplifying the process, and yet at the same time rendering dogs completely refractory to hydrophobia."

Micro-organism of Hydrophobia.—The existence of a specific microbe of hydrophobia is not yet positively demonstrated. Nevertheless, certain facts are established, which apparently indicate that one exists.[5] M. Pasteur has stated that, if two preparations be made, one with a normal medulla oblongata, and another with one that is rabid, "they both are found to contain a considerable number of molecular granules; but that the rabid medulla contains a larger number of granules, and they are much smaller. One is tempted to believe in the presence of an infinitely small microbe, neither presenting the form of a bacillus nor that of a constricted micrococcus, but that of small specks."

Since that communication was made, M. H. Fol[6] has stated that, in preparations of medulla oblongata, hardened with Ehrlich's fluid, and coloured according to Weigert's method, he has detected micro-organisms, presenting the aspect of perfectly spherical granules of a blue colour, not arranged in any definite order, 2μ in diameter. Furthermore, M. Fol cultivated some rabid cerebral matter, in broth, made by triturating a sheep's brain, mixing it with water and carbonate of potash. A sediment was deposited after an interval of four days, and the same micro-organisms were present in it. This cultivation-fluid, when less than six days old, often produces hydrophobia in animals, but not if of older date. M. Pasteur has examined M. Fol's preparations, and has told us that he is quite inclined to believe that the micro-organism detected by him will be proved to be the specific organism of hydrophobia.

M. Gibier, in 1883, stated that he had seen, in the medulla oblongata of a rabid animal, examined under a magnifying power of 500 to 600 diameters, a micro-organism twenty times smaller than a red blood-corpuscle. Later, a plate of it appeared in his doctoral thesis. Judging from these plates, it appears to us to be granules of myelin; it is certainly not the micro-organism that M. Fol has described, which, unless coloured, is invisible under a magnifying power of 600 diameters.

The Virulence of Rabid Virus Preserved in Pure Carbonic Acid.—The virulence of rabid virus, which, when preserved in dry air, becomes perfectly inert between seven to ten days, is preserved during several months, if kept in pure carbonic acid, and thus kept from contact with the air, and from the influence of foreign microbes (*loc. cit.*, October 26th, 1885. p. 767, note).

[4] *Comptes Rendus de l'Académie des Sciences*, 19 Mai, 1884, p. 1230.
[5] *Ibid.*, 25 Février, 1884, p. 458.
[6] *Ibid.*, December 14th, 1885, p. 1277.

PRESENTATION.—Dr. L. A. Weatherly, being about to leave Portishead, has been publicly presented with a very handsome timepiece, and the following address, with more than two hundred signatures of working men and women: "To Lionel Alexander Weatherly, M.D., M.R.C.S. Sir,—We, the undermentioned, members of the working classes of Portishead, Portbury, and Clapton, beg leave to offer you this timepiece, as an humble mark of our heartfelt gratitude and sincere thanks for your invariable kindness and deeply-valued services to ourselves and families. We feel that no words of ours could adequately convey our regret at losing so faithful and kind a gentleman and friend as you have always been to the working classes of each place. We beg to wish you every success in the new sphere of usefulness you have chosen, and humbly pray that health and every other blessing may attend you; and, although we are losing you, pray believe that your honoured name will ever live in the hearts of ourselves and our children." (Signed) Robert Edbrooke, chairman; William H. Edbrooke, Francis Simpkins, John Reed, Henry Charles Barrington, committee; and followed by the names of 212 working men and women.

ABSTRACTS OF

THE LUMLEIAN LECTURES

ON

THE ELECTRICAL CONDITION OF THE HUMAN BODY; MAN AS A CONDUCTOR AND ELECTROLYTE.

Delivered at the Royal College of Physicians, London, April, 1886.

By WILLIAM H. STONE, M.A., M.B.Oxon., F.R.C.P.,
Physician to St. Thomas's Hospital.

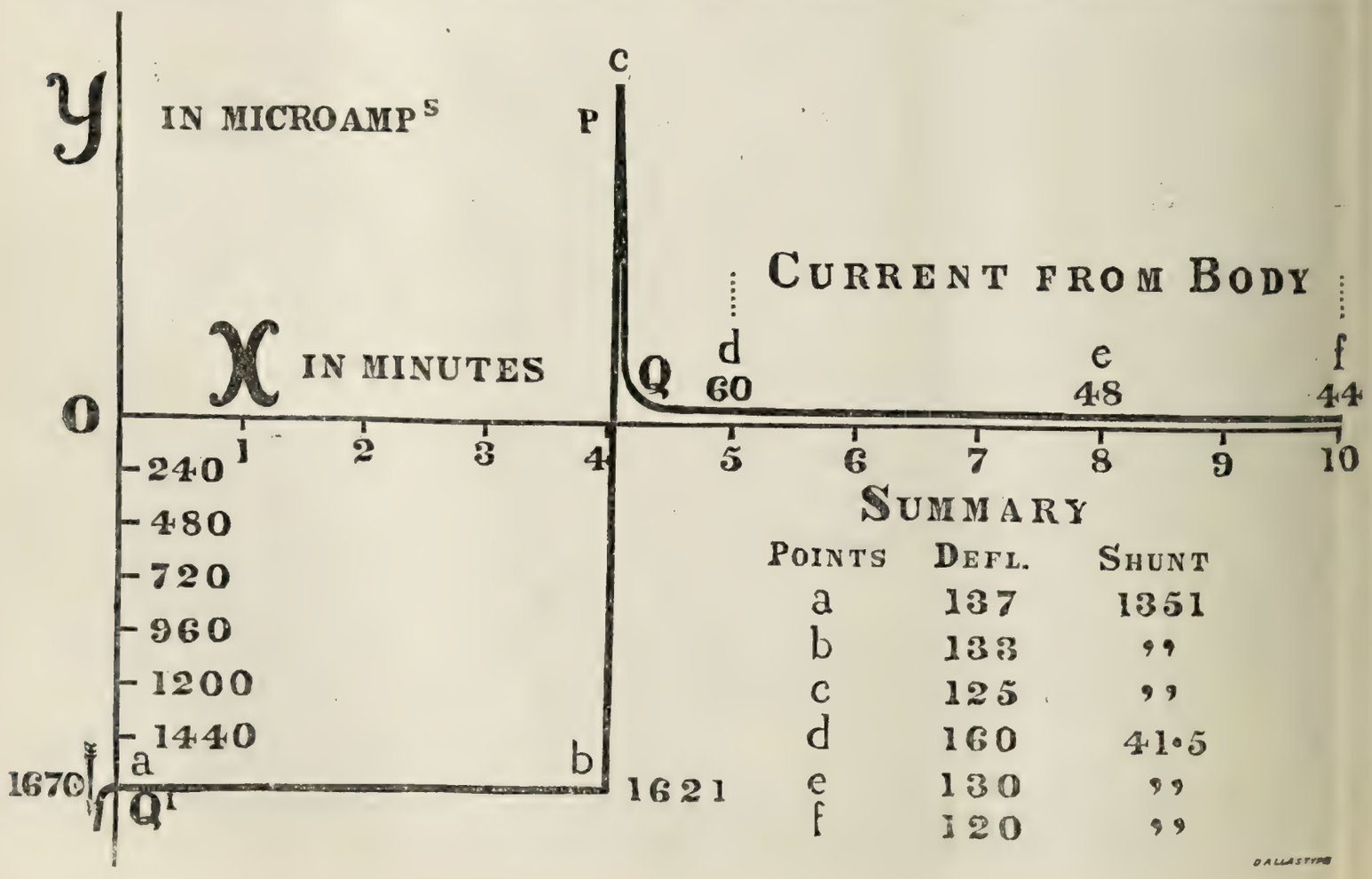
Lecture II.

Dr. Stone commenced his second lecture by supplying an omission in his first. It had been ascertained that the contact made by the use of the large electrodes described was perfect, by the following experiment. The leaden poles were applied to the feet of a body in the dead-house; two observations were made with reversed currents, the result being the same in both cases, the resistance being found to be 1,150 ohms; silver needles were then thrust, to the depth of three inches, into the plantar muscles of the corpse. The current, under these conditions, encountered a resistance of 1,200 ohms, or 50 more than with the large lead and salt-water electrodes. The great resistance attributed to the skin was, therefore, only an obstacle when it was dry, and could be easily overcome.

Electrolytic Action.—One great difficulty in the way of making an accurate estimate of the resistance of the human body was the occurrence of electrolytic changes. The subject had engaged the attention of Dubois-Reymond, of Du Moncel, and more recently of Waller and de Watteville (*Phil. Trans.*, 1882). With a sensitive galvanometer, Dr. Stone had found that there was an initial throw, and then a permanent deflection. He had at first attributed the first phenomenon to a "condenser-action," but now was inclined to apply to it the term self-induction. On the present occasion, however, he would not consider the nature of this self-induction, which was shown only as a momentary effect, but would pass on to discuss the counter electromotive force, which took the form of a charge. He had found it considerably larger and more persistent than he had anticipated.

This part of the subject was illustrated by two experiments; in the first, a voltametric arrangement, reproducing approximately the electromotive force and the resistance (1,340 ω) of the human body, consisting of two tall jars filled with salt and water, united at their lower part by a tube of glass 15 cm. long, and 3 mm. in diameter, with large leaden electrodes immersed in them was charged through a charging and discharging key from a battery of 10 volts for ten minutes. At the end of ten minutes, the two cells, which, together were a schema of the human body, were discharged through a galvanometer. There was a slight "throw" of the needle, which returned at first rapidly, but, after reaching a certain point, very slowly towards zero. A healthy adult man was then substituted for the schema, and also charged for ten minutes; at the end of this time, he was discharged through the galvanometer with the same result as in the former case, a sudden throw, a permanent deflection, and then a very slow return towards zero. The time, during which this discharge continued before reaching zero, had not been ascertained, though one experiment had lasted half-an-hour. These experiments were made with a moderate electromotive force. A larger effect could be produced with a large electromotive force, and the quantity of the charge became considerable.

Observations in Disease.—Dr. Stone had made observations on this head in patients. The first was a case of old-standing sciatica, with wasting of the leg, in a man. The resistance, measured from foot to foot, was high, amounting to 1,900 ohms. He was charged for thirty minutes with the current from ten bichromate cells, and was then discharged. The first throw was very large, 250 scale divisions; of this, it was ascertained that only 20 were due to the lead electrodes and the bath. There was a permanent deflection of 110 scale-divisions. On correcting the resistance, by Mance's method, 103 ω were found to be due to polarisation. The second was the subject of diabetes. (Dr. Mariano Semmola had shown that, under the influence of the constant current, there was a decrease in the amount of the sugar excreted; this decrease, however, was only temporary.) The electrodes were placed in contact with the



forehead, and with both feet. A current of fourteen volts was passed for half an hour. The resistance was found to be 600 ohms, rising to 680, and, when corrected by Mance's method, 543 ohms. Of this, 137 ohms were due to polarisation. The third had also had diabetes, and a current of 10 volts was passed in the same way. The resistance was found to be 1,100 ohms, rising to 1,160, and, when corrected by Mance's method, 1,025 ohms. Polarisation was equal to 145 ohms, a larger electromotive force than had been before demonstrated.

Dr. Stone then gave a very excellent measurement, made independently of himself, and which is represented by two curves on the diagram. The first part of the curve below the line in the middle is the period of charge. All the measurements are given. Then the discharge takes place where the vertical line is. The galvanometer shoots up to the point C, and comes down again, but not to the line of zero. On the contrary, it remains steadily, and for a very considerable time—very much longer than he anticipated—discharging through the galvanometer without losing its charge. In that case, there are ten minutes given, and the fall in the current is very slight. In many cases, he had been able to produce a much larger effect than that. It was intentionally taken with a small current, so that we should be able to measure it with a delicate galvanometer.

The Initial Throw.—As to the great initial throw, it could not be said, without experiment, how much of this was due to the needle swinging under its own inertia. This point had been determined, at Dr. Stone's request, by Mr. Wilkinson, Mr. Lant Carpenter's assistant. An experiment was made under exactly the same conditions, but with an inert instead of a polarisable resistance, and the permanent deflection reproduced. The throw, under these conditions, did not reach the point of discharge given from the body. The difference between the two was due to the effect of self-induction; it was exceedingly small in the experiment, because the electromotive force used was very low—about two volts, compared with the electromotive force of the body, which was about one volt. It was difficult to separate polarisation from capacity, but this experiment showed that there was some self-induction. The discharge from the patient observed in Messrs. Lant Carpenter and Wilkinson's experiment, referred to in the first lecture (see page 729), when no battery was in circuit, was 60 micro-ampères. After three minutes, it fell to 48.7 micro-ampères, and, after two minutes more, to 45 micro-ampères. The body, therefore, had discharged itself like a secondary battery. The curve of its discharge showed a perfectly steady falling current.

Electrotonus.—It was next pointed out that these observations had an important bearing on electrotonus. Dr. Stone said that he had long felt sceptical as to the accuracy of the statements current with regard to electrotonus, on account of the general agreement, that it was difficult to obtain constant results. He quoted the statement of Drs. Waller and de Watteville (in the paper above mentioned), to the effect that the inconstancy of the results was due to the inconstancy of the nervous matter, and expressed the opinion that this explanation was unsatisfactory. It had not been shown that the physical agent was constant. Too much stress had been laid on the terms anode and cathode, which were, in truth, fictitious terms, founded on the assumption that the current went from the one to the other. On the other hand, it was known with certainty that, at the + terminal in an electro-depositing apparatus, oxidation took place; and that, at the — terminal, hydrogen came off, and bases were separated; and it was also known that this produced a secondary battery, even in the living human body, of no inconsiderable power. The inconstant results might well be due to chemical changes produced in this way. Such phrases as "weak," "strong," "of medium strength," as applied to currents, were utterly vague. The latter phrase probably meant a current which exactly balanced the electromotive force of the body. If the electromotive force of the current were sufficiently strong to overpower the counter electromotive force of the body, electrolysis would take place. As a rule, the currents used were too strong. Dubois-Reymond, for instance, had used the current from eleven or twelve Grove cells. Rosenthal had, in fact, explicitly admitted that the results obtained were thus rendered inconstant. Another probable source of fallacy was the tetanising key of Dubois-Reymond; it was a short circuiting apparatus, and was supposed to cut off the electric agency from the body experimented on, but this was not scientifically true. Rosenthal admitted that some current, though he qualified it as a very little, did continue to pass through the body experimented on. When the induction-coil was used, the problem became still more complex; when the continuous current, and induced currents, were united, a problem was presented which was quite past accurate solution. Another false assumption was one which Drs. Waller and de Watteville appeared to have made; this was, that the laws of diffusion were the same for the constant and for the induced currents. Dr. Stone had found that the induction-current might show a resistance of only half or two-thirds that found with the constant. In one experiment corrected by Mance's method, the resistance with the constant current was found to be 1,141ω; with the interrupted 575ω.

Errors due to Inappropriate Instruments.—The phenomena, though admittedly inconstant, had been well and carefully observed, but error had arisen from working with instruments which were oversensitive, like Thompson's galvanometer, or insusceptible of calibration, like the galvanoscopic frog; which, moreover, was not constant, no two frogs having the same galvanometric power.

The telephone, used in the manner indicated in the last lecture, would probably be of service to measure, not only the resistance, but also the comparative self-induction. But, before observed phenomena could be safely attributed to physiological conditions, it was essential that the physical conditions of the instruments of research employed should be thoroughly understood. The experiment referred to afforded an instructive commentary on this head; the telephones produced a loud tick on making, and a soft tick on breaking the current; and on withdrawing the coil along the slide, as was done in physiological experiments, both ticks grew fainter, and the softer soon ceased to be heard. The resemblance between this experiment and the experiments on electrotonus, made in physiological laboratories, could not fail to be observed; the telephone in this purely physical experiment had reproduced the peculiar difference between make and break, which, when manifested in muscles, had been set down to physiological conditions.

In concluding his lecture, Dr. Stone expressed the fear that the phenomena in question had been incorrectly though laboriously observed, and too often ingeniously misinterpreted.

TWO LECTURES
ON
TUMOURS OF THE LARYNX; THEIR PATHOLOGY, SYMPTOMS, AND TREATMENT, WITH ILLUSTRATIVE CASES.

Selected from a Course of Lectures delivered during the Winter Session of 1885-86 at the Glasgow Royal Infirmary.

By DAVID NEWMAN, M.D.,
Surgeon in charge of the Department for the Diseases of the Throat and Nose at the Royal Infirmary; and Surgeon to the Dispensary at the Western Infirmary, Glasgow.

LECTURE II.—*(Continued from page 770).*

WHAT I have said up to the present time regarding malignant growths has had reference specially to the sarcomata. I have now, gentlemen, to ask your attention to a form of malignant disease which is not only more frequently met with, but is less under the control of the surgeon. I refer to the carcinomata.

Cancer of the larynx appears, in the great majority of cases, as epithelioma. Medullary cancer comes next in order of frequency, and the least common variety is scirrhus or hard cancer. I have no intention at present of entering into a detailed discussion of the various forms of cancer which may affect the larynx. By doing so, I would occupy more time than I have at my disposal; and, besides, I think I can instruct you better by referring you to the specimens and cases now before you. I shall ask you to examine these carefully along with the specimens placed under the microscopes.

When cancerous disease attacks the larynx, it is usually limited to that cavity, and, during the early stages, seldom extends to the lymphatic glands. It is true that at one time it was believed to arise not in the larynx itself, but in the parts close to it. This, however, was a misconception; and it is now a recognised fact that cancer is more frequently intrinsic than extrinsic in its origin. In many cases, it is impossible to decide precisely where the disease commenced, but this is not a matter of great clinical importance; the point which one is anxious to make out is not whether the disease has its origin in one or other part of the larynx, but whether it is limited to the cavity itself, or has extended to, or originally involved, the epiglottis, the base of the tongue, the aryteno-epiglottidean folds, or the œsophagus. In the cases met with in hospital practice, the disease is, in many instances, so far advanced before admission, that it is not easy to ascertain the part of

the larynx first affected; but, by referring to the literature of the subject, I find that, of the parts external to the larynx, the epiglottis is most frequently attacked, while of the intrinsic parts the vocal cords are the most common seat of the primary nodule.

Cancer of the larynx is practically a disease of advanced life, 50 per cent. of the cases occurring between the ages of 50 and 70; sarcoma, on the other hand, is a disease of middle life, appearing usually between the thirtieth and fiftieth years.

The case which I am about to describe to you illustrates in a most typical manner the symptoms and appearances of an extrinsic epithelioma of the larynx. The patient, D. McK., aged 64, sent to me by Dr. Dickie of Strone, was admitted to the hospital about a month ago. At that time, he was only able to speak indistinctly, and so was unable to give a very accurate account of his illness. From what he then stated, it appeared that, eighteen months ago, he noticed for the first time an alteration in his voice, unaccompanied by pain during either phonation or deglutition. The alteration in the voice gradually became more marked, and in April 1885 was accompanied by pain in front of the larynx. At that time, there was no difficulty in swallowing or breathing. It was not until a fortnight before admission that he suffered from dyspnœa. This symptom appeared very suddenly, and was associated with a severe paroxysmal cough which caused him considerable distress; so much so that, on one occasion, his wife feared that he would die from suffocation. On admission to the ward, the obstruction to respiration was so great, that I considered it advisable to perform tracheotomy without delay.

As the patient was advanced in years, and the dangers of the administration of a general anæsthetic, such as ethidene dichloride, chloroform, or ether, were considerable, I thought it advisable to avoid their use, and resolved to try the effect of a hypodermic injection of a 5 per cent. solution of hydrochlorate of cucaine. Therefore, about twenty minutes before operating, twenty minims of the solution were injected under the skin over the cricoid cartilage. This caused complete local anæsthesia, and tracheotomy was performed with as much deliberation as if the patient had been under the influence of chloroform. During the operation, he only suffered slight discomfort, no actual pain.

The day following the operation, I made a careful laryngoscopic examination, and found the tumour occupying the upper two-thirds of the cavity, and attached to the false cords on the right side. The growth was also seen to extend along the right aryteno-epiglottidean fold, to the base of the epiglottis; and it stretched across the cavity so far, that respiration by the mouth seemed impossible. The upper surface of the tumour was ulcerated, and covered by a coating of gray mucus and slough, which, when removed, exposed an irregular surface with elevated edges.

A few days after, the trachea was opened; the laryngeal obstruction somewhat subsided, and the voice improved a little. This favourable change might be accounted for by the rest afforded to the affected parts.

Since admission, the growth has increased in size rapidly, and now, as you will observe, there is no possibility of respiration by the natural channel, and the aphonia is complete. When I first examined the patient, it was with difficulty I could detect any enlargement of the lymphatic glands; at the present time, not only can indurated glands be detected at the side of the thyroid cartilage, but there is also a chain of enlarged glands in the sublingual region.

A few days ago, I removed a small portion of the tumour, *per vias naturales*, for diagnostic purposes, and you may see a section of it under the microscope after the lecture.

I will now show you a second specimen of extrinsic cancer of the larynx. This larynx was removed by me from a patient in the Western Infirmary in September, 1883. You will observe that the tumour involves the interior of the larynx above the level of the true vocal cords, as well as the whole of the epiglottis; but none of the lymphatic glands in the neighbourhood were infiltrated. I operated upon this case, not because I considered it a suitable one, but because the patient and his friends urged me to operate, after all the dangers of the proceeding had been explained to them, and after I had advised them that the ultimate results would not be satisfactory, even although the patient survived the immediate effects of the operation.

The patient, D. McD., aged 55, was admitted to the Western Infirmary on September 3rd, 1883. The principal features of the case were aphonia, and difficulty in respiration, accompanied by a copious discharge of blood-stained mucus. The patient was emaciated, and prematurely old. He stated that his father had been operated upon for cancer of the lip. The first sign of the disease in the larynx was a troublesome cough, which commenced three years ago, and, at that time, was paroxysmal in character, but subsequently was almost constantly present. On pressure over the larynx, the patient complained of pain, but external manipulation failed to indicate any departure from the normal in the form of the parts. The laryngoscopic examination revealed the tumour which I have already described to you. Great difficulty was experienced in coming to a conclusion regarding the condition of the lungs, on account of the impediment in the larynx interfering with the access of air to the chest, and so producing sounds that obscured auscultation. Percussion showed slight diminution of resonance at the right apex, and at both bases posteriorly; the cardiac phenomena were normal. On September 7th, a consultation of the staff was called, and it was decided that extirpation of the larynx should be performed. Consequently, on the following morning, I performed laryngectomy, and along with the larynx proper, removed the whole of the epiglottis. The wound was packed with a sponge sprinkled with iodoform, and enveloped in perforated green silk, and a large tracheotomy-tube was fixed in the trachea.

During the first twenty-four hours the patient appeared to be doing well, the highest temperature being 101.4° Fahr., while the pulse maximum was 117. The respirations, however, were rapid, (from 30 to 40 per minute), and a good deal of mucus was coughed up from time to time. On the evening after the operation, a small œsophageal-tube was introduced through the nose, and a small quantity of peptonised beef-jelly was administered, along with a spoonful of brandy. As there was no tendency to vomiting, this was repeated every two hours. On the following morning, the patient seemed to be in fairly good spirits, but not so well as on the preceding night. The wound was dressed the same as before; but afterwards he appeared to be greatly exhausted, and the pulse became fluttering and irregular. During the day, a considerable quantity of mucus was coughed up, and, on examination of the chest, the lungs were found to be dull over the entire lower lobes; the pulse averaged from 100 to 117, the respirations from 40 to 48, while the temperature rose to 102.4° Fahr. In the evening, the pulse improved in volume, but still continued irregular in rhythm. The patient continued to take food without vomiting. At midnight, the pulse gradually became weaker and weaker, notwithstanding free stimulation; perspiration was profuse. This condition continued until 4 A.M., when he died from collapse.

Microscopic examination of the tumour shows it to be a typical epithelioma. At the *post mortem* examination, the whole of the growth was found to be removed, and none of the lymphatic glands were involved. The heart was collapsed, and very soft in consistency. The lungs were in a state of hypostatic congestion, and, to my surprise, a small cavity was found in the substance of the left lung, if I remember correctly. The cavity was situated at some distance from the surface; its walls were lined by a layer of mucus, and showed no evidence of recent destructive processes. On account of the physical conditions in the larynx, to which I have already alluded, the state of the lungs was not easily made out; and although special attention was directed to the condition of the lungs, this cavity was not detected, either by the physician who examined the chest or by myself. To this point I will refer hereafter.

This other larynx was extirpated in July, 1879, by my colleague, Dr. William Macewen, from a man, aged 56. In this case, the disease was more extensive than in any of the others that I have referred to, with the exception of D. McK. The tumour involved the larynx and upper part of the gullet, while there was a large glandular mass situated on the left side of the neck. The whole growth was excised, including the larynx, a portion of the gullet, and the enlarged glands. The patient died on the third day; and, on *post mortem* examination, the whole of the diseased tissue was found to be removed. On examining the larynx, you will observe that the arytenoid cartilages, the posterior wall of the larynx down to a quarter of an inch below the true cords, are occupied by an epithelioma; while the anterior part of the larynx, and the base of the epiglottis, appear to be quite healthy.

The three cases which I have just described to you are illustrative of extrinsic epithelioma of the larynx. I shall now give you an account of two cases of intrinsic epithelioma; upon one of these I operated on February 6th last.

The patient, J. W., aged 37, was admitted into the ward on January 5th, 1886, and tracheotomy was performed on the 14th of that month. The following is the history of the case as recorded in the ward journal.

About three years ago, the patient first noticed a slight hoarseness in speaking, unaccompanied by pain or by any difficulty in swallowing or breathing. The hoarseness commenced about November, 1882, and continued until the following summer, when some improvement took

place, but he was not certain whether the voice regained its normal condition or not. The following winter, 1883-84, his throat again troubled him, became worse than during the preceding year, and, since then, the disease had gradually developed to the present condition. He now complained of pain over the larynx extending upwards to the left ear, but not increased by palpation. Aphonia was complete, and there was slight difficulty in deglutition. Digital examination externally did not reveal any alteration in size or form of the larynx, or enlargement of the lymphatic glands. The epiglottis was practically normal, but the aryteno-epiglottidean folds were thickened slightly, and the mucous membrane of the upper part of the larynx was hyperæmic. On the left side, midway between the arytenoid cartilages and the thyroid attachment of the false cords, there was a deep ulcer with a sharply defined edge anteriorly, but posteriorly the edge was rounded, and the mucous membrane covering it presented a warty appearance. On the right side, the mucous membrane was considerably thickened over the false cords; the true vocal cords were completely destroyed by a large ulcer, which extended down as far as the lower margin of the thyroid cartilage, and presented the characteristic appearance of an advancing epithelioma.

Tracheotomy was performed, as I have stated, on January 14th; and on February 1st I made the following note. The patient stated that, for the last few days, the pain in deglutition had so increased, that he found considerable difficulty in swallowing solid food. For some time back (two months) he had had difficulty in swallowing fluid food; but, till lately, he had been able to swallow solids without pain, or even difficulty. This change was accounted for by the fact that, within the last week, the mucous membrane covering the arytenoid cartilages and the interarytenoid fold had become considerably indurated, apparently by inflammatory products. The only other change worthy of note was an increase of pain over the larynx, and in the left ear.

Previously to operating, I asked Dr. Perry to examine the patient, especially as regards the condition of his heart and lungs. These Dr. Perry pronounced as practically normal. Having satisfied myself, by microscopic examination of a portion of it, that the growth was an epithelioma, I asked Drs. Macewen and Knox to assist me in the operation. I intended to have done it in the ward, and so avoid exposing the patient to cold air while being removed from the operating-room to his bed; I therefore did not ask any of you to be present on the occasion, but limited the onlookers to those whom I absolutely required for assistance. The morning, however, was so dark, that I found it necessary to operate in the theatre attached to Dr. Macewen's ward.

My reasons for operating upon this patient, and refusing to do so upon D. McK. were that, in J. W., the growth was entirely limited to the laryngeal cavity, although it occupied both its sides. The patient was a young and otherwise healthy man; the tumour was of comparatively slow growth, and the patient was anxious to have the operation performed; whereas, in the case of D. McK., the growth was not limited to the cavity of the larynx, but extended along the right aryteno-epiglottidean fold to the base of the epiglottis, and the lymphatic glands were enlarged not only over the thyroid cartilage and the immediate neighbourhood of the larynx, but also in the sublingual region. The patient was a prematurely old man, the tumour was growing rapidly, and the condition of his lungs was not so satisfactory as one would desire. I therefore satisfied myself in the case of D. McK. with what I had done for him, in relieving him of the danger of suffocation, etc.

I shall describe the method of operation when we come to consider the subject of laryngectomy, and the after-treatment in the case of J. W.

This other specimen of intrinsic epithelioma was removed by the late Dr. Foulis. The primary growth was, I believe, a papilloma, and was removed by Dr. Morell Mackenzie, about five years previous to the time that the patient came under Dr. Foulis's care. The papilloma was followed by the epithelioma, which you now see within the larynx. Laryngectomy was performed on April 30th, 1881, and the patient recovered so rapidly from the effects of the operation, that he was sent home on May 27th following. Unfortunately, however, he took too much liberty with himself after returning to his occupation, and, during the following winter, he died from an acute affection of the lungs, the exact nature of which I have been unable to ascertain.

I have now shown you five specimens of malignant disease, all of which have been removed by complete laryngectomy; one by Dr. Macewen, two by the late Dr. Foulis, and two by myself. The only other example of malignant disease to which I will direct your attention is the one I now present to you. It is one of epithelioma, involving the pharynx and larynx, as well as the right border of the epiglottis. The growth passes downwards, on the posterior wall of the larynx, to about three-eighths of an inch below the vocal cords, occupying chiefly the fissure between the cords, but also involving the posterior extremity of the right cord. The surface presents superficial ulceration, and several glands in the neighbourhood of the larynx are enlarged. The patient from whom this preparation was removed was under the care of Professor McCall Anderson, in Ward 2, in August, 1873. The history is rather imperfect; but, as far as can be ascertained, her age was 30 years, and she stated that she had had a slight cough for many years, accompanied occasionally by hoarseness and dyspnœa. The symptoms became aggravated six months previously to admission to the Royal Infirmary; and then dysphagia, for the first time, set in. The expectoration was profuse, muco-purulent, and tinged with blood.

We now come to the discussion of the general question of diagnosis of neoplasms of the larynx, and the two points we have to determine are: first, Is there a tumour in the larynx? and second, If so, what is its nature? For diagnostic purposes, symptoms arising from functional disturbance are, when taken by themselves, not of much value; thus, we may have all the subjective symptoms of tumour present without the existence of a new formation; and, on the other hand, a neoplasm may occupy the larynx for years without revealing itself. It is only by a laryngoscopic examination that it is possible to be certain whether or not the laryngeal symptoms are due to the presence of a tumour. There are five methods which we may adopt in the diagnosis of tumour. These are: first, the employment of the laryngeal mirror; second, passing the laryngeal sound or probe; third, palpating the larynx externally, or passing the finger through the mouth; fourth, auscultation and percussion; and, fifth, microscopic examination of a portion of the growth removed by the endolaryngeal method. By the first method, namely, the laryngeal mirror, we can make out the relationship of parts, the situation, the colour, and the general appearances of the new formation; but, by the reflected image alone, it is difficult to estimate the consistency, or establish the situation and seat of origin of the growth. For this purpose, we must employ the laryngeal probe or sound; by it, the insertion of the tumour may be precisely ascertained. Auscultation and percussion have both been employed in the diagnosis of laryngeal tumours; but the results are unsatisfactory, as compared with those derived from the methods I have just mentioned, and they are now seldom resorted to. Palpation externally may reveal facts of importance. By external manipulation, the relationship of the alæ of the thyroid cartilage, or of the cricoid and thyroid cartilages, may be ascertained; and infiltration or inflammatory enlargement of the lymphatic glands, as well as perforation of the cartilages by the tumour-tissue, may be discovered. If, in addition to palpation externally, the larynx be anæsthetised, and the finger be introduced into the upper part of the larynx, or fauces, points of considerable importance may be elucidated; the consistency, the extent, and the firmness of the attachments of the tumour to neighbouring parts may be ascertained, and the observations made by the laryngeal mirror and probe corroborated. To assist you in diagnosing the exact nature of a tumour, there is no method more certain than removing a small portion of the growth, and submitting it to microscopic examination. This method I shall refer to more fully hereafter.

I do not think it necessary in the present lecture to discuss, nor even to indicate briefly, the points which distinguish the products of tuberculosis, syphilis, and lupus, from non-inflammatory neoplasms. I shall consider the diagnosis of these conditions when I come to speak of tuberculosis.

Suppose, now, that you have ascertained to your satisfaction that a tumour occupies the larynx, what is the next point to be cleared up? It is this: Is the tumour benign, or is it malignant? It is almost impossible to lay down any hard and fast rules for your guidance; and, while I attempt to do so, I trust you will bear in mind that the statements I make must be taken with certain reservations. The following circumstances are worthy of your attention, as distinguishing malignant from non-malignant growths.

In the former, especially in round-celled sarcoma and in soft cancer, the development of the symptoms and the growth of the tumour are rapid; whereas in the latter, as a general rule, the symptoms remain stationary, or nearly so, for a considerable time, often for years, and the increase in the bulk of the neoplasm is practically imperceptible. One exception to the slow growth of benign tumours is the papillomata, which, in many instances, grow with considerable rapidity. When the larynx is the seat of a benign growth, the mucous membrane may be hyperæmic, or slightly thickened by chronic catarrhal changes, but is not usually otherwise altered in appearance;

whereas, in malignant disease, especially in cancer, not only is the tumour ulcerated itself, but the mucous membrance is indurated, infiltrated with inflammatory products, and not uncommonly marked by erosions. Again, in cancerous disease, or when the larynx is occupied by a soft round-celled sarcoma, hæmorrhage may be a prominent symptom, especially if the patient suffer from paroxysms of coughing. This symptom is seldom present in non-malignant disease. Unless the larynx be the seat of prolonged and intense inflammation, enlargement of the lymphatic glands may be regarded as pathognomonic of cancer. In the sarcomata, the glands are not affected. Another symptom which makes one very suspicious of cancer is pain, at first limited to the larynx, but subsequently radiating to the ear and cheek and neck, on the affected side. In the early stages of the disease, it is, in many cases, very difficult to come to a definite diagnosis. This is especially the case in the sarcomata. Associated with these tumours, you have not the distinctive symptoms, subjective or objective, that you have in the carcinomata. The patient seldom complains of pain; there is rarely enlargement of the lymphatic glands, or ulceration of the surface of the tumour; but still the tumour is malignant, and the patient incurs almost as great a risk to life as if he were the subject of a cancerous growth. What means have we, then, of ascertaining with absolute certainty the nature of the new formation? At the last lecture, you saw me remove from the larynx of L. a small portion of the growth. This I did in order that I might examine it microscopically, and be quite sure as to its nature. This method should always be employed when there is any doubt respecting the histological characters of a tumour. It is a very simple operation, is practically devoid of danger; if the tumour be benign, it is but a step for its complete removal by the endolaryngeal method; if malignant, the sooner the fact is ascertained the better. Some growths which are homologous in their origin—for example, the papillomata and adenomata, may, at a later period of life, become heterologous, and develop signs of malignancy.

The diagnosis of intrinsic from extrinsic tumours is important, especially when we have to deal with malignant neoplasms—so important, that I will not apologise for repeating some statements which I have already made. By the term intrinsic, we mean to convey the idea that the growth is strictly limited to the laryngeal cavity. When this is the case, the prominent symptoms are aphonia and dyspnœa. The lymphatic glands are seldom affected; as a rule, cachexia is not a prominent feature during the earlier stages of the disease, and dysphagia is not a common symptom. In patients suffering from extrinsic growths, on the other hand, aphonia is not usually present at the commencement of the disease, and, indeed, there may be only slight alteration in the voice; while dysphagia is, as a rule, present as soon as the growth has reached any considerable size. Pain in the larynx and pharynx, extending round the neck and to the ear of the affected side, is more characteristic of extrinsic than of intrinsic new formations. In the former, the glands also are involved at an early period, and cachexia is usually pronounced.

[*To be continued.*]

THE SALICYLIC TREATMENT OF GLYCOSURIA.

By J. SINCLAIR HOLDEN, M.D.,
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A FRESH impulse has been received with regard to the treatment of glycosuria, or diabetes, from the recent valuable researches of Professor Latham on the pathological connection between diabetes and rheumatism. Dr. Latham considers that there are two distinct kinds of diabetes. First, there is that which arises from a neurotic disturbance of the function of the liver; this has the effect of arresting the metabolism of the glucose, and allowing it to pass unchanged into the general circulation and appear in the urine. Second, that which arises from a neurotic disturbance of the function of muscle; this allows glucose to form in that tissue, and to pass unchanged into the general circulation and appear in the urine. He has also shown that this second kind of diabetes is intimately connected with rheumatism; so intimately, that a degree of more or less oxidation determines whether the muscular tissue generates an abnormal amount of lactic acid or of glucose in the system. Moreover, he has shown that, when salicylic acid is administered, it has the property of arresting the formation of both lactic acid and glucose, by means of a chemical combination which it forms with the antecedents of these products.

These very important views of Dr. Latham, I think, are corroborated by the following cases of glycosuria which I have met occurring in rheumatic persons.

CASE I.—Mrs. C., aged 61, was crippled with rheumatic arthritis. In May, 1879, while attending her for eczema of both legs, I found that she was also suffering from diabetes, which, from her account, must have been going on for two years. Her urine had a specific gravity of 1055, was loaded with sugar, and measured nine pints daily. For six months, I treated her in the usual way—restricted diet and codeia—but never got the specific gravity of the urine lower than 1047, nor the daily quantity much below nine pints. As she had some acute pains in her joints, I then left off treating the diabetes, and gave her salicylic acid, in doses of twenty grains thrice daily for three days, and then in ten-grain doses. At the end of a fortnight, not only were the joint-pains relieved, but I found that the specific gravity of the urine was 1035, with less sugar, and she was passing only five pints daily. I continued the salicylic treatment, and only restricted from her diet sugar and potatoes. On December 13th, 1879, the urine was quite free from sugar, of specific gravity 1020, and normal in quantity.

This improvement continued for two and a half years, when there was a return of the same condition of glycosuria; a month's treatment with the salicylic acid completely arrested the attack, and there has been no symptom of it since. At the present day, she is in good health, except for the rheumatic arthritis.

CASE II.—Mrs. F., aged 56, of a very rheumatic family, suffered from rheumatic pains. For the last four years, she had been under medical treatment for diabetes. From being a strong robust woman, she had become helplessly weak. She consulted me in May, 1880. She was then passing daily from nine to twelve pints of saccharine urine, of specific gravity 1040, and suffered intensely from pruritus vulvæ. I thought her case hopeless, but put her on the salicylic treatment, the diet to be what she fancied except sugar and potatoes. During the four weeks following, the urine fell to three pints daily, of specific gravity 1030. She had gained in flesh and strength, and was quite free from pruritus vulvæ; she was able to resume the duties of managing a large boarding school. This improvement continued for nearly four years, when cancer of the liver set in, from which she died. In this case, I could never get the urine free from sugar, nor its specific gravity lower than 1030; yet, at the same time, the quantity remained normal. She took the medicine at intervals up to the last.

CASE III.—Mrs. H., aged 51, had, on the fingers of both hands, nodes of rheumatic arthritis. Symptoms of diabetes had existed a year; she had wasted greatly. I saw her in February, 1881. She was then passing eight pints of urine daily, of specific gravity 1040, loaded with sugar. After two weeks' taking of the salicylic acid, forty grains in the day, I found the specific gravity of the urine 1020, and only a trace of sugar; and she was passing a normal quantity. She continued the medicine, in less doses, for a month. At the end of that time, she wrote to me that she was in every respect quite well. I had no further visits from this case, as she left the neighbourhood while under treatment.

CASE IV.—Miss W., aged 52, was subject to rheumatic pains and cramps. I saw her in consultation in March, 1885. Diabetes had existed four months, rendering her unfit lately for household duties. Her urine was highly saccharine, of specific gravity 1030, and seven pints were passed daily. She was ordered salicylic acid, fifteen grains in mixture, three times a day, for a week; and then in ten-grain doses. At the end of the second week, the specific gravity of the urine was 1010, with no sugar. The quantity was six pints daily. She said she always passed about this quantity, but now felt quite well. The medicine was shortly afterwards discontinued; and there has been no return of the glycosuria. In this case, no restriction of diet was ordered.

CASE V.—Mrs. P., aged 59, had rheumatic arthritis in the fingers and wrists, and muscular pains and cramps frequently. She first consulted me on February 3rd, 1885, for cataract forming in both eyes. Symptoms of diabetes dated back a year. The urine was highly saccharine, of specific gravity 1035; and eight pints were passed daily. She commenced the salicylic acid, taking thirty-six grains daily, and from her diet she was ordered to exclude sugar and potatoes. On February 10th, urine eight pints, specific gravity 1028; much sugar. On February 17th, urine five pints, specific gravity 1020; less sugar. On February 26th, urine four pints, specific gravity 1010; no sugar. On March 12th, she was in the same condition as at the last report. I had to leave off the salicylic treatment, as she complained of it giving her indigestion. She said she was very much stronger. The above rapid improvement, under the salicylic treatment, only lasted three months, as, on May 28th, the urine, though only four pints in the day, had a specific gravity of 1030, and there was a return of the sugar. On resuming the medicine, the glycosuria again disappeared. Owing to the dyspepsia which the medicine causes, this lady cannot continue it long

ough to do more good. The cataracts have not increased, and she ins instead of losing strength ; but, up to the present, she returns out every three months with glycosuria, but no polyuria.

Case vi.—Mr. D., aged 59, had frequent rheumatic pain and iffness of joints, also cramps. I first attended him on January 13th, is year for a peculiar clonic spasmodic action of the left arm, and at ie same time discovered that he had been suffering for about six onths from diabetes, passing daily twelve pints of saccharine urine, specific gravity 1042. I prescribed salicylic acid in mixture, 36 ains daily, and ordered him to avoid sugar and potatoes, also to ke whiskey instead of beer. In four days, the quantity of urine was duced to four pints in the day, containing less sugar, and specific avity 1025. He is still under treatment. He has had no return of ie spasms or rheumatic pains ; the specific gravity of the urine varies tween 1025 and 1032, but the quantity has no day exceeded four pints.

In addition to these six cases of glycosuria in rheumatic persons, I ve tried the salicylic treatment in four other cases in which no rheuatic symptoms existed, and, in all, failed to make any impression on ie polyuria or sugar. Two of these cases were carefully observed in spital ; they improved on restricted diet and sedatives, but not on llicylic acid. These four were doubtless glycosuria of hepatic origin; age they were under 30, while the cases I have described were all er 50.

General Remarks.—The first and most marked effect of the licylic treatment in the glycosuria of rheumatic persons, is the most complete removal of the distressing polyuria which accomnies it.

In Case vi, after four days' treatment, the daily evacuation of urine is reduced from twelve to four pints, and, in all the cases, this effect is one of the earliest and most constant ; at the same time there was considerable fall, both in the specific gravity of the urine and its oportion of sugar; even when the treatment fails to remove the gar entirely, it reduces it to such a trifling amount, that the patient unconscious of any ailment, and gains in flesh and strength. This provement persists for weeks after suspending the medicine, as is e case with two patients now under observation; the quantity of ine never exceeds three to four pints in the day, nor does the specific avity rise above 1028 or 1030, though containing sugar. Even this ndition must be safer and less serious than when the patient is ssing daily nine to twelve pints of saccharine urine, of a specific avity of 1040 and upwards.

As to diet, the careful restriction which is so imperative in the abetes of hepatic origin is not so necessary in this kind; still I think greatly helps to restrict the formation of glucose in the system, prohibiting potatoes, farinaceous puddings, and sugar, as much as ssible.

In administering salicylic acid, the following mixture has given od results : ℞ Salicylic acid ʒii, bicarbonate of soda ʒj, carbonate of mmonia ʒj ; mix in water ʒi, and, when effervescence has subsided, d water to ʒxii. An eighth or twelfth part to be taken three times day. This is a soluble neutral mixture, and is not unpalatable ien given in a wineglass of water, with a little tincture of orangeel added. The ammonia prevents any depressing effects. I have ied the free acid made into three-grain pills with mucilage, as remmended by Dr. Latham in rheumatic fever, but have not found em superior to the mixture, while many patients object to swallowg five or six pills as a dose.

It is a matter of much importance, with regard to treatment, to be le to distinguish between the two kinds of diabetes. The presence absence of rheumatic arthritis, pains, and cramps, is often suffint; but Dr. Latham has recently called attention to a more certain ode of distinguishing between the two, as he has found that in the abetes of rheumatic persons—that is, originating in the muscular sue—the urine contains some substance which dissolves cuprous ide ; so that a larger quantity of Fehling's test has to be added fore getting the brown precipitate in this urine, than in the diatic urine of hepatic origin. I have lately been able to confirm this servation.

To judge from the proportion of cases of diabetes in rheumatic rsons which I have met with in this neighbourhood, this kind of ycosuria can be by no means rare ; and the early treatment of it th a salicylic acid offers a real hope of cure, or, at any rate, it will .ieve and prevent that tendency to wasting and exhaustion which s but one issue.

Presentation.—Dr. A. Harrison Thomas, Senior Medical Officer the Fisherton House Asylum, was, on April 16th, presented with address, together with an inkstand and tankard, by the officials of at institution, on the occasion of his resigning his appointment.

NOTES OF A CASE OF SUPRAPUBIC LITHOTOMY.

By J. RUTHERFORD MORISON, M.D., F.R.C.S.Edin., Hartlepool.

Removal of Three Pure Uric Acid Stones ; largest, about the size of a Cocoa-nut, weighing one pound six and three-quarter ounces, long circumference 12 *inches, short circumference* 9¾ *inches.*

S., aged 52, married, a seafaring man, residing at West Hartlepool, complained of pain and difficulty with his urine. His general health had been good, with the exception of the trouble complained of. He had been somewhat addicted to alcoholic excess. He looked a strong man, but much worn by pain and loss of rest.

For the last thirty years, he had had attacks of pain and difficulty in micturition. He thought that an accident, a fall on the perinæum over a railing, which he met with when a boy, might have been the cause. During the attacks, he had had a frequent desire to micturate, accompanied by straining pains in the perinæum and rectum, and a shooting into the point of the penis. These attacks lasted a variable time, occasionally passing off in a few days, at other times requiring months. He said they had to reach a height, after which followed a gradual return to health, and for a time he remained perfectly well. Several years ago, during one of the attacks, he passed blood with his urine. At different times he had consulted a variety of physicians and surgeons, but nothing did him any good except morphine, which relieved his pain. He had been frequently sounded for stone, but without result.

His present attack began four months ago in the usual way, with painful and frequent micturition, for which, up to the time of my seeing him, he had been under medical care, and steadily becoming worse. At the time of my first seeing him, I was going away for three weeks ; therefore, on examining his urine, and finding it to contain one-third albumen, some pus, and to be of a low specific gravity (1008), I ordered him to live on milk, and to take 15 minims of tincture of perchloride of iron three times a day, postponing any instrumental interference till my return.

On August 14th, three weeks having expired, I again visited him. So far as could be ascertained, all his organs were healthy, with the exception of the genito-urinary system. He was wearing an urinal, as his urine was constantly dribbling away. As a consequence, his thighs were excoriated, and he had a strong urinous odour. On palpation, a rounded swelling could be felt in his lower abdomen, reaching midway between the umbilicus and pubes, which was dull on percussion, and pressure on which caused a desire to micturate, and the escape of some urine by the natural channel. Pressure over both kidneys, posteriorly, caused pain. By the rectum, a round, hard, tender swelling was easily felt, projecting into the lower part. A soft rubber catheter entered as far, apparently, as the prostatic urethra, but here it hitched, causing great pain, and about a teaspoonful of urine escaped in little gushes. The catheter could not enter the bladder. I arranged, after explaining that, in his dangerous state, even the passing of an instrument and the emptying of his bladder was attended by considerable risk, to give him chloroform the following day, and make a thorough exploration.

August 15th. On giving chloroform, the distended bladder could be distinctly felt as a rounded swelling in the lower abdomen. A soft *coudé* instrument struck at the same spot as the one introduced yesterday, and no more urine could be obtained through it. A silver catheter, now tried, struck a stone at the point of obstruction lying in the urethra, and could not be passed beyond it. I arranged to make an incision, and, by that means, empty his bladder next day.

August 16th. The staff, when introduced, hitched on the urethral calculus, but passed on into the bladder, where it struck another calculus. The ordinary (as for lateral lithotomy) incision was now made, and bled profusely from the whole surface. The transverse perineal artery was so active as to be formidable, and a Péan's forceps was fixed on each end. When the urethra had been incised, a small flat stone escaped into the wound, and was extracted with my finger, which was then passed into the bladder on to the stone there, and the staff was removed. The stone was of such large size, that I enlarged the wound in the bladder with a probe-pointed bistoury before introducing the largest size of lithotomy-forceps. Expanding the forceps widely, I grasped the stone, which was so large and of such a shape that the instrument slipped off. After repeating the process in a variety of directions, it was plain that the stone could not be removed through this incision, and that, if the stone were to be had, it must be by the suprapubic operation. The wound had all

along bled profusely from its whole surface, and by this time the patient had lost at least a pint of blood. A sponge was packed into the perineal wound, the suprapubic incision made, and the bladder opened above the pubes on the stone; a matter of little difficulty, as the stone was pushing forwards the anterior bladder-wall. The incision in the skin was extended upwards for about four inches from the pubic bone, the bladder-wall being opened for about two inches up to the reflection of the peritoneum. The lithotomy-forceps was again introduced, but had no power, and slipped. There was the same difficulty as before. The midwifery-forceps of a neighbouring practitioner was now sent for, and, on its arrival, one blade was introduced at a time, as in an ordinary instrumental delivery. The entrance of the first blade was followed by a gush of putrid urine, which escaped over the abdominal wound, and must inevitably have run into the peritoneal cavity had it been opened. This urine, about two ounces, was lying in the base of the bladder under the stone, and at a lower level than the urethral opening. The forceps being locked, the stone was easily removed by slow and gentle traction, the wound in the bladder expanding without laceration, and no further obstruction being encountered because of the long incision through the superficial soft parts. The bladder-wall was very much thickened, and so vascular that it bled freely. Lying at the lowest part of the bladder was another small flat stone, which was now removed.

The operation was completed by the introduction of two deep and three superficial sutures of catgut into the abdominal wound, leaving only the lower half open; by stitching a full sized drainage-tube reaching the bladder into the perineal wound; by flushing out the bladder and wounds with boracic lotion; and, finally, by the introduction of a large sponge, with Péan's forceps attached, into the bladder to stop the oozing from its interior still going on. The operation occupied three quarters of an hour, including the delay occasioned by having to send for forceps.

An hour afterwards, the sponge in the bladder was removed by means of the Péan's forceps, which was left attached, and all the bleeding had ceased. The patient had a fair pulse, but had not yet rallied from the cold, chloroform, and shock.

August 16th, evening. Fair pulse, 110; temperature 97°. He had not yet recovered from the shock, and was inclined to be cold. A hypodermic injection of one-sixth of a grain of morphine was made, and some hot milk and water given.

August 17th, morning. Temperature 97°. The hands were still cool, but the body warm and perspiring. He had had a good night; he had slept three or four hours, and had taken milk freely without sickness. 1 P.M., temperature 97.6, pulse 112; 3.40 P.M., temperature 99°, pulse 120; 10 P.M., temperature 102.6°, pulse 160. Ten grains of quinine, and ten grains of compound ipecacuanha powder, were ordered.

August 18th, 1 A.M. Temperature 100.2°, pulse 140; 8.20 A.M., temperature 97.4°; 3.20 P.M., temperature 98.8°; 8 P.M., temperature 99°, pulse 117. After this, his temperature only once reached 100°. For several nights he required morphine to make him sleep, not because of pain, but of restlessness.

August 19th. Most of the urine escaped by the abdominal incision, in spite of the fact that the perineal tube was large and patent. The tube was removed in consequence. The secretion of urine was very free, and had been ever since the operation. To-day he took a quantity of egg-flip; he looked much better, but his tongue was dry, and he was disposed to hiccough. One grain of calomel was ordered to be taken every four hours.

August 21st. His pulse occasionally intermitted, and had kept up to about 120 since the operation. He was ordered 10 minims of tincture of digitalis every four hours. The tongue was much cleaner. He asked for and relished some tea and toast.

August 22nd. Most of the urine escaped through the abdominal wound; and a tendency, apparently, for it to find its way into the urethra had caused some pain. I passed a full sized drainage-tube through from the perineal to the abdominal opening, and ordered the bladder and tube to be syringed out from above every four hours with warm boracic lotion. The patient seemed very well and strong; pulse 100, temperature normal. He could not, however, sleep well at nights; the urinary secretion was very free.

August 27th. He was very well and strong. The upper part of the abdominal wound was healed; the lower part was granulating, and both it and the perineal wound had closed in so as to embrace the drainage-tubes. His diet had been gradually improving; to-day he was allowed to have for dinner chicken with vegetables, pudding, and a glass of beer. After dinner he enjoyed a smoke, and was anxious to know if he soon could get up a little. He was in excellent spirits about himself.

August 28th, morning. He looked rather depressed, and said he did not feel in such good spirits. He had had hiccough occasionally; but, as his pulse was good, and temperature normal, the wounds looked well, and the secretion of urine was free, no importance was attached to it, as, even when fairly well for some months, he had sometimes had it. In the evening the hiccough was much worse; it never let him rest. The tongue was dry; pulse 120, temperature 98.4°. He was very thirsty, drowsy-looking, and low-spirited. He said he was going to die. Hypodermic injection of morphine, and a variety of other things, were tried.

August 29th. The hiccough never ceased. He had been delirious all night, wanting to get out of bed, etc. He died early in the morning. No *post mortem* examination could be obtained, though there could be little doubt from the history and his condition that the ureters were dilated, and the kidneys diseased.

ENDOMETRITIS.

Read before the Glasgow Obstetrical and Gynæcological Society.

By ROBERT BELL, M.D., F.F.P.S.G., ETC.,
Physician to the Glasgow Institution for Diseases of Women.

Two reasons have influenced me in my selection of endometritis as the subject of this paper: 1, because this morbid condition is so frequently met with; and 2, because its existence is so frequently overlooked by the general practitioner. I do not, of course, wish it to be inferred, when I speak of endometritis, that I believe that the endometrium, in any great number of cases, is affected alone—that is, without the parenchyma of the uterus being likewise involved; but, as it is principally through the lining membrane of the organ that we are able to reach its more remote structure when treatment is being employed, and as the indications of restored health are reflected through the canal, the health of this membrane must always be viewed as indicative of the health of the uterus as a whole. I have just observed that this diseased condition of the uterine canal is often overlooked; but I go farther, and would point out that not only is it passed by unrecognised, but one of the manifestations of the disorder, and one which of itself is of little account, is accepted as *the* disease, and, even when this is detected, it is misnamed. I refer to the so-called ulceration of the womb, which, so far from being an ulcer, on the contrary, is a hypertrophic condition of the cervix. This partakes no more of the nature of an ulcer than an ectropion of the eyelid does. Papillary and follicular ulceration of the cervix are terms in our nomenclature which never should have existed. Certainly the strawberry appearance of the cervix, which frequently, but by no means constantly, is a part of endometritis, is a most prominent symptom; and to observe its gradual disappearance is a most welcome sight; but to treat it *per se* by local applications, in the expectation that the patient will thus have her health restored, will surely end in disappointment. What we have been long in the habit of calling an ulcer of the womb, in common parlance, is, we now know, an ectropion of the cervical membrane due to hyperplasia, which results in the mucous membrane being crowded outwards; and this hyperplasia is due to endocervicitis. Let us now, however, consider endometritis, not in part, but as a whole; and it will be my endeavour not only to demonstrate what I consider the safest and surest means of arriving at a correct diagnosis, but also to detail my experience in its treatment.

First, then, its etiology must have careful attention, as this is very varied. The causes of endometritis are frequently at the onset apparently very trivial, so much so, that it is not a matter of surprise that they are often overlooked; and yet these may advance so insidiously, that quite unexpectedly they come to be mighty factors in the production of this most painful and trying disorder. We cannot be surprised, however, that a woman should suffer intensely and long before applying for relief, when the uterus is the seat of disease. It must always be a great effort on her part to submit to examination, and to a course of treatment. Symptoms are thus apt to be pretty well advanced, and, therefore, more difficult to remove than otherwise they would be, before they come under observation. As each menstrual period is accompanied by a physiological hyperæmia of the uterus, which in the healthy woman passes off with the emptying of the surcharged vessels, it will not be difficult to comprehend how, if any inflammatory condition be present as well, though it may not be sufficiently marked to indicate itself by any decided symptoms during the intermenstrual repose, this will be so aggravated at the period of

menstrual activity as to make its presence distinctly evident. The tendency, then, will be for the hyperæmic condition to persist beyond the normal number of days, and possibly induce menorrhagia, which will, in its turn, give relief to the symptoms so far; but in all probability this will again be succeeded by a catarrhal discharge, which will, in a minor degree, act as a depleting agent, though it will, by its very presence, perpetuate the disease. It behoves us, therefore, to employ means at once with a view of checking this incipient form of the disorder, such as rest and general tonic treatment, with, perhaps, a moderate amount of shampooing. At the same time, special attention must be directed to the bowels, a duty which is too often neglected, much to the hurt of the patient; otherwise, if the disease be permitted to advance, it will soon manifest its presence by unmistakable symptoms. I have frequently met with cases similar to that which I have just depicted, in girls who have either been indiscreet during the menstrual flow, going into baths, for instance, or getting their feet wet, or who have suffered some mental shock, by which means the discharge has been checked; and I feel sure many here must have had similar experiences. Then we must not overlook the fact, that an atonic condition of the general system is a potent predisposing cause to endometritis, which condition, we know, may arise from a number of circumstances, but which would be beyond the scope of this paper to detail. If we view the anatomical relation of the uterus to the neighbouring parts, its dependent position in the pelvis, its blood-supply, etc., it is not difficult to realise how readily a passive congestion can obtain within its structure, and how this, being aggravated at each molimen, will sooner or later assume a chronic condition.

Constipation is another predisposing cause, and, I must insist, a much more frequent and energetic factor in inducing endometritis, than one is fain to imagine. It acts in two ways: first, by interfering with the circulation in the pelvis; and we must remember that it is always the circulation in the veins that suffers first when pressure exerts an effect on the vascular system, the elastic walls of the arteries rendering them, to a large extent, free from much risk of compression. The venous capillaries, therefore, become engorged, and œdema results. Now, an accumulation in the rectum and lower reaches of the colon interferes very considerably with the vascular health of the pelvic viscera. In the second place, we cannot have a sluggish action of the colon, and, therefore, a loaded colon, without some portion of the liquid fæcal matter being reabsorbed into the blood, in this way developing within the vital fluid a poison, modified certainly, but still a blood-poison, which exerts upon the red corpuscles a most pernicious effect; and, in my opinion, actually reduces their vitality so far as to destroy large numbers of them, and thus to tend very much to bring about anæmia. Nay, I will go further, if I may be pardoned a slight digression, and I would suggest that, in a large majority of cases, constipation is the starting-point of anæmia. Moreover, I have detected, in not a few instances, an accumulation of hardened scybala in the rectum, actually crowding the uterus out of position; and, in more than one instance, have demonstrated that this was carried to such an extent as to produce a temporary retroflexion.

Vaginal leucorrhœa may produce so much irritation of the mucous membrane of this canal, as to give rise to not a little vaginitis, which may spread by continuity of tissue, and involve the cervix, and afterwards spread to the endometrium. On the day I am writing this, I have had an unmistakable example of this brought before me.

Displacements, but more especially flexions, are pregnant sources of endometritis, and generally of a most acute type. This is more especially the fact in traumatic cases. The reason is obvious; for here we have the relation of the venous to the arterial flow suddenly altered. Some gynæcologists affirm that a bend in the uterus does not and cannot interfere with the uninterrupted circulation in the uterine tissue; and, therefore, cannot prove a factor in the production of endometritis. Two cases, however, at this moment are present to my mind, which, I think, demonstrate beyond a doubt the distinct effects of sudden retroflexion. The accident in both cases happened to unmarried ladies, who, previously to the event, were entirely free from any uterine symptoms, so that the evidence is as distinct as it possibly can be, and, to my mind, most valuable. The first, Miss L., while walking on the footpath after dark, slipped and fell with a thud on her sacrum. The next morning, she called in her medical man, on account of a severe flooding which had come on. He plugged the vagina, and gave gallic acid, without producing the slightest effect on the hæmorrhage. A day or two afterwards, I forget exactly how long, he asked me to see her with him. The patient was very anæmic, and in great alarm, as also were her friends. On making a vaginal examination, the uterus was found to be acutely retroflexed, and very flabby, but not in the least degree tender to the touch. I therefore concluded that the flexion had been produced by the fall, and that the sudden venous congestion which resulted had terminated in the rupture of the walls of the vessels; and hence the hæmorrhage and absence of inflammatory symptoms. I therefore replaced the uterus, and kept it in position by means of a Hodge's pessary, with the almost immediate effect of arresting the hæmorrhage; and in a short time, with the exception of the weakness resulting from the loss of blood, the patient was in her usual health, and free from all inconvenience. She wore the pessary for some months, and has had no recurrence of the metrorrhagia since, nor has she had any uterine symptoms. The second case was that of a young lady (Miss R.), who fell from a height of several feet, and came down on her haunches. She was carried into the house, and suffered intense pain, which continued for several weeks, the discharge being excessive at each menstrual period for some time afterwards. It was fully a year after the accident when she came under my observation, and then she was very nervous and depressed. Vaginal examination disclosed retroflexion, with considerable hyperplasia, and acute sensitiveness of the fundus. I did not attempt at first to reduce the flexion, but took measures to support the fundus with tampons, and thus allay the inflammation as well. I thereafter replaced the fundus, and supported it by means of a pessary, with the result that all local symptoms disappeared. I should have mentioned that, during the whole of the time this patient was under treatment, endometritis existed, and this was accompanied by a muco-purulent discharge. This was treated *pari passu* by the method which I will afterwards describe.

I now come to speak of the most frequent cause of endometritis in the virgin. I was going to say, in the nullipara, but, for special reasons, I will not speak of married women at present. I refer to stenosis of the internal os. This stenosis is generally spasmodic, and in consequence of this, considerable dysmenorrhœa accompanies each molimen. (I concluded that it is spasmodic, from the fact that the painful character of the period usually disappears when once the flow has been thoroughly established. Were it due to a distinct narrowing of the cervical canal, or of either orifice of it, the pain would necessarily be prolonged during the whole period.) The physiological hyperæmia becomes, in process of time, prolonged beyond the continuation of the flow, in consequence of the irritation produced by the violent contractions which have accompanied the expulsion of the discharge through the constricted orifice. The inflamed condition of the canal is indicated, first, by the clotted character of the menstrual discharge, and, secondly, during the intermenstrual period, by a copious mucous, or, in more advanced cases, muco-purulent exudation; by backache, pain on a slight amount of fatigue, weight in the abdomen, ovarian neuræsthesia, lowness of spirits, etc.; and the uterus is exquisitely sensitive to touch. It may be remarked that I am not warranted in classing stenosis amongst the causes of endometritis, that this is purely an assumption on my part; but that, on the contrary, it is more likely to be a result than a cause. I think, however, gentlemen, if you inquire into the history of dysmenorrhœa, you will find that it rarely exists during the early life of a menstruating girl, and that it will not occur at all if the girl lead a natural, and not the artificial, life into which our young ladies are thrust. We hear of these young creatures going out night after night to dances, and drawing upon the powers of nature to such an extent as to render them totally unfit for the ordinary and rational duties of life. They make no difference whether their catamenia be present or not, but pursue their wild career after pleasure, passing through an amount of physical fatigue in a heated atmosphere, and then exposing their heated bodies to draughts of cold air, in a way which would try the strongest frame, not to speak of the delicate organism of a woman. Along with this, they neglect the function of the bowels, and, as a rule, set every hygienic law at defiance. Is it to be wondered at, then, that this routine of foolhardiness, as I have observed over and over again, results in stenosis? Whether this be concomitant with a persistent hyperæmic condition of the organ as well, I am not prepared to insist, but that it is followed by this condition, and, to say the least of it, aggravated by it, I have not the slightest doubt.

Overstraining the nervous energies at school is another predisposing cause of stenosis, and thus of endometritis, by the neglect of hygienic precautions which it engenders, and also by the actual wear and tear resulting therefrom. Irritability is the natural outcome of reduced tone, and a highly delicate organ like the uterus is sure to suffer. A woman, to be healthy, must lead a natural, useful, and moderately active life. She must not overstrain her natural powers, or indulge in a too luxurious mode of living. If we analyse the various classes of society, we will find that symptoms which point to endometritis are by far more prevalent in those women who lead the artificial existence in which the upper classes indulge.

A conical cervix is another potent cause of endometritis, and for the same reason that stenosis of the internal os induces it, namely, an obstruction to the menstrual flow. It is a well known fact that fluid will pass much less readily through an elongated narrow canal than it will do through a shorter tube of the same calibre. Now, the smallest amount of irritation in the cervix—which irritation is most prone to exist when this portion of the canal is hypertrophied—will produce coagulation of the discharge, thus making the resistance still greater, and necessitating uterine contractions to accomplish expulsion. This repeated and continued effort of the uterus, in due time, produces congestion, and an inflammatory condition results.

Now, with reference to the married woman, we will not unfrequently observe that this disease is induced by excess of sexual excitement and over-indulgence. How often are we compelled to attribute endometritis to this cause, on learning that it dates from the commencement of married life, and from the history of the patient, which she reluctantly gives.

But perhaps the most prolific cause of this affection is subinvolution of the uterus, following the delivery of either a premature or a full-grown fœtus. This, however, most frequently occurs after a miscarriage, from the fact that much less care, as a rule, is exercised in these circumstances in securing a complete convalescence, before the woman is permitted to rise and resume her ordinary duties. On inquiry, in a large majority of cases, it will be ascertained that the patient dates the commencement of her illness from a miscarriage or a confinement. It therefore behoves us to be most exact with our instructions, and to ascertain for ourselves that these are carried out, so that complete convalescence may be ensured before the patient is permitted to resume the ordinary duties of life.

Attention has of late been, and very justly so, called to another most potent factor in the production of endometritis; moreover, it is one which renders the disease most persistent. I refer to laceration of the cervix. Now, if we inquire into these cases carefully, we will ascertain that, when a laceration occurs in the middle line, either anteriorly or posteriorly, it does not act so detrimentally as when the lesion is situated in the lateral aspect of the cervix. This leads me to conclude that it is not so much the fact of a laceration existing that is so baneful in its effects, as the position of the tear. Why should the effects of the injury be influenced by its location? it may be asked. And this seems not an unnatural query. Yet, if we look at the anatomy of the circulation in the cervix, it will not be difficult to account for the difference in the results. It has been accepted as an explanation of laceration producing endometritis, that the cicatrix formed in the fissure compresses the nerve-filaments involved therein, thus producing and propagating a continuous nerve-irritation. Now, if this be correct, why does a laceration outside of the middle line exert a greater effect than that in the middle line itself? I, therefore, have excluded this view of the *casus morbi*, and attribute the consequences entirely to the effects of the lesion upon the circulation. The vessels are divided in their course, and this does not occur if the middle line be the seat of injury. The nutrition of the pendulous and semi-detached portion is interfered with in consequence of the incomplete vascular supply that results, and therefore its vitality becomes diminished, which renders it an irritant to the neighbouring structure; and its continued presence gives rise to congestion, which persists till the injury is repaired or the weakened portion removed. I have repaired such cases with most complete and satisfactory results; but, in a small number of instances, I must confess, no relief followed the operation. But where trachelorraphy has failed, success has most surely followed amputation of the cervix in a line with the apex of the laceration; thus proving, I think, that it is the presence of the devitalised portions of the cervix which has produced and kept up the diseased condition of the uterus. This is still further placed beyond doubt by the fact that, the greater number of segments into which the cervix is divided, the greater amount of irritation is then produced.

So far, then, I have gone briefly over the etiology of the disease under discussion; I naturally, therefore, come now to speak of its semeiology. What are the symptoms which would indicate the uterus as being the seat of disease, and that the disorder is endometritis? If a woman complain of depression of spirits, amounting in many instances to despair, and in not a few cases to suicidal mania, we naturally inquire as to the uterine functions; when it will be ascertained, if the disease be not far advanced, that there is excessive menstrual discharge, often clotted, preceded by a dull, heavy pain in the pelvis, which passes downwards into the limbs; backache, polyuria, etc. The nature of the woman is changed; from being an active, cheerful and energetic member of society, she has become lethargic and careless of her duties; she is fretful, and ill-natured; her sleep is fitful and unrefreshing; there is copious catarrh, either muco-purulent or entirely composed of pus. The physiognomy is completely altered, a dejected and an anxious look having taken the place of the once lively and sprightly countenance; and she seems to have lost all interest in life. A common complaint is, that her back aches so much that it makes her feel as if she would fall to pieces. Vaginal examination by the finger discovers that the cervix is enlarged and spongy, and that the uterus also is hyperplasic and sensitive to touch. When the speculum is introduced, the vaginal portion is found to be eroded, and to present the usual characteristic strawberry appearance, and from the os exudes a purulent discharge. Bimanual examination makes it evident that the whole organ is considerably enlarged. If the sound be passed, it will produce exquisite pain, and its withdrawal will be accompanied and followed by more or less hæmorrhage. The ovaries will also be very sensitive to touch; and, if the disease be of long standing, the Fallopian tubes will be found to be thickened. Indeed, I am convinced that disease of the tubes in every instance is simply an outcome of endometritis, they having become involved through continuity of tissue. This, however, is beyond the scope of my paper, and therefore I will not dwell more on this subject at present. If we examine carefully the eroded surface, which presents itself to view through the speculum, it will be seen that it is composed for the most part of the ectropic and denuded surface of the cervical mucous membrane; and the discharge which exudes from the os, and from this raw surface may, and frequently does, attain such acridity as to give rise, not only to vaginitis and condylomata, but to erosion of the vaginal mucous membrane also. If this have occurred, it will not be difficult to infer how much pain an examination must give to the patient. Reflex irritability of the bladder is almost invariably a concomitant of this disorder; and this fact must not be overlooked, as frequently the bladder-symptoms are laid great stress upon by the patient, thus often leading the practitioner to treat them as the disease, while the cause is overlooked. An irritable condition of the bowel is also frequently connected with endometritis, but it is superfluous to remark that this is only sympathetic.

Another most important symptom yet remains to be mentioned, and one which it is only natural to expect when the uterus is so sensitive, and that is dyspareunia. This is frequently of such prominence, as to be the incentive which impels the poor woman to seek advice and relief.

Having thus briefly passed in review the causation and symptoms of this distressing disease, I will now, in a few words, give my views as to treatment; and first, I would insist that, although general tonic and hygienic measures are essential to promote recovery, they as a rule are useless if employed alone. Local treatment must also be had recourse to, and may be accomplished either by the medical man or by the patient herself. If the case be not far advanced, then rest, with periodic douches of water, at a temperature as hot as the patient can bear them, and continued each time for at least ten minutes, will prove most effective in restoring the health of the parts. These will, if properly conducted, always have a most beneficial effect. At the same time, the patient must be dieted, have her digestive organs attended to, and the bowels carefully regulated.

It would be superfluous, not to say presumptuous, in me to hint at what would constitute constitutional treatment in such cases. I will, therefore, in as few words as possible, detail the local treatment I usually adopt. If there be much hypertrophy and excessive sensitiveness, I content myself with the introduction, twice a week, of a tampon, saturated with glycerine of alum and boracic acid, which I make sufficiently large to act as a support as well as a depleting agent. In a short time, varying from a week to a fortnight, it is generally practicable to commence intra-uterine medication; but sometimes this requires to be done for the first few times while the patient is under chloroform. This consists of an application to the whole endometrium of a saturated solution of iodine in carbolic acid; after which a tampon is introduced, and allowed to remain *in situ* for three days, when it is removed, and another applied for a like period. If there be much depression of spirits and nervous irritability, I find a pill, containing 2½ grains of valerianate of zinc, and two grains of the extract of conium, administered forenoon and afternoon, of great service. Of course, if a laceration of the cervix exist, this must be at once repaired, or the pendulous portion amputated, after the hypertrophy has been reduced by the local measures indicated. It not unfrequently follows that the presence of a mucous polypus is recognised, when most of the symptoms of endometritis have disappeared. This is, doubtless, a result of the prolonged irritation of the Nabothian follicles or mucous membrane. If such be present, it will prevent a complete restoration of the parts to health, and it frequently accounts for a satisfactory result being difficult to attain. With the removal of the polypus, however,

the difficulty will end. It will be necessary to warn the patient against overexertion of any kind for some time to come, and also to insist that the vaginal douche be employed for some considerable time after she passes from under your care. If rupture of the perinæum exist, it is most desirable that this be repaired, so that due support to the uterus may be given by the vaginal walls. This will not only add to the comfort of your patient, but remove a grave risk of a recurrence of the uterine mischief. Lastly, I come to speak of the treatment when elongation of the cervix exists. Doubtless, local treatment generally is successful in giving relief, but it may be looked upon as almost a certainty, if impregnation do not immediately ensue, that the endometritis will recur. I, therefore, of late years, have always insisted on removing the redundant tissue, an operation which has hitherto invariably been followed by the most satisfactory results.

ON THE DIFFERENTIAL DIAGNOSIS BETWEEN DISTENSION OF THE FALLOPIAN TUBES AND FIBROMYOMATA OF THE UTERUS.

By P. HORROCKS, M.D., B.Sc., M.R.C.P.,
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In the JOURNAL for March 27th, I pointed out the differential diagnosis between my case of "Pelvic Tumour" (*vide* JOURNAL, March 6th) and distension of the Fallopian tube. In that paper, I confined myself rigidly to the clinical account of the case, and showed that, in all probability, the case was one of fibromyoma.

The diagnosis of distension of the Fallopian tube, in the present state of our knowledge, is very difficult; indeed, those who have had the largest experience in operating for this disease, admit that they are never sure that the tube is diseased or distended until they have got it outside, through the abdominal wound. But this difficulty of diagnosis is due to the similarity between distension of the Fallopian tube and many other conditions, more especially pelvic cellulitis, pelvic peritonitis, and ovarian disease. It is, as a rule, not difficult to distinguish between fibromyoma of the uterus and distended Fallopian tube. The broad distinctions between these two conditions are as follows.

1. Fibromyomata are usually accompanied by menorrhagia, and distensions of the tube are not.
2. Fibromyomata, especially when intermural, cause uterine enlargement; whilst, in distension of the Fallopian tube, the uterus is not enlarged, or only slightly, unless complicated by some other condition.
3. Fibromyomata are usually painless, except that there is often dysmenorrhœa (as in my case, published March 6th), and, if large, a bearing-down pain, or sense of weight; whilst, in distension of the tube, the pain is constant throughout the intermenstrual period, aching in character, and aggravated by the menstrual period.
4. Nutrition is not much affected in fibromyomata, whilst it is in distension of the tube, especially when the distension is caused by pus; hence, wasting or loss of flesh is a valuable distinction.
5. The temperature is normal in fibromyomata, raised more or less according to nature and amount, in distensions of the tube.
6. Fibromyomata, when intermural, move much more rigidly with the uterus than distensions of the Fallopian tube.
7. Fibromyomata are much less painful, on pressure, than distensions of the tube.
8. Fibromyomata are usually much firmer in consistence than distensions of the tube.
9. Intermenstrual discharges, usually yellow, are much commoner in distension of the Fallopian tube than in fibromyomata.
10. The position and direction of the uterine cavity is much more affected by fibromyomata than by distension of the tube.
11. Fibromyomata are usually more or less spherical, distensions of the Fallopian tube cylindrical.
12. Aspiration yields serum or pus in hydrosalpinx or pyosalpinx; and blood in fibromyomata and hæmatosalpinx.
13. Distensions of the Fallopian tube are accompanied by pelvic inflammation much more frequently than fibromyomata.

These are, in my experience, the broad distinctions between these two diseases. Exceptional cases occur where the diagnosis is not so easy; but distension of the Fallopian tube is much more likely to be mistaken for some disease of the ovary or broad ligament, rather than for fibromyoma of the uterus. My experience does not agree altogether with the statements of Mr. John W. Taylor in the JOURNAL for April 17th, but I agree with him that the discussion may be profitable.

A CASE OF LAPARO-NEPHROTOMY.

By H. LANGLEY BROWNE, F.R.C.S.E.

E. C., aged 46, was admitted into West Bromwich Hospital in December last. She had an abdominal tumour, occupying the right half of the abdomen, and extending across the median line towards the left iliac region. It was dull on percussion, except in two places, where there was adherent intestine. Obscure fluctuation was observed. There was a history of renal colic extending over twenty years. Many calculi had been passed *per urethram*, but none during the last five years, although there had been very frequent attacks of pain. For five months only had the enlargement of the abdomen been noticed, and the pain been constant and severe. There was no pus in the urine. On January 21st, ether was given, and an incision, about four inches long, was made in the median line, below the umbilicus, exposing: 1, adherent intestine; 2, stretched out mesentery; 3, a tumour with a dark blue thick wall, evidently containing fluid. The intestine and mesentery were detached and drawn up, and a small puncture made into the cyst, through which



a small ovariotomy trocar was pushed, and about three pints of pus escaped. The finger, introduced into the incision, came into contact with a small calculus lying loose; and, when this was removed, a large mass was felt deep down on the right side, firmly imbedded in soft friable tissue, which bled very freely. Partly by cutting, and partly by tearing, this mass was removed in two portions, and, by a thorough exploration of the tumour, five other smaller calculous masses were detected and removed. (See diagram.) The tumour was so adherent

that it was impossible to enucleate it, so the cyst wall was stitched to the abdominal wall after a careful peritoneal toilette, and a large glass drainage tube was left in. For eleven days, there was not a single bad symptom. At 2 P.M., on the eleventh day, the woman seemed very well; at 3.30, she was talking to and laughing with some visitors. A few minutes afterwards she died from heart-clot. The calculi weighed seven ounces, and were phosphatic and uric.

PHYSIOLOGICAL MEMORANDA.

THE VOICE A STRINGED INSTRUMENT.

I HAVE not attempted to establish any principle or dogma, but simply to state my reasons for concluding "what form of musical instrument the human voice most resembles." I have not alluded to the matter as "The Voice as a Stringed Instrument" (Mr. Browne), nor "The Voice is a Stringed Instrument" (Mr. Casson). I am greatly indebted to Mr. Lennox Browne for kindly drawing my attention to the theory of Ferrein as stated in 1741. I would point out to Mr. Browne that the art of laryngoscopy was not discovered for about a century after the date he mentions, and that, as the theory I advocate is based on laryngoscopic observation, the reference is inapplicable.

I refer to Mr. Browne's "answers" in order.

ANATOMICAL.—1. *Answer:* "The vocal cords are not of the nature of strings at all in the general acceptance of the word." *Rejoinder:* I am not aware that I made any such statement. I, however, repeat the fact that, "the vocal cords are strings or bands of yellow elastic tissue, capable of the most exact extension and relaxation." Nor did I say that they "were slender cords or ropes attached, as in the case of a violin, at each end, and free all round." That the vocal cords do vibrate when the voice is produced, is an incontrovertible fact known to every student. Mr. Browne allows, himself, that they are free at their inner and approximating edges.

2. "Are covered with extremely fine and closely adherent mucous membrane," etc. "*Answer* to this reason is best afforded by asking what would become of the vibrations of the string of a violin or violoncello if it were brought into contact, along the whole of its length, with some substance, as is the free inner edge of the vocal ligament with the thyro-arytenoideus muscle." *Rejoinder:* This "answer" does not controvert my statement. The vocal cords are covered with extremely thin and closely adherent mucous membrane. One edge of a piece of elastic membrane can be easily made to vibrate, though the other edge be attached along its whole length; and, as stated above, the inner edge of the vocal cord does vibrate, in spite of the thyro-arytenoideus. There is a wide difference between the edge of the membrane being "brought into contact along the whole of its length with some substance, and something being attached to the membrane, which moves with it even as the thyro-arytenoideus does with the vocal cord." Musical strings are covered with wire to alter the character of the tone, etc., and in no way interfere with the necessary vibrations.

PATHOLOGICAL.—1. Mr. Browne quotes only the first part of this paragraph, that is, "When the cords cannot approximate, from the interposition of mucus, tumours, etc., huskiness, or loss of voice, ensues; it is analogous to pressing the fiddlestring without applying the bow." He omits the following, which explains. "The aperture between the cords is too large to allow the air to be applied with sufficient force to produce the necessary vibrations, though the cords may be in an exact state of tension." He makes no reference to the converse of this, as seen in laryngitis, when the aperture may remain normal, but the cords, owing to the thickening and inflamed condition of the muscles, are incapable of perfect tension; that is, the bow is used, but the fingers remain unapplied.

2. *Answer:* "While absolutely denying the accuracy of this statement as applied to the musical voice, I would ask where, if true, is the analogy? To render it relevant to the string-theory, we should be told what sort of note—not to say tune, and quite irrespective of 'volume or power,'—can be produced by one cord only without co-operating with the other, as compared to that to be obtained by one string only of a violin?" This answer is involved. I will try to make myself clear. *Rejoinder:* With every respect for Mr. Browne's experience, I must repeat my statement. I regret that the results of my observations differ from his. The notes to which I alluded were notes produced in musical sequence. This point has reference to the fact that the strings tuned together, and sufficiently proximate to be simultaneously thrown into vibrations, produce more sound than one string acting alone (at the last exhibition, fiddles were exhibited with two strings to each peg, for the purpose of producing increased volume of sound). In this latter case, the vocal aperture is larger even than when mucus, tumours, etc., prevent the cords from approximating, but sound is produced because the healthy cord reaches to, and often beyond, the median line, and thus rests exposed to the full current of air.

VOCAL.—*Answer:* "This statement is correct as far as it goes, but it by no means follows that the human voice is a stringed instrument. It would be as logical to assert that because bats can fly that therefore they are birds." *Rejoinder:* I am glad that Mr. Browne consents to the correctness of my statement about "portamento" notes. I beg to reiterate that I never stated that "the human voice is a stringed instrument;" my contention is, that it is a stringed instrument "that it most resembles." Though I should not venture to assert that bats are birds, I assert that they both have wings for the purpose of flying.

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CLINICAL MEMORANDA.

ENLARGED PROSTATE AND RETENTION OF URINE: RELIEF FROM INJECTION OF CUCAINE.

G. B., aged 60, tall and stout, had retention of urine, on December 20th, 1885, from a greatly enlarged state of the prostate gland. I used catheter No. 8, and continued to do so for about fourteen days—twice, and sometimes thrice, daily. On one occasion, I was unable to attend myself; an assistant tried, but failed. After this attempt, the tenderness seemed to increase along the urethra, with constant acute pain in the prostate gland, although morphine was often given without relief. I decided to inject a grain of cucaine, dissolved in a drachm of water and rectified spirit, into the urethra, with a small syringe, forcing the solution down to the prostate by a little pressure. The relief was instantaneous. During that night, he had complete relief from pain, and the change, he said, "was heavenly." It was used on two successive nights with like results.

W. W., aged 65, of Glossop, had been troubled with stricture for twenty-five years. When passing urine one day, it stopped suddenly. Some one attempted to pass a catheter, but he was injured thereby half-way down the urethra. An abscess formed, and was opened in fourteen days. After this, micturition was difficult, and the stream until now had continued small. Four years ago, I passed a No. 4 catheter for him, with some difficulty; he had then a large prostate. At 6 P.M. on January 6th, 1886, he sent for me to pass a catheter. I found a very bad state of things; not a drop of urine had passed for two days, and I could not use the catheter. There was extravasation of urine, which extended along Poupart's ligament and the upper part of the thigh, with great enlargement of the scrotum. I punctured the parts freely, and injected a grain of cucaine hydrochlorate in a drachm of water and rectified spirit, to relieve pain along the meatus, forcing this past the stricture down to the prostate gland. I then went home for a large curved trocar and cannula, to tap the bladder posteriorly, and took my son to assist. On returning, in less than an hour, I was surprised to find that the patient's pain was gone; and, in ten minutes after the injection was used, he passed over half a pint of urine. There now seemed no need to tap the bladder. On calling to see him in the morning, he had passed five pints of urine; and now continues to pass it in a free stream, better than before.

In both the above cases, as in others, I found good results from the use of the following medicine: ℞ Quinæ sulph. gra. viii; tinct. ferri perchlor. ʒiiss; ammoniæ hydrochlor. ʒi; aquæ menthæ ʒi; aquam ad ʒviii. One ounce to be taken every four hours.

The man is now at work. There was sloughing of the scrotum and upper part of the thigh, but this has done remarkably well. If any medical men will try the cucaine, I am sure they will be delighted with the success.

JAMES RHODES, Glossop.

THE RECOGNITION OF ALBUMEN.

THE following notes may be of interest.

C. S., a young man, aged about 20 or 21, having been exposed to wet and cold, complained to me that he did not pass enough urine. He also stated that he had been, and thought himself still, somewhat swollen. His appetite was good, but he had had some sickness. Finding his statements highly suspicious, I examined him more closely, and found what he said as to swelling quite correct, for the skin on his shins showed distinct œdema, though by no means in a great degree. He urinated in very small quantities at a time, as I was enabled to see for myself before I left his house, where I was detained

for other reasons. On examining the urine, it proved to have a specific gravity of 1030, to be acid in reaction; and, as it was not perfectly bright and clear, I applied heat, hoping to clear it, but, on continuing to apply the flame of the lamp for a short time, a thick precipitate rapidly formed in the upper heated stratum, which dilute nitric acid only intensified. Trying a fresh portion with Dr. Oliver's test-papers, I got no result whatever; neither the potassio-mercuric iodide, nor sodium-tungstate, nor picric acid, gave evidence of any albumen. But the dilute nitric acid (*B.P.*) produced a copious white precipitate, which followed the course of the acid through the test-tube. This trial was made on April 10th. On the 12th, I again repeated the whole process, and with the same result. With the microscope, the examination of the sediment proved the presence of a large amount of tube-casts, most of them containing renal epithelium and blood-corpuscles.

Here, then, we have a case in which the test-papers of Dr. Oliver ought to have aided in revealing the disease with which I had to deal; yet they failed most completely, and, had I relied on them in the absence of general symptoms, I should probably have been misled, for I had commenced to believe them infallible, having never yet examined a sample of albuminous urine in which the nitric acid heat-test did not confirm and corroborate the action of the test-papers.

I was led to believe that the cause of the failure might be due to a thick coagulum of albumen forming around the paper, and thus preventing any further action on the urine. I therefore diluted the urine with its own bulk of water, but still there was no result. Then I made a solution from the papers, and added to it urine by drops, but again I failed to obtain any evidence of the presence of albumen, which most undoubtedly was present.

I trust others who are making use of the albumen precipitant test-papers will never forget to compare their results with the old method of heating and adding nitric acid; it may prevent mistakes.

M. R. J. Behrendt.

CASE OF QUININE-BLINDNESS.

R. T., aged 33, by occupation a ship-engineer, came on board the steamship *Sarpedon*, at Hong Kong, on January 28th, and was a passenger to London, where we arrived on March 20th. It appears that, on January 3rd, when in Shanghai, he went ashore, and returned late at night to his steamer. The night being dark, he missed his footing on ascending the ship's ladder, and fell into the river, but was immediately picked up, and went to bed, feeling no ill-effects. Next day, while attending to his usual duties, he had a prolonged rigor, followed by acute pain in the right side, and was obliged to go to bed. On January 5th, he was seen by the ship's surgeon, who, he stated, prescribed a cough-mixture, but did not examine his chest. At this stage of his illness, he had rust-coloured sputum. Next day, he felt worse, and was again seen by the surgeon, who took the temperature, but omitted to look at the sputum, and make a stethoscopic examination. The temperature was 105° Fahr. The surgeon apparently endeavoured to reduce it by administering quinine in large and repeated doses, giving twenty-five or thirty grains every two hours. On the morning of January 7th, the patient felt a buzzing in the ears, followed by deafness, dimness of vision, and total blindness. On the following day, the steamer arrived in Hong Kong, and the patient was conveyed to hospital, where it was ascertained that he was suffering from pneumonia of the right lung. He remained in hospital until he joined our steamer on the date mentioned. When I, as surgeon to the steamer, saw him, he was totally blind, the pupils being largely dilated. The urine was free from albumen, its specific gravity normal; triple phosphates were found in abundance. I detected some lung-mischief still remaining, and my treatment was directed to its removal. Not having an ophthalmoscope, I determined not to in any way meddle with his sight, which began to return about twenty days after we left Hong Kong, when he noticed a coloured handkerchief (blue and white), held at a distance of three feet from him; he also could read large type. Objects held closer, or at a more remote distance, became either blurred and indistinct, or unnoticeable. He complained of photophobia. At this time, his lung-mischief had quite disappeared; and suffice it to add that, up to the time of our arrival in London, his sight seemed to be steadily, though slowly, improving. His general health seemed good, and all the time he had quite an insatiable appetite. He acknowledged that he had led a somewhat dissolute life, and that, nine years ago, he contracted syphilis, followed by secondary symptoms.

J. J. O'Bryen, L.R.C.P., L.R.C.S.Ed., L.A.H.Dub., London.

DEATH FROM EMBOLISM OF THE PULMONARY ARTERY.

On April 15th, I was suddenly called to the Viaduct Hotel, to see a man who had fallen down in the street near, about ten minutes previously. The policeman said the patient was able to speak when he found him, and appeared to be faint. When I first saw him, he was gasping for breath; his face was pallid, with drops of sweat on the forehead; he had lividity of the lips, was throwing the arms about, and was unable to speak. The heart-sounds were muffled by a churning sound, and the pulse was very rapid and weak. He threw himself about on the bed, and patches of lividity formed about the neck. The breathing continued gasping, and, in a few minutes more, he died, with lividity about the mouth.

At the necropsy, the heart was found to be healthy, and, in the right branch of the pulmonary artery, there was a clot of blood about two inches long. The end furthest from the heart was formed by a yellow embolus, about the size of a pea. Attached to this was a recent clot, which had evidently formed during the twenty-five minutes the deceased lived after the seizure. There was a very tight knee-cap on the left knee.

At the inquest, I learnt that the deceased had been in good health, but had had some effusion into the knee-joint, for which he had been wearing the knee-cap; also that he had complained to his wife for a few days of weight and pain in the left leg, but had not rested it as desired.

Taking the history into consideration, I think there is but little doubt that the embolus came from a vein in the left leg; and that the tight knee-cap was the cause of the trouble.

Alder Smith, Christ's Hospital.

THERAPEUTIC MEMORANDA.

INTERNAL ADMINISTRATION OF VASELINE.

In the Journal for February 13th appears a short note, by Mr. H. Shapter Robinson, on three cases of poisoning by paraffinum molle; and, in the concluding paragraph, it is queried "whether vaseline should be administered internally at all, and, if so, in what doses." The following facts show that vaseline can and has been used in India in large doses; and, although perhaps with very doubtful benefit, at all events without traceable harm.

During 1884, the district police-officer of Noakholi (a district of Eastern Bengal) reported to the local government that, having had a large number of cholera cases in his district, when away from proper medical aid, he had experimentally treated them with large doses of vaseline—teaspoonful doses, frequently repeated; and, having been surprised at the large percentage of recoveries, he had thought it his duty to report the matter, with a view to a further and extended trial. The Local Government took the matter up, and a circular was issued to all civil surgeons in Bengal, requesting a trial of vaseline in cholera. A similar circular was sent to the General Hospital, Calcutta. As second resident surgeon of that institution, all cholera cases admitted from amongst the shipping came under my care, and I gave the vaseline a fair trial—that is, it was given freely for upwards of three months, sometimes alone, and more often as an adjunct to other treatment. Most cases received drachm-doses of vaseline every hour, and some patients had as much as three or four ounces of vaseline given from the time of admission to the time of death. Some of the vaseline was vomited, but a good part was retained, as, from its viscosity, it was difficult to throw up. I am very nearly positive that not one of the cases treated with these large doses of vaseline recovered, and also that, in my judgment, not the slightest benefit resulted from the treatment; yet, on the other hand, I cannot say that any positive harm resulted to the patients which could, in any way, be traced to the vaseline; there were no symptoms of irritant or narcotic poisoning, no extra vomiting or purging—in fact, the results of administration, as far as I could judge, were purely negative. I noticed that, after the first few doses, the majority of the patients evinced a decided reluctance to go on with the vaseline, objecting to its slimy taste. I do not know what the results of other medical officers were with vaseline; but, at the General Hospital, it was found to be completely inefficacious, and was abandoned—indeed, it is difficult to see how any benefit could result. I do not know whether Koch's comma-bacilli thrive in vaseline, or how they behave in that medium. The originator of the treatment has often assured me that he is positive the cases he treated in Noakholi were true cases of cholera, with the usual symptoms of watery purging and vomiting,

etc. ; and that he never saw any harm result from the treatment. My own cases were mostly amongst Europeans, and were genuine cases of a very bad type.

GEO. A. HARRIS, M.R.C.S., L.R.C.P.Lond., Bengal Medical Service ; Joint Civil Surgeon, Simla.

SURGICAL MEMORANDA.

THE BEST METHOD OF REMOVING FOREIGN BODIES FROM THE EAR.

I CAN, from a fairly large experience, fully recommend Mr. Hutchinson's method for removing foreign bodies from the ear. The wire loop is both safe and efficient, while the scoop and forceps are more or less dangerous instruments. For a long time, I have used silver wire for the removal of foreign bodies either from the ear or the nose. I first twist it, so as to leave a loop at the end. This loop can be altered to any size and shape, and bent at any angle with the stem. The stem, also, can be curved to suit the peculiarities of any given case. An appliance like this is made in a few seconds. It resembles both the scoop and the vectis, and is applied in much the same way ; but it is not so rigid as to be dangerous, and yet it is rigid enough for practical purposes. It is also perfectly adaptable. I have never yet failed with it. It is only occasionally that I have found an anæsthetic necessary ; namely, in children, who are very frightenened and restive, and where the passages have been rendered painful by previous attempts at removal of the foreign body.

J. SCOTT BATTAMS,
Resident Medical Officer, East London Hospital for Children.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUY'S HOSPITAL.

TWO CASES OF RUPTURE OF THE URETHRA.

(Under the care of Mr. CHARTERS SYMONDS.)

CASE I. *Complete Rupture of the Urethra: Perineal Section and Suture of the Ends: Subsequent Plastic Operation.*—W. M., aged 11, was admitted on April 12th, 1884. He had had retention of urine since the previous night, when he fell astride a railing, on which he was walking. On admission, there was extensive bruising of the perineum and scrotum, with considerable swelling. Catheterism having failed, the boy was put under chloroform, a grooved staff was passed down to the seat of the rupture, and exposed by a median incision. The subcutaneous tissue was found thickened to an inch, by blood-clot and inflammatory products; and beneath the superficial layer of perineal fascia was a cavity containing an ounce and a half of clot, but no urine. The staff now projected, and indicated the position of the distal end of the urethra. The proximal end was found surrounded by the corpus spongiosum, completely detached, turned backwards, and widely separated from the distal end. The orifice of the urethra being found with difficulty, a grooved probe was passed into the bladder, and a No. 8 gum-elastic catheter, previously, entered by the meatus, was guided along it into the bladder. The ends of the urethra were brought together by four catgut sutures, and the corpus spongiosum by two of silk. The parts came together round the catheter fairly well, but it was found impossible to effect complete apposition on the upper surface. So complete was the rupture, that the pubic arch was quite exposed. Next, in order to divert the urine from the injured part, an opening was made into the urethra, behind the rupture, and a grooved probe and a No. 4 catheter introduced by the side of the other. The deep layer of fascia was brought together by silk sutures, and a dressing of oiled lint applied. For the first two days, most of the urine came through the No. 8 catheter.

April 16th. The perineal fascia was noticed to be sloughing. The No. 4 catheter was removed, and a No. 7 introduced, and that in the urethra withdrawn, so as to lie just outside the bladder. Pus was escaping freely from the meatus. It was also observed on this day that the ends of the urethra had separated, the catheter being exposed in the wound for half an inch.

Notwithstanding the method adopted, urine flowed by the urethra, and out at the perineal wound. To control this, an India-rubber catheter was passed by the meatus through the perineal wound, and directed into the bladder along a grooved probe. At the point opposite the posterior opening in the urethra, an aperture was cut, and a metal tube inserted ; this allowed all the urine to flow away, and prevented any from entering the ruptured portion, while it kept this latter part dilated during the process of healing. This was done on May 3rd. On May 29th, a gum-elastic catheter was passed, and the perineal wounds were allowed to close. On June 5th, a No. 9 catheter was passed, and retained seven days, when a No. 10 was substituted. During this time, very little urine passed by the perineal aperture, which was reduced now to a small opening. On June 19th, the catheter came out, and, after several attempts, only a No. 4 catheter could be introduced. The difficulty was found to be due not to a narrowing of the calibre, but to the irregularity of the channel, for the two ends were separated by about three-fourths of an inch, and the proximal made an angle with the distal, so that the only way of entering a catheter was by first passing a probe through the perineal wound into the bladder, and directing a catheter, passed by the meatus, along this. On only one occasion was a catheter passed without this aid. The catheter was left out for a week, and the boy allowed to pass urine, which he did freely, and in a good stream.

Fearing future contraction, unless a catheter could be passed in the ordinary way, and finding that the difficulty appeared to be due to the two ends not being in the same line, a plastic operation was undertaken on August 19th, with a view of uniting the ends. A grooved staff was passed through the meatus, and guided into the bladder along a probe introduced through the perineal wound. A median incision exposed the ends of the urethra, which were found as surmised, not only separated, but the one (anteriorly) looking backwards, and the other (posterior) looking towards the skin, and practically corresponding with the perineal opening. The posterior end was dissected free of the cicatricial tissue, and turned up and sutured over a catheter to the anterior. The skin was united by wire.

On August 26th, the perineal wound was united, except at a small spot.

On September 18th, a No. 10 catheter was tied in as a result of the plastic operation. Catheters could be passed without introducing a guide through the perinæum, but only by the aid of the stilette, and by making a very short curve. Moreover, their passage always caused pain. He was discharged on October 13th. He passed urine freely by the meatus, but there still remained a small perineal opening. The result was, on the whole, unsatisfactory, for the boy would not be able to pass a catheter himself, nor would anyone else be able to do so without giving a good deal of distress. The great destruction of the corpus spongiosum, urethra, and perineal structure by the injury was the cause of this. The boy's father held a fair position, and could be trusted to look after his son's welfare ; so that, should any trouble arise in future, he promised to give information, and bring the boy up for observation and treatment. In reply to an inquiry, the father wrote, under date of December 9th, 1885, one year and seven months after the injury, that there was still occasionally a little discharge from the perinæum, that the boy passed his urine freely, and in the ordinary way, and made no complaint whatever.

CASE II. *Rupture of Urethra: Retention: Perineal Section: Cure.*—Thomas C., aged 63, a bricklayer, fell across a joist at 6 P.M. on May 7th, 1884. He had passed his urine half an hour before the accident. He did not think himself much injured, and resumed work, but, in about half an hour, in attempting to micturate, he found himself unable to do so, passing only a few drops of blood-stained fluid. The desire to micturate became very frequent, and he was in much distress all night. He came up to the hospital at 3 P.M. on May 8th. The perinæum was swollen and hard ; the bladder extended nearly up to the umbilicus. He passed, with considerable tenesmus, a few drops of urine now and then. Catheterism was attempted immediately without success, and the attempt was attended with free hæmorrhage. Chloroform was then administered, and catheterism again attempted, with no better result. A straight staff was then passed down the urethra as far as it would go, and its point exposed by a median incision in the perinæum. The wound was enlarged backward, and a search made for the posterior end of the urethra. There was smart hæmorrhage from the corpus spongiosum, and all the structures were much bruised and discoloured by clot, but there was no urine or foul fluid evacuated. It was clear that the urethra had not been completely torn across, for the corpus spongiosum was not divided, as in the previous case ; about one-eighth, or less, of the wall appeared to be entire. The edges of the wound were held apart with forceps, and a large probe used to search for the

orifice. When this was finally discovered, it was seen that the connecting band of mucous membrane had been twisted, and the orifice thus concealed. A grooved probe was passed into the bladder, and along this a catheter (No. 12), having been first passed from the meatus down the penile portion, was guided into the bladder and retained. Iodoform was dusted into the wound, and a piece of oiled lint and a pad of carbolised tow applied without any pressure.

The catheter unfortunately slipped out during the night of May 11th and 12th, and, an attempt to return it having failed, it was decided to leave the wound alone for some days, until, presumably, granulations had formed over the wounded surfaces, when a further attempt would be made to introduce the catheter. There was a good deal of blood lost from the wound from time to time, amounting, in some days, to several ounces, so that, on May 14th, pressure had to be applied. Some small sloughs had separated on May 15th, and by May 16th the wound was granulating, and looked quite healthy. On May 22nd, he was placed in the lithotomy position, and a grooved probe was, without any difficulty, passed from the perineal wound into the bladder. Then an India-rubber catheter was passed down the penile portion, and directed into the bladder along the probe and retained.

On May 29th, a gum-elastic catheter (No. 10) was introduced, and retained, the first having been in a week. The wound was looking well. Between May 29th and June 5th, the catheter had been changed two or three times, having either slipped out or become blocked. On June 5th, a No. 11 catheter was tied in; and, on June 7th, a No. 12 catheter. The bladder was washed out with acidulated water, as there was a little cystitis. This complication, however, never gave any serious trouble. On this day, subacute epididymitis developed. The catheter was left out for several days, to see if the man could dispense with it; but, on June 13th, the urine again escaped from the perinæum. The next day, a No. 12 catheter was inserted. An attack of pleurisy on the right side supervened on June 22nd. It appeared to be in no way connected with the urethral injury, and gradually subsided, both it and the epididymitis being well on June 29th. On this day (29th), there was a little escape of urine by the perinæum. From June 30th, the catheter was passed twice a day to remove the urine, instead of being retained, by which means the urine came in contact with the wound. He got up on June 31st. On July 3rd, the wound was healed, and the cystitis well. He was discharged on July 13th, passing his urine freely. A No. 12 catheter was employed daily while in hospital, to prevent contraction. The man continued to attend, at first twice a week, then once a week, then once a fortnight, and at last once a month, for catheterism. A No. 12 catheter could always be passed with ease; and, when last seen, nearly a year after his discharge, he remained well, and took a No. 12 catheter without the slightest difficulty.

Remarks by Mr. Symonds.—The above cases illustrate well the severer form of rupture of the urethra and the method of treatment. In the case of the boy, the suturing took a very long time, and, as the result proved, was of no use whatever. The extensive bruising, and subsequent sloughing of the fascia, were sufficient to lead to failure in this instance; and, from my experience in these two cases, suturing does not give promise of much success. It will be noted that, in the case of the boy, an opening was made into the urethra behind the laceration, in order to keep this part free from the irritation of the urine; but the result showed that this procedure was of no benefit. The present condition of the lad is not satisfactory, in the sense that there is still a perineal opening, though a very small one; and that a catheter cannot be passed with ease. He, however, suffers no inconvenience after the lapse of more than a year. Mr. Birkett records a similar case, where no contraction had taken place three years after the injury. The result in the old man was satisfactory. After the catheter slipped out on the second day, no attempt was made to introduce it till the whole wound had granulated, and all the irregular pockets, due to the laceration and the operation, had filled up and become smooth, when no difficulty was experienced. The greatest difficulty was in finding the vesical end of the urethra at the time of the operation, probably owing to the fact that, having been divided across three-fourths of its extent, the remaining portion had become twisted, and so concealed the orifice. Considerable help is obtained by compressing the bladder, and observing the point from which the urine escapes. In neither of the cases was there any choice in the treatment, since catheterism failed. It may be noted, however, that, even in cases of complete rupture, catheterism may be successful; but that, in electing to treat such by catheterism alone, it must be borne in mind that suppuration is very liable to occur from small quantities of urine passing by the side of the catheter, and escaping into the wound. In these cases, it is, therefore, most essential to keep a careful watch on the perinæum, and to incise upon the first indication of tension and swelling, or of general febrile disturbance.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 27th, 1886.

George Pollock, F.R.C.S., President, in the Chair.

On the Development of Mammary Functions by the Skin of Lying-in Women.—By F. H. Champneys, M.D., F.R.C.P. After referring to numerical abnormalities of the breasts and nipples already described, he gave thirty cases of the condition described in the title of the paper, occurring between October, 1882, and November, 1884, in the General Lying-in Hospital. The right side was affected in fourteen, the left in one, both in fifteen. The lumps in the right side predominated both in frequency and in size. After describing the situation and characters of the bodies referred to, and their course of development, he said that the secretion was of three principal kinds: (*a*) granular *débris*, like the secretion of sebaceous follicles; (*b*) colostrum; (*c*) milk, and was expressed from the situation of the sebaceous follicles, as marked by the situation of the hairs. The whole surface of the lump produced secretion; there was no centralisation. The cases were seen by numerous observers. Three typical cases were described at length, and instances of the following conditions were described by way of contrast: extension of the mammæ into the axillary folds; axillary mammæ, with axillary nipples, pores, or ducts; supernumerary nipples, without special gland-substance (including one case having a typical "axillary lump" in the skin of the right axilla, and also three small "axillary lumps" on the right side, and three rudimentary nipples, two on the right side, and one on the left). The cases of "axillary lumps" were believed to be now described for the first time. They seemed to prove that, in lying-in women, the sebaceous follicles of the skin were capable of producing true mammary secretions. The transition from granular material, through colostrum, to true milk, was distinct and unmistakable. They confirmed the opinion that the breast was a highly specialised aggregation of highly specialised sebaceous follicles. The least specialised form was that here described, where the skin was merely thickened, and the sebaceous glands might produce true mammary secretions. The next form was that where there was an aggregation of the ducts, which opened by one or more external pores. The highest rudimentary form was where a nipple or more were superadded to the last variety. It was well known that nipples might be developed independently, and it was far from improbable that these "axillary lumps" might share the pathological affections of the breast, and even be the seat of abscess. Reference was made to some affections described by Verneuil as "Hidrosadénite," and believed by him to be situated in the sweat-glands. A case of "axillary lump," painful during menstruation, was also given. The paper concluded with a table of thirty cases of "axillary lumps," giving the side affected, dimensions, when first noticed, largest on which day, state when last seen, and secretion. — The President believed it was the first time that this subject had been brought before the Society.—Mr. Alban Doran observed that Dr. Champneys' monograph proved that supernumerary nipples and mammary glands depended upon pathological or histological conditions. They had little or no morphological significance. A misinterpretation of Darwinism had led some authorities to consider supernumerary nipples as reversions to an older type. If that theory were true, then, supposing that the human species was descended from a hedgehog, the supernumerary nipples should occasionally be found, in considerable numbers, on the abdominal integument. Yet abdominal nipples were almost unknown in the human species. If any other female animal were considered, it would be found that the nipples and mammæ were not developed in the places where supernumerary nipples were generally found in woman. On the other hand, these abnormal structures had been found on the buttock in woman and on other parts, where they never lay in normally formed inferior mammals. They were, in fact, not relics of older types, but, as Dr. Champneys had demonstrated, the result of differentiation of sebaceous glands.—Dr. Creighton thought that these observations contained the germ of a great discovery. The question of aberrant portions of the breast in the axilla was a very open one. Such were not mammary tumours at all, but developed from the skin-glands. It was purely hypothetical to suppose that the secretion was from the sebaceous glands. He had, some years previously, described the glandular stratum sometimes found at the apex of the axilla; it was identical with the glands found in the

skin of the dog, which contained an albuminous secretion, and granular cells. He believed this stratum was the origin of the "axillary lumps" described by Dr. Champneys. He also referred to the gland found in the Australian platypus, which seemed to be of identical structure. The products from these glands in the skin and in the breast of the dog could not be distinguished by the eye alone. The test would be the presence or absence of plain muscular fibres in connection with the axillary glands.—Dr. JOHN WILLIAMS mentioned a case where pain in the axilla was complained of during menstruation. Knowing the pain and fulness which was felt in the breast, he had been interested to see if there was any change of sensation in regard to the axillary glands; in some cases he had known pain so complained of, but this might have been due to extension of the mammary glands. —Mr. BENNETT said that, in the case of a young woman after her first pregnancy, after lactation was over, a lump had been noticed at the apex of one axilla, and this axilla was noticed to perspire more freely during menstruation. The lump felt like a fatty tumour, and, after removal, proved to be an encapsuled lipoma.—Dr. CHAMPNEYS, in reply, regretted that he had not been able to exhibit a patient, but the secretion rapidly declined after delivery. As to the cases of extension of the mammæ in the axilla, he thought there was no difficulty in recognising such cases; the skin could be freely pinched up over them, and no secretion could be expressed from them. These served to distinguish them from the axillary lumps. He thought that Dr. Creighton's explanation with regard to the glandular layer in the axilla was probably the correct one; his naming the sebaceous follicles was purely hypothetical. In Mr. Bennett's case, it was not clear that it was of the same nature as those he had described, his axillary lumps were not stationary. It would have been desirable to have had a microscopical examination.

On Paraplegia from Pott's Disease, and its Treatment by the Actual Cautery. By JULIUS ALTHAUS, M.D., M.R.C.P.—A domestic servant, aged 20, had had rheumatic fever two years before admission into the Hospital for Epilepsy and Paralysis, and painful paraplegia for about twelve months. The right lower extremity was more severely affected than the left. There was exaggeration of the superficial and deep reflexes, and of the galvanic and faradic responses of the nerves and muscles, and there were certain vaso-motor symptoms, while all forms of sensibility were perfectly normal. There was an angular deformity of the ninth and tenth dorsal vertebræ, the structures above the projecting vertebræ being thickened and indurated, with deficient flexibility of the spine. All the other organs and functions of the body appeared to be normal. The case was, therefore, diagnosed as one of caries, probably non-tubercular, of the bodies of the vertebræ, followed by external pachymeningitis and some degree of interstitial transverse myelitis. Medicinal treatment having proved ineffectual, the actual cautery was applied by Mr. Pearce Gould on both sides of the deformity, on four separate occasions, with the result that the patient, who had been unable to walk, sit, or stand, recovered, and was discharged cured seven months after admission. The author discussed the mode of production of the pain, and of the motor, vaso-motor, and secretory paralysis, as observed in cases of Pott's disease, and distinguished three different degrees of pressure, and of corresponding severity of nerve-symptoms. 1. In one form only the spinal liquid was displaced, while the membranes and the substance of the cord were not interfered with to any perceptible degree. This explained the cases in which there was considerable deformity, but no pain nor paralysis in the limbs. 2. In another, there was not only displacement of spinal liquid, but also a moderate degree of external pachymeningitis and interstitial myelitis of the white columns of the cord, caused by the contact with the diseased vertebræ, and accompanied with pain and paralysis of limbs, but without loss of sensibility or reflex mobility. Motion suffered more readily from pressure than sensation, because sensation was more easily conveyed along the nerve-tubes, and would persist, as long as only a portion of the nerve-cells in the grey centre of the cord remained active, and after the posterior columns had been disabled. The case described belonged to this class. 3. In a third class, there was severe squeezing, and consequent inflammation of the entire substance of the cord. In such cases, clinically, all the symptoms of complete transverse myelitis in the seat of the disease were observed. The author recommended an early resort to the use of the actual cautery, in all cases of Pott's disease, where symptoms of paraplegia were beginning to be developed. Under the influence of powerful counter-irritation, the inflammation in the bones and the dura mater ceased, there was absorption of morbid products, and the compression and inflammation of the cord were relieved. Although there was probably always some degree of myelitis, in addition to the pachymeningitis, the recovery of function could be explained by assuming that a considerable number of nerve-tubes had not perished, and that, when compression was removed, these were enabled to resume their normal activity. When the third stage of the disease had once been reached, recovery was plainly impossible; loss of sensibility was, therefore, a much more ominous symptom in cases of Pott's disease than paralysis.—The PRESIDENT asked in what form the actual cautery was used. He had used it a great deal in cases of chronic joint-mischief, with much success. He mentioned one instance, in particular, where an entire and speedy cure was effected. He considered the actual cautery was most useful. He did not use it so as to produce much scarring or ulceration.—Dr. B. O'CONNOR thought the case was unique, in its complete recovery, and he asked Dr. Althaus whether the cautery was better than setons.—Mr. FITZROY BENHAM had seen several cases where rest had sufficed to cure the disease. If the paralysis did not improve in these circumstances, the disease was advancing. He agreed that loss of sensation was very rare. His experience extended over about fifty cases.—Dr. ALTHAUS replied that two large strokes were made by the sides of the column. Formerly, the cautery was used for disease of the spinal cord alone, and did no good, and, therefore, had fallen into abeyance. The cautery certainly shortened the course of the disease in his case. He preferred the cautery to the seton; it was more speedy, and less painful.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 2ND, 1886.

W. B. HEMMING, M.R.C.S., President, in the Chair.

M. Pasteur.—Dr. THUDICHUM brought before the meeting a proposition that the honorary membership of the Society be conferred upon M. Pasteur.

Epileptiform Seizures due to Sudden Anæmia of the Brain.—Mrs. H., aged 65, consulted Mr. R. F. BENHAM, the author of the paper, with reference to pain in the soles of the feet whilst walking, and to symptoms of dyspepsia. She was rather corpulent, but, with the exception of slight attacks of rheumatism, had always enjoyed good health. She had, moreover, never suffered from fits or syncopal attacks. The heart-sounds were normal; beyond some slight increase in cardiac dulness, this organ was apparently healthy. The family-history was good, with the exception of a tendency to gout on the father's side. Mr. Benham attributed the pain in the soles of the feet to flattening of the arches, and ordered suitable boots to be born; whilst, for the dyspepsia, a mixture of soda, ammonia, lithia, and arsenic, was prescribed. Under this treatment, the patient became quite convalescent. Shortly afterwards, through a chill, she developed an attack of so-called subacute rheumatism. She was treated for this accordingly; but, after a time, as the patient still felt ill and weak, it was decided to discontinue antirheumatic drugs, and to give a tonic. Three days afterwards, the patient complained of shooting pains over the cardiac region, and was said to have had several fits. Whilst Mr. Benham was inquiring into the nature of the latter, with two fingers on the patient's radial pulse, the pulse suddenly became imperceptible, she became blanched, the eyes fixed and unconscious, with several tonico-clonic spasms, which continued for about fifteen seconds. Fifteen attacks similar to this occurred during a period of two hours and a half, and the author was able to predict the occurrence of each not only by sudden dead stoppage, as it were, of the radial and carotid pulses, but also by arrest of the heart's action when in complete diastole. The convulsions towards the last attacks were more feeble as the patient undoubtedly grew weaker. The urine, passed six hours after seizures, contained a good trace of albumen, but this subsided on the following day. Two days after the seizures, the left hand and arm became much swollen, so much so, that the wedding ring was required to be cut. It was decided to return to the antirheumatic treatment; this the patient continued taking for about three weeks; then the symptoms abated, leaving her weak, and with stiffness in the various large joints, which, however, subsided under treatment. The author then discussed the cause of the sudden arrest of the heart's action, and the origin of the epileptiform seizures; and in conclusion, suggested "that, as it is a recognised fact that, in all epileptics, a severe seizure causes immunity for a long time from a second attack, while a slight seizure less so, could not the cause of these seizures be attributed to the energy of constraint taken away since the generative force, so to say, was already developed."

A Case of Epileptiform Seizures due to Irregular Cardiac Action.—Dr. CAMPBELL POPE read a paper under this title, of which the following is an abstract. T. R., a lanky youth, aged 18, porter, was on January 8th, 1885, carrying on his back a large basket, weighing

alf a hundred weight. He ran up the stairs at the Mansion House tation, and was slightly out of breath. As he made his way city- ards, he faced a strong wind, which he felt increased his difficulty in reathing. He became giddy, fell, and was carried unconscious into a arehouse. He left for the station in ten minutes, and, on entering carriage, again fell down insensible, and came to himself at Sloane quare Station. On arriving at Hammersmith, he could not ascend ie staircase for several minutes, owing to shortness of breath. He alked home a third of a mile, and sat down, feeling intensely giddy, id soon afterwards vomited. Then violent pain in the head com- enced; his pulse was markedly irregular; the pulsations at ie wrist being separated at times by intervals of extraordinary ngth, such as 11-9, 7-5, and 3 seconds respectively. The eart-sounds corresponded with the pulsations at the wrist, but i the long intervals the heart was not at rest, uneasily churning and mbling about, causing perceptible movements, but only very slight unds, like the faint creaking of a boot. He vomited during the ght, was delirious, and the intense pains in the head were noticed reach their most acute stage in the long intervals between the heart- ats. He also fell forwards in the long intervals. On the third day, is symptoms were less marked; and he was admitted into the West ondon Hospital, where, under the influence of rest and the administra- on of digitalis, he rapidly recovered. He has had no return of cardiac cerebral symptoms. In the early stages of the case, some difficulty as felt in estimating the relative diagnostic value of the cardiac and rebral symptoms.—A discussion followed, in which Drs. TRAVERS, LDERSON, OWLES, THUDICHUM, CAMPBELL POPE, Mr. LLOYD, and r. CHAPMAN, took part.

On Cardiac Dilatation about the Age of Puberty, and its especially equent Occurrence in Girls.—In this paper, the author, Dr. PITT, rst read the notes of the case of a girl, aged 16, who had grown three iches during the preceding year, who worked hard at school, it at the same time was fond of vigorous exercise. For some onths she had noticed that, on violent exertion, she had attacks of yspnœa, with cardiac discomfort, lasting for the rest of the day. atterly, these attacks had been more frequent, and had several times curred at night, so as to render sleep impossible. She had palpita- on, was languid, readily became tired, and had attacks of partial ncope. Menstruation had occurred only once in six months pre- iously, and was scanty. The physical signs were a prolonged systolic pical sound, accentuated second pulmonary sound, and diffused im- ulse, extending out to the nipple-line, with slight epigastric pulsation. he essential feature in the treatment was, she should lie down for vo hours in the middle of the day, so as to rest the heart. Arsenic id iron were given internally. Six months later, she had been free om any symptoms for many weeks. During the past year, the uthor had seen seven similar cases, presenting similar but less marked mptoms. Six were in girls from 10 to 14, one in a girl aged 18, ie in a boy aged 14. They had almost all grown rapidly; in none was uberty complete; and in all, development was taking place slowly. he author drew attention to the much greater frequency of these mptoms during the development of puberty, especially when was slowly established. Beneke's observations had shown iat, whereas the average increase in the heart previously to uberty was ten per cent. annually, the increase due to puberty was 0 to 100 per cent., and that this increase might be spread over one three or five years, but that the puberty increase, in excess of the nual increment, was greater in proportion as the changes were rapidly complished. In those cases in which puberty was developed slowly, ie heart hypertrophied imperfectly, owing to deficient nutrition, and ence there were cases in which signs of cardiac weakness were fre- uent. Naturally the period when the greatest strain was put upon the eart was the one which furnished the greatest number of failures. Bow- itch had shown that, up to the age of 11, boys, on an average, were eavier and taller than girls, but that, for the next two or three years, rls had the advantage. This more rapid growth of girls at this age, ie more rapid development of puberty, and the associated greater lood-pressure, rendered girls at this age much more liable than boys to eak down. The symptoms in these cases were due to a halt in the ormal developmental process, and hence tended naturally to recovery. hen they occurred later in life, they were usually much more serious, as ey implied cardiac degeneration. The exceptions were chiefly cases of nusual muscular strain, and had been noted chiefly in young police- en and soldiers after prolonged drilling, long marches, etc., to which r. Myers and others had drawn attention. These tended, with st, to recover. The cause in these cases, as in the ones narrated, as a slight temporary cardiac dilatation. The deficiency was mainly ie of cardiac tone, and the amount of dilatation was very slight, and rely led even to a systolic apex-*bruit*. The author stated that the cases to which he referred in his paper were exceedingly common, but that their especial frequency about the period of puberty had not, so far as he was aware, been noticed, nor had the explanation hitherto been offered. The group of symptoms due to the cardiac weakness was dyspnœa on exertion, languor, loss of energy, with palpitation and cardiac anxiety; while, in extreme cases, the dyspnœa was severe, and came on with very slight exertion. The treatment was good food, and rest in the recumbent position in the middle of the day, which invariably accelerated their departure.—A discussion followed, in which Drs. TRAVERS, CLIPPINGDALE, CHAPMAN, PARSONS, ALDERSON, and BALL took part, and Dr. PITT replied.

Specimens.—Mr. DUNN showed the following pathological specimens. 1. A Stomach from a Case of Carbolic Acid Poisoning. 2. A large Femoral Hernia, with Gangrene of Sac and Contents. 3. Scirrhous Growth of the Heart. 4. Brain, showing large Hæmorrhage into Right Lateral Ventricle, and a long Base.—Brigade-Surgeon CURRAN showed some drawings of elephantiasis, and Indian curiosities.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, APRIL 1ST, 1886.

CHARLES OLDHAM, F.R.C.S., Vice-President, in the Chair.

Syphilis.—Mr. ALGERNON HODSON brought forward a boy with cutaneous syphilide, tubercles on the throat, and large condylomata at the anus, probably infected *per rectum*.

Pulmonary Stenosis, Tricuspid Reflux, Congenital.—Dr. MACKEY showed a girl, aged 7, admitted into the Children's Hospital with stomatitis and dyspnœa, a loud systolic *bruit* being heard over the back of the chest, mostly over the root of the lung, not over the heart itself. In a few days, the murmur became fainter, and, though still heard at the back, was traced at the third left costal cartilage, was louder at the second, and heard also at the first. Behind, it was very distinct at the level of the scapular spine, and two inches below the scapular angle, not in the axilla. There were jugular pulsation in the left side of the neck, and loud venous hum, suggesting anæmia as a partial explanation. The area of percussion-dulness was increased, and the apex-beat diffused, in the nipple-line between the fifth and sixth ribs. The child had always suffered from dyspnœa, and could never walk fast or run, had convulsions at fourteen months, and, later, scarlet fever and measles; she had always some cough. She was rather pale than cyanotic.

Intestinal Obstruction: Abdominal Section: Recovery.—Mr. WILLOUGHBY FURNER related a case of this kind, occurring in a married woman, aged 33, admitted into the County Hospital, on July 11th, 1883, for sickness and obstruction of eight days' duration. She had been attended twelve months before for perimetritis, and at intervals since had pain in the abdomen and back, dysuria, and increasing difficulty in relieving the bowels; no blood passed per anum; catamenia regular. On admission, a swelling, dull on percussion, occupied the hypogastrium, other parts of the abdomen being resonant, though not distended, except in the left iliac fossa. The whole abdomen was tender; the liver and spleen were normal; tongue dry, red, and cracked; she frequently vomited, and had done so for last three weeks. On vaginal examination, the uterus was found large and fixed, and the pelvic floor occupied by an indurated mass, suggesting cancerous formation; the bladder contained little urine; in the rectum, a stricture was felt four inches from the anus. On July 16th, vomiting and stricture continued, in spite of enemata, etc., and there being great pain in the right inguinal region, abdominal section was performed, from umbilicus to pubes; the lower half of the cavity was occupied by inflammatory adhesions, matting together coils of intestine, which were in some places distended, in others collapsed; some old hard adhesions could not be divided, but several recent and soft ones were torn across, and the intestines released, to some extent, from strangulation. The operation was done under carbolic spray, and the wound closed and dressed aseptically. No ill effects followed, and solid motions passed four days afterwards. In October, improvement continued. She was up, and had the bowels relieved regularly, taking only some olive-oil occasionally, and suffering, at times, some pain and sickness. The indurated condition of the pelvic floor was gone, though dulness remained in the right groin, and the rectum was still narrow. Twelve months after the operation she was stout and ruddy, and said she was well, and the bowels acted properly. Mr. Furner considered this case hopeless without operation, and gave reasons for judging that the rectal stricture was not the sole cause of the malady; for example, there was no distension of the ascending colon, and there was the hypogastric tumour; hence he decided on section, rather than on lumbar colotomy. Referring to puncture of distended intestine, in such cases

he strongly discouraged it, quoting cases of fæcal matter escaping through the puncture. In cases of cancer, etc., affecting the sigmoid flexure, the pain and swelling were frequently on the right side.—Mr. VERRALL remarked that the result of puncture of the intestine depended much on the state of the latter, for, if softened or gangrenous, it would not close.—Dr. EWART related a case of obstruction, from strangulation of intestine, resulting from adhesions, after a stab in the navel; life was saved by an operation. He quoted, also, the common practice of puncturing the distended intestine of cattle with impunity.—Mr. SCOTT quoted a case of peritonitis, resulting from a needle puncture of intestine, and remarked on the importance of distinguishing between obstruction from peritoneal bands, and from paralysis of bowel, pressed on by external masses. He pointed out that, in Dr. Fagge's opinion, the balance of evidence was rather against the value of operation of abdominal section.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MARCH 5TH, 1886.

J. B. BRADBURY, M.D., President, in the Chair.

Primary Encephalo-scirrhus of Common Bile-duct.—The PRESIDENT read the notes of W. L., aged 55, married, a laundry-man, admitted November 5th, 1885. There was no family history of new growths. He had served in the army during the Crimea and the Indian Mutiny, being invalided home from the latter for virulent ophthalmia, which led to total blindness. He had gonorrhœa when in the army, but no syphilis, and drank heavily of both beer and spirits in youth. His illness began with slight cold, on September 16th, followed by vomiting and pains in the abdomen. On October 15th, jaundice appeared. On admission, he had a yellow skin and conjunctivæ, and passed pale clay-coloured motions and dark brown urine. The patient continued in much the same condition, the colour varying slightly from time to time, with gradual loss of flesh and strength, being at times troubled with diarrhœa, till November 30th, when a small abscess appeared over the right eye. From this time, other abscesses appeared in the subcutaneous tissues, principally on the thighs and abdomen. He died on February 10th. Temperature remained normal till the abscesses became general, and then fluctuated from 101° to 103°. He was treated principally with nitro-hydrochloric acid, taraxacum, and gentian.—Mr. GRIFFITHS gave an account of the *post mortem* examination. The gall-bladder was much distended, and pyriform. The liver was firm, tough, and elastic, not enlarged, with a few yellowish white nodules on the surface. The gall-bladder was distended with mucus. A probe could be passed up the common orifice of the bile and pancreatic ducts, and into the common duct, and to the portal fissure, but not up the cystic duct or pancreatic duct. The mucous-membrane extending for half an inch from the apex of the ampulla seemed healthy; immediately above this, the mucous membrane was completely destroyed to the extent of one-third of an inch, and replaced by a somewhat firm stricture with an irregular surface; then it again abruptly commenced. On the under surface of the right lobe of the liver, to the right of the portal fissure, and extending backwards to the posterior abdominal wall, was a large abscess, firmly adherent to the liver-substance, containing about four ounces of thick grumous puriform fluid, occupying the position of the right suprarenal body. The abscess-cavity was connected with the pelvis of the kidney by a small fistulous opening. The right kidney was congested and bile-stained, and scattered through its substance numerous small yellowish white bodies were found. The left kidney was similar. The spleen was somewhat enlarged and soft. There were slight vegetations on the aortic valves, and a small purulent abscess in the wall of the left ventricle near the base. The lungs showed small purulent collections, and evidences of old mischief at the right apex. The bladder contained two to three ounces of grumous pus, similar to that in the abscess surrounding the right kidney. The microscope showed the stricture to be an encephaloscirrhus carcinoma.—Dr. BRADBURY said it appeared to be a case of primary cancer affecting the common bile-duct, and he was unable to find any case on record.

Primary Malignant Disease of Prostate.—Mr. CARVER showed this specimen taken, *post mortem*, from a man, aged 66, who was admitted to Addenbrooke's Hospital, November 4th, 1885. He was at this time suffering from frequent painful micturition. The urine contained no blood, pus, phosphates, or albumen, but he complained more particularly of fulness and discomfort after food, with epigastric tenderness, and constipation. For the last four or five years the bowels had acted, as a rule, only after aperients. After death, the prostate was much enlarged, with a new growth, bulging into the rectum (which was healthy). Two tumours, each about the size of a small hen's egg, were found adherent on each side to the bladder and rectum, an the pelvic wall. From the outer side of these, a chain of secon tumours, and enlarged glands about the size of filberts, stret upwards, along the pelvic walls and iliac vessels, to the lumbar gla which were similarly affected. There were a few deposits on mesentery, and many on the parietal peritoneum, and there was fluid in the peritoneal cavity. There were numerous secondary posits in the liver, and on the visceral and parietal pleuræ. M scopic examination showed the deposits to be medullary.

Aneurysm of Arch of Aorta.—Mr. MARTEN showed this speci from a man, aged 41, who had had symptoms of an intratho aneurysm for more than two years.

Occipital Meningocele.—Mr. LAURENCE HUMPHRY showed an ample of this affection. The tumour was nearly as large as a ch head, and protruded through an opening in the occipital bone, a an inch in diameter. It contained no brain. Its cavity was tinuous with the fourth ventricle and posterior subarachnoid sp and the dura mater, lining its walls, was thickened in parts, forn bands, but there were no septa or loculi. The cranial bones remarkably thin, the fontanelles and sagittal suture widely open. opening in the occipital bone was in the usual situation of torcular Herophili, and was separated from the foramen magnum a band of fibrous tissue.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, APRIL 7TH, 1886.

J. HOLMES JOY, M.D., President, in the Chair.

Loss of Conjugate Movements of the Eyeballs Downwards, of vergence and Accommodation.—Dr. SUCKLING showed a woman, 38, who presented these symptoms; she had suffered from ve for twelve months; there was no history of syphilis, the p responded normally, and the fundus was normal. There was a sl general increase of the deep reflexes, most marked on the left side walking, the body was held stiffly, and she frequently fell, fallin the left; there was no psychical change. Dr. Suckling thought the paralysis was due to degenerative changes in the cerebellum.

Paralysis depending upon Idea.—Dr. SUCKLING showed a wo who had been sent to him suffering from paraplegia and anæsthes the legs, following a fall five months previously. She was of neurotic type, cheerful, intelligent, energetic, industrious, and e to get well. After being informed that the application of electr would cure her, immediate recovery followed faradisation. Dr. S ling read a paper upon paralysis depending upon idea and fa healing.

Glioma of Retina.—Mr. EALES showed an eyeball excised for gli of the retina in a child, aged 2½ years. The vitreous body and re were replaced by the growth, which, however, had not perforated ocular tunics anywhere; the lens was transparent, and the iris apparently involved. Microscopic sections of the tumour were typ of glioma, but sections of the optic nerve showed it to be free f infiltration by the growth, and apparently quite normal.

The Extraction of Senile Cataract.—Mr. EALES, the author of paper, insisted on the importance of ophthalmoscopic examinatio the early stages of cataract, when only the state of the fundus coul ascertained. Bright's disease and diabetes were, perhaps, the r unfavourable of all the various conditions of ill-health which ten to bad results of operation. Cucaine locally applied had rend general anæsthesia unnecessary for extraction of cataract, thus moving one source of danger, both to the patient and to the integ of the eye. When all the conditions were favourable, he thought corneal section of Liebreich, with a small iridectomy, just involv the pupillary margin of the iris only, was a good operation, and g excellent results. The section was most favourable for removing tical matter without the use of force, and was well placed for e subsequent inspection, while the cicatrix was hardly noticeable af wards, and the iridectomy too small to be attended with bad res as regards vision or appearance; nor was it extensive enough to ca pain to any extent during its performance, no dragging out of the taking place, comparing favourably in this respect with the j caused in excising the iris down to its root, necessary in all modifi tions of Gräfe's linear extraction, in which, consequently, the f stages of the operation were often attended with much embarrassm to the operator by the patients having lost their composure. W the conditions were not favourable, he preferred the three-millime flap modification of Gräfe's operation, in which case he frequen performed the iridectomy previously, as in cases where glaucoma present, or its tendency suspected, or the iris non-dilatable or vascu

Bright's disease present. He had found Forster's method of turing the lens a most valuable method of dealing with cases of y slowly maturing nuclear cataract, affecting both eyes equally, l a means of saving months of waiting and forced idleness to the ient.

REVIEWS AND NOTICES.

CHIATRY: A CLINICAL TREATISE ON DISEASES OF THE FORE-BRAIN. By THEODOR MEYNERT, M.D., Professor of Nervous Diseases and Chief of the Psychiatric Clinic in Vienna. Translated by B. SACHS, M.D. Part 1. London and New York: G. P. Putnam's ons. 1885.

OFESSOR MEYNERT is so well known as an original investigator into anatomy of the brain, that any work by him dealing with the e and any kindred subject must command attention. As he states he preface, he has had no inclination simply to "make" a book; anyone who reads this work will certainly not bring any such rge against him. His endeavour has been to write a scientific tise on mental diseases, commencing with an account of the ent state of knowledge regarding the anatomy and physiology of brain, and including the discussion of such psychological facts as te to the science of cerebral disease. It will be seen that such a is by no means an easy one; for in scarcely any branch of minute tomy and physiology is there so much difference of opinion and ance in experimental results, as in that dealing with the central ous system, and the variations of opinion in psychology are still e marked. That the author has succeeded in his task will not be eded by everyone; but he is to be congratulated not only on the rage displayed in the undertaking, but on the original manner in ch it has been executed.

he first part of the book, which alone is now under notice, treats he anatomy, physiology, and chemistry of the brain. It need lly be said that the account of the anatomy is as full and excel- as so accomplished an expert could make it; the wood-cuts, eover, are mostly clear, and are numerous. Even in the anatomy of brain, various views exist; and, naturally, prominence is given hose of the author. It would take too much space to discuss e; suffice it to say that the account of the "tracts" in the spinal l differs in many points from that generally accepted. The author pursued the only scientific method in dealing with this portion he subject; namely, he has considered it from the developmental comparative point of view; and this is the more essential, since physiological facts which we apply to man are all gained from eriments on animals. More exception must be taken to the phy- gical portion of the book; and though, from the incompleteness ur knowledge and the varying results of experimenters, this must ssarily be so, yet the author has added to the difficulty by a some- t involved exposition; so that few who are not versed in brain- siology, and in psychology, will be able to follow all the argu- ts here brought forward. For the clear understanding of a sub- so inherently difficult, and especially in a work which has in r the furthering of practical and scientific medicine, there must marked distinction drawn in the exposition between the facts and uctions obtained by experimental physiology and those obtained sychology; in the present state of knowledge, it is impossible to ncile physiology and psychology. It is a drawback to the useful- of this work, that the author has not separated more widely these realms of facts. It is necessary to examine in more detail what is under the heading "Anatomical Corollaries, and Physiology of ebral Architecture." "In order to establish anatomical corol- es," that is, to deduce function from structure, the author says, e need postulate but a single principle" . . . . . "this is Bell's of the conduction of nerve-force in a centripetal direction through posterior, and in a centrifugal direction through the anterior al roots." If our anatomical knowledge were perfect, there is no bt that a deduction of function of different parts of the central ous system would be possible, and might be in many instances ect; but, as a rule, it may be said that anatomical structure is a guidance to the investigation of function by physiological ex- ments. Special attention is drawn to three anatomical facts as of ortance; the first is that, in animals "accustomed to run with their s close to the ground," the olfactory lobe is highly developed; second, that in these animals the *gyrus fornicatus* is more strongly eloped than in man; the third, that in man the convolutions round the Sylvian fissure are highly developed. These facts tend to prove "localisation of cerebral functions," since they show structural growth with increase of function. From this point of view, the author proceeds to discuss cortical centres. The observations of Hitzig, Nothnagel, and Munk, are chiefly discussed; but Ferrier's experiments are dismissed in a few words, and his views with the sentence that his "'centres' have met with opposition from all authors."

The absence of diagrams illustrating cortical localisation is a great drawback to the understanding of this portion of the book. What the author has to say on the functions of the cortex, is confined chiefly to the psychological aspect. He begins with the axiom that "sensitiveness is the only specific energy of ganglion-cells." It may be said, however, that this property must be of a twofold nature, because the ganglion-cell (or group of cells) is capable of transmuting an impression into sensation, and then into a motor impulse. The facts on which great stress is laid are derived from Munk's interesting experiments, in which removal of a certain portion of the occipital lobe (in dogs) caused "psychical blindness," and of a part of the temporal cortex, "psychical deafness." Both these conditions are accompanied by the symptoms of real blindness and deafness; with this difference, that the animal can learn to see and hear "as in his earlier days." This condition, then, must be understood to mean that there is no preception (interpretation) of the visual and auditory impressions; the recovery means that the area round the lesion has acquired the functions of the removed portion of cortex. The author does not discuss the question whether such new function might not be acquired by the visual or auditory centre on the opposite side, which, considering the close connection of the centres in the two hemispheres, is at least possible. Munk's extended researches into the motor centres of the cortex, are accepted by the author; in this case, also, the removal of a limited portion of the cortex causes pyschical paralysis of a larger portion round this cortical (that is, absolute) paralysis. For the full discussion of these points, the book itself must be consulted.

The statements made as to the connection between the optic thalamus and the upper extremity are interesting; though in disease and in physiological experiment a lesion of the thalamus does not produce hemiplegia, yet there is some spasm of the muscles in both arms, this result being explained by the anatomical fact that all the descending fibres from the thalamus do not decussate, both upper extremities being, in other words, represented partially in each thalamus. A case is quoted which lends support to this view. The psychological portion of the work is somewhat abstruse reading; and it might have been much simplified. It is evident that the author is completely on the side of the physiological psychologists. In his opinion, there are only two forms of primary movements, conscious and reflex; he gives no place to instinctive movements. The *ego* or individuality, growth of knowledge and thought by association and other allied subjects, are discussed; it will, however, suffice to mention one other point. The sensation of happiness is ascribed to a determination of arterial blood to the fore-brain, that is, to a functional hyperæmia. This statement is emphasised, and the same functional hyperæmia is supposed to accompany what the author calls "aggressive" movements; an opposite condition, constriction of cerebral arteries, acccompanying "repulsive" movements. These are statements to which exception may be taken; the condition of the cerebral arteries under various emotional and intellectual states is not yet sufficiently known for any definite conclusions to be drawn. *A priori*, indeed, it might be thought that the more energetic repulsive movements, those associated with (psychological) pain, would be accompanied by a greater increase of blood-supply than the quieter aggressive movements, those associated with (psychological) pleasure.

The fourth and last chapter deals with the Nutrition of the Brain. An excellent description is given of the blood-supply of the variations of pressure in the cranium, and of the movements of the brain, cardiac, arterial, and respiratory.

The account of the Chemistry of the Brain is as complete as can be expected from the present state of knowledge. The important part assigned to the phosphorus constituents is, however, a little beyond what is known; and certainly it may be said that no "direct relation" is known to exist between the albuminous bodies and the percentage of phosphorus. Further, it remains to be proved whether nuclein has an important nutritive function. This body gives all the tests of mucin, but differs from it in containing phosphorus; it is still doubtful whether it is a waste or a store-product of metabolism.

Excellent statistics are given of the weight of different parts of the brain in men and animals. The book ends with an account of the development and variations of the convolutions. There is an ap-

pendix on the mechanism of expression. A word of congratulation must be given to the translator, who has performed his very difficult task with success.

THE HISTORY OF CHOLERA IN INDIA. By H. W. BELLEW, C.S.I., Deputy Surgeon-General, Sanitary Commissioner in the Punjab.

THIS goodly volume of 839 pages, bristling with tabular statements, diagrams, and maps, gives a history of cholera, descriptive and statistical, from 1862 to 1881, derived from the published official reports of the several provincial governments during that period, with original observations on the causes and nature of cholera. The author makes no secret of the fact, which is plainly stated on the title-page, that his intention is to illustrate the relation between cholera-activity and climatic conditions. Mr. BELLEW was the only medical member of a "special committee appointed by the Government of India to inquire into the recent prevalence of cholera in certain parts of the Punjab," and was named Secretary to this Committee. It will strike some of our readers as something novel and peculiar to India, that an inquiry of this kind should have been confided to a body of laymen. It would be interesting to know the peculiar qualifications of the members of this curiously constituted committee, appointed to conduct a scientific inquiry of this kind. In his preface, Deputy Surgeon-General Bellew complains that he was much embarrassed in dealing with the materials from which his history of cholera is compiled, by the vast amount of recorded circumstances and events—often evidently biassed in their relation by the preconceived views of the writer—and the variety of opinions recorded, that he finally abandoned as a hopeless task the attempt to reduce the whole to an orderly form of connected narrative. Mr. Bellew appears to us to be quite unconscious of the fact that, from end to end of his book his own "preconceived views" are apparent on nearly every page. It is impossible for any candid reader to avoid the conviction, that he began and carried out this inquiry under the notion "of a fixed relation between cholera-activity and special climatic conditions, which previous long acquaintance with the disease had led him to favour;" and in another part of his preface he plainly tells us that, in dealing with his materials, he gave a preference "to such records as seemed best to illustrate the relation of cholera-prevalence to climatic influences, coupled with a description of the actual life-conditions and accessory surroundings of those exposed to the action of the disease." In other words, Mr. Bellew, in preparing his history of the disease, gave free play to his own "preconceived views," thus committing the very fault for which he takes other inquirers severely to task; and, so far as we can gather from his book, the author seems to have had it all his own way with his lay colleagues, who were probably quite unconscious that their secretary knew all about the subject of the "inquiry" before the inquiry began. This of itself is a sufficient condemnation of the constitution of this committee.

As if this were not enough to vitiate the scientific value of this "inquiry," our author tells us on the very first page of his preface that, in coming to the work of collecting and arranging the materials that came before him for examination, he was already impressed with the idea "that none of the current theories of the causation and spread of cholera, as by means of a specific poison or germ, or by means of human agency through intercommunication, by contagion, foul water, etc., were capable of at all accounting for the facts we had to deal with and explain, regarding the behaviour and nature of the disease brought to the notice of the committee."

Unless Mr. Bellew have confined his studies on the subject of cholera entirely to India, he must surely be aware, "that cholera has advanced eastwards to China, southwards to Ceylon, northwards to Archangel, westwards to Britain, raging at all seasons of the year, in all terrestrial temperatures, from the highest tropical heat to the lowest Arctic cold; in all states of the air as to humidity, barometric pressure, or wind, at sea and on land; on all soils from the most moist to the driest, from the most barren to the most fertile; at all elevations, from the level of the sea to the highest inhabited region; among all races of mankind whose country has lain on its line of march, in all varieties of political condition, or civil station; in short, in every variety of circumstances in which it is possible to regard human beings. Is Mr. Bellew prepared to dispute the accuracy of the above well known statement? if not, then his exclusive climatic theory cannot be sustained. The author of this history may say that it purports to be only a history of cholera in certain parts of the Punjab; but no one can read his book without seeing that he gives a much wider application to his theory than to the limited area of the Punjab. We in Europe take a wider view; we recognise the fact that cholera, when it visits Europe, behaves very much with us as it does in India; that when, on what Bryden aptly calls "a tour of invasion," mere climatic conditions appear to exercise but little influence on it march; but we everywhere notice that what does influence its progress and its malignancy is the sanitary condition of the place and people where and among whom it is acting; and, little importance as Mr. Bellew may attach to the purity or otherwise of the water-supply sanitarians in Europe, in England more especially, do maintain that once the disease is introduced into any place, city, or village, the mortality is, to a great extent, governed by the condition of this first necessity of health. It is certain that the water-supply and soil in and about the cities and villages of India are universally impure although many observers in that country, notably Dr. James Cuningham and our author, altogether underestimate their importance as agents of local propagation.

Mr. Bellew's theory as to the cause of cholera is, in his own words, briefly this. "It is a choleraic fever, to be classed with other malarious fevers owing their origin to the effects of climate and atmospheric influences acting, in the first instance upon the functional offices performed by the skin and lungs and, in the next, through them upon the functional offices of the other great excretory organs which are associated with the functional arrangements of the alimentary system, and chief amongst them the liver." Again: "Cholera in India, at all events is a disease which is entirely dependent for its origin upon the effects of atmospheric influences acting upon the body through the skin and lungs, as in the other malarial fevers I have enumerated, aided and controlled, no doubt, by the health-state of the individual and the immediately predisposing cause of the attack, and controlled in respect to mildness or severity of prevalence by peculiarities of epidemic season."

This is the "theory" worked out by the scorner of "theories" after a laborious investigation, the record of which covers 830 closely printed pages. Will it satisfy pathologists in Europe? We fear not. We too know something of this disease, without pausing to discuss the question whether or not cholera is, as our author confidently asserts, always with us; we at least know it is an occasional visitant in an epidemic form, as virulent and destructive while its visitation lasts as it is in India; and as we have already reminded our readers the climatic conditions, so much insisted upon in the work before us, are far indeed from being necessary for its origin, its propagation, or its power to slay. What we do notice is this, the sanitary condition of the place into which the disease is introduced is the question of life or death to a community; where that is what sanitarians call "good," including a pure water-supply, cholera seems powerless to destroy. Our climatic conditions remain pretty much what they have been within historic times; but one city differs from another city in its hygienic conditions; the cleanly escape, the uncleanly suffer. This is the lesson which England has learned in the dear school kept by Dame Experience. There is nothing in this large volume to diminish the value of the precious lesson.

In conclusion, although we do not agree with the result and method of this inquiry, we can conscientiously commend the industry of Mr. Bellew in collecting material, and the great labour bestowed in the preparation of his book.

Although unable to say that Mr. Bellew has added much to our knowledge of cholera, we can conscientiously commend his diligence in collecting facts, and the labour bestowed in turning them to account according to his views on their relation to his subject.

OLD AGE, AND CHANGES INCIDENTAL TO IT. By Professor HUMPHRY, M.D., F.R.S. Macmillan and Bowes. 1885.

PROFESSOR HUMPHRY is doing a great service in turning a part of his enthusiasm and energy to the collection and consideration of the changes of old age. It is a subject eminently fit for study by the union of the experience of many isolated observers, by the method, in fact, of Collective Investigation; for the main points are to be learnt by long observation, such as comes only in private practice; and the elderly subjects who are healthy, or very nearly healthy, whose condition is to be inquired into, are not those who are grouped together in hospitals, or who come in large numbers into any single private practice. The subject might be studied in workhouses, if the workhouse medical officer were not, as a rule, too hard pressed to have any time for such matters. It is due to the fact that the Salpêtrière is practically a select workhouse infirmary, that some of Charcot's earliest studies were on old age; and we owe many interesting observations to the keen eyes of the French Professor. But he studied diseases almost entirely, whereas Professor Humphry is anxious to pay most attention to the changes that occur in healthy age. He very justly

nforces the apparent paradox, that natural death is not a part of the conomy of Nature. If we could imagine human life entirely without civilisation, we should see a state where each man's hand was for himself alone, and anyone who had not full health and strength to maintain for himself the struggle for life would yield to rapid death. No one would be tided over the difficulties of the moment by the help of his fellows, or be sheltered by them during the slow degeneration of old age. The skulls of our far-distant ancestors, as Professor Humphry somewhat grimly remarks, have all good teeth ; for, if their teeth had once begun to fail them in the contest for food, they would have had no chance of surviving for a day. "Decay and disease," in fact, are by civilisation substituted for a quick and early death."

Taking one year's record of the Registrar-General's recent returns, we find eighty-nine people dying at the age of 100 or over 100 ; of these, ten are men, and seventy-nine women ; and many other statistics go to prove that, from the earliest years, the men die more rapidly than the women. The general ratio of births to deaths is enshrined in the well known distich,

> "Every minute dies a man,
> And one and one-sixteenth is born ;"

and we can hardly expect that there should be shown in metre the delicate differences between the ratios of male and female births and deaths ; but the Registrar-General knows well that more males are born than females ; and the insurance-offices know, also, that more females survive than males. Professor Humphry remarks that this is not sufficiently explained by the greater exposure of men to accidents than of women, for the same superiority of females in survival is shown in the first year of life, when the exposure to accidents is equal.

The changes of bone in old age naturally attract Professor Humphry's first attention. He describes the subperiosteal ossification, the absorption of the cancellous tissue, and general lightening of the bones, except in the case of the calvarium, which sometimes grows heavier and thicker as the brain shrinks, the absorption of the intervertebral cartilages, which reduces the height, and the softening of the costal cartilages, as in the case of Old Parr, into a state of second childhood. Calcification of the cartilages, he admits, is common, certainly, but not normal, not "the natural senile developmental process." From the 500 answers he received to the paper of questions which he circulated on the characteristics of old age, he draws what is on the whole a hopeful picture. In persons over 80, the arteries are reported normal in 60 per cent. ; the rate of the pulse is nearly natural ; the respiration is slightly quickened, especially in women ; the bladder-troubles are not so serious as might have been expected ; and there is much less liability to contagion, though we should perhaps bear in mind that Louis XV died of small-pox when he was 65. The point to which he is most anxious to call attention is the capacity for healing in old age, a point which he supported by many excellent examples in our columns some time ago (July 12th, 1884). The wounds in old age heal readily, he concludes, if they do not slough, and, perhaps it should be added, if the patient do not sink under them. In operations for hernia, there are many examples that have healed completely in three or four days ; after operations for cataract, the cornea sometimes sloughs ; but, if not, "the wound heals quite as quickly, or more quickly, than at an earlier period of life." So, too, the stump left by senile gangrene heals remarkably well. The difficulty of bringing about bony union of fractures of the neck of the femur, which troubles the surgeon so often in the aged, is to be attributed, Professor Humphry urges, not to senile incapacity for bony union, but rather to "the separation of the broken surfaces which commonly occurs ; the buried position of the inner fragment in the cavity of the acetabulum, which prevents any overlapping of the fragments and any throwing out of uniting matter round it ; as well as the comparative absence, and, when the fibrous covering of the neck is torn through all round, the complete absence of the tissue in which that material can be produced ; and also by the bathing of the fractured surfaces by the synovial fluid. That these conditions, which are found to be more or less prejudicial to the bony union of fractures into other joints, and not senility, are the real causes of failure in the case of the neck of the thigh-bone, is proved by the fact that union by bone will take part at this part of the skeleton, as well as elsewhere, if the fractured surfaces be fixed in apposition, either by any kind of impaction or by well adjusted appliances; and that this will occur in the aged, there is ample evidence in our museums."

Full of matter and pithy as this little volume is, it does not assume to be a treatise or complete survey of the seventh and last scene of life ; but it is an excellent example of how much may be gathered from the results of a collective investigation placed in masterly hands.

NOTES ON BOOKS.

Zur Therapie der Chronischen Herzkrankheiten. Von Dr. August Schott, aus Bad Nauheim. Berlin, 1885. *(On the Therapeutics of Chronic Heart-disease.)*—This pamphlet is a reprint of a communication published last year in the *Berliner Klinischen Wochenschrift.* It gives the results of the author's treatment of chronic heart-disease by baths and gymnastic exercises, separately and combined. The cases in which good results have been obtained are those of functional disturbance, irregular and "weakened heart," and those of organic disease in which dilatation of the right and left ventricles is the chief symptom of want of compensation. Minute directions are given as to the mode of giving the baths, and the kind of baths to be used. It is recommended that patients should commence with a daily bath at the temperature of about 93° Fahr. (27° R.), containing two to three per cent. of chloride of sodium, and not more than one per cent. of chloride of calcium. As the treatment progresses, carbonic acid is generated in the water up to three grammes in the litre. The gymnastics recommended are the graduated exercises of the limbs, muscles chiefly ; the success of the treatment depending on the avoidance of dyspnœa. Both the baths and the muscular exercise act, according to Dr. Schott, in the same way, not only by improving the general condition, but by acting as tonics to the heart. Thus, he explains, in a dilated left ventricle in organic valvular disease, less blood is sent into the aorta than normally, and the cavity is never completely empty ; the graduated muscular exercise increases the work of the heart, and the ventricle, contracting more powerfully, tends to drive more blood into the aorta, and more completely to empty itself. By a regular and continued action of this kind, the heart "puts on flesh," the dilatation lessens, and the quickening of the pulse and other signs of the organic disease disappear, sometimes completely. It is easy to see, as the author points out, that injudicious muscular exercise will produce an opposite effect by increasing the dilatation. An important addition to the treatment by baths and gymnastics is the regulation of the diet ; Dr. Schott gives peptones (Leube's meat-solution) with the food. Some cases are quoted, showing the results obtained ; they are not sufficient in number, however, for an independent judgment to be formed as to the merits of the method of treatment.

A Guide to Therapeutics. By Robert Farquharson, M.P., M.D.Ed., F.R.C.P., LL.D. Fourth Edition. London : Smith, Elder, and Co. 1886.—In preparing a new edition of this useful text-book, Dr. Farquharson has so altered it, as to make it correspond with the new edition of the *British Pharmacopœia.* He has omitted all notice of certain articles which have been struck out of the *Pharmacopœia ;* and, in reference to this, he expresses his regret that the list has not been much extended, and made to include a large number of useless articles which still linger in the text-books. On the other hand, he regards the list of additions to the *Pharmacopœia* as admirable, including, as it does, all the recently introduced drugs which seem to stand on a firm basis, and which have already proved useful in practice. Dr. Farquharson's comments on the various articles, as well as the useful introductory chapters on the modes of administering medicines and on prescribing, render the book a valuable guide to students. The various articles of the materia medica appear to be dealt with according to their relative importance in therapeutics; it is, however, rather difficult to understand why guaiacum and its preparations, although retained in the *Pharmacopœia,* are altogether omitted by Dr. Farquharson. But, as we have already said, the book is an excellent one, and the new edition deserves, and will doubtless retain, the popularity among students which has been the lot of former editions.

New Aspects of Filtration, and other Methods of Water-Treatment. The Gelatine Process of Water-Examination. By Percy F. Frankland, Ph.D.—The author has succeeded in applying Koch's method of cultivation on solid media to the detection and quantitative estimation of the micro-organisms in potable waters. He drops a measured volume of the water under examination upon a sterile gelatine film on a glass plate, protected from aërial contamination by a glass shade and a moat of solution of mercuric chloride. He finds that the risks of aërial contamination during the transfer of the water to the film are very small, at all events, in the devitalised air of a chemical laboratory. The natural processes of filtration and subsidence having acknowledged efficiency in producing waters devoid of life, Dr. Frankland has investigated the action of certain artificial processses, namely, 1, filtration through various media; 2, agitation with solid particles, followed by subsidence, and 3, chemical precipitation. One of the most interesting facts, brought out by the experi-

ments with filtering agents, is that a substance may remove living organisms entirely from a water, without sensibly affecting the quantity of dissolved organic matter in contains. The removal of micro-organisms from water by filtration through such substances as spongy iron, animal and vegetable charcoal, and coke, can only be effected by very slow filtration. The removal of organisms from water by agitation with finely divided solids, followed by subsidence, though often very perfect, is only transient, and is most marked just after the liquid has become clear. Clark's process (softening of water by lime) is shown to be capable, when carefully applied, of removing 99 per cent. of micro-organisms from waters. The want of a co-operation of biological and chemical science in the matter of water-examination has been long felt by chemists, and Dr. P. F. Frankland's work is an advance in the right direction. The method employed appears to be trustworthy and practicable to all chemists, and we hope that its adoption will lead to additions to our knowledge of natural waters, which will prove of value to mankind.

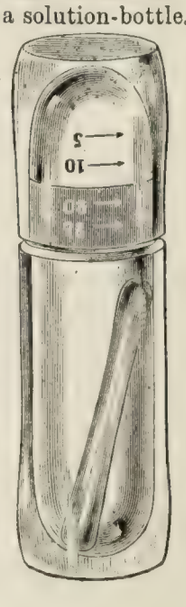
Les Bandages, l'Orthopédie, et les Appareils à Pansements, Description Iconographique. Par LÉON et JULES RAINAL. Avec 782 figures intercalées dans le texte. (Paris: J. B. Baillière et Fils). [Trusses, Orthopædic Apparatus, and Splints.]—This publication is, as might be suspected, an illustrated catalogue, prepared by a firm of instrument-makers. No direct trade-business enters into the composition of the book, however, excepting the name of the firm marked upon every instrument illustrated in its pages, and a notification that everything described therein is kept on stock, ready for immediate delivery. The French are always good in the field of descriptive literature; hence we are not surprised to find that the letterpress forms a highly finished sample of literary art. The illustrations are good, but not superior to those which adorn English works of the same class. Messrs. Rainal are conscientious, withal. In describing a pessary, we read, "ce pessaire a l'avantage, d'après l'auteur, de soutenir l'utérus," etc.; and this kind of qualification frequently recurs. We may render a service to *Les Bandages* in one respect. It forms a valuable book of reference, which should be kept in medical libraries for the benefit of British writers. The French name for an instrument, or part of an instrument, is not always to be found in a dictionary. It is easier to find such a name in a catalogue of this kind, than in a French work on operative surgery.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW PESTLE AND MORTAR,
FOR THE READY SOLUTION OF TABLETS AND ALKALOIDS FOR HYPODERMIC USE.

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and the Portsmouth and South Hants Eye and Ear Infirmary.

THE little contrivance, represented in the engraving, can be used as a measure-glass, as a pestle and mortar, and also as a solution-bottle. The mortar is divided into two unequal parts, by a tight-fitting joint, and the shorter end is graduated in minims. The cavity of the closed mortar is ovoid in shape, and the rounded extremities are adapted to receive the ends of the glass pestle.



The pestle and mortar is designed to facilitate the accurate solution of hypodermic tablets, and to render their use more easy and convenient in everyday practice.

The solution can be instantaneously prepared in the following manner.

The required quantity of water having been poured into the measure, the tablet is dropped in with the pestle, and the mortar closed. After shaking the vessel for a few seconds between the finger and thumb, the solution and the pestle are both turned into the long end, the joint is unfastened, and the fluid contents carefully poured off into the measure.

The solution is now ready to be drawn into the syringe or injector.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 1st, 1886.

UNSETTLED PROBLEMS ABOUT PNEUMONIA.

CLEARER knowledge regarding the etiology and the pathological relations of pneumonia is one of the present *desiderata* of medicine. In spite of the abundant opportunities which we possess for studying the affection, we are still in great doubt regarding its true character and its proper place in the fraternity of disease. We allude to the subject, in order to indicate the lines which, we think, inquiry might take with advantage.

Three views are held on the subject: first, that pneumonia is a local inflammation, attended by profound systemic disturbance; secondly, that it is a specific febrile disease, with a pulmonary inflammation as its constant local expression; thirdly, that the local condition is not truly inflammatory at all. We allude, of course, only to acute sthenic pneumonia, with which the epithet "croupous" has been unluckily and apparently inseparably conjoined.

The third theory may, we think, be put aside, partly because of the slender evidence on which it rests, and partly because our ideas of inflammation are so much derived from the examination of hepatised lung that, if pneumonia were pronounced non-inflammatory, it would practically mean a reconsideration of the whole question of inflammation. Two theories remain for consideration—the local inflammation theory, and the specific fever theory; the former universally adopted by the laity, the latter commending itself more and more to scientific observers.

In favour of the view that pneumonia is neither more nor less than "inflammation of the lungs," we have the constancy of the local condition, the general belief that the disease frequently follows exposure, and the absence of decisive proof of its contagious character. Against this theory may be urged the facts that the local condition and the systemic disturbance are very loosely related, the latter often preceding the former, the former usually outlasting the latter; that the etiology of "chill" is often open to grave suspicion; and, most important of all, that pneumonia undoubtedly occurs at times as a well defined and destructive epidemic. Obviously, the points that make against the "local inflammation" theory are *pro tanto* in favour of the specific character of the disease. To these may be added the fact that pneumonia pursues a fairly uniform course, with a well marked rise of temperature, and a clearly defined crisis. The frequency of hepatic disturbance and the presence of the micrococcus must also be borne in mind in this connection. Some authorities further urge that the frequent presence of herpes labialis is the analogue of a specific cutaneous eruption. We think the

alance of evidence is strongly against the theory which professes to xplain the disease as simply a local inflammation. Often the pyrexial eriod has run most of its course with great severity, before the ost careful physical examination of the chest yields any result. . case occurred recently in our experience, where the disease began 1 a typical form, and with a profuse herpetic eruption ; but an examination on three successive days by three hospital physicians, all n the look-out for the disease, proved quite fruitless. On the fourth ay, the physical signs were developed in the usual way. Again, it very common for the temperature to fall to normal with relief f the most urgent symptoms, while the lung still shows no sign of esolution.

Adopting, then, the view that pneumonia is a specific febrile disase, we have still a further problem to determine—Is it an ally of he contagious exanthemata, or of such systemic diseases with local anifestation as acute rheumatism? It is here that the question of tiology becomes vitally important. If pneumonia were proved to e usually due to "chill," we should be disposed to rank it with acute heumatism; whereas, if its contagious character were established, hat would go far to justify its inclusion upon the list of specific evers. Unfortunately, upon these points the evidence is most conicting. Most observers are agreed that pneumonia is at least occaionally attributable to exposure ; while, on the other hand, cases of pparent contagion sometimes arise, and the undoubted occurrence f pneumonia in an epidemic form suggests the existence of some inective property. The prevalence of pneumonia in the variable and reacherous weather, often characteristic of the spring season in this ountry, is a point in support of the favourite etiology ; yet many cases here the disease is confidently attributed to chill do not, on close nvestigation, warrant this hypothesis. The theory is often too obiously a pure after-thought. In this country, chill is popularly rearded as the *fons et origo* of almost every conceivable malady, and he hypothesis of having caught cold presents a ready and satisfactory scape from all etiological difficulties. The more carefully we sift the istory of a case of pneumonia, the more frequently do we find that he universally volunteered theory of having "caught cold" rests on othing better than a hazy conviction on the part of the patient, that is malady must have owed its origin to this cause. It is clear that neumonia does not bear the same direct and unequivocal relation to tmospheric influences as bronchitis or rheumatism ; nevertheless, it ust be admitted that, in some cases, such a relation seems difficult o dispute.

On the other hand, the evidence of the contagious nature of pneuonia is still scanty. It is beyond question that the sporadic disease s very rarely communicated, and, we believe, the vast majority of practitioners enforce neither isolation nor disinfection ; yet, occasionally case of apparent infection comes under observation. Such isolated ases would probably attract little attention, were it not for the phenomena of epidemic pneumonia. It is unquestionable that such epiemics occur, and are often extremely destructive. Their occurrence s sometimes vaguely explained as due to a "pneumonic" influence in he air; but, if this means anything, it points to the existence of ome specific contagion. How are we to draw the line between epiemic pneumonia which appears to be infective, and sporadic pneuonia which is almost universally regarded as non-infective? It is arely possible that the two diseases are really distinct, but no attempt as hitherto been made to distinguish them.

As illustrative of the problems presented by the phenomena of pneumonia, we may mention the following instance, brought forward by a speaker at a recent discussion in one of our provincial medical societies. A child was under treatment for pneumonia, when two other children in the same house were seized with the same disease. At first sight, the evidence of contagion seemed strong ; but closer inquiry elicited the fact that the two children in question had been put to sleep in a disused room, and that the window had been accidentally left open all night. Here, argued the speaker, is an apparent case of infection clearly explained by an obvious source of chill. In reply to this, it was powerfully urged by a subsequent speaker that, on the broad principle of probabilities, the chance of two children (in a family where a third child was already suffering from pneumonia) becoming affected by the disease in consequence of exposure to cold, would be almost infinitesimal. The probability that one at least would take a common catarrh, bronchitis, rheumatism, or other usual consequence of exposure, would be extremely strong.

We make no attempt to settle problems which are still insoluble with the evidence at our disposal. We think, however, that much light might be derived from a thorough investigation of the etiology in all sporadic cases of pneumonia, and still more from a diligent inquiry into all instances where the disease assumes the form of an epidemic. In this work, every physician in general practice might aid.

THE CONJOINT SCHEME AND MEDICAL EDUCATION.

THE scheme which is to impart fresh vitality to the study of medicine in London, and place metropolitan students on an equality with their provincial compeers, appears at present to be within measurable distance of becoming an accomplished fact. So far as can be gathered, the only additional test to be imposed will be in regard to preliminary education; and it cannot be denied that some raising of the standard is extremely desirable, if medical men are to continue to hold their own from a social point of view. The elaboration of this scheme should, however, comprise and remedy certain deficiences in medical education, as at present conducted, in so far as examination-tests are concerned. The present moment would certainly be opportune for the introduction of reasonable experiments in the matter of psychology and the study of insanity. Whatever modifications are made in the existing lunacy laws, a competent knowledge on the part of the medical man certifying will always be indispensable ; and it would hardly fail to assist in re-establishing that confidence on the part of the public, which has been seriously shaken by the errors in judgment and tact of certain members of the profession. It is worthy of note that these particular cases have occurred, in by far the greater proportion, in the practice of specialists. The general practitioner, probably on account of a want of familiarity with the subject, when he does err, is apt to err in favour of the patient; if, indeed a dispensation from proper treatment and surveillance can be accounted a favour. Scarcely less regretable is the want of proper guarantees of a knowledge of legal medicine; cases requiring a practical acquaintance with which may, however, fall at any moment within the province of any and every practitioner. At the examination for the licence of the Apothecaries' Company, it is indeed, a subject of which the candidate must show, at all events, a fair knowledge ; but, strange to say, at the examination for the licence of the College of Physicians, no attention whatever is paid to this

important branch of education, a branch, too, where ignorance may not only bring discredit on the professional man who betrays his want of knowledge, but is attended with grave social inconveniences. Some slight acquaintance with the general laws of hygiene and public health is at least as necessary for the licentiate as for the member of the College of Physicians. It is no exaggeration to say that nine men out of every ten, who have not gone beyond the licence, are profoundly ignorant of what constitutes good as distinguished from bad drainage, and could not, without reference to a book, estimate the suitability of a dormitory for a given number of schoolboys, as calculated by cubic measurement and renewal of the atmosphere. Advantage should be taken of the period of transition, through which we are now passing, to introduce these modifications, which are desirable both for the profession and for the public. It will add, it is true, to the labours of the student; but the curriculum can, if necessary, be lengthened, and there is no lack of men able and willing to acquire the information which shall enable them to raise the profession in the esteem of the general public, which is not slow to detect and condemn the flaws in the scientific cuirass of its medical attendants.

THE CHOLERA IN ITALY.

THE news from Brindisi is not very encouraging. The disease, it is true, has not assumed any violent epidemic form in that town itself, the average number of cases occurring daily not exceeding four or five; but reports from other parts of Apulia indicate an extension, in almost every direction, which is disquieting. We hear of outbreaks at Ostuni, at St. Vito dei Normanni, at Camposalentino, and even as far south as Tricase, quite in the heel of the boot; and, as the whole province is essentially agricultural, it is perfectly in keeping with that fact to learn that the ignorant peasants are up in arms against intruders into their villages, and intend to keep out the cholera at the point of the pitchfork. The belief, too, that the medical men are engaged in poisoning them, is not confined to the country districts, as many cases occurred in Brindisi in which no medical aid was summoned, probably because the victims were almost exclusively amongst the very poorest of the population, and on a level in intelligence with the Neapolitans, who clung firmly to the same delusion at the beginning of the epidemic there, two years ago.

The mortality has not been very high, but this is frequently noted in cases which might be held to be sporadic, and only the precursors of an epidemic, which the heat of summer may still develop into formidable proportions. Quarantine has, of course, been established in every country bordering on the Mediterranean, against arrivals from the Adriatic, although the French prefer to call it an observation period of three or five days; and the Italian quarantine-stations for ships, in which cases actually occur, have had medical officers appointed to them, and are again open for the reception of any vessel flying the yellow flag. The Upper Sanitary Council, too, having ordered that all local postal and passenger vessels should carry a medical man during the epidemic, great inconvenience and interruption of the postal service has arisen from the impossibility of finding, at once, the number of qualified men willing to serve; and, amongst other results of the quarantine, the eighth meeting of the Italian Medical Congress, which was to have been held at Palermo from May 2nd to the 6th, has necessarily been postponed. A few signs there are, certainly, tending to show that some doubt, as to the wisdom or efficacy of these measures, is gradually spreading amongst the more enlightened classes. The Chamber of Commerce of Venice has unanimously protested, this week, against all quarantine restrictions; and several influential newspapers in Rome, and other cities, have pointed out the incongruity and uselessness of certain of the measures adopted. The Italians, even, can see the absurdity of compelling the steam-packet from Naples to Leghorn and Genoa to carry a surgeon on board, when the trains which run to and from the same cities are subjected to no restraint whatever. The zeal of the converts to absolute freedom of intercommunication must, however, appear somewhat suspicious, when it is borne in mind that there was not one newspaper in Italy which did not support the land quarantine, fumigations, and waste of disinfectants, which were looked on as the sole means of safety, two years ago.

There is still one feature to be mentioned, in connection with the local epidemics which have occurred throughout Italy, and that is, that the Government have shown a commendable desire to prove their sympathy with the distressed districts, by practical means. The journey of the King and the Prime Minister to Naples, is still fresh in the memory of Italians, and, last year, Ministers and Deputies vied with each other in personal efforts, in aid of the sufferers at Palermo. The visit which Signor Tajani, the Minister of Justice, has just paid to Apulia, is not only praiseworthy, as a manifestation of interest in the population, but also does much to raise the *morale* of an impressionable race. What might seem a somewhat theatrical display to the more self-assertive and independent Briton, is received with gratitude by the Italian, who, on all occasions of great public calamity, at once turns to the Government for help and encouragement. Hence the distribution of a little money, and the cheering effect of a few well-timed words from anyone in high authority, are unquestionably most beneficial in that country.

There is, fortunately, no confirmation of the report that some genuine cases of Asiatic cholera have been observed in Milan.

THE President and Council of the Medical Society have issued invitations to a *conversazione* on Monday, May 3rd.

PROFESSOR CORFIELD will commence a course of lectures on Hygiene and Public Health at University College, by an introductory lecture on Tuesday, May 4th, at 4 P.M.

THE Superior Health Council of Madrid has voted that Government should sanction Dr. Ferran's inoculations for cholera. During the winter, Dr. Ferran has continued his researches.

WE hear that Dr. Ralph Leslie, of the University of Toronto, Canada, and St. Thomas's Hospital, London, has been decorated with the Order of Leopold by the King of the Belgians, for his services on the Upper Congo.

THE scientific world has sustained a great loss by the death, in his 72nd year, of the distinguished chemist, M. Melsens, member of the Academy of Sciences, and of many foreign learned societies. He was the author of several discoveries; amongst others, the cure of mercurial and lead-poisoning by iodide of potassium, for which he received a prize from the Institute of France.

LOSS OF THE STEAMSHIP OREGON.

AT the official inquiry held at Liverpool, we notice that the captain, chief officer, and medical officer, were the last to leave the sinking vessel. This is as it should be.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Mr. Jonathan Hutchinson, F.R.S., has accepted the invitation of the Council of the West London Medico-Chirurgical Society to deliver the Cavendish Lecture on June 4th, the subject being "The Study of Symptoms Caused by Certain Drugs."

THE GENERAL MEDICAL COUNCIL.

The *London Gazette* of April 21st, contains an Order in Council reappointing, under the provisions of the Medical Act, Mr. John Simon, C.B., F.R.S., and Mr. Thomas Pridgin Teale, F.R.C.S., to be members of the General Council of Medical Education and Registration of the United Kingdom for a further term of five years from May 23rd next.

RAGS FROM SPAIN.

The prohibition of the importation into this country of rags from Spain has been further extended, by the Local Government Board, for a period of four months from May 1st. Good reasons exist at the present time for this precautionary measure; but it is to be hoped that cholera will not develop, during the next few months, to such an extent as to render necessary the continuance of the prohibition beyond the autumn.

GUY'S HOSPITAL.

It is announced that the next distribution of the prizes of the Medical School will be held early in July, instead of October as hitherto; it is, consequently, proposed to postpone the biennial dinner, which occurs this year, and usually takes place in May, for a few weeks, in order that it may be held on the evening of the same day as the distribution, at which it is hoped that His Royal Highness the Duke of Cambridge, who is one of the governors of the hospital, will preside.

THE SALE OF CHLOROFORM.

At an inquest held by Dr. Danford Thomas, at the Crowndale Hall, Camden Town, recently, on the body of a child which had been suffocated in bed, the woman in charge of it, a midwife, admitted that she had been in the habit of taking chloroform. She had broken off the habit; but, in times gone by, she had taken as much as four ounces by inhalation, and, on one occasion, she had taken twelve ounces. The coroner said he remembered that, on one occasion, he was consulted as to whether it was right to serve the witness with large doses of chloroform, and he advised that it should not be done.

ATTENDANCE ON RAILWAY SERVANTS IN BELGIUM.

A discussion has arisen in Belgium amongst the railway authorities on the subject of the medical tariff for attendance on the railway servants and workmen, in consequence of alleged abuse by certain medical officers of the system hitherto in vogue of payment per visit. It was stated that, in some cases, as much as 1,200 francs had been claimed yearly by more than one medical officer. This, however, if an abuse, had been permitted during the course of two or three years without protest. The administration now propose to pay an annual sum of 3 francs per head, which most of the medical officers appeared disposed to accept, though it was pointed out by others that the Minister of Public Works had allowed the Belgian Medical Federation a yearly sum of from 8 to 14 francs per head.

A STEP IN THE RIGHT DIRECTION.

The Treasury are, indeed, becoming liberal. They have just enabled the Local Government Board to issue, with unwonted prodigality, to anitary authorities and health-officers throughout the country, a reprint of the valuable report on disinfection by Dr. H. Franklin Parsons, which appeared in the last annual report of the medical officer of the Board. This slight indulgence is certainly a step in the right direction. It would be well, in the interests of public health, if the practice were more frequently adopted, and if the results of the more useful researches carried out by the Central Board were systematically brought directly before the local sanitary workers, for whose benefit they are, in theory, undertaken, and to whom, in practice, they would be of the greatest possible assistance. Hitherto, a local health-officer, whose sanitary authority was not disposed to provide him with "luxurious literature" at the expense of the rates, has had either to buy these official reports for himself, when they have come under his notice, or rest satisfied with the reviews of them that he may find in the scientific journals; for, if he applied to the Local Government Board for a copy, that body would only "express their regret that the supply of copies at their disposal was too limited to enable them to comply with his request."

ESCAPING GASES FROM CREMATORIES.

The American press has, says the *Sanitary Record*, lately been at some considerable trouble to prove to the public that the escaping products of combustion, which are due to imperfect cremation, are in no way desirable, whilst the products of combustion given off by scientifically constructed crematories are imperceptible and innocuous. The Le Moyne furnace, which was several times used at Washington, Pennsylvania, was little more than a calcining retort, and gave much offence. The same might be said of the Polli-Clericetti gas furnace, which was first used at Milan. All these pioneers have now been made obsolete, and are replaced by the Gorini and the Venini patterns, now used at Milan and elsewhere, and by some modifications of the Siemens' system, used at Gotha, in Germany. The expense of cremation, as a system of reduction simply, is about the same in all the patterns. The Gorini pattern, in use at Woking, effects cremation at a cost of about six shillings, that is, for fuel only. All the products of combustion, besides passing through heated flues over and over again, are finally passed through incandescent coke lighted a little way up to the chimney. Offence is impossible.

DRINKING IN A "SURGERY."

The Manchester coroner recently investigated a singular case of poisoning. Some time ago, a man named Edwards, a mason, and some companions, who had been drinking together, went, after the public-houses were closed, to a dispensary kept by a man named O'Hea, to play cards "for drink." Deceased's wife met him staggering home with a bottle in his hand. He said it contained gin, and he asked his wife to have some of it. She refused, whereupon he drank the contents himself. He at once became very ill, and was taken to the dispensary again, when it was found that what he had drunk was caustic potash. He was subsequently taken to the infirmary, where he died. Mr. O'Hea admitted to the coroner that he was not a registered surgeon, and that he practised without authority. Neither he nor the other men could say how the deceased got the bottle. The coroner said it was a most dangerous thing to allow drunken people in a room where poisons were kept. The jury returned on open verdict, but mildly censured O'Hea for allowing drinking in the dispensary after public-houses were closed. This case throws some light on the conduct of the so-called "dispensaries" by unqualified persons, which, it is hoped, future legislation by a reformed Medical Act would help to check.

ON STRYCHNINE IN DIPSOMANIA.

In the *Vratch*, No. 10, 1886, p. 177, Dr. U. M. Popoff, of St. Petersburg, states that, guided by the works of Magnus Huss, Luton, Dujardin-Beaumetz, and others, he employed nitrate of strychnine in two typical cases of dipsomania, and obtained strikingly successful therapeutic results. In one of the patients (a very gifted man of letters, aged 40), the alkaloid was administered under the skin, in the dose of $\frac{1}{30}$th of a grain at first (during a drinking bout) daily, then every other day, then twice a week, etc. The patient ceased to ask for drink after the second injection: within the next two days, various

morbid phenomena (headache, weakness, discomfort, etc.) disappeared. On subsequent occasions, a few injections of $\frac{1}{60}$th or $\frac{1}{45}$th of a grain of strychnine rapidly removed craving, anxiety, irritability, agoraphobia, and other premonitory symptoms of a threatening dipsomaniac attack. The patient each time rapidly improved in all regards, and felt desire for work and society. In another patient, dipsomania disappeared under the internal administration of strychnine, the alkaloid being given for the two first weeks, in doses of $\frac{1}{30}$th of a grain, and for another two weeks in that of $\frac{1}{60}$th, twice a day, in pills.

ART AND MEDICINE.

MR. ERNEST HART will give, on May 4th, 11th, and 18th, at 8 P.M., three lectures at the Society of Arts, John Street, Adelphi, on the "Historic Arts of Japan." The lectures will be illustrated by examples of the great Japanese masters, from the ninth century to the present date, including works in metal of the Miôchins, Metada Nobuiye, Kenzan, and others; picture rolls by Motonobu and Hokusai, the great Japanese artists of the last three centuries; and specimens of the work of Korin, Shonsui, Roma, Kajikawa, Dérné Ossman, and other of the old masters of Japan, in lacquer, keramics, wood and iron carving. At the request of the Council, a portion of the extensive private collection of Mr. Hart will be on view in the library of the Society's house, during the course of the lectures, from May 4th to May 18th. A large section of the collection consists of the exquisitely worked gold lacquer medicine boxes, which the old Daimios and Samurais of Japan carried, suspended from their girdles by the marvellously carved old ivory and wooden toggles (netsuaki), which are now the prizes of European collectors.

THE VOLUNTEER MEDICAL STAFF-CORPS AT THE EASTER MANŒUVRES.

AT both Dover and Portsmouth, the members of this corps took a prominent part during the march on Friday and Saturday, and at the field-day on Monday. The main body of the corps went to Dover, where, under the direction of Surgeon H. R. O. Cross, Grenadier Guards, excellent opportunities were afforded for work. On Friday, a section of a field-hospital was pitched, dressing and collecting-stations were formed, and stretcher-bearer parties sent in search of the wounded. On Saturday, the number of sick, owing to the heat and the long march, was very large. The five ambulances were quite full, and the surgery-wagons had to be used for sick-transport. The cases met with were chiefly cardiac excitement, sunstroke, epileptiform seizures, diarrhœa, kicks from horses, blows from passing vehicles, and the like. A mule, with litters on Friday, and cacolets on Saturday, did excellent work, except in reaching the top of the almost perpendicular downs. On Monday, but few of the troops fell out, but one or two curious accidents occurred; amongst others, the impaction of a small pebble in the front of the thigh of one of the riflemen engaged was the most curious. Dr. Hearn, Principal Medical Officer of Queensland, Australia, who was attached to the bearer-company, extracted the pebble, which was lying at a depth of two inches from the surface. Three bearer-companies marched past at Dover, with a mule and cacolet; five ambulance-wagons, five water-carts, and two surgery-wagons. The military critics pronounced the appearance of the corps to be smart and workman-like, and the march past to be very good. The Portsmouth Company earned unqualified praise from all onlookers, both for its appearance and efficiency.

MEDICAL STUDENTS' REGISTER.

WE have received from the Registrar of the General Medical Council a copy of the new *Medical Students' Register*, containing, in addition to a list of the medical students registered during the year 1885, the fullest possible information on the subject of registration of students. Statistics are given showing the various educational bodies recognised by the Council, and the number of certificates from each, presented by students as their qualification for registration. A list is also supplied of the places of medical study at which students commenced professional study in 1885, together with a statement of the number of students registered at each place of study; and a table is further furnished, giving a summary of the number of medical students registered during each year in the three divisions of the United Kingdom, from the commencement of students' registration in 1865 to the end of the year 1885. It is seen that the number of students registered during 1885 was, in England, 910; Scotland, 639; Ireland, 335, showing a slight increase in respect to England and Scotland, but a falling off of more than one hundred in the case of Ireland, making a total for 1885 of 1,884, against 1,957 for the year 1884. From the list of places of medical study whereat students were registered as having commenced medical study in 1885, it is shown that the University of Edinburgh furnishes the highest, namely, 265; the University of Glasgow, 164; the University of Cambridge, 90; and St. Bartholomew's Hospital, 88. These numbers, however, do not always indicate the total number of first-year students at each place of study, as many are registered prior to entering. This little work, the compilation of which is undertaken by the Registrar, contains a large amount of interesting information, arranged with great clearness and conciseness of detail.

HYDROPHOBIA IN BALTIMORE.

DR. BRINTON H. WARNER, a physician practising in Baltimore, is reported to have died from hydrophobia. He was bitten on Christmas day, by an unknown dog, which he had befriended in the street.

M. PASTEUR'S WOLF-BITTEN PATIENTS.

DR. DAVIDOFF has telegraphed from Smolensk to M. Pasteur that the sixteen survivors of the first wolf-bitten batch of Russians have returned home in perfect health. They are full of gratitude to the illustrious French savant.

STATISTICS OF M. PASTEUR'S HYDROPHOBIA PRACTICE.

At a recent meeting of the Academy of Sciences, Paris, M. Pasteur announced that he had treated the following number of people from different countries for bites from mad dogs: France 505, Algeria 40, Russia 75, England 25, Italy 24, Austro-Hungary 13, Belgium 10, North America 9, Finland 6, Germany 5, Portugal 5, Spain 4, Greece 3, Switzerland 1, Brazil 1. This makes a total of 726.

HYDROPHOBIA IN AUSTRIA.

DR. VON FRISCH, who was lately sent to Paris by a Vienna committee to inquire into Pasteur's system of inoculation against rabies, has given an account of his researches in a public meeting at the Town Hall. He unreservedly commended Pasteur's system, urging that it should at once be adopted by the medical profession in Austria. Giving some statistics on hydrophobia, he said that, in Austria, there had been 135 deaths from this cause in 1874, and 132 in 1875. In 1882, the mortality declined to 77, the lowest figure on record. Dr. von Frisch warmly advocated the compulsory muzzling of dogs in the streets, and thought it a matter for congratulation that the number of dogs should be decreasing. There was now, he said, but one dog in Austria for every section of 116 inhabitants.

TWO MEDICAL MEN ATTACKED BY A HYDROPHOBIC PATIENT.

Two assistants to Professor Kovalevsky, at the Kharkoff Lunatic Asylum, are now in danger of hydrophobia from injuries which they received a few days ago from a patient who was so violent, that none of the attendants would wash him or touch him. Drs. Gutnikoff and Davidoff volunteered to do so, though the sufferer was in a disgusting condition. In his ravings, however, he managed to bite one of them on the finger, and to spit into the right eye of the other. It is, therefore, feared that they themselves will fall victims to the disease, thus adding to the already long roll of medical martyrs. It has been suggested that they should go to Paris to M. Pasteur;

but there seems to be a difficulty about meeting the heavy expense of the journey, and the residence in Paris. It is to be hoped that help from private, if not from official sources, will be forthcoming.

SANITARY SUPERVISION OF DAIRIES, ETC.

In 1882, and again in 1883, a Bill was laid before Parliament by the Lord President of the Council, supported by Mr. Dodson, which proposed to transfer to the Local Government Board and local sanitary authorities the powers at present vested in the Privy Council, under Section 34 of the Contagious Diseases (Animals) Act, 1878. No opportunity for discussing the proposal was, however, then available, owing to pressure of other business, and the Bill was eventually withdrawn. We believe that there is some intention of reviving the proposal in a Bill which, amongst other matters, would empower sanitary authorities to make by-laws, (1) for the registration of persons carrying on the trade of cowkeepers, dairymen, or purveyors of milk; (2) for the inspection of dairies, cowsheds, etc., and for securing proper sanitary arrangements in such places; (3) for securing the cleanliness of milk-stores and milk-shops, and of milk-vessels; and (4) for prescribing precautions to be taken for protecting milk against infection or contamination. The Bill will, probably, also give power to the central authority, in the event of neglect on the part of a local authority to make such by-laws, themselves to make and enforce by-laws of the kind in the district.

THE PROGRESS OF BEER-DRINKING IN AMERICA.

Beer, it would seem, is rapidly replacing the fantastic "drinks" for which the United States have earned a reputation, and is in a fair way to become the national beverage. The quantity of beer now consumed is, in proportion to the population, eleven times as great as it was forty years ago. Some, perhaps not altogether disinterested, persons appear anxious to get up a scare about beer; and are endeavouring to prove that it is a beverage peculiarly dangerous to health, causing degeneration of the heart, the liver, and the kidneys. The evidence, however, in support of this charge is not overwhelming; it is said, for instance, that the hearts of the men of Munich are larger than those of other people, and more ready to undergo fatty degeneration; and that the number of people who die of Bright's disease, in New York, has increased since beer became a popular beverage. Evil tales are told of adulteration, but they have not found much confirmation in the analyses made for the State Board of Health; and there is reason to fear that even whisky is sometimes tampered with. On the whole, this change in the drinking habits is a matter for congratulation; even if it be true that he who drinks beer thinks beer. Still, our somewhat mercurial cousins may be none the worse for the infusion of a little Teutonic stolidity. There is, however, one kind of ale which is best of all—that of Adam.

INTELLECTUAL DEVELOPMENT AND SUFFERING.

As civilisation advances, and as intellectual requirements increase, the share of suffering which falls to the lot of individuals seems to be doomed to augmentation. The psalmist tells us that "in much wisdom is much grief, and he that increaseth knowledge increaseth sorrow," and this is true in more ways than one. Apart from the number, each year more formidable, of those whose nervous organisation succumbs to the extra demands of an exacting age, it would appear that the pains of child-birth are directly in proportion to the cerebral development of the fœtus. Such, at least, is the ingenious theory advanced by a modern writer on obstetrics, in America, who explains thus the comparative immunity from pain of the females of savage races. It is difficult to know, for certain, how far this alleged immunity from pain on the part of savage females may be regarded as proved; but the suggestion is rather enticing at first sight. Not, indeed, that the amount of pain during a given labour could ever be accepted as a criterion of the cerebral development of the forthcoming infant; for the estimation of pain is difficult, as matters stand at present, and would become infinitely more so if the idea obtained general acceptation that the intelligence of the child could be guaged, to some extent, by the evidence of pain afforded by the mother. This increase of grief was, probably, not that foretold in the above quotation, but it may possibly, in reality, constitute the female share of the malediction. On this hypothesis, one shudders to think of the throes that must have accompanied the birth of a Milton or a Shakespeare, and mothers have every reason to be thankful that geniuses of their calibre are rare indeed. The statistics, necessary to prove or disprove this theory, would unfortunately be exceedingly difficult to obtain, particularly if the object of the inquiries became known to the mothers. Women are not, as a rule, prone to underrate the sufferings through which they have gone, nor would they be likely to do so if they thought any importance were to be attached to their amount. Those women whose abnegation does not extend to an increase of pain, in view of a child possessing more than ordinary intellectual endowments, will probably seek to avoid such "unearned increment," by marriage with men more remarkable for their physical vigour, than for their mental acumen, and whose heads, accordingly, had never inflicted unnecessary pain on a suffering mother. Such a policy, however, is, from a physiological point of view, simply suicidal; it would be far preferable to marry a poet, whose son has so many chances of being an idiot, according to popular belief.

THE NEEDS OF OUR HOSPITALS.

In a contribution to *Time*, bearing the above title, Mr. Walter Pye, following up an excellent recent contribution to the *Toynbee Journal*, endeavours not only to impress on the general public the fact that the necessities of English hospitals are at present very urgent, but also to show clearly what those necessities really are. He deprecates some of the offensive processes by which money is collected for more or less obscure and undeserving charities. This evil is traced to the misconceptions of the public with regard to the true value of a hospital, as an institution. It is not until the nature of a charity can be understood, that the charitable can afford it any assistance in the true signification of the word. Mr. Pye introduces an ingenious argument. He dismisses the common idea that hospital maintenance is a benevolence, granted of their goodness, by the well-to-do to the needy. He shows that it must be held to be an essential part of the social fabric, and then proceeds to calculate roughly to what extent different classes of society benefit from the existence of hospitals and medical schools. Above all, Mr. Pye is strongly under the impression that, should the public understand more of hospital work, they would take more interest in hospital management. It is also suggested that representatives of the working classes should be elected as members of hospital governing boards The article is of a kind suitable to the public, especially at a time when the needs of our hospitals are both serious and ill-understood. The duties of hospitals to society, and of different classes to hospitals, the question of pay-wards, and the absurdity of considering that hospital relief is derogatory to a patient, are well discussed. The enlightenment of the public, as to the true nature of hospital work, is, on the other hand, a matter of questionable feasibility. The nearest approach to perfection, in a board of governors, would be a system by which no person could be made a member, unless he were a medical man and a scientist, two different things, it must be remembered, not always combined. Above all, such a member must have no interest, in the baser sense of the word, in any member, or knot of members, of the hospital staff. Such a board would be an impossibility. The governor, of the ordinary type, cannot understand purely medical questions thoroughly, because he has not had a purely medical education. A smattering of medical education would only do harm; and a clever, unscrupulous operator, may be supported by the whole weight of a board, if he take the members round his wards from time to time, and show them how well and happy the patients look. It is not through even the best managed and most intelligent boards that the worst abuses of hospital management are found out.

THE STATE BOARD OF HEALTH OF NEW YORK.

We have been favoured by Dr. A. L. Carroll, the Secretary of the State Board of Health of New York, with a copy of his annual report to that Board for the year 1885. It is odd to find from it that it was only last June that the duty of reporting births in the State was laid upon the parents or custodians of the children born. It is calculated that at least 40 per cent. of the births have previously escaped registration. The recorded birth-rate of New York has, for many years, fallen far short of the death-roll, demonstrating the insufficiency of the existing system of obtaining returns; and, in scattered rural populations, the difficulty in this respect has been even greater. Beyond the bare records of deaths from different deaths from different diseases, no data of real statistical value are tabulated; the reason, apparently, being the smallness of Dr. Carroll's office-staff, besides the imperfect system of registration of births and of census-enumeration. In many parts of the State, one of the chief difficulties to be overcome is the high level of the ground-water, even apart from the wide regions of actual marsh-land. The prevalence of filth-diseases, as population becomes more dense, emphasises the need of adopting safer methods of disposal of refuse than are now in use in the majority of the cities and villages in the State. Comparing 1885 with 1884, there was a decrease in the death-rate from typhoid fever and diarrhœa, but an increase in that from diphtheria, the greatest fatality of this disease occurring in the colder months. "Apart from any question of contagion, the propagation, if not the origin, of this disease is, probably, in the majority of cases, largely dependent upon filth-factors of an intra-domiciliary character—faults of construction, house-drainage, plumbing, etc., which are in but small degree affected by public sanitary improvements, or amenable to the efforts of local boards of health." Some anxiety was caused by the small-pox epidemic at Montreal, which, it was thought, might extend into New York State; but such precautionary measures as were possible were adopted, and only thirty deaths occurred in the State during the year. Typhus fever, which had for a long time held no place in the mortality records, showed itself, early in the year, in New York and Brooklyn; and, up to the end of November, fourteen deaths had occurred, twelve at New York, and two at Brooklyn. In the latter part of November, however, an outbreak took place at the Albany Penitentiary, which at one time threatened to assume dangerous proportions. Dr. Carroll discusses at length the chemical characteristics of potable water; but he does not get much further than somewhat confusing quotations from conflicting "authorities" on this much vexed question.

AN OMNISCIENT BOARD.

The inquest as to the cause of the death of a stoker on the White Star steamer *Republic*, who died the day after the ship reached Liverpool, was concluded on April 14th. It was alleged that the man's death had been accelerated by the brutal treatment inflicted by the third engineer, who, it was said, had dragged the man out of his bunk, and kicked and cuffed him down into the stoke-hole, where the plates and ladders were hot, without allowing him to put on his boots. The surgeon of the ship had advised the man, who was in a very poor state, to go into hospital in New York, but the man preferred to stick to his work; and, it was not until the day before reaching Liverpool, that he again appealed to the surgeon, who then sent him into the ship's hospital. The *post mortem* examination showed that death was due to pneumonia. The story is very wretched; but it is difficult to see who is to blame for the death. The man had a wife, and was, no doubt, loth to stay in New York, and leave her unprovided for. The engineer was, of course, bound to get his work done, though the rough treatment he inflicted was not the best way to achieve his object, and gives an ugly look to the story. The surgeon seems to have done his duty, so far as he saw it; and the moral of the story seems to be that the medical inspection of the hands shipped ought to be a reality, and not a farce. The deceased was evidently not fit for his work, even when shipped, and succumbed to the hard life in the stoke-hole of an Atlantic liner. If the medical inspection at Liverpool had been thorough, a man in the deceased's state of health would never have been shipped, and we should have been spared this miserable tragedy. Cases of this kind ought to stir even the dry bones at the Board of Trade; omniscience appears to be the foible of this office, where matters affecting the health of thousands of travellers are regulated by clerks and officials, who do not deign to ask the advice of medical or sanitary experts. Death and disease, they say, are unavoidable: *Tout est pour le mieux dans le meilleur des mondes.*

CHRONIC DIPHTHERIA.

Dr. Astley Gresswell has been investigating, for the Local Government Board, a persistent prevalence of diphtheria in the registration-district of Mansfield, Nottinghamshire. Ever since 1858, the disease has hung more or less over this district. There were only 2 deaths from it in 1881; but in 1882, there were 54 deaths; in 1883, 24; in 1884, 41; and, in the first half of 1885, 25 deaths. The parishes chiefly infected were Mansfield and Sutton-in-Ashfield; and Dr. Gresswell's investigations lead him to the conclusion that the general history of the prevalence, during late years, is consistent with epidemic development of diphtheria in Mansfield, an extension thence to Sutton, and a later extension from Mansfield and Sutton to the other parishes. He thinks that the sustained prevalence of diphtheria at Sutton has been largely determined by exceptional facilities for personal intercourse, and by the exceedingly bad sanitary condition of the town. His history of the latest epidemic at Sutton, in 1884-5, is one of diphtheria remaining dormant, or existing as mere sore-throat, during December, 1883, and January, 1884, but awaking to fresh activity and virulence in February, 1884, and forthwith making use of schools in fastening on a dozen or more households in several separate localities. And the subsequent behaviour of the diphtheria is consistent with dissemination of infection from the several centres thus set up, assisted by the meeting together, at the schools of the district, of susceptible children and other children developing or recovering from the malady. As recorded by him in other reports, on which we recently commented, Dr. Gresswell found that persons living in wet and filthy homes were liable to a chronic inflammatory condition of tonsils, tonsils in such a condition being specially receptive of diphtheritic virus. In Sutton, instances were not uncommon in which the first person taken with diphtheria in a house was one who had, for some time previously, suffered from chronic sore-throat of one or another sort. Moreover, persons living under such circumstances are liable, after an attack of diphtheria, to suffer almost constantly from a chronic inflammation of tonsils, and are peculiarly liable to re-acquire or to re-develop genuine diphtheria. The assumption that diphtheria may thus take what may be called a chronic form, would speak against the possibility of setting a limit to the duration of infectiveness of a given patient, and would dictate the necessity of exercising the greatest caution in allowing those who suffer from a chronic tonsillar inflammation after diphtheria to mix freely with people of susceptible age, especially in ill-ventilated rooms.

SCOTLAND.

UNIVERSITY OF ABERDEEN.

The preliminary examination for medical students, at this university, was held at the end of last week, when there was a good turn out of entrants. The summer medical session commenced on Monday, April 26th.

ABERDEEN MEDICAL OFFICER OF HEALTH.

The Town Council of Aberdeen has, by a majority of votes, appointed Dr. Theodore Thomson to this office. Practically, the appointment lay between Dr. Thomson and Professor M. Hay.

MEDICAL APPOINTMENT AT AYR.

THE Ayr Parochial Board have appointed Mr. Black Morrison, M.B., C.M., to be medical officer for the burghal and landward parts of the parish of Ayr.

HANDSOME LEGACIES TO MEDICAL CHARITIES.

THE following legacies have been bequeathed by the late Misses Margaret and Janet Strachan, Clematis Cottage, Broughty Ferry: Dundee Royal Infirmary, £1,500; Convalescent Home, Dundee, £1,000; Brechin Infirmary, £1,500; Forfar Infirmary, £1,000; besides numerous other sums to various other charities not strictly medical, making in all a total of £8,400.

POISONING BY OXALIC ACID.

AN unfortunate case has occurred at Cambuslang, in which a child was poisoned by oxalic acid, which was administered by its mother in mistake for Epsom salts, in consequence of an attack of toothache. The child immediately became sick, and died before medical attendance could be procured. A *post mortem* examination was held, and the Procurator Fiscal is investigating the circumstances of the case.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

THE Directors of the Edinburgh Royal Hospital for Sick Children have appointed Mr. Henry Alexis Thomson, M.B., C.M., and Mr. Thomas W. Dewar, M.B., C.M., to be resident physicians to the hospital for the next six months. Dr. W. J. Smith was reappointed assistant to the extra physicians for another period of six months. The directors of the hospital have also unanimously elected Sir Alexander Christison, Bart., to be a director in the room of the late Dr. Angus Macdonald.

THE HEALTH OF EDINBURGH AND INTIMATION OF INFECTIOUS DISEASES.

THE report submitted this week by Dr. Littlejohn to the Public Health Committee of Edinburgh Town Council shows some interesting statistics. Thus, the intimations of cases of infectious diseases for the month numbered 957, of which 2 were of typhus, 18 of typhoid, 13 of diphtheria, 7 of small-pox, 55 of scarlatina, and 862 of measles. For the quarter just ended, the intimations numbered 1,588, while, in the corresponding period of last year, there were 722; in 1884, there were 2,375; and in 1883, there were 2,307. Of the cases intimated since January 1st, 1886, no fewer than 1,348 were cases of measles; and, among these, 18 deaths had occurred. There is a considerable increase in the death-rate for March, 1886; there were 468 deaths, equal to an annual mortality of 22.05 per 1,000. This is the highest rate for the month of March for some years, the average for the same month during the previous five years being 19.70. Diseases of the chest caused 38.88 per cent. of the entire mortality, while zymotic diseases contributed 7.47 per cent. of the whole number, the deaths from them in March numbered 35, and, for the whole quarter, 58. As to the Fever Hospital, there were in it 1 case of typhus fever, 13 of enteric fever, 11 of small-pox, 24 of scarlatina, 30 of measles, 5 of whooping-cough, 9 of erysipelas, and 7 were in quarantine, giving a total of 99 patients, of whom 45 are children. The small-pox, which is not a frequent visitor, is evidently pretty well subdued, as there are four cases fewer than a fortnight ago, and those remaining are convalescent, while there have only been two deaths. The present outbreak of measles, although extensive, is not so considerable as in 1882 and 1884.

GLASGOW UNIVERSITY.

THE different professional examinations in the Medical Faculty came to a close last week; and the results, as regards the numbers who satisfied the examiners, were up to the usual average. For the last preliminary examination, there have never been so many candidates; but, owing to the changes in the subjects that must be passed before registration can be effected, it is doubtful if the actual number of matriculated students will be much larger than in former years. The graduation ceremony takes place on April 29th; and the half-yearly meeting of the General Council, on the preceding day, possesses more than ordinary interest, the report of the Committee appointed to consider the subject of University Reform containing several very important changes, all of which are certain to provoke a good deal of debate and discussion.

GLASGOW MICROSCOPICAL SOCIETY.

AT a meeting, held last week, in Anderson's College, steps were taken for the formation of a Microscopical Society in Glasgow, as, for some time, there has been a feeling that there was room for such; and that it would prove of service to many local workers, desirous of helping each other in their studies and manipulative work. Before the meeting separated, upwards of fifty members were enrolled, and it was decided to elect Dr. Dallinger the first President. A Society of this kind cannot but prove useful in a town like Glasgow, and we wish it every success.

SCOTCH UNIVERSITY REFORM.

A CORRESPONDENT writes from Glasgow: The congested condition of the Arts classes in the University of Glasgow has for some time attracted the attention of reformers. The students entering these classes are too numerous for the professors single-handed to instruct, and grave scandals have been current of work scamped, and hence necessitating a change. The question was referred, at the last meeting of Council, to the Business Committee, "to consider this subject in connection with the proposals of the last Scotch University Bill, and, in particular, the question of extramural teaching; and to report to next meeting." A summary of the recommendations of the Committee, of which Professor Edward Caird was convener, has been issued. The proposed changes are ample and thorough. New chairs are recommended in modern languages, and the appointment of assistant-professors and lecturers; also a fund in each of the Faculties, into which fees should be swept, and from which salaries should be granted. If the changes receive legislative sanction, the spectre at the feast of university banquets—extramural teaching—will, it is expected, die of inanition. The Committee openly state "that this teaching brings with it a system, of which all the best teachers complain, wherever it is introduced, as confining their instructions to a routine which hinders intellectual progress both in teachers and taught." It will be interesting to note how certain extramural teachers, who have been the prime instigators of the agitation, will like the idea of such a crushing verdict on their "uncovenanted hands." Undoubtedly, in the Medical Faculty, the extramural teachers connected with Scotch universities have furnished the most valuable recruits for vacant chairs, and have stimulated, by wholesome rivalry, university fame. The decision of the Council under this head will thus be awaited with interest by the medical profession, apart altogether from the levelling-down process of a common fee fund, which seems at first sight to crush the efforts of individual professors for deserved success as teachers or scientists.

THE SCOTCH FISHERY BOARD.

THE programme of scientific work to be followed out this summer on the west coast of Scotland, under the direction of the Scotch Fishery Board, is to include several matters of great interest and practical importance; and, with the view of facilitating investigations, all the tanks and other appliances at the Rothesay Aquarium have been placed at the service of the scientific staff. The experiments to be undertaken will include the possibility of hatching, in large quantities, different sea-fish, with the object of re-stocking the inshore waters around our coasts; for, as yet, it is an uncertain point whether sea-fish can be artificially produced in the same way as salmon and trout are multiplied. Another point into which it is intended to inquire is the rate of growth of the various food fishes, and especially as regards

the herring, so as to learn when it arrives at maturity; recent observations having shown that it commences to spawn when only seven inches in length, a fact that has no small bearing on the chief fishing industry of our western coasts. It is also intended to see if something can be done to resuscitate the cultivation of oysters in some of our more sheltered lochs and bays, and thus revive what was once a flourishing industry, but has now almost ceased to exist. With problems such as these before them, the staff of the Scotch Fishery Board will have ample work before them for the summer months, and it will be an encouragement to them to feel that the results obtained may prove a source of national benefit, in addition to the scientific interest they may possess.

PROFESSORIAL WORK AND PROFESSORIAL PAY.

UNDER this title, a recent contribution to the *Scotsman* furnishes some interesting statements as to the incomes of the various professors of the Medical Faculty of the University of Edinburgh. The net income from salary, fees, etc., of the chair of anatomy would appear to amount to £3,440; and, next in order of amount, comes that of physiology, which is worth £2,170 yearly. The chairs of botany, materia medica, natural history, pathology, midwifery, and clinical surgery vary in value from £1,600 to £1,950 per annum. In the aggregate, the income of the chairs in the Medical Faculty amount to £26,628, and the expenses connected with them to £5,180, leaving a net total revenue of £21,230. Particulars are also given of the work expected of the holders of these posts. These figures will probably bear comparison with the returns of most universities at home or abroad; nor can the remuneration be considered excessive so long as the teaching work is performed satisfactorily; indeed, it is only by liberal treatment that the best men can be secured, and induced to remain and become a credit to their university. It is the inability to meet such demands that hampers the selection of men for smaller and less well-provided-for universities.

IRELAND.

A WOMAN, named O'Hare, died last week at Savilmore, co. Down, at the alleged age of 106 years.

DR. RICHARD LEADER, of Mill Street, and Dr. Quinlan, of Castletownroche, Cork, have been appointed, under War Office authority, as Medical Examiners of Recruits, for Line and Militia, for these districts.

THE SMALL-POX OUTBREAK AT QUEENSFERRY.

WE are glad to observe, from the report of Dr. Hunter to the Queensferry Police Commissioners, that the outbreak of small-pox at South Queensferry may now be considered at an end, as no fresh case has been reported for three weeks; and that eight cases only remain in the hospital-ship *Hugomont*, of whom six are convalescent. Sixteen cases of recovered patients have been discharged since the previous report.

CORK EYE, EAR, AND THROAT HOSPITAL.

THE eighteenth annual report of the committee shows that 2,500 patients were attended to last year, being 500 in excess of the year previous. The cases treated included 98 cases of cataract, 473 affections of the cornea, 91 of the iris, etc. The public subscriptions for the year (£151) only averaged 1s. 3d. per head for the patients treated. Owing to the increased numbers attending the hospital, the accommodation of the extern department has been found utterly inadequate, and the committee have secured adjoining premises, which will, when the funds of the institution admit of the necessary outlay, provide the required room, and a small recreation-ground, where convalescent patients can obtain fresh air, without going into the treet.

HEALTH OF DUBLIN: QUARTERLY REPORT.

IN the quarter ending April 3rd, the births numbered 2,617, or 29.6 and the deaths 2,950, or 33.4. Zymotic diseases caused 307 deaths and included 20 deaths from scarlet fever, 56 from fever, 3 fro measles; while the deaths from whooping-cough, which, in the pre ceding three months, had amounted to 90, rose last quarter to 161 or more than 52 per cent., of the total mortality from zymotic disease for the quarter. The mortality from phthisis was considerably abov the average, the deaths amounting to 362, or 97 above the number fo the preceding three months.

DR. DAVIS AND THE LOCAL GOVERNMENT BOARD FOR IRELAND.

IN the Queen's Bench Division last week, an action was brought by Dr. Hugh A. Davis against the Local Government Board. The actio was to recover damages, laid at £3,000, for wrongful dismissal from th position of Medical Officer of the Newport Workhouse, co. Mayo, t which he was appointed twelve years since. By an order made by th Local Government Board last year, the Newport Union was dissolved and amalgamated to the Westport Union, so that the plaintiff lost hi employment. The defendants denied that the plaintiff was ever in their service, and demurred to the statement of claim on the ground that there was no contract of service between the parties. In the cas of a union being dissolved, the guardians are enabled, if they think fit, to charge the rates of the district with compensation; and, in this instance, a proposition was made to give compensation, but the guardians threw out the proposal. The court delivered judgment, allowing the demurrer with costs. The defendants had acted within thei statuable power in dissolving the union, and the Act having given the plaintiff a remedy, namely, compensation at the hands of th guardians, there was no cause of action existing.

CORK WORKHOUSE.

COLONEL SPAIGHT, an Inspector of the Local Government Board for Ireland, recently inspected the Cork Workhouse, and his half-yearly report was, last week, brought under the notice of the guardians. It stated that the Protestant Male Hospital was much overcrowded, and suggested that the ward now occupied by boys, adjoining it, should be given as an addition to it, and that the boys' hospital be moved to the ward now occupied as a male Protestant infirm ward. The closets, also, are very defective and offensive, and an automatic apparatus for each is recommended. Colonel Spaight refers to a very objectionable practice which exists of leaving for many hours, in their beds among the other patients, the bodies of patients who may die in the female hospital. As regards the female lunatic wards, they are very much overcrowded. On the occasion of the inspector's visit, there were 133 occupying fourteen wards, where there was only sufficient room for 100; and, in one ward, 80 were sleeping, where there was only proper accommodation for 44. To remedy this evil, he suggests a plan by which ample space would be afforded to 34 patients, at a cost of £189. At present, there is no operation-room in the male hospital; and, as the number of surgical cases has largely increased, and the duration of such in hospital could be greatly curtailed by early operation, the want is greatly felt. Many of the cases have to be postponed for the want of any place to perform the operation. Plans and estimates were prepared some months since, on the recommendation of the Committee, but the action was postponed, on the ground of expense. The report will be fully discussed at the first meeting of the newly elected board, Colonel Spaight's suggestion about providing suitable accommodation for the lunatics being adopted.

DONATIONS AND BEQUESTS.—The Marquis of Bute has promised £1,000 towards the building of a new hospital at Merthyr-Tydfil, provided other landowners, mineral agents, etc., subscribe £2,000.—The Adelaide Hospital, Dublin, has received £1,000 under the will of Mr. Francis Donagh.—Mr. George Redford, of Southport, Lancashire, has devised the residue of his real and personal estate to the Southport Infirmary, the Oldham Infirmary, and the Southport Convalescent Hospital.

MEMORANDUM WITH REFERENCE TO THE PRESENT POSITION OF THE MEDICAL SERVICE OF ATLANTIC STEAMSHIPS.

For reasons connected with the present position of this urgent question, it is desirable to call attention to the facts anew.

First Action of the Parliamentary Bills Committee.—At its meeting on March 14th, 1883, the Parliamentary Bills Committee had before it the subject of the unsatisfactory condition of Medical Service of the Atlantic Steamships. Previous discussion in the British Medical Journal had shown that there was an almost complete absence of organisation, the owners of each fleet, or even of each individual steamship, having the power to make such arrangements, with any person holding a qualification to practise medicine or surgery, as might seem most to their advantage; and that, in consequence, medical officers were liable to be appointed without due regard to age, professional qualifications, and experience.

Memorial Presented to President of the Board of Trade.—A memorial to the President of the Board of Trade, pointing out the unsatisfactory conditions under which the medical officers were appointed, and suggesting certain remedies, was adopted by the Committee. This memorial, drafted by Dr. Irwin, in consultation with the Chairman of the Committee, showed that the medical and sanitary administration of ocean steamers, especially those engaged in conveying emigrants to North America, was often seriously defective; that the medical officer had no independent authority in sanitary matters, and probably felt that any attempt on his part to modify existing arrangements and customs would be unpalatable to the owners, upon whose good will the tenure of his appointment depended absolutely; that his salary, which never exceeded £10 per month, and was often a good deal less (being generally about the same as the cook's or steward's), was inadequate to remunerate competent and experienced medical services; that his quarters were badly placed and small; and that the hospital-accommodation, even when adequate on paper, was often unavailable, owing to its being devoted to some other purpose, and that the surgeon had no dispenser, hospital-steward, sick-nurse, or other attendant, to assist him in duties which were often onerous. The memorial suggested, in relief of these grievances, the formation of a Marine Medical Service, consisting of medical officers appointed by the Board of Trade, and responsible to and supervised by it; the provision of better quarters, competent assistants, adequate remuneration, with promotion, and superannuation allowances, and fixity of tenure; the medical officer to have separate authority in sanitary matters not involving the safety or general discipline of the ship, to be required to make frequent inspections of the inhabited parts of the ship, and to furnish a report at the end of the voyage on the health of the passengers and crew, and other matters coming within his duties as thus defined.

Reply of the Board of Trade.—This memorial, which was printed in full in the British Medical Journal, 1883, vol. i., p. 589, was presented on July 26th, 1883, and the then President (Mr. Chamberlain) promised that, in the forthcoming Shipping Amendment Bill, he would consider what he could do to meet the wishes of the deputation, and to raise the standard and qualification, and enhance the position, in every way, of the ship-surgeons; but he could hold out no hope of the formation of a Government service of ship-surgeons for the mercantile marine, which was one of the suggestions put forward.

Inspection for Local Government Board, conducted by Dr. Blaxall.—In consequence, however, of representations made to the Foreign Office by direction of the Government of the United States, an investigation had already been undertaken by the Local Government Board at the instance of the Foreign Office. This investigation was conducted by Dr. Blaxall, one of the Medical Inspectors to the Local Government Board, with whom, at the request of the Board of Trade, was associated Captain Wilson, the Chief Emigration Officer of the Port of London. Dr. Blaxall's report was published in the twelfth Report of the Medical Officer of the Local Government Board.

Legal Enactments by which Present Arrangements are Governed.—This report covers considerably wider ground, but confirms the general accuracy of the facts set forth in the memorial. With regard to the legal enactments governing the sanitary arrangements of ships, it may be said that to the Local Government Board, and local sanitary authorities, are entrusted the precautionary measures with regard to the introduction and dissemination of infectious disease; while it is the duty of the Board of Trade (and the local marine boards) to see that the outgoing ships are not overcrowded, that the passenger-cabins are properly ventilated, that sufficient hospital-accommodation in a suitable part of the ship is provided, and that the medical stores and antiscorbutics are examined by a medical inspector appointed by the Board of Trade or Local Marine Board. It is further enacted that every foreign-going ship carrying 100 persons or upwards shall carry a duly qualified medical practitioner; that every passenger-ship carrying fifty passengers, where the voyage exceeds eighty days in the case of sailing-ships, or forty-five in the case of steam-ships, and every ship, whatever the length of the voyage, when the number of persons on board exceeds 300, shall carry a duly qualified medical practitioner. This regulation is evaded. During the six months ending June 30th, 1882, out of 141 persons acting as surgeons in 108 ships carrying emigrants from Great Britain to the United States and Canada, eight had no qualification to practise in Great Britain, and sixty-five did not hold qualifications making them eligible for poor-law appointments.

Arrangements in Emigrant Ships good, except with regard to Medical Matters.—Dr. Blaxall's report shows that it is in the medical arrangements that the comfort and health of emigrants are most neglected. The hospitals, there was good reason to believe, were frequently occupied by passengers, ship's officers, stewards, or other members of the crew; the accommodation provided for the surgeon was "not calculated to invite the services of desirable men, being altogether out of keeping with the responsible position the surgeon holds in the ship, as entrusted with the care of the health of hundreds of men, women, and children. In some cases, he has to stow himself away in the dispensary, surrounded by medicines and drugs, having no other place to sleep in. In other ships, the cabin allotted to him is small, dark, and badly situated, thus in every way militating against his keeping any reasonable record of the cases of sickness that occurred during the voyage. It is highly important that all such cases should be chronicled, especially with reference to infectious diseases; the want of such records has been experienced in the present inquiry." The same report further states that "the Board of Trade medical inspection of emigrants, on embarkation, to provide against the introduction of infectious disease into the ships, is conducted under difficulties, such as exposure to weather, etc., that militate against its efficiency," and "that there is a want of due precautionary measures on board ship to guard against the spread of disease."

Amount of Infectious Disease during Voyage excessive.—The amount of infectious disease on Atlantic emigrant ships appears to be considerable. In the eighteen months, January, 1881, to June, 1882, 601 such cases occurred; and Dr. Blaxall suggests that the epidemic prevalence of disease, in certain ships, was due either to want of care on the part of the surgeon of the ship in recognising and isolating the earliest cases, or to the absence of efficient means of carrying out isolation; and, as has been already shown, the latter alternative is true in some cases.

Mortality High.—The mortality on board Atlantic ships is excessive. Emigrants are persons in presumably good health, and are (as a rule, to which the exceptions are trifling in number) medically inspected at the time of embarkation. Yet, of 315,850 passengers who crossed from Great Britain to North America in 1881, 169 died (excluding deaths by suicide or drowning, and deaths of infants born on the voyage). This is a rate of 5.38 per 10,000, occurring in twelve days, equivalent to a rate of 16.14 per mille *per annum*. This is a very high rate, under the circumstances as to age and medical inspection above referred to.

General Accuracy of Allegations Proved.—The statements made in articles published in the British Medical Journal, and reprinted in a pamphlet issued by the Association on March 20th, 1883, which was submitted to the Board of Trade, along with the memorial, have elicited angry comments from journals published in the interests of shipowners; but no attempt has been made to refute the facts, which have been, on the contrary, fully confirmed by the official Report to the Local Government Board.

The Report of the Committee of Quarantine, drawn up by Dr. William M. Smith, health-officer of the Port of New York, and published in 1883, affords further independent testimony to their truth. After pointing out the faulty position frequently assigned to the hospitals, the Committee proceed to observe that the compensation given to the surgeons of passenger steamers is a "bid for the inexperienced, incompetent, and dissolute to seek the position." If, it is added, "the pay of surgeons were reasonable, men of the class referred to would be quickly displaced by men of greater ability, more experience, and with regular habits. The health authorities at the ports of arrival, in this country, as also in the interior, are not only bound in the interest of suffering immigrants, but of the vast population with whom the immigrants will soon mingle, and among whom they may distribute infectious and contagious diseases, whose latent germs were sown during the voyage, from the inefficiency or incapability of the medical officers

of steamships, to 'cry aloud, and spare not,' until a more efficient system of medical marine service is secured." These strictures do not apply, of course, without exception, and it is admitted that there are noble exceptions; the contention is that the system is wrong, and that, consequently, abuses are constantly liable to arise. "The uncertain tenure of the office of surgeon of steamship is also a reason for this inefficiency of the service. His tenure of office should be as permanent as that of other officers, his rank as fixed, his responsibilities as defined, interference with his duties as unallowed, as those of any officer of the ship. The medical service of the mercantile marine needs to be wholly reorganised, and a system adopted essentially different from that which exists." The committee then proceed to suggest the formation of medical boards in New York, charged with the duty of inquiring into the character, habits, and professional capacity of the candidate for the appointment of ship-surgeon; a surgeon, after being approved by this board, "should be secure in his tenure of office, except for cause, and as certain of his rank by seniority of appointment as other officers of the line."

The Scope of the Royal Commission.—The Royal Commission appointed in 1884 was directed to give "special, but not exclusive, regard to the following subjects: the laws concerning Marine Insurance, and the liability of shipowners; the functions and administration of the Marine Department of the Board of Trade; the functions of the Courts before whom wreck inquiries are conducted; the condition and efficiency of merchant officers and seamen, and the best means of improving the same." It would, therefore, be within the functions of this Commission to take evidence with regard to the administration of medical affairs by the marine department, as well as with regard to the condition and efficiency of the medical officers of merchant ships, and the sanitary functions and administration of the Board of Trade.

In discussing any proposed reforms, the following points will require to be borne in mind.

1. *The Ambiguous Position of Ship-Surgeons.*—A ship-surgeon ought to be also the sanitary officer of the ship, entrusted not only with the care of the sick, but with the prevention of sickness; and it is in this latter capacity that he discharges the duties of greatest commercial and international importance.

2. *The Absence of Sanitary Officers Afloat.*—Under the present conditions of the Atlantic emigrant trade, there is practically no sanitary officer, the ship-surgeon having no independent sanitary authority, and being, moreover, the nominee of the owners, paid by them, and sometimes required to sign articles at nominal pay, the result of this manœuvre being to put the surgeon entirely in the hands of the owners.

3. *The System adopted by the Australasian Colonies.*—A different system has been found to work extremely well in the Australasian emigrant trade. Each Colonial Government appoints a surgeon-superintendent, for whom a cabin properly fitted up is provided; the special instructions issued to him by the Colonial Governments make him responsible for the quality and quantity of the provisions issued, for the cleanliness, ventilation, and other sanitary conditions of the emigrants' quarters, and for the general maintenance of discipline and order amongst the emigrants. The surgeon-superintendents are, in fact, appointed by the Colonial Governments, and are members of a public service.

4. *The Advantages of a Marine Medical Service.*—The establishment of a similar service would probably be attended by like advantages in the Atlantic emigrant trade, and would not inflict any injury on owners who already do their duty, but would be to their advantage; not only by relieving them of duties which are not of a commercial nature, but also in attracting good officers, and retaining their services, as would be the case were ship-surgeons members of a public service, responsible to a Government department, and assured of promotion and pensions for good services.

5. *No Medical Department at the Board of Trade. No Consultative Medical Officers.*—The Board of Trade has no proper medical department. In order to fulfil the requirements of the Passenger Acts formerly executed by the Emigration Commissioners, it appoints medical men to discharge certain definite and special duties connected with the inspection of emigrants at ports, but it has not thought it necessary to elaborate any special or methodical medical system, much less any organised medical service.

6. *Divided Authority in Sanitary Matters affecting Ships.*—There is a great deal of confusion and divided authority with regard to sanitary matters afloat. The Board of Trade, the Local Government Board, and the Port Sanitary Authorities, the shipowners, the Board of Customs, and, to a certain extent, the Consular Authorities, all and each have responsibilities which are ill-defined.

Members of the Royal Commission.—Earl of Aberdeen (Chairman), Duke of Edinburgh, Right Hon. J. Chamberlain, Sir Charles P. Butt, Sir J. E. Gorst, T. C. Baring, T. Burt, Hy. Green, James Kennedy, James McGregor, William Pearce, L. Douglas Smith, L. Charles Wakefield, William Walton; R. Anderson, LL.D. (Secretary); with power of subdivision.

THE CHOLERA.

CHOLERA IN ITALY.

OUR own correspondent writes: There can be no doubt, unfortunately, that the epidemic disease which has appeared at Brindisi is true Asiatic cholera. Throughout the winter, sporadic cases have been reported from Padua, from Venice, and from the Venetian Province. Quite lately, several cases occurred in one of the regiments in garrison at Padua, which had been transferred from Sicily last autumn. The regiment was isolated and sent into encampment, and the disease was said to have been thus stamped out; but it is difficult to ascertain the exact truth. In Venice, notwithstanding the denials of the Syndic, several cases are known to have occurred lately, and it is possible that the contagion was transmitted from that city to Brindisi. It is asserted, at any rate, that the first case at Brindisi occurred in the family of a laundress, who had washed the dirty linen of some of the crew of a steamboat, belonging to the Peninsular and Oriental Company, which had just arrived from Venice. The true nature of the disease was either not at first recognised, or there was some want of energy in the efforts made to limit it; and the Syndic and Subprefect of Brindisi are reported to have been suspended from their functions, for delay in informing the Prefect of the district at Lecce. The number of cases, up to the present, does not seem to have reached a hundred since the commencement of the outbreak, ten days ago, and the mortality has not been higher than about one in six or seven of those attacked; but the rapid spread of the contagion to adjoining towns and villages has alarmed the Italians, as well as the Government, who sent off, on Friday, one of the officials of the Home Office to investigate and report. Already, too, we hear of demonstrations at Palermo in favour of a strict quarantine for Sicily, as the epidemic of last year has not taught the Islanders to what they ought to trust for immunity; and Sardinia and the other islands will, no doubt, follow suit. There are even political measures which are much influenced by the news, as the present Ministry is greatly discredited, and intends dissolving and appealing to the constituencies immediately, a step which could not well be carried out if the Islands were granted the quarantine clamoured for, and which the Ministry were weak enough to concede in 1884 and 1885.

In their perplexity, the Government have turned to the Upper Sanitary Council of the Kingdom for their advice; and, if the results of the deliberations of that body, at the meeting held on the 18th, be as reported, they show a thorough incapacity on the part of men, who, from their positions, ought to be the leading sanitarians of Italy, to profit by the lessons of the last two years. The Ministry, it is said, are recommended to grant protection to the Islands by quarantine, in the event of their inhabitants demanding it, provided only that the Island making the request is itself free from cholera at the time. A more humiliating confession of weakness and vacillation could scarcely have been published. The men, in a word, who ought to dictate what the Government must do, leave it to the terror-stricken and ignorant islanders to formulate a request with which the Ministry will at once comply.

If this is the outcome of the experience of the epidemics of the last two years, and of their reflections on the views so well set before the International Sanitary Conference held here a year ago, the Italian hygienists cannot be congratulated on any great advance towards the comprehension of the more enlightened ideas on sanitary matters prevalent elsewhere. Perhaps it was oversanguine to expect any marked change in the opinions of a body whose present President—Baccelli—only two years ago, was the first to demand a land-quarantine against arrivals from France, when the news of the outbreak of cholera at Toulon threw all Italy into a shameful panic.

THE CHOLERA IN FRANCE.

THE mortality from cholera continues in the naval stations of Brittany. In the scientific world, the theory that cholera is due to cosmic causes has more partisans than it used to have. The magnetic needle this year has been very restless, and it was phenomenally so on March 30th, a few days previous to the outbreak which has just carried off many Breton sailors. Although no steps are being taken to estab-

ish a sanitary cordon between Paris and Brest, a severe quarantine of eight days will be imposed at Tunis on all vessels arriving from Brindisi, and of twenty-four hours on those coming from the other Italian ports. The Spanish authorities appear alarmed at the cholera outbreak in Brittany and Italy, and are establishing frontier and harbour quarantines.

VIENNA.

The Austrian Minister of the Interior has published a notice which says that, considering the near approach of the cholera to the frontiers of Austria-Hungary, he deems it prudent that all doctors and surgeons should enter their names in official registers of the districts where they are residing, in order that the authorities may know how much medical assistance would be available in an emergency. The Minister remarks that this is only a precautionary measure, and that no cases of cholera have broken out in the Empire since the four cases which occurred in Trieste last December.

The sanitary condition of Vienna is at present good. There was an epidemic of small-pox during the winter, and, a few weeks ago, during the temporary scarcity of water, a few cases of typhus fever were reported. But now that the pure Hoch Quelle water is being supplied in abundance again, there is much less danger of cholera in Vienna than in most Continental cities. The municipality, however, is very vigilant, and disinfectants are daily used in large quantities in the cleaning of drains and the watering of streets.

BERLIN.

As the danger of cholera being imported into Germany has again come within the bounds of possibility, the police authorities are required to enforce the regulations made in 1885, in order to prevent this calamity. Care is also to be taken that the health committees shall set to work in case of need, and direct their attention to the removal of special insanitary conditions in their several districts.

ROYAL COLLEGE OF SURGEONS OF IRELAND.

On Wednesday last, April 28th, the Royal College of Surgeons of Ireland was the scene of an interesting ceremony. There has lately been added to the College buildings a splendid hall, devoted to the reception of the large collection of pathological and other casts made by Mr. Butcher, which was to be opened by the Lord Lieutenant. There has also been installed in the entrance-hall a statue of Mr. William Dease, one of the founders of the institution, which his Excellency was to unveil; and, lastly, the College had decided to confer the Honorary Fellowship on Professor Pasteur, Professor Huxley, Sir James Paget, Sir Joseph Lister, Sir T. Spencer Wells, and Professor Marshall. Unfortunately, only one of the recipients, Sir James Paget, could be present, Professors Huxley and Marshall being ill, M. Pasteur too busy warring with hydrophobia, Sir Spencer Wells prevented by a domestic bereavement, and Sir J. Lister on his way to the West Indies to attend a patient.

All the Fellows and Members of the College who could attend mustered, attired in their academic robes, besides many of the dignitaries of Trinity College, of the kindred College of Physicians, and distinguished members of the legal profession. The Lord Lieutenant and the Countess of Aberdeen, with the Prince Edward and Princess of Saxe-Weimar, arrived about half-past three o'clock, and were conducted in procession to Butcher Hall, where the President, Sir C. Cameron, delivered an address, explaining the nature and value of the objects to which it is devoted. They had assembled, he said, to do honour to the illustrious dead, and the illustrious living; to place upon the memorial of a truly great surgeon of the last century, wreaths of cypress and immortelles, and to grace, with a mural crown, the brow of one of the most eminent of surgeons of the present day. Last year, a large-hearted Irishman, many years a member of Parliament (Mr. O'Reilly Dease), undertook to defray the expenses of erecting, at the College, a statute to his grandfather, Mr. Dease, one of the principal founders of the College. Subsequently, Mr. Butcher, an eminent past-president of the College, complied with his (Sir Charles Cameron's) request, that he should present to the College his unrivalled collection of pathological casts. Mr. Dease gave them another proof of the interest he took in the College, by proposing to build, at his sole expense, a place to contain Mr. Butcher's museum. He also presented an admirable portrait of Mr. Butcher, painted by Mr. Chatterton Smith. The College considered in what way the event might be most appropriately celebrated, and they resolved to render it more memorable by offering their Honorary Fellowship to some of the most distinguished surgeons and men of science. Their names were speedily and unanimously selected, and public opinion had ratified the choice. Sir Charles then spoke, in detail, of the great attainments of the gentlemen on whom the honour was conferred, and, at the conclusion of his address, introduced Sir James Paget, and formally presented him with the diploma of Fellowship, *honoris causâ*.

Sir James Paget returned thanks.

The Vice-President then handed to the Lord Lieutenant the first copy of the history of the College, edited by Sir Charles Cameron; and a vote of thanks to their Excellencies was moved by Mr. Rawdon Macnamara, representative of the College in the General Medical Council, and seconded by Sir George Porter, Surgeon in Ordinary to the Queen. The resolution was adopted. The procession then returned to the Hall, where the Countess of Aberdeen unveiled the statue of Mr. Dease. His Excellency declared the Butcher Museum open, and the ceremonial terminated.

In the evening, Sir Charles Cameron gave a banquet in the College, at which His Excellency the Lord Lieutenant, Prince Edward of Saxe-Weimar, the Duke of Abercorn, the Lord Mayor of Dublin, and nearly 200 other gentlemen, were the guests of the President.

ASSOCIATION INTELLIGENCE.

The General Secretary of the British Medical Association acknowledges the receipt of two essays for the Middlemore Prize, with the mottos, "Sorte Suâ Contentus," and "Nichts Neues."

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

Inquiries are in progress on the subjects of

Diphtheria, Acute Rheumatism,
Old Age, Cancer of the Breast,
The Value of Hamamelis.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The Etiology of Phthisis.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

A general inquiry into the Therapeutic Value of Hamamelis has now been issued. A report will be made to the Section of Therapeutics at the annual meeting.

Prognosis in Heart-Valve Disease, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; the Extreme Duration of Infectiousness in Infectious Diseases. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of

Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of this district will be held at Canterbury on Thursday, May 20th.—W. J. TYSON, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above district will be held at Tunbridge Wells on Friday, May 28th. Mr. Abbott will preside. Mr. Gorham will bring before the notice of the meeting Brief Reminiscences of Guy's Hospital in the year 1839, relating to Ovarian Dropsy. Gentlemen wishing to contribute short papers or cases should communicate with the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this district will be held at the Greyhound Hotel, Croydon, on Thursday, May 13th, at 4 P.M.; E. Diver, Esq., M.D., of Kenley, in the chair. Dinner, 6 P.M.; charge, 7s., exclusive of wine. The following papers, etc., are promised. Dr. George Harley, F.R.S.: The Crystalline Structure of Gall-Stones, illustrated by specimens and diagrams. Mr. J. Tweedy: The Treatment of the various forms of Hardness of the Eyeball. Mr. A. Matthey will exhibit some Pathological Specimens. Dr. Oxley: Notes of interesting cases. 1. Abdominal Tumour (myxoma); 2. Apepsia Nervosa. Dr. Rutherford Adams will exhibit a case of Cirsoid Aneurysm. Members intending to dine will greatly oblige by communicating their intention to P. T. DUNCAN, M.D., Croydon, Honorary Secretary.

SOUTHERN BRANCH: SOUTHAMPTON DISTRICT.—The next meeting of this district will be held on Tuesday, May 4th, 1886, at 8 P.M., at the residence of Mr. Bromley, 1, Portland Terrace, Southampton. Business: Election of Officers; Examination of Accounts. A case of Obstruction of Bowels from large Gallstones will be brought forward by the Honorary Secretary. This will be a combined meeting of the district with the Southampton Medical Society. Paper: Mr. King Sampson: Acute Inflammatory Diseases.—THEOPH. W. TREND, M.D., Honorary Secretary.

YORKSHIRE BRANCH.—The spring meeting will be held on Wednesday, May 5th, at 3 P.M., in the School of Medicine at Leeds, when the following papers will be read. 1. Dr. Myrtle: On Eczema, Psoriasis, Acne, Pruritus. 2. Mr. A. W. Mayo Robson: (*a*) An Operation for Imperforate Anus, with the question of establishing a new principle in dealing with such cases; (*b*) Removal of large Uterine Polypus in seventh month of pregnancy. 3. Mr. Jessop will exhibit some Surgical Cases. 4. Dr. Churton: (*a*) Three cases of Chorea during Pregnancy; (*b*) A case of Hæmorrhagic Pleurisy. 5. Mr. T. Smailes: Four cases of Croupous Pneumonia. 6. Dr. Jacob: (*a*) The Visceral Lesions of Syphilis (microscopical preparations will be shown in the Library before the meeting); (*b*) Exhibition of some Ophthalmic Cases. 7. Dr. J. F. Little: Results of a Carnivorous Diet. 8. Dr. Braithwaite: A case of Abdominal Hysterectomy. 9. Mr. Miall: A case of Dislocation of the Shoulder-joint, reduced by Dr. Macleod's Method. The members will dine together at the Great Northern Hotel at 5.30 P.M. Dinner (exclusive of wine), 7s. per head.—ARTHUR JACKSON, Secretary.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fifth ordinary meeting of the session was held at the Grand Pump Room Hotel, Bath, on Thursday evening, April 22nd; E. C. BOARD, M.R.C.S.Eng., President, in the chair.

New Members.—Messrs. W. E. Walter, M.R.C.S.Eng., of Marshfield, and Charles Flemming, M.R.C.S.Eng., of Neshford, were elected members of the Association and Branch.

Messrs. Burroughs, Welcome, and Co. gave a demonstration on Digestive Ferments and Dietetics.

Communications.—The following communications were made.

1. Mr. Freeman: A Case of Gritti's Amputation at the Knee, and a Case of Radical Cure of Inguinal Hernia by Parker's Method. Observations were made on the two cases by Messrs. Richardson Cross and Scott.

2. Mr. Richardson Cross showed two cases of Evisceration of the Eye, and a case of Ligature of the Carotid Artery for Intra-orbital Hæmorrhage. Mr. Mason made some remarks on the cases.

3. Dr. Field read notes of a case of Endocarditis terminating in Meningeal Hæmorrhage, which gave rise to some observations by Dr. Goodridge.

4. Mr. G. S. Pollard read notes of a case of Intestinal Obstruction, and showed the specimen. Drs. Shingleton Smith and Goodridge, and Messrs. Scott, Prankerd, Fowler, Wathen, and Tuckett, joined in the discussion which followed.

PROCEEDINGS OF COUNCIL.

AT a meeting of the Council, held in the Council Room, Exeter Hall on Wednesday, April 14th, 1886, Present,—

Dr. BALTHAZAR FOSTER, M.P., President of the Council, in the chair,

Dr. W. Withers Moore, President-elect, Brighton
Mr. C. Macnamara, Treasurer, London
Dr. B. Anningson, Cambridge
Dr. H. Barnes, Carlisle
Dr. G. B. Barron, Southport
Dr. M. M. De Bartolomè, Sheffield
Dr. T. Bridgwater, Harrow-on-the-Hill
Dr. A. Carpenter, Croydon
Dr. C. Chadwick, Tunbridge Wells
Surgeon-General Cornish, London
Dr. J. Ward Cousins, Southsea
Dr. G. W. Crowe, Worcester
Dr. A. Davidson, Liverpool
Dr. P. M. Deas, Exeter
Dr. J. L. H. Down, London
Dr. W. A. Elliston, Ipswich
Dr. C. E. Glascott, Manchester
Dr. Bruce Goff, Bothwell
Dr. W. C. Grigg, London
Mr. G. F. Hodgson, Brighton
Dr. C. Holman, Reigate
Professor G. M. Humphry, Cambridge
Mr. A. Jackson, Sheffield
Mr. T. Vincent Jackson, Wolverhampton
Mr. T. R. Jessop, Leeds
Mr. H. R. Ker, Halesowen
Dr. D. J. Leech, Manchester
Dr. W. G. V. Lush, Weymouth
Mr. F. Mason, Bath
Mr. W. Jones-Morris, Portmadoc
Dr. F. Needham, Gloucester
Dr. C. Parsons, Dover
Dr. A. Sheen, Cardiff
Mr. S. W. Sibley, London
Dr. E. M. Skerritt, Clifton
Dr. A. Strange, Shrewsbury
Dr. W. Strange, Worcester
Mr. T. Sympson, Lincoln
Mr. J. Taylor, Chester
Dr. T. W. Trend, Southampton
Mr. F. Wallace, London
Dr. E. Waters, Chester
Mr. C. G. Wheelhouse, Leeds

The minutes of the last meeting having been printed and circulated, the President of the Council asked if there was any exception to their being signed as correct, and, none being taken, the minutes were signed.

The President of Council reported the death of Dr. Austin Flint, who had consented to give the Address in Medicine.

Resolved: That this Council has heard with sincere sorrow of the death of Dr. Austin Flint, of New York, and begs to express its sense of the great loss which the medical profession throughout the civilised world has sustained by his untimely death.

Resolved: That Dr. Billings be requested to deliver the Address in Medicine, in August next.

Resolved: That the proposed regulations—drawn up by the Committee appointed to consider and report upon the constitution of the various committees, on the mode of election of the members of the same, and also to suggest in what manner the reports should be brought before the annual meeting of the Association—be adopted.

Rules and Regulations as regards the Committees of the British Medical Association.

1. That the Council may from time to time appoint Committees for such purposes as it may think proper. These Committees may consist either wholly of members of the Council or partly of members of the Council and partly of members of the Association (not members of the Council).

2. That at the first or subsequent meeting of the Council after the first day of the annual meeting, such Committees as may be desirable shall be appointed. It shall be the duty of any Committee whose work is to be continued, to provide the Council before the annual meeting with the names suggested to act for the ensuing year.

3. That it shall be competent to the various Committees to add to their number new members. These new members shall be empowered to act on the Committee until the next meeting of the Council, when their names shall be submitted to the Council for election on the Committee.

4. That the Committees shall be empowered to ask other gentlemen, either members of the Association or others, to assist in the deliberations of the Committee, without the power of voting.

5. That it shall be the duty of each Committee to keep the Council informed of their proceedings by submitting their minutes to each quarterly meeting of the Council.

6. That a report from each Committee shall be submitted to a meeting of the Council before the annual meeting of the Association. This report, if approved and adopted by the Council, shall be submitted to the general meeting of the Association.

7. That it shall be the duty of the General Secretary to summon each Committee as soon as convenient after their election.

N.B.—The Journal and Finance Committee, being regulated by the by-laws of the Association, would not be affected by these regulations.

Letter read from Deputy Surgeon-General Graves-Irwin, of Bermuda, of which the following is a copy:

[*Copy.*] Hamilton, Bermuda, November 4th, 1885.

SIR,—Your favour of August 24th duly received. Herewith enclosed certificates required for 13 (thirteen) gentlemen who are anxious to join the British Medical Association, namely, 10 (ten) civilian practitioners, registered as per official list, *vide* p. 28 of Bermuda Almanac, posted herewith; and 3 (three) military medical officers, now serving in this command. We wish to form a Branch of the B. M. A. in this island.

On other side you will find names of gentlemen now serving in this command, ho are already members of the B. M. A., and there are 2 (two) other civilian ractitioners, whose certificates will be forwarded again. We are thus 19 *in esse*, nd 21 *in posse*. Kindly attend to election of enclosed as soon as possible, and let ie have decision of Council as to formation of our Branch at early date.—Faithlly yours, C. GRAVES-IRWIN, D.-S.-G., M.S., P.M.O., Bermuda.

N.B.—Our nearest island, British Colony, is about 1,000 miles distant. Bermuda *not* in West Indies.

Names of officers now serving in Bermuda already members B. M. A.—Dept. isp.-Genl. M. W. Cowan, R.N.; Staff-Surg. Anthony Kidd, R.N.; Surg. J. T. W. . Kellard, R.N.; Dept.-Surg.-Genl. C. Graves-Irwin, M.S.; Surg.-Maj. J. A. ampbell, M.S.; Surg.-Maj. W. Finlay, M.S.; Surg. H. J. Michael, M.S.; Surg. arnes, M.S.; Surg. Cecil Birt, M.S.

The Secretary, B. M. A., 161A, Strand, London.

Resolved: That the Council will gladly recognise and warmly welome the addition of a Branch in Bermuda, upon receiving from the iembers of the proposed Branch a copy of the proposed by-laws and onstitution for approval.

The proposal of 186 candidates for election as members was then onsidered.

Resolved: That 185 of the 186 candidates whose names appear on he circular convening the meeting be, and they are hereby elected, iembers of the Association. (The nomination of one candidate not eing in order, he was disqualified.)

Resolved: That the minutes of the Journal and Finance Committee f to-day's date be approved, and the recommendations contained herein be carried into effect.

The minutes of the Journal and Finance Committee contain the particulars of ccounts for quarter ending March 31st last, amounting to £4,080 13s. 11d., a ecommendation that a further sum of £1,000 be invested, and sundry editorial iatters.

Resolved: That the financial statement for the year ending Decemer 31st, 1885, certified by the auditors as correct, be received, pproved, and published in the JOURNAL, in accordance with By-aw 33. (See page 799.)

The President of the Council reported the purchase of £2,000 3½ per ent. Newcastle-upon-Tyne Corporation Stock.

Resolved: That the minutes of the Scientific Grants Committee of ie 13th instant be received, approved, and the recommendations conained therein be carried into effect.

It was moved and seconded: That the minutes of the Branch Organiation Committee be received and adopted.

The Branch Organisation Committee recommended that the map of Branch reas be published in the JOURNAL; that various alterations be made in the regutions for the formation of Branches.

Whereupon an amendment was moved and seconded, That the map efining the boundaries of the Branches, presented with the minutes f the Branch Organisation Committee, and the report of the Committee e circulated amongst the Branches, requesting the opinion of the ranches upon the map, before it receives final sanction.

The amendment was adopted.

The President of the Council reported that the Premises Committee ad held two meetings since the last Council meeting, but that, at resent, the Committee had only to report the earnest consideration f this matter, and that, so soon as anything definite could be placed efore the Council, it would be reported.

Resolved: That the President of Council, the Treasurer, and Mr. essop, be appointed a Subcommittee to draw up the annual report of ie Council.

Dr. Edward Waters, the Chairman of the Committee, reported, on ehalf of the Medical Reform Committee, that a Bill had been introuced into the House of Commons by Sir Lyon Playfair, and explained n detail the effects of the Bill.

Resolved: That the report of the Medical Committee be adopted.

Mr. Sibley reported, on behalf of the Parliamentary Bills Committee, iat much had been done. A great many Corporation Bills had been xamined for those clauses relating to the public health. The Lunacy ill had been considered by a Subcommittee appointed for the purpose, id the Lord Chancellor had adopted most of the suggested modifications.

Resolved: That the Report of the Parliamentary Bills Commit be eceived and adopted.

It was moved and seconded:

That the Council authorise and request the Chairman of the ouncil, the Chairman and Secretary of the Collective Investiation Committee, and such other persons as they may think fit associate with themselves, to form a deputation to certain of the orporations of the City of London, to ask if they would be willing to ontribute from their funds towards the carrying out of the scientific vestigations into the distribution, the causes, and the treatment of sease, which this Association has undertaken with a view to the prootion of the general interests of the community in the matter of pubhealth.

Whereupon an amendment was moved and seconded:

That the consideration of this question be deferred to the next meeting of the Council.

The amendment having been put from the chair, the same was declared to be carried.

The amendment having been put as a substantive motion, was also declared to be carried.

Resolved: That the Branch Organisation Subcommittee be requested to consider and report upon any alteration of By-law 17, which it may now be necessary to adopt for the election of representatives of Colonial and Indian Branches.

Resolved: That the minutes of the Trust Funds Committee of the 13th instant be approved, and the recommendations contained therein carried into effect.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

On the Toxic Substances contained in Normal Organisms and in Normal Urine.—The Therapeutic of Urethan.—The Dangers of Cucaine.—The Trichophyton Tonsurans.—General News.

AT the meeting of March 22nd at the Paris Aeademy of Sciences, M. Bouchard, Professor at the Paris Medical Faculty, read a paper on the toxic substances existing in normal organisms, and especially in normal urine. All the chemical constituent principles of the animal organism can become hurtful when present in too large proportions. Oxygen, in too small quantity, produces death; in excess, it has the same effect. Water, a most necessary element in the animal organism, kills, if more than the eighth of the weight of the animal be introduced into the blood. Sodium-chloride regulates the phenomena of osmosis, which are essential to the process of nutrition; this substance produces death if more than one part of it to every four hundred parts of the weight of the animal be introduced into the economy. Other substances, which are also indispensable integral constituents of the animal organism, will, in much lower doses, provoke death. Eighteen centigrammes of potassium-chloride to every kilogramme of the animal's weight will prove fatal. Many other substances, much more toxic, are present in the animal economy. The human organism, like that of other animals, is impregnated with toxic substances, either introduced there or developed. These substances, in consequence of food being constantly taken, and uninterrupted nutrition going on, increase and accumulate. Nevertheless, poisoning does not ensue in a normal condition. There are three different preventive causes: the poisons are destroyed by intra-organic oxidations; others are arrested and destroyed by the liver; the principal part is excreted by different emunctories. When normal urine is injected into the veins of an animal, the pupil contracts. After ten, twelve, fifteen cubic centimètres of urine have been injected, myosis becomes more and more marked, until the pupil resembles a pin-hole; the respiratory movements become quicker and shorter, the animal grows weaker, it moves with difficulty, and finally sleeps. Urinary secretion is increased; the animal also frequently passes urine; the injection of urine does not increase any other secretion than that of urine. Temperature becomes lower; palpebral and corneal reflex action is lessened, often exophthalmos occurs; finally, death results, generally without convulsions; sometimes, there are slight muscular contractions, and, under certain conditions, opisthotonos. Heart-beats are observed after death, also the contractility of striated and non-striated muscle. The pupil either remains contracted, or in some cases dilates. If a lower dose of urine than the one specified be injected, one sufficient to produce coma, but not to cause death, the respiratory movements are short and feeble, the animal is cold, presents stenosis of the pupil, and has polyuria. Urine escapes every ten minutes. The superficial vessels dilate; the arterial pulsations are so intense, that they are perceived in the end of the ear. The animal then becomes less torpid, its temperature increases, and its pupil dilates; it regains its normal condition without any pathological condition ensuing. Albuminuria rarely occurs with injection of normal urine; when it does, it is always very slight and transitory. With some kinds of pathological urine, it is constant; hæmaturia is sometimes produced. When a fluid of a lower temperature than that of an animal is injected into its veins, its temperature is lowered, in consequence of the equilibrium which is established between the body and the fluid injected; but this effect is only transitory, and an increase of temperature quickly follows the injection. When urine

is injected, the actual animal-heat is lessened. The quantity of urine required to kill a kilogramme of living matter varies. It is influenced by external considerations. The same person, at the same hour in the day, may, according to the larger or smaller quantity of fluid he imbibes, furnish urine which is toxic in doses of ten or ninety cubic centimètres. The more urine is diluted, the less toxic it is; like distilled water, it may be toxic in doses of 122 cubic centimètres to every kilogramme; it can even be less toxic than distilled water. Certain solid toxic substances contained in urine weaken the power that water has to make the blood-corpuscles swell and dissolve. The average toxic power of the urine of a normal adult is 45 cubic centimètres of urine to every kilogramme of living matter. A healthy adult man eliminates every twenty-four hours for every kilogramme of his weight a sufficient quantity of urinary poison or "urotoxin" to kill 464 grammes of living matter. His urotoxic co-efficient is, therefore, 0.4645. He would take two days and four hours to produce enough urinary poison to be acutely toxic. M. Bouchard's further researches will be made to ascertain the quality and intensity of urinary toxicity under different conditions, cerebral activity, muscular activity, sleep, different kinds of food, etc.; also to determine what are the substances on which this toxicity depends.

MM. Mairet and Combemale have addressed the following communication to the Academy of Sciences. "We have administered urethan 300 times, to 37 insane patients, with whose form of insanity we were acquainted. The doses varied from half a gramme to 5 grammes, given in twenty-four hours. When we administered urethan to insane patients, with whose symptoms and condition we were not thoroughly acquainted, it was given to them several times. The mental affections of the patients may be classed as follows: mania, 13; lypemania, 2; imaginary persecution, with sensorial faculties perverted, 3; insanity, consecutive to mania or lypemania, 9; insanity, consecutive to atheromasia, 3; paralytic madness, 7. In paralytic insanity, and insanity from atheromasia, strong doses of urethan did not have any hypnotic effect. In the other forms enumerated, the effect varied according to the excited state of the patient; when this is very intense, the drug does not have any hypnotic effect, but appears to increase the excitement. In less excited conditions, urethan produces sleep, which is calm, regular, and free from nightmares; the patient wakes up easily from a slight noise, or any other disturbing influence, but quickly falls asleep again. Sleep from urethan generally lasts from five to seven hours, and is not followed by any disagreeable sensation. Nutrition does not appear to be affected by urethan, even though it be given during fifteen days. From 2 to 5 grammes produce sleep, but not smaller doses; if 5 grammes be given as a first dose, and fail, it should not be continued. Its action is generally quick; sometimes two or three hours elapse before sleep results. Its action is not lasting; after two or three days, or six or seven days, according to the patient, it fails to produce sleep; its use must then be discontinued during some days. The earlier and the sounder the sleep resulting from its influence, the sooner is that influence exhausted." MM. Mairet and Combemale's physiological researches on the action of urethan, published in the *Comptes Rendus de la Société de Biologie*, 20th March, 1886, indicate that this substance acts directly on the nervous system.

M. Javal, at a recent meeting of the Academy of Sciences, stated that he has twice observed a half milligramme of cucaine produce obscurity of vision, also rendering extremely hard an eye with a glaucoma at the onset. This effect has also been observed in Germany. M. Javal recommends the use of gelatine tablets, instead of collyria, when experiments are made with given quantities of a remedy, and especially when energetic remedies are placed in the hands of patients.

At a recent meeting of the Biological Society, M. Duclaux stated that Grawitz, in a recent work, says that he believes he has identified the oïdium lactis with the fungus of herpes tonsurans, of favus, of pityriasis versicolor, and of aphthæ; furthermore, he believed that he had identified the fungus of aphthæ with that of mycoderma vini. M. Duclaux has controlled these experiments; he cultivated, in veal-broth, fluid removed from the pustules frequently met with round patches of herpes, and always obtained the trichophyton fungus, which, cultivated in milk, was perfectly successful, but did not result in the appearance of oïdium lactis; neither did he obtain the microsporon furfur and the mycoderma vini. Pure cultivations of the fungus of favus, and that of herpes, demonstrate the difference between these two. Grawitz has since admitted that he was wrong in assimilating *Trichophyton tonsurans* to *Achorion Schœnleinii*, and *Oïdium albicans*. M. Duclaux believes that Grawitz was misled by the variety of forms and modes of fructification observed in *Trichophyton tonsurans*. M. Duclaux showed to the Society a guinea-pig, inoculated by scratching its skin with a steel point which had been dipped int an artificial cultivation-fluid. The part scratched showed true alo pecia. The affected hairs presented all the characteristics of tinea o human beings, described by M. Balzer in his memoir on this subject

Dr. Dujardin-Beaumetz, in his report on hydrophobia, to th Conseil d'Hygiène, makes the following statement. A man was bitte by a mad dog about two months ago; he paid no attention to th circumstance, and died on the 11th of last month. Two children ha been bitten by the same dog; the day after the man's death they wer taken to M. Pasteur's laboratory. At present, they are free from sym ptoms of hydrophobia. M. Dujardin-Beaumetz further stated tha this is the first death from hydrophobia that has occurred since M Pasteur's communication, whereas, at the corresponding period las year, there were twenty deaths from hydrophobia.

The Conseil d'Hygiène Publique de Salubrité, of the department o the Seine, has sent to the Prefect of Police its report on the contagiou diseases of animals in the Seine Department, during 1885. During 1885, 518 animals were ascertained to be mad: 503 dogs, 13 cats, 2 horses; 527 doubtful: 513 dogs, 13 cats, 1 goat. The number of bite from animals not ascertained to be mad was 655; bites from animal declared mad, 64, followed by 19 deaths; stray dogs taken away from the street, 4,348; 4,026 were killed, 844 used for experiments, 19 given back to their owners. The canine population is 69,768. I 1885 there were 518 cases of hydrophobia; in 1884, 301.

M. Jules Ferry has visited M. Pasteur's laboratory, and witnessed the inoculations. M. Ferry assured M. Pasteur that, notwithstanding certain unavoidable delays, the Chamber would certainly supply the funds necessary to organise a Pasteur Institute. M. Ferry was then shown the laboratories where the different forms of rabid virus are prepared.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The Owens College.—Unhealthy Dwellings—Provident Dispensaries.

THE Owens College students have been very successful, at the recent examinations in anatomy and physiology, at the College of Surgeons and Conjoint Board of the Colleges of Surgeons and Physicians. As no test-examinations have been held by the authorities, and as, moreover, several old students have gone up who have not been attending the classes during the past winter session, it is not possible to estimate the exact number in the "pass and pluck" list. From what I can learn, it appears that thirty-one men went up, and only two men failed in both subjects, though several others made their appearance in the "anatomy only" or "physiology only" lists. This success is the more noteworthy as, last year, the College had the misfortune to lose both Professors in each department, and thus, in a sense, the session began with new men; and it is certainly to the credit of all concerned that the students should have come out so well in the pass-list. Professor Stirling begins his work at the College early in May, giving a course of practical physiology. I hope he will be prevailed upon, when he has settled down to his work, to give some physiological demonstrations or lectures to the members of the profession—in fact, a post-graduate course—as I feel sure they would be well attended and much appreciated. This might also be done with advantage by some of the other professors.

Last year, the City Council appointed a Special Committee, "to inquire and report upon the dilapidated or unsanitary dwelling-houses within the city, especially such as are situated in courts approached by narrow or covered passages, also those in *cul-de-sac* streets, with a view of their improvement or removal." This committee reported last year that the number of dwelling-houses which came within their instructions was very large, and they asked to be allowed to make use of the powers conferred by the Artisans' and Labourers' Dwellings Acts. Since September, the committee have been proceeding to carry out certain improvements in connection with these unsanitary dwellings; but the great difficulty which stands in the way of a complete removal of these slums, is the question of compensation to owners. Many of the owners in question acquired their property in the good times of ten or twenty years ago, and appear to expect that they should receive something like what they gave for it at a time when household property in the city was of far greater value than at present. It is to be feared that these are making their influence felt in the Council, with the result of seriously checking, if not of completely paralysing, the praiseworthy efforts of the committee, in endeavouring to make a clean sweep of the courts "unfit for human inhabitation." The *Manchester Guardian* is endeavouring to arouse public opinion in this matter, and the sooner the ratepayers insist upon the public health being put before private interest, the better.

The paper controversies concerning the abuse of the Provident Dispensaries, appear to have come to an end, leaving rather a sense of utter weariness of the whole subject, than having come to any definite conclusion as to their alleged abuse. The largest and the most flourishing dispensary, namely, the Pendleton Dispensary, was the one against which abuses were urged. The whole question largely turns upon "what constitutes abuse of a provident dispensary?" Each candidate for admission is taken or refused on his merits, by the local committee, the acting committee of which is composed of working men; and it s hardly to be wondered that, with a keen eye to making the dispensary pay, and have a good balance at the end of the year, they admit those who would, by many less interested persons, be thought unsuitable members. Doubtful cases are, apparently, referred to the District Provident Society for investigation and report; but, as the Provident Dispensaries constitute a branch of the above society, their investigations somewhat savour of the left hand inquiring into the doings of the right hand. Probably, no rules or machinery of any description will prevent occasional abuse, of the grosser kind; but it would certainly be a satisfaction to learn, that, from time to time, an entirely independent investigation was made of the books and members of the Provident Dispensaries, by some competent authority. There would, however, always remain the difficulty, that small shopkeepers and others may altogether misrepresent their incomes.

NEWCASTLE-UPON-TYNE.

[FROM OUR SPECIAL CORRESPONDENT.]

Industrial Exhibition.—Pathological Society.—Sick Children's Hospital.—College of Medicine.—Death of Mr. Manford.

It has been decided to hold an Industrial Exhibition in Newcastle next year, to celebrate the jubilee year of the Queen's reign. A section is to be devoted to surgical and medical instruments. The committee for this department includes Dr. G. H. Hume; Mr. Martin, of the firm of Brady and Martin; Mr. McQueen; and Mr. Clark. The three latter are surgical instrument-makers of considerable repute; so that the management of this part of the Exhibition is in good hands, and will, I trust, be successful in bringing together an interesting collection. It was originally intended to hold the Exhibition this year, and on the ground appointed for the site of the new Colleges of Medicine and Science. It has, however, exceeded what was the intention of its promoters, and a larger ground has become necessary. It is hoped that some of the exhibits from the Colonial Exhibition will be brought North and shown here next year.

The last meeting of the Northumberland and Durham Medical Society was held in March, when the officers for the ensuing year were nominated. Dr. G. H. Hume was, I understand, nominated for the President's chair, and Dr. Oliver and Dr. Limont for the post of Honorary Secretary.

The question of a site for the new Hospital for Sick Children will come before the next meeting of the Council. I hear that a very good and well situated ground, about four and one-quarter acres in extent, has been decided upon; but the granting of it may meet with some opposition. The ground belongs to the Magdalene Charity, any surplus funds of which are, according to the original bequest, to be devoted to medical charities. Allowing the hospital to be built on this site would, therefore, be carrying out the original bequest to the letter.

No greater argument for the necessity of a new College of Medicine can be found than the fact that an examination now proceeding for medical degrees cannot be held in the present building, owing to want of room. Upwards of eighty candidates are now undergoing examination for the Durham University degrees. This is the largest number ever examined here at one time, and it speaks well for the popularity and esteem which our professional branch of the University is attaining.

I am sorry to record the death of Mr. F. W. Manford, one of our oldest and most esteemed practitioners. The deceased gentleman commenced practice over forty years ago with the L.R.C.S.Ed. only. After twenty years of harder work than falls to the lot of most men, he obtained by examination the L.R.C.P.Ed., and a few years ago he was elected F.R.C.S.Ed. He was a quiet unassuming man, never seeking professional appointments of any kind, content to follow his own line as a general practitioner; as a result, his practice was a very large one, extending over a considerable radius. Mr. Manford "walked" his practice, scorning the assistance of a carriage; and his death, at the age of 64, may be in some measure attributed to the hard work he had gone through. He died actually "in harness," and his death will be much regretted both by professional and other friends. It was the result of apoplexy, thrombosis, and dilated heart.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

MATERIA MEDICA AT THE CONJOINT EXAMINATION.

Sir,—That the Royal Colleges of Physicians and Surgeons should have limited their demands from candidates for examination in Materia Medica, is a change which is in accordance with the almost unanimous opinion of all who have formed any opinion on the subject; but a careful study of the synopsis and schedule for the first combined examination, bearing date March 11th, 1886, yields some results which are rather astonishing.

The principle of scheduling the more important drugs is excellent, and the limitation of the practical part of the examination is also good; but the details are surely open to criticism. There are only twenty drugs in the whole *Pharmacopœia* with the physical properties of which the candidate is expected to show practical familiarity. A medical student who is unable to recognise, for instance, any preparation of ammonium, sodium, or potassium (saving only the permanganate), who cannot identify nitrate of silver, or any salt of iron, or nitrous ether, quassia, glycerine, tannic or gallic acid, camphor, turpentine, nitrite of amyl, cantharides, or cod-liver oil, need have no fear, it would seem, of failing for this reason to pass a practical examination in Materia Medica at the New Hall of Examination on the Thames Embankment.

He must be aware of the dose and use of quassia, but not necessarily of those of gentian and calumba. He is excused any knowledge of the appearance, dose, or use of nitrate of potassium, podophyllin, copaiba, cubebs, creasote, santonin, pepsin, croton-oil, or even castor-oil. He must recognise the chlorides of mercury, and have theoretical acquaintance with its oxides and iodides (although only one iodide is now officinal); but he is no longer required to give any account of "blue pill," "blue ointment," or "grey powder" (unless these are supposed to be included under oxides of mercury). The white precipitate and the nitrate would also be beyond his ken.

Such are some of the results of the combined wisdom of the two learned Colleges. It was open to them to ask for a really useful practical acquaintance with the pharmacopœia of every-day practice; or, on the other hand, to omit all practical examination. For either of these courses, something might be said; but what can be urged in favour of the present arrangement, it is difficult to see. It can scarcely be expected to be permanent.

During the last few years, the staff of each medical school has had to make an almost annual rearrangement of the curriculum to meet the continual variations in the demands of licensing bodies; but we should count the labours light if it were possible to perceive a steady approximation to a settled and satisfactory system.—I am, sir, yours, etc.,

John Benjamin Hellier, M.D.Lond.,
Lecturer on Materia Medica and Therapeutics in the Yorkshire College, Leeds.

MANCHESTER AND SALFORD PROVIDENT DISPENSARIES.

Sir,—May I be allowed a few words in reply to Dr. Orchard's letter on the above subject in the Journal of April 24th? I shall not concern myself with the quotation from "Surgeon's" letter, because not a single one of his "charges" is applicable to the Pendleton Branch.

I am glad the cry of "abuse" is now quietly dropped, and that some attempt is being made at criticism of the provident dispensary system. The critic, however, only nibbles at the question, and adopts throughout a narrow view of pure self-interest; and his contracted vision can only take in the money element involved, to the exclusion of all the rest. It was not in conformity with such a spirit as this that any good has ever been done by the profession to mankind. Who will deliberately assert that the sole aim of a medical man is to make money out of his patients? And yet such is the only conclusion that can be drawn from those charges and complaints against the provident dispensary system. The explanation given of

the difference between this system and club-practice, again, turns solely on this money view of it, and leaves the question of principle untouched. The strictures passed on provident dispensary medical officers are equally applicable to hospital physicians and surgeons; to all the benefactors of the human race, such as Jenner; indeed, to all who inculcate preventive medicine and promote the public health, and so "deprive medical men of the legitimate earnings of their profession." True enough, "the labourer is worthy of his hire;" and, therefore, I say, let those who are well able to pay be made to pay; but deal leniently with those to whom the "hire," in ordinary circumstances, is a hardship. It cannot be a soothing reflection to any man that he may have been the cause of others going short of bread.

Note the paragraph with regard to the affiliation of the provident dispensaries with the Royal Infirmary, etc. "A case of chronic bronchitis and asthma was sent into the infirmary, to prevent the patient falling into my hands.....Infirmary made use of as a means of mollifying and pleasing dissatisfied provident dispensary patients." Who can envy the state of mind of a man, if he really believe that such small motives as these words imply actuate the conduct of the medical officers or of the dispensary authorities? If the dispensary were conducted on such contemptible principles, from such narrow motives, for such despicable ends, then, indeed, would its enemies have cause to rejoice; for it requires no gift of prophecy to be able to foretell that any institution so conducted is doomed, and deservedly so, to early decay and ruin. Not many cases go into the infirmary, and it is my experience that they go reluctantly. One case that had been for a long time under Dr. Orchard (for "chronic phthisis," he says) was sent into the infirmary, went unwillingly, did not remain there long, was cured at home, and is now in excellent health.

The explanation given of the existence of members of provident dispensaries who receive parish relief may be satisfactory to the author of it, but is not correct; and the statements about sick-entrances are also inaccurate and misleading. Besides this, Dr. Orchard, in his haste to convict the provident dispensary at all costs, not only adopts narrow views of mere self-interest, and makes inaccurate statements, but he is also self-contradictory; for example, "The question of the medical attendance of the wage-earning classes is not to be solved by attending them for almost nothing, and allowing them to have their physic for a penny a bottle. Medical men who endeavour to make money by this system, etc." How can one "make money" out of "almost nothing?" No; a medical man who joins a provident dispensary must not do so in the hope of making money thereby; it is not to be done. (The payments for medicines do not cover the cost in connection with them.)

Let it not be understood for a moment that this is a question between two or three medical men; it has other and far wider issues. To close on 4,000 persons, all told, in Pendleton and its environs, the local branch of the provident dispensaries is a real blessing; and I do not know any of the members that I would not rather attend that way than as private patients. I am not maintaining that the system is perfect, but I do maintain that it has the elements of life in it which may yet make it prosper.—Faithfully yours,

ALEXANDER STEWART.

SIR,—In replying to Mr. Harwood's letter, there is one point to which I should like to refer, because Mr. Harwood purposely avoids it, and, when he quotes extracts from my letters, he takes care not to include it. It is this. No rule exists in connection with the Pendleton Provident Dispensary which states what income should qualify or disqualify a person from becoming a member. When the dispensary was founded, there existed a rule to the effect that families with an income of over thirty shillings a week were ineligible as members; but, after a time, this rule was abolished, because the Committee found that, by adhering to it, they could not procure a sufficient number of members to keep the dispensary going. There is now no limitation as to income. If three families wished to join the dispensary with an income of £2, £3, and £4 a week respectively, the working men's managing committee could admit them, and say that they were not tied down by any rule as regards income, which should prevent those persons from becoming members. We decline to send cases for investigation so long as the dispensary is managed in this manner; and Mr. Harwood need not express his surprise that only one case has reached him "from the whole medical faculty of the district," and that case was not sent to him for investigation.

On March 1st, a patient paid a medical man a bill of about £4; on the 18th, the same person was accidentally observed to come out of the dispensary. This was mentioned to Mr. Harwood, who replied by saying that he would send the case to the Provident Society for investigation. I may mention that the provident dispensaries are worked as a branch of the Provident Society.

"The working members of the district committees we do not blame; as a rule, they are men in whom it would be absurd to look for proper respect for the rights of a great profession. The blame rests on the shoulders of the leading men, who, from being the promoters of a philanthropic scheme, have become the patrons of what I may call a medical co-operative society."

It is not to be expected that a member of Parliament, two magistrates, and two or three of the clergy, would trouble their minds to inquire into the circumstances of persons who might be desirous of joining a provident dispensary.—I am, your obedient servant,

Claremont Place, Pendleton. THOMAS N. ORCHARD.

THE REPEAL OF THE CONTAGIOUS DISEASES ACTS.

SIR,—It is rarely, if ever, that the penalties of sin are limited to the sin-doers, whether the sins are against the civil or moral law. The same principle happily exists in virtue and right-doing. "It is hard that our children and children's children" should suffer for our sins, but it will be so if a person suffering from syphilis will not get a cure before being married. Dr. Rose will easily understand my feelings on this question if he will grant this, namely, "that it is never right to do evil that good may come, or even to prevent the natural penalties of wrong-doing."—Yours, etc., JNO. BROWN, L.R.C.P.Lond.

Bacup.

FOREIGN BODIES IN THE VERMIFORM APPENDIX.

SIR,—Allow me to make a slight correction in Mr. Lovell's reference to my remarks on the above subject. The twenty-four cases referred to are all *unrecorded*, except the one published at the time the paper was read, and were collected from the records of inspections at Guy's Hospital.—Faithfully yours,

Weymouth Street, W. CHARTERS J. SYMONDS.

INCOME-TAX.

SIR,—Will you grant me a small space in your valuable JOURNAL to remind your readers that now, the expiration of the financial year, is the time for giving written notice to the District Surveyor of Taxes of one's intention to claim repayment of income-tax on over-assessed profits for last year, in virtue of Act Vict. 5 and 6, cap. 35, sec. 133? I appeal to your courtesy with the more confidence that, in consequence of my previous letters to you, very many medical men wrote to me from all parts of the country; and, I am happy to say, most of them obtained relief. In one case, of two partners, this will amount tono less than £38: on three different claims, over-assessment for the past year; repayment of £13, and, *ipso facto*, reduction of assessment for next year, from £900 to £510, the real average for the past three years, £1,900, an abatement of £120 for three years, each of the partners having received £255; and, lastly, about £6 in life-insurance premiums for three years. The special forms for professional men to make their returns have been in great demand, and have given satisfaction in all cases.—I am, sir, your obedient servant,

16, Artesian Road, W. ALFRED CHAPMAN.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

THE ollowing appointments have been recently made at the Admiralty.—HENRY A. CLOSE, Fleet Surgeon, to the *Northampton;* ALFRED CROPLEY, Surgeon, to the *Northampton;* ALFRED H. MILLER, Surgeon, to the *Wye;* GEORGE J. FOGERTY, Surgeon, to the Chatham Division of the Royal Marines, Walmer Depôt; WILLIAM EAMES, Surgeon, to Chatham Dockyard; EDWARD SHIPSEY, Surgeon and Agent at Skull; W. H. PATTERSON, Staff-Surgeon, to the *Sapphire;* E. H. SAUNDERS, Staff-Surgeon, to the *Satellite;* CLEMENT ALSOP, Surgeon, to the *Cockchafer;* G. H. H. SYMONDS, M.D., to the *Merlin;* T. J. CROWLEY, M.D., Surgeon, to the *Espoir;* W. MILLER, Fleet Surgeon, to the *Hotspur;* P. C. GORHAM, Surgeon and Agent at Bayleek; G. A. CAMPBELL, Fleet-Surgeon, to the *Euphrates;* JOHN ACHESON, M.D., Surgeon, to the *Grappler;* A. W. MAY, Surgeon, to the *Jackal*, when commissioned.

The Greenwich Hospital pension of £50 a year, vacant by the death of Deputy Inspector-General C. D. Steel, has been awarded to Staff-Surgeon H. T. S. BEVERIDGE, M.D. Dr. Beveridge joined the Royal Navy in 1839, and has seen distinguished service. The *Royal Navy List* informs us that he was Assistant-Surgeon of the *Hastings*,, on the coast of Syria, 1840 (war medal, clasp, Syria, and Turkish medal); served in the *Lightning*, forming part of the Royal Squadron, on the Queen's first visit to Scotland, 1842; sole medical officer of squadron on occasion of return to the continent of Nicholas, Emperor of Russia, 1844; specially promoted; Surgeon of the *Mutine*, actively employed in suppression of slave trade on east coast of Africa, 1845-46; engaged Arab pirates in Somba Bay; capture of the *Princeza Reale* and the *Diana* slave ships, also seven dhows; upwards of three years Senior Medical Officer of the *Imaum* (Commodore' Broad Pendant)

Port Royal; thanked by the authorities of Jamaica for volunteered services during fatal epidemic of Asiatic cholera, 1850-51; Medical Superintendent of Cholera Hospital, in charge also of cholera wards in Royal Naval Hospital; assisted at *post mortem* examination in first two cases that presented; advised coroner to discontinue holding inquests; promoted the establishment of soup kitchen and convalescent house; 5,000 (out of a population of 40,000) died in Kingston, and one-third of the inhabitants of Port Royal succumbed; served in the *Sampson*, Senior Officer's ship, at bombardment of Odessa, April 22nd, 1854; in combined attack of the batteries of (causing expulsion of Russian garrison from) Redoubt Kaleh, May 19th; present at shelling of Russian camp, in the Bay of Katcha, during the landing of the allied armies, September 14th; engaged in combined attack of Fort Constantine and other forts and sea defences of Sebastopol, October 17th, 1854; dismasted in hurricane of November 14th, 1854; received Crimean medal and Sebastopol clasp from the Queen's own hands, holds also Turkish Medal; serving in the *Hawke*, amputated during action in engagement with 22 gun-boats, the forts and batteries of Riga, 1855 (Baltic medal); L.R.C.S.E., M.D. (Edin Univ.); author of *Results of Practical Observations of Asiatic Cholera in various parts of the World.*

MEDICAL STAFF.

Surgeon-Major J. B. Hamilton, M.D., is promoted to be Brigade-Surgeon, *vice* D. Codrington, M.D., retired. Dr. Hamilton entered the service January 19th, 1860; became Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1875. He has no war-record.

Surgeon-Major Franklin Gillespie, M.D., is granted retired pay, with the honorary rank of Brigade-Surgeon. His commission as Assistant-Surgeon bears date October 1st, 1860; Surgeon, March 1st, 1873; and Surgeon-Major, June 1st, 1875. He, also, is without war-experience.

Surgeon-Major D. C. G. Bourns has been placed on temporary half-pay, on account of ill-health. His commissions are dated: Assistant-Surgeon, September 10th, 1864; Surgeon, March 1st, 1873; and Surgeon-Major, September 30th, 1876. He was engaged in the war in Zululand in 1879, and has the medal and clasp therefor; and in the war in Egypt in 1882, in which he was present at Tel-el-Kebir, and has the Egyptian medal and clasp, and the bronze star granted by the Khedive.

Surgeon-Major U. A. Jennings, M.D., has been granted retired pay, with a step of honorary rank. He dates as Assistant-Surgeon from March 31st, 1866; as Surgeon from March 1st, 1873; and as Surgeon-Major from March 31st, 1878. Dr. Jennings is not credited with any war-service in the Army Lists, although he served in Egypt during the latter part of 1884, and far into 1885.

Surgeon-Major J. H. Ussher, M.B., who went on half-pay in March of last year, has now retired from the service with a gratuity. He entered as Assistant-Surgeon, March 31st, 1868; became Surgeon, March 1st, 1873; and Surgeon-Major, March 31st, 1880. Dr. Ussher served in the Ashanti war in 1873-74, and has the medal and clasp.

Surgeon-Major T. W. Orwin died at Palace Chambers, Westminster, after a brief illness, on April 16th, at the comparatively early age of 47. He entered the army as Assistant-Surgeon, March 31st, 1864; rose to Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. He was without experience of war.

Brigade-Surgeon W. H. Pickford, formerly Surgeon-Major Grenadier Guards, and since Surgeon-Major Scots Guards, died on April 13th, in his 52nd year. His commission as Assistant-Surgeon bore date February 19th, 1858; Surgeon, March 1st, 1873; and Surgeon-Major, March 16th, 1881. He went on retired pay, with a step of honorary rank, in March, 1883. The Army Lists do not assign him any war service.

INDIAN MEDICAL SERVICE.

Surgeon-Major G. C. Roy, M.D., Bengal Establishment, Civil Surgeon of Beerbhoom, is appointed to act as Civil Surgeon of Burdwan during the absence on deputation of Surgeon-Major O'Brien.

Surgeon-Major J. Cleghorn, M.D., Bengal Establishment, Civil Surgeon, First Class, on return from deputation, has been posted to the charge of the civil medical duties of the Lucknow district, from March 9th.

Surgeon-Major A. Cameron, M.D., Bengal Establishment, Civil Surgeon, has been promoted from the Second to the First Class, from the date of retirement from the service of Surgeon-Major J. W. Whishaw, and to remain in charge of the Allahabad district.

Surgeon J. Sykes, Bengal Establishment, Supernumerary Civil Surgeon, Second Class, on being relieved by Dr. J. Cleghorn, has been transferred from the Lucknow to the Bara Banki district.

Surgeon-Major E. A. Fitzgerald, Bengal Establishment, Civil Surgeon, Second Class, has been transferred from Meerut to Mainpuri.

Surgeon W. B. Bannerman, Madras Establishment, doing duty 4th Pioneers, is directed to do general duty under the orders of the Deputy Surgeon-General of Her Majesty's Forces, Bangalore Division and Ceded Districts.

Surgeon-Major C. J. F. M'Dowall, Bombay Establishment, is appointed to the medical charge of the 21st Native Infantry, *vice* Surgeon-Major P. Murphy, M.D., appointed Superintendent of Mahableshwur.

Surgeon S. T. Avetoom, Bombay Establishment, placed on general duty Presidency Circle, is transferred to general duty Mhow Circle.

The services of Surgeon W. H. Burke, Bombay Establishment, are temporarily placed at the disposal of the Government in the Civil Department.

Surgeon K. R. Kirtikar, Bombay Establishment, is appointed to act as Professor of Anatomy and Curator of the Museum, Grant Medical College, during the absence of Surgeon W. K. Hatch.

Surgeon M. B. Braganza, Bombay Establishment, is appointed to the temporary medical charge of the 16th Regiment Bombay Infantry, at Suakin, *vice* Surgeon-Major W. C. Kiernander, appointed to the medical charge of No. 1 Field Hospital.

Brigade-Surgeon W. E. Cates, Bombay Establishment, is permitted to return to Italy.

Surgeon V. E. Hunter, having returned from sick-leave, is placed on general duty, Poona Circle, Bombay command.

Surgeon-Major H. W. A. Mackinnon is appointed Principal Medical Officer to the field-force in Upper Burmah.

Surgeon W. G. Birrell, M.B., and R. H. Hall, M.D., are posted, the former to the Mhow Circle, the latter to the Sind Circle, in the Bombay command.

Surgeon-Major C. J. Weir, M.B., in anticipation of sanction to his retirement from service, is permitted to return to England in the troopship *Malabar*, which is to leave Bombay on April 3rd.

Surgeon-Major J. M. Fiddes and Surgeon A. T. Sloggett, serving in Bengal have leave of absence for six months on private affairs.

Surgeons A. L. H. Dixon and H. V. Dillon, on arrival from England, are ordered to do general duty in the British Burmah Division, Madras command.

The undermentioned Surgeons-Major in the Madras command are posted as follows: A. Lewer, doing duty station-hospital, Bangalore, to be Senior Medical Officer south station-hospital, Bangalore; F. Dick, M.D., Senior Medical Officer, Station-Hospital, Rangoon, to be Senior Medical Officer, North Station-Hospital, Bangalore; P. L. Kilroy, in medical charge 2nd Battalion Hampshire Regiment, Burma Field Force, to do duty Station-Hospital, Bangalore; D. C. W. Heather, Senior Medical Officer of the Station-Hospital, Toungoo, to do general duty Bangalore Division and Ceded District; A. H. L'Estrange, on arrival from England, to be Senior Medical Officer, Station-Hospital, Rangoon; R. W. O'Donnell, doing duty Station-Hospital, Toungoo, to be Senior Medical Officer, Station-Hospital, Toungoo.

Surgeon J. Anderson, M.B., in medical charge of Q-1st Royal Artillery, Burmah Field-Force (now at Madras), is directed to do duty at the Station-Hospital at Secunderabad.

The undermentioned gentlemen, all of the Bombay Establishment, have leave of absence for the periods specified. Brigade-Surgeon G. Y. Hunter, for six months on medical certificate; Surgeon-Major I. B. Lyon, Chemical Analyser to Government, and Professor of Chemistry and Medical Jurisprudence at the Grant Medical College, for nine months on private affairs; Surgeon G. E. Fooks, Medical Officer Sind-Pishin Railway, for one year on private affairs.

The undermentioned gentlemen, all of the Bengal Establishment, have obtained leave of absence on medical certificate for the periods specified: Deputy Surgeon-General A. J. Dale, M.B., for 130 days; Surgeon-Major H. B. Purves, for one year; Surgeon-Major G. C. Ross, for one year; Surgeon H. C. Hudson, for 180 days.

Surgeon-General M. C. Furnell, M.D., Surgeon-General with the Government of Madras, is granted furlough for six months on medical certificate.

Surgeon C. B. Maitland, Bombay Establishment, on duty with the Indian Contingent at Suakin, is appointed to the medical charge of the 23rd Native Infantry, *vice* Surgeon J. C. Lucas, M.D., who is transferred to general duty, Mhow Circle.

Mr. Damer Harrison has been appointed Surgeon to the Lancashire Hussars.

Surgeon F. W. Wright, Derbyshire Yeomanry; Acting-Surgeon H. A. Hodson, 1st Sussex Artillery Volunteers; Acting-Surgeon H. L. Davies, 2nd Volunteer Battalion of the Royal Welsh Fusiliers (late the 1st Flint and Carnarvon); Acting-Surgeon E. J. Domville, 1st Devon Artillery Volunteers; and Acting-Surgeon George Pilkington, 1st North Riding of Yorkshire Artillery Volunteers, have resigned their commissions.

The undermentioned Surgeons of Volunteers have been granted the honorary rank of Surgeon-Major: C. S. Hall, 1st Cumberland; H. B. Wood, 2nd Volunteer Battalion of the Buffs (late the 4th Surrey); Thomas Newby, M.D., 1st Lincolnshire Artillery; Joseph Harper, 4th Volunteer Battalion of the Devonshire Regiment (formerly the 4th Devonshire); S. W. Broadbent, 1st Durham; W. Dawes, 1st Volunteer Battalion the Prince of Wales's North Staffordshire Regiment (late the 2nd Staffordshire); and W. H. Platt, of the Volunteer Medical Staff Corps.

William Barter, M.D., is appointed Acting-Surgeon to the 2nd East Riding of Yorkshire Artillery Volunteers.

Acting-Surgeon R. J. Collie, M.D., has been made Surgeon to the 3rd Durham (the Sunderland) Volunteers.

Mr. R. J. Reece has been appointed Surgeon to the Volunteer Medical Staff Corps.

CHANGES OF STATION.

The following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

	From	To
Brigade-Surgeon B. C. Kerr, M.D.	Bengal	Dublin.
,, H. M. Macbeth	Bombay	Weedon.
Surgeon-Major R. W. Davies	Aldershot	Gosport.
,, W. W. Tomlinson	Chester	Malta.
,, J. Macartney, M.D.	Bengal	Dublin.
,, J. Leader	—	Cahir.
,, R. Exham	Cork	Kinsale.
,, R. H. Robinson	Dublin	Curragh.
,, W. C. Grant, M.B.	—	Gosport.
,, A. L. Browne, M.D.	Madras	Chester.
Surgeon C. H. Swayne	Dublin	India.
,, J. Powell	Egypt	Woolwich.
,, G. D. Bourke	Egypt	Portsmouth.
,, H. G. Gardner, M.B.	Devonport	India.
,, P. A. Hayes	—	Portsmouth.
,, M. R. Ryan, M.D.	Suakin	Chatham.
,, H. J. Robbins, M.D.	C. of Good Hope	Dover.
,, T. Boyd	Egypt	Aldershot.
,, P. H. Johnston, M.D.	Cork	India.
,, I. B. Emerson	Berwick	Coventry.
,, A. W. Carleton, M.B.	Egypt	Athlone.
,, B. W. Large	Dublin	Templemore.
,, R. D. Hodson	Hulme	India.
,, C. K. Powell, M.D.	Kinsale	India.
,, J. Armstrong	Dundalk	Bombay.
,, P. M. Ellis	Devonport	India.
,, P. J. O'Sullivan, M.D.	Chatham	India.
,, R. T. Beamish, M.D.	Dublin	India.
,, J. Pedlow, M.D.	Portsmouth	India.
,, H. J. M'Laughlin, M.B.	Netley	India.
,, J. Stevenson, M.B.	Egypt	Devonport.
,, W. L. Lane, M.B.	Jersey	India.
,, P. J. Dempsey, M.D.	Dublin	India.
,, O. E. P. Lloyd	Ceylon	Jersey.
,, A. Harding	Portsmouth	India.
,, H. E. B. Flanagan	Woolwich	India.
,, A. W. P. Inman, M.B.	Dublin	Buttevant.
,, G. W. Robinson	York	Birmingham.
,, J. D. Day, M.B.	Dublin	Mullingar.

Surgeon R. D. Donaldson, M.D.	Dublin		Cork.
,, E. Landon	Bengal		Colchester.
,, W. O. Wolseley	Coventry		India.
,, B. T. M'Creery, M.B.	Bengal		Cork.
,, J. M'M. Bolster	Bengal		Dublin.
,, D. Wardrop, M.B.	Bengal		Portsmouth.
,, H. G. Christian, M.B.	Bengal		Curragh.
,, J. M. Jones	Bengal		Colchester.
,, F. M. Baker, M.B.	Madras		Dublin.
,, P. M. Carleton, M.D.	Madras		Edinburgh.
,, R. W. Barnes	Bengal		Portsmouth.
,, G. H. Sylvester	Bengal		Devonport.
,, M. O. Drury	Mullingar		India.
,, S. A. Crick, M.B.	Salford		India.
,, W. G. A. Bedford, M.B.	Woolwich		Gibraltar.
,, T. B. A. Tuckey	Templemore		India.
,, A. H. Morgan	Buttevant		Cahir.
,, C. W. S. Magrath, M.B.	Portsmouth		Bengal.
,, C. R. Thiele, M.B.	Netley		Honduras.
,, H. P. Birch	—		Dover.
,, H. W. James	Gibraltar		India.
,, R. H. Hall, M.D.	Cork		Bombay.
,, J. F. Burke	Curragh		India.
,, R. Crofts	Sierra Leone		CapeCoastCastle

The undermentioned, appointed January 30th last, have been stationed as follows.

Surgeon M. T. Yarr	—	Beverley.
,, L. P. Mumby, M.B.	—	Portsmouth.
,, C. H. Melville, M.B.	—	Edinburgh.
,, B. L. Mills, M.B.	—	Ayr.
,, R. E. Genge	—	Colchester.
,, G. S. Cardew, M.B.	—	Aldershot.
,, C. A. Renny, M.B.	—	Colchester.
,, H. Thiele, M.B.	—	Chatham.
,, H. Cocks, M.B.	—	Hulme.
,, J. B. Wilson, M.D.	—	Devonport.
,, W. J. Lee	—	Devonport.
,, J. G. Black, M.D.	—	Curragh.
,, J. Kearney, M.D.	—	Dublin.
,, F. W. Hennessy, M.B.	—	Aldershot.
,, F. A. Saw, M.B.	—	Colchester.
,, W. B. Stokes, M.B.	—	Dublin.
,, F. W. G. Hall, M.B.	—	Chatham.
,, A. Kennedy	—	Curragh.
,, G. S. Tate, M.D.	—	Belfast.
,, H. W. M. Kendall	—	Portsmouth.
,, H. P. G. Elkington	—	Portsmouth.
,, R. C. G. Dill	—	Aldershot.
,, J. B. W. Buchanan, M.B.	—	Belfast.
,, F. T. Skerrett	—	Dublin.
,, H. M. Adamson, M.B.	—	Cork.
,, H. M. Ramsay	—	Aldershot.
,, T. G. Lavie	—	Colchester.
,, J. Rose	—	Cork.
,, H. H. Brown, M.B.	—	York.
,, T. H. Corkery	—	Salford.
,, E. H. Locker	—	Portsmouth.
,, W. R. D. Crooke, M.D.	—	Cork.
,, W. P. Squire	—	Devonport.
,, C. L. Walsh	—	Dover.
,, J. J. O'Donnell, M.B.	—	Curragh.
,, S. J. W. Hayman	—	Portsmouth.
,, J. P. S. Hayes	—	Canterbury.

WHAT ENGLISH ARMY-SURGEONS CAN COPY FROM THE SWEDISH MEDICAL CORPS.

SIR,—I gathered some ideas from a recent visit to the Stockholm Garrison Hospital, where I had the pleasure of meeting several very kind Swedish army-surgeons.

Teaching of Ambulance Work to the Body of the Army.—I was informed by the Swedish medical officers that no non-commissioned officer of any corps of the Swedish army could reach such grade, without having first passed an examination in "first aid to the wounded." This is an excellent order, probably owing its origin to Bernadotte, the great soldier who founded the present Swedish Royal House. I take it as quite certain that no person in any army should reach any non-commissioned grade without learning this very simple knowledge so fraught with importance to all soldiers. Every officer should assuredly be put through such a course. It is pitiful to think of men being entrusted with the command of men, yet themselves completely ignorant on all questions of the working of the human machine.

Doubtless, it should be possible to have a "short course" at Aldershot for all army officers to go through a definite system of ambulance instruction; and a certificate should be issued to the officers and men of the army, if they pass a test-examination. It would correspond to the St. John's Ambulance examination in civil life, only it would be an official certificate. Curiously, in our army, ambulance-certificates can be given to volunteers and militiamen, but not to regulars in this work. The certificate is all-important in inducing men to work; but, probably, a step further than Swedish routine is needed in an army like ours, serving in every climate, and exposed to an infinite variety of diseases. After the first ambulance course, there could be a second lecture course on hygiene and health-laws.

We send yearly to India thousands of young English officers and men; 60,000 troops at least are serving in that country. To a man, they are, on landing, completely ignorant of what Indian health-laws are. Of the meaning of sunstroke, dysentery, cholera, liver-disease, ague, malaria, dangers of bad water, they are completely and entirely ignorant.

All health-primers, all mere printed matter, are nearly useless in teaching the great mass of these men. What is wanted is that we, the army medical officers, should teach them in regularly defined health lectures, carried on as a matter of routine, on troopships and in India, with definite examinations and certificates to follow. By so doing, we would vivify and make real the words that Parkes wrote, and make him and his idea a permeating force in that army, of which he was the greatest benefactor. We must carry the rank-and-file army, as a body, with us in such a work, and we will find in such personal lectures immense opportunities of knowing the officers and the men. "The spoken word" is of enormous force in such matters, to ignorant peasant boys who know nothing of that new country in which they are going to serve.

Ignorance and panic often reign, during sickly times, in our Indian barracks. I have seen seventy teetotallers break their pledges in a single night, at a whiff of cholera in the garrison. Why? Because the men were densely ignorant, and we have never taught them. But we can any day begin. Even on the question of those personal contagious diseases rife amongst soldiers, we have never told the men, by lecture, all the facts about them, and what the ailments really mean to present and future physical fitness.

Yet all this would form a "second course" to the "first ambulance aid." All that is needed is an outline syllabus, and an official certificate; and leave it to the energy and individual enterprise of the medical service to do the rest; although I see no reason why a capitation allowance for passing so many men through classes should not be possible.

I think if "science can save," as assuredly it can, science should not be entombed in Parkes's book, and placed on a library book-shelf, but should be a living fact in the minds of the men of the army. This would be our contribution to "army reform," and its effects would be far-reaching to the army and the nation, and to ourselves.

Sanitary Teaching for Military Officers.—In the class-rooms where the Swedish army surgeons go through their secondary instruction, I saw a photographic group of infantry, cavalry, and medical officers. On asking what it was, I was told it was a group of the last hygiene class, made up of these officers. It is highly important to teach this subject to the staff of the army, but I never heard of its being done in our army. It would mean some staff officers going through our Netley course with us, to the probable advantage of both classes of officers.

Germany, of course, teaches her staff officers these subjects; indeed, anyone ignorant of them is neither a true staff officer, nor a true soldier. No man can be a real leader of men who is ignorant of the working power and the working laws of the machine he controls. Every great leader of men has had this idea firmly in his mind; and, whether it be Xenophon in the past, or Turenne, or Saxe, or Marlborough, in later times, all have seen the enormous importance of such knowledge. Our army officers are never taught it.

In the killing fight for sanitary reform, the true method of conquest is to educate your opponent. It is not obstinacy, but ignorance, which blindly opposes progress in this direction.

I believe, then, we can certainly learn of Sweden some new methods of progress. Apart from lessons in teaching work, Sweden has also a very good pattern of battalion medical wagon, such as is used in nearly all armies, except our own, to carry the regimental medicine supplies, and the stretchers of the regimental bearers.

Could not an enterprising volunteer surgeon get a cart like it made, by writing for a plate of it, to the Surgeon-General of the Swedish army, Oberfeldlakaren Endholm, Garrison Sjukhus, Stockholm.

TEACH THE SOLDIER.

THE INDIAN MEDICAL EXAMINATION.

A CANDIDATE asks for information with regard to the amount of knowledge of the natural sciences, more especially chemistry and natural philosophy, required for the Indian medical examination, and the best text-books to read, etc., on the subject. He also asks if the old examination-papers are obtainable; and, if so, where they can be obtained.

HOSPITAL AND DISPENSARY MANAGEMENT.

STAFFORDSHIRE COUNTY LUNATIC ASYLUM, BURNTWOOD.

AT the end of 1884, there were resident in this asylum 573 patients, namely, 307 males and 266 females; there was no vacant accommodation for males, but 34 more women could be received. Of the total number, about 150 were suicidally disposed, and 120 epileptic. The percentage of recoveries on admissions in 1884 was 35.5, not 37, as given in the statistical tables; the error is due to the common, but incorrect, practice of halving the sum of the male and female percentages in order to arrive at the total percentage, instead of making a separate calculation. The percentage of deaths on average numbers resident was 9.6, as compared with 13.5 in 1883; this somewhat high mortality is attributed by Dr. Spence to the fact that "the number of patients admitted suffering from epilepsy, general paralysis, and other forms of incurable brain-disease, is greater in Staffordshire than in most of the other counties." Of the 56 deaths, 11 were due to phthisis pulmonalis, 5 to general paralysis, 6 to sanguineous apoplexy, and 14 to epilepsy; two epileptics died under the age of 15 years. It is impossible not to regret that there should be in any county asylum nine patients between the ages of 10 and 15; though we know that Dr. Spence's past experience at Earlswood well qualifies him for treating such cases.

During 1884, several patients were passed on to their respective workhouses, or to the care of relatives; Dr. Spence reports that, as the cases were selected with great care, very few had been returned to the asylum.

Considering the large number of epileptics, it is satisfactory to find that, during 1884, "no occasion arose for the use of either seclusion or restraint." About 76 per cent. of the men, and 78 per cent. of the women, are regularly employed, and a considerable number walk beyond the grounds.

The Medical Superintendent states that "the substitution of a money-allowance in lieu of the ale ration formerly served out to the attendants and nurses has worked satisfactorily; the patients, however, continue to receive and to appreciate the allowance of beer specified in the diet-table," namely, three-quarters of a pint daily for men, and half a pint for women.

With regard to the statistical tables (among which we are glad to see Table II A), we will only add to what has been already said, that the total recovery-rate in Table III has been incorrectly calculated by dividing the sum of the percentages for all the years by the number of years in question; the figures should, of course, tally with those in Table IV. The total death-rate for the whole period was 11 per cent., not 10.2 as stated.

It is interesting to note that, during the twenty years this asylum had been open, the numbers of male and female cases admitted were equal, namely, 1,316; but that only 188 men recovered, compared with 332 women, while 577 men died, and only 434 women. It would be interesting to hear Dr. Spence's views as regards these exceptional statistics.

LEEDS GENERAL INFIRMARY.

The report presented at the recent annual meeting of the Leeds General Infirmary, was of a more than ordinarily satisfactory manner. During the year, 4,401 in-patients had passed through the institution, being an increase over the numbers of the previous year of 347. There had been 19,106 out-patients, an increase of 2,376. With the large number of 4,401 in-patients, the mortality had been singularly small, being only 3.90 per cent., after deducting the cases in which the patient died within forty-eight hours after admission.

The number of deaths had been less than 4 per cent. of the admissions. A new ward had been opened which accommodated twenty-nine patients. The opening of this ward had raised the number of beds for patients to 270, and they had recently that number in the building. There was an average of fifty empty beds for contingencies, which made a total of 320 beds available for the public. There had also been added a new department—the gynæcological department, with twelve beds, under Dr. Braithwaite, who had joined the honorary staff. A maternity charity had also been established, in accordance with the wishes of the Medical Department of the Yorkshire College. The women who were attended were not those who would have been attended by midwives, too often very inexperienced. There was, of course, a danger of abuse in that, as in other departments of charity, to be guarded against, lest people who could afford to pay for medical or surgical attendance came to the out-patient department, and applied for aid in this maternity branch. It was desired to prevent this abuse; and the Charity Organisation Society had done invaluable service in making inquiries into the circumstances of people who applied for assistance in that department.

Structural alterations had been made in the Operation Theatre, by which better waiting rooms, and a room for the administration of anæsthetics had been provided. A students' room had been added, and the Nurses' Home enlarged. The Hospital Sunday collections showed an increase. While the sources of income were less than in the previous year, the expenses were very much larger; but, owing to an anonymous donation to the infirmary of £1,500, the expenses had been covered. The receipts were £17,273, and the expenditure was £16,510, so that there was a balance of £700.

It was decided to organise a regular system of collection amongst the working classes, and of establishing a Hospital Saturday.

LUNATIC ASYLUM FOR THE CITY AND COUNTY OF BRISTOL.

Here, as in many other asylums, the accommodation available is inadequate to the number of applications for admission; so that, in 1884, it was found necessary to remove forty female patients to the County Asylum at Barnwood. Notwithstanding this, there was, at the end of 1884, vacant accommodation for only ten females, and none for males. We are, therefore, glad to learn from the Committee's report that they were considering the extension and alteration of the asylum; and that, to this end, plans had been prepared and land purchased. The necessity for such enlargement is very manifest on examination of one of the statistical tables, from which it appears that, for some time during the year, there were over 245 females under treatment, while there was really accommodation for only 220.

The recoveries in 1884 were 33.3 per cent. of the admissions. The percentage of deaths on average numbers resident was 7.8, as compared with 14 per cent. in 1883. Of the 34 deaths, 9 were due to general paralysis, and 11 to "other forms of brain-disorganisation." We cannot imagine why these "forms" are not specified.

Dr. Thompson reports that the withdrawal of beer from the ordinary dietary works well, and that the diet has been improved. He also gives an account of the precautions taken in case of fire, which appear to be adequate, though the Commissioners in Lunacy commented somewhat unfavourably on them at their visit in July, 1884.

The staff of attendants seems to require augmenting; three attendants can scarcely be considered sufficient for 67 patients, of whom 30 were epileptics. Were the nursing staff larger, it is probable that seclusion would be required much less frequently; we learn from the Commissioners' report that, in the eight months from November, 1883, to July, 1884, seclusion was resorted to in the cases of 9 men and 23 women, on 22 and 57 occasions, and for a total of 332 hours. On an average, about 50 per cent. of the patients are present at church on Sundays, and a rather larger number at the entertainments.

We hope that, in future reports, the revised statistical tables of the Medico-Psychological Association will be used, in proper numerical order, and including Tables IA and IIA, neither of which appears in the report for 1884. The table showing the causes of death is rendered unnecessarily cumbrous by the inclusion of certain diseases; for example, pernicious anæmia, acute meningitis, peritonitis, etc., which caused no deaths during the year. Had these been omitted, there would have been room for those causes of death from brain-disease, regarding which such legitimate curiosity is excited. The percentage of deaths on the average numbers resident during the twenty-four years the asylum has been open, which is given in Table III as 10.1, should be 11.6.

OBITUARY.

R. D. TAGGART, M.D., Surgeon-Major Royal Antrim Artillery Militia, Carrickfergus.

General and genuine sorrow was felt in Carrickfergus on Saturday evening, April 10th, when it became known that Dr. Taggart had passed away, and shutters were immediately put up in every shop-window. The sad event was not unexpected, as the deceased gentleman had been in declining health for a considerable time past, and some weeks ago it was known that, notwithstanding the care bestowed on him by several of the most eminent medical gentlemen in Ulster, his recovery was hopeless, rapid consumption being the cause of death, at the comparatively early age of 47 years. Dr. Taggart was son of the late Mr. William Taggart, of Thornhill, Antrim. He was educated at the Queen's College, Belfast, and held his degree of M.D. from the Queen's University in Ireland. He was also a Licentiate of the Royal College of Surgeons of Edinburgh.

He came to Carrickfergus in the year 1859, and, by his courteous manner, gentlemanly deportment, and skill in his profession, he soon built up an extensive and lucrative practice. He was coroner for the southern division of county Antrim, and also for the county of the town of Carrickfergus; and the sometimes trying and difficult duties in connection with these offices were discharged by him with the utmost impartiality.

He succeeded the late Dr. L'Estrange as Surgeon-Major of the 2nd Brigade North Irish Division Royal Artillery, and was a general favourite with his brother-officers and the men. He also held the post of certifying factory surgeon for the Carrickfergus district, and surgeon to the Sheils Almshouses, Carrickfergus. In politics, Dr. Taggart was a moderate Conservative, and, at the last contest in the month of November, he was returned in the Conservative interest as one of the municipal representatives; but he did not long enjoy the honour thus won, as the entire election was soon after set aside by the Court of Common Pleas, and a new one ordered, which has not yet been held. The deceased leaves a widow and five children, for whom much sympathy is felt in the bereavement which they have sustained.

Botanic Beer.—At the Nottingham Quarter Sessions last week, Mr. Buszard, Q.C., Deputy Recorder, upon an appeal by the Inland Revenue authorities from the decision of the justices, held Summer's botanic beer, manufactured from fermented sugar and water, and flavoured with herbs, to be beer within the meaning of the Inland Revenue Act, 1885, and that to retail it necessitated the holding of an Excise licence. This decision affects every kind of beer containing over two per cent. of proof spirits.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, March 27th, 6,183 births and 4,603 deaths were registered in the twenty-eight large English towns, including London, dealt with by the Registrar-General in his Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had risen from 24.2 to 29.3 per 1,000 in the four preceding weeks, declined during the week to 26.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Hull, 18.3; Sunderland, 19.6; Newcastle-upon-Tyne, 20.2; Wolverhampton, 22.2; Sheffield, 22.3; Bradford, 23.3; Oldham, 23.6; Brighton, 23.8; Norwich, 23.8; Leeds, 24.7; Birmingham, 24.7; Leicester, 24.7; Derby, 25.6; Salford, 25.9; Cardiff, 26.4; Bristol, 26.5; Nottingham, 26.6; London, 26.9; Liverpool, 27.4; Bolton, 27.8; Halifax, 28.0; Huddersfield, 28.8; Birkenhead, 29.0; Portsmouth, 30.2; Preston, 30.9; Manchester, 31.0; Blackburn, 37.3; and the highest rate during the week, 40.2 in Plymouth. The death-rate in the twenty-seven provincial towns averaged 26.0 per 1,000, and was 0.9 below the rate recorded in London, which, as before stated, was 26.9 per 1,000. The 4,603 deaths registered in the twenty-eight towns included 406 which were referred to the principal zymotic diseases, against 430 and 427 in the two preceding weeks; of these, 164 resulted from whooping-cough, 128 from measles, 32 from diarrhœa, 28 from "fever" (principally enteric), 28 from diphtheria, 22 from scarlet fever, and 4 from small-pox. These 406 deaths were equal to an annual rate of 2.3 per 1,000. The zymotic rate in London was equal to 2.6, while it did not average more than 2.1 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Derby and Halifax, to 4.5 in Bolton, 7.3 in Portsmouth, and 8.6 in Blackburn. The deaths referred to whooping-cough, which had increased in the four preceding weeks from 161 to 195, declined during the week under notice to 164, and showed the largest proportional fatality in Leicester and Portsmouth. The fatal cases of measles, which in the two previous weeks had been 122 and 103, rose again to 128, and caused the highest death-rates in Birmingham, Portsmouth, Bolton, and Blackburn. The 32 deaths from diarrhœal diseases showed a decline from recent weekly numbers. The fatal cases of diphtheria, which had been 18 and 20 in the two preceding weeks further rose during the week under notice to 28, of which 18 occurred in London, 2 in Liverpool, and 2 in Wolverhampton. The 28 deaths referred to different forms of fever, and showed a decline of 4 from the number in the previous week. The fatal cases of scarlet fever, which had risen from 29 to 32 in the three preceding weeks, declined during the week under notice to 22, a lower number than has been recorded in any week on record; this disease was, however, fatally prevalent in Birkenhead. The 4 fatal cases of small-pox returned in the twenty-eight towns were all recorded in Bristol; no death from this disease occurred in London during the week under notice, although the death of a London resident from small-pox was recorded in the Metropolitan Asylum Hospital ship *Atlas* situated outside Registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 7 at the end of each of the three preceding weeks, was 8 at the end of the week under notice; 5 new cases were admitted to these hospitals during the week, against 1 and 2 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 8.9 per 1,000, and considerably exceeded the average. The causes of 82, or 1.8 per cent., of the 4,603 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

During the week ending Saturday, April 10th, 6,120 births and 3,500 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,906,446 persons. The annual rate of mortality, which had declined from 29.3 to 22.2 per 1,000 in the three preceding weeks, further fell during the week under notice to 20.1. The rates in the several towns, ranged in order from the lowest, were as follow:—Hull, 15.5; Bradford, 15.9; Wolverhampton, 16.3; Sheffield, 16.6; Brighton, 16.6; Halifax, 16.7; Norwich, 17.6; Leeds, 17.9; Leicester, 18.3; Birmingham, 18.6; Cardiff, 18.6; Bristol, 19.1; Salford, 19.3; Birkenhead, 19.7; London, 19.9; Sunderland, 20.1; Plymouth, 20.4; Liverpool, 20.6; Nottingham, 21.1; Huddersfield, 21.8; Bolton, 23.3; Derby, 23.3; Newcastle-upon-Tyne, 23.5; Oldham, 23.6; Manchester, 25.6; Blackburn, 26.8; Preston, 27.8; and the highest rate during the week, 28.7 in Portsmouth. The death-rate in the twenty-seven provincial towns averaged 20.2 per 1,000, and exceeded by 1.3 the rate recorded in London, which, as before stated, was 19.9 per 1,000. The 3,500 deaths registered in the twenty-eight towns included 364 which were referred to the principal zymotic diseases, against 406 and 359 in the two preceding weeks; of these, 131 resulted from whooping-cough, 121 from measles, 37 from diarrhœal diseases, 26 from "fever" (principally enteric), 26 from scarlet fever, 21 from diphtheria, and 2 from small-pox. These 364 deaths were equal to an annual rate of 2.1 per 1,000. The zymotic death-rate in London was equal to 2.3, while in the twenty-seven provincial towns it did not average more than 1.9 per 1,000, and ranged from 0.0 in Halifax, Huddersfield, and Hull, to 3.6 in Blackburn, 4.1 in Preston, and 7.7 in Portsmouth. The deaths referred to whooping-cough, which had fallen in the three preceding weeks from 195 to 157, further fell during the week under notice to 131, and showed the largest proportional fatality in Manchester and Derby. The fatal cases of measles, which in the two previous weeks had been 128 and 97, rose again to 121, and caused the highest death-rates in Birmingham, Plymouth, Blackburn, and Portsmouth. The 37 deaths from diarrhœal diseases differed but slightly from recent weekly numbers. The fatal cases of fever, which had been 28 and 30 in the two previous weeks, declined during the week under notice to 26; this disease was proportionately most fatal in Preston. The 26 deaths from scarlet fever showed an increase of 7 upon the number in the previous week. The fatal cases of diphtheria, which had been 22 and 19 in the two preceding weeks, rose again during the week under notice to 21, and included 15 in London. Of the 2 deaths referred to small-pox in the twenty-eight towns, one occurred in Bristol, and one in London (admitted into hospital from Brentford). The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 7, 8, and 11 at the end of the three preceding weeks, further rose to 13 on Saturday, April 10th; the admissions, which had been 5 and 4 in the two previous weeks, were again 4 during the week under notice. The death-rate from diseases of the respiratory organs in London during the week was equal to 4.4 per 1,000, and was considerably below the average. The causes of 77, or 3.2 per cent., of the 3,500 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, having an estimated population of 1,283,977 persons, 889 births and 678 deaths were registered during the week ending Saturday, March 13th. The annual rate of mortality, which had increased in the three preceding weeks from 22.3 to 24.9 per 1,000, further rose to 27.5 but was slightly below the average rate for the same period in the twenty-eigh large English towns. Among these Scotch towns, the rate was equal to 14.t in Perth, 20.0 in Leith, 21.4 in Edinburgh, 23.5 in Aberdeen, 25.4 in Dundee, 25.7 in Greenock, 30.4 in Paisley, and 33.6 in Glasgow. The 678 deaths registered during the week under notice in these Scotch towns included 20 which were referred to whooping-cough, 11 to diarrhœa, 6 to measles, 5 to scarlet fever, 5 to diphtheria, 4 to "fever" (principally enteric), and not one to small-pox; in all, 51 deaths resulted from these principal zymotic diseases, against 51 and 43 in the two preceding weeks. These 51 deaths were equal to an annual rate of 2.1 per 1,000, which was 0.4 below the average zymotic death-rate during the same period in the twenty-eight English towns. The highest zymotic death-rates in the Scotch towns were recorded in Edinburgh, Paisley, and Glasgow. The deaths from whooping-cough, which had been 19 in each of the two preceding weeks, were 20 during the week, all of which occurred in Glasgow. The 11 fatal cases of diarrhœa were considerably below those recorded in the corresponding week of 1885. The deaths referred to scarlet fever, which had declined in the three preceding weeks from 8 to 4, were 5 during the week under notice, and included 4 in Glasgow. The 5 fatal cases of diphtheria exceeded those returned in any recent week; 4 occurred in Glasgow and 1 in Dundee. The deaths from different forms of fever, which had risen from 2 to 7 in the three preceding weeks, declined to 4, and included 3 in Glasgow and 1 in Paisley. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 8.0 per 1,000, against 10.7 in London. The causes of 91, or 13.4 per cent., of the 678 deaths registered during the week in these Scotch towns, were uncertified.

During the week ending Saturday, March 20th, 878 births and 690 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which has increased in the four preceding weeks from 22.3 to 27.5 per 1,000, further rose during the week under notice to 27.9, which was, however, 1.4 per 1,000 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 17.8 in Leith, 19.4 in Aberdeen, 21.4 in Dundee, 23.9 in Edinburgh, 26.2 in Perth, 33.0 in Paisley, 33.4 in Greenock, and 33.9 in Glasgow. The 690 deaths registered during the week in these towns included 46 which were referred to the principal zymotic diseases, against 43 and 51 in the two preceding weeks; of these, 14 resulted from whooping-cough, 11 from diarrhœa, 10 from measles, 6 from "fever," 4 from scarlet fever, 1 from diphtheria, and not one from small-pox. These 46 deaths were equal to an annual rate of 1.9 per 1,000, which was 0.5 below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates during the week were recorded in Greenock and Edinburgh. The deaths from whooping-cough, which had been 19 and 20 in the two preceding weeks, declined to 14, of which 13 occurred in Glasgow. The 11 fatal cases of diarrhœa differed slightly from recent weekly numbers. The 10 deaths referred to measles showed a further increase upon those returned in the two preceding weeks, and included 8 in Edinburgh, and 2 in Leith. The 6 fatal cases of "fever" exceeded by 2 the number recorded in the preceding week; 2 occurred in Glasgow, and 2 in Greenock. The 4 deaths from scarlet fever showed a slight decline, and included 3 in Glasgow and 1 in Leith. The fatal case of diphtheria was returned in Edinburgh. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 8.6 per 1,000, against 11.5 in London. The causes of 85, or 12.3 per cent. of the 690 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, April 3rd, 892 births and 534 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had been 27.9 and 24.7 per 1,000 in the two preceding weeks, further fell during the week under notice to 21.6, and was 0.6 per 1,000 below the average rate in the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 11.5 in Perth, 14.1 in Leith, 17.4 in Greenock, 19.8 in Edinburgh, 19.9 in Aberdeen, 20.1 in Dundee, 22.5 in Paisley, and 25.5 in Glasgow. The 534 deaths registered in these towns during the week, included 46 which were referred to the principal zymotic diseases, against 46 and 62 in the two preceding weeks; of these, 14 resulted from whooping-cough, 11 from diarrhœa, 5 from "fever," 5 from diphtheria, 4 from scarlet fever, 4 from measles, and 3 from small-pox. These 46 deaths were equal to an annual rate of 1.9 per 1,000, which was slightly below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates during the week were recorded in Leith, Aberdeen, and Paisley. The deaths from whooping-cough, which had been 14 and 29 in the two preceding weeks, declined again last week to 14, of which 12 occurred in Glasgow. The 11 deaths attributed to diarrhœa, corresponded with the number in the previous week, but exceeded the average for the season. The 5 deaths from "fever," exceeded the number in the previous week by 1, and included 2 in Edinburgh and 2 in Paisley. The 5 deaths referred to diphtheria also showed an increase upon the numbers in the two previous weeks, and included 2 in Aberdeen. The 4 fatal cases of scarlet fever were returned in Glasgow, and the 4 of measles in Edinburgh. Of the 3 deaths referred to small-pox, 2 occurred in Leith, and 1 (said to be a fatal case of chicken-pox) in Aberdeen. The mortality from diseases of the respiratory organs, in these Scotch towns, was equal to 5.4 per 1,000, against 6.4 in London. The causes of 80, or 15.0 per cent., of the 534 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,269,170 persons, 852 births and 524 deaths were registered during the week ending Saturday, April 10th. The annual rate of mortality, which had declined from 27.9 to 21.6 per 1,000 in the three preceding weeks, further fell to 21.2, but exceeded by 1.2 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 15.1 in Dundee, 17.8 in Edinburgh, 18.5 in Leith, 19.7 in Perth, 22.1 in Aberdeen, 22.3 in Greenock, 23.4 in Paisley, and 24.6 in Glasgow. The 524 deaths registered during the week under notice in these towns included 12 which were referred to diarrhœa, 11 to whooping-cough, 6 to measles, 4 to "fever" (princi

pally enteric), 3 to diphtheria, 2 to scarlet fever, and not one to small-pox; in all, 38 deaths resulted from these principal zymotic diseases, against 62 and 46 in the two preceding weeks. These 38 deaths were equal to an annual rate of 1.6 per 1,000, which was 0.5 below the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns, during the week under notice, were recorded in Edinburgh, Aberdeen, and Greenock. The 12 deaths from diarrhœal diseases differed but slightly from recent weekly numbers. The fatal cases of whooping-cough, which had been 29 and 14 in the two preceding weeks, further declined during the week under notice to 11, of which 9 occurred in Glasgow. The deaths referred to measles, which in the three previous weeks had declined from 10 to 4, rose again to 6, and included 4 in Edinburgh. The 4 fatal cases of fever were within one of the number in the preceding week; 2 occurred in Glasgow. Of the 3 deaths from diphtheria, 1 was returned in Dundee, 1 in Aberdeen, and 1 in Greenock. The fatal cases of scarlet fever, which had been 8 and 4 in the two preceding weeks, further declined during the week under notice to 2, of which 1 occurred in Glasgow, and 1 in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 4.5 per 1,000, against 4.4 in London. As many as 90, or 17.2 per cent. of the 524 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending February 27th, 449 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 27.0 per 1,000. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 26.3; Cork, 24.0; Drogheda, 16.9; Dublin, 29.8; Dundalk, 34.9; Galway, 30.3; Kilkenny, 21.1; Limerick, 17.5; Lisburn, 38.7; Londonderry, 30.3; Lurgan, 15.4; Newry, 28.1; Sligo, 9.6; Waterford, 27.8; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.5 per 1,000, the rates varying from 0.0 in nine of the districts to 7.1 in Londonderry; the 17 deaths from all causes registered in that district comprising 1 from each of the following diseases: whooping-cough, simple continued fever, enteric fever, and diarrhœa. The 112 deaths from all causes registered in Belfast comprised 1 from measles, 2 from scarlatina, 2 from typhus, 3 from whooping-cough, and 1 from diphtheria. One of the two deaths registered in Sligo was caused by typhus. In the Dublin Registration District, the deaths registered during the week amounted to 206. Twenty-four deaths from zymotic diseases were registered in Dublin; they consisted of 18 from whooping-cough, 1 from diphtheria, 2 from cerebro-spinal fever, 2 from simple continued and ill-defined fever, and 1 from diarrhœa. Sixty-one deaths from diseases of the respiratory system were registered; they comprised 47 from bronchitis, 7 from pneumonia, 2 from croup, and 2 from laryngitis. The deaths of 18 children under 5 years of age (including 15 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by apoplexy, 9 by other diseases of the brain and nervous system (exclusive of convulsions), and 7 by diseases of the circulatory system. Phthisis caused 27 deaths, mesenteric disease 4, and cancer 2. Three accidental deaths were registered. In 30 instances the cause of death was "uncertified," there having been "no medical attendant" during the last illness.

In the week ending March 6th, the total number of deaths registered in the sixteen principal town-districts of Ireland was 473. The average annual death-rate represented by the deaths registered was 28.5 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 46.5; Belfast, 30.3; Cork, 29.2; Drogheda, 8.5; Dublin, 29.8; Dundalk, 26.2; Galway, 20.2; Kilkenny, 12.7; Limerick, 31.9; Lisburn, 58.0; Londonderry, 21.4; Lurgan, 10.3; Newry, 21.1; Sligo, 28.9; Waterford, 13.9; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.7 per 1,000, the rates varying from 0.0 in nine of the districts, to 9.6 in Sligo; the 6 deaths from all causes registered in that district comprising 1 from typhus and 1 from diarrhœa. The 129 deaths from all causes registered in Belfast comprised 2 from measles, 2 from scarlatina, 1 from whooping-cough, 1 from diphtheria, and 1 from enteric fever; and the 23 deaths in Limerick comprised 1 from typhus and 1 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 204. Seventeen deaths from zymotic diseases were registered in Dublin; they comprised 1 from typhus, 10 from whooping-cough, 3 from enteric fever, 1 from diarrhœa, etc. Deaths from diseases of the respiratory system, which had fallen from 68 in the week ended February 20th to 61 in the following week, fell during the week to 45. Twenty-eight of the 45 deaths were caused by bronchitis, 5 by pneumonia, and 3 by croup. The deaths of 12 children (including 9 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by apoplexy, 1 by epilepsy, 17 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 22 deaths, mesenteric disease 3, and cancer 8. Four accidental deaths were registered. In 17 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending March 13th, 601 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 36.2 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 5.2; Belfast, 39.3; Cork, 34.4; Drogheda, 33.8; Dublin, 37.8; Dundalk, 34.9; Galway, 43.7; Kilkenny, 33.8; Limerick, 39.1; Lisburn, 29.0; Londonderry, 25.0; Lurgan, 15.4; Newry, 21.1; Sligo, 14.4; Waterford, 41.7; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.5 per 1,000, the rates varying from 0.0 in Galway, Newry, Drogheda, Wexford, Dundalk, Sligo, Lisburn, and Armagh, to 5.1 in Lurgan; the 3 deaths from all causes registered in the last named district comprising 1 from typhus. The 167 deaths from all causes registered in Belfast comprised 4 from measles, 2 from whooping-cough, 1 from enteric fever, and 1 from diarrhœa; among the 53 deaths in Cork were 1 from measles, 1 from scarlatina, 1 from typhus, 1 from enteric fever, and 2 from diarrhœa; the deaths in Londonderry comprised 2 from whooping-cough; and the 18 deaths in Waterford comprised 1 from enteric fever and 1 from diarrhœa. In the Dublin registration-district, the deaths registered during the week amounted to 259. Twenty-four deaths from zymotic diseases were registered; they comprised 1 from scarlet fever, 3 from typhus, 11 from whooping-cough, 3 from enteric fever, 1 from erysipelas, etc. From diseases of the respiratory system, the number of deaths amounted to 69, comprising 55 from bronchitis, and 9 from pneumonia. The deaths of 23 children under 5 years of age (including 20 infants under one year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis caused 26 deaths, and cancer 9. Six accidental deaths were registered. In 38 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending March 20th, the number of deaths registered in the sixteen principal town-districts of Ireland was 579; the average annual death-rate represented by the deaths registered was 34.9 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 36.1; Belfast, 33.6; Cork, 27.9; Drogheda, 46.5; Dublin, 39.6; Dundalk, 21.8; Galway, 30.3; Kilkenny, 29.6; Limerick, 33.7; Lisburn, 9.7; Londonderry, 39.2; Lurgan, 25.7; Newry, 21.1; Sligo, 4.8; Waterford, 41.7; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.7 per 1,000, the rates varying from 0.0 in ten of the districts to 5.3 in Londonderry; the 22 deaths from all causes registered in that district comprising 2 from whooping-cough, and 1 from enteric fever. The 143 deaths from all causes registered in Belfast comprised 2 from measles, 1 from scarlatina, 2 from whooping-cough, 1 from simple continued fever, and 2 from diarrhœa; and the 43 deaths in Cork comprised 1 from each of the following diseases, measles, scarlatina, and diarrhœa. In the Dublin Registration District the deaths registered during the week amounted to 274. Twenty-one deaths from zymotic diseases were registered in Dublin; they comprised 6 from whooping-cough, 1 from cerebro-spinal fever, 6 from enteric fever, 1 from diarrhœa, 2 from erysipelas, etc. The deaths from diseases of the respiratory system amounted to 72; they comprised 41 from bronchitis, and 17 from pneumonia. The deaths of 25 children (including 22 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 8 by other diseases of the brain and nervous system (exclusive of convulsions), and 15 by diseases of the circulatory system. Phthisis caused 33 deaths, mesenteric disease 5, and cancer 9. Six accidental deaths, including 3 from burns, were registered. In 45 instances, the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending February 27th, that the annual death-rate recently averaged 33.3 in the three principal Indian cities; it was 23.9 in Bombay, 38.4 in Calcutta, and 41.3 in Madras. Cholera caused 29 deaths in Calcutta, and "fever" mortality showed the usual excess in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 28.5 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by 4.3 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 35.4, and showed a further increase upon the rates in previous weeks; the 630 deaths included 26 from scarlet fever, and 25 from "fever." In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 19.1, and ranged from 16.3 in Christiania, to 21.3 in Stockholm; diphtheria and croup caused 7 deaths in Copenhagen, whooping-cough 8 in Stockholm, and scarlet-fever 4 in Christiania. In Paris, the death-rate was 28.7, against 26.3 in each of the two previous weeks; the deaths included 35 from diphtheria and croup, 15 from typhoid fever, and 13 from small-pox. The 198 deaths in Brussels gave a rate of 23.3, and included 8 from diphtheria and croup. The rate in Geneva was 25.2, and 2 of the deaths resulted from "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.1, and the several rates ranged from 21.4 in the Hague, to 32.6 in Rotterdam; measles caused 10 deaths in Amsterdam, and 8 in Rotterdam, and 6 fatal cases of whooping-cough occurred in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.9, and ranged from 22.0 in Dresden and 22.5 in Berlin, to 32.5 in Vienna and 35.0 in Prague. Small-pox caused 12 deaths in Buda-Pesth, 9 in Vienna, and 3 in Prague; 11 deaths from typhoid fever occurred in Hamburg; and diphtheria caused the greatest mortality in Berlin, Dresden, Munich, and Trieste. The death-rate was equal to 36.8 in Rome and 31.5 in Venice; small-pox caused 10 deaths in Rome and 5 in Venice, and the deaths in Rome also included 12 from measles and 8 from diphtheria. In four of the largest American cities, the mean recorded death-rate was 22.0, the several rates ranging from 17.9 in Baltimore to 25.1 in New York. Diphtheria and scarlet fever showed more or less fatal prevalence in each of these American cities; and typhoid fever caused 8 deaths in Philadelphia.

It appears from the statistics published in the Registrar-General's return for the week ending March 6th, that the annual death-rate recently averaged 31.6 per 1,000 in the three principal Indian cities; it was 23.5 in Bombay, 30.5 in Calcutta, and 43.9 in Madras. Cholera caused 32 deaths in Calcutta, and diarrhœal diseases 52 in Calcutta, 64 in Madras, and 23 in Bombay; "fever" mortality showed the largest excess in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-two of the largest European cities averaged 29.2, and was 2.6 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 36.0, and the 640 deaths included 34 from "fever," 23 from scarlet fever, 20 from measles, and 11 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 20.1, and ranged from 18.8 in Copenhagen, to 23.6 in Christiania; the 58 deaths in Christiania included 11 from diphtheria and croup, and 5 from scarlet fever. In Paris, the 1,246 deaths were equal to a rate of 28.9, showing a further slight increase upon the rates in recent weeks, and included 50 from diphtheria and croup, 23 from typhoid fever, 12 from measles, and 9 from small-pox. The 217 deaths in Brussels were equal to 25.6 per 1,000; 9 deaths resulted from diphtheria and croup, and 3 from "fever." In Geneva the 40 deaths, of which one was to typhus, gave a rate of 28.8. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 29.0, the rates ranging from 21.7 in the Hague to 32.6 in Amsterdam; the deaths in Amsterdam included 19 from measles, and 12 from diphtheria and croup, and 8 fatal cases of measles occurred in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.0, and ranged from 22.5 and 22.8 in Dresden and Breslau, to 36.0 in Prague, and 36.7 in Buda-Pesth. Small-pox caused 18 deaths in Buda-Pesth, 7 in Vienna, and 5 in Prague; and diphtheria caused the greatest mortality in Hamburg, Dresden, and Munich. The death-rate averaged 30.8 in three of the largest Italian cities, and was equal to 27.9 in Venice, 28.1 in Turin, and 35.2 in Rome; small-pox caused 9 deaths in Rome, and 5 in Venice; and typhoid fever 4 in Turin and 2 in Venice. In four of the principal American cities, the mean recorded death-rate did not ex-

ceed 21.7, and the rates ranged from 16.0 in Baltimore, to 23.5 in New York. Diphtheria and croup caused considerable mortality in each of these American cities, and 11 deaths from typhoid fever were recorded in Philadelphia.

It appears from the statistics published in the Registrar-General's return for the week ending March 13th, that the annual death-rate recently averaged 32.0 in the three principal Indian cities; it was 26.5 in Bombay, 30.2 in Calcutta, and 39.3 in Madras. Cholera caused 32 deaths in Calcutta, and other diarrhœal diseases 59 in Madras, 39 in Calcutta, and 16 in Bombay; "fever" mortality showed the largest excess in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 30.0, and was 2.0 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 38.5, showing a further increase upon the rates in previous weeks; the 684 deaths included 99 from diarrhœal diseases, 29 from "fever," 28 from scarlet fever, and 26 from measles. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 20.5, and ranged from 17.9 in Stockholm to 24.0 in Christiania; the 59 deaths in the last named city included 10 from diphtheria and croup, and 5 from scarlet fever. In Paris, the 1,320 deaths were equal to a rate of 30.6, showing a further increase upon the rates in recent weeks, and included 53 from diphtheria and croup, 22 from typhoid fever, 20 from measles, and 9 from small-pox. The 233 deaths in Brussels were equal to a rate of 27.0 per 1,000; 7 deaths were referred to croup, and 5 to "fever." In Geneva, the 39 deaths included 1 from typhoid fever, and gave a rate of 28.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 30.8, the rates ranging from 25.5 in the Hague, to 36.7 in Rotterdam; measles caused 17 deaths in Rotterdam and 14 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.8, and ranged from 21.0 and 26.6 in Berlin and Breslau, to 35.6 in Trieste and 37.1 in Prague. Small-pox caused 7 deaths in Vienna, 7 in Buda-Pesth, and 4 in Prague; diphtheria caused the greatest mortality in Dresden, Hamburg, Buda-Pesth, and Berlin. The death-rate was equal to 36.0 in Rome, and to 27.5 in Venice; the 228 deaths in Rome included 13 from small-pox, 32 from measles, and 8 from diphtheria. In four of the principal American cities, the mean recorded death-rate did not exceed 24.2, and the rates ranged from 20.1 in Baltimore to 28.3 in New York. The deaths in New York included 49 from diphtheria, 14 from scarlet fever, and 2 from small-pox; diphtheria and croup also caused considerable mortality in each of the three other American cities; and 8 deaths resulted from typhoid fever in Philadelphia.

It appears from statistics published in the Registrar-General's return for the week ending March 20th, that the annual death-rate was recently equal to 23.8 in Calcutta, and to 24.9 in Bombay. Cholera caused 20, and other diarrhœal diseases 24 deaths in Calcutta; and "fever" mortality also showed the greatest prevalence in the same city. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty of the largest European cities averaged 30.2, and was 0.9 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 37.8, and showed a slight decline from the still higher rate in the previous week; the 672 deaths included 31 from "fever," 31 from scarlet fever, 20 from measles, and 14 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 22.4, and ranged from 21.9 in Christiania, to 24.9 in Stockholm; diphtheria and croup caused 10 deaths in Christiania, 4 in Stockholm, and 4 in Copenhagen. In Paris, the 1,271 deaths were equal to a rate of 29.5, and included 51 from diphtheria and croup, 15 from typhoid fever, 11 from scarlet fever, and 5 from small-pox. The 213 deaths in Brussels, of which 8 resulted from "fever," and 9 from croup, were equal to a rate of 25.1; and the 42 deaths in Geneva, including 2 from whooping-cough, gave a rate of 30.2. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 31.9, the rates ranging from 23.2 in the Hague, to 31.9 in Rotterdam; measles caused 16 deaths in Rotterdam, and 9 in Amsterdam; and the fatal cases of diphtheria and croup were 8 in Amsterdam and 6 in the Hague. The Registrar-General's table includes seven German and Austrian cities, in which the death-rate averaged 28.5, and ranged from 22.2 in Berlin, and 24.8 in Dresden, to 34.1 in Vienna, and 37.8 in Prague. Diphtheria showed the greatest mortality in Hamburg and Munich; small-pox caused 5 deaths in Vienna, and 7 in Prague; and 12 deaths from "fever" were recorded in Hamburg. The death-rate was equal to 33.3 in Rome, and to 26.4 in Venice; small-pox caused 11 deaths in Rome and 4 in Venice; and the deaths in the former city also included 25 from measles and 8 from diphtheria. The death-rate was equal to 42.5 in Cairo, and to 40.6 in Alexandria; typhoid fever caused 21 deaths in Cairo, and 5 in Alexandria. In four of the principal American cities, the mean recorded death-rate was 22 9, and the rates ranged from 19.6 in Baltimore to 25.9 in New York. Diphtheria and scarlet fever showed more or less fatal prevalence in New York, Brooklyn, and Philadelphia; typhoid fever caused 15 deaths in Philadelphia, and whooping-cough 18 in New York.

It appears, from statistics published in the Registrar-General's return for the week ending April 3rd, that the annual death-rate recently averaged 30.6 per 1,000 in the three principal Indian cities; it was 24.1 in Bombay, 28.9 in Calcutta, and 40.2 in Madras. Cholera caused 29 deaths in Calcutta, and "fever" showed an exceptionally excessive mortality in Madras. According to the most recently received weekly returns, the annual death-rate averaged 30.1 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by no less than 7.9 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 36.2, but showed a decline from still higher rates in the previous weeks; the 644 deaths included 32 from "fever," and 19 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 23.7, and ranged from 17.1 in Christiania, to 29.1 in Stockholm; diphtheria and croup caused 5 deaths in Stockholm, and 4 both in Copenhagen and Christiania; 5 deaths from scarlet fever occurred in Christiania and 3 in Stockholm. In Paris, the death-rate was equal to 31.1, and exceeded the rate that prevailed in London by 9.2; the deaths included 34 from diphtheria and croup, 30 from measles, and 16 from typhoid fever. The 248 deaths in Brussels, of which 3 resulted from "fever," and 3 from diphtheria, gave a rate of 29.2. The rate in Geneva was 40.3, and 1 death from scarlet fever was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.7, the several rates being 27.4 in the Hague, 30.2 in Amsterdam, and 36.5 in Rotterdam; measles caused 17 deaths in Amsterdam, and 5 in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 30.2, and ranged from 24.0 in Berlin, and 26.1 in Dresden, to 36.1 in Buda-Pesth, and 40.4 in Prague. Small-pox caused 17 deaths in Buda-Pesth, 7 in Vienna, and 4 in Prague; diphtheria showed the greatest mortality in Berlin, Dresden, and Hamburg; "fever" caused 9 deaths in Hamburg, and 7 in Prague. The mean death-rate in three of the principal Italian cities was 30.2, the rate being 29.1 in Turin, 31.1 in Venice, and 31.3 in Rome; small-pox caused 4 deaths in Rome, 2 in Turin, and 1 in Venice; 11 deaths from diphtheria and croup were returned both in Rome and Turin; and 26 fatal cases of measles occurred in Rome. The death-rate was equal to 27.7 in Alexandria, and to 45.8 in Cairo; typhoid fever caused 3 deaths in Alexandria, and 19 in Cairo. In four of the largest American cities, the mean recorded death-rate was 26.1, the rates ranging from 18.1 in Baltimore to 28.7 in New York. Diphtheria, including croup, caused considerable mortality in New York, Brooklyn, and Philadelphia; typhoid fever caused 12 deaths in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ST. GEORGE, HANOVER SQUARE.—This proverbially healthy district maintained its reputation in 1884, its death-rate being only 16.30 per 1,000. This is the lowest rate recorded for the parish, except that of 1883, and it is more than 1.25 below the average rate for the preceding ten years. Dr. Corfield estimates the mean duration of life for the decade to have averaged fifty-one years. The zymotic death-rate was somewhat in excess of the average, owing to epidemics of measles and whooping-cough, diseases over which the Sanitary Authority has but little control. A check was given to the spread of measles, by the closing of infant schools for three weeks. Whooping-cough caused 43 deaths, just twice as many as in 1883, though only a little over the decennial average. Dr. Corfield calls attention to the fact, that increase in deaths from both these diseases followed a year in which the mortality was remarkably small. Diphtheria was very prevalent in London generally, and this district did not escape its visitation. Of the 25 deaths due to this cause, however, 12 were those of non-parishioners, in St. George's Hospital. Small-pox caused 2 deaths, and there were 4 deaths of parishioners from this disease in public institutions. There were also 7 deaths from scarlet fever, 44 from diarrhœa, and 23 deaths from fever.

STAFFORD.—The record of the health of this borough during 1884 does not compare favourably with those of the years immediately preceding, there having been a decrease in the birth-rate, owing, probably, to continued depression in trade, and an increase in the death-rate, due, to some extent, to the severe epidemic of measles which occurred during the earlier months of the year. The birth-rate fell from 35.39 per 1,000 in 1883, to 33.82 in 1884; whilst the death-rate rose from 16.03 per 1,000 in 1883, to 18.92 in 1884. The zymotic death-rate was 2.5 per 1,000. Mr. F. Marsh, the new health-officer, calls special attention to the large mortality from phthisis in the borough, being at the rate of 3.039 per 1,000, and he associates it with the fact that, in Stafford, the level of the ground-water is high, and there is no deep drainage. Having in view the researches of Dr. Buchanan and other eminent authorities, he is of opinion that, if this state of things were remedied, and the soil made drier, there would be not only a lower mortality from phthisis, but a great diminution in the number of cases of catarrh and rheumatism, two affections which prevail extensively in the borough. He would also welcome a better appreciation on the part of the inhabitants generally, especially the working classes, of the benefits of proper ventilation of the bedroom. The drainage of the town is far from being in a satisfactory condition, whilst a good and pure supply of water is urgently needed. The establishment of a public *abattoir* is also recommended by the health-officer.

RANGOON.—Dr. Pedley had to contend with adverse circumstances in his labours for the public welfare during 1884. In the first three months of the year, small-pox was severely epidemic, and there was increased mortality from fevers and other causes. The number of deaths was 4,912, and was 1,530 above the average of the preceding five years, equal to a rate of 36.83. "February and March were serious months; the atmosphere seemed laden with disease." Children who escaped small-pox, had measles or chicken-pox; sore throats were common; mumps was prevalent. Even animals died of contagious pustular fever, and an epidemic of foot-and-mouth disease brought animal vaccination to a standstill. Out of 1,468 cases of small-pox reported, 884 were fatal, and Dr. Pedley feared even greater mortality; but, thanks to the energy displayed in vaccination, the disease subsided in April and May. The opposition of the Burmese and other townspeople to this measure of prevention has somewhat abated. An important success was the winning over of a number of inoculators and Sayas, for whom the Burmese have a profound veneration, and these are now careful and able vaccinators. There were 82 cases of cholera, with 70 deaths. Dr. Pedley finds that the natives show great readiness to report cases, and to seek advice. Their fanaticism does not, however, always allow them to follow it. In an outbreak of cholera in one of the villages, Dr. Pedley tried in vain to persuade the people to relinquish the use of water contaminated with sewage, and to obtain a pure supply from an adjoining lake. As

a last resource, red carbolic powder was thrown in, but 11 cases out of 17 had proved fatal. There was steady improvement in the sanitary work of the town. A most important step was taken in the purchase of plans and models for underground drainage, and a project is in hand for removing the sewage by Shore's hydro-pneumatic system. Dr. Pedley has much to say of the faulty methods of building in Rangoon. Flimsy copies of European dwellings are being run up, in which ventilation is not provided for; and with the generally damp, foul, state of the soil beneath, health must seriously suffer. In the Chinese quarter of the town, there is much overcrowding.

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed their second examinations in Anatomy and Physiology at a meeting of the Board of Examiners on April 14th, and, when eligible, will be admitted to the final examination.

Messrs. D. T. Belding, student of St. Bartholomew's Hospital; and C. R. Lane, of St. Thomas's Hospital.

Passed in Anatomy only.

A. H. Walker, of Charing Cross Hospital.

Passed in Physiology only on April 15th.

Natal Sisca, student of Naples; G. Severs, of St. Mary's Hospital; D. Peters and J. E. Bailey, of University College; A. G. Haydon, of St. Bartholomew's Hospital; J. F. Jones, L. N. Jekyl, and F. G. Cory, of the London Hospital; W. H. Storrs, of King's College; J. D. Price, of Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at a meeting of the Court of Examiners, on April 21st.

Messrs. A. W. Riddell, L.R.C.P.Lond., Bristol, student of Bristol Infirmary; B. S. Lawson, L.R.C.P.Lond., Harley Street, and Charles J. Tabor, L.R.C.P.Lond., Reading, of Middlesex Hospital; S. J. Armstrong, L.K.Q.C.P.I., Wakefield, of Leeds and Charing Cross Hospital; J. T. Henderson, L.S.A., Wibsey, of Leeds General Infirmary; W. R. Baker, L.R.C.P.Lond., Kilburn, N.W., of St. George's Hospital; F. G. Oliver, L.R.C.P.Lond., Nejapatam, India, of University College; S. M. Roome, L.R.C.P.Lond., Cork, of Edinburgh University; H. Davidson, L.R.C.P.Lond., Forest Gate, and F. S. Arnold, Oxford, of St. Bartholomew's Hospital; E. C. Hare, L.R.C.P.Lond., West Bath, of Guy's Hospital; F. A. Bennett, L.S.A., Birmingham, of Birmingham General Infirmary.

One candidate was referred for three months, and nine for six months.

Admitted on April 22nd.

Messrs. J. E. N. Joly, L.R.C.P.Lond., Oppidem Road, E. F. Trevor, Harlesden, and E. F. Bright, Bournemouth, students of University College; C. W. Turner, Leeds, J. T. Walker, Rexborough, T. W. Cundall, York, W. Greenwood, Ossett, of Leeds General Infirmary; H. E. Brodrick, Bury St. Edmund's, of Liverpool and Newcastle-on-Tyne Infirmary; H. E. Gough, Manchester, of Manchester Royal Infirmary; G. E. Deacon, Hethersett, E. J. Tatham, Highgate, G. R. Williams, L.R.C.P.Lond., Stroud Green, and R. H. Chapman, Richmond, of St. Bartholomew's Hospital; F. W. Smith, B.A.Cantab., Sherborne, of Cambridge and Guy's Hospital; P. S. Webster, L.R.C.P.Lond., Lincoln; and G. T. Collingwood, Brockley, S.E., of the London Hospital; W. Bett, Holbeach, and G. E. Halsted, Newark, of Guy's Hospital; W. S. Colman, Peterborough, of Edinburgh University; A. B. Woakes, Harley Street, W., R. Nairn, Kennington Road, and L. W. Burton, Burton-on-Trent, of St. Thomas's Hospital; W. P. G. Graham, Cambridge, T. Redmayne, Newcastle-on-Tyne, and C. G. May, Dublin, of London Hospital and Cambridge University.

Three candidates were referred for three months, and eight for six months.

Admitted on April 26th.

Messrs. G. W. Davis, L.R.C.P.Lond., York Road, S.E., student of St. Thomas's Hospital; T. C. Pagden, Epsom, C. T. Lyne Dixon, Camden Road, R. G. Cross, Petersfield, A. E. Lyster, L.S.A., Walthamstow, A. S. Tredinnick, St. Austell, Cornwall, H. P. Cholmeley, Duke Street, Adelphi, and W. H. George, Probus, Cornwall, of St. Bartholomew's Hospital; W. B. Colquhoun, L.R.C.P.Lond., Upper Clapton, E., and C. G. Wallis, Woolwich, of Guy's Hospital; W. J. Spoor, Gloucester Place, of Middlesex Hospital; G. W. Blomfield, L.S.A., Hastings, C. H. Walker, Great Yarmouth, and A. A. Howell, Wrexham, of the London Hospital; J. M. France, Guildford Road, and W. Bowden, Hilldrop Crescent, of University College; W. E. Evans, Torquay, and G. Michelmore, Gloucester Street, of St. George's Hospital; Absolom Georges, Percy Circus, of King's College.

Seven candidates were referred for three months, three for six months, and one for nine months.

Admitted on April 27th.

Messrs. C. H. Evans, L.R.C.P.Lond., Winchmore Hill, student of University College; W. R. Clay, L.R.C.P.Lond., Westwich Gardens, W., of Middlesex Hospital; A. J. Gore, L.R.C.P.Lond., Victoria, Australia, C. A. Parker, L.S.A., Alford, Lincolnshire, and S. E. Ward, L.S.A., Havershill, of St. Bartholomew's Hospital; E. A. Burnside, L.R.C.P.Lond., Richmond Road, W., of King's College; C. B. T. Langton, L.R.C.P.Lond., Brixton, of Manchester and St. Thomas's Hospital; L. Bidwell, L.R.C.P.Lond., Blackheath, of Guy's Hospital; S. S. Sprigge, Milner Terrace, S.W., of St. George's Hospital and Cambridge University.

Admitted on April 28th.

Messrs. Alfred Fisher, L.R.C.P.Edin., Liverpool, student of the Royal Infirmary, Liverpool; F. Norman, L.R.C.P.Lond., W. F. Mitchell, L.S.A., Granville Square, W.C., of St. Bartholomew's Hospital; J. E. Nevins, L.S.A., of Liverpool, of Liverpool and Guy's Hospital; E. Buckell, L.R.C.P.Lond., Romsey, and J. Melhuish, L.R.C.P.Lond., Belsize Park, of University College; E. Vallance, L.R.C.P.Lond., The Deanery, Stratford, E., H. Holyoake, L.R.C.P.Lond., Droitwich, and T. N. Thomas, L.S.A., Solva, Pembrokeshire, of the London Hospital; C. D. Christmas, L.S.A., Hammersmith, and H. O. Grenfell, L.R.C.P.Lond., Calstock, Cornwall, of Charing Cross Hospital; C. W. Daniels, M.B.Cantab., Manchester, of Cambridge and London Hospital; G. Varley, Stanningley, of Middlesex Hospital; A. Rigden, L.R.C.P.Lond., South Kensington.

The following gentlemen passed their primary examinations in Anatomy only, at a meeting of the Board of Examiners, on April 14th, and, when eligible, will be admitted to the pass-examination.

Messrs. E. D. Rees and S. V. Duncan, students of King's College; W. Hichens and M. A. Kirton, of London Hospital; A. L. Devenish-Meares and F. G. Vicars, of Guy's Hospital; J. W. Hudson, of Middlesex Hospital; E. Lambert, of Leeds School of Medicine; J. C. McLearn, of Dublin, G. D. Parker, T. G. Bokenham, of St. Bartholomew's Hospital; C. Mattei, of Malta, and St. Thomas's Hospital; R. G. Greenwood, of University College; R. F. Berry and R. Stuart, of St. George's Hospital; and A. S. Phillips, of St. Thomas's Hospital.

Passed in Physiology only.

A. Ehrmann, C. H. Miles, F. H. Haines, W. W. Williams, H. Lloyd, J. H. Harrison, and F. W. Barton, of University College; R. F. Gordon, H. J. Tizard, J. H. E. Austin and S. D. Graham, of St. George's Hospital; W. G. Beyts, C. G. Thorp, E. E. P. Tindall, and C. D. H. Rygate, of Guy's Hospital; W. G. R. Farquharson, R. B. Ferguson, and C. Graves, of St. Mary's Hospital; H. S. Challenor, of Middlesex Hospital; A. H. Howell, of London Hospital; T. E. Pallett, of Westminster Hospital.

Passed in Physiology only on April 15th.

H. J. Holman, F. T. Troughton, G. Pender Smith, and J. P. Pendlebury, of London Hospital; R. A. Smith, of University College; E. Webster, of St. Thomas's Hospital; F. C. Wood, of the London Hospital; A. W. Lyons, of King's College.

UNIVERSITY OF ABERDEEN.—At the April graduation term, the following results were announced.

Degree of M.D.—J. H. Anderson, M.A., M.B., C.M., Stonehaven; J. M. Booth, M.A., M.B., C.M., Aberdeen; W. Geddie, M.B., C.M., Accrington; J. Inglis, M.A., M.B., C.M., Kirkley, Lowestoft; P. W. MacDonald, M.A., M.B., C.M., County Asylum, Dorchester; F. R. Mutch, M.A., M.B., C.M., Nottingham; J. Reid, M.A., M.B., C.M., Adelaide; J. T. Robb, M.A., M.B., C.M., Tottenham, London; W. Stericker, M.A., M.B., C.M., Dulwich Grove, London; P. A. Sullivan, M.A., M.B., C.M., Carlisle.

Degrees of M.B. and C.M.—C. M. Aird, Wakefield; H. Angus, Arbroath; C. A. Arnold, Chichester; J. M. Barnes, Foulsworth, Manchester; J. F. Binnie, M.A., Aberdeen; G. Burgess, Grantown-on-Spey; A. W. Chapman, Manchester; F. L. Collie, Viewbank, Cults; W. Davidson, Kinneff; J. S. Dickie, Aberdeen; J. C. G. Duffus, M.A., Cullen; G. Forbes, Tarland: J. Galloway, M.A., Inverurie; W. Greig, Tyrie; A. G. R. Ingram, M.A., Rothiemay; J. T. Lewis, Aberdeen; P. J. Lumsden, India; D. G. G. Macdonald, Inverness; J. Malcolm, Ashbourne, Derbyshire; W. Milligan, Old Aberdeen; A. Milne, Aberdeen; J. Murray, Galashiels: C. Reid, Aberdeen; J. Russell, M.A., Insch; W. Scatterty, M.A., Kennethmont; A. Simpson, M.A., Aberdeen; D. A. Shirres, Aberdeen; J. W. Smith, Chapel-en-le-Frith, Derbyshire; R. B. T. Stephenson, Aberdeen; J. Taylor, Woodside, Elgin; J. D. Thomson, M.A., Cullen; W. D. Urquhart, Woodside, Aberdeen; G. Williamson, M.A., Elgin; R. G. Wills, Axminster, Devon.

Of the above named candidates, J. C. G. Duffus, M.A., J. D. Thomson, M.A., received their Degrees in Medicine and Surgery with Highest Academical Honours. J. Galloway, W. Milligan, and J. Murray received their Degrees in Medicine and Surgery with Honourable Distinction.

At the same time, A. F. C. Clark, G. N. Wilson, and A. Mackay were certified to have passed all the examinations, but did not graduate.

The following candidates have passed the first division of the first professional examination.

C. Aymer, W. Bromilow, G. J. Buchanan, H. F. Cameron, R. Cumming, J. Fraser, A. P. F. Gammack, W. Goodwin, J. F. S. Hay, J. Johnston, J. Moir, B. W. Mudd, W. E. Munro, M. Murchison, F. Noble, T. M. Rae, G. R. C. Russell, G. R. Scotland.

The following candidates have completed the first professional examination.

J. L. Adam, G. Allan, W. H. Barnby, F. Beetham, A. T. G. Beveridge, R. S. Black, J. H. Collier, R. H. Cook, A. J. Davies, J. Don, A. L. Duke, S. S. Dunn, R. Eatough, A. D. Ellis, G. S. P. Ferdinands, G. G. A. Forsyth, W. M. Francis, A. R. Galloway, R. J. Gladstone, W. Gordon, C. Grant, J. Grant, R. Grant, A. B. M. Gunn, T. W. Illingworth, A. Innes, A. G. Jamieson, J. Johnstone, B. E. Jones, J. Joss, A. Keith, F. T. Keyt, A. Little, G. Macdonald, J. M. Mackay, R. G. M'Kerron, W. Masson, G. Michie, J. Milne, R. H. Nicholson, J. S. Riddell, A. M. Saunders, W. St.J. Skene, J. F. Souter, D. A. Sturrock, W. St. C. Symmers, R. M. Townsend, J. L. Watt, A. M. Will, A. S. Williamson.

The following candidates have passed the second professional examination.

Messrs. W. Alexander, C. Angus, J. Bryce, J. Crevie, J. J. Y. Dalgarno, D. M. Davidson, C. E. Duff, A. D. Forbes, A. C. Hutchinson, F. MacRae, R. Morison, J. Pearson, R. Rannie, G. Rose, J. Shand, C. H. J. Souter, J. Thomson, T. H. Thomson, J. Williams.

UNIVERSITY OF EDINBURGH—MEDICAL DEGREES.—The following is the official list of candidates who passed the first professional examination in April, 1886.

Messrs. J. H. Bayley, H. R. Bellamy, W. H. H. Bennett, J. J. Beveridge, M.A.; W. T. Blackledge, T. P. Blades, R. L. Booth, J. A. Bower, W. Bower, E. W. R. Branch, T. L. Brander, Reginald Broadbent, B. Burger, T. Burns, R. Cattley, Albert Coleman, M. W. W. Cowan, P. Crerar, R. Davies, W. Dickson, D. S. Dixson, J. A. Forrest, W. A. Fowler, W. J. Greenham, A. Griffiths, A. H. Hallen, R. E. Howell, W. H. Hughes, W. Hume, D. Huskie, M.A.; J. Huskie, H. M. Inglis, B.A.; H. Jameson, W. E. Jennings, J. L. Jones, A. B. Kenworthy, J. M. Laughton, A. S. Lawrence, O. R. Lewis, J. S. S. Lumsden, R. Macfarlane, J. T. M'Kay, W. R. Main, F. Mason (with distinction), F. A. Maynard, G. Melville, G. S. Mill, V. Milner, J. L. Morrison, J. M. Morrison, J. P. Morton, A. Nasmyth, A. Newall, A. Nobbs, A. J. Prentice, R. Renton, C. G. Robson-Scott, R. R. Ross, J. C. Rossie, W. V. Sinclair, G. B. D. Smart, A. E. Taylor, C. T. T. Water, D. F. D. Turner, G. Vandewall, J. J. Vernon, G. A. Waith, C. Waterston, A. R. A. Wilhelm, J. Wilkinson, A. Wilson, G. C. Winchester, R. E. B. Yelf, C. W. Yeoman.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April examinations, held in Glasgow, the following candidates passed the respective examinations for the triple qualification conferred by the three Scottish medical corporations.

First Examination.—J. A. Calderwood, A. F. Crinan, L. Watson, and R. P. Williams, of the Glasgow Medical School; A. H. H. Watson, and M. C. Wright, of the Edinburgh School; H. C. Pauli and G. C. Giles, of the Leeds School; W. Cheadle, Owens College; J. Stewart and W. A. Wales, of Queen's College, Belfast; E. S. Leyburn, Dublin; and M. V. C. Marquis, Bombay.

Second Examination.—C. Carruthers, J. F. Challinor, G. Evans, J. Rogerson, J. K. Jones, and A. M'Arthur, of the Glasgow School; A. A. Adie and M. C. Wright, of the Edinburgh School; W. F. Copper, Queen's College, Birmingham; L. P. Jackson, King's College, London; and D. Henderson, Queen's College, Belfast.

Final Examination.—W. E. Bennett, Leeds School; W. Colquhoun, A. E. Thorpe, and H. K. Young, of the Glasgow School; G. R. Nelson and J. Wingfield, of the Edinburgh School.

The following were admitted Licentiates of the Royal College of Physicians of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, under the regulations in force prior to October, 1884.

G. W. Eglinton, of the Liverpool School; E. J. Finlstin, of the Leeds School.

UNIVERSITY OF GLASGOW.—Medical Examinations, April, 1886.—The following gentlemen have passed in the undernoted examinations.

First Professional Examination.—J. B. M. Anderson, G. A. Bannatyne, T. Berry, W. M. Boyd, R. Calderwood, A. Copland, J. Crawford, A. Davidson, M.A., D. Davie, J. P. Dunn, C. J. Fyfe, P. Gardiner, H. W. Gentles, J. Gillespie, G. Gordon, R. Hamilton, C. A. Henderson, J. M. Johnston, R. B. Lothian, G. Mathieson, D. M'Callum, D. M'Intosh, R. D. Mackintosh, C. N. M'Quarie, J. W. Nichol, D. Ramsay, W. Robb, J. Rowan, J. Sandilands, M.A., J. Stewart, P. Stewart, R. Stobo, J. Wallace, R. Weir, M. Whyte, W. E. Williams.

Second Professional Examination.—R. Banks, M. Beattie, M. A. Boyle, A. Campbell, J. Crawford, J. B. Dalrymple, T. J. Davies, F. L. Duncan, F. Fedarb, P. Ferguson, R. J. Freebairn, H. Girvan, A. Gunn, C. H. Hallet, T. W. Hay, W. R. Jack, A. H. Jago, T. W. Jenkins, M.A., T. Laird, G. Lapraik, J. Melville, J. T. C. Mitter, J. F. D. Macara, J. Macarthur, J. M'I. M'Call, D. M'Eachern, J. K. Mackinnon, W. H. M'Kinstry, H. Park, J. S. Rankin, H. R. Sloan, W. Stewart, J. P. Tannock, J. Vallance, J. D. Wilson, J. P. Wilson, R. J. Wylie, J. Young, R. Zuill.

Third Professional Examination.—J. Adam, F. Ashurst, J. Baird, A. Butler, D. Craig, A. D. Crawford, W. J. Daly, J. Dewar, W. Dinsmore, F. Duncan, J. Edgar, M.A., A. G. Faulds, R. T. Ferguson, H. W. Finlayson, W. J. Giblin, J. D. Gordon, A. Gray, H. Gray, R. Greenhill, W. T. Hannah, G. F. Hilliard, R. Hogg, G. J. Imrie, D. Jones, W. Livingstone, J. Love, J. R. Marshall, G. Miller, J. K. Morton, D. Munro, W. H. Murray, J. M'Corkindale, T. L. M'Farlane, T. M'Geoch, M. A. Mackintosh, A. H. M'Lean, W. Mac Lennan, R. A. Macleod, J. MacPherson, W. F. Ness, M.A., T. J. Redhead, R. G. Reid, H. Rhodes, A. H. Richmond, A. Roxburgh, G. Russell, W. Russell, C. E. Scanlan, R. Stevenson, J. M. Stewart, D. Stone, A. Tannahill, E. B. Tant, J. A. Ure, W. Walker, D. C. Watt, R. O. Willis, A. S. Wotherspoon, J. M. Young.

The following have also passed in Pathology.

A. D. Crawford, R. T. Ferguson, A. Gray, R. Greenhill, R. Hogg, D. Jones, W. Livingstone, G. Miller, W. F. Ness, M.A., A. Roxburgh, C. E. Scanlan.

W. F. Phillips has passed the First and Second Examinations (old regulations).

UNIVERSITY OF ST. ANDREW'S.—The following registered medical practitioners, having passed the required examinations, the degree of M.D. was conferred on them on April 21st.

Edward Adam, M.R.C.S.Eng., L.K.Q.C.P.Irel., Liverpool; Robinson Boustead, M.R.C.S.Eng., F.R.C.S.Ed., L.S.A.Lond., Brighton; Harry Davis, L.R.C.P. Lond., M.R.C.S.Eng., L.S.A.Lond., Callington; Alexander Gunn, L.R.C.P. Ed., L.R.C.S.Ed., Edinburgh; Frederick Henry Hume, M.R.C.S.Eng., L.S.A.Lond., London; Charles Frederick Knight, M.R.C.S.Eng., L.S.A.Lond., London; Keith Norman Macdonald, L.R.C.P.Lond., F.R.C.P.Ed., L.R.C.S. Ed., Cupar, Fife; John Edwin Scowcroft, L.R.C.P.Ed., F.R.C.S.Ed., F.F.P.S.Glasg., Bolton; Edward Matthew Shirtliff, M.R.C.S.Eng., L.S.A. Lond., Kingston-on-Thames; Henry Willson, M.R.C.S.Eng., L.S.A.Lond., London.

The following gentlemen also proceeded to the degree of M.D.

Alexander Bowie, M.B., C.M.St.And., L.R.C.P.Edin., L.R.C.S.Ed., London; John Alexander McMunn, M.B., C.M.St.And., L.R.C.P.Ed., L.R.C.S.Ed., Alderney.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, April 22nd, 1886.

Alexander, Sidney Robert, Essex Lodge, Upper Norwood.
Fowler, John Bucknill, Thornton, Hereford.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Medical Officer. Salary, £200 per annum. Applications by May 20th to the Secretary.

COVENTRY PROVIDENT DISPENSARY.—Surgeon. Applications by May 10th to the Honorary Secretary.

CUMBERLAND INFIRMARY.—Assistant House-Surgeon. Salary, £40 per annum. Applications by May 11th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental Surgeon. Applications by May 10th, to G. A. Ibbetson.

DORSET COUNTY HOSPITAL, Dorchester.—House-Surgeon. Salary, £70 per annum. Applications by May 19th to the Chairman of the Committee.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Assistant-Surgeon. Applications by May 21st to the Secretary.

HARTLEPOOL FRIENDLY SOCIETY'S ASSOCIATION.—Dispenser. Applications to T. Tweddell, Reed Street, West Hartlepool.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary £120 per annum. Applications by May 8th.

LEICESTER SICK BENEFIT SOCIETY.—Medical Officer. Applications to J William, 62, Humberston Gate, Leicester.

LIVERPOOL DISPENSARIES.—Three Head Surgeons. Salary, £200 per annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liverpool.

LIVERPOOL DISPENSARIES.—Six Assistant-Surgeons. Salary, £80 per annum. Applications by May 6th, to R. R. Green, 34, Moorfields, Liverpool.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury.—Junior House-Physician. Salary, £50 per annum. Applications by May 3rd.

ROYAL BERKS HOSPITAL.—Assistant-Surgeon. Applications by May 4th to J. F. Hugo.

SEAMAN'S HOSPITAL (late *Dreadnought*), Greenwich, S.E.—House-Surgeon. Salary, £50 per annum. Applications by May 11th to W. T. Evans.

WESTMINSTER GENERAL DISPENSARY.—Honorary Physician. Applications by May 8th.

MEDICAL APPOINTMENTS.

DIXON, H. W., M.B., L.R.C.S.Ed., appointed Assistant-Surgeon to the Gateshead Dispensary.

FOXWELL, Arthur, B.A., M.B.Cantab., appointed Pathologist to Birmingham Hospital for Women *vice* Dr. Saundby, elected Consulting Physician.

HODSON, Francis Octavius, L.K.Q.C.P., F.R.C.I., J.P. for New South Wales and Licensing Magistrate, appointed Medical Officer to the Walgett District Hospital (February 1st, 1886), Government Medical Officer and Public Vaccinator (February 26th) to the Walgett District.

LAWFORD, John Bowring, M.D., C.M., appointed Assistant Ophthalmic Surgeon to St. Thomas's Hospital.

PERCIVAL, Frank, M.R.C.S.Eng., appointed Assistant Medical Officer to the Lunatic Hospital, The Coppice, Nottingham.

REVINGTON, George, A.B., M.B., B.Ch.Univ.Dub., appointed Junior Assistant Medical Officer, Prestwich Asylum.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

BLENKARNE.—On April 25th (Easter Day), at 335, Humberstone Road, Leicester, the wife of W. L'Heureux Blenkarne, M.R.C.S., of a daughter (Eva Cecilia).

MARRIAGES.

REES—DEW.—April 27th, at St. Martin's Church, Scarborough, by the Rev. J. Hughes Rees, M.A., brother of the bridegroom, Robert Rees, M.B., West Bromwich, to Blanche, fifth daughter of the late J. Wormald Dew, Surgeon, Holme on Spalding Moore, Yorkshire. No cards.

SMITH—SHEPPARD.—On April 27th, at Holy Trinity Church, Paddington, by the Rev. H. B. Hyde, M.A., Herbert Arthur Smith, M.R.C.S., L.R.C.P., L.S.A.Lond., of Ealing, second son of the late Thomas Smith, Surgeon, of Wheatley, to Myra Dixon Sheppard, eldest daughter of W. Sheppard, Esq., Surgeon, of Ealing (formerly Ashford).

DEATHS.

ORWIN.—April 16th, at Palace Chambers, Westminster, after a brief illness, Surgeon-Major Thomas William Orwin, A.M.D., eldest son of the late James Orwin, M.D., aged 47.

TAGGART.—At his residence, Carrickfergus, April 10th, Surgeon-Major D. R. Taggart, M.D., Coroner of the County Antrim and County of the town of Carrickfergus, aged 47.

GUY'S HOSPITAL.—The Michael Harris Prize in Anatomy has been divided between Mr. A. Parkin, of Hightown, Yorkshire, and Mr. R. D. Mothersole, of Colchester, both candidates being of equal merit. The Beaney Prize of 30 guineas in Pathology has been awarded to Mr. J. W. Washbourn, of Gloucester.

ST. JOHN AMBULANCE ASSOCIATION.—The third annual meeting of the Gibraltar Centre was held, on March 31st, at the New Assembly Rooms. The Governor, His Excellency General Sir John Adye, G.C.B., presided; and Lady Adye presented certificates and medallions, among the recipients of the latter being the Chief-Justice, Sir H. J. Burford-Hancock.—Brigade-Surgeon A. Clarke has reported to St. John's Gate an excellent case of "first aid," rendered by Gentleman Cadet H. R. Beddowes, now attending his lectures at the Royal Military College. A poor woman was knocked down by a train at Farnborough Station, and had her foot and leg smashed. There was profuse arterial bleeding, and much shock. No surgeon was available; but Mr. Beddoes applied temporary tourniquets, and took such other measures as, undoubtedly, saved the woman's life.

DISPENSING MEDICINES.—"A Chemist and Druggist" writes: "I think the danger arising from incorrectly dispensing medicines might be considerably decreased by the law making it compulsory that all chemists' assistants should be qualified before being allowed to dispense medicines. As the law stands at present, an assistant is allowed to dispense medicines without any legal proof of his capabilities to do so. I might safely say that half the chemists' assistants of the present day are unqualified; and a great proportion of these have not passed the preliminary examination of the Pharmaceutical Society, or any equivalent, which a youth ought to pass on leaving school. Then, again, another great source of danger, to my mind, is the permitting of a qualified chemist to keep as many branch shops as he chooses, managed by unqualified men. In my opinion, if these two great evils were properly dealt with, it would be to the mutual benefit of the public at large and the chemists and druggists themselves."

PRESENTATION.—Dr. Mackie has (in addition to the testimonial reported on April 24th) been presented by the inhabitants of Stagsden with a very handsome Benares tray, inscribed, "Presented to W. J. Mackie, M.D., as a tribute of gratitude from friends at Stagsden, March, 1886." The residents of Astwood have also presented him with a silver fish-knife and fork and cruet.

A LARGE CHILD.—The *New York Medical Journal* has been informed by Dr. E. A. Morgan, of Naros, Illinois, of the birth of a child weighing seventeen pounds. Both mother and child were reported to be doing well.

ST. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE.—The Kirkes Gold Medal and £30 Scholarship have been awarded to Mr. W. H. Hamer, B.A.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Annual Oration, by R. Douglas Powell, M.D., F.R.C.P. Conversazione at 9.15, and Reception by the President. The band of the Royal Artillery will be in attendance.

TUESDAY.—Pathological Society of London, 8 P.M. Mr. R. W. Parker: Obliterative Tracheitis and Bronchitis in Congenital Syphilis. Dr. Hale White: Pathological Histology of Hydrophobia. Dr. Payne: Granuloma Fungoides. Mr. Eve: Granuloma Fungoides of Foot. Dr. Handford: Hepatic Abscess secondary to Pelvic Inflammation. Dr. Norman Moore: Primary Cancer of Thyroid. Dr. N. Dalton: Congenital Stricture of Small Intestine. Dr. Carrington: Double Intestinal Stricture. Mr. Davies-Colley: Spinal Abscess destroying Right Kidney and opening into Duodenum. Dr. Silcock: Psoas Abscess, with Formation of New Bone in Sinus. Dr. Turner: 1. Tubercular Arteritis; 2. Miliary Tubercle in Pulmonary Artery. Dr. Mott, for Dr. Steeves: Malignant Growth of Lip, with Melanosis. Card Specimens—Dr. Payne: Trichorrexis Nodosa. Dr. Handford: 1. Aneurism of Aorta communicating with Pulmonary Artery; 2. Disease of Mediastinal, Lumbar, and Mesenteric Glands. Dr. Sherrington: Spinal Cord from Friedrich's Hereditary Ataxia. Mr. Eve: Multilocular Cyst of Epididymis. Dr. Moore: 1. Hydrocephalus; 2. Gummata of Spleen. Mr. E. H. Fenwick: Villous Tumour of the Bladder. Mr. Ballance: Calvarium showing Perforations from a Case of Hydrocephalus. Mr. Churchill: Central Sequestrum of Great Trochanter. Mr. J. H. Targett: Traumatic Hernia through Diaphragm. Mr. Stoker: Cancer of Thyroid. Mr. Poland: Old Subcoracoid Dislocation of Shoulder.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown. Dr. Matthews Duncan: On Elasticity, Retraction, and Polarity of the Uterus. Dr. Amand Routh: A Case of Serous Perimetritis. Dr. Champneys: On the Artificial Production of the so-called Lymphatic Varix.

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. C. M. Handfield-Jones: On Sudden Death in Pregnancy, Parturition, and the Puerperal State. Dr. W. Ewart: On some Practical Points in Percussion and Auscultation of the Chest.—Ophthalmological Society of the United Kingdom, 8 P.M., Living and Card Specimens. 8.30 P.M., Exophthalmic Goitre; its Symptoms, Pathology, and Treatment. Communications will be made by Drs. Wilks, Bristowe, Hughlings Jackson, Sharkey, Hill, Griffith, and Samuel West, and by Messrs. Lunn, Higgens, Silcock, etc.

FRIDAY.—West London Medico-Chirurgical Society, 8 P.M. Mr. Percy Dunn: Morbid Specimens. Dr. Ball: A Case of Multiple Warts. Drs. Ball and Colcott Fox: Cases of Hereditary Syphilis. Dr. Colcott Fox: Some Cases of Bone-Syphilis in Infants. Dr. Scanes Spicer: A Case of Chronic Cerebral Abscess following Otitis Media, with Account of *Post Mortem* Examination. Dr. Clippingdale: Educational Overpressure of Young Children.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED

QUERIES.

Works on Vaccination.

M.D., M.C. writes: Can you recommend me a good standard work on vaccination that brings all branches of the subject up to the present date, giving statistics of small-pox and vaccination in different countries, the use of calf-lymph, and the advantages of this over human lymph, etc.?

*** There is no one book which now fulfils all these requirements. Leaving out of consideration the articles in different *Systems of Medicine*, the late Dr. E. C. Seaton's *Handbook of Vaccination* is the nearest approach to what our correspondent desires; but it was published in 1868 (Macmillan and Co.), and is, therefore, somewhat out of date. A *Manual of Animal Vaccination*, by Dr. Warlomont, of Brussels, has recently been published by Messrs. J. and A. Churchill; but it has not been specially well translated, and does not say much on vaccination generally. Mr. Ernest Hart's *Truth about Vaccination* (Smith, Elder and Co., 1880) went exhaustively into the statistics of vaccination as a prophylactic against small-pox, and combatted *seriatim* the objections raised to it. This work has, however, been for some time out of print.

Centrifugal Force in Medicine.

H. L. D. asks if the action of centrifugal force has ever been tried in the treatment of disease; if it has not, he proposes to make some experiments on the subject. He believes that there is a wide field for its use in medicine.

Sir Charles Scudamore.

Dr. J. A. Hunter (190, Canal Street, New Orleans, Louisiana, U.S.) writes to say that he wishes to get a picture of Sir Charles Scudamore. An engraving or print, as large and well executed as possible, would be preferred. If not to be had, Dr. Hunter would like a photograph of any portrait or bust in existence. He would like to obtain the address of any member of Sir Charles Scudamore's immediate family who may possess a portrait.

The M.D. Brussels.

Physician and Surgeon asks any gentleman, who possesses the above degree, to furnish him with the following information? 1. What are the subjects for examination, and how many papers are given? 2. Over how many days does the examination extend? 3. What is the average expense, including fare, board, and degree-fee.

The Diffusion of Whooping-Cough.

J. G. writes: A lady, now living in a house where some of the children probably, though not certainly, have whooping-cough (no whoop has yet been detected, but the disease is epidemic just now) is anxious to pay a visit to a family a hundred miles off, where there are several small children. Is it possible that she could convey the infection, supposing it to exist?

Lamprey Oil.

Dr. Burton (Stonehouse, Gloucestershire) asks if any correspondent can give his experience of the action of lamprey-oil, as a substitute for cod-liver oil, and can inform him where it is to be obtained. It is said to contain more iodine, to be thinner in consistence, more palatable, and cheaper than cod-liver oil.

ANSWERS.

Sanitary Science Certificates.

Dr. G. F. Hetherington will find the regulations of the University of Cambridge in the British Medical Journal of September 12th, 1885. Information on the subject may also be obtained by application to Professor Liveing, Cambridge.

Mr. J. H. Trout (Birmingham).—Attendance on a course of lectures on Botany is not necessary.

Diseases of the Eye.

A. D.—Mr. Nettleship's *Student's Guide to Diseases of the Eye* (third edition, J. and A. Churchill) is a concise, and, at the same time, sufficiently complete and practical work, and would, no doubt, be what our correspondent desires.

C. B. A.—By advertisement, or through the hands of a respectable medical agent.

M.D. London will do well to communicate with Mr. R. H. S. Carpenter, 130, Stockwell Road, S.W., Chairman of the Medical Alliance Association.

M.B., M.A.—For a description of the operation for the removal of the uterine appendages see Keetley's *Index of Surgery*, third edition, article "Oöphorectomy," and Mr. Lawson Tait's *Diseases of the Ovaries*, fourth edition.

H. L. Wallis.—Your letter has been forwarded.

Medical Study in Germany.

In reply to A. V., "Armenia" advises no one to go abroad to study who has not already passed through his curriculum and qualified, and who does not know the language fairly. In any other case, it is time wasted, although, as "A. V." says, it is no uncommon thing for students to go there to study without a knowledge of the language. Of the very few teachers who can speak English at all, most of them do so imperfectly, and few sufficiently well to explain medical subjects to students, even if they desired to adopt such an unusual course.

Scalpel.—For surgery, any one of the well known general text-books of Erichsen, Bryant, or Holmes will be sufficient, or probably the forthcoming Dictionary of Surgery of Christopher Heath, which is announced for next week. Mr. Pepper's *Surgical Pathology* may advantageously be read for the department of science of which it treats.

T. P. W.—The fee which should be charged in consultation by the regular medical attendant is double the ordinary visiting fee.

NOTES, LETTERS, ETC.

Enlargement of the Thyroid Gland.

Mr. A. E. Boulton (Horncastle) writes:—Dr. Webb, speaking of enlargement of the thyroid gland, in the Journal of April 10th, states that, with regard to treatment, he has not found any better plan than that used a generation ago; namely, the combined internal and external use of iodine; and with regard to the iodide of potassium, he says, "its effects have certainly seemed to be more pronounced when given uncombined and largely diluted with water."

Now, as the water of Woodhall Spa contains more than six grains of iodine and forty-four of bromine in every ten gallons, principally combined as iodide and bromide of sodium, your readers will be prepared to hear that excellent results have been observed from the use of this water in such cases.

From six to ten ounces of the water, taken twice or three times a day, and a compress soaked in the mother-liquor, applied to the neck every night, persevered in for some months, will, in most cases, effect considerable reduction of the bronchocele; and where patients can afford the time to pay a visit to the Spa, they may expedite matters by a course of baths.

The Bartlett Case.

M.D., F.R.C.P. writes:—I trust you will allow me to supplement your judicious remarks on the trial of Mrs. Bartlett by a suggestion, which appears to me to render much less mysterious than hitherto the part taken by the various actors in the tragedy which was the occasion of the trial. So far as the trial and verdict are concerned, I have nothing to add to the comments in your leader of April 24th, with every word of which I agree. It was admitted on all sides that Bartlett was suffering from what has been variously described as hypochondriasis and hysteria, the chief symptoms of which were some strange fancies, chiefly about sexual matters, and occasional outbursts of sobbing and other emotional displays. Now, in the absence of any severe shock to the nervous system, such as that which would result from a railway accident, or sudden loss in business, the most likely cause for this emotional condition is sexual excess. In the whole of the evidence adduced, there is not a whisper that Bartlett, notwithstanding his curious notions about the propriety of having two wives, cohabited with any woman other than his wife. Is then the story of Mrs. Bartlett with regard to the Platonic relations between herself and her husband not to be believed? For my part, I see no reason to doubt her statements. The truth appears to me to be that Bartlett was an inveterate masturbator, and that, at the time of his death, he was suffering from what Clouston describes as masturbational insanity. Wretched creatures, whose minds are dominated by this disgusting habit, not only abandon the natural exercise of the sexual function, but are also often the subjects of a mental perversity, in which they are attracted sexually by persons of their own rather than of the opposite sex.

Those who are anxious for further information about this perverted sexual instinct, may consult the following papers:—Westphal: "Die Contrare Sexualempfindung," *Archiv für Psychiatrie*, Bd. ii, 1870, p. 73; "Zur contraren Sexualempfindung," *Ibid.*, Bd. vi, 1876, p. 620; Krafft-Ebing: "Ueber gewisse Anomalien des Geschlechtstriebes," *Ibid.*, Bd. vii, 1877, p. 291; "Zur Lehre von der contraren Sexualempfindung," *Irrenfreund*, 1884, Nr. 1; Kreng (Julius): "Perverted Sexual Instincts," *Brain*, vol. iv, 1882, p. 368; Charcot and Magnan: "Inversion du Sens Génital, et autres Perversions Sexuelles," *Archives de Neurologie*, Tome iii, 1882, p. 53, et Tome iv, 1883, p. 296; Magnan: "Des Anomalies, des Aberrations, et des Perversions Sexuelles," *Progrès Médical*, 1885, Nos. 3, 4, 5. Numerous other references to the subject will be found in one or other of these papers.

This explains the unhealthy friendship which Bartlett had evinced for Dyson, and the gushing letters which he wrote to him even after it was acknowledged that he had supplanted him in the affections of his own wife. Of persons suffering from this form of insanity, Clouston remarks, "Suicide is often thought of, and oftener talked of, but masturbation makes most of its victims too cowardly to kill themselves."

Now, it is very remarkable with what frequency the early death of Bartlett was spoken of by himself and his wife, notwithstanding that both of them must have been frequently assured, by his medical advisers, that he was not the subject of any fatal disease. This constant talk of death, indeed, leaves no doubt on my mind that he had, for a long time, contemplated suicide, but that, over and over again, his courage failed him. The Attorney-General, in his address to the jury, argued that Bartlett was not likely to have committed suicide, inasmuch as, on the evening before his decease, he was in much better spirits than he had been for weeks previously, and had even ordered something for breakfast, which he looked forward to enjoy. But variability of spirits is one of the manifestations of the mental condition under consideration, and great elation of spirits at one moment is by no means incompatible with intense depression of them the next. Men of this type are not at all insensible to their degraded position; and it is possible that Bartlett may have abstained for some days from the vice by which he was overmastered, and may even have persuaded himself that he would succeed in conquering his weakness; but when his wife retired to the dressing-room, there is nothing more likely than that he was quickly undeceived. Once again he gave way, most probably, to his usual act of folly, and in the moment of disgust and mental depression which ensued, summoned sufficient courage to pour out and swallow the fatal glass of chloroform. There is not a shadow of doubt on my mind that Bartlett committed suicide; and the only question I would at all entertain, is whether or not his wife, who was possibly cognisant of his temptation to self-destruction, might not have acted on this knowledge so far as to have intentionally placed within his reach the means for the easy accomplishment of his purpose. Her conduct, however, with reference to the *post mortem* examination, does not bear out the opinion that she had even gone so far.

If the above opinion as to Bartlett's mental condition be correct, it will be easily understood what a wretched life the poor woman, who was for many years his daily companion, must have led. The description which Mr. Leach gave of the hugging and petting which was going on between Bartlett and his wife, makes it almost certain that she must have been kept in a state of constant sexual erethism without having had her appetite satisfied for years. In such a condition of excited and ungratified sexual passion, a woman, possessed even of very moderate personal attractions, must have been a most dangerous companion for any young man with normal sexual instincts; and although I believe Dyson to be a much too conscientious and, I do not hesitate to say, too religious a man to have given way to illegitimate indulgence, he allowed himself to drift into a very compromising relationship with her.

The opinion of Bartlett's mental condition, given above, is formed entirely from the reports in the daily papers of the evidence at the inquest and the trial, and not from any private sources of information; but my experience, of more or less similar cases, in everything except the tragical ending, enables him to

advance the opinion with much confidence in its truth. This view, if adopted, will enable us to see that the two survivors of the tragedy were placed in very cruel circumstances, and to admit that they are probably not much, if any, worse than the average of mankind.

MR. ALFRED LEACH (41, Charlwood Street, S.W.) writes to us as follows:—Concerning your leading article of April 24th, you have expressed regret that the judge felt compelled to warn the jury that the inferences of the medical witness were unreliable, although he, the witness, meant to speak the truth, but seemed to be "imbued with a spirit of romance and sensationalism." Now, as I happen to be the medical witness indicated, and the judge's summing-up involves questions of more than personal interest, I will ask permission to offer a comment or two.

I went to the Old Bailey the unwilling mouthpiece of the defence. I knew my second-hand narrative was extraordinary, improbable, *outré*, and I fully expected a hard time and rough usage from the prosecuting, and perhaps the defending counsels. However, it turns out that I have only to complain of the judge, and, in some measure, of yourself. If the narrative of incidents was sensational, blame the incidents; do not, with the judge, blame the narrator. For Mr. Justice Wills there is much excuse. He, as a lawyer, felt bound to follow the rule-of-thumb method of what he calls "the broad lines of every-day experience," and measure the acts and motives of the Bartletts by this standard. I, as a medical man, felt equally bound to draw my inferences from the actual case before me. My knowledge of the deceased and some cogent facts, that slipped my memory when they were suddenly called for in the witness-box, had led me to accept as probably true the statements made to me. A sense of justice and duty forced me to acknowledge my conviction, and act up to it regardless of consequences. The consequences are those on which you have commented in not too generous a spirit. I may add that Justice Wills based his objections to my theory partly upon certain articles found in the possession of the deceased. This "find," argumentatively speaking, was Mr. Justice Wills's own, and, fired by the discovery, he elaborated a theory based upon parts of the evidence to overthrow the one I had formed from extensive observation. Then it was he stated that I had given the "poetised version of a very vulgar fact," namely, the use of checks. But having done me the justice of granting my intended veracity, it became necessary, in the interests of his own theory, to discredit mine, or rather me. Hence, the accusation of "sensationalism," the "spirit of romance," etc. I know it was conscientiously spoken, but I think it was unfair. In your leading article, you also allude to a rebuke I received during the early part of my evidence, when his lordship informed me that I was endeavouring to give to myself a prominent place in the case. The supposition is, in itself, ludicrous; but I accept, in a modified sense, some amount of blame. This is what I was doing. During the long course of these proceedings (over sixteen sittings before the coroner, magistrate, and grand jury), some very absurd, annoying, and injurious notions had got abroad, such as that I had Dyson to tea with me (!), that I had private access to the drawer containing the chloroform; that Bartlett Senr. caused the *post mortem* examination to be made; that I had received presents from Mrs. Bartlett (a diamond ring was specifically rumoured); that I was enamoured of her (!); *et hoc genus omne;* and so, when I found myself in the witness-box at the Old Bailey, I was ill-advised enough to accept the suggestion of some friends, and jump at my last chance of refuting some of the more glaring of these untruths, at all of which I own I ought to have had moral courage enough to laugh. His lordship's rebuke was, in a sense, deserved; his suggestion, under the circumstances, comical.

Here I may leave personal matters for others of general importance to the profession. I have much more unfeigned respect for Justice Wills than people would imagine; but I must give a word of warning to medical witnesses who may chance to stand before him. He has (and I knew this independently of the Bartlett case) the misfortune to be possessed of medical knowledge, and just that amount of it which is proverbially dangerous. A medical witness must, therefore, be prepared to have his diagnosis reversed, and his therapeutics contemned upon the sole authority of the presiding judge. This is a serious matter; and I will illustrate from my own experience. I distinctly swore, and had very excellent reasons for doing so, that the late Edwin Bartlett was not suffering from syphilis. No other medical opinion was called to contradict me; but the learned judge suggested an adverse opinion to the jury with *ex cathedrâ* solemnity. What ailments the man had I treated with considerable and rapid success (I say this not boastfully, but with the support of evidence); but the judge expressed his pity for the "poor man" having taken "all this stuff." I may, for one moment, ascend to the Bench, and addressing you, sir, as the proper jury in such cases, say, "You have heard the evidence; the facts are in print at the office of the shorthand writers, and available for your reference; return your verdict."

One more point, and I have done. You assume "it is evident that no really systematic search for bottles was ever made." Perhaps you are right, for I really am at a loss to distinguish between a "really systematic search" and an ordinary search carried on by two men who are eagerly looking for a six-ounce bottle on a broad open mantelpiece, with only four vases and a clock upon it. A really systematic search for the spot-ball on a billiard table!

You have kindly expressed your regret that these matters came about, and doubtless the same sense of regret has impressed all your readers. By kindly printing this explanation, you will be removing an injustice done to me, and ministering to the regret of all parties.

A Caution.

DR. T. D. RANSFORD (Bath) writes: I send you the details of the fraud practised on me as a warning to others, especially Guy's and St. Thomas's men. They are as follows.

On March 31st, a stranger was shown into my room, who said his name was M——, and asked me if I did not remember him as the winner of the two mile race at the inter-hospital sports. He stated that he had landed, the day before, at Plymouth, from Cape Colony, where he had gone for his health, and, for about two years, had occupied himself with medical practice in various parts; but, just before leaving the colony, he had severely injured his elbow by a fall from a horse, and was now on his way home, *viâ* London, where he hoped to get further advice about his injury. He had broken his journey at Bath because he thought that Moxon Turner was in practice here, who, he said, was an old student friend of his, and, in looking for his address in the local directory, he saw my name. He stated further that, as his father was old, having been in practice since 1848, he was going to join him, and relieve him of the union appointments, etc.; that he had run short of ready cash, having only circular notes, and could I oblige him by lending him enough to clear his hotel and railway expenses home? He assured me he would start for London on Thursday, the 11th, and, after getting advice about his elbow, go on the same day home, and that he would return the amount by the end of the same week.

My suspicions having been aroused by a friend in practice near here, I wrote to his father, and also to the surgeon whom he said he was going to consult in London; and found, first, that he had not gone home; secondly, that he was unqualified; and, thirdly, that he had not consulted the surgeon whom he stated he was going to visit, the reason probably being that, about two or three years ago, he victimised him in much the same way.

The Medical Acts Amendment Bill.

DR. JAMES MORTON (Glasgow) writes: Your issue of March 27th contains a well-timed notice of another Medical Acts Amendment Bill, "probably shortly to be introduced to Parliament," with an outline of its contents. That outline does not indicate that the new Bill goes any further than previous attempts, and it appears to me that the profession had a right to expect some advance.

In these times, when nearly all classes are enjoying the benefits of representation, I cannot see why the medical practitioners of the United Kingdom should not be more fully represented in that body, which is said to preside over them, and make laws for them, namely, the General Medical Council. Upon this matter the profession should bestir itself, otherwise we will have a tiresome repetition of the strife between medical corporations and universities.

According to your outline, the proposed Bill will continue the many portal system, with many confusing titles, and the competition in granting such which has been complained of, whereas we ought to have only one registrable licence, with an appropriate name. This licence should be given, after due examination by the profession itself, as is done in other professions, and should be the only legal title to practice. In this way alone can the monopoly in teaching be broken down. Out of twenty-eight members of the General Medical Council, the profession is to elect four, which gives about $\frac{1}{8000}$ part of a member of that august and active body to each practitioner. The other six-sevenths of the Council, or twenty-four members, fall to the share of the corporations and universities combined, and may be said to be returned by less than 2,000 medical men, or a twelfth part of the profession. The very minute section of the profession in the universities, not alone, but in conjunction with some non-medicals, return nine members, or about a third of the whole.

In a recently reformed Parliament, we surely may hope for some re-arrangement calculated to remove such inequalities, and I need scarcely remark that such a result is not likely to be arrived at without seeking. These form only a small part of the considerations which might be urged for some activity on the part of the profession generally, which I hope to see.

*** Bills which proposed to go as far as our correspondent suggests, have repeatedly been introduced during a long course of years, and by successive Governments, but have invariably been defeated by the opposition of the bodies in question.

Treatment of Scarlet Fever and Diphtheria.

DR. C. R. ILLINGWORTH (Accrington) writes:—I find that the biniodide of mercury is a specific and prophylactic for scarlet fever and for diphtheria. Both are diseases due to the development of germs in the blood, myriads of minute nucleated bodies in active movement being visible by the microscope on examination of the membrane peculiar to each. Hence, I think, the efficacy of the remedy I name.

As all diseases of this nature deprive the blood of a large portion of its hæmoglobin and fibrin, I prescribe the ammonio-citrate of iron with it. Thus: ℞ Sol. hydrarg. bichlor. ʒiii; potass. iodid. gr. x; ferri ammonio-citrat. gr. xx; syrupi ℥ss; aquam ad ℥ij. Fiat mistura. Signa: One teaspoonful every two hours (for a child of from 2 to 4 years).

As soon as all the membranous deposit has disappeared from the parts affected, I give the usual steel and chlorate of potash mixture. As a rule, this occurs in from four to five days; but in severe cases it takes ten.

The only and important exception to this rule of treatment, is in those cases where the disease is ushered in with vomiting and purging, with scanty rash and collapse. In these, which evidence a rapid liquefaction of the blood by the action of the poison, the iron and chlorate of potash mixture should be given at once in full doses, every two hours.

Locally, I have found nothing to act better than the glycerine of tannic acid.

Royal College of Surgeons of England.

THE following questions in Physiology and Anatomy were submitted to the candidates at the primary examination for the Membership on April 1st and 2nd. Candidates were required to answer at least four questions in each subject. *Physiology.* 1. Describe the circulation of the blood through the liver. Give the structure and functions of a hepatic lobule. 2. Describe the structure of a bronchial tube. Mention the uses of each of its constituents. 3. Explain the processes by which the normal temperature of the body is maintained and regulated. 4. Give the microscopic structure of a striated muscle-fibre. How may a muscle be excited to contract? What phenomena accompany contraction? 5. Describe the development and structure of a ripe Graafian follicle. What changes does it undergo after the discharge of the ovum? 6. What is the meaning of the term blood-pressure? By what circumstances may blood-pressure be modified?—*Anatomy.* 1. Mention the muscles which are attached to the following parts of the skeleton: (*a*) great wing of the sphenoid; (*b*) angle of the inferior maxilla; (*c*) coracoid process of scapula; (*d*) coronoid process of ulna; (*e*) internal cuneiform bone of the foot. Give the nerve-supply of each muscle. 2. Describe the dissection necessary to expose the common femoral artery. 3. Describe the under surface of the liver, and state the relative position of structures in contact with that surface. 4. Give the origin, course, and distribution of the spinal accessory nerve. 5. Describe the innominate artery, and give its course and relations. 6. Describe the arrangement of the superficial veins of the upper extremity.

Intravenous Saline Injection in Post Partum Hæmorrhage.

THE value of intravenous saline injection in metrorrhagia is warmly advocated by Dr. F. Weber in the *St. Petersburger Medicinische Wochenschrift.* Its superiority over transfusion of blood, human or animal, consists partly in the simplicity of the apparatus required. All that is needed is an Esmarch's jar, with a glass reservoir, a cannula, and some India-rubber tubing. The operation is as follows. Five litres of a 6 per cent. solution of common salt is prepared with distilled water of the temperature of the body. If the veins be so collapsed as to be invisible

through the skin after ligation of the upper arm, a vein is exposed, and two ligatures passed under the free portion; the distal end is tied, a longitudinal incision is made in the vein, and a glass cannula introduced, filled with saline solution, which is then fastened by means of the second ligature. This, and the pressure of the finger on the vessel, prevent the air from entering the veins. The cannula is then connected, by tubing, with the jar containing the whole quantity of the solution. Directly the finger is removed, the injection begins. No ill effects are seen. Dr. Weber relates an instance in which this method was most valuable. He was called by a midwife to a married woman, aged 21, who was seized with *post partum* hæmorrhage fifteen minutes after the birth of a putrid child. Dr. Weber arrived at 10.30 P.M., an hour after the hæmorrhage had commenced. He found the uterus atonic, reaching to the umbilicus. Massage, hot injections, and hypodermic injections of camphor and ether were used, with some effect. The hæmorrhage returning, he was called at 3 A.M., and after hot douches and ice-tampons, it again decreased; but cerebral anæmia appearing to an alarming extent, and, the pulse being imperceptible, hot compresses were placed on the head, the lower extremities bandaged, and hypodermic injections administered every quarter of an hour. These proving unavailing, it was decided to try an intravenous saline injection. This was successfully administered; and, when 500 grammes had been given, hæmorrhage ceased, and the patient, who had been conscious the whole time, experienced great relief. The pulse, too, became distinct. On 1,000 grammes being injected, the patient complained of palpitation, and the jar was lowered in order to lessen the pressure on the circulation. When 1,500 grammes had been injected, the pulse was perfectly good, and the cerebral and hæmorrhagic symptoms disappeared. The patient felt completely invigorated, and took nourishment without vomiting. She continued to do well, and made an excellent recovery.

Inversion of the Uterus.

Mr. William Donovan (Erdington) writes:—The precept, strongly enforced on students of midwifery, "to follow down the uterus with the hand as it empties itself, during the third stage of labour," is not one of unmixed good. More especially in multiparæ, we are told that is a preventive of *post partum* hæmorrhage. After seventeen years of constant midwifery practice, our correspondent cannot recall one case of serious *post partum* hæmorrhage, and he does not make it a rule to follow down the uterus. He has been called in to two cases of inversion. In one case, he saved the woman's life, and in the second, the woman had succumbed before he could reach her. Both cases were due to unskilled attempts to remove the placenta. He does not agree with the opinion that inversion can occur spontaneously. There must be some amount of bulging in of the fundus, either the result of traction on the funis, or of external pressure, such as would be used in "following down the uterus," or in "expressing the placenta," two methods, in his opinion, dangerous and unscientific. If the placenta do not follow in due course, it should be removed by introducing the hand into the vagina, grasping the placenta, and allowing the uterus to expel both as it will, if left to itself. The act of introducing the hand, with, perhaps, a little friction outside, is quite enough to cause contraction. The method adopted by practitioners of making pressure over the fundus to assist uterine action, is also carried too far, and is a factor in subsequent uterine troubles. The indiscriminate and wholesale use of ergot of rye is still more injurious.

Heredity in Deformities, and other Anomalies.

Dr. W. Curran writes:—The following petition was hawked about more than one of the military stations in which I served in India; and as its production here may help to throw some light on the occurrence, in certain families, of club-footedness, left-handedness, and other hereditary anomalies of that kind, I give it for what it may be worth. I examined two or three of the members of this family, but could detect no abnormality in either of them, and yet I do not think there was any collusion or imposture in the case. "Petition! Pity the Poor blind and Dumb. The bearer of this certificate begs most respectfully to request charity on behalf of herself and five brothers, all dreadfully afflicted, viz., two blind and one lame, and another besides herself dumb, in consequence of which afflictions, they are totally unfit for manual labour, and therefore are compelled to subsist on any charitable donations it may please any kind lady or gentleman to give the bearer. Hoping that the charitably disposed will not turn a deaf ear to this petition, I promise the constant prayers of my family for the welfare of the charitable."

The following has come to hand since the above, and is, I believe, like that, perfectly authentic. As such, it deserves, I think, a record.

"The Honble Surdars and Gentlemens—The humble petition of 5 deaf and dumb brothers and two blind sisters one family of the Norther Division, most humbly showeth—that your humble petitioners are on the surface of the Globe without any means of support. Your petitioners therefore begs that these grievance should be taken with consideration, and their wants be supplied, for which act of charity your petitioners as in duty bound shall ever pray."

Gratuitous Vaccinators and Local Government Board Lymph.

Quaerens joins with "Public Vaccinator" in complaining of the injustice of medical men vaccinating gratuitously. He can see but two reasons which would induce men to do so, and both are alike contemptible. It is either done as a form of "touting" for patients, or to deprive the Public Vaccinator for the district both of his miserably small fee, and of the chance of getting the Government award, for which a certain percentage must be shown. If one of the recognised leaders of the profession could only be induced to take the lead, it might be possible to get an expression of feeling on the subject from the general body of the profession at the forthcoming meeting of the Association at Brighton next August. Quaerens adds, in relation to "Nemo's" letter (Journal, April 24th, p. 804), complaining of the quality of lymph as sent by the National Vaccine Establishment, that, where he lives, it is believed one-half the number of tubes sent are filled with *aqua pura*, the other half with fairly good vaccine matter.

J. O. Holden, M.B. (West Hampstead) endorses every syllable of "Nemo's" complaint. He has applied for lymph on more than one occasion, and found it, as "Nemo" says, "inert and worthless."

J. L. Brown, L.R.C.P., writes: If "Nemo" will always get lymph on ivory-points, instead of capillary-tubes, he will rarely, if ever, fail. At least, this is Mr. Brown's experience of the lymph supplied to him from the Local Government Board for several years past.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. A. E. Barrett, London; Dr. W. G. Walford, London; Mr. C. G. Maxted, London; Dr. A. Meadows, London; Messrs. Ingram and Royle, London; Dr. C. A. Wigan, Portishead; Dr. Tatham, Salford; Mr. Curran, London; Dr. R. Wade Savage, London; The Honorary Secretary of the Harveian Society of London; Dr. Mackey, Brighton; Dr. J. T. Arlidge, Stoke-on-Trent; Dr. J. R. Day, London; Mr. J. Brown, Bacup; Dr. T. N. Orchard, Pendleton; Messrs. A. Essinger and Co., London; Dr. Byrom Bramwell, Edinburgh; Mr. C. Lunn, Edgbaston; The Secretary of the University of St. Andrew's; Mr. G. Rivington, Prestwich; Dr. E. MacGregor, London; Dr. J. Erskine, Glasgow; Dr. J. F. Edwards, Philadelphia; Dr. J. Constable, Leuchars, N.B.; Dr. Hack Tuke, London; Dr. J. Milner Fothergill, London; Dr. Gore, Sibi Caber, Egypt; Dr. W. H. Tayler, Anerley; Mr. E. C. Thomas, Llanarth; The Secretary of the Artists' Benevolent Fund; Mr. W. Square, Plymouth; Mr. T. G. Alderton, London; The Secretary of the Medical Society of London; Dr. G. C. Kingsbury, Blackpool; Dr. J. A. Hunter, New Orleans; Mr. Hugh L. Donovan, Lucknow; Mr. G. Hitchings, Oxford; Mr. J. Martin, Huddersfield; Mr. F. A. Coward, Huddersfield; Dr. Bucknill, Rawtenstall; Mr. Richard Fitzmaurice, Lindfield; Dr. Robertson, Ventnor, Isle of Wight; Mr. A. Stewart, Manchester; Dr. J. C. Gooding, Cheltenham; Dr. J. B. Hellier, Leeds; Mr. G. A. Harris, Simla, Punjab; Dr. Dixon, London; Mr. A. Leach, London; Mr. F. J. Bailey, Liverpool; Mr. H. L. Wallis, London; The Editor of the *Chemist and Druggist*, London; Surgeon P. J. D. Hackett, Brunswick, Canada; Mr. J. O. Horden, London; Dr. J. F. Oliver, London; Mr. F. O. Hodson, Walgett, New South Wales; Mr. K. Franks, Dublin; Mr. H. Waite, Armley; Dr. J. H. Gramshaw, Gravesend; Mr. G. Sturge, London; Mr. R. Browne, King's Lynn; Dr. P. T. Duncan, Croydon; Mr. J. Brewster, Bootle; Mr. F. Shepherd, London; Mr. F. Vacher, Birkenhead; Mr. T. Jenner Verrall, Brighton; Dr. Willoughby, London; Dr. Sieveking, London; Dr. J. Hutchison, Glasgow; Dr. W. Taggart, Antrim; Mr. A. Foxwell, Birmingham; Anti-Humbug; Dr. Aitken, Rome; Mr. W. F. Haslam, Birmingham; Dr. Adam, London; Mr. R. Freeman, London; Dr. George Herschell, London; Mr. W. P. Dester, Cardiff; Our Aberdeen Correspondent; Mr. G. B. Lawford, London; Dr. Josiah Williams, Sheffield; Dr. T. W. Trend, Southampton; Mr. R. C. G. Durdin, Dublin; Mr. C. J. Symonds, London; Mr. F. W. Smith, Sherborne; Mr. Alfred Craske, London; Mr. J. Giles, Caxton, near Cambridge; Dr. Styrap, Shrewsbury; Mr. G. H. Elliott, Chichester; Mr. J. R. Irwin, Whitehaven; Our Paris Correspondent; Mr. C. McKerrow, Workington; Mr. J. Spottiswoode Cameron, Huddersfield; Mr. W. C. King, London; Mr. H. T. Batchelor, Queenstown, Cape Colony; Dr. R. Ryder, Nailsworth, Gloucester; Mr. D. Arthur Davies, Swansea; Dr. J. Johnson Bailey, Marple; Mr. Herbert Snow, London; Dr. J. Mackenzie Booth, Aberdeen; Our Newcastle Correspondent; Mr. C. J. Welsford, London; Dr. Burton, Stonehouse; Mr. J. H. Morgan, London; Dr. Tatham, Salford; Mr. W. Eddowes, Shrewsbury; Mr. E. A. Jones, London; Mr. G. A. Cardew, Cheltenham; Mr. J. T. Lister, London; Mr. A. Chapman, London; Mr. A. Foxwell, Birmingham; Mr. Leigh, London; Dr. W. G. Smith, Dublin; Dr. W. Philson, Cheltenham; Mr. W. Gardiner, London; Mr. T. D. Acland, London; Dr. J. Coats, Glasgow; Mr. J. B. Grewcock, Pershore; Mr. C. E. Scragg, London; Mr. O. R. Travers, St. Leonards-on-Sea; Professor Corfield, London; Dr. A. Ambrose, Bournemouth; Our Edinburgh Correspondent; Mr. Shirley Murphy, London; Mr. Scott, Bath; Mr. A. Jackson, Sheffield; Mr. J. B. Bunny, Newbury; Mr. W. Moorman, St. Columb; Mr. A. W. Wallace, Parsonstown; Surgeon-Major Ray, Malta; Mr. W. King, London; Dr. J. Ross, Manchester; Mr. G. D. Edwards, Ramsgate Dr. C. R. Macdonald Beith Ayrshire etc.

BOOKS, ETC., RECEIVED.

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ABSTRACTS
OF THE

CARTWRIGHT LECTURES

ON CERTAIN PROBLEMS IN THE PHYSIOLOGY OF THE BLOOD-CORPUSCLES.

Delivered before the Association of the Alumni of the College of Physicians and Surgeons, New York, March 23rd, 1886.

By WILLIAM OSLER, M.D.,
Professor of Clinical Medicine in the University of Pennsylvania.

Lecture II.—Degeneration and Regeneration of the Corpuscles.

The Blood an Internal Medium.—Dr. Osler began his second lecture by pointing out that the blood was to be regarded not as a fluid tissue, but as an internal medium (Bernard), bearing the same relation to the constituent tissues as does the external medium to the individual. The remarkable uniformity in the composition and characters of the blood was maintained by the combined action of the receptive, excretory, and formative tissues. Though it was impossible to afford an ocular demonstration that the corpuscles underwent waste and repair, yet the fact that such degeneration and reproduction did occur was generally accepted. The evidence on this head was chiefly indirect; the colouring matters of the bile and of urine were derived from hæmoglobin, and, to supply this source of waste, many red corpuscles must daily be destroyed; the variation in number, under certain conditions, also pointed in the same direction. The presence of degenerating red corpuscles in the spleen and bone-marrow was a piece of direct evidence. Pathological and experimental investigations had thrown some additional light on the subject, and the condition of the blood in anæmia would be first discussed.

The Blood in Anæmia.—Anæmia might be produced either by loss of blood, or by imperfect reproduction. In the former case, the loss might be sudden (hæmorrhage or acute poisons) or gradual (fever or chronic poisoning); in the latter case, the imperfect production might be due to primary changes in the cystogenic tissues, or might be a secondary effect of imperfect nutrition. In health, the variations which occurred in the size of the red corpuscles were comprised within very narrow limits. The variations from 7.5μ, the ordinary diameter of the red corpuscles, never exceeded 1μ above or below this, and were comparatively very seldom seen. Hayem (*Leçons sur les Modifications du Sang*, 1882) had put the medium-sized red corpuscles at 75 per cent.; but this was probably too low. The percentage of corpuscles of less or greater diameter varied in different individuals. In the newly born, and very young child, the range was very great, from 10.3μ to 3.3μ; and, in certain diseased conditions, there was a reversion to this embryonic or infantile condition. In such cases, the range between the smallest and largest forms might be from 2.5μ to 14μ. To these aberrant forms, the terms microcytes and megalocytes had been applied.

Microcytes.—Microcytes, which occurred in the blood of the embryo (Fig. 10*b*) and new-born child, were rarely seen in the healthy adult,



Fig. 1.—Outlines of red corpuscles in a case of profound anæmia. 1, 1, normal corpuscles; 2, large red corpuscle—megalocyte; 3, 3, very irregular forms—poikilocytes; 4, very small, deep-red corpuscles—microcytes.

but were abundant in all forms of anæmia (chlorosis, splenic anæmia, leucæmia, pernicious anæmia, Hodgkin's disease. and the anæmia of cancer, phthisis, and other chronic affections). They were most numerous in the primary anæmias (especially progressive pernicious anæmia), while, in the secondary anæmias, they were more variable, and sometimes absent. Some observers looked upon them as disintegrating remnants of corpuscles, others as young developing forms. Dr. Osler thought that possibly both views were correct. In a freshly prepared slide of anæmic blood, firm pressure on the top cover sometimes produced a large number of microcytes, from the destruction of the red corpuscles by the pressure. They might, indeed, be observed in process of formation, as shown at Figs. 2 and 3. Normal blood in

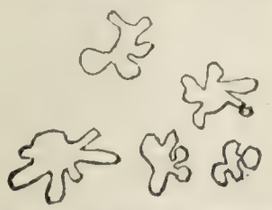


Fig. 2.—Extreme poikilocytosis in blood from anæmic patient, examined in Pacini's fluid. It illustrates also a possible mode of origin of the microcytes.

Pacini's fluid did not often show special changes in the form of the corpuscles; but the corpuscles, in cases of profound anæmia, might become in it very irregular in outline, and deeply fissured, as sketched at Fig. 2, and portions might separate, and appear in the field as microcytes. In the bone-marrow, too, a somewhat similar process (Fig. 3) might be noted. Microcytes were certainly not always pro-



Fig. 3.—Origin of microcytes from red corpuscles by process of budding and fission. Specimen from red marrow.

duced by *post mortem* changes; and certain forms (the less deeply tinted) were regarded by many good observers as developing forms.

Megalocytes.—The term *megalocyte* might be applied to forms ranging upwards from 8.5 or 9μ to 12, 14, or even 15μ. Such cells were very constant in cases of pernicious anæmia, and also occurred in chlorosis and leucæmia. Gram (*Fortschritte der Medicin*, Band ii) had made the interesting observation, which Dr. Osler was able to confirm, that these forms occurred in numbers of cases of icterus. Gram also stated that ordinary red corpuscles placed in icteric serum (of ascites in cirrhosis) seemed to increase somewhat in size. Dr. Osler also referred to the peculiar lemon or subicteroid tint of skin seen in many cases of pernicious anæmia.

Poikilocytes.—The loss of the natural uniform outline was a distinctive feature of the various forms of anæmia. To these irregular cells Quincke had applied the term *poikilocytes*, which had been very generally adopted. At Figs. 1 and 2, this condition is represented. The corpuscles might present the most remarkable shapes, ovoid, elongated, pyramidal, balloon-shaped, with indented edges, or rods straight, or bent at right angles. Dr. Osler said that he still held that these poikilocytes, which were probably produced by a physical change due to alterations in the blood-serum, were met with in a more extreme form in pernicious anæmia than in any other disease, but added that they were also present in the anæmia of phthisis, cancer, and inanition.

Percentage of Hæmoglobin.—In health, the percentage of hæmoglobin in each cell varied within very narrow limits. In disease, variations occurred in three directions. (1) In chlorosis, the hæmoglobin was reduced out of proportion to the reduction of the corpuscles, so that the individual worth of each red corpuscle in colouring matter might be very greatly lowered. The true anæmia might be much greater than the number of red corpuscles per cubic millimètre might indicate. (2) In ordinary anæmia from hæmorrhage or from organic disease, the average worth in hæmoglobin of each corpuscle usually remained unaltered, and the percentage of colouring matter corresponded closely with the percentage of the corpuscles. (3) In certain cases of pernicious anæmia, the interesting fact had been ascertained that the percentage of hæmoglobin in each corpuscle was increased, and the anæmia in reality might not be so great as the reduction in the number of red corpuscles would appear to indicate. The individual worth of each corpuscle in hæmoglobin might even be doubled, and the heightened colour evident on microscopic examination.

Nucleated Red Corpuscles.—In anæmic states, there might be present in blood, nucleated red corpuscles such as normally occurred in the blood of the embryo, and such as were present in the red marrow of the bones. They were, however, not frequent, and did not occur in

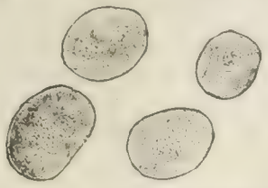


Fig. 4.—Nucleated red blood-corpuscles from blood in case of leucæmia.

all cases of profound anæmia. Dr. Osler had found them in largest number in leucæmia (Fig. 4). These cells were larger, and, as a rule, paler than ordinary red corpuscles; sometimes the nucleus, and occasionally the cell, might be seen in process of fission. Dr. Osler held that they originated in the bone-marrow, and had found that it was in cases where this tissue was hyperplastic that the nucleated red corpuscles were found in the blood. Their resemblance to the corpuscles described by Kölliker in the blood of the embryo was pointed to, as supporting this theory.



Fig. 5.—Corpuscles containing red blood-corpuscles. 1, from blood of child at term; 2, from blood of a leucæmic patient.

Included Corpuscles.—In a few rare instances, red corpuscles had been seen in the blood within colourless corpuscles (Fig. 5). The unfrequency with which this condition occurred was rather remarkable, considering the abundance of such cells in the marrow, spleen, and lymph-glands in certain states. It was possible, however, that a colourless corpuscle might take up a red cell into its interior. Dr. Osler had observed such an occurrence in a frog, where a white corpuscle contained three human red corpuscles, which it had, as it were, eaten.

Anæmia after Hæmorrhage.—After severe hæmorrhage (for example, in an animal deprived of one third of its blood) the changes noted were almost identical with those above described. 1. Microcytes were numerous, but the larger forms of red corpuscles were not so constant. Poikilocytes also occurred. As the percentage of red cells approached the normal, these irregularities diminished. 2. The colour-

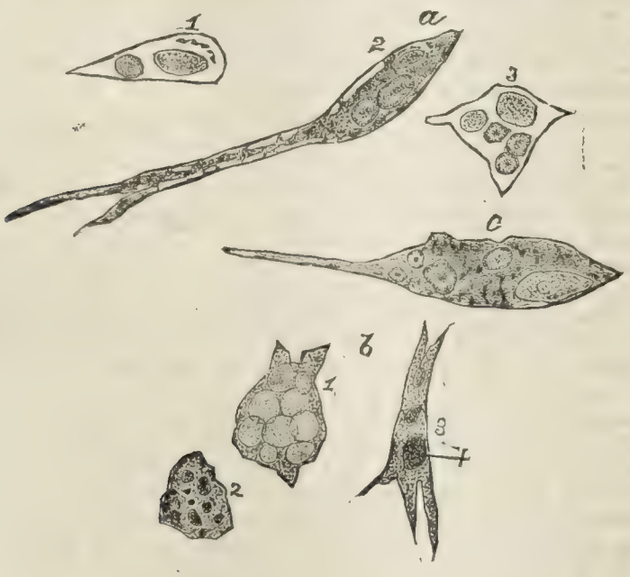


Fig. 6.—*a*. 1, 2, 3, Spleen-cells containing red blood-corpuscles. *b*. From marrow; 1, cell containing nine red corpuscles; 2, cell with reddish granular pigment; 3, fusiform cell containing a single red corpuscle. *c*. Connective-tissue corpuscle from subcutaneous tissue of young rat, showing the intracellular development of red blood-corpuscles.

less corpuscles were relatively, and sometimes absolutely, increased in number. This, doubtless, was the result, in part, of a relatively smaller loss in white corpuscles, in consequence of their adhesive wall-loving property, and, in part, to the flooding of the blood-current with leucocytes, poured in with the copious flow of lymph, which took place to make up the volume of blood. 3. The nucleated red corpuscles might appear. 4. There was a marked increase in the number of blood-plaques.

Regeneration of Corpuscles.—The red marrow, in the new-born and young child, occupied the bone-cavities of the entire body, and in the adult, though confined to the cancelli of the short and flat bones, would, if massed in one organ, considerably exceed the volume of the spleen. When a small quantity of soft red marrow was removed with a capillary pipette, and placed on a slide, without the addition of any reagent, the following elements were usually seen.

(1) Ordinary marrow-cells (*a*), cells with coarsely granulated protoplasm (Fig. 7. *a*), and nuclei, not apparent at first, but gradually becoming distinct, two or three in number, oval, round, or reniform in shape, and vesicular in character; the cells displayed a feeble amœboid movement on the warm stage. (*b*) Smaller cells, with more solid nuclei and less granular body-protoplasm.

(2) Marrow-cells (9 to 12 μ in diameter) (Fig. 7, *d*), containing a single large nucleus, surrounded by a narrow rim of smooth homogeneous protoplasm, a dumb-bell-shaped nucleus, or two, or even three, nuclei. Certain of the cells presented the faintest possible tint of colour, and were peculiarly flexible.

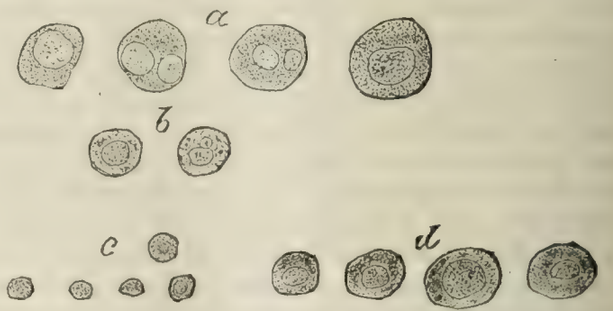


Fig. 7.—Cell-elements of red marrow. *a*. Large granular marrow-cells. *b*. Smaller, more vesicular cells. *c*. Free nuclei, or small lymphoid cells, some of which may even be surrounded with a delicate rim of protoplasm. *d*. Corpuscles with clear, translucent protoplasm.

(3) Small lymphoid elements (2.5 to 5 μ in diameter) resembling free nuclei (Fig. 7, *c*), but, in some cases, presenting a faint border of protoplasm. Identical cells occurred in the spleen ("primary lymph-cells" of Norris).

(4) Nucleated red corpuscles (Fig. 8, *a*), 6 μ to 12 μ in diameter, with homogeneous protoplasm of every grade of colour, up to that of the red corpuscle; the nucleus colourless, large, single or divided,

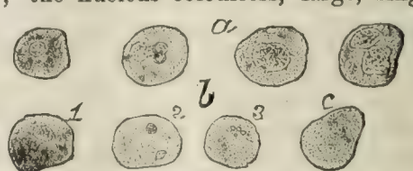


Fig. 8.—Nucleated red cells of marrow. Illustrating mode of development into the ordinary non-nucleated red corpuscle. *a*, Common forms of the coloured nucleated cells of red marrow; *b*, 1, 2, 3, gradual disappearance of the nucleus; *c*, large non-nucleated red corpuscle, resembling 2 and 3 of *b* in all respects, save in the absence of any trace of nucleus.

sometimes granular and indistinct, as though disappearing; at others adherent to the edge, as though migrating from the cell (Fig. 9).

(5) Ordinary red corpuscles, as well as megalocytes and microcytes.

(6) Myelo-plaques, or giant-cells.

(7) Corpuscles containing red blood-cells (Fig. 6, *b*, 1); some being collections of red corpuscles undergoing disintegration into cells, containing granular pigment (Fig. 6, *b*, 2); others resembling giant-cells (Fig. 6, *b*, 3).

Dr. Osler expressed the opinion that the nucleated red corpuscle was derived from the clear-bordered homogeneous marrow-cell (Fig. 7, *d*); there was no essential difference in the protoplasm of the two cells, and every gradation of colour could be traced. These colourless marrow-cells, with a border of clear protoplasm, were probably derived from the small elements resembling free nuclei ("primary lymph-cells," "proto-leucocytes"). Gradations might be seen between the forms figured at Fig. 7, *d*, and the smaller corpuscles at Fig. 7, *c*. The transformation of the neucleated red cell into the ordinary red corpuscle was brought about by the gradual disappearance of the nucleus (Fig. 8, *b*, 1, 2, 3).

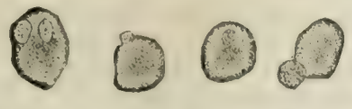


Fig. 9.—Nucleated red corpuscles. Illustrating the migration of the nucleus from the cell, a process not unfrequently seen in the red marrow.

Dr. Osler thought the migration of the nucleus from the cell (Fig. 9) was probably a *post mortem* change, though Rindfleisch held the opposite view. The view adopted with regard to the disintegration of the nucleus was supported by the fact that a similar process could be traced in the nucleated red blood-cells of the embryo, as shown at Fig. 10, *a*; and, as the cells were identical in appearance, and probably in origin, this might be regarded as strong confirmative evidence. Bizzozero, whose careful study of this question entitled his

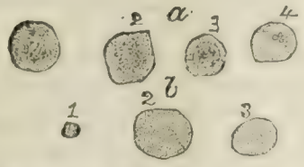


Fig. 10.—Blood of embryo, four months. *a*, 1, 2, 3, 4, Nucleated red corpuscles; in 4 the same granular, disintegrated appearance of the nucleus as in marrow-cells; *b*, 1, microcyte; 2, megalocyte; 3, ordinary red corpuscle.

opinion to the greatest consideration, regarded the nucleated red corpuscle as a fixed and constant element, derived, by fission, from pre-existing forms of the same kind, and not by any process of development from colourless cells of the marrow.

The nucleated red corpuscles resembled in size the megalocytes which were usually abundant in the bone-marrow. A cell, such as is represented at Fig. 8, *c*, differed in appearance from those at Fig. 8, *b*, 1, 2, 3, solely in the absence of nuclear remnants. In the further process of development, there would be a condensation of the stroma, and a change from a flattened cell to a biconcave disc. The megalocytes, so abundant in anæmia in the blood, might be regarded as imperfectly formed corpuscles.

A process of budding might be seen in certain of the red cells of the marrow (Fig. 3) and of the spleen, and Malassez held that these gemmæ were capable of development into ordinary red forms.[1] A development of red corpuscles appeared to occur in the large myeloplaques, and in the elongated cells of the stroma of the marrow (Fig. 3, *a*, 1, 2, 3, and *b*, 3). Dr. Osler had been struck by the close resemblance of such cells to those in the subcutaneous tissue of the young rat, in which the process of intracellular development of red corpuscles could be readily traced, as shown by Professor Schäfer. Fig. 6, *c*, represented one of these connective tissue corpuscles, with four developing red cells in its protoplasm.

Hayem held that the red corpuscles were derived directly from the blood-plaques, on the following grounds: (1) a supposed resemblance in shape; (2) a supposed occurrence of coloured blood-plaques; (3) the existence of gradations in size; (4) the large number present when blood-formation was in rapid progress; (5) their occurrence in the cells of the blastoderm. Dr. Osler rejected this view, on the ground that even the largest blood-plaques were not coloured, and that the ordinary microcyte was of a deep red tint. In Fig. 11, a group of ele-

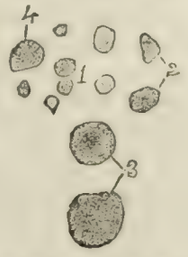


Fig. 11.—From spleen. 1, Blood-plaques, colourless and varying a little in size; 2, microcytes of a deep red colour; 3, two ordinary red corpuscles; 4, a solid, translucent, lymphoid cell or free nucleus.

ents from the spleen were depicted with the blood-plaques, five or six in number; some (1) were of various sizes, and presented a pale faintly granular protoplasm; at (2) were seen two microcytes, resembling more closely miniature blood-discs than the form represented at Figs. 1 and 4; but, though resembling in size the larger plaques, the appearance was totally different, and forms intermediate between them were not seen. A strong point in Hayem's theory was the abundance of the plaques under the very conditions in which the corpuscular production went on rapidly: (1) in the embryo and new-born, (2) after hæmorrhages, (3) in the stage of convalescence from acute diseases. So, also, in chronic wasting diseases, and in certain forms of anæmia, their prevalence might be reasonably explained by failure to develop into more mature forms, for future observers to determine the precise position. There was, however, a remarkable unanimity of opinion among those who had lately worked at the subject, to the effect that the evidence, at present, was altogether insufficient. Afanassiev, who was an exception, held that the plaque developed into the nucleated red blood-corpuscle, the nucleus of which was in turn extruded, and became a plaque.

The White Corpuscles.—Modern observation appeared to have disposed of the theory, that the red were derived from the colourless corpuscles. The researches of Metschnikoff, Tavelowsky, and others, had materially widened our conception of the functions of the colourless corpuscles. They were to be regarded as constituting so many masses of primitive or basis protoplasm, which might be called upon in the repair and reproduction of tissues, and in the healing of wounds. They acted as scavengers—*phagocytes*—in the removal of dead parts, or enclosed injurious particles in their interior, and so rendered them inert. The leucocytes of the body had been compared to a standing army, ready to resist invasion; and inflammation, in which they played an important part, was but a battle in which they protected the organism against injurious agents, such as micro-organisms.

Conclusion.—Dr. Osler said that the most solid acquisition to our knowledge of the process of regeneration of the corpuscles was the participation in the adult of the bone-marrow, and the development of the red corpuscles from its nucleated colourless cells. How far the spleen shared in this work was still doubtful, though the evidence that it took some part was very strong.

[1] Creighton has described the formation of coloured corpuscles in blood-cysts by budding from embryonic cells lining their walls, and, a few years ago, Johnstone maintained (Seguin's *Archives*, vol. vi) that the red cells were developed by budding from the granular protoplasm of the adenoid reticulum of the spleen and lymph-glands.

ABSTRACTS OF

THE LUMLEIAN LECTURES

ON

THE ELECTRICAL CONDITION OF THE HUMAN BODY; MAN AS A CONDUCTOR AND ELECTROLYTE.

Delivered at the Royal College of Physicians, London, April, 1886.

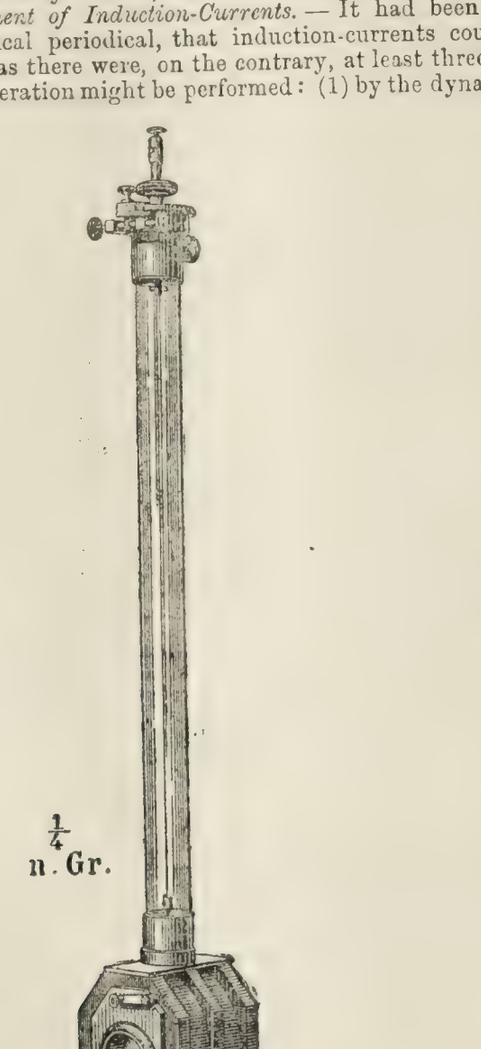
By WILLIAM H. STONE, M.A., M.B.Oxon., F.R.C.P.,
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Lecture III.

Induced Currents.—Dr. Stone commenced by observing that the characters of the induced current were so thoroughly described in every text-book, that there was no need for him to recapitulate them further than to remind his audience that the current induced in the second wire was momentary, and occurred at make and break, while even in a single wire, at the same time, a current, called the "extra-current," was produced, which antagonised the make-current, and reinforced the break-current. Induction-currents had come into early use in physiology and medicine, owing to their obvious and striking action on the sensory nerves, to their convenient stimulant action on muscles, and, also, owing to the remarkable work done with them, thirty years ago, by Duchenne. Using a very clumsy and primitive form of induction-coil, Duchenne had, by patient labour, created a new era in our knowledge of the pathology of the nervous system. But his coil was, in reality, only a convenient means of testing the irritability of muscle, and had no special electric qualities. Beyond this, the induction-coil was valuable as a means of keeping up the irritability of muscle which had been damaged by the metallic impregnation of lead, or from which, by nerve-injury, or more deeply seated lesions, motor nerve-influences had been cut off; here, it acted as a muscle-stimulant, and not by reason of its electric characters. It might also be used, though with more caution, to test sensation. Here, individual difference of temperament stepped in, the tolerance to induced currents varying extremely in different persons. The apparatus often seen at fairs, by which the passers by were invited to "try their strength," was an illustration of this; the real point measured being the tolerance of the individual to the induced cur-

rent. It might be of service in stimulating even so deeply seated a muscle as the diaphragm, in asphyxia or in opium-poisoning, one pole being placed on the neck, and the other being moved about at the lower border of the ribs. It was a convenient and effective agent for demonstrating physiological phenomena in the lecture-room; but its use ought to end there, for, in physiological research, it was an unsafe, because a complicated and unmeasured, agent. Dr. Stone thought it a matter for regret that it had been used in recent researches on the localisation of function in the brain. In the first place, there was not only no proof that the current passed through the region included between the poles, but there was conclusive reason to believe that it diffused itself widely and irregularly in all directions, with enormous differences of density, owing to the varying conductivity of the tissues; in the second place, it was doubtful whether it ever traversed a moist substance like brain-tissue at all, or whether it merely originated a series of laminated polarities, such as were typified in a condenser. These strictures applied to a current from the ordinary induction-coil, usually named Ruhmkorff's alternating currents, obtained by commutating a battery-current, stood in a different position.

The Measurement of Induction-Currents. — It had been recently stated, in a medical periodical, that induction-currents could not be measured, whereas there were, on the contrary, at least three methods by which this operation might be performed: (1) by the dynamometer,



Hartmann's Unifilar Electro-dynamometer.

which was a galvanometer in which the moving needle had been replaced by a moving coil; (2) by a dynamometer, which Dr. Stone had constructed on a similar principle, with a very light coil of aluminium wire, adapted to the measurement of small currents; (3) by a still simpler form, where the coil was replaced by two sheets of soft annealed iron, which so rapidly changed their magnetic polarity that it was always practically in the same relation to the coil; this last pattern was, he believed, the dynamometer of the future for medical purposes. (4) A still more accurate method remained, that, namely, where the determination was made by the quadrant electrometer. With the assistance of Professor Stocker and Mr. Gregory, of Cooper's Hill College, some determinations had recently been made with this instrument. The general conclusion to which the observations tended seemed to be that the mean electromotive force, developed by the particular induction-coil made use of for the subsequent experiments was less than fifty volts, and probably nearer forty volts. The method, by joining the needle of the electrometer alternately to either pair of quadrants, was explained; and Professor Adams's and Dr. Hopkinson's formulæ were exhibited.

Low Resistance to Induction-Currents.—An experiment was then performed on an adult male, using Kohlrausch's combined induction coil and meter bridge, with the whole series of telephones in multiple arc extending down the library, as before described, as galvanometers. When the resistance in the circuit, in which the man was included, was exactly balanced by the resistance introduced into the other circuit of the meter bridge, the telephone became silent; by using all the telephones, this phenomenon was simultaneously demonstrated in all parts of the room. In this way, it was ascertained that the re-



Kohlrausch's combined Meter-Bridge and Induction-Coil.

sistance of the man to the induction-current was only 600 ohms, whereas the resistance to the constant current, in the same individual, was 1,160 ohms. Some such difference was constantly found; though it rendered this elegant method untrustworthy for the measurement of resistance, it was a physiological fact of considerable importance. It was susceptible of being explained in several ways. 1. The human body, like all imperfect conductors, was probably really more permeable to a high tension than to low tension current, as was fairly demonstrated by the experiments reported. 2. It was probable that with rapid intermissions, the current did not really pass at all, or not fully, before it was annulled by the next current in the opposite direction; so that the human body, under the influence of a current alternating rapidly in direction, might be regarded as in a stratified or laminated state of opposite polarities, like the leaves of a book, or a condensor; or, more closely, like an elastic body transmitting sound longitudinally in alternate phases of condensation and rarefaction, these planes of condensation and rarefaction being represented in this case by positive and negative polarities. This appeared even in De Moncel's reports of his early experiments; and had, quite recently, excited some controversy among electricians, so that the matter could not be considered as yet settled. 3. Dr. Oliver Lodge had suggested

to Dr. Stone that an alternating current might be expected to show too low a resistance, because of the electro-chemical capacity of the body which it would treat like conductivity. 4. There was, probably, also considerable self-induction, a term which he was free to confess involved much difficulty.

Self-induction.—The possibility that self-induction played a considerable part in the actions now under consideration, was very strongly brought to mind by the highly suggestive Presidential Address, delivered by Professor Hughes to the Society of Telegraph Engineers and Electricians, on January 28th, 1886. Professor Hughes had sketched the history of the discovery of self-induction in the following words. "Induced, or secondary currents, in a near but independent circuit, were discovered by Faraday in 1831; and the phenomenon of the self-induction of an electric current in its own wire, was observed by Henry in 1832, and traced to its cause in 1834 by Faraday, who proved that, on sending a current through a wire, a momentary induced current, in the opposite direction, is evoked in its own wire; also that, on the cessation of the primary current, a second induced, or 'extra current' is excited in the direction of the primary. The effect is greatly augmented when the wire forms a coil, as we then have, in addition, the reaction of superposed currents; but the effect exists to a great extent, even when the wire forms but a single loop, or a straight wire with the earth forming the returning portion of the loop, as in all telegraph lines."

Dr. Stone said that, though there was still some controversy as to the mathematical interpretation of the facts brought forward by Professor Hughes, he believed that they pointed to a new direction, in which research might be prosecuted by physiologists. Professor Hughes divided the current into stable and variable periods; the continuous current was in the stable, the alternated and interrupted in the variable period. It was in the latter that induction took place. Instead of the time-honoured Neef's hammer of the induction-coil, Professor Hughes employed his own invention, the microphone, or a small contact-breaking clock. This allowed the use of the ordinary meter-bridge for measuring resistance, in combination with the sonometer, by which means not only resistance, but self-induction could be measured.

A straight meter-bridge, with a platinum silver-wire, and two sliding contacts, was shown, joined up with the latest form of the Hughes sonometer, consisting of two concentric coils of wire, on cylindrical bobbins, the inner being movable round an axis passing through the diameter of the outer coil. When the two coils were at right angles to each other, a pointer, attached to the inner one, indicated zero, where being no self-induction between them in this position. The connections formed a most ingenious combination of the meter-bridge with the sonometer. A current, slowly interrupted by the contact-breaking clock, was then passed through a standard resistance, and through the same man as had been before experimented on, the series of telephones distributed about the room still acting as sensitive galvanometers in the bridge. Approximate silence was obtained in the telephones by means of the sliding contacts, which was rendered complete by rotating the moving index and coil of the sonometer, until an equal and opposite amount of self-induction to that of the human body had been introduced.

With this instrument, which had only recently come into his hands, Dr. Stone hoped to be able to balance resistance and self-induction separately; but, as yet, the time during which it had been at his disposal had been too short to allow him to arrive at complete measurements. The method of using the instrument was, however, successfully demonstrated.

General Considerations.—In bringing his lectures to a conclusion, Dr. Stone expressed his conviction that there was a great field open for research in this direction. The whole foundation of physiological electricity required to be strengthened and re-examined. It was, indeed, a stately building, but its physical basis was unsafe, and, until this was made firm, the entire superstructure was in danger. If this work be done, many precious discoveries would doubtless be made in the course of the necessary explorations. Already the analogies between nerve-force and the great physical force were growing strong. One such analogy relating to inhibition had been published in *Nature* by Dr. Lauder Brunton. Another analogy Dr. Stone had ventured to suggest, in a speculative way, in his syllabus, by comparing the human nervous system to a duplexed telegraph-cable, in which a transmitted impulse was balanced and inhibited at the sending-station, but unbalanced and exhibited at the receiving-station.

Therapeutic Possibilities.—There were not wanting indications, from several directions, that electricity might be hopefully applied in various diseases. Its use in muscular enfeeblement from lead, and in other metallic impregnations, and the so-called "refreshing action" of the current, were well known. Neuralgia could sometimes be cured by its use, a fact illustrated by the case of sciatica, reported in Lecture II. Here, he believed, the electro-chemical production of alkaline bases in the tissues occurred. It was of use, too, in certain other diseases of the nervous system, in locomotor ataxy, and in progressive muscular atrophy. In these diseases, its favourable influence was due, not only to its direct action, but also to its power to loosen chemical affinities, and to render more active alteratives administered by the mouth. Dr. Stone had been able to demonstrate that, under its influence, copper, mercury, and, perhaps, silver, administered by the mouth could be eliminated. Its hypnotic properties had been tested by so good an observer as Colonel Bolton, who had informed Dr. Stone that a constant current passed from head to hand never, in his own case, failed to produce sleep.

Conclusion.—After finally insisting upon the necessity for accurate measurement in the use of this therapeutic agent, Dr. Stone, in a few brief sentences, expressed his gratitude to the President and Censors of the College of Physicians for giving him an opportunity of demonstrating and explaining his views on a subject, at which he had worked for over five years; to his colleagues, for their kindly presence and intelligent interest in his experiments; to distinguished men from outside the College, like John Marshall and Sir Henry Mance, who had honoured him by their attendance and advice. He proposed to conclude by saying farewell in a time-honoured formula, and, following an ancient custom of the place in which he spoke, in the Latin language, "Dixi, dignissime Præses, quod felix faustumque sit huic Collegio. Vos socii cæterique omnes valete et plaudite."

TWO LECTURES
ON
TUMOURS OF THE LARYNX; THEIR PATHOLOGY, SYMPTOMS, AND TREATMENT, WITH ILLUSTRATIVE CASES.

Selected from a Course of Lectures delivered during the Winter Session of 1885-86 at the Glasgow Royal Infirmary.

By DAVID NEWMAN, M.D.,
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Lecture II.—*(Concluded from page 816).*

I now pass to consider the question of prognosis, and, in doing so, I shall divide the subject into two divisions: first, the prognosis in benign tumours; and second, in malignant. In pre-laryngoscopic times, the fact of a tumour being malignant or not was not of the same importance to the patient as it is now; because, in former times, if the tumour had a tendency to increase to such an extent as to cause obstruction to respiration, death was almost certain to result, whether the tumour were of one class or of the other. Previously to the middle of this century, there were few cases of successful extirpation of benign tumours, and surgeons looked upon all tumours of the larynx as clinically malignant. Certainly this was true, from a strictly clinical point of view, in so far that they were almost certain to lead to the death of the patient. Now, however, the tumours which I have described as benign, may be removed without much danger to the patient; hence the prognosis is favourable, as a rule, in non-malignant neoplasms. In respect to benign growths, the points necessary to hold in view in forming an opinion in respect to the future are, first, the age of the patient; and, secondly, can the growth be removed by the endo-laryngeal method?

In children, the prognosis is less favourable than in the adult, partly because the diagnosis is not so easily made, and also from the fact that manipulation within the larynx is more difficult; so that, in the majority of cases, if the tumour is to be removed, the extra-laryngeal method must be adopted. Again, during the earlier years of life, the larynx is so small, that a tumour of trivial size may cause complete obstruction to respiration. It also must not be forgotten, that at this period the laryngeal mucous membrane is more prone to acute inflammation and spasm, than in the later years of life. After what I have just said, I will eliminate, for the sake of simplicity of description, cases of benign tumours in children; the following remarks apply to adults. Two questions must be considered: the rela-

tion of the tumour to the life of the patient, and the probability of phonation being impaired or not. First, in relation to life; the danger of death resulting from suffocation may be easily obviated by the performance of tracheotomy, an operation which in itself, apart from co-existing pulmonary or cardiac disease, is almost free from danger, so that a patient should never lose his life from interference to respiration, so long as he is under the care of the surgeon at a sufficiently early stage of the disease. Should, however, the patient refuse to submit to tracheotomy, the danger of suffocation may be considerable. Tumours situated below the vocal cords or multiple sessile tumours are less favourable than single pedunculated growths. Again, large tumours are necessarily more grave than small ones; but the point which above all others determines a favourable or unfavourable prognosis is whether or not the removal of the growth necessitates the larynx being opened from without. The general health of the patient, but especially the condition of the heart and lungs, must be held in view. The prospects as to the recovery of the voice are determined by the character, the situation, the size, the number of the tumours, and the amount of inflammatory induration associated with them, and whether the neoplasm can be extirpated through the mouth or not. When thyrotomy is required, not only is the danger to life increased, but the chances of the vocal function being impaired or lost are very great. If the growth be situated at the upper part of the larynx, especially anteriorly, if it be single, small, and pedunculated, it can be removed, and in all probability the patient will recover the full use of his voice; but if the growth be sessile, multiple, not clearly defined from the surrounding tissues, and if important parts of the larynx be involved in its substance, then the likelihood of the voice being restored after the tumour has been removed is small. In many cases, the inflammatory induration of the mucous membrane accompanying tumours gives rise to considerable alteration in the character of the voice, but it is astonishing how rapidly this may disappear after the growth has been extirpated. It is not necessary for me to say anything to you regarding the danger of recurrence. To this I have already referred in my description of the various tumours, and I shall have something to say about it when considering operative interference.

In relation to the life of the patient, the prognosis of malignant disease is in all cases unfavourable, but is worst in extrinsic carcinomata, most favourable in intrinsic sarcomata, while the intrinsic carcinomata may be said to occupy an intermediate position. In extrinsic cancer the disease is incurable, the growth spreads rapidly, the lymphatic glands become involved at an early date, and the patient is liable to die either from suffocation, from asthenia, from hæmorrhage, from sudden collapse, or from pyemia; or the fatal termination may be induced by perforation of the œsophagus, by the formation of abscesses, or by pulmonary disease. If tracheotomy have been performed at the proper time, life may be prolonged, and suffering for the time be mitigated, but more heroic surgical interferences in cases of extrinsic carcinomata, offers little or no hope of success. Although the prognosis is very unfavourable in all cases of cancer, it is much less so in intrinsic than in extrinsic growths. When the tumour is small in size, and none of the tissues external to the larynx have become involved, the hope of rescuing the patient from death is considerable. If, however, the disease has spread beyond the limit of the laryngeal cavity, or if the glands have become affected, then a tumour, which at first may have been intrinsic, becomes quite as hopeless, as far as operative interference is concerned, as if the growth had been extrinsic from the beginning.

Throughout this lecture I have discussed the facts in connection with laryngeal neoplasms, under the two heads, according as they are malignant or benign; but, in bringing under your notice the treatment of tumours, I shall depart from this classification, and, for obvious reasons, discuss the question of treatment under the following heads: first, palliative; and second, operative treatment. I shall divide the latter into three classes, (*a*) endolaryngeal operations, for the destruction or extirpation of growths, (*b*) extra-laryngeal operations, and (*c*) extirpation of the larynx in whole or in part.

There are two classes of cases which call for palliative treatment; small growths causing little disturbance further than local irritation, and malignant tumours, where operative interference for their removal is considered inadvisable. The principal symptoms which call for relief are interference with respiration or with deglutition, and the presence of spasm or of inflammation. When there is much pain, it may be relieved by spraying the fauces and larynx with a solution of cucaine, or by insufflation with morphine and starch, or by inunction with an ointment containing morphine. The danger of death from suffocation may be removed by the timely performance of tracheotomy; and, in cases which demand this operation, it should be performed as soon as possible. Opening the trachea is not in itself a dangerous operation, and, in my opinion, should be resorted to whenever there is the least indication of dyspnœa, especially if the surgeon be not likely to be at hand when he may be required. It is remarkable how much relief a patient derives from the rest to the larynx, when the air ceases to pass by its natural channel.

In advanced cases of malignant tumours, or when large benign tumours occupy the upper portion of the larynx, dysphagia becomes a marked and troublesome symptom. In the former cases, the only treatment you can adopt is to insufflate the larynx with powder containing morphine, or by the use of a spray of cucaine, both of which only give temporary relief. The treatment of spasm of the larynx arising in connection with tumours must be conducted on general principles; but, as a rule, nothing short of removal of the growth will give permanent relief.

With these few remarks on palliative treatment, I will pass to consider the methods which may be adopted for the removal of tumours; and I may premise what I have to say, by urging upon you the importance of removing growths at the earliest possible opportunity. There are doubtless many cases where a tumour may exist for years without causing any disturbance, and I know of at least two cases where a neoplasm must have existed for a considerable time without the patients being cognisant of the fact that there was anything the matter. Indeed, it is urged by some writers that, so long as a tumour does not cause trouble, it should be left alone; this seems to me a dangerous doctrine. Not only is it easier to remove a small growth than a large one, but the probability of removing the former without injuring some important structure is greater; and, moreover, there is always a certain amount of danger, especially in old persons, of a tumour, in its early stages homologous, becoming in its later development heterologous. In other words, a tumour which at one time followed the type of a benign growth, may, at a later period, show evidences of malignancy. Doubtless, certain growths, such as the fibromata, after they reach a definite size, remain quiescent; and, if they be situated in the upper third of the larynx, they may interfere so little with the voice, that the patient may not be anxious to have them removed.

Suppose you discover a tumour, and the patient refuse to have it removed, it is clearly your duty to represent to him that, if he allow it to remain, there is always the danger of sudden, and sometimes serious, dyspnœa arising, in consequence either of increase in the bulk of the growth, or of some intercurrent affection, such as acute laryngitis, œdema, or spasm; and also, you must explain to him that at no time will the growth be more easily removed than at present.

Radical treatment is preferable to palliative, and may be carried out by a great variety of methods. These may be divided into groups, according as the operation is performed, by aid of the laryngoscope, through the mouth and natural passages, or by means of incisions through the skin, cartilages, etc. I will, therefore, classify operations under the following divisions: endolaryngeal, extralaryngeal, and extirpation of the larynx in whole or in part.

The first class of operations requires considerable practice and dexterity on the part of the surgeon, and some patience and assistance from the patient. Before attempting any of the methods I am about to describe to you, it is necessary that you should first educate your patient to sit in a proper position, and perfectly steady, while you are manipulating the parts; and you must also teach him to hold out his tongue in the proper way. He must also avoid swallowing, coughing, or retching. I will now perform the operation upon one of the patients whom I have brought from the ward, and I will explain to you as I go along what I am doing. Before this man was brought into the lecture-room, my assistant, Dr. Keogh, sprayed the larynx several times with cucaine; and you will see, when I pass this probe, heated in warm water, into the larynx, that I can touch the tumour without causing any discomfort. The growth, a portion of which I am now going to remove, is a large one, and almost completely fills the upper third of the larynx. The instrument I have selected is Morell Mackenzie's antero-posterior spoon-shaped cutting forceps; and you will see that, with them, I can remove a considerable portion of the growth. They are warm, so as to prevent the metal from causing irritation. With the assistance of the laryngeal mirror, I now pass the forceps over the epiglottis, lay hold of the tumour, and, with a little force, cut through its substance. You see I have now removed three pieces, and the hæmorrhage prevents me from seeing the remainder of the growth, so that I shall now send the patient back to the ward, and in a few days I will repeat the operation.

Besides using forceps, growths may be extirpated by means of instruments, such as those which I now pass round for your inspection. That to which I first ask your attention is Schroetter's guillotine and

forceps; but they are not instruments which I would advise you to employ, for this reason, that the guillotine has no grasp of the portion of the growth cut off, and, when the larynx is anæsthetised, there is always a danger of the separated piece dropping down into the lower part of the larynx or trachea; and moreover, as far as my experience goes, the hæmorrhage following their use is more profuse than when cutting forceps are employed.

In place of these forceps, tube-forceps, such as those I hold in my hand, may be used. Türck's, Schroetter's, and Stoerk's forceps are of this variety; Fauvel's and Mackenzie's are branched forceps; whereas Gottstein's combine the movements of both instruments. The disadvantage of the tubular forceps is that they do not grasp the growth firmly, and, therefore, when considerable force is required to remove the neoplasm, they fail in their purpose; whereas, on the other hand, branched forceps, such as Mackenzie's, although they seize the growth with firmness, have the disadvantage that, in opening them within the larynx, they partly cover the field of vision at the very time when it is desirable to have a clear view of the parts. To some extent, Gottstein's forceps obviate these difficulties.

I have now shown you two sets of instruments, namely, forceps and guillotines; but, besides these means, others may be adopted according to the requirements of the individual case. These I shall glance at only for a moment.

Small growths may sometimes be destroyed by the application of chemical agents, such as chromic acid, nitric acid, acid nitrate of mercury; these, however, require very delicate manipulation, and, unless skilfully used, are apt to lead to unpleasant accidents. Electric cauterisation is greatly to be preferred to chemical, and the cautery which I have shown you to-day is the one that I always employ. I have never found any bad results follow its use, although some laryngoscopists blame it as more apt to cause collateral inflammation than when chemical caustics are used. I have found, however, that when the cauterisation is limited to the neoplasm, which is not, as a rule, very sensitive, no bad results follow its use. Of course, before operating by this method, the larynx should be thoroughly anæsthetised with a solution of cucaine.

Knives, properly curved and guarded, may be used for the separation of growths which may be seized, but not pulled off, by forceps. This method is, however, seldom employed, so that I need not do more than mention it.

Crushing or compression may be found necessary for the purpose of inducing the death of a tumour, which would otherwise require too much force to tear it away.

Wire-snares and écraseurs may be also used. In using such instruments, the wire loop is made to encircle the growth, and afterwards drawn tight, so that the tumour is forcibly pulled or twisted from its attachment. This method is, however, difficult and uncertain in its application; for not only is the wire apt to become displaced, and so lose its hold of the growth, but the manipulation of these instruments within the larynx is very likely to cause considerable local irritation and spasm.

The methods which I would recommend you to adopt are evulsion, or tearing the growth away bodily by forceps, such as Gottstein's or Mackenzie's, or destruction of the tumour by the electric cautery.

Under certain circumstances, for example, when the tumour is large, or situated below the vocal cords, and is inaccessible by the mouth; when the patient is too young to allow endolaryngeal manipulation, or when the tumour is very firmly attached to the surrounding tissues, it may be necessary to open the larynx from without. Extralaryngeal methods should only be adopted when less severe operations have failed or are inapplicable, or when life is in danger from suffocation or obstruction to deglutition.

Extralaryngeal operations include section of the thyro-hyoid membrane; section of the middle crico-thyroid ligament; section of the thyroid cartilage in the middle line; and section of the entire larynx, or of the trachea. Before attempting any of these operations, the surgeon should perform tracheotomy, and make a thorough and diligent endeavour to remove the growth by an endolaryngeal operation, and only when he is convinced that it is impossible, should he attempt any of the operations I have just mentioned; for, if the thyroid cartilage be divided, the ultimate results are not only less favourable than when the tumour is removed by the mouth, but the immediate dangers to life after the extralaryngeal operation are much greater.

The extralaryngeal operations usually employed for the removal of tumours are thyrotomy, and complete division of the larynx. The others I have mentioned to you, especially subhyoid pharyngotomy, permit only a very limited space for manipulation, and their usefulness is therefore very restricted. Mesochondric laryngotomy may be employed for the removal of small subcordal tumours; it does not interfere with the function of the larynx, it involves very little risk to life, and the cicatrix which follows is hardly noticeable. The only two operations which I will describe to you to-day, are thyrotomy and complete laryngotomy. The latter should only be resorted to when section of the thyroid cartilage fails to expose the interior of the larynx sufficiently.

In performing either of these operations, the patient should be placed on his back, with a firm pillow behind his shoulders and the upper part of his chest, so that the thorax is raised, while the head is thrown backwards, and the soft parts in front of the neck are put upon the stretch. The neck should be held perfectly straight by an assistant, while the operator feels for the thyroid cartilage; and, when the precise situation of the various parts of the larynx have been ascertained, the surgeon should grasp them between the fingers and thumb of his left hand, so as to render the skin moderately tense.

When section of the thyroid cartilage alone is to be performed, a vertical incision should be made in the middle line, from a little above the upper border of the thyroid cartilage to the lower margin of the cricoid. The edges of the wound should be held aside by retractors, and all bleeding points secured before the larynx is opened. The only vessels that are likely to cause any trouble are the crico-thyroid arteries, which are firmly attached to, and anastomose over, the crico-thyroid membrane; if seen, they should be drawn downwards before the membrane is penetrated. A sharp pointed curved knife should now be thrust through the crico-thyroid membrane, and the thyroid cartilage be divided in the middle line from below upwards, care being taken not to injure the interior of the larynx. When completely divided anteriorly, the two halves of the thyroid cartilage should be drawn apart by blunt hooks, and the interior of the larynx exposed to view, when the growth may be removed by scissors, by the knife, by the electric cautery, or by other appropriate means, according to the features of the individual case. Should, however, section of the thyroid cartilage not sufficiently expose the cavity of the larynx, then the incision may be extended downwards through the crico-thyroid membrane, or, if necessary, complete laryngotomy may be performed by subsequent section of the cricoid cartilage. If the growth be firmly attached to the cartilage, the perichondrium should be separated from the part of the cartilage to which the tumour is adherent, and that portion of cartilage excised.

These operations are not applicable when the larynx is occupied by a malignant growth; under such circumstances, either more complete removal is necessary, or the case should be left alone.

When malignant disease attacks the larynx, more complete removal is demanded than is possible by the operations to which I have, up to the present, referred. Laryngectomy, either complete or partial, is called for.

The possibility of an animal living after total extirpation of the larynx was first established by Albers, in 1829, while conducting a course of experiments upon dogs for the purpose of ascertaining to what extent the larynx participated in respiration. Koeberlé, in 1856, suggested the idea of removing the larynx for disease; and, in 1866, the operation was first put into execution by Dr. Patrick Heron Watson, of Edinburgh. The operation was performed for syphilitic stenosis, but the case was not published. It was only in 1871 that the operation was introduced to the profession by Professor Billroth, of Vienna, who undertook it upon man, consequent upon the experimental investigations upon animals by Czerny, of Heidelberg. Up till the present time, complete laryngectomies have been performed over ninety times. In the great majority of cases (eighty), the operation has been performed for cancerous disease. Until recently, the cases have not been carefully selected, and the operation has been performed without regard to the circumstance that the tumour was not limited to the cavity of the larynx. I am firmly of opinion that cancer is primarily a local disease, and this view has been strongly supported at the recent discussion at the Glasgow Pathological and Clinical Society; and so long as the system of lymphatics has not become involved in the new formation, I think it is quite possible that the patient may be rescued from death by the early performance of a radical operation. It is, however, a very different matter when the disease has spread beyond the laryngeal cavity. In such cases, laryngectomy seems to me unjustifiable, for two reasons: the immediate danger of the operation is greatly increased, and the possibility of eradicating the disease is extremely small; but I do not see any reason why an intrinsic carcinoma, which has not yet exhibited any evidence of glandular involvement, should not be removed with a good prospect of saving the patient. It is not my intention at the present time to enter into statistical details, but I think it my duty to indicate to you what I consider to be the elements of failure, and to point

out suitable cases for operation. Looking at the subject broadly, I may say that death has been due, in the majority of cases, to the immediate dangers of the operation, and, later on, to recurrence of cancer. Immediately following the operation, the causes of death are collapse, pyæmia, pneumonia, and hæmorrhage. These dangers must, therefore, be carefully guarded against; the first mentioned may be, to some extent, avoided by carefully preventing loss of blood during the operation, and by feeding the patient as soon as he is able to digest food. Pyæmia may be prevented by the free use of antiseptics during the first few days following the operation. Iodoform is the most easily applied, and, if carefully watched, the most satisfactory that we have at our disposal; but the drug, if inhaled, may, in certain cases, cause very alarming symptoms. Therefore, although iodoform may be used to disinfect, or rather to prevent infection of the wound, it is not safe to apply it freely to the tracheal tube by means of warm sponges. The danger of pneumonia, on the other hand, may be minimised by keeping the air of the apartment aseptic, moist, and at an equable temperature. Care should also be taken to prevent any fluid from the wound or food from entering the air-passages; and this can be easily done by using a large-sized tracheotomy-tube, which completely fills the trachea. The period when pneumonia is apt to develop is during the first fortnight. This time bridged over, the life of the patient may be regarded as safe from this complication.

The mortality from the operation is high in cases of cancer; whereas, in cases of sarcoma, not a single patient has died from the immediate effects of the operation. One reason for this is, that cancer is essentially a disease of old age; and, moreover, in many of the cases recorded, laryngectomy has only been resorted to as a last resource.

I am clearly of opinion that, when surgeons make up their minds to operate upon cancer of the larynx, either by total or by partial extirpation, at the earliest possible stage of the disease, namely, as soon as they are satisfied that they are dealing with a case of intrinsic cancer, the statistics of laryngectomy will be greatly improved.

Up till the present moment, I have only referred to the operation as applied to cases of carcinoma. At an early part of the lecture, I told you, while speaking of the prognosis in relation to life in cases of malignant disease, that the prospects of long life are worst in extrinsic carcinomata, more favourable in intrinsic sarcomata, while the intrinsic carcinomata may be said to occupy an intermediate position. In the first mentioned condition, the disease must be regarded as incurable, and the question of performing laryngectomy should not be considered. (The patient whom I showed you to-day, D. McK., comes under this category.)

I had the privilege of assisting the late Dr. Foulis in operating upon a case of sarcoma in the larynx. The operation was performed in September, 1877, and the patient lived till March, 1879, when he died of tracheal and pulmonary phthisis, a disease from which he was suffering previously to the operation. Up till the time of his death, there was no evidence of recurrence; so that, if he had not been the subject of tubercular disease, the probability is that he would have been alive now. In sarcomatous disease, death is certain, unless extirpation be performed; but, if the diseased tissues be entirely removed, the prognosis is rendered favourable.

Laryngectomy has been performed for sarcomata five times; by Lange, Czerny, Foulis, Caselli, and Bottini. The patient of the first mentioned surgeon lived for nearly seven months, in which case the disease not only involved the larynx, but also the gullet. The second was a lymphosarcoma, perforating the thyroid cartilage, and involving the neighbouring glands. The latter were removed repeatedly; the common jugular vein, the internal and external carotid arteries, and the pneumogastric nerve, were divided; and the patient died in high fever, with right-sided pleurisy, fifteen months after the primary operation. These two cases were clearly unsuitable for operative interference. Of the three remaining—namely, Caselli's, operated upon in September, 1879; Bottini's, in 1875; and Foulis's, in 1877—two are still alive. That of Foulis died of phthisis, seventeen and a half months after the operation. These cases, though few in number, indicate far more satisfactory results than we can find in connection with carcinomata.

The other diseases for which laryngectomy has been performed, are papillomata, lupus, perichondritis, and stenosis. In some of these, no doubt, the operation was undertaken with the mistaken idea that the disease was cancer; otherwise, it is difficult to comprehend why such a radical measure for the cure of disease, which might be easily remedied by less heroic treatment, should be adopted.

I now come to consider the conditions in which extirpation of the larynx may be undertaken with advantage. In no non-malignant growth is it called for; but it may be resorted to in intrinsic sarcoma, and in intrinsic cancer. Laryngeal carcinomata are, as a rule, intrinsic for a considerable period, and, therefore, the time during which the operation may be performed with advantage is considerable; but, notwithstanding, it is of the utmost importance that, if the operation is to be performed at all, it should be undertaken as soon as the disease has been recognised. When the malignant disease is associated with infiltration of lymphatic glands, or if the primary tumour be extrinsic, or if there be persistent bronchial or pulmonary catarrh, the operation is contra-indicated; for, if it be performed in such cases, not only may the patient be deprived of the small remnant of life left to him, but the chances of eradicating the disease are very remote. Cases are on record in which, besides the larynx, portions of the thyroid gland, of the trachea, œsophagus, or pharynx, have been extirpated; but the results are far from encouraging, not only on account of the immediate dangers of the operation, but also from the fact that recurrence takes place within a limited time.

In a few instances, half the larynx may be removed in place of the entire organ; for example, in malignant tumours of limited extent, in stenosis and obliteration of the larynx which cannot be cured by other means, and in recurrent papillomata not removable by less heroic interference. These cases are, however, rare; for, since 1878, when Billroth first showed that this proceeding was feasible, only twenty cases have been reported. From these it is not possible to draw conclusive deductions; but it may be said that, whereas, in operations for total extirpation, the mortality is 33 per cent., after partial or unilateral extirpation, the mortality is not more than 20 per cent. Moreover, if the cases be properly selected, the dangers of recurrence are not greater after the partial, than after the complete, excision. Again, another advantage which is claimed for unilateral laryngectomy is, that the voice may be almost perfectly retained, without the use of a tracheal cannula, and deglutition also may be completely preserved.

I will now describe to you the steps of the operations, first, for total, and, second, for unilateral, laryngectomy. In the patient, J. W., tracheotomy was performed sixteen days previously to the operation of extirpation. In performing excision of the larynx, I made a median incision from the lower edge of the hyoid bone to the tracheotomy wound, which was situated on a level with the second ring of the trachea. The skin and subcutaneous tissues were then dissected from the thyroid cartilage in front, and the anterior margin of the thyro-hyoid muscle was exposed, and the substance of the muscle was separated from the upper part of the cartilage by the handle of the knife, while the origin of the muscle from the oblique line on the side of the thyroid cartilage was separated by incision as far back as the pharynx. This was done first on the left, then on the right side. The other muscles, namely, the sterno-thyroid and the inferior constrictors, were then dissected, the edge of the knife being kept close upon the cartilage. The cricoid cartilage was then dissected out, and the upper ring of the trachea exposed. When this had been done, the trachea was drawn forwards and upwards, and divided below the first ring Up to this stage of the operation, chloroform had been administered through the tracheotomy tube; but, now that the trachea was divided transversely, it was necessary to introduce a large-sized tracheal tube (Macewen's), with an india-rubber ring round the end in the trachea, in order to prevent blood from flowing into the air-passages, and also to permit chloroform to be administered at a little distance from the operator. The mucous membrane on the posterior wall of the trachea was then carefully dissected from the œsophagus; the superior cornu, and upper part of the left ala of the thyroid, were then cut through and separated from the rest of the cartilage, so as to permit the posterior part of the larynx to be more readily dissected from the pharynx. The thyro-hyoid membrane was then divided in front, the epiglottis was divided at its base, and the upper attachments of the larynx were cut through. A small portion of the mucous membrane of the pharynx was taken away, along with the arytænoid cartilages. The portion of cartilage which was separated from the thyroid was then removed. All bleeding points having been secured, the trachea was stitched to the lower edge of the wound, and a large-sized tracheotomy-tube was fixed in position. The wound was dressed with absorbent cotton-wool sprinkled with iodoform, and inclosed in a casement of perforated green silk protective.

The patient was then placed in bed, and no food was administered until the evening, when a feeding tube was introduced into the œsophagus, through the upper part of the wound, and retained in position by a piece of sticking plaster.

In performing this operation, I divided the trachea and removed the larynx from below upwards. Some surgeons, however, prefer to do it in the opposite direction; this is a more tedious method, but it avoids the risk of blood entering the air-passages, on account of the severance of the larynx from the trachea being the last step in the

procedure. These advantages are, however, counterbalanced in the method which I adopted, by the circumstance that the operation can be performed more rapidly; while, by using a flexible gum-elastic tracheal tube, of sufficient size to fill the trachea, not only can the escape of blood into the lower air-passages be prevented, but the anæsthetic and the hands of the administrator are removed to some distance from the field of operation.

One point to which I desire to direct your attention is, the advantage of dividing the thyroid cartilage close to its upper posterior angle. By separating the superior cornu before dissecting the larynx from the œsophagus, the operation is greatly facilitated, and the danger of injuring the œsophageal wall, or large arteries, is removed. Some operators ligature the superior and inferior thyroid arteries, and if necessary the superior laryngeal, or even the hyoid branch of the lingual artery, as a preliminary to the operation of extirpation; but as far as my experience goes, the hæmorrhage is by no means great, and can easily be controlled.

Unilateral laryngectomy is performed by making an incision down the middle line from the level of the hyoid bone to that of the cricoid cartilage, while another is made along the lower margin of the hyoid bone. The soft parts are then separated from the cartilages on the diseased side; and, after the larynx has been exposed, the thyroid cartilage is split, and the interior of the cavity exposed to view. If, on inspection, the disease be found to be limited to one side, the affected parts are removed; but if not, the cricoid cartilage is not divided from above downwards, but is severed from the trachea transversely, the larynx is dissected from below upwards, and complete extirpation is performed.

Before concluding this lecture, it is necessary for me to say a few words with reference to the treatment of the patient preliminary to the performance of extralaryngeal operations.

The operation, whatever its extent, should be preceded by tracheotomy, which should be performed at least a week in advance. In most cases calling for extralaryngeal interference, the patient suffers from dyspnœa, and consequent engorgement of the pulmonary vessels. This is relieved by the free entrance of air through the tracheotomy-tube. Another reason why the trachea should be opened as a preliminary measure is, that the physical examination of the chest by auscultation is facilitated, especially in cases in which the entrance of air through the larynx is noisy. Moreover, the patient becomes habituated to the entrance of air through an artificial opening, and the irritation produced by the wound leads to adhesion of the trachea to the surrounding integuments. High tracheotomy should be performed; it does not practically interfere with the further steps of the operation, whereas low tracheotomy causes two wounds instead of one.

I will now say a word or two in respect to the after-treatment in cases of laryngectomy. The edges of the wound should not be brought together by sutures, but the cavity should be packed either with a sponge wrapped in perforated green silk, a method which I adopted in my first case; or, for the sponge, there may be substituted absorbent cotton-wool sprinkled over with iodoform or other antiseptic. The dressings should be replaced every twelve hours, and the surrounding atmosphere should be kept at a temperature of 70° Fahr., and warm sponges, sprinkled with iodoform, should be applied at short intervals over the opening of the tracheal tube. Care should be taken not to apply the iodoform too freely on warm sponges. The vapour of the antiseptic is rapidly absorbed by the lungs, and, in certain cases, symptoms of iodoform poisoning may suddenly develop.

The great object for the first few days, that is to say, until the surface of the wound has become covered by healthy granulations, is to keep the discharges thoroughly aseptic, and to prevent, by use of a large tracheal tube, the possibility of their entering the air-passages. Nourishment, and, if required, stimulants may be supplied through a tube introduced into the œsophagus, either by the mouth, or through the wound.

During the first few days after the operation, the only food required is milk, and this should be supplied at the rate of three or four pints in twenty-four hours. When the wound has become firm, the patient may be encouraged to take food by the mouth, and an artificial phonatory apparatus, such as the one I now show you (Dr. Irvine's modification of Gussenbauer's artificial larynx), may be introduced, and the edges of the wound drawn over the upper or pharyngeal limb by strips of sticking plaster. This instrument differs from the original tube devised by Gussenbauer in the following respects. The mechanism of the two limbs is reversed, so that the pharyngeal tube, in place of being introduced through the tracheal tube, is passed first, and the other limb is introduced through it. The phonatory reed is carried by the tracheal tube, and may be drawn out and in with great ease. These modifications were suggested by my friend Dr. Irvine, of Glasgow, and were employed in Dr. Foulis's first case. This apparatus (kindly made for me by Dr. J. Cowan Woodburn) I will use in a few days for the patient J. W.

I may now conclude by a remark or two with respect to the symptomatic treatment of cases of malignant disease which are unsuitable for operative interference, such as that of the poor man, D. McK., whom you have seen to-day. Life may be prolonged and rendered less intolerable—first, if the tumour cause dyspnœa, by the performance of tracheotomy, an operation which not only permits free access of air to the lungs, but, by relieving the œdema and inflammation of the upper air-passages, facilitates deglutition. Dysphagia may be relieved by the introduction of an œsophageal tube, or by spraying the pharynx with a solution of cucaine. Pain, on the other hand, may be alleviated by insufflations of starch containing a sixth to half a grain of morphine; or, what I consider even better, an ointment containing morphine may be applied to the larynx externally by inunction. Hæmorrhage may be restrained by the hypodermic injection of ergotine; while, to some extent, the general constitutional disturbance may be modified by the administration of preparations of arsenic. The prospects of alleviating suffering in these sad cases are small, and usually, within a few months, the glands becoming implicated, the patient dies. We, however, look forward to the time when very few cases of intrinsic cancer will be permitted to involve the lymphatic system without an attempt being made to remove the primary growth, either by partial or by complete laryngectomy. In order that this end may be achieved, it is absolutely necessary that the disease be recognised at an early stage.

ON THE EARLY TREATMENT OF PROSTATIC RETENTION OF URINE.

Read before the East Surrey District of the South Eastern Branch.

By GEORGE BUCKSTON BROWNE, M.R.C.S.Eng.

An elderly man, requiring catheterism for partial or complete prostatic retention of urine, may be looked upon as a blind traveller unconsciously approaching the brink of a precipice, and his surgeon may be compared to the friend who, aware of the danger, hastens to his assistance. The friend must interfere, or else the man is lost; but, if he rush unskilfully to his aid, he may cause him to stumble, and so actually hasten his end, although by a very brief period of time; or the man may already have lost his equilibrium, the most skilful aid is unavailing, and he falls, and, in falling, may drag his would-be saviour down with him. In other words, the onlookers, ignorant of the danger, may attribute the loss of the patient to the surgeon and his catheter, and the surgeon's credit, dear to him as his life, be gone. Therefore, with regard to prostatic catheterism, it behoves us as practitioners of surgery, jealous of our reputation and of that of our art, to act from the very outset so cautiously and judiciously, that no one may have occasion to reproach us.

Putting metaphor aside, catheterism, in such cases as we are now considering, may be followed by fever, which varies in intensity from an almost imperceptible illness to one which may speedily place the patient's life in serious danger, and ultimately even prove fatal. In a few cases, there is no fever at all; in some there is a feeling of chilliness, followed by slight but general *malaise;* while in others there is, or is not, definite rigor, the temperature soon running up to 104° or 105°, with a pulse of 100 or thereabouts, followed by a feeling of great heat, and then by sweating and recovery. In graver cases, the fever may be continued and the rigors repeated, the patient ultimately recovering, but being left for a long time weak and prostrate; and, in the gravest cases of all, the fever continues, perhaps without further rigor, the temperature remains about 103° or 104°, the pulse perhaps 120 to 130, the tongue becomes dry, brown, and narrow, and the patient gradually sinks into a comatose condition, and dies.

Now, the important question arises, What is the etiology of this remarkable and often serious fever, and how is it to be prevented, or, at least, mitigated? The answering of these questions is the object of the paper which I have the honour of reading before you this afternoon. Owing to my association with Sir Henry Thompson, my opportunities of observation for the last twelve years have been very numerous. I have known the fever follow the passage down the urethra of a large and sharp edged renal calculus; and, in fact, it may

follow all kinds of urethral irritation, independently of urethral instrumentation. I shall, therefore, not apply to it the term used by some, namely, catheter fever, because catheters are only one of many sources of irritation.

Of course, septicæmia may follow a wound in the urethra, as it follows, occasionally, a solution of continuity in any part of the body. Some have thought the fever we are now considering due to septic invasion of the kidney by the introduction from without of septic matter by means of the instrument. Now, this I cannot allow. In the first place, the fever may follow after every antiseptic precaution has been taken; and, secondly, there are numbers of men about daily and active, whose bladders we know to be constantly full of foul and decomposing urine.

In connection with the causation of this fever, the following case is instructive.

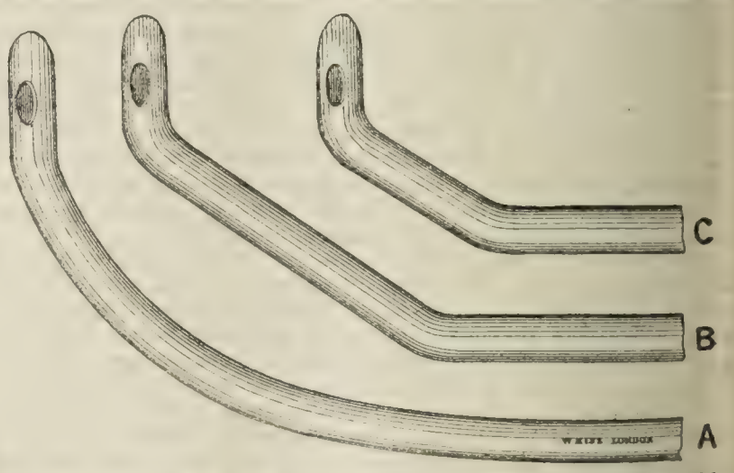
A year ago, Dr. B., a well known hospital medical officer, thin, anxious, nervous, and sensitive, consulted me about a very close stricture. He constantly went about his work with a No. 1 gum-catheter tied into his bladder, and, if he took it out, complete retention frequently ensued. On three occasions, I made gentle dilatation with bougies larger than No. 1, and each time violent rigor and high fever followed. I found that one-third of a grain of morphine, subcutaneously injected half an hour before making dilatation, entirely prevented rigor; but, for obvious reasons, this mode of treatment was impracticable, and I proposed internal urethrotomy. I cautiously, accurately, but freely divided the stricture with Civiale's urethrotome, and, from that day to this, he has had no fever, although every fortnight he regularly passes bougies up to 13 Eng.

Now, such a case as this (and I could quote a dozen) effectually disposes of another theory as to the causation of this fever, namely, that it is due to absorption of urine by the urethral mucous membrane, from abrasion made by the catheter; for, although there was a free incision into the urethra, there was an entire absence of fever, which, previously, had always followed the most gentle and bloodless instrumentation. The absence of rigor and fever under the influence of morphia is also highly significant.

In my own mind, I am satisfied that this fever results from urethral shock communicated to the sensitive excretory apparatus of the kidney through the nervous system, and causing all degrees of suppression of urine, from the merely momentary up to the most complete and absolute. We all know that, anatomically, the genito-urinary organs are closely connected with the cerebro-spinal and sympathetic nervous systems, and therefore with all the organs of the body, and especially with the kidneys. Physiologically and clinically, we know that, when an urethral instrument is passed for the first time upon a man, it is occasionally followed by alarming symptoms; and not unfrequently, in the space of a few seconds, the patient may be writhing on the floor, in all the unsightliness of an epileptiform seizure. A much commoner example of the remarkably close connection between the genito-urinary organs and the general nervous system is the excitement produced in the former organs by a single erotic thought. Death from shock has immediately followed amputation of the penis; and I have known rigor, with complete suppression of urine, lasting for twenty-four hours, and verified by the use of a small catheter, follow the passage of a bougie rather larger than ought to have been passed through an urethral stricture. The nervous origin of the fever explains satisfactorily what we constantly observe in practice, that, the more sensitive and cultivated the nervous system of the patient, the more readily does he suffer from this fever; for example, the medical man and the artist suffer more than the labourer. I am also of opinion, as the result of much observation and practice, that the amount of fever following urethral interference is directly proportionate to the amount and character of the instrumentation inflicted; and it is a very practical point, and all in favour of the theory I accept, that instrumentation, when made under the influence of morphine, is often made without fever in cases where fever is sure to follow if no drug be employed. In proportion to the amount of shock communicated to the kidney, the blood in the general circulation becomes more or less loaded with urinary elements; fever is produced; and, if the kidneys do not speedily recover themselves, it is easy to see that soon the patient may be in danger. In the firm belief that this explanation of the fever is the correct one, I do not term it catheter-fever, for the reason just given; nor urethral fever, because the kidney may suffer shock in other ways than through the urethra; but I prefer, as Sir Henry Thompson does, the name *urinary fever*.

When there has been long standing obstruction to the natural outflow of urine, owing to prostatic enlargement, the kidney is particularly liable to certain changes which render it difficult for it to recover from the congestion consequent upon the shock from urethral catheterism; and, although the catheterism may have been vitally necessary for the relief of partial or complete retention, still it is the starting-point of serious, and perhaps fatal, illness; and it is difficult to make the patient and his friends understand that, so far from being the cause of the illness, it is precisely because catheterism was not sufficiently early resorted to, that the illness is so severe. There is good reason to believe—putting aside cases where a person endowed with a remarkably sensitive nervous system may die from pure shock—that no one ever dies from urinary fever, if, at the outset, the kidneys be perfectly healthy. Unfortunately, we have no means of ascertaining beforehand whether the kidneys are in a state to bear catheterism or not, although, undoubtedly, urine of a low specific gravity is an unfavourable sign; but we need not let this impede our practice, for, if a catheter be necessary on account of retention of urine, it must be used, otherwise the patient's fate is sealed; and if, through long continued, but perhaps unobserved, disease, he succumb from urinary fever, it is very certain that, had he not been subjected to catheterism, he would have died also, and probably with much more suffering. The full acceptation of the nervous origin of urinary fever is of great help to us in practice. It obliges us, in the first place, to do all in our power to diminish urethral shock; and, when once the fever has come on, it makes plain to us that all our attention must be devoted to the relief of the embarrassed kidney. Our non-acceptation of the septic origin of urinary fever saves our patient from the prolonged instrumentation and disturbance of the bladder and urethra, which are necessarily caused by constant and free antiseptic irrigation; and we make no attempt to mould or straighten our patient's prostatic urethra by the introduction of dilating instruments—an old plan of treatment, recently again brought forward.

The first object of treatment being, therefore, to reduce the urethral shock to its minimum, it is necessary to pass the easiest kind of catheter, and in the most skilful and gentle way. I will, therefore, as briefly as possible, discuss the relief of prostatic retention by instruments. All instruments must be antiseptically clean, warm, and well oiled. They should, if possible, be soft ones, and, as a rule, the smaller they are, within certain limits, the better. The least trying



of all to the urethra, is a No. 5 or 6 Eng. vulcanised india-rubber catheter (Jaques' patent); it is easy of introduction, and if it "go," well and good, but it will not always pass, and then no amount of skill will be of any use. If it will not pass, a small French *coudée* catheter may be employed. I show you a suitable catheter, and also one often supplied, which undoubtedly is a *coudée* catheter, just as a penny Pickwick is a cigar, but not the cigar a *connoisseur* would care to smoke. Keep the beak upwards, and as a rule, this catheter rides easily into the bladder; if it fail to pass, it will probably be due to the point catching in the prostatic sinus. In order to disengage the point of the instrument, gently withdraw it for about an inch or more, and rotate the catheter on its long axis, so that the beak points laterally to the right or left, instead of upwards as it did before. Now try to pass it into the bladder; if unsuccessful, repeat the movement, turning the point this time to the other side. Frequently, this manœuvre will prove successful. If not, a *bicoudée* catheter should next be tried. I do not think that this form of catheter has ever been fully appreciated; it is one of the most useful instruments in certain cases of difficult prostatic catheterism. Probably, the catheter has failed to take its proper position, because such bad forms of it are sold as are represented in figures C and B. Figure A represents a perfect bicoudée catheter; its second permanent bend is not abrupt. They are made to perfection by M. Bénas, of Paris. If still unsuccessful, the surgeon may try a very soft-ended olivary catheter; but this

instrument is only rarely of use in difficult prostatic catheterism. Then, if necessary, a large *coudée* catheter may be tried (No. 12 Eng.); for, although large instruments give more pain than small ones, they will often, by reason of their size, avoid an awkward place, which will engage a smaller instrument. I would here mention, with praise, the silk web *coudée* catheters, made in London, and of somewhat recent introduction. They are soft and highly polished, and I have often succeeded with them when an ordinary coudée has failed. I think this is because they are soft enough to become practically *bicoudéed* in the urethra, which enables them to pass easily over the bar at the neck of the bladder. Then, the English gum catheter is not to be despised; in skilful hands, it is more effectual than perhaps any other single kind of catheter, for it can be moulded in warm water into any shape, and afterwards "set," by dipping it into cold. A good plan is to keep one of these catheters permanently on a stylet which has been overcurved; when required for use, the stylet is removed, and the catheter keeps its curve so well in the urethra that it will often successfully surmount the obstacle at the neck of the bladder. Another plan of using this catheter in a difficult prostatic case is to introduce it on a stylet. When the catheter meets the obstruction at the neck of the bladder, it is held there with one hand, while the other withdraws the stylet for an inch or two; this movement causes the end of the catheter to rise and come forward, frequently with the happy result of entrance into the bladder. If this be not the case, silver catheters must be used, of various prostatic curves, with the patient either standing or lying. The introduction of the left forefinger into the bowel may often be of assistance, by pressing the point of the catheter forwards. After successful but very difficult catheterism, it may become a question whether the catheter should be tied in or not. This should always be avoided, unless the difficulty have been really great, and then only a soft instrument should be retained. I am as satisfied that I have seen life saved by tying in a soft instrument, as I am that I have seen life lost by using a metal catheter. If a silver or metal instrument alone have relieved the retention, it may often successfully be replaced by a soft instrument, if the latter be moulded on a stylet to the exact shape of the former. With patience, gentleness, and skill, the surgeon should always succeed in passing a catheter in a case of prostatic retention; but supposing that, from great irregularity of the part, or want of suitable instruments, or injury previously inflicted upon the urethra, he cannot pass an instrument, he should not delay, but should aspirate the bladder at once suprapubically. Afterwards, with rest and a thorough evacuation of the bowels, a catheter may often be easily passed through the urethra and into the bladder. Should retention recur and catheterism again fail, a second or even a third aspiration is allowable; but although the bladder has been safely aspirated many (ten or twelve) times in succession, fatal extravasation and abscess have been known to follow even a second aspiration, and it is therefore unwise to aspirate often. After a third aspiration has been necessary, and if still no catheter can be introduced, it will be good practice to puncture the bladder suprapubically with trocar and cannula, leaving the cannula or a small catheter in the wound.

The diagnosis of prostatic retention does not concern us here; but, in discussing its early treatment by catheter, it is conveniently considered under three heads.

1. In cases where the prostate has only recently enlarged, and where the partial, but habitual, retention of urine does not amount to more than two or three ounces after every natural act of micturition, with proper care and management, recovery should always take place. These patients become thoroughly accustomed to the catheter, and use that instrument daily, as a mere addition to their ordinary toilet. They live as long as their fellows, and often attain great age. I recently saw, with Dr. Morton, of Kilburn, a gentleman, aged 85, who had passed all his urine by catheter for twenty-five years.

2. Cases where the patient is able to void urine, but is obliged to do so with much frequency, and there is a large area of hypogastric dulness on percussion, often do not come under the surgeon's notice until there is complete retention; they are always grave, and sometimes almost hopeless from the commencement of treatment.

3. There is a form of complete retention which may be termed the paroxysmal complete prostatic retention, in which the patient only occasionally requires catheterism, often going for long periods without the slightest need of the catheter.

1. In cases where the prostate has only recently enlarged, the first catheterism will often be made as an aid to diagnosis. Owing to certain symptoms, the surgeon desires to find out if the patient be able to empty his bladder by his natural efforts. If the patient be ordinarily robust, the catheter may be passed in the consulting room, and afterwards the patient should go home, and sit in a warm room for the rest of the day; but, if he be nervous or in any way out of health, I would advise the surgeon to make an appointment with him at his own house, and ask to be received in his bedroom. Before the catheter is passed, the patient should be desired to pass all the urine he can by his own efforts. He should be left alone for this purpose. Afterwards, the patient stands with his back to the wall, and the surgeon, seated in front, passes a No. 5 vulcanised india-rubber, or a small French elbowed catheter; any urine drawn off will be urine which the patient could not pass himself. If only an ounce or so be found retained, the experiment had better be repeated next day; because, often from sheer nervousness, a patient may be unable to make his bladder act completely on the first occasion. I may here say that, most unfortunately, the use of cocaine as a lessener of urethral shock, during early catheterism, is impracticable; the drug renders the urethra insensitive where it comes into contact with it, but it cannot be introduced into the deep urethra without using a urethral instrument, so that nothing is gained by its use. After such catheterism as just described, the patient should have a hot bidet bath. If no urine be found behind, he may be allowed to go out the next day; but, if two, three, or more ounces are found, he should at once learn to pass a soft catheter, and, for a week or ten days, should not leave the house. If the quantity retained be considerable, *e.g.*, five or six ounces, and if the patient be feeble, he had better keep his bed at first. The catheter is usually required once a day for less than three ounces of retained urine, twice a day for three to six ounces, and three times daily for six or seven ounces; over this amount, the patient will not be comfortable without four or more catheterisms in the twenty-four hours.

2. In treating those coming under my second heading, there is usually little doubt that the bladder habitually retains a large amount of urine (say a pint, or more). Such cases should not be touched by catheter until they are comfortably settled in a warm room, where they can remain as many days or weeks as the surgeon may deem necessary. The urinary fever, which is almost certain to follow catheterism, will be much controlled if a little morphia be administered half an hour before the catheter is used. If by mouth, I prefer a small dose of Squire's solution of the bimeconate of morphine, or of nepenthe; but, in my own practice, I prefer a small dose of morphine, combined with atropine, injected hypodermically. If the bladder be very full of urine, it should not be emptied at the first catheterism. It is quite enough to draw off from sixteen to twenty ounces; otherwise, pain and cystitis are produced, both of which we wish particularly to avoid. Usually, four or five days should elapse before the bladder is completely emptied. In all cases, after the commencement of regular catheterism, if there be constitutional irritation, advantage will follow the administration of small doses of an opiate, two or three times a day. Should rigor come on, spirits must not be given, but the patient should be warmly wrapped up, hot bottles put to his feet, and hot tea, or other simple drink given to encourage perspiration. If the fever run very high (105°), and the patient be fairly robust, frequent small doses of antimony wine are useful; if he be not very strong, the salicylate of soda may be given, and, when the fever is slight, frequent small doses of liquor ammoniæ citratis are excellent. Sometimes, as patients approach recovery, there is considerable diuresis, which may occasion much disturbance, at a time when they are not well able to bear it. Here, some one of the many preparations of opium will act as a charm, by checking the secretion of urine, while, at the same time, it promotes the action of the skin. I do not recommend belladonna, nor atropine, except at first combined with morphine hypodermically, to lessen the effects of shock. Counter-irritation, doubtless, exercises much influence over the production of urinary fever, as witness the remarkable immunity from fever often enjoyed by patients who are relieved by catheter from very painful retention of urine. The very hot bidet or hot hip-bath is a mild form of counter-irritation; hot mustard and linseed poultices over the loins, and even blisters, are other forms which sometimes may be employed with advantage. In order to enable the kidney to recover itself, those organs which are complementary to it in their action, notably the skin and the liver and intestines, must be kept active; the former is stimulated by the warmth of the bed or bedroom, and the latter should be made to act gently, daily, by a little simple laxative medicine (not saline), combined occasionally with small doses of blue pill. The diet should consist of bread, vegetables, soup, fish, game, and chicken, with little, if any, butcher's meat, and no milk or cheese. As a rule, spirits must be avoided, and as little wine given as the plaintiff's previous habits will allow. Above all, the patient must be able to obtain relief by the catheter, whenever the calls to pass urine are frequent, and the bladder evidently suffering from ineffectual efforts to void its contents. The amount of urine secreted in any given portion of the twenty-four hours, varies greatly from day

to day, and the patient must not be dependent upon the periodical visits of his surgeon for instrumental relief, but should learn to pass a catheter for himself, or have a skilful attendant always at hand. If no urine is passed naturally, the catheter must be used whenever the desire to micturate comes on. Patients often try to postpone the use of the catheter as long as possible, and look upon the instrument as a source of irritation; the reverse is exactly true, and it is better to pass the catheter even oftener than is really necessary, than too seldom.

3. After complete retention of urine, all the care just insisted upon is specially important. After relief by the catheter, the patient should go to bed. If the amount of retained urine be great, the bladder must not be emptied suddenly, as such a proceeding has been followed by fatal syncope. If the amount be not great, *e.g.*, under a pint and a half, the patient should be watched, and, if he be able, in time, to pass urine naturally, the catheter should be employed after he has done all he can by his own efforts, to see if he really can empty his bladder. In the few cases where the patient regains his vesical power completely, he should keep his bed twenty-four hours, and his house for two or three days, and take a little calomel or blue-pill, with some mild laxative. But if, as is usual, the regular use of the catheter is required, the patient should be kept in bed until the urinary fever, which is usually to be expected within the first five or six days, has passed away. During the first few days of catheterism, hæmorrhage into the bladder not unfrequently occurs; this need not excite alarm, provided the necessary instrumentation is practiced with gentleness and skill, and that the patient is kept absolutely at rest. In such cases, morphia is often very useful; astringents by mouth are really useless, and injections into the bladder are to be deprecated as long as bleeding lasts.

Thus, the main points to be observed in the early treatment of prostatic retention of urine, are:

1. The reduction of the urethral shock to its minimum;
2. The care necessary to enable the kidney to maintain, or regain, its equilibrium, often rudely disturbed by reflex irritation, conveyed from the urethra.

CASE OF INTERCURRENT HEPATITIS AND RETAINED GALL-STONES.

Read before the Glasgow Medico-Chirurgical Society, April 2nd, 1886

By ALEXANDER NAPIER, M.D.,
Assistant to the Professor of Materia Medica and Therapeutics in the University of Glasgow.

Mrs. W. T., aged 43, had been subject to occasional "bilious" seizures for at least six years, and to a tendency to prolapse of the womb for several years; for the latter affection she wore a pessary. She stated she had "gastric fever" twice, once twenty-three years ago, and again fourteen years ago; she was five weeks in bed in the last attack, not so long in the first.

With the exception of the "biliousness" referred to, there was no indication of grave involvement of the liver till June 21st, 1884, when Mrs. T. suffered from well marked symptoms of hepatitis: acute pain in the right hypochondrium, enlargement of the liver, feverishness, nausea, and sickness, but no rigors, and no jaundice. She was confined to bed about two weeks. Mrs. T. then continued tolerably welll with occasional "bilious" attacks, always with want of appetite, til, May, 1885, when she had another similar illness (apparently hepatitis) but much slighter, lasting only a few days.

In the end of July or beginning of August, 1885, she received a severe blow with a tennis-ball in the pit of the stomach. This caused intense pain at the time. From this date onwards the general indisposition, and the uneasiness in the region of the stomach, increased; there were a constant, dull, heavy pain in the hepatic region, entire loss of appetite, and progressive debility.

On September 10th, 1885, the pain suddenly became very acute, and was accompanied by sickness and vomiting, which lasted for three days; this was followed by marked jaundice, the urine becoming very dark in colour, and the stools white, or pipe-clay coloured. The patient at this time was twelve days in bed, but the jaundice did not disappear till six weeks had elapsed. She then improved a good deal in general condition, and suffered no longer from headache or sickness; but there was still entire absence of appetite.

On November 18th, 1885, there was another sudden attack of severe pain in the hepatic region, which had been preceded for a day or two by an increased sense of uneasiness in the liver. It was then that I saw her for the first time. The attack was one of typical gall-stone colic; the pain was spasmodic, exceedingly severe, shooting up to the shoulder and through to the spine, causing the patient to cry out; it was accompanied by marked and severe rigors, and by vomiting. Pulse 96; skin cool; tongue whitish and moist. Relief was obtained from the use of morphine subcutaneously.

After the first night, the pain was not so severe; but the liver continued tender to pressure. The irritability of the stomach lasted for several days, only small quantities of liquid food being tolerated. Then vomiting ceased; the pulse rose to 120, and the temperature to 100° and 101°, for many days in succession; marked jaundice came on, with constipation, whitish stools, very dark (almost black) urine, headache, and nausea. The liver was tender to pressure over the left lobe and over the region of the gall-bladder; in the latter situation, a well-defined rounded mass could be felt. Hepatic dulness was not perceptibly increased in the axillary line, nor over the left lobe; but at the median edge of the right lobe, in the region of the gall-bladder, it came far past its normal limits downwards, exactly corresponding to the firm mass above referred to. The swelling was smooth, firm, and resistant, but gave no sense of fluctuation, or of rubbing, when grasped.

Treatment consisted in the use of morphine at first, to relieve pain, the occasional administration of saline purgatives, chloride of ammonium, and pancreatised food, together with persistent poulticing of the hepatic swelling.

The patient was seen early in December by Professor Gairdner; he, without rejecting the theory of gall-stone, rather favoured the view that we had to do with an abscess or tumour of some kind.

The patient's general condition gradually improved, though the mass projecting from the lower border of the liver continued rather tender to pressure, and quite unaltered in size, till January 8th, 1886, when she had a severe rigor, vomiting, and acute hepatic pain; while the mass became distinctly larger, and much more tender. The skin and superficial tissues were freely movable over the swelling. Pulse 120; temperature not noted, but certainly not febrile. In a couple of days, the pulse had fallen to 90, the sickness had ceased, and the local pain much diminished; this attack passed off without any jaundice.

On January 18th, the patient complained much of severe darting pains, with considerable tenderness to pressure over the whole abdominal surface, not specially over the swelling, though this continued tender. These pains, probably connected with the formation of adhesions between the swelling and the abdominal parietes, lasted for several days, but yielded to persistent poulticing.

On January 22nd, she was ordered capsules containing ether and turpentine.

On January 25th, there was slight vomiting once, and the capsules were stopped.

On January 27th, very severe and persistent vomiting set in. Absolutely nothing, not even a drop of water or broken ice, remained in the stomach. The pulse ran up to 135, and the patient became exceedingly prostrate. She was supported by nutrient enemata.

On January 29th, she was seen by Professors Gairdner and Buchanan, and was apparently sinking. The general abdominal pain had gone, but the tumour was unchanged in character, except that it felt more adherent to the skin. It was agreed that the swelling should be opened next day. Morphine, given subcutaneously, procured for the patient a fair night's sleep; and small quantities of milk and brandy were retained by the stomach.

On Saturday, January 30th, Professor Buchanan performed the operation, which he describes in the following article.

CHOLECYSTOTOMY FOR THE REMOVAL OF BILIARY CALCULI, RETAINED IN A GALL-BLADDER WITH OCCLUDED CYSTIC DUCT.

Read before the Glasgow Medico-Chirurgical Society.

By GEORGE BUCHANAN,
Professor of Clinical Surgery in the University of Glasgow.

On January 29th, I was asked by Dr. Napier to consult, along with Professor Gairdner, in the case of Mrs. T., aged 43. She had been suffering, for eighteen months, with intercurrent attacks of hepatitis, followed, for the last three months, by symptoms of retained gall-stones; this last condition following on a blow she received on the epigastrium from a tennis-ball. The details of her illness were related

to us by Dr. Napier, in a clinical history, which appears as a separate part of this communication.

At the time of my visit, the patient was much emaciated, could take no nourishment, and vomiting had been almost continuous for the last forty-eight hours. It was obvious that, if any surgical interference were required, there could be no great delay.

On examination, I found an ovoid tumour extending from the lower margin of the costal cartilages, to about an inch above the level of the umbilicus. Its situation corresponded with the linea semilunaris, below which it lay, with a measurement across, at the upper end, of about three inches. The tumour could be moved slightly from side to side; but the movement was communicated to the abdominal walls, to which it seemed to me to be adherent. It was firm and resistant, with an obscure feeling of deep elasticity, rather than fluctuation. The opinion I formed of it was, that it was an enlarged thickened gall-bladder, adhering to the abdominal walls; probably containing imprisoned calculi. And I stated that, in my opinion, it was a clear case for an incision of an exploratory kind. In this, Professor Fairdner and Dr. Napier concurred; this being the view they had already discussed before sending for me.

Accordingly, on the morning of January 30th, Mrs. T. was put under the influence of ether, that anæsthetic being chosen in consequence of the feebleness of the circulation.

I made an incision, three inches long, from the edge of the costal cartilages opposite the site of the gall-bladder, extending perpendicularly downwards to nearly opposite the umbilicus. After cutting through the skin and fascia and muscular walls of the abdomen, I came to a white, dense, tight membrane. To the knife, it felt tough and rigid; and, on dividing it by careful application of the instrument, I became aware I was cutting into a condensed fibrous tissue, evidently the bond of union between the gall-bladder and the abdominal wall. Proceeding carefully, I at length opened a cavity, from which some dark brown purulent fluid escaped. Though discoloured, it was not foul or putrid. I now passed the point of my finger into the cavity, and found a number of smooth gall-stones, lying in a bag with smooth soft walls. I had no difficulty in removing them with the point of my finger and the scoop-end of a director. The form of the cavity was pear-shaped; it admitted the whole length of the forefinger, and was evidently the gall-bladder. I washed it out with boiled water, and then carefully explored with a fine probe, to ascertain if the cystic duct could be entered; but no orifice could be found. I therefore concluded that the duct must have been occluded by the inflammatory process, by which the gall-bladder had become adherent to the wall of the abdomen. A drainage-tube was introduced into the cavity, and the wound was lightly dressed with absorbent gauze.

It is unnecessary to go into details as to the progress of the case. The relief to the agony, distress, and sickness and vomiting was instantaneous. Sleep and appetite returned, and Mrs. T. was practically well in a fortnight, getting out of bed during the day, and relishing her food. Suddenly, on the evening of March 8th, Mrs. T. had a rigor, followed by feverishness and a distinct attack of jaundice. Next day she was better; but the wound, which was not quite closed, became inflamed, and the surrounding tissue swollen. On the third day, a gush of pus, tinged with bile, took place; and this was followed by the spontaneous discharge of a gall-stone. From this attack she rapidly recovered, and has continued quite well till to-day (April 2nd); except that, two days ago, without any pain or any indicative symptoms, two more gall-stones came away in the slight discharge from the wound, which still continues.

Query: Are these gall-stones being formed in the common duct, and finding their way into the gall-bladder by a fistulous opening, the result of an ulceration which did not exist at the time of the operation?

BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL.—The annual meeting of the governors of this hospital was held on April 15th. The report stated that, during the past year, 1,142 patients were treated for skin-disease, 810 for venereal disease, and 230 for miscellaneous diseases. The attendances were 13,616. There has been an increase over last year in annual subscriptions of £30 11s. After referring with regret to the death of Dr. Russell and Dr. Heslop, the report showed that the necessity for larger premises became yearly more urgent; and that, after careful consideration, it was decided to build a new hospital, with provision for beds and baths, as originally intended. For this purpose, a piece of land in the centre of the town has been secured. The cost of erecting and suitably furnishing the building was estimated at £5,000. Towards this sum, legacies, donations, and the surplus of ordinary income amounted to £1,200. The committee earnestly commended the matter to the public.

CASE OF IRREDUCIBLE INGUINAL HERNIA TREATED BY ELASTIC PRESSURE.

By WILLIAM ELDER, M.B., C.M.Edin.,
Resident Physician Royal Infirmary, Edinburgh.

THE following case of irreducible inguinal hernia, treated by elastic pressure, by means of pads of cotton-wool and an elastic bandage, may be of interest to the readers of the BRITISH MEDICAL JOURNAL.

A. B., a man, aged 56, came to Professor Chiene, of Edinburgh, for advice on July 1st, 1885, complaining of irreducible inguinal hernia on the left side. He stated that he had had a small hernia for more than thirty years, but it had never given him much trouble till within the last few months, when it had been coming down oftener than usual, and had been more difficult to reduce. He had never worn a truss, nor used any means to prevent the hernia from coming down. He said that he was always very particular in getting the bowel reduced immediately he felt it down, but that he did not think there was any danger of strangulating the omentum. He did not consult a medical man till the day before (June 30th), when it had become very much enlarged and irreducible. The surgeon advised him immediately to put himself under the care of Professor Chiene, which he did.

On examination, the swelling was found to consist partly of bowel and partly of omentum. The omentum was much indurated; so much so, that it felt nearly as hard as a stone. There was one large mass larger than a goose's egg, and several smaller ones. There was no pain on pressure. On palpating the tumour, a sort of crepitating sensation was felt, as if there were fluid in the sac. An attempt was made to reduce the hernia, when the bowel was reduced, but very little difference could be made on the omentum.

As there was thought to be danger of strangulation, ice was applied to the part, and the patient kept absolutely at rest on his back. He was kept thus all next day; and, on the evening of that day, he was given chloroform, and an attempt was made to reduce it. This, however, was unsuccessful; and, next day, July 3rd, Professor Chiene applied elastic pressure by means of a padding of salicylic wool, and an elastic bandage in form of a single spica.

On removing this, next day, July 4th, the hernia was found much reduced in size, and all the crepitating sensation was gone on feeling it. The elastic pressure was reapplied, and the hernia improved, becoming gradually smaller till July 10th, when the largest mass was somewhat larger than a duck's egg, and several a little smaller. The masses, however, were softer, and not so much indurated. Next day, July 11th, however, the hernia had increased in size, and the crepitating sensation was again felt. This was thought to be due to the bandage having slipped off the swelling during the night, which it had always a tendency to do. The bandage was reapplied, but not so tightly as before, as it was a little painful.

It was kept on till July 14th, when the hernia was smaller than it was on July 11th, but not in a better state than on July 10th. The bandage was reapplied, and slowly and gradually the swelling became smaller, till July 17th, when I applied the bandage in a different manner, which I will afterwards describe.

This bandage remained on till July 20th, when it was found that the swelling had almost entirely disappeared. The omentum, however, had all gone back, and the swelling that remained was felt to be due to a thickening of the tissues round the cord and the external abdominal ring. The bandage was reapplied; and, next day, this thickening had completely gone, and no difference could be felt on the two sides, except the canal, which could be felt to admit the point of the index finger. The bandage was kept on till a truss could be fitted, which was done on July 24th; and, next day, the patient was able to be up, and gradually regained strength. He is now (May, 1886) as well as ever he was in his life, and the hernia has never been down again.

The two points which, I think, are worthy of notice in this case, are: first, the efficacy of the elastic pressure in the treatment of irreducible hernia; and, secondly, the method of applying the pressure. I think the first of these is quite evident to everyone, namely, that continued elastic pressure, carefully applied, must reduce an indurated hernia in size, and, by reducing its size, must make it more easy to reduce. Secondly, as to the method of applying the pressure; at first, the bandage was applied as a single spica, but it was found that the swelling was very apt to make its way out below the bandage, by passing towards the middle line. On July 17th, however, I applied the bandage more in the form of a double spica, although not a true double spica. I began the bandage at the right anterior superior iliac spine, crossed

the abdomen to below the left trochanter major, then round the thigh and across the perinæum to the right groin and right anterior superior iliac spine, where it was pinned to the beginning of the bandage. Then it was wound round the back, above the iliac crests, to keep it from slipping down. I then brought it down over the hernia, on the left side, across the perinæum, and round the right thigh, over the front of the abdomen to above the left iliac crest, and round the back to the right anterior superior iliac spine, where the bandage began. I then went on as before, following the same course, but making the bandage above slightly overlap the one below, until I got all the pubic region covered, except a small space in the middle line for the penis. This opening, which always weakens the pressure, must not be too large, otherwise the hernia will tend to escape through it. I consider that it was the altering of the method of putting on the bandage, that had such a wonderful effect in this case. This bandage had only been once on when the hernia disappeared.

Another point is, that enough wadding must be used, in order that, when the bandage is on, it may not pain the patient, and in order that the pressure may be equal all round the hernia. It is not necessary to put the bandage on very tightly, as it gradually becomes tighter the longer it is kept on. The different layers of bandage must be pinned to each other, to prevent them from slipping out of their place.

CASE OF CERVICAL SPINA BIFIDA, SUCCESSFULLY TREATED BY INJECTION.

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and the Portsmouth and South Hants Eye and Ear Infirmary.

A male infant, ten weeks old, labouring under spina bifida, came under my care in January, 1886. The tumour was circular in outline, about half the size of a small orange. It occupied the middle cervical region, and was invested with healthy skin, except over a limited area at the summit, from which part a transparent process of the membranous sac protruded. The margin of the skin around this process was well defined. The tumour was tense, and the base broad and fixed. Immediately below it, there was a central depression, marking a considerable deficiency in the neural arches. When the infant cried, a free expiratory impulse occurred in the sac, synchronous with the impulse at the fontanelle. In the prone position, the tension of the tumour subsided; and, on pressure, the membranous protrusion became quite flaccid.

The treatment consisted in injecting, near the base of the tumour, half a drachm of Dr. Morton's iodo-glycerine solution. For some days after the operation, the infant manifested much fretfulness, and some irregular twitching of the limbs occasionally occurred. The slightest movement of the head appeared to cause considerable distress, and the whole tumour looked swollen and congested. This inflammatory stage was soon followed, however, by a brownish discoloration of the skin, and a gradual shrinking of the sac. At the end of six weeks the tumour was shrivelled to the size of a small marble. The remnant of the subcutaneous portion is now firm and immovable, and the membranous process is a mere nodule, covered with a thickened cuticle of the same colour as the surrounding skin.

Remarks.—The case is recorded simply as another example of the value of the treatment by injection. The intrinsic character of the tumour is, of course, a matter of uncertainty. It may have consisted only in a protrusion of the spinal membranes, or it may have been a protrusion of the membranes, together with the spinal cord and its nerves. It is impossible, in the living subject, to ascertain the exact relation between the sac of a spina bifida and the important nervous structures with which it is connected. As a general rule, however, the size and position of the tumour yield very little information on this important question. Some evidence respecting the contents of the sac can be obtained by a careful examination of the surface of the protrusion. A median longitudinal furrow, or a depression near the summit, is a strong indication of an intimate association with the spinal cord. In this case, there were no furrows or depressions on the surface; still, the general characters of the tumour certainly pointed to the conclusion that the nervous structures were involved in the sac. The sessile base, the free communication between the sac and the spinal canal, and the size of the cleft, which extended to the bodies of several vertebræ, are indications that the tumour was really a meningo-myelocele. The absence of any depression on the surface renders it probable that the cord and the nerve-roots were not extensively incorporated with the structure of the tumour, and that they did not extend into its posterior wall. They may have been only connected with the mouth of the sac; and, in this position, a considerable portion of the sac and its fluid contents must have been situated above them.

The infant was well nourished, and otherwise healthy. In every case of spina bifida, the constitutional condition demands as much consideration as the extent of the malformation; for, in estimating the probable result of surgical interference, a favourable state of the system, marked by the absence of other disorders and deficiencies, really appears to be of more practical importance than the external characters and the position of the protrusion.

CASE OF EXTENSIVE FRACTURE OF SKULL: TREPHINING: RECOVERY.

By T. LAW WEBB, M.R.C.S., L.R.C.P.Lond.

On May 9th, 1885, E. J., a boy, aged 10, fell from a tree, about twenty feet, into a ditch, striking his head against a stone. He lay undiscovered until the following day, at noon, exposed to rain and extreme cold for twenty hours. When found, he was unconscious, and half naked, having partially undressed himself.

May 10th. When I saw him, he was cold, but partially conscious, answering questions fairly correctly when aroused. There was great swelling and puffiness over the whole of the right side of the head. He kept continually saying, "Take that hat off," and tearing at something which he imagined to be on the injured spot. Temperature 96°, pulse 80, full. I ordered brandy and warm milk. He took liquids freely, and slept at intervals. 10 p.m. His body was warmer; other symptoms were much the same. A depressed fracture was felt at the anterior part of the right parietal region. The pupils were equal, and contractile; speech was slow and thick; he vomited twice.

May 11th, 8 a.m. He was much the same, but less easily roused; he was continually grinding his teeth; he was not so rational; the bowels acted freely; severe ecchymosis of the right eye appeared. 3 p.m. Pulse 85, temperature 97°. He was worse; could hardly swallow, fluids running out of the corners of his mouth. After a consultation, I determined to trephine.

On incision, the fracture could be traced from the anterior border of the parietal bone to the occiput. Its upper margin was depressed, especially in front, the spot selected for trephining. Blood was flowing rather freely from the fissure. It being found impossible to elevate the whole of the portion depressed, the edge of the upper piece, where most driven in, was cut away, and six small pieces of bone removed. Bleeding from inside the skull ceased, much clot having been removed from beneath the scalp; the wound was closed and dressed antiseptically. 6 p.m. Pulse 80, very weak; temperature 98°. There was rigidity of both arms. He was very drowsy; he had wetted the bed. 11 p.m. He had rallied. Pulse 85; temperature 98°. He moaned, and complained of pain in the head, but slept at intervals.

May 12th, 8 a.m. He was about the same. 10 p.m. Pulse 90; temperature 96°. He lay always on the left side.

May 13th, 8 a.m. There was more swelling of the face. He was more conscious, and in great pain. He continued to wet the bed. 3 p.m. Vision was entirely lost. 11 p.m. He was sleeping a good deal. Pulse 88; temperature 99.5°.

May 14th, 8 a.m. Pulse 90; temperature 99°. The swelling of the face was less. 10 p.m. He had less pain, but still said "he could not see." He could, however, perceive light. Pulse 100; temperature 99.5°.

May 15th. The wound was suppurating freely. Pulse 88; temperature 99°.

May 16th. Pulse 80; temperature 98°. He was more rational.

May 17th. His condition was the same. The edges of the wound were pale and sodden.

May 19th. He was very hungry, eating all day.

May 20th. His state was the same. Pulse 100; temperature 99°. His mind was clearer.

May 21st. He was not so well; was much quieter. He had headache. Pulse 120; temperature 102°.

May 22nd. He was better. The wound gaped, exposing bone. Pulse 86; temperature 98°.

May 24th. The left arm trembled and twitched. There was considerable loss of co-ordination in the entire limb.

May 26th. He was better in every way; and clear mentally.

May 30th. The trembling continued. He vomited twice.

After this date, all the symptoms steadily improved. Vision gradually became normal. The wound healed soundly, all weakness of the left arm disappeared, and the boy made a complete recovery.

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CLINICAL MEMORANDA.

HODGKIN'S DISEASE AND ITS CONSEQUENCES.

THE following case, having a fatal issue, presented peculiar features, which may possibly be worthy of record.

C. S., aged 14, had not been in good health for some months, although there was nothing in particular to cause anxiety. He had been observed to be out of breath on exertion, to have lost his appetite, and to be frequently craving for water. He had never suffered from ague or fever; he had no cachexia, was fairly nourished, and had never had any hæmorrhage from his nose or gums. About a fortnight before the accession of marked illness, he got into trouble in snowballing, and this led him to suffer a somewhat severe chastisement. The symptoms attending his last few days of illness were so unusual and unaccountable, that it was suggested that ill-treatment might have caused or accelerated the fatal termination; moreover, exaggerated rumours were abroad as to the injuries he had received. Under these circumstances, it was deemed unadvisable to certify without referring to the coroner, who very properly directed an inquiry to be held, and a *post mortem* examination to be made.

C. S. was first seen on December 21st, by my partner, Dr. Hoar, who found him suffering from gastric disturbance, coated tongue, foul breath, etc., but with a normal temperature, and no symptom of an alarming character. On the 23rd, his urine was noticed to be pinkish in colour, from admixture of blood, and, of course, loaded with albumen; but he was cheerful, sat up in bed, and played the flute; vomiting supervened. On the 25th, convulsions set in, and, on the same day, he died. The *post mortem* examination was performed by Dr. Hoar and myself on the 27th. There were two bruises observed on the left arm, but no further evidence of external injury. In the anterior mediastinum was found a diffused ecchymosis; the heart-substance was pale, but apparently healthy; both ventricles were full of blood. The pericardium contained about two ounces of serum; the lungs were crepitant throughout. On opening the abdomen, the spleen was noticed to be enlarged, and, on further examination, it was found to be four or five times its normal size; the liver was enlarged, extending about three finger-breadths below the margin of the ribs. The stomach and intestines showed no evidence of disease, but there was a general and considerable enlargement of the mesenteric glands. On the posterior surface of the right kidney were two ecchymosed patches; its pelvis was full of extravasated blood, as was also that of the left kidney. On removing the calvarium, the dura mater was found healthy; the vessels of the surface of the brain were congested. There was no evidence of inflammation within the skull, either past or recent. The fourth ventricle was full of extravasated blood. Both lateral ventricles were filled with a large and soft coagulum, breaking up the brain-substance in its neighbourhood; the brain itself was healthy. The superficial lymphatic glands throughout the body were, more or less, enlarged and indurated; the submaxillary on both sides, the concatenate, a row of inguinal glands on each side, stood out prominent and distinct; the deep glands in Scarpa's triangle were also affected. On section, the glands presented a greyish surface, and appeared to be simply hypertrophied; no morbid deposit in their substance was discernible.

JOHN TAYLOR, Ticehurst, Sussex.

OBSTETRIC MEMORANDA.

EXTRA-UTERINE AMPUTATION, WITH OTHER DEFICIENCY OF PARTS.

MRS. T. W., aged 22, a primipara, who had been under my care for some weeks previously, suffering now and again from false pains, with a serious glutinous discharge, was seized, on April 5th, with labour-pains. Upon examination, the os was found fully dilated, and the breech presented. On passing my right index-finger over the hip, the left limb was easily brought down. It was found to be amputated at the middle third of the leg, and the stump was firmly healed, apparently a successful case of a circular operation. In my attempt to bring down the other leg, it was found to be stiff and unyielding; a steady traction was therefore applied to the stump, and thus the infant was soon launched into the world.

According to the mother's calculation, her child was about a month premature. He looked bright and intelligent enough, though he presented the following peculiarities, in addition to the amputated leg. The right lower limb was straight as an arrow from the hip to the ankle, the knee ankylosed, and the rotundity of the structures of both thigh and leg lost. The foot was twisted upon itself inwards, as in talipes varus. The toes were simply in a rudimentary state. The limb was constantly kept firmly flexed to the right shoulder, soldier-like, presenting "shoulder arms," substituting, in this instance, the leg for the arm. As to the left or amputated leg, the stump was firm and well developed, and moved about with the greatest alacrity. The right hand had the index, the long, and the ring fingers fully developed, with the thumb and the little finger in a rudimentary state. Again, the left hand had only the index and the long fingers intact, only a trace of the others being left.

A search was now made for the missing or amputated part, which was found along with the placenta expelled. It was a plump waxy-looking body, but sufficiently formed to ascertain that the foot corresponded with its fellow, being clubbed. The child died four hours after birth.

JOHN WILLIAM, Brynmeurig, Bethesda.

PHYSIOLOGICAL MEMORANDA.

THE VOICE AS A STRINGED INSTRUMENT.

SOME years ago, I had the chance of examining a man who had cut his throat in such a manner that the larynx was divided exactly between the true and false vocal chords; and the action of the former was readily and distinctly visible when the head was thrown back and an effort was made to speak. The so-called chords were brought close together, and bulged upwards by the force of the breath; a vibratory movement along them was visible, and some bubbles of mucus were forced out. The presence of the mucous secretion was attributed to irritation caused by the adjacent wound. Directly the expiratory effort ceased, the chords separated, and left a triangular chink between them. What was the result of the attempts to use the vocal organs? No articulate syllable, no musical note, no sound whatever, except such as results from blowing between the closed lips. In fact, the larynx is not the organ of voice or a musical instrument at all; it is but a part of a musical instrument, and not the most important part of it. It closely resembles and performs the same office as the closed lips when a man plays upon a brass instrument. A horn or trumpet consists essentially of a tapering tube, ending at the smaller extremity in a cup-like cavity, and at the larger in a bell-like expansion. To use either instrument, the closed lips are inserted into the cap, and the breath forced between them into the brass tube. The edges of the lips are thrown into vibration, and a sound produced varying in pitch according to the length of the tube and the force of the breath. The lips without the brass tube, and the vocal chords apart from the oral cavity, produce no sound; but in both cases the vibrating membranes originate the sound in the resonant chambers, and, by varying the capacity of the latter, a series of musical notes can be effected. The part of the vocal instrument corresponding to the trumpet is the air-chamber above the larynx, and musical notes, and even tunes, can be rendered by it, without the use of the larynx at all, by substituting for it a vibrating tongue of metal called a Jew's harp, held between the lips. In this case, the breath must be inspired, instead of expired. The rate of vibration of the metal tongue will be constant, and the series of tones effected by altering the capacity of the cavity of the mouth.

EDWARD E. MEERES, M.D., M.R.C.P., Plymouth.

THE VOICE A STRINGED INSTRUMENT.

VERY few words will suffice to answer Mr. George Stoker's rejoinder, and I will not ask valuable space for detailed refutation of his many erroneous inferences on my former remarks. A fair example is the suggestion that I am ignorant of, or deny, the fact "that the vocal cords do vibrate when the voice is produced." I have simply to say that it was especially in recollection of the part that "laryngoscopic observation" has played in dispelling pre-laryngoscopic speculations, that I made the statement that the stringed instrument theory of Ferrein has been "refuted and exploded by the most eminent investigators."

I observe that Mr. Stoker has omitted to answer the note of Mr. Harwood Casson, and even to allude to that of my colleague, Dr. Dundas Grant. The latter very correctly stated the now generally accepted doctrine that the vocal organ "may be most nearly described as a reed pipe, having a reed adaptable to all variations within its range"; and I venture to affirm that Mr. Stoker stands alone amongst laryngoscopists, from Garcia and Czermak, to Gruetzner (Hermann's *Physiology*) in his conclusion "that the human voice most resembles a stringed instrument." In this view he has the unique distinction to differ also from other scientists (not specialists in laryngoscopy), who

have paid attention to the subject, such as Helmholtz and Tyndall, to name only two of the great army who could be arrayed against him.

LENNOX BROWNE, F.R.C.S.Ed., Surgeon to the Royal Society of Musicians, Senior Surgeon to the Central Throat and Ear Hospital, etc.

SURGICAL MEMORANDA.

SCIRRHUS OF THE BREAST: RECURRENCE LONG AFTER REMOVAL.

IN reference to the above, Dr. Herbert Snow remarks "that if, two years after excision of the breast with the contents of the corresponding axilla, the patient can pass a careful medical scrutiny, and be pronounced free from all recurrence, experience leads me to consider her permanently cured." As my experience is not in accord with Dr. Snow's, I place on record the following history of a recent case seen by me.

Mrs. R., aged 68, consulted me in August, 1885. Four years previously, the right breast was removed for scirrhus; the operation-wound did well, and in three weeks, she says, it was quite healed. She had remained well, up to five weeks ago, when a swelling was felt above and at the inner end of the cicatrix, which, for five inches, occupies the situation of the right mamma. The lump was a nodule of scirrhus, and I advised that it should be removed. No known cause for this recurrence could be assigned.

VINCENT JACKSON, Wolverhampton.

MANIPULATION OF THE SCAPULA IN DISLOCATION OF THE SHOULDER.

HAVING seen a report under the above heading, in the BRITISH MEDICAL JOURNAL of October 15th, 1881, by Dr. Illingworth, of Clayton-le-Moors, I was determined to adopt his suggestions in the next case that should come under my observation. In his paper on the subject, he states that, "in two cases, he has been surprised at the ease with which reduction was effected. The arm having been abducted and extended, with slight force, by an assistant, I firmly grasped the scapula with the right hand over the acromion, and depressed it in such a manner as to make the lower edge of the glenoid cavity slide over the rounded head of the humerus."

I was called to a case of dislocation into the axilla a few days ago. The man was very muscular, and would have given me considerable trouble to reduce in the ordinary way. I adopted Dr. Illingworth's plan with this modification, that I fixed the scapula by placing over the shoulder a long, narrow cloth tied into a loop, into which I placed my foot, stirrup-fashion. I then directed an assistant to gently raise the arm from the side, when, with both hands free, I, with the greatest ease, raised the head of the humerus into the glenoid cavity.

RICHARD RYDER, M.D., L.R.C.S.I., etc.,
Nailsworth, Gloucestershire.

DISLOCATION OF A METACARPAL BONE.

A FEW days ago, a labourer came to me, saying that he had fallen off a tree, and that a branch he had been lopping had fallen on and hurt his wrist. On examination, I found a conical protrusion on the back of the right hand, which proved to be the carpal end of the metacarpal bone of the middle finger, entirely dislocated. The deformity was soon reduced by traction and manipulation; but, on the slightest movement of the hand, the bone became again partially dislocated, and kept rising up as soon as replaced, being only kept in position by pressure. I put the hand, extended, on a splint, and applied a pad and bandage.

I have never met with this accident before, and believe it to be of rare occurrence. The carpal ends of the metacarpal bones are strongly bound by ligaments, and it is difficult to see why anything falling on the hand should cause one particular metacarpal bone to become dislocated, without injuring the rest.

HENRY A. HALLETT, M.D., Kimbolton, Hunts.

BEQUESTS AND DONATIONS.—Mrs. Mary Redfern, of Rose-lea, Knutsford, widow of Mr. R. Redfern, solicitor, of Oldham, has bequeathed £1,000 to the Oldham Infirmary, and £200 to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster.—Mr. John Dennison Hargreaves, of Woodlands, Staffordshire, has bequeathed £300 to the Royal Hospital for Incurables.—The Northampton General Infirmary has received £100, less duty, under the will of Captain Senhouse, of Ashby St. Ledgers.—The Cloth-workers' Company have given £50, additional (making £700), to the Charing Cross Hospital, and £50, additional, to the Ventnor Hospital for Consumption and Diseases of the Chest.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

EDINBURGH ROYAL INFIRMARY: OUT-PATIENT DEPARTMENT.

AN INTERESTING CASE OF EPILEPSY.

(Under the care of Dr. BYROM BRAMWELL.)

J. B., aged 23, presented himself on January 2nd, 1886, complaining of epileptic attacks. The patient, a fresh-coloured and healthy-looking man, living at Blairgowrie, in Perthshire, stated that he had enjoyed good health until five years before, when he went through an attack of typhoid fever; it was shortly after recovering from this illness that the epileptic attacks commenced. When the first epileptic seizure occurred, he was intoxicated; in that attack, he fell down unconscious, but was not, so far as he knew, convulsed. So far as he had been able to ascertain (and he had, at the request of his medical man, made special inquiry into this point), none of his relatives had suffered from epilepsy; his mother was alive, and well; he had one sister, aged 27, who is healthy; his father, however, had committed suicide at the age of 55, but he had been drinking heavily for some time previously.

The attacks from which he suffered came on very frequently; sometimes, he had as many as six or seven in the day; for the three months before he applied, they had not been so frequent. During this time he had been under medical treatment, taking bromide of potassium; he had two attacks on January 1st.

The attacks consisted in loss of consciousness; but there had never, so far as he knew, been any muscular spasms, twitchings, or convulsions; he had never bitten his tongue, nor foamed at the mouth; he had never fallen down when unconscious, except during the first attack, and then, as has been already mentioned, his co-ordination was impaired by alcohol.

Although quite unconscious during the attacks, he not unfrequently performed elaborate co-ordinate muscular movements, which, to bystanders, appeared to be done with a purpose, and to be ordinary conscious and voluntary acts. Sometimes, for example, he had left the bench at which he was working (he worked in a large room with several other men), had gone to another bench, and began to work with another man's tools; sometimes he "played at boxing bonnets," that is, trying to knock the hat off any one who was near him, first with one hand and then with the other. He had never injured any one during an attack.

The state of unconsciousness lasted, as a rule, for six or seven minutes. When he came to himself, he was often surprised at what he had been doing; and his apparently voluntary, but really unconscious and automatic acts, had often caused amusement to those who had witnessed them. Before the attacks of unconsciousness commenced, he would see some object, very often an animal, such as a dog or rabbit. The attack of unconsciousness was always preceded by a "visual aura" of this description; the object was usually seen on his left side, and low down towards the ground. When the attack passed off, he was in the habit of feeling quite well; his mind was clear; he was not sleepy, and did not feel in any way incapacitated. His memory had not become impaired since the attacks commenced, nor was his sight in any way affected. The pupils were widely dilated, but very sensitive to light. On ophthalmoscopic examination, both the arteries and veins of the fundus appeared to be dilated; there was a very wide sclerotic ring; but the discs were quite normal. His general health was good; the urine was natural; there was no evidence of "coarse" cerebral disease, nor, in fact, of localised organic disease in any part of the body.

REMARKS.—Dr. Bramwell pointed out that this case was one of very great interest and importance. There were three main varieties of the epileptic fit: 1, simple loss of consciousness, without spasms or muscular movements (*petit mal*); 2, loss of consciousness, with violent muscular spasms, usually bilateral, but always more strikingly marked on one side of the body than on the other (*grand mal*); and 3, loss of consciousness, with the performance of elaborate co-ordinate movements, which were in reality unconscious and automatic, but which appeared, to those who witnessed them, to be voluntary, and made with a purpose. These automatic acts were, in some cases, phenomena of the post-epileptic state, rather than of the actual epileptic paroxysm itself.

This patient manifested both the first and the third forms. The third variety, which was much the most rare form of epilepsy, was of the greatest practical and medico-legal interest; for it sometimes happened that the automatic acts which the patient performed during the state of unconsciousness were injurious, either to himself or to others. This patient, for example, stated that, during the attacks of unconsciousness, he often tried to knock the hat off the head of any one who was standing in front of him. This "playing at boxing bonnets," as he called it, had not so far been attended with any injurious consequences; but it was quite possible that he might some day inflict a severe blow or injury on some one; or, instead of performing some harmless and ludicrous act, he might some day take up a knife, hammer, or poker, and seriously injure some one standing near him. Death had actually been caused in this way; and some epileptics had, without doubt, been hanged for killing in this automatic and unconscious manner.

The point was, therefore, of the greatest medico-legal importance; for, on the one hand, it was necessary to take care that epileptics were not hanged as murderers for these involuntary, unconscious, and automatic acts; and, on the other (though this case was less likely to occur or to give rise to difficulty), that real murderers should not be allowed to escape the legal consequences of their crime by setting up a plea of epilepsy and unconsciousness.

The chief points to which attention should be directed, in investigating cases of murder by supposed epileptics in a state of unconsciousness, were: (1) the presence or absence of an adequate motive or cause for the crime; (2) evidence of premeditation or preparation; (3) a history of previous epileptic attacks; (4) the occurrence of epileptic attacks after the assault, while, for instance, the patient was under observation in custody (it was unnecessary to mention that the attacks must be genuine and not feigned, and that this involved—in some cases a nice point—the differential diagnosis of genuine and sham epilepsy); (5) the conduct and action of the patient immediately after the assault; and (6) whether there was an hereditary history of epilepsy, or of nervous disease other than epilepsy, or of anything in the parent's mode of life, such as prolonged drinking, which was likely to produce nervous disease and epilepsy in his children. The last two points (5 and 6) were not so weighty as the first four; but they were, nevertheless, of great practical importance.

It was important to note that, after the attacks, this patient did not feel drowsy, stupid, or in any way incapacitated; this was exceptional after ordinary attacks of *grand mal;* it was also important from a medico-legal point of view.

Another point in which the case was, also, somewhat exceptional, was the fact that, notwithstanding the long duration (four years) and the great frequency of the fits (sometimes as many as six or seven in a day), the mental faculties and memory did not appear to be deteriorated. In *petit mal*, where there was simply loss of consciousness and no spasms or convulsions, the stress of the discharge fell, as it were, upon the sensory centres, and did not affect the motor areas. According to Hughlings Jackson and other observers, loss of memory and mental deterioration were more common in *petit mal* than in cases of *grand mal*, where the motor areas were also involved, and in which the attacks seemed much more severe.

A point of very special interest in this case was the well marked "visual aura." In about 50 per cent. of the cases of epilepsy, there was a warning sensation or aura of some kind or another; it might be an affection of the nerves of common sensation, such as a pain in the tip of the tongue or finger; an affection of the nerves of the sense of touch or temperature, such as a feeling of tingling, heat or cold in some part of the body; of the nerves of special sense, such as a flash of light, a loud noise, a peculiar taste, or smell; of the vaso-motor nerves, such as a feeling of shivering or a burst of perspiration; or of the motor nerves, such as a limited muscular twitching or spasm.

The kind of aura, and the part of the body affected by it, showed the part of the grey matter of the cerebral cortex which was first discharged during the epileptic attack.

In this case, the epileptic discharge evidently commenced in the highest visual centre, for it was not a mere flash of light which was seen, but an elaborate visual picture of a distinct and definite object, such as a dog or rabbit. Ferrier's researches seemed to show that the highest visual centre was probably placed in the angular gyrus; in this case, it was probable that the right angular gyrus (or, rather, part of it, for the image was seen low down near the ground) was first discharged, for the patient usually saw the object at his left side.

Further Note by Dr. Bramwell (not communicated to the students).—I do not know whether this third form of epileptic fit (unconsciousness, with the performance of elaborate automatic muscular acts) is usually preceded by a "special sense aura" or not. This is a point well worth investigating. It is not improbable, I think, that this form of epileptic fit is often preceded by an elaborate special sense-aura, such as the image of some object (the highest form of visual aura), or the hearing of words, voices, messages, or commands (the highest form of auditory aura). It is quite natural to suppose that, if the visual or auditory centres be so discharged at the commencement of the epileptic paroxysm as to produce such elaborate subjective sensations, as the seeing of objects, and the hearing of words and messages, the nervous discharge will flow over to the motor centres, and produce, during the epileptic attack or state of unconsciousness, elaborate co-ordinate muscular acts, which appear to be voluntary, but which are, in reality, reflex and automatic, just as elaborate voluntary muscular acts are excited by visual and auditory impressions during states of full consciousness. The same nervous channels and mechanisms are used and discharged in both conditions, the essential difference being that, in the former case, the primary discharge of the visual centre originates from within, and as the result of disease; and that the excitation of the motor part of the apparatus takes place independently of the will, and consciousness is purely reflex and automatic, and whatever the resulting co-ordinate act may be, it is performed; whereas, in the latter, the discharge of the visual centre is, or rather, to speak more accurately, probably is (for it may, of course, also be called up by a mental (internal) effort or objective (external) impression, which primarily passes to and stimulates some part of the brain other than the visual centre, and which then flows over, as it were, to the visual centre, as in the ordinary association of ideas) the result of some external visual impression, which subsequently passes on with the full approval, concurrence, and consent, as it were, of the will and consciousness, to the motor-centres, and finally resulting in the production of an ordinary voluntary muscular act or effort. In the latter case, if the act, which is suggested by the stimulation of the visual or auditory centre is a wrong act, it does not take place, or probably does not, for it is inhibited by the higher cerebral centres. An elaborate special sense aura, such as was present in this case, is comparatively rare, and does not, as a rule, precede the ordinary attacks of *petit mal;* in other words, the primary seat of the discharge in ordinary epilepsy (*petit mal*) is not the highest visual or auditory centre, but is probably situated either in the grey matter of the occipital or prefrontal lobes. In this circumstance (the difference in the seat of the grey matter first and most discharged) is probably to be found the explanation of the fact that the memory and mental faculties were not deteriorated in this case, as they are apt to be after long-continued and frequent attacks of *petit mal.* When the patient next presents himself for examination, I shall endeavour to determine whether there is not some impairment of the visual memory—that is, some difficulty in reviving former visual impressions—which, if the suggestion advanced above be true, may probably be present.

A Chloral-Hydrate Band.—On February 8th (20th), at the St. Petersburg District Criminal Court, a sensational process of a band of robbers was concluded. The band included three peasants and a *feldsher* (medical assistant) named Lantchinsky. Their operations consisted in drugging hackney-coachmen (*izvoshtchiks*) with chloral-hydrate dissolved in *vodka* or in beer, or sometimes with tincture of opium; and in subsequently appropriating the horses, carriages, purses, etc., of their victims. Five separate crimes of the kind had been traced out, two of the victims having died from an overdose of chloral. Lantchinsky, and another chief accomplice, named Kutiloff, were sentenced to twelve years of penal servitude each; a third member, to eight years; and a fourth, to deportation to Eastern Siberia.

Amateur Surgeons.—The Paris correspondent of the *Daily News* telegraphs: M. Boissenot, one of the chief permanent officials at the Prefecture of Police, is in a situation to realise the wisdom of the proverb which enjoins the cobbler to stick to his last. This influential person has a wife to whom he is devoted. To be able to supply the place of a medical man, should she fall ill when he and she go on long holiday excursions in uncivilised places, he has studied medicine and a little surgery. A few days ago, Madame Boissenot being attacked with an abscess, the husband took upon himself to lance it. As he was doing so, she shrank suddenly from the lancet, and he inflicted a slight wound on his finger, which he neglected to cauterise. In a short time, his hand and arm swelled in the most alarming manner, and the physicians called in to attend him say that he has no chance of life except in amputation.

Mr. M. C. Soutter, M.R.C.S.Eng., A.K.C.Lond., of Finsbury Park, has been elected a member of the South Hornsey Local Board of Health.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 30TH, 1886.

WILLIAM CAYLEY, M.D., F.R.C.P., Vice-President, in the Chair.

Subpleural Laceration of the Lung.—Mr. TIMOTHY HOLMES related a case in which a girl, aged 14, had fallen, and severely bruised the right breast. There was no fracture of the ribs. The leading symptoms were hæmoptysis, great dyspnœa, and entire absence of breathing in the right lung. The right chest did not move in respiration; it was natural on percussion. These symptoms, with the history of her having a piece of biscuit in her mouth at the time of the accident, led to some suspicion of the impaction of a fragment in the right bronchus; but the progress of the case negatived this idea. The dyspnœa was, at first, so alarming, that tracheotomy almost seemed indicated. Next day, amphoric breathing was heard under the angle of the right scapula, and this soon developed into the physical signs of a large cavity in the lung, but without any sign of fluid or air in the pleura. This cavity gradually contracted, and the girl quite recovered. It was noteworthy that subcutaneous emphysema appeared at the right side of the root of the neck on the third day. When last seen, the girl, though in perfect health, had evident physical signs of considerable consolidation of the right lung. In commenting on this case, the author quoted Nélaton's description of the symptoms of subpleural laceration (including emphysema at the root of the neck) as exactly verified by the symptoms here observed. He remarked on the slight attention which was bestowed on this form of injury in most text-books, and the doubts which he had himself expressed in his own work, as to the possibility of diagnosing the subpleural form of laceration. These considerations, together with the comparative rarity of such cases, would, he believed, justify the publication of this case; but it also contained a feature of its own, which had not hitherto been noticed in the history of the lesion, namely, the entire suspension of respiration in the injured lung. The cause of this phenomenon was discussed, and reference was made to other cases of subpleural laceration.—Mr. A. T. NORTON recorded an instance of rupture of lung occurring in a man who had been buried beneath a mass of sand. From the symptoms observed, it was a similar case to that described in the paper.—Mr. GODLEE asked if the signs observed might not be explained on the supposition that a small bronchus was torn across.—Dr. BRISTOWE thought it almost certain that rupture of the pleura must have occurred in Mr. Holmes's cases, attended by pneumothorax. Otherwise, it would be difficult to account for the sounds heard on auscultation. He did not see how metallic tinkling could have been produced, except by a pleura largely filled with air.—Mr. HOLMES thought there was no question in his case that the pleura was not ruptured. No fluid or air entered the cavity immediately after the accident, and the auscultation-sounds, as described, agreed with those given by Nélaton as occurring in subpleural rupture of the lung. The absence of respiration in the lung was the most striking feature in his own case, and gave it especial interest surgically. As to rupture of a bronchus, a certain answer could not be given in absence of a *post mortem* examination, but in his (Mr. Holmes') opinion, the symptoms pointed, at least, to laceration of lung-tissue, rather than of a bronchus. The emphysema did not appear until after three days; it was of limited extent, and soon disappeared. After recovery, the base of the lung was condensed and consolidated, as if from a large cicatrix. When the parenchyma of the lung was lacerated, the emphysema traversed the root of the lung, and appeared, as in this case, about three days afterwards, at the base of the neck. The suspension of the breathing in the injured lung was due, he believed, to the plugging of the large bronchus by the clots of blood.

Gummata of the Liver in a Boy, aged 15.—Dr. BRISTOWE read notes of this case. The patient was admitted into St. Thomas's with a tumour in the epigastrium, from symptoms of which he had suffered for six months. The tumour was about as large as a Tangerine orange, and slightly tender. The boy looked healthy; and, as no history of syphilis was obtained, and no indications of congenital syphilis were observed, the suspicion that the case was one of visceral syphilis was dismissed. No definite opinion, however, was formed as to the nature of the disease; but, on two occasions, a fine trocar and cannula were introduced, with the result that they simply penetrated solid matter. The boy remained in the hospital for four months without specific treatment, and with gradual enlargement of the liver; and, during the whole of this time, presented a hectic temperature (the morning fall being down to the normal, or even below it, and the evening rise varying from 101° to 103°), with frequent chills or slight rigors. But his general health remained apparently unimpaired; he did not lose either flesh or strength; he had a good appetite, and slept well. At the end of the four months, a closer inquiry elicited the facts that three of his brothers and sisters had died in infancy; that he had himself (when 7 years old) suffered, for several months, from some affection of his eyes; and that (what had hitherto been overlooked) there were several very faint nebulæ in both corneæ. There was no other trace of congenital syphilis. Acting on this information, Dr. Bristowe at once treated the patient with iodide of potassium and mercury. On the fifth day of treatment, the morning and evening temperature were both subnormal for the first time; and, from this time onwards (with two or three exceptions, when it rose to 98.4° or 98.6°, and once when under the influence of an attack of tonsillitis, it rose to 102.6°) the morning and evening temperatures remained subnormal, until, at the end of two months, he left the hospital. Under the antisyphilitic treatment, the liver diminished in size, all pain and tenderness ceased, and he gained flesh. Excepting for some remaining tumour of the liver, the patient left the hospital, apparently well, six months from the time of admission.—Dr. CAYLEY was not long ago led into a somewhat similar error to that committed by Dr. Bristowe. The patient was a male adult, with hectic temperature, and liver enlarged; it was supposed to be abscess, but no pus was found on puncturing. Eventually the man quite recovered.—Dr. SYDNEY PHILLIPS quoted, from memory, a lecture of Dr. Murchison's, that intermittent temperature was often an accompaniment of tertiary syphilis. It was a misnomer to call it hectic; such a temperature occurred in many diseases.—Dr. BRISTOWE asked if Dr. Cayley's patient was treated specifically.—Dr. CAYLEY said yes.—Dr. BRISTOWE, continuing, defended the use of the term hectic in application to the fever observed; it corresponded exactly to the temperature called hectic, and was certainly not intermittent. He had seen such a course of temperature before in syphilis, but none of the cases had gummata of the liver.

Hydatids of the Liver: Opening into Lung: Excavation of whole Lobe of Right Lung.—Dr. R. W. BURNET related particulars of this case. S. P., aged 30, was admitted to the Great Northern Central Hospital, under the care of Dr. Burnet, on September 18th, 1885, complaining of pain in the right hypochondriac and epigastric regions, radiating into the right axilla and right shoulder; and of sickness and vomiting, which occurred without any special relation to the taking of food. The vomited matter was described as being greenish-yellow; she had never brought up blood; and, after being sick, always felt relieved. She had been losing flesh rapidly. On admission, the patient was anæmic and weak, with an anxious expression of face; tongue red and irritable; temperature 101°; urine dark, acid, 1020, and containing a trace of albumen. On examining the chest, the heart's impulse, diffused, and feeble, was seen and felt about or slightly without the normal position. Cardiac dulness commenced on the level of the nipple, and was lost in abdominal dulness. The sounds were clear; there was no murmur. The expansion of the lungs was good and equal on both sides; percussion was good on the right side in the upper part, but dulness extended from the fourth rib downwards in front, while behind it commenced at the fifth rib, and increased to the base, where it was absolute. The breath-sounds were feeble in front, somewhat harsh posteriorly and accompanied by a few large crepitations; at the base they were feeble, and not tubular. The left side was fairly normal throughout. The lower part of the abdomen was flaccid, and not tender on pressure, but all over the right hypochondriac, epigastric, and left hypochondriac regions there was marked tenderness. On the right side, there was evident bulging. Dulness existed in the hepatic region from the level of the nipple to one inch above the umbilicus, and continued into the right axilla, epigastrium, and lower third of the left axilla. The patient had never been strong, but there was no history of definite illness until three months before admission, at which time she was slightly jaundiced, and she began to suffer from pain in the abdomen, with retching and vomiting. Shortly after she came into hospital, she was examined under chloroform, and a consultation held with a view to surgical interference; but it was deemed inexpedient to operate. On October 14th, after severe coughing, she brought up a quantity of purulent fluid; and, ten days later, more of the same, and some undoubted hydatid cysts. Microscopic examination showed pus, cholesterine crystals, and hooklets. On November 23rd, another very severe fit of coughing was followed by expectoration of a large quantity of cysts and pinkish purulent fluid, in all, five pints. The physical signs were then considerably altered; dulness was diminished greatly in area, and feeble breath-sounds were heard at the right base; no moist sounds were audible. The patient sank and died on December 10th,

Post mortem examination.—Firm adhesions united the lower two-thirds of the right lung to the parietes and the diaphragm; the whole lower lobe of the right lung was excavated, and forming a ragged cavity lined with lymph, but with no trace of true hydatid membrane; between this and the liver was a thick layer of fibroid tissue, with an opening through the diaphragm into the liver; in the liver was a small cavity, and within the cavity a plate of partially calcareous material, bile-stained, and adherent to the wall. Nothing in other organs called for special notice. In his remarks, the author dwelt chiefly on the following points:—(1) the obscurity of the symptoms when the patient came into hospital; (2) the absence of any lengthened history of previous symptoms; (3) the question, could a diagnosis have been definitely arrived at before the appearance of the cyst? (4) what operative interference, if any, should have been adopted?—Mr. CRIPPS had seen three cases of hydatids of the liver, or of the omentum just below it, which he had treated in three different ways. The first was a lady, with a swelling in the right hypochondrium of the size of an adult head. The swelling was punctured with a trocar, though which was passed in a No. 11 gum-elastic catheter, which was left in for a fortnight. When it was taken out to be changed, there was a difficulty, and it was not replaced. The fluid reaccumulated, so that, in three months' time, the tumour was as big as before the first puncturing; the catheter was then replaced, and kept in for eight months, and the patient recovered. In the second case, a capillary trocar was used, and about a quart of fluid withdrawn by the aspirator, when the tube became blocked. In a few weeks, fluid reaccumulated, and was aspirated a second time, when it was found to be pus. It was nearly all drawn off, and, two months subsequently, simply an indurated swelling was left. In the third case, an incision down to the tumour was carefully made. Two cysts were found over the liver, hydatid cysts on the point of suppuration. Both were incised, and came away complete; each contained about a pint and a half of fluid. The patient quite recovered. Mr. Cripps considered that treatment should begin with simple aspiration at the first, and be succeeded, if necessary, by puncture and drainage.—Dr. F. TAYLOR would ask how surgeons were prepared to treat cases in which the tumour, though a hydatid of the liver, appeared in the chest, not in the abdomen. In a patient of his own, the liver was pushed down into the abdomen, and there was dulness of the bases of the lungs, whilst the heart was pushed up to the third intercostal space. The right chest was aspirated, and about forty ounces of bile-stained fluid was drawn off. After a time, aspiration was again performed, and fluid, similar in quality and amount, was again withdrawn; no hooklets were found in it. Afterwards, the tumour was aspirated from the front, but nothing resulted. At a fourth operation, fifty ounces of hydatid fluid were drawn off, with, apparently, two cysts. The patient was then suffering much, and was operated upon. An attempt was made to get to the cysts by an incision. Pleurisy supervened, and the patient, unfortunately, sank in a few days.—Mr. GODLEE did not know what treatment could be adopted in any case like Dr. Burnet's, before the diagnosis was made clear. But, after the diagnosis was established, he thought an incision should be made down to the tumour, and the cavity drained. Some years ago, he had treated in such manner a case of hydatid communicating with the pleura.—Dr. BRISTOWE questioned whether, if the hydatid tumour, though starting from the liver, extended high up into the chest, the puncture should be made through the chest and the diaphragm. In a patient of the kind so treated, pleurisy and death resulted from the escape of the fluid into the pleural cavity.—Mr. HOLMES thought that any opening through the chest was very dangerous. The hydatids were as well evacuated by the natural process without any operation whatever. Everything that could be done by the surgical operation was done by nature.—Dr. BURNET had seen two cases, lately, of hydatid of the liver; both were treated by aspiration, and recovered.

Ununited Fracture of Patella in a man, aged 44: Four and a Half Inches Separation of Fragments: Excision of Knee-Joint: Cure.—Mr. R. LUNN gave notes of this case. W. J., aged 44, single, was admitted into the St. Marylebone Infirmary, January, 1885. His family history was good. There was no history of syphilis, gout, etc. He scalded his face and shoulders five years ago. He fractured his left patella sixteen years ago, and it united. Again he fractured the same patella six months afterwards, and it never united. He stated "his life had been simply miserable ever since, on account of the gnawing pains in the left knee, and everyone used to think he was drunk, as his left knee used to give way under him, though he had worn a splint." On April 14th, 1885, Mr. Lunn excised his left knee-joint, wiring his femur and tibia together with silver wire. (The danger of the operation was explained to the patient before it was undertaken, as he was so anxious for something to be done.) The operation was performed antiseptically. Six weeks after the operation, the patient was put up in plaster-of-Paris, and allowed to get about on crutches. The reason why the author took the liberty of showing this case before the Society was, that excision of the knee-joint was seldom performed over the age of 42. In the *Medical Chirurgical Transactions*, vol. liii, Dr. Humphry said he had excised the knee-joints of forty-five patients, one being as old as 47. In the same volume, Mr. Gant had given an account of twenty cases, his oldest being 50 years old. Mr. Lunn's case made an uninterrupted recovery, and with no rise of temperature. The question in his mind was, whether the operation was justifiable, and he should like to hear any of the members' experience in similar cases.—Mr. HOLMES thought the course followed by Mr. Lunn would be very serviceable in many other cases. He believed, however, that wiring the broken patella was a rash proceeding in recent cases of fracture; and certain old cases, in which adhesions and other complications had arisen, did not yield good limbs after wiring, which would have done well with excision. As to age, modern notions had been much modified; he himself had excised the knee at tolerably advanced ages, over forty, at any rate, and he had seen cases of success in older people. He believed Professor Humphry had one patient over sixty years old so treated, who had recovered. The fracture was not more dangerous in such subjects than wiring under certain circumstances.—Mr. PEARCE GOULD remarked that wiring the patella made it possible to give the patient a movable knee, whereas excision necessitated a stiff joint, as in Mr. Lunn's patient, though he possessed an undoubtedly useful limb. Mr. Gould mentioned the case of a woman, in whom, a year ago, he had wired a patella, with the result that a serviceable reliable leg was preserved, with good power of flexion at the knee. In some cases, however, excision might be essential.

Specimens.—The following living specimens were shown. By Mr. LUNN: (1) Excision of Left Knee-joint in a Man, aged 44, for Ununited Fractured Patella, with four and a half inches of separation; (2) Ulcerating Tumour of the Lower Lip in a Man, aged 22, of sixteen months' duration, diagnosis uncertain, but the father had died of sarcoma (? epithelioma) of the neck; (3) Frost-bite of both Ears in a Man. By Dr. SAVILL: Ichthyosis Sebacea in a Girl. By Mr. BALLANCE: Rodent Ulcer of the Ear.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 4TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Obliterative Endo-tracheitis and Endo-bronchitis in Congenital Syphilis.—Mr. R. W. PARKER said the specimens had been removed from the body of a boy, aged 15 years, who had died in the East London Hospital for Children, at the beginning of last year. He was first seen three years previously, and was then suffering from extensive endosteal nodes on the shins, and from a tracheal fistula at the seat of an old tracheotomy opening. The operation had been done some years ago, on account of dyspnœa, associated with syphilitic laryngitis, by Mr. Elkington, of Birmingham. It was thought that the admission of dust, etc., through this fistulous opening into the lungs, might have had something to do with the production of the lung condition. The tracheal disease only commenced about one inch above the bifurcation, much below the lowest spot to which the tracheotomy tube could reach. The occluding new growth began rather suddenly and uniformly, while a little lower down it became less uniform, but more marked; the lumen of the trachea was reduced to about one-third of the normal, while that of the left primary bronchus was almost quite obliterated. The new growth in the trachea was strictly endo-tracheal, the cartilaginous rings being quite healthy; that in the bronchial tubes was partly endo-bronchial and partly peri-bronchial. Mr. Parker thought that the latter was part of a fibroid condition, which affected the whole lung, and might be regarded as due to the irritation set up by the secretions, which had been retained, owing to the bronchial and tracheal occlusion higher up. The whole of the peripheral parts of the lung were in a condition of extreme bronchiectasis, the contents of the cavities, muco-pus, being excessively fœtid. The new growth was a highly organised and vascular fibrous tissue, containing the mucous glands, widely separated, but otherwise in a healthy condition. Until within a few days of his death, there had been very little dyspnœa. This was probably due to the very gradual onset of the disease. The resemblance of this condition to syphilitic endarteritis was remarked upon.—The PRESIDENT inquired whether cirrhosis of the lung was an ordinary sequel of the prolonged use of a tracheotomy-tube.—Mr. R. W. PARKER replied in the negative.

The Pathological Histology of Hydrophobia.—Dr. HALE WHITE showed a series of specimens, taken from two men and a dog who had died of the above disease. The following were the chief changes noticed. The medulla oblongata was in a state of acute inflammation, for the most part limited to the floor of the fourth ventricle, and the subjacent nerve-tissue, for a depth of about one-third of the thickness of the medulla. It was most marked in the median line on either side of the posterior median fissure. The result of this inflammation was a general blurring of the nerve-tissue, so that the normal arrangement of fibres and cells could not be made out; there were many small inflammatory cells in the tissue, and, under a high power of the microscope, they could be seen in large numbers, crowding through the walls of the vessels. The inflammatory exudation had a tendency to run in directions determined by the nerve-fibres. The nerve-cells were implicated, and in many places blurred and indistinct; the nuclei most affected were the vagal and hypoglossal. The dilatation of the minute vessels was extreme, and had in many cases led to their rupture. The hæmorrhages thus produced were all microscopic, and were most numerous immediately under the floor of the ventricle, so that blood could often be seen to be effused into the meshes of the pia mater, but in no place was this membrane itself inflamed. The same condition was observable in other parts of the brain, but to a much less degree, and it could also be seen in the cord to a slight extent. Dr. White said that the study of these specimens seemed to show that the essential lesion in hydrophobia was an acute inflammation of the floor of the fourth ventricle; and that this spread slightly upwards to the brain, and downwards to the cord. In the salivary glands, there was some blurring of the secretory epithelium, and a few leucocytes could be seen wandering about among the gland constituents. In one case, there was an atrophic condition of the thyroid gland. The vagus and sympathetic nerves, and every organ in the body, were examined, but they were all found to be healthy, with the exceptions just mentioned.

Granuloma Fungoides.—Dr. PAYNE showed drawings and microscopical specimens of granuloma fungoides, from a man, aged 56. Scattered over the skin were large, scaly patches, red or dark-brown. On the patches, or replacing them, were tumours, hemispherical, varying in size from half a walnut to half an orange; these tumours rapidly increased in size. The patient had never had any illness, beyond chronic bronchitis, until this affection began; and his family history was good. The disease had been described first, by Alibert, as mycosis fungoides, and the cases had also been regarded as sarcoma, or lymphadenoma of the skin. The patient died from the cachexia which accompanied the disease. At the necropsy, the organs were all found to be healthy, and the changes were strictly limited to the skin. The psoriatic patches and the tumours had the same structure, and consisted of granulation-tissue. Micrococci had been said to have been found in two cases in Germany; one case was under the care of Ausspitz. Dr. Payne had observed certain granular bodies within the cells, which agreed in distribution with the so-called micrococci of Ausspitz, but he was not prepared to accept the conclusion that these granules were micro-organisms. Professor Rindfleich had described a streptococcus in the blood-vessels, in a second case; but in his case, Dr. Payne said, there were no organisms in the blood-vessels; but Professor Rindfliesch's observations were made on specimens removed twelve hours after death, whereas, in the other two cases (Ausspitz and Payne), the tumours were removed during life.—Mr. EVE showed a specimen, to which he applied the term granuloma fungoides. Upon the dorsum of a foot was a flat mass, springing from the skin, which presented a warty condition around, and was thickened. There was a rough papillary condition of the skin of the leg, which extended, also, up to the knee. The patient was a man, aged 53, who had been under the care of Mr. Hulke. The patient had been subject, from youth, to small gummatous knots, which, from time to time, suppurated and broke down; and the whole skin was thickened. The growths were diagnosed as epitheliomata, and the limb was amputated through the thigh; a short time later, a syphilitic gumma appeared near the elbow, and broke down. At the necropsy, a new growth was found attached to the inner aspect of the right ilium, which was partially perforated; the tumour was breaking down. Mr. Hulke thought the original disease was hypertrophic lupus, and that the growth in the foot was an epithelioma, arising in connection with a scar of the lupus. The patient was, probably, the subject of inherited syphilis. The structure of the growth on the foot was granulomatous, with an unusual quantity of fibrous tissue. Mr. Eve did not consider that any micro-organisms were present, though certain cells contained granules, which stained very deeply. Mr. Eve felt himself unable to decide whether the histological appearances were most nearly allied to congenital syphilis, or to granuloma fungoides.—The PRESIDENT said that Mr. Eve's case differed from Dr. Payne's, in that in the latter the skin only was involved, and that the disease had only been present for a few months.—Dr. T. D. ACLAND said that no organisms could be obtained from the growths, by cultivation, under the most favourable circumstances, on blood-serum or gelatine.—Mr. J. HUTCHINSON, jun., referred to a case shown to the Society by Mr. Treves, supposed, at one time, to be actinomycosis, but closely resembling that shown by Dr. Payne. He added that Mr. Jonathan Hutchinson, sen., had had one case of granuloma fungoides, under his care in the London Hospital.—Dr. PAYNE, in reply, said that, probably, many cases recorded under the name of multiple sarcoma of the skin, were, in reality, examples of granuloma fungoides.—Mr. EVE said that in the case recorded by Ausspitz, a scaly eczema had existed seven years before the development of the granuloma.

Hepatic Abscess.—A specimen of hepatic abscesses, secondary to inflammation within the pelvis, was shown by Dr. HANDFORD. The patient was a woman, aged 25, who, while in hospital at Nottingham, suffered from irregular pyrexia, followed by hectic; at a later stage in the disease, great pain was complained of in the right hypochondrium, and the liver was found to be enlarged and tender. An ineffectual attempt to tap the suppurating area was made, and the patient died exhausted. At the necropsy, the liver was found to be adherent in front, and greatly enlarged; in the upper part of the right lobe was a large loculated abscess, beyond which the liver contained numerous small abscesses. There was no sign of a hydatid origin, nor of intestinal ulceration. The brain contained a few abscesses. The Fallopian tubes were adherent to the ovaries, and dilated with curdy, puriform fluid. The patient, when admitted, had a vaginal discharge, and some frequency of micturition. The sequence of events seemed to have been gonorrhœa, pyosalpinx, and pyæmia.—Mr. STEPHEN PAGET referred to a paper by Dr. Tilt, in the *Transactions of the Obstetrical Society*, where the part played by the lymphatics in the distribution of the lesions of pyæmia was well brought out. From an examination of a large number of cases of pyæmia, Mr. Paget had found that, of 281 cases of pyæmia secondary to injury of the lower limb, abscess of the liver occurred in 61; of these 61 cases of hepatic abscess, 57 occurred in cases where the bone was injured. These and other similar facts seemed, to him, to point strongly to the conclusion that pyæmia was often distributed through the lymphatics.—Dr. WILKS said that it was important to recognise that pyosalpinx was a source of general pyæmic infection. Whether, however, the theory that gonorrhœa was the invariable determining cause of the pyosalpinx and ovarian disease was correct, was an open question.—Dr. W. B. HADDEN said that the liver, in Dr. Handford's case, resembled a specimen of actinomycosis now in the museum at St. Thomas's Hospital.—Dr. CARRINGTON said that, in tropical abscess, the portal vein was commonly unaffected, a fact which supported Mr. Paget's view.—Dr. NORMAN MOORE had seen it affected in one case only.—Dr. HANDFORD, in reply to Dr. Hadden, said that actinomycosis had not been searched for, but the specimen had altered a good deal in appearance while in spirit.

Primary Carcinoma of Thyroid.—Dr. NORMAN MOORE showed a specimen of primary carcinoma of the thyroid gland, from a woman, aged 46, lately in St. Bartholomew's Hospital. The new growth formed a huge mass, which had ulcerated through the skin and into the larynx. It completely compressed one recurrent laryngeal nerve, pressed on both carotid arteries, and had grown through the upper wall of the arch of the aorta, but without causing extravasation of blood. Secondary deposits were found in the kidneys, on one rib, and in the brain. All deposits showed a great mixture of cells, but there were groups of well marked epithelial type, surrounded by numerous connective tissue cells, but with a very ill-developed stroma. The growth seemed to be of epithelial type, probably originating in the walls of the loculi of the thyroid. The duration of the growth was about four months. On the patient's admission to the hospital, a large cyst projected from the right lobe, and, from this, blood-stained fluid was let out, but it rapidly refilled. After a month in the hospital, the tumour began to approach the surface, and broke through in a few days as a fungating mass. There was some dysphagia and partial aphonia, but never urgent dyspnœa.—Dr. FELIX SEMON said that there now appeared to be reason to believe that epithelioma of the thyroid gland was not so uncommon an affection as had been supposed.—Mr. J. B. SUTTON said that the epithelium of the thyroid was a true epithelium derived from the hypoblast, and that, therefore, it would not be surprising if it turned out that cancer in this situation was not uncommon.—Dr. NORMAN MOORE, in reply, dwelt on the difficulty in diagnosis.

Double Stricture of Intestine.—Dr. CARRINGTON showed two cases

of double stricture of the intestine. The first specimen was from a man, aged 49, who had, since August, 1885, suffered from griping pains and obstinate constipation. When admitted into Guy's Hospital on December 28th, 1885, a mass of growth could easily be felt *per rectum*. Colotomy was performed, but the patient died on January 6th. At the necropsy, a cancerous growth, with thick everted, nodular edges, and ulcerated surface, was found, four inches up the rectum. The stricture was very tight. A second growth, with the same characters, was found surrounding the ileo-cæcal orifice. No secondary nodules were found in the body. The second specimen was from a woman, aged 61, whose illness had commenced two months before admission into Guy's Hospital, in October, 1885. She became jaundiced on September 28th, had been obstinately constipated throughout, but had only vomited on two occasions. The only physical condition to suggest an explanation of the jaundice was a nodule in the tissues surrounding the umbilicus. Severe abdominal pain and tenderness came on on December 25th, and she died on December 26th. At the necropsy, it was found that the bowel had ruptured just above the uppermost of two strictures, situated three feet above and one foot below the cæcum respectively. The strictures were narrow and triangular. On section, there was scarcely any lumen of the bowel at the upper, and the calibre of the colon at the site of the lower was not more than half an inch. The gall-bladder contained two facetted stones. The common bile-duct was surrounded by a nodule of growth, which had invaded the liver by continuity. The liver weighed thirty-two ounces, and contained a few secondary nodules. There was much blackening and puckering in the portal fissure. The ovaries contained one or two small nodules. No other disease was found in the body. Both tumours were sarcomata.

Spinal Abscess.—A specimen from a case in which a spinal abscess had destroyed the right kidney, and opened into the duodenum, was demonstrated by Mr. DAVIES-COLLEY. The patient was a woman, aged 24, who came under treatment on account of angular curvature of the lumbar vertebræ, accompanied by excessive pain in the right lumbar and iliac region, and in the upper part of the right thigh, but without any distinct fluctuating swelling. Under an anæsthetic, a lumbar incision was made, and the side of the body of the third lumbar vertebra exposed. Nothing flowed at the time, but in the evening there was a free discharge of foul and turbid pus. No relief of the pain followed. The copious suppuration continued, and was thought to be stercoraceous. In eleven days the patient died; and was found to have extensive disease of the last lumbar vertebra, and to a slight extent of the fourth. The right kidney was disorganised, and there was a perforation of the second portion of the duodenum, just below the entrance of the common bile duct. The chief points of interest were: 1. The want of correspondence of the angular projection which was formed by the spine of the second, third, and fourth lumbar vertebræ, with the disease, which had utterly destroyed the body of the fifth, and only slightly attacked the fourth lumbar vertebræ. 2. The absence of any pus in the urine, to indicate the destructive processes going on in the kidney. This was probably due to the occlusion of the ureter having preceded the renal suppuration. 3. The remarkable clinical results due to the perforation of the duodenum. The suppurating cavity appears to have discharged itself by the opening, and, in consequence, there was a fluctuating swelling in the usual sites of spinal abscess. At the same time, excruciating pain was set up by food getting into the abscess cavity. This still continued after the operation, and possibly the escape of the food through the wound, increased the weakness of the patient.—Mr. SHATTOCK asked whether Mr. Davies-Colley's case might not be an example of actinomycosis. The connection between the abscess and the duodenum resembled some of Israel's cases, where primary infection of the duodenum by actinomycosis was followed by abscess and disease of the vertebræ.—Dr. CARRINGTON said that the perforation of the duodenum was obviously recent.—Mr. DAVIES-COLLEY said that the lateral curvature had lasted for three years, and that the case did not appear in any of its features with actinomycosis.

New Bone in Sinus.—Mr. A. Q. SILCOCK exhibited a specimen, showing the formation of new bone in a sinus leading from a psoas abscess. The patient was a child, aged 5; the sinus, at its termination, contained numerous plates of spurious bone, which converted it into a bony canal. The canaliculi were not well developed.

Malignant Growth with Melanosis.—Dr. F. W. MOTT showed for Dr. REEVES a specimen of malignant disease of the upper lip with melanosis. The patient was a woman, aged 37; a growth had been present two weeks; it was situated, chiefly, in the substance of the lip, and presented at the muco-cutaneous position as a soft purple nodule. The patient was cachectic. The growth rapidly increased in size, and was removed. Shortly afterwards, a secondary nodule appeared in the face; later, a growth appeared in the scar, and the submaxillary glands became enlarged, then a tumour appeared over the occiput; she became deaf, and died twenty-two months after the tumour first appeared. At the necropsy, the external organs were unaffected. The microscopical structure resembled, on the one hand, carcinoma melanodes, and, on the other, alveolar sarcoma with melanosis.

Tubercular Arteritis.—Dr. TURNER showed a specimen of aneurysm of a branch of the pulmonary artery, in an old cavity in the apex of the left lung, from which rapidly fatal hæmorrhage had taken place. In the lung there were also several wedge-shaped masses of recent consolidation, and old fibroid areas. The specimen was obtained from a child, aged 6, who had suffered from pulmonary symptoms, off and on, for two and a half years, since an attack of measles. She had been failing in health for twelve months, and had had occasional attacks of hæmoptysis. She had not been laid up until four months before her death. She improved under treatment; but the symptoms returned with progressive severity a few weeks before death occurred from the profuse hæmorrhage, of which there had been no warning. Sections from the neighbourhood of the cavity showed great proliferative thickening of the inner coat of the pulmonary arterioles, in and adjacent to caseous tracts, and much nuclear infiltration and proliferation of the outer coats of the arterioles, and of the interlobular and interalveolar connective tissue, and of that around the caseous tracts and nodules, which contained many "giant-cells" of the kind seen in tubercular lesions. A button-like elevation, which appeared to be another small aneurysmal bulging, on a branch of the pulmonary artery, might be seen on the wall of the cavity near the first. The specimen was regarded as an instance of rupture, and possibly of the formation of such aneurysms as an incidental complication of a progressive phase of a chronic pulmonary lesion, attributable to weakening of the walls of the pulmonary arterioles by periarteritis, unattended by obstructive endarteritis of corresponding degree, such as might have produced the cavity and wedges of consolidation and fibroid induration seen in the lung. The right lung was completely fibrous and retracted. There were cavities in the upper lobe. There were no miliary tubercles to be seen in the lungs, or in the abdominal viscera. The child's paternal grandparents had both died young, but there was no other evidence of phthisis in the family.

Card Specimens.—Dr. PAYNE: Trichorrexis Nodosa.—Dr. HANDFORD: (1) Aneurysm of Aorta communicating with Pulmonary Artery; (2) Disease of Mediastinal, Lumbar, and Mesenteric Glands.—Dr. SHERRINGTON: Spinal Cord from a Case of Hereditary Ataxy.—Mr. EVE: Multilocular Cyst of Epididymis.—Dr. MOORE: Hydrocephalus.—Mr. E. H. FENWICK: Villous Tumour of Bladder.—Mr. BALLANCE: Calvarium showing Perforations, from a Case of Hydrocephalus.—Mr. CHURCHILL: Central Sequestrum of Great Trochanter.—Mr. J. H. TARGETT: Traumatic Hernia through Diaphragm.—Mr. STOKER: Cancer of Thyroid.—Mr. POLAND: Old Subcoracoid Dislocation of Shoulder.—Mr. SHATTOCK: Calvaria perforated and ridged in Meningocephalocele.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 14TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimens.—Mr. GREIG SMITH showed eleven specimens of uterine appendages removed by operation. All the patients recovered. In every case, actual disease was found in the ovaries, or the tubes, or both. He had always refused to operate when he had not been able to discover actual disease before the operation. He believed that functional neuroses had a real origin in diseased structure. The name "castration" for "neurosis," which our German friends were fond of using, ought, he thought, to be replaced in surgery by the name "operative treatment of disease of the uterine appendages."—Dr. ELDER showed a large ovarian cystoma, weighing, when recent, quite forty pounds. It had grown with great rapidity, having only a little over a twelve months' history. The operation was long and difficult, on account of adhesions. The patient recovered well. He also showed a specimen of congenital cystic disease of both ovaries, removed *post mortem* from a child six months old.—The PRESIDENT showed the preparation from a case of abscess of the ovary, which he had removed from a patient in the south of France, ten days before. She had suffered from several attacks of peritonitis, one extremely severe, in which death was threatened. There could be no doubt it was due to rupture of the abscess into the peritoneal cavity. At the time of operation, the abscess was found to have refilled. The parts were terribly matted together, and the operation was extremely difficult, and the hæmorrhage severe.

Vicarious Menstruation.—Dr. BARNES read a paper on this subject. The doctrine of vicarious menstruation was one of remote antiquity. The reality of this phenomenon had recently been called in question. He thought no greater service could be rendered to science, than to study the subject afresh, in the light of advanced knowledge and improved methods of investigation. Did vicarious menstruation rest mainly on tradition, or was it substantiated by the evidence of recent observers, and was it in harmony with actual knowledge of physiology? That was the question to be decided. A difficulty arose, at the outset, as to what caused, or constituted, normal menstruation. Putting aside the controversy as to whether the menstrual flux was caused, or not, by the maturation of ovules, he would offer a definition of menstruation, based simply upon admitted objective phenomena. Briefly, "menstruation consisted in the periodical discharge of blood from the uterus; this, the most conspicuous objective phenomenon was, however, only one act in a complicated process, of which the genital system was the focus, but upon which the entire organism was at work." The definition would have to be amplified by noting some of the general phenomena associated with the periodical flux; but it might be accepted, for the present, as a standard by which one might determine what was to be understood by vicarious menstruation. The old definition might be accepted, "menses per vias insolitas erumpenses; menstruasis vicaria." To appreciate the question rightly, it was necessary to study more closely some of the attendant phenomena, local and systemic. First, what was the source of the blood in normal menstruation? Strictly speaking, it issued from the mucous membrane of the body of the uterus, and the Fallopian tubes. But menstruation might take place when there was no uterus, and this fact was of crucial importance in support of the doctrine of vicarious menstruation. Other constitutional phenomena also attended menstruation. It was immediately preceded by increased nervous tension and mobility, manifest in exalted psychical, emotional, and reflex action. Closely following upon the increase of nervous tension, was increased vascular tension, manifested by turgescence of the capillary and venous system, and by the sphygmograph. There were increase of temperature, and increase of urea. The history of menstruation presented points of similitude with that of gestation, at every stage. The immediate purpose of menstruation was to discharge the superfluous material and energy prepared for the missed pregnancy. In the later stage was seen the analogue of puerpery; the supurfluous blood was thrown off, absorption was more active. Lactation was another function which required to be studied, in relation to menstruation. It might be regarded as a substitute. Commonly, menstruation was suspended during lactation; but, not seldom, menstruation returned before the secretion of milk ceased. It was remarkable to observe that, in some cases, the subjects became fat and stout during lactation. It seemed as if the material elaborated for lactation was imperfectly expended in its proper use, and that a portion of the surplus was used in the formation of fat. When lactation was over, and menstruation returned, the work of absorption set in, and the fat disappeared. Gestation also acted as a substitute for menstruation, taking its place, using, for structural purposes, the blood that would otherwise be discharged from the uterus. One might, without much straining the argument, look upon gestation as an analogue, or, rather, a homologue, of menstruation; that is, as a form of vicarious menstruation. Gestation, it was well known, did not always suspend menstruation. Ovulation, which one might, until the contrary was proved, assume to be the immediate cause of the menstrual flow, continued during gestation, and occasionally the tendency of the menstrual wave to overflow by its natural channel was too strong to be retained. What was the source of this blood? Up to the third month of gestation, the decidual cavity was not always closed. It might, therefore, ooze from the free surface of the parietal decidua, probably, also, from the reflexes. It might also come from the mucous membrane of the cervical canal, and even from the vagina. In the later months, it could only come from the cervical canal or vagina. Of the theories of vicarious menstruation, the oldest and the most obvious was the theory of plethora, which was a condition of normal menstruation. The state of hyperæmia preceding menstruation, expressed by the term molimen hæmorrhagicum, must be relieved. If the normal route failed, the excess of blood, which was manifest in every part of the system, sought a vent elsewhere, and made its escape at the *locus minoris resistentiæ*. This theory was sanctioned, almost universally, by the older authors, and by the majority of recent authors. It had been contended, by others, that hæmorrhages broke out in organs or tissues predisposed by being diseased; that there must be some abnormal condition of the vessels of the organs, or loss of their natural tegument. But he could adduce cases to prove that this postulate of a morbid state of the structures, from which the hæmorrhages issued, was not necessary. In some cases, it appeared certain that the bleeding tissue, if diseased, had become so as a consequence of the repeated hæmorrhagic molimen directed to it. The ectopic discharge not unfrequently occurred from more than one place. Thus cases were narrated in which hæmatemesis existed, with bleeding from the ears, nose, and other organs. If the patient were suffering from piles, these were pretty sure to bleed. Another theory, the one adopted by Parrot, was that the transudation of blood was due to nervous influences. This theory was based upon well known cases of menstruation suppressed by fright or emotion, and quickly followed by hæmatemesis; nerve-influence, as a factor, could not be disputed. But the truth lay exclusively neither in the theory of plethora or other vascular disturbance, nor in the theory of nervous disorder, but in the mutual and concurrent action of both. In the statement of the history of ordinary menstruation, it had been seen that two phenomena were well marked—namely, exalted nerve-tension and exalted vascular tension. These two factors were necessarily concerned in every form of disordered menstruation. The due relation, the equilibrium, might be overturned, but still both played a part, struggling to fulfil the function with which they were charged. Vicarious menstruation was not to be regarded as a disease, although many morbid or abnormal conditions might arise in complication with it. Menstruation was a function that must, in one way or other, be performed, or the system would suffer. The term "amenorrhœa" was not to be accepted without great reserve; it was apt to mislead, and to conceal altogether processes working obscurely in the attempt to accomplish the purpose of menstruation. In studying this question, the human body should be regarded as a whole. The vicarious or supplementary relation of organs was a familiar fact in physiology; it was a law that governed all rational therapeutics. That obstructed or arrested menstruation, then, should be supplemented or helped by other organs than the uterus, was in strict accordance with the fundamental laws of physiology. Reasoning from this basis, one should be prepared to understand that menstruation was not merely a function of the uterus and ovaries, but a systemic function, the due performance of which was necessary to the well-being of the individual. If, thus, menstruation were not carried out in the usual way, by the discharge of blood from the uterus, an attempt, more or less successful, would be made (1) by ectopic discharges of blood; (2) by discharges of mucus, serum, by leucorrhœa or diarrhœa; (3) or the material in the circulation, and the nervous energy prepared, would be used up in other functions, as in the processes of gestation or lactation; (4) by building up new tissues, as fat or other aberrant forms of metabolism; (5) by effusions in the connective tissue, in serous cavities, or in the substance of organs; (6) by exciting various neuroses, as hysteria, epilepsy, apoplexy. The most common routes chosen for vicarious menstruation were the stomach, hæmatemesis often being accompanied by epistaxis; the skin, the blood, sometimes appearing in the form of petechiæ, sometimes oozing from the surface, as a true bloody-sweat, sometimes in the form of erythema nodosum; the nipples. Ulcers often afforded an escape for the menstrual flow. Cases were related in which the hæmorrhagic discharge occurred from the eyes and ears. The conjunctiva was a mucous membrane, which evinced a peculiar proclivity to shed blood vicariously. The lips, gums, and throat were sometime the route selected. The most crucial and instructive cases were those in which uterus and vagina were wanting. A case of this nature occurred in St. George's Hospital, and was related in the second edition of Dr. Barnes' *Diseases of Women*. Hæmorrhages had taken place from the nose, mouth, and skin. The case terminated fatally. Thus was seen, in a striking manner, the influence of ovulation upon the system. There being no uterus, the menstrual blood sought outlet in almost every direction, and, the function failing, the patient died. The reciprocal relations of phthisis and menstruation and hæmoptysis deserved investigation. The interest in this inquiry was not exhausted when it had reached the general fact that amenorrhœa commonly ensued at some stage of phthisis, and that hæmoptysis occurred. It seemed that the hæmoptysis was, in some measure, a form of vicarious menstruation. It was certain that ovulation went on during phthisis, notwithstanding the suspension of menstruation. The remarkable aptitude of phthisical women to conceive, proved this. Although there might be no proper menstrual flow from the uterus, the menstrual molimen declared itself in many ways. There was often a copious monthly leucorrhœa, turgescence of the breasts, and the characteristic nervous phenomena, emotional, psychical, and neuralgic. It deserved to be noted whether the phenomena of ovulation—nervous, vascular, and hæmoptysis—occurred in any regular sequence, and with periodicity. The conclusions drawn were these. As menstruation was a physiological necessity,

hen the function could not be performed in the ordinary way, some stitute for it must be found, or mischief would ensue. Vicarious upplementary functional action was a fundamental law in phy- ogy. There was nothing exceptional in vicarious menstruation. arious menstruation might occur under various phases. It conservative in intent and action, lessening or averting evil.— WILKS said that it was a very remarkable fact that it should be ssary for a member of a medical society to have to prove the ex- ice of an affection which was regarded by many of not uncommon rrence. His own experience was, that all the so-called cases of rious menstruation which had come under his notice, had broken n on investigation, so that he remained an unbeliever until he had self witnessed an example of it, or heard of one from some trust- hy witness. He had been brought up like other students, in the f of such an affection. It was, no doubt, true that much of ical knowledge had no scientific basis, but was made up of old and lar beliefs, dressed up in technical language. The doctrine of ious menstruation was widespread, and there probably could not und a village in England in which there was not an old woman profoundly held to it, it being thought that the stoppage of the es was the cause of every evil a girl could have, and more ially the cause of any hæmorrhage. Even amongst the better es, every medical man knew how the popular belief was always sug- ng to him to bring on the courses, in order to arrest the development ery possible complaint. When, many years ago, so-called cases arious menstruation came before him, he investigated them for elf, and found, even after the most positive assurances of the nt and friends as to the periodicity of the bleeding, that the ments were erroneous; and, from that day to this, the results of nquiry had always been the same; the cases would not bear strict tigation, the so-called facts being evidently dictated by the fancy e patient. He had also inquired of medical men, and found most of those of large experience had never seen a case, whilst s believed in it, as a matter of course, but were equally ing in instances in support of the fact. He then referred edical works, with a similar result. The majority of cases second-hand, and did duty over and over again. Dr. Barnes several cases quoted from foreign journals, but the only ice described at length was one, already published, of a girl who n St. George's Hospital, many years ago, under Dr. Clark. She 8 years of age; and, for three months before death, had spitting od and other hæmorrhages, together with purpura on the skin. *st mortem* examination, her lungs were found gorged with blood; eart was much diseased, there being a button-hole mitral valve, as s changes in the aortic valves, and the uterus was absent. He ht such equivocal cases should not have been quoted, but it had luty for three different writers, and suggested the idea that it ot easy to obtain well marked instances of the affection. Barnes Watson were the only two authors who gave cases of vicarious ruation, neither of them relating a straightforward simple case irl bringing up blood every month, of the truth of which there o reason to doubt the accuracy. He did not deny the possibility arious menstruation, any more than he should deny the possi- of any other event. He had hoped to have heard that night lation of one or two cases, which would have obliged him to the fact of its occurrence. He was disappointed, therefore, in g to listen to an essay, rather than a detail of cases, a learned ell written paper, but not exactly what he had hoped for. the author loaded his paper with expressions which were o precise, and failed altogether to define what he meant by norrhœa," the definition of which ought to lie at the very f his argument. He could not for a moment think that Barnes held to the popular belief that amenorrhœa, as met with, was a substantive disease. He had no hesita- n saying that, in an enormous majority of cases, it was a m, and a consequence of disease elsewhere; and not only ie coloured discharge wanting, but also those other indi- of the process to which Dr. Barnes had referred, so girl with chlorosis or phthisis lost altogether the reckoning periods. In cases like this, the physiological process was in ce; the molimen was absent. If amenorrhœa were a condition obstruction or absence of the uterus, then, according to Dr. 's own showing, it was a very exceptional affection. The au- ad not defined the term amenorrhœa, on which his whole rested; but, if he agreed with the prevailing opinion that, in nense majority of cases, it was a mere symptom, and that the physiological process was in abeyance, then there was no r the process which he called vicarious menstruation. Accord- the author's theory, there was an effort on the part of the system to get rid of something, and to have the equilibrium restored. The patient must, therefore, be healthy, and have no morbid influences at work which lead to its suppression. The endeavour to menstruate must exist; but, if ineffectual, on account of some mechanical impediment, then it was the system freed itself by these unnatural outlets. If this were true, vicarious menstruation must be as rare as those primary causes of amenorrhœa were rare. He hoped that authors of books would hesitate before they again indoctrinated unlearned students with the idea that vicarious menstruation was a common affection. There were other points in the paper of great interest. Dr. Barnes spoke of bloody sweat as of not uncommon occurrence. His opinion, and that of most writers, was that it was altogether a very questionable affection. He should like, finally, to ask the Society, quite irrespectively of this paper and discussion, to endeavour to report in their *Transactions* half a dozen cases of vicarious menstruation, for the benefit of the profession.

The discussion was adjourned.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 14TH, 1886.

WALTER DICKSON, M.D., President, in the Chair.

Disease among Cows, and Scarlet Fever.—A paper was read by Dr. JAMES CAMERON, on a certain malady occurring among cows at a time when the milk produced by them disseminated scarlet fever. The disease, which had been the subject of investigation by Mr. W. H. Power, Dr. Klein, and himself, during a recent inquiry into an outbreak of scarlet fever which occurred in certain districts in London, and in Hendon, amongst consumers of milk derived from a dairy-farm situated within his sanitary district. The circumstantial evidence which led to the discovery of this disease was in the hands of Mr. Power and Dr. Klein. The disease was certainly not new; it had been known to some farmers and cowkeepers, at any rate, as a catching malady, under the designation of "sore teats," "blistered teats," and the like; but it had never hitherto been recognised or described as a specific contagious disease, or considered to have any concern with the causation of scarlet fever in the human subject. After giving an account of the farm, and speaking favourably of its sanitary condition, the author stated that the disease first appeared in some newly purchased cows, which had arrived about a fortnight before the first cases of scarlet fever occurred among consumers of the milk. It was subsequently ascertained that one of these cows, which was the first sufferer, introduced the disease; the malady spreading until the whole herd of one hundred cows, with very few exceptions, was attacked. Coincidently with the spread of the disease among the cows, scarlet fever appeared, and continued to prevail, among the consumers of the milk procured from these sheds. Dr. Cameron described the disease generally as a specific contagious disease occurring usually, in the first instance, amongst newly calved cows, and capable of being communicated to healthy cows, by direct inoculation of the teats with virus, conveyed by the hands of the cowman. The disease might continue from four to six weeks, and was characterised by general constitutional disturbance; a short initiatory fever; a dry, hacking cough; sometimes quickened breathing; sore-throat, in severe cases; discharges from the nostrils and eyes; an eruption on the skin round the eyes and on the hind quarters; vesicles on the teats and udder; alteration in the quantity of the milk; and well marked visceral lesions. From five to seven days after the commencement of the illness, one or more teats became much swollen, and vesicles or bullæ shortly appeared upon them. These vesicles were usually rubbed and broken in milking, leaving sores with raised ulcerated-looking edges. At this period, the disease appeared to be easily conveyed to other cows. Shortly after the vesicle had been broken, a brown scab formed upon the sore; and this might remain from ten days or a fortnight, to five or six weeks, a thin discharge escaping from beneath it, until the sore was healed. There was a tendency for the milk to become ropy during the illness, but this was not always present; and, as a rule, this condition was not apparent until the milk had stood for five or six hours; hence, the milk from this farmer was distributed before this peculiarity had had time to show itself. After describing the difference between cow-pox and the disease in question, Dr. Cameron urged the necessity for examination of cows, and for the removal of all suspected animals from the milk-business; and he expressed the hope that the Government would, before long, institute some means of more effectually protecting the general public against the recurrence of outbreaks of disease due to milk.—In the discussion which followed, the PRESIDENT, Drs. MURRAY, PRINGLE, HICKS, and SAUNDERS, and Messrs. BARHAM, SMEE, and SHIRLEY MURPHY, took part.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 16TH, 1886.

W. H. CORFIELD, M.D., President, in the Chair.

Dr. Koch's Gelatine Peptone Water-test.—Professor G. BISCHOF read a paper on this subject. The author stated that he had made hundreds of tests, besides a very large number of experiments, with the object of testing the method itself. He asked why colonies of bacteria should be the standard of purity of water. A satisfactory answer to this could only be given in two ways. The colonies might behave in the same way as chemical poisons, being harmless in certain numbers, and injurious or poisonous in others. He was convinced that was not so; at least, not within a very wide limit, perhaps within a million in the cubic centimètre, which was a much larger number than any likely to occur in potable water. In proof of this, he had taken a sample of New River water, which would still have been called "very good" in quality by Dr. Koch, had it contained even twice as many micro-organisms as it did contain. This he kept for six days in a sterilised flask, protected against aërial infection, and then found that, instead of one liquefying colony, he had 640, and, instead of a total of fifty-three, he had 770,000 micro-organisms per cubic centimètre. Although the sample on the sixth day compared unfavourably, as regards numbers of colonies, both with New River water from the company's main, to which one per cent. of sewage had been added, and with Thames water at London Bridge, if such a number of colonies were hurtful, this would have been known long since from experience, as water was frequently kept longer on board-ship, and under much more unfavourable conditions. The only other way of connecting micro-organisms with purity or quality was, if they indicated something else which was injurious to health. This could only be pollution. Did the conditions, upon which the development of micro-organisms depended, warrant any such conclusion? Temperature was, perhaps, the most important of those conditions, because, near the freezing point, development was entirely stopped, whilst it was aided, as, gradually, a temperature of 33° to 40° Cent. was reached. Of scarcely less importance was the time allowed for development, or, as it would be called in the case of water, storage; next came food; and, lastly, aëration and light. Temperature, storage, and light had no necessary connection with pollution. As regarded aëration, it was well known that, when there was a deficiency of oxygen, the development of microphytes was checked; therefore, as the deficiency of oxygen generally coincided with impurity of water, the latter would actually check, as far as aëration went, the development of microphytes. Food, the only remaining condition, was always the result of pollution; but even in distilled water, which certainly was not polluted in the common sense of the word, and where there was but a scanty trace of food, very large numbers of microphytes were sometimes developed. Referring once more to the sample of New River water, kept for six days, he asked if, in such water, containing few organisms, and which was generally pure, such enormous numbers of microphytes could be developed by storage pure and simple, it was justifiable to say that the number of microphytes depended upon pollution. Thus, there seemed to him an insurmountable difficulty in judging the sanitary condition of water by the number of microphytes, which might, or might not, be a proper standard in any given case. He was convinced of the value of the method for many laboratory experiments; but, in testing water, it should be applied with discrimination. It had been laid down that the presence of many different kinds of microphytes was, *cæteris paribus*, an indication of danger; but he believed that sufficient advance had not yet been made to allow definite conclusions to be drawn from this criterion. The search by the test for specific microphytes, such as were the cause of zymotic disease, did not, for two reasons, rest on a much more satisfactory basis; first, the knowledge of these microphytes was as yet very limited; and, secondly, several of the known organised poisons could not at all be cultivated in gelatine-peptone; at least, not under the ordinary conditions of the test.—In the discussion which followed, the PRESIDENT, Mr. WYNTER BLYTH, Dr. KLEIN, and Mr. CASSAL took part.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, APRIL 22TH, 1886.

R. J. PYE-SMITH, F.R.C.S.Eng., President, in the Chair.

Congenital Tumours of Orbit.—Mr. SNELL related particulars of a case of a young woman, for whom he had removed, from each orbit, at the outer part, a small congenital tumour. There was in one eyelid partial coloboma, and also the absence of the greater part of the external ear on one side.—Mr. ATKIN examined the tumours with the microscope, and stated they were "mixed tumours."

Salivary Calculus.—Dr. HARGREAVES exhibited a calculus, half an inch long, and the sixth of an inch wide, from a man, aged 45. It was from the submaxillary gland, but, instead of coming by the duct it ulcerated through the mucous membrane posterior to it.

Dentigerous Cyst.—Mr. GARRARD related this case; it occurred in the lower jaw.

Communication between Stomach and Transverse Colon.—Mr. JEFFREYS (Chesterfield) showed the specimen, from a man, aged 54, a retired publican, and a hard liver. Pain over, and enlargement of, the liver were first noticed in May, 1884. Later, there had been severe attacks of profuse offensive expectoration, and they lasted a considerable period. Emaciation steadily increased. On February 16th last he had a severe syncopal attack, and, shortly afterwards, stercoraceous vomiting set in; this was preceded by severe, diffused, abdominal pain. He suffered a great deal from constipation, and enemata were used. On February 27th, he passed a large piece of necrosed tissue accompanied by hæmorrhage. He died on March 2nd, from exhaustion. At the necropsy, a large cavity was found containing pus, and extending from the lower part of the transverse colon to the under side of the diaphragm; the spleen formed the outer, and the posterior wall of the stomach the inner, boundary. The stomach, through an opening in its posterior wall, communicated with this cavity, as did also the posterior part of the transverse colon; there was, also, an opening (from the abscess-cavity) through the diaphragm, and, at this point the left lung was adherent.

Lead in Drinking-Water.—Mr. PYE-SMITH referred to the large field at present open in Sheffield for observation of the effects of the contamination of drinking-water with lead; and, after quoting the opinions of various authorities as to the probable frequency of unrecognised cases of chronic plumbism, in the absence of the usual pronounced symptoms, he mentioned several classes of cases he had met with where he suspected lead to have been the cause of the symptoms; namely, cases of severe functional derangement of the circulation and digestion, without signs of organic disease, cases of arthralgia and myalgia, cases of nerve-disturbance, and cases of abortion. All the cases referred to occurred within the area supplied by the Redmires water, and the majority of the patients showed evidence of the presence of lead in the body by a blue line on the gums.—Remarks were made by Dr. MARTIN, Dr. PORTER, Mr. GARRARD, and Dr. KEELING.

BORDER COUNTIES BRANCH.

FRIDAY, APRIL 9TH, 1886.

C. S. HALL, M.R.C.S.Eng., President, in the Chair.

Surgery of the Brain.—Dr. THOMSON, Dumfries, opened a discussion on this subject, with special reference to the removal of adventitious products, in cases where there were no external manifestations on the surface of the skull. He referred to some points in connection with brain-surgery, arising from accident, and particularly (1) to cases of recovery, after trephining, and opening the dura mater, for the removal of inflammatory products; (2) to cases of recovery, after direct violence, where the brain was laid open, and where there was loss of brain-substance. From recovery in those cases, was urged the possibility of being able to remove successfully—within limited areas on the surface of the cerebral hemispheres—morbid products, such as tumours, cysts, and abscesses. It was pointed out that attempts would probably have been made earlier in this direction, but for the inability to localise with sufficient accuracy the object to be removed, and that only with gradual progress in the study of anatomy, physiology, and pathology of the nerve-centres, had this class of cases been brought within the realm of practical surgery. The difficulty of selecting suitable cases was brought forward, both with regard to the nature of the substance to be removed, and to the obtaining of a well-defined and accurate localisation of its relations. These difficulties, viewed in connection with the dangers of the operation, were considered sufficient grounds for concluding that it was still an open question whether surgeons were justified in interfering with such cases. It was admitted that some practical answer had already been given to the question, and that, in particular, the unique, and now classical case operated on by Mr. Godlee, afforded, to the sanguine, some degree of encouragement for the future of cerebral surgery.

Four Abdominal Cases of Interest.—Dr. CAMPBELL (Garlands, Carlisle) gave a condensed report of the history and the *post mortem* appearances in these cases. 1. The first case was one in which a female patient became emaciated without any recognised cause. Her mental state was such, and she resisted so much, as to preclude accurate examination. Vomiting appeared shortly before death. The necropsy showed a mass of hair and twine in the stomach. This was the

se of the sort seen by Dr. Campbell, though a necropsy was made ter each death in the asylum under his charge. 2. The second case as one of melancholia, with obscure abdominal symptoms; tympan- es recurring in different positions; general abdominal discomfort; th, at the close, general dropsy. The *post mortem* examination owed bands of thin white fine membrane, crossing and recrossing e intestines, which were compressed, giving the compressed por- ons the appearances of small bladders. 3. The third case was one cancer of the pylorus. It was long suspected, and the patient, at obably the commencement of the disease, gave expression to the de- sion that she had rats in her stomach, which delusion she held to r death. Dr. Campbell pointed out that physical disease was very equently the starting point of delusions which, to a casual observer, emed ridiculous and groundless. Several cases which had lately me under his observation with cancer of the stomach, duodenum, pancreas, had exhibited a very similar mental condition, and held ry similar delusions. 4. The fourth case was one of cicatricial icture of the stomach, with one recent ulcer. The patient was years of age, had become thinner and cachetic looking, and had fee-ground vomit. Cancer of the stomach was diagnosed. The mach was divided into two unequal portions by the stricture, which uld admit the point of a finger. The cases were grouped together t from having points in common, but as having, in a limited popu- ion of 250 female patients, come under observation in a short period ree in 1885).

Treatment of Lupus.—Dr. T. DAVIDSON (Thornhill) read a paper on o methods of treating lupus. After describing the ordinary scraping thod, details, with cases, were given of Schwimmer's method, con- ting of the application of vaseline, followed by an ointment of pyro- lic acid; the whole mass being then covered with mercurial ster.

Illustrations of the Origin of Certain Zymotic Diseases in an Isolated use.—Dr. EATON (Cleator Moor), who presented this paper, made ne introductory remarks on the connection between unsanitary angements in houses and the spread of zymotic diseases, and re- ed the following circumstances. During February, 1884, a most ulent case of diarrhœa occurred in a child, aged 5 months, which ved fatal within a few days. Within other two days, the father s below par in health. In another three days, a son, aged 6 years, s ill of double pneumonia, of an adynamic type, from which he wly recovered; and, in a few days more, a daughter, aged 11, had vere attack of diphtheria. The following month, the mother was fering from a low state of health. Eleven months afterwards, ther daughter, aged 10, had a severe attack of diphtheria; and, e months ago, a female visitor, aged 13, who had been staying a night in the house, was taken home ill, of what proved to be a y severe attack of diphtheria and scarlatina combined. On inquiry, was found that an extremely foul cistern, situated close to the ldren's bedroom, had been cleaned out just before the first series of es occurred. The overflow water from this cistern passed directly o the soil-pipe, which was not ventilated. The water-closet pan s not sealed; sewer-gas was, therefore, constantly escaping into water-closet, and pervading the adjoining parts of the house. direct connection of the overflow pipe of the cistern with the -pipe permitted sewer-gas to pass to the cistern, which, of course, n became excessively foul, and, the cistern being open at the top, loft above the children's bedroom became saturated with sewer-

At an opening in the ceiling of this room, a down draught was ected, constantly entering the room, three feet from its eastern ner, where an open grate was situated. The defaulting room had, viously to 1884, been used as a servant's bedroom, and the servants frequently been ill, of diseases (the nature of which he could not n), without the cause being known. It had been used as a bed- n and day-nursery by all the children who had become ill; and occurrence of the second series of cases simply proved that the nsing and disinfection had not been thoroughly performed after first cases had occurred, and that some source of infection must e been overlooked.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, APRIL 21ST, 1886.

A. OGSTON, M.D., President, in the Chair.

uscara Sagrada.—Dr. URQUHART read notes on the action of cas- sagrada. After describing the plant, and the history of its intro- ion as a medicinal agent, he gave details of his own experience of se. He had used it largely in the form of liquid extract, in doses om five to forty minims, given twice daily, and had found it the serviceable agent in the treatment of constipation generally, its chief advantage being that the bowels were not locked after its employment. He had, however, known it to fail occasionally, which he attributed to variation in quality.—Specimens of cascara bark were exhibited by Dr. URQUHART and Professor DAVIDSON.

Strophanthus Hispidus and Casca.—Professor DYCE DAVIDSON showed a fine specimen of the strophanthus hispidus, which he had lately received from Lake Nyassa, and one of erythrophlœum, or casca bark; and he remarked on their action on the circulation, and the likelihood of their future usefulness in medical practice.

Talipes Equino-varus.—Dr. GARDEN showed a boy on whom he had operated, eight weeks previously, for talipes equino-varus. The distortion had been excessive, the back of the foot being applied to the ground. The anterior part of the astragalus and os calcis, together with the whole of the scaphoid and cuboid bones, were removed, the foot put into position, and a simple dressing applied to the wound, and plaster was applied three weeks after the operation. The result had been exceedingly good, the foot being in the proper position, and the ankle-joint freely movable.—Dr. OGSTON, in remarking on the case, said the result was one of the best he had seen with such a marked degree of club-foot.

Hæmatoma of the Labium.—Dr. EDMOND read a note on a rare case of hæmatoma of the labium. The tumour, which was of considerable size, occurred in the right labium of a primipara, aged 42, the day after labour. Spontaneous rupture took place; the blood-clot was extruded, and the wound healed readily in the course of a few days.—None of the members present had met with a similar case.

Flat-Foot.—Professor OGSTON exhibited a dissection of flat-foot, which he had had the opportunity of making in a limb amputated for disease of the knee-joint. The specimen showed well the state of parts characteristic of this deformity, namely, the descent and locking of the os calcis and astragalus; and Dr. Ogston demonstrated the various operative procedures undertaken in these cases for the restoration of the natural arch of the foot.

Hydrocephalus and Spina Bifida.—Dr. RUXTON exhibited two cases of hydrocephalus of unusually large size in the first year of life, the front parietal circumferences of which were twenty-one and twenty-six inches respectively. One of these presented, in addition, a well-marked spina bifida in the lumbar region. Dr. Ruxton remarked on various cases of spina bifida which he had had under his care, and on the varying appearances presented in the different cases, and referred to the occasional concurrence of hydrocephalus and spina bifida in the same individual.

REVIEWS AND NOTICES.

THE HISTORY OF CHOLERA IN INDIA. By Deputy Surgeon-General BELLEW, Sanitary Commissioner, Punjab.

SECOND NOTICE.

IN our first notice of this work, we felt constrained to point out that while the author charges those who have preceded him in the difficult inquiry into the history and causation of cholera in India, of doing so with preconceived notions on the subject, and of reading facts in the light of such ideas, he himself is just as open to this charge as those whom he judges; and, we think, we made this sufficiently apparent by quotations from the "inquiry" under notice. We now proceed, according to promise, to deal more in detail with the deductions and practical observations of the writer, as given at considerable length in the concluding part of his work.

We must, however, first notice some points in Mr. BELLEW's introductory chapter, in which he disposes of the various theories that have been put forward on the nature and cause of cholera. These are: (A) the blood-poison theory; (B) the specific contagion theory; (C) the water-contamination by cholera-dejecta theory; and (D) the cholera-germ theory. After what we said in our last notice, it is almost needless to add that, in the opinion of the author, they one and all fail to establish the merits claimed for them: "they contain within themselves only a part of the truth, being," in his opinion, "built up from minor truths connected with the manifestations of certain special symptoms, characteristic of a particular stage of the disease, and not upon the nature and causes of cholera in all its stages." This remark may be true of some of the alleged causes of cholera; it is not true of all. When Dr. Snow first published his observations on the propagation of the disease by contaminated water, he dealt with the broad fact that those who used water taken from a particular well, suffered in a much larger proportion than those in the same neighbourhood who used water from a different source. The water theory, formulated by Snow, had nothing to do with par-

ticular stages of the disease; and the same remark is applicable to all the reliable evidence on this subject with which we are acquainted.

The blood-poison theory is attributed by our author solely to Dr. George Johnson. It is true that Dr. Johnson has insisted on it much, and has based on it a method of treatment that has not commended itself to modern Indian practitioners. It is, in point of fact, a very old belief, that at one time prevailed among some old Indian physicians, and fell out of repute on account of the unsatisfactory results of the purgative treatment which was based on it. The cholera contagion theory is flatly denied by our author, in the face of the declaration of the Special Commission on Cholera, of 1861; and of the International Sanitary Congress, held at Constantinople, in 1886. And, we add, in the face of a fact, proved to demonstration that cholera has never found its way to the continent of America, notably to the United States, other than by maritime communication. We admit, with our author, that outbreaks of cholera do not travel in all directions, as human beings do, but we demur entirely to the *dictum* which immediately follows, that cholera absolutely refuses to be introduced by human agency into new tracts which lie outside the natural limits of its epidemic influence. Such a conclusion, even in India, can only be sustained by obstinately closing our eyes to such facts as the spread of the disease by pilgrims, and by innumerable examples, more particularly in Southern India, of infected regiments carrying the disease with them, and spreading it over a wide area on their line of march. Like the late Sanitary Commissioner with the Government of India, Mr. Bellew holds that when cholera appears in a place simultaneously with the arrival of a person from a cholera-infected locality, the event is to be accepted as a "mere coincidence," and the assertion is ventured on, that such a thing never happens unless the place so invaded "is within the limits of the general epidemic area."

In fact, the whole, or nearly the whole, of Mr. Bellew's arguments on this part of the subject appear to us to be only the oft-repeated dicta of Dr. James Cuningham; arguments which, as we have on many occasions in this JOURNAL shown to be in conflict with well observed facts made and recorded by trustworthy men, who have had to deal with cholera, not in sanitary reports only, but practically, and not in India alone, but in other parts of the world into which the disease has been introduced. While constrained to express ourselves as above, we are far, very far, from denying the mysterious power of what Sydenham called the "epidemic influence," whether or not that influence, as our author asserts, be always intimately associated with season and climatic phenomena. We are as far as Mr. Bellew himself from attributing to contagion more influence than facts and observations warrant, but we hold it to be alike mischievous, and, in the present state of knowledge, unphilosophic, to deny its influence altogether.

On the water-contamination theory, we have already touched. The most that our author admits under this head is that impure drinking-water may favour the attack of cholera in the individual by injuriously affecting the standard of his general health; and he goes so far as to say that there is no evidence to show that impure drinking-water has anywhere in this country (India) originated an attack of cholera, and far less developed an epidemic of the disease. We have nowhere seen it asserted that impure drinking-water has "developed" an epidemic; but unless we are prepared to dismiss from our minds the accumulated evidence on the local propagation of the disease by the agency of water, very notably that of the sanitary commissioners of Calcutta; the evidence of other observers in India who have recorded facts, not intended to bolster up a theory; the researches of sanitarians in this country, as recorded by Simon and others; and last, not least, the history of the late epidemic in Spain, as given by the highly competent commissioner of the *Times* in that country, it is impossible to subscribe to Mr. Bellew's doctrine, which, after all, is only Dr. James Cuningham's doctrine writ large.

The germ-theory is regarded with a certain amount of favour; while not accepting Pettenkofer's doctrine as a whole, the author subscribes to the truth of his statement as to the "ground-water;" so far, that the appearance of cholera is coincident with a fall in the subsoil-water, the relation between the two occurrences being an absolute fact.

Bryden's theory of an earth-born poison, having an endemic and epidemic area, is given in detail. This theory is so well known, that it is needless to repeat it. In our author's words, "Shorn of its germ element, and the hypotheses built-up thereon of reproduction, invasion, dormancy, revitalisation, etc., this theory contains more of the truth of cholera than all the others preceding it put together." Mr. Bellew considers "that, in India, cholera is a phenomenon of season, controlled, as regards period of appearance, by geographical position, and, as regards local activity, by conditions of climate and soil, coupled with those of the health state of the individual; that in its nature and properties, cholera is strictly analogous to influenza and also to malarious fever (intermittent and remittent), and that like those diseases, cholera is the result of atmospheric changes acting upon the system, in a manner specially determinated in each disease under certain conditions of its bodily health; and that cholera, like influenza and malarious fever, without being contagious, is nevertheless infectious, as a subordinate contingency concurrent with the general epidemic diffusion of the disease."

Our readers will admit that the above quotation from a scorner of "theories" can hardly be said not to sin against a method of advancing medical science by the method elsewhere deemed so objectionable by the author.

It is time now to explain the plan on which Mr. Bellew's inquiry has been conducted. The period under notice is from 1862 to 188 inclusive. The statistics of the nine provinces—Madras, Bombay, Berar, Central Provinces, Bengal, Assam, Burma, North-Western Provinces, and Oudh and Punjab—are dealt with separately, year by year, for the whole series of twenty years. With such means as were at our author's disposal, he has appended to the cholera review of each year a brief description of the meteorology of the period, embodying such observations as have appeared to bear upon the subject in hand. To this interesting and important part of our author's labours, we must refer our readers to the work itself. It is obvious impossible for us, with the space at our disposal, to give the bare summary of the observations, occupying, with maps and tables, 7 closely printed pages.

From a careful consideration of the facts brought out in the historical part of the inquiry, Mr. Bellew arrives at the conclusion "that cholera in India is a disease which, in point of prevalence, very intimately related to, and dependent upon, the climatic and sonal influences of the country; and that the effects of these influences, as manifested in the prevalence and fatality of the disease, in a very remarkable manner modified and controlled by conditions of locality affecting the soil, the weather, and the life-circumstances of the people." Again, the records show very clearly that certain regions and tracts of country in India, which bear a striking similarity of resemblance in respect to the main features of their physical aspects and climatic characteristics, are much more favourable to development of the epidemic activity of cholera than are other regions and tracts of country in India, which differ from them very essentially in the characteristic features of their physiography and meteorology, as well as in point of density of population, and the condition the material prosperity of that population. The author goes on show that in the one region the disease is always endemic; in the oth only an occasional visitor, and an epidemic disease. This is, of cour Bryden's "endemic and epidemic area," in other words.

There is, of course, nothing new in the description of the physi characteristics of the endemic area—its lowlying alluvial soil, sa rated with stagnant water, and water-logged by the floodings of great rivers which traverse the area "in deltaic formation;" the mate hot, tropical or subtropical, and densely populated. The amples given of such endemic areas in Bengal and Assam are river-deltas of the Ganges and Bramaputra, of the Mahanadi Orissa, and the interfluvial tracts of Behar. In Burma, the delta the Irrawady and Salwin, and, in Madras, those of the Godaveri, Kistna, and the Kaveri, although in those last named there are dif ences in geological formation, all are within the Tropic of Cancer, a hot and moist climate is common to them all. Bombay also great deltas—those of the Narbada and Indus; but they differ fr those named above in climate. The delta of the Indus is beyond influence of the rainy monsoon, is extratropical; the soil is arid, summer-heat is excessive, and the winter is cold. These deltas not endemic areas of cholera. The strictly endemic areas of Bombay Presidency are the seaboards of the Konkan and Mala coasts, where the conditions of soil and climate assimilate to thos the deltas of Bengal and Madras.

In the Berar and Central Provinces, and the great Deccan table-l occupying the body of the southern peninsula between Bombay Madras, the difference between the soil and climate, and that of alluvial deltas described is marked, and they are consequently outs the endemic area, although subject to severe visitations of the dis in the epidemic form. The writer of this notice was quartered c to the city of Hyderabad, in the Deccan, for twelve years; in o one year in that time was the disease entirely absent from that ci the month of May, the driest and hottest month in the year in Deccan, being the season of greatest prevalence. The North-West Provinces and Oudh have districts with many points of resemblanc

the deltaic regions of Bengal. The southern half of these provinces, from the nature of their soil and climate, are included by Mr. Bellew in the endemic area. In the Punjab are certain tracts which, bearing some resemblance to some parts of Bengal and the North-Western Provinces, both in climate and supersaturation of the soil with water, bring such districts, during the season of the hot weather monsoon rains, within the endemic area.

The epidemic regions of cholera, while presenting a very different character of soil and climate from that in the endemic area, yet present many variations both in soil and climate, and cannot be said to have any uniform characteristic beyond the absence of an alluvial soil and a humid climate.

The records of cholera, as evidenced by the history of the disease compiled from official sources, bring out once more its seasonal development. It has its regular seasons of activity and of quiescence in alternation, in every year and cycle of years. This cycle is one of three years, both for the several provinces, taken separately, and for all India, taken as a whole. In the annual alternations of rise and fall in cholera prevalence, the periods of the vernal and autumnal equinoxes, and the seasons of its absolute inactivity or minimum degree of prevalence, even in the course of an epidemic; and the month intervening between these and the northern, or summer, and the southern, or winter, solstices, respectively, are the seasons of its habitual activity, or maximum degree of intensity, whether in ordinary course, or in the course of an epidemic career. There are seeming exceptions to this law, which Mr. Bellew thinks are due to the conditions of soil, climate, and health circumstances of the people, favourable or unfavourable to the development of cholera. "The collateral circumstances" which, according to our own author, are favourable to the continued prevalence of a naturally developed seasonal epidemic of cholera, are: *a*, an abnormal excess of atmospheric humidity and temperature, coupled with some ill understood, but nevertheless very plainly perceived changes in the electric condition of the air and the amount of its present ozone; *b*, conditions of soil favouring sudden and unduly active evaporation of moisture from its surface, and when seasons of unusual drought are followed by copious rainfall; *c*, a low standard of health among the people, produced by unusual exposure to fatigues, privations, and vicissitudes of weather. The author dwells, with much minuteness, on the effect of the periodical monsoons of India; nothing can be better or more complete than his account of the meteorological phenomena of these monsoons; that they exert an influence on the health of the population cannot be doubted, and their influence on the propagation of cholera is as much insisted on by Mr. Bellew as it was by the late Dr. Bryden. We have not space for the author's remarks in explanation of the fact that the hot-weather rains in some parts of India, are coincident with an abeyance of cholera activity, whilst in other parts of the country they are more or less generally accompanied by a greatly increased prevalence of cholera activity. The explanation will be found at p. 785.

We entirely concur with the author in his condemnation of the practice of confining the use of the term cholera only to those cases which are characterised by rice-water stools, and suppression of urine, which, he justly says, "are the last and most dangerous stages of the disease, forgetful of the fact that the one cannot appear until the bowels have been cleared of their fæcal contents; nor the other, until the drain of fluids from the blood has left none for the secretion of urine."

We take leave, however, to doubt whether the practice of neglecting what has been called the stage of "premonitory diarrhœa," but which, in fact, is the disease itself in its first stage, is so common in the present day as it formerly was. It is consistent with our knowledge, that, in military practice, at least thirty years ago, many medical officers were in the habit of having frequent inspections, during the day, of the men under their charge; of having non-commissioned officers placed near the latrines, for the purpose of at once reporting men going frequently to the rear; and we further know that the immense importance of this system has been much insisted on at Netley, ever since the Army School was instituted. Nevertheless, we are glad that the subject has been so well dealt with by the author, in one of the most practical pages in his important work.

We come now to the important question put by our author—What is cholera? He thus answers it. "It is simply an influenza or catarrh of the mucous membrane of the alimentary canal, precisely homologous to the influenza or catarrh of the mucous membrane of the respiratory passages." Like Bryden, he takes Copeland's article on influenza as exactly applicable to cholera, and, like Bryden, he quotes it, substituting the word cholera for influenza.

Here we must pause for to-day, and hope, in a third notice, to conclude our review of this important volume. We have endeavoured to epitomise our author's opinions on the important questions dealt with, as much as possible in his own words.

REPORT ON SANITARY MEASURES IN INDIA IN 1883-4. Presented to both Houses of Parliament.

WE think the time has come when it may well be asked what is the necessity for the existence of a special Army Sanitary Commission, and the publication, year after year, of a bulky Report, like the one before us? Can it be that its *raison d'être* is to find employment for one very excellent official, who has, in his time, done good work in the cause of army sanitation? If so, it would surely be better economy to give this deserving public servant a liberal retirement. We are quite at a loss even to guess why this Army Sanitary Commission "drags its slow length along," if it be not for the reason suggested above. In the Report before us, we have 124 pages devoted to "abstracts" of the reports of the various sanitary and administrative officers of India, already published at enormous length, and widely circulated at great expense. There is also, in the office of the director-general of the medical staff, a "Sanitary Branch," whose officers are surely competent to present the pith of the various reports received in the office, for the "information of Parliament." In addition to this *réchauffage* of already published reports, there is an "appendix," which consists of a running commentary on the facts and figures given in the Reports. We have gone with some care through this "appendix," without lighting on one fact or observation worth the paper on which it is printed. Take, as an example, the remarks, at page 141, on the "cholera bacillus," and the "fungus theory of Professor Hellier of Jena," and we find nothing but a repetition of matter on the above subjects, "weary, stale, and unprofitable,"—matter which has been threshed out in professional journals, and even text-books, until nothing but husks and straw remain. Surely, at this time of day, we do not need a special Army Commission to tell us, for the thousandth time, "that neglect of cleanliness in times past appears to have led to the pollution of village sites, and the sources of village water-supply,"—a fact, no doubt, but one to be found in every sanitary report published in India since such papers have been printed. Of such novel sayings, no small portion of this appendix is made up. We have, in addition to the above, notices of the sanitary improvements recommended or in progress, all, of course, warmed up from official documents already published. How many Members of Parliament, for whose information this report is said to be published, will read such details? Most important they are, but they concern the local authorities, who have to carry them out, who already have them in original before them, and do not require the sanction of an elderly gentleman, sitting in the War Office, before doing so. We cannot conclude this, we must admit, not complimentary notice of this report, without adverting to one point. The whole credit of the diminished mortality in India is given to improved sanitation. The fact that, in spite of this, an enormous amount of the gravest forms of tropical disease is successfully dealt with in India in the hospitals, is calmly ignored. Professor Maclean, more just to medical officers than the compiler of this report, has the following passage, which we respectfully commend to the attention of the Army Sanitary Commission sitting in the War Office. "After the largest possible allowance has been made for the beneficent operations of the means referred to (improved sanitation), a share in the splendid results may reasonably be claimed for the successful treatment of disease. Notwithstanding the great sanitary improvements that have taken place, a vast amount of disease of the gravest kind remained to be dealt with by the medical officers of the army. Unless treatment, to a large extent, had kept pace with sanitation, the results we contemplate with so much satisfaction could not have been obtained."

SURGICAL HANDICRAFT. By WALTER PYE, F.R.C.S. Second edition. London: H. Kimpton. 1885.

WE had occasion to notice favourably the first edition of this manual of surgical manipulations, minor surgery, and other matters connected with the work of house-surgeons and surgical dressers; and we find, in this new edition, various improvements upon the original. The book is made less bulky, but contains more matter, though the number of pages remains about the same. Corrections have been made here and there, and useful additions made. The new matter partly consists of notices of recent advances in the handicraft of surgery, which seem likely to have a permanent value. Thus the account of the fitting of trusses and much of the chapters on Listerian dressings have been rewritten, additions have been made to those on spinal jackets, local anæsthesia, etc.; new appendices added, containing short direc-

tions for the preparation of patients for operation, for the making of poultices, etc., and for case-taking.

It is, of course difficult to include everything that a house-surgeon or dresser may want; but we should be glad for their sakes to see added in some form a list of the requirements of these officials as to instruments, etc., some outline of their duties and responsibilities, of their legal duties at inquests, and of the simplest methods of making *post mortem* examinations. These would, we think, add very materially to the value of the book, and make it one of the most useful which a house-surgeon or dresser could possess; and as the work is intended specially for them, we think it should contain such information in some form. There are some useful hints in many special books on minor surgery, and particularly in Maunder's *Operative Surgery* and in Le Gros Clark's *Outlines of Surgery*, which house-surgeons and dressers would be glad to see in such a manual as this, and are not found in the larger text-books.

But the work is a very practical and useful one, and the author is to be congratulated upon its success. The student, too, will not be sorry to find the present edition less costly, as well as more full of information, and also more portable. The book is certainly worthy of its author's reputation, and can be safely recommended.

On the Fœtus in Utero. By Alexander Harvey, M.A., M.D.' Emeritus Professor of Materia Medica in the University of Aberdeen, etc. London: H. K. Lewis. 1886.

This little volume is a reprint of a series of five essays contributed by the author, some of them as far back as 1849-50, to the *Monthly Journal of Medical Science*, and other periodicals. A great deal of the subject-matter has so far become part of current ideas that it seems quite odd to see it argued, as it were, *de novo*. The essays are, however, valuable, if only from a historical point of view, and treat of matters which are replete with interest to physiologists, and of grave practical importance to the public. They comprise dissertations on the influence of the male on the female organism, either directly or through the fœtus, on the peculiar effects of sexual intercourse between individuals of different race, and on the transmission of syphilis to the mother *viâ* the fœtus, etc.

A great deal advanced by the author is necessarily matter of conjecture, and either has not been proved, or, perchance, from the nature of things, does not admit of proof. Much, however, can be done in this direction by careful observations of the cases which are met with in routine professional life; and in this way the suggestiveness of these essays may prove of the greatest service by eliciting the facts by which alone a clear comprehension of these questions can be attained.

NOTES ON BOOKS.

The Medical and Dental Registers for 1886.—The Medical Register for 1886, a copy of which has been forwarded to us by the Registrar of the General Medical Council, has undergone thorough revision and considerable enlargement, and everywhere traces of careful and judicious editing are apparent. No less than forty additional pages have been added, containing, in addition to the names and qualifications of all registered practitioners, much valuable and interesting statistical information. In Table E is shown the total number and percentage of persons registered from the beginning of registration in 1858 up to January 1st, 1886, in the three divisions of the kingdom; the numbers being, for England, 27,872; for Scotland, 6,810; Ireland, 6,887. The number of persons at present on the *Register* is, England, 17,109 (an increase of 198 over those in the like period of the previous year); Scotland, 4,703 (being an increase of 339); Ireland, 4,186 (showing an increase of 140). The number of persons added by registration during the year 1885 was 787 for England, against 769 for 1884; Scotland, 355, against 381 in 1884; and Ireland, 235, against 238 in the previous year; making the total number of persons registered during the year, for the three kingdoms, 1,377. The number of persons struck off the *Register* in consequence of death was 711. The total number of medical practitioners on the *Register* up to December 31st, 1885, was 25,998. *The Dentists' Register* for 1886, issued from the same office, contains, as usual, a large amount of useful information, from which we gather that, of the number of persons registered under the Dentists' Act, there are, in the United Kingdom, 869 licentiates in dental surgery; licentiates in dentistry with additional surgical qualifications, 23; without, 4,306; showing a total of dentists in the United Kingdom of 5,198. The number of dental students registered from 1878 to December 31st, 1885, was 392; the number now remaining on the students' register, 300.

Vestnik Klinitcheskoi ee Sudebnoi Psikhiatrii ee Neirologii (*The Herald of Clinical and Forensic Psychiatry and Neurology*). Edited by Professor Ivan P. Mierzejewski. Vol. iii, part ii. St. Petersburg: Karl Ricker.—As usual, this valuable contemporary is full of interesting and instructive material for reading and instruction. The psychological part of the volume at hand contains the following articles. 1. A paper by Dr. P. A. Dukoff on Crime and Insanity, the scientific character of which is considerably blotted and marred by dragging in personal reactionary political views. 2. An article by Dr. Vladimir Tchij, on Measuring the Time of Elementary Mental Processes in the Insane, based on the author's researches, under the guidance of Professors Flechsig and Wundt. The paper must be read in connection with another psychometric work by the same author, published in the *Vestnik*, vol. iii, p. 1, On the Examination of Apperception after the Methods of Complications. We would friendly advise the author to write in a simpler and more lucid style. There does not exist any subject, however seemingly complicated and embroiled, which could not admit a simple and clear exposition. 3. Dr. B. C. Greidenberg makes an interesting contribution to the Study of Acute Hallucinatory Insanity (*Paranoia Hallucinatoria Acuta*), with five cases of his own. The neuropathologic part of the journal includes an important monograph by Professor V. Bekhtereff, of Kazan, on the Functions of the Optic Thalami in Man and Animals (pp. 91-173). It is followed by a communication from Professor A. Kojevnikoff, of Moscow, on a case of Amyotrophic Sclerosis, with degeneration of the pyramidal tracts through their whole length, from the lumbar cord up to the cerebral cortex. Dr. T. J. Viazemsky contributes a paper on the Galvanic Resistance of Animal Tissues, and its Measurement. It is a second portion of the author's galvanometric researches (in Kojevnikoff's clinic), the first being given in the *Vestnik*, vol. iii, part i, p. 242. Two remaining original articles are Dr. L. O. Finkelstein's experimental investigations (in Professor Mierzejewski's clinic) of the Electrical Phenomena on Stimulating caused by the Optic Apparatus; and Dr. V. Tchij's short casuistic note on Cerebral Degeneration, tending to elucidate anatomical relations between the nerve-bundles passing through the pons Varolii. In a third division of the periodical dedicated to reports and reviews, we find, amongst numerous paragraphs, a note on Dr. Gowers's lectures on the diagnosis of cerebral diseases, the reviewer highly commending this new work of the talented author. A fourth part, Chronicle of Lunatic Asylums, is composed of articles by Drs. Litvinoff, Jakovenko, and Droznes, articles concerning the Tver, Moscow, and Kherson Asylums.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PILLS OF VALERIANATE OF QUININE, IRON, AND ZINC.

We have received from Messrs. W. H. Schieffelin and Co., of New York, specimens of their new pills, containing one grain each of valerianate of quinine, iron, and zinc. They are attractive in appearance, the coating is soluble, and they seem admirably adapted for the treatment of hysteria, hypochondriasis, hemicrania, epilepsy, and other diseases in which the valerianates have been found useful.

ELECTRIC LIGHT FOR LARYNGOSCOPE AND OPHTHALMOSCOPE.

In the Journal of February 13th, Mr. Juler described his very beautiful adaptation of the electric light to ophthalmic work, and gave a drawing of his instrument, as made by Messrs. Pickard and Curry. Having ordered an electric light laryngoscope from Messrs. J. Weiss and Son, I requested that firm to procure one of Mr. Juler's ophthalmoscopes, and see if it could not easily be worked from the same Leclanché battery as the laryngoscope. This has been effected by the addition of a resistance-coil and an extra terminal, and so one battery is dispensed with. I may say that both instruments work most satisfactorily, and require no special skill to manipulate.

3 Brighton Parade, Blackpool. George C. Kingsbury, M.A., M.D.

Conviction for Illegal Practice.—A man named Ries, of Dortmund, has been sentenced to eight years' imprisonment for manslaughter, through the illegal practice of medicine. He was, until lately, a night-watchman; but has several times, during the last few years, been punished for quackery.

Medical Magistrate.—Dr. John Constable, of Leuchars, has been appointed a Justice of the Peace for the County of Fife.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 8th, 1886.

MEDICAL ACTS AMENDMENT BILL.

ON Monday last, May 3rd, being the first day of the re-assembling of Parliament after the Easter recess, Sir Lyon Playfair moved and carried, in the House of Commons, the second reading of the new Medical Acts Amendment Bill, promoted by the Privy Council, on behalf of the Government, and introduced on April 5th. Time after time, different Governments have undertaken the settlement of the long-vexed question of Medical Reform, but, as Sir Lyon Playfair has stated, "owing to the interests affected, and the jealousies of different medical bodies, the measures had all failed." The conflicting interests of the medical bodies represented in the Medical Council defied agreement. When, in 1869, the Council was asked by the Marquis of Ripon, as Lord President of the Privy Council, to frame a Medical Bill, the effort proved absolutely abortive, so that the Government declined to attempt legislation on such inadequate grounds. The same interests still exert their influence in the General Medical Council, and mar its usefulness; and, as in the Council, so in both Houses of Parliament, all the Universities and Corporations are able to exert an immense influence, and possess a power of resistance to change, and thereby to legislation, well nigh insuperable. Lord Carlingford and Mr. Mundella really failed to settle the proportionate representation on the Divisional Boards proposed to be formed under their Bill, owing to the jealousies existing between the Universities and Corporations. Such was the mutual fear lest either should secure the preponderance over the other, that the fight, on this one point alone, remained undecided to the end.

This difficulty, happily for its success, is avoided in the present Bill. Sir Lyon Playfair, guided by the experience which his long familiarity with all the details and difficulties of the question has given him, has so framed his Bill as to avoid exciting the susceptibilities of any of the licensing bodies, and thereby incurring the open or concealed opposition which has proved fatal to previous attempts at legislation.

The brunt of the battle for medical reform has, beyond cavil, been borne by the British Medical Association. When other reformers have despaired and abandoned the field, the Association, year after year, still appointed its Medical Reform Committee. Through the direct influence of the Association, Lord Carlingford and Mr. Mundella undertook and, during two exciting sessions, distracted by party conflicts, by domestic and foreign complications, persevered in the attempt to carry a Bill based on the Report of the Royal Commission; and though it was, in the end, withdrawn, yet, through the influence, also, of the Association, the Bill, and thereby the question of medical reform, was removed from the arena of party, and approved and supported by the leading members of the Opposition. This failure was a bitter disappointment; but, even supposing success unattainable, great good still followed in the wake of the continued agitation, in the face of which the corporations could not do less than keep their houses in more or less better order. Sir Lyon Playfair has distinctly stated that, "since the attempt to reform the medical profession, the different medical corporations had shown a tendency to combine;" witness in England, *longo post tempore*, the combination of the College of Surgeons and the College of Physicians to have one qualifying examination, in both medicine and surgery—the very corporations foremost in defeating the attempt of the Association, in 1858, to make the double qualification obligatory for registration.

The Association, while welcoming all these combinations as distinct improvements, cannot regard them as final. Such combinations are voluntary, and liable to be rescinded; and the Association would be false to the principles it has for so many years advocated, did it not strive to make the complete examination compulsory; and to this end legislation is indispensable.

The failure of Lord Carlingford's Bill caused, not only depression, but actual despondency, in many quarters, and the representatives of the Association were urged by honest reformers to abandon the struggle. The mandate imposed on them did not permit such a course, and therefore, in February, the Government was again approached, and informed that the Association had commissioned a committee to press forward the subject of medical reform until the object worked for was obtained. Stress was laid on the fact that the power of the Association was materially strengthened, owing to a Select Committee having sat during two sessions, and a Royal Commission having subsequently reported in favour of the principles advocated by the Association, and owing to repeated attempts at legislation by both Conservative and Liberal Governments. The election of the President of the Council of the Association as a member of the House of Commons was specially mentioned.

The familiarity of the Lord President and Vice-President of the Privy Council with all the details of medical legislation naturally inspired a hope that a Medical Act Amendment Bill might be carried. On March 26th, the Medical Reform Committee agreed as to the general purport of the details of a Bill which would be satisfactory to the Committee.

At the meeting of Council of the Association on April 14th, Dr. Edward Waters, the Chairman of the Committee, reported, on behalf of the Medical Reform Committee, that a Bill had been introduced into the House of Commons by Sir Lyon Playfair, and explained in detail the effects of the Bill. The report of the Committee was adopted. This Bill, having passed the second reading on Monday last, is down for Committee on Monday, the 17th instant. Its provisions have, in substance, been given in the JOURNALS of March 27th and April 10th, and need not be repeated. At present, it is known that the diploma of any single corporation entitles to registration and consequent power, as a registered medical practitioner, to practise all branches of the profession, though possibly qualified in one only. By this Bill, the examination qualifying for registration will embrace medicine, surgery, and midwifery—an immense improvement on the present state of things.

The most remarkable result of the prolonged struggle for medical reform is not only the general admission that the profession should be directly represented in the Medical Council, but the acknowledgment that the direct representatives will improve the constitution of the Council.

The Royal Commission reported in their favour. Sir Lyon Playfair stated: "These representatives would add to the strength of the Medical Council." Sir H. Holland said: "The constitution of the General Council was to be entirely changed, and wisely, by this Bill." Dr. Foster, our President of Council, not only approves, but considers the representation given inadequate. He showed that, according to the respective numbers of the profession in the three divisions of the kingdom, England should have four, Scotland and Ireland one each—the number always demanded by the Association, if the corporations retained their present representation. Dr. Farquharson concurred in Dr. Foster's remarks. Sir H. Roscoe expressed a hope that Dr. Foster's recommendations on this head "would receive due consideration, because he felt that the medical profession was not so fully represented as it deserved to be." This testimony in favour of the principle fully justifies the unflinching course pursued by the Association to attain this end.

Sir H. Roscoe pleaded for a distinct representative for the Victoria University, on account of the Colleges of Liverpool and Leeds connected with it, and as representing a population as large as that of the metropolis.

This Bill, though not all that we wish, is yet due to the persistent labours of the Association, and may be looked on as the result of more than fifty years' struggle. It provides the three-fold examination under the control of the improved Medical Council; and it provides for the admission of direct representatives of the profession to the General Medical Council.

If we were to reject a Bill which concedes these two cardinal points, for which we have so long contended, in the hope of obtaining more, we might lose a solid gain in grasping at a shadow.

If we were to reject it, we should be carrying out the wishes of all those—how many, and how powerful they are, the Medical Reform Committee has, by bitter experience, learned—who have long and strenuously opposed direct representation—of those who would not permit the insertion of a clause into the Act of 1858, enjoining the double qualification as essential to registration.

In 1858, we accepted an instalment of Medical Reform, rather than sacrifice everything.

Again, in 1886, after another arduous battle, let us accept what is attainable as a further instalment, and not lose the fruit of all our efforts, by demanding what has, for the present, been proved unattainable.

BALNEOTHERAPEUTICS.

THE science of the treatment of diseased conditions, by means of one or other of the natural mineral waters, is evidently by no means a new one. The hygienic use of water, impregnated or not with gases or salts, was, indeed, probably far more appreciated, if not better understood, in the days of those over-cleanly people, the Romans, than in the time in which we live. In consequence, perhaps, of its venerable antiquity, the first step in the study of the therapeutics of "water-cures," consists in clearing away the quasi-superstitions and unnecessary obscurities with which centuries of interested circumlocutions have contrived to surround the subject; and having done this, we can proceed, free from prejudices and bias, to discuss the matter on its merits. Nothing, probably, has done more to discredit this branch of therapeutics than the fanciful phraseology of men, pleading for the most part *pro domo*, who, in their anxiety to give their claims an appearance of plausibility, employed a style and a nomenclature which deserve no better epithet than that recently applied to them, of "unscientific circumlocutions." Our still scanty knowledge of the physiological action of warm and cold, of baths containing salts and gases, are, by them, carried far beyond the boundary of certain conclusions, and to the construction of what are often only haphazard theories. In the opinion of a great authority on the subject, the present position of balneotherapy is empirical, and is founded on the observation and experience of physicians. Hence, the only really valuable information has to be derived from a study of practical experiences of the therapeutic action of mineral waters, so far as they comprise the operation of the more important agents in "water-cures."

The curative agents in balneotherapy may be divided into the hydro-therapeutic, which refers to the action of cold baths, douches, etc.; the pharmaco-dynamic, as where gas- or salt-containing waters are drunk with a view to obtaining their specific effects; and the hygienic, this latter class comprising the change of air and scenery, absence of worry or professional cares, etc., which constitute a powerful factor in the beneficial results to be obtained from a sojourn in watering places. Apart from the latter consideration, there is no reason to suppose that a mineral water, systematically drunk at home, is less efficacious than when drunk at the well under the eye of the bath-physician.

While the value, under certain circumstances, of the outward application, in the form of baths of waters containing gases or salts in solution, is generally admitted, such results are, in almost every case, to be attributed to the local and general effect of the water, aided or not by its temperature. It appears, from numerous and carefully conducted experiments, that neither salts nor gases ever permeate the skin sufficiently to produce an appreciable effect, and even the water itself is not absorbed to any noticeable extent. An exception may, perhaps, be made in favour of waters containing iodine or sulphuretted hydrogen; although even here it is open to question, whether these substances do not enter the system through the lungs in consequence of their volatile nature.

By means of baths of different temperatures, marked changes may be produced in the blood-pressure; the arteries of the pia mater, for example, contracting during immersion in a warm, and dilating in a cold bath. Further, if the body be placed in a cold bath, the volume of a limb not so immersed is distinctly increased. The general effect of a cold bath is to stimulate production of heat, and consequently metabolic changes; and this effect survives some time after the bath, if this be not unduly prolonged. On the other hand, both production of heat and elimination of carbonic acid are retarded by a warm bath, unless the duration or temperature of the latter be such as to lead to a rise of temperature. Further, after a warm bath, the rapid evaporation which takes place from the sodden skin, together with the lethargic state of the cutaneous vaso-motor system, renders the patient particularly liable to take cold, and special precautions are necessary to obviate this tendency. The abrupt changes in the circulation, produced by the external application of cold water,

evidently point to caution in its use under circumstances where such variations might be attended with risk. The sensitiveness of the skin is dulled by prolonged immersion in warm baths; and this fact is turned to account in the treatment of skin-diseases attended by pruritus, smarting, etc., temporary relief generally following the application.

The question of the electric action of metallurgic baths may be summarily dismissed as appertaining to that series of high pitched assertions enveloped in pseudo-physical phrases, which form the basis of many modern books on balneotherapy, and even of some which lay claim to a high standard of physiological observation and accuracy.

The therapeutic effects to be hoped for from the ingurgitation of mineral waters require very careful consideration. To have any appreciable effect, however, such waters require to be taken in sufficiently large quantities, and no small importance attaches to the time and conditions under which it is administered. Many of the good results so obtained ought, in fairness, to be attributed to the substitution of a bland unirritating liquid for other and injurious drinks, together with the change in habits which is associated with a course of treatment. It must be remembered that the organism not only finds a certain quantity of water necessary in the twenty-four hours, but it also requires a certain degree of periodicity as to the time when it is swallowed. On this account, drinking-cures in which this periodicity is replaced by large draughts once a day, may not be without value, from their effect in quickening the blood-current and their more rapid elimination. Before treating of the thermal effects of water taken into the stomach, it will be well to remark that they are, generally speaking, contrary to those obtained by its outward application. One effect of cold drink is to bring about a lowering of the temperature of the body; the pulse-frequency is, moreover, diminished, while the blood-pressure is thereby temporarily increased. The popular idea, however, that water, so administered in large quantities is absorbed in the stomach, is probably not altogether correct. Experiments tend to prove that as a matter of fact the specific gravity of the blood is not sensibly modified, even after copious libations; but the rapid excretion of superfluous water by the kidneys may to some extent account for this. We possess, probably, in copious water-drinking, especially if spread out so as to allow more perfect absorption, a means of subjecting the system to a powerful washing out, and possibly a coincident and temporary increased excretion of certain products of tissue-change. Indeed, a great number of water-cures owe their efficacy, in disease, far more to the diuretic and washing out effect of water drunk in increased quantity, than to the salts and gases dissolved in it. It is not alone the urinary secretion that is thus augmented, for, *pari passu* with increased diuresis, the secretion of the parotid gland is stimulated, and the flow of bile is also increased, while its colour is rendered lighter. Perspiration is more active, the intestinal juices are more abundant, and the peristaltic movements become more vigorous.

The curative action of certain alkaline springs in the treatment of gout and rheumatism, is sufficiently established to need no more than a passing remark. The tonic effect of a course of chalybeate waters, and the depurative action of the purely purgative waters, are also well known and appreciated. Although the composition of many of the waters belonging to this latter class has been approximately ascertained, their effect, when prepared artificially, is frequently not the same as when taken on the spot, although many of them admit perfectly of being transported in bottles without perceptible diminution of their active properties. The value of these waters, of which Friedrichshall is a type, in the treatment of constipation and the numerous ailments which follow in its train, is in a notable degree found to be attributable to the presence of chloride of sodium, together with other salts; but it is very probable that the conditions under which these salts are found in mineral waters, differ materially from the gross results as shown by analysis. This class of waters is that probably in most general use, and, with increased facilities for transport, their popularity must needs go on increasing. Their action is free from the doubt and uncertainty which characterise the results obtainable from waters of a more complicated composition, and containing substances as to the value of which, either here or elsewhere, much variety of opinion exists. France is particularly favoured, so far as number and variety of springs is concerned; but Germany follows closely behind, and German waters are, probably, better known in this country than the more expensive and often less highly mineralised waters of France. England possesses several springs of undoubted value, but, for some reason or other, they are less highly esteemed than water from foreign sources. If the subject can only be liberated from the tincture of charlatanism which pervades it, and placed once for all on the basis of experimental observation, there is every reason to hope that the use of mineral waters may be generalised in the treatment of those complaints to which they seem peculiarly applicable.

THE DELAYS OF SANITARY LEGISLATION.

At a meeting of the Association of Public Sanitary Inspectors, on the 1st instant, Mr. Edwin Chadwick took occasion to discourse on the fruitful theme of sanitary delays, in which he especially emphasised the neglect which always had, and still was, displayed in regard to sanitary matters in Ireland. He pointed out that he had shown, so far back as 1852, that those districts in Ireland which were most mud-hovelled, 61 in the worst to 29 in the best, were the most ravaged by epidemic diseases, in the proportion of 35 to 47. In these districts especially he proposed, nine years ago, as a measure of sanitation, compulsory subsoil land-drainage (and, in some instances, surface-drainage), such as had been extensively adopted, in a voluntary manner, in England, repaying itself, in seven years, by a profit of more than 10 per cent. in fair instances. Ireland, he said, was wetter than England, and, therefore, in greater need of sanitary relief of this particular kind.

Another point was that, in these poor and distressed districts, where the ordinary wage did not exceed a shilling a day, two shillings a day would have been provided as piecework, which would have been a great advantage in many economic ways. This measure, however, was not adopted, and Mr. Chadwick said that he could not discover, in the Irish Bills now under consideration, any means of relief for the most depressed and discontented portion of the Irish people.

He then went on to show the loss and inconvenience entailed on the metropolis by the present system of vestries and independent local authorities, instancing the bad paving and cleansing of the streets, the increasing losses of life and property from fire, owing greatly to the deficient supply of water, and the unsatisfactory construction and condition of the sewers.

He concluded by denouncing the plan of the Metropolitan Board for deodorising the sewage, and sending it into the Thames, instead of using it to fertilise the land, in the same way as now in operation at Berlin, Paris, and in various cities of the United States.

REPLACEMENT OF A LOST EYE.

THE operation of transplanting an eye removed from a rabbit, or dog, into the human orbit, first suggested and performed by Dr. Chibret in May last year, has now been performed five times. In a recent paper (*Archives d'Ophthalmologie*, January—February, 1886), M. Terrier publishes the details of these operations, and gives the history of the only successful case down to a later date than was possible when it was first published. In Chibret's case, the patient was a girl, aged 17, and the transplanted eye was that of a rabbit. All the cellular tissue was carefully dissected off the sclerotic, and the eye was retained in the capsule of Tenon by the conjunctiva being constricted round it by a ligature. The cornea ulcerated, and gave way on the fifteenth day, when the contents of the globe escaped. The sclerotic was left, and underwent cicatricial contraction. The antiseptic used was corrosive sublimate. The second case, by Terrier, was in a man aged 30, in whom one eye had been lost by a recent injury. A rabbit's eye was used in this case also, but the cellular tissue on the sclerotic was preserved, as well as a circumcorneal ring of conjunctiva; the latter was stitched to the conjunctiva of the recipient by eight points of suture. The eye was washed in a warm solution of boracic acid, and Lister's antiseptic precautions were employed. Some entropion of the lower lid took place, and the cornea sloughed. The eye was removed on the fifth day. The third operation, by Rohmer, was on a woman, aged 42, in whom there was an old adherent staphyloma, with localised irido-cyclitis, and sympathetic irritation of the other eye. A dog's eye was used, the cellular tissue and conjunctiva being preserved as in the preceding case. Corrosive sublimate was used as an antiseptic. The cornea sloughed on the sixth day. Three months later, the patient returned with a fresh attack of sympathetic irritation, and the shrunken stump, which had been constantly suppurating, was removed. It was found to have contracted firm adhesions. The fourth case is the successful one already published by the operator, Bradford (*Boston Medical and Surgical Journal*, No. 12, 1885). The patient was a man, aged 35, in whom one eye was blind and shrunken—the result of an old injury. The eye was enucleated in the ordinary manner, except that sutures were passed through the recti muscles and the optic nerve previous to their division. A rabbit's eye was then enucleated, the muscles being cut short, but about eight millimètres of the optic nerve being removed with the eye. The eye, and the orbit of the recipient, having been washed with the white of an egg, the eye was introduced, and secured, first, by a suture connecting the optic nerves; secondly, by the recti being attached to the cellular tissue on the sclerotic; thirdly, by conjunctival sutures. Iodoform was applied as a dressing, and the eye was not opened till the seventh day. There was then a superficial opacity of the cornea, and some chemosis of the conjunctiva. The suture through the optic nerve, which had been secured by a kind of slip-knot, was removed, as well as two of the sutures through the muscles; one of the latter had already given way. On the twelfth day, the remaining suture was removed; the cornea was clearer, and the conjunctiva united in its whole circumference. On the eighteenth day (the date of the previous publication of the case), the size, shape, and tension of the eye were normal, and its movement free. M. Terrier adds that, two months and twenty days after the operation, there was a cicatrix of the former ulceration, occupying about one-sixth of the cornea; that the pupil was of medium size, and inactive; and that all the movements were free. There were some opacities in the vitreous humour. The last published case is one performed by Terrier, on October 19th, last year. The patient was a man, aged 66, in whom an unsuccessful cataract operation had been followed by severe ciliary neuralgia. The eye was enucleated, and a rabbit's eye introduced, and secured by sutures through the recti. Warm boracic acid solution was employed as an antiseptic. A troublesome entropion of the lower lid occurred, and caused ulceration of the cornea; the latter sloughed, and the globe was excised on the nineteenth day, when it was found to have contracted firm and vascular adhesions to the capsule of Tenon. The feasibility of the operation may be considered as established, for not only was Bradford's case successful, but the fact that, in Terrier's two cases, firm and vascular adhesions had formed between the transplanted eye and the capsule of Tenon, renders it probable that a successful issue would also have been obtained in them could the ulceration of the cornea have been prevented. The latter was, probably, in a great measure, due to the entropion of the lower lid; and the occurrence of this might be prevented by modifying the details of the operation, and especially by adopting the expedient, since suggested by Terrier, of temporarily uniting the eyelids. From a physiological standpoint, the successful transplantation of so complex an organ from one animal to an individual belonging to a different species, is of the greatest interest; it may, however, well be doubted whether the operation will prove of any practical value. It is, indeed, difficult to see what advantage can be claimed for the transplanted eye over an artificial organ. The cosmetic effect of a well fitting glass-eye would probably be far better, except, perhaps, in respect to the range of movement. The vitality of the organic eye would probably be low, and it would be liable to become inflamed from slight causes. We much doubt, moreover, whether many patients would give their consent to the eye of a rabbit or dog being constituted a part of their individuality. We should not have thought it necessary to point out the impossibility of the transplanted eye being of any functional use, had not the contrary been hinted at. Even if the retinal elements of the transplanted eye retained their power of responding to the stimulus of light, and the conductility of the optic nerve was restored when organic union took place, still, no useful vision could result unless the retinal elements of the transplanted eye, which corresponded to any given points in the visual field, became connected with the same fibres as those connected with the corresponding retinal elements in the excised eye; this would necessitate an impossible similarity in the optical conditions, and in the number and arrangements of the retinal elements in the excised and transplanted eyes.

MR. ERICHSEN has been appointed successor to Mr. George Busk as Inspector, under the Act 39 and 40 Vict., ch. 77, for Regulating Physiological Experiments on Living Animals. Mr. Erichsen was a member of the Royal Commission whose report preceded the passing of the Act. Mr. Erichsen is conspicuous for his services to the Royal Humane Society, as well as being an eminent scientific surgeon. We regret to say that Mr. Busk's retirement from the inspectorship, which he has held for ten years, and which he has filled with great judgment and good sense, is due to ill-health.

THE Medical Acts Amendment Bill was read a second time on Monday night, and the Government do not anticipate any serious opposition to the Medical Bill at any of its further stages. Should the measure pass, the fact will be worthy of note, as, since 1870, over twenty measures, dealing with the complex questions involved, have been introduced into Parliament, but have failed to survive the opposition to their provisions.

WE understand that the General Medical Council will probably meet during the first week in June, for the transaction of ordinary business.

UNIVERSITY COLLEGE, LONDON.

THE Right Honourable the Earl of Kimberley, K.G., President of the College, will preside at the Distribution of Prizes in the Faculty of Medicine, on Wednesday, May 19th. The chair will be taken at three o'clock.

FOTHERGILLIAN GOLD MEDAL.

THE Medical Society of London has awarded this medal to John Strahan, M.D., of Belfast. The successful essay is entitled "The Nature and Varieties of the Fevers prevalent in the United Kingdom," and will be published in due course in the Society's *Transactions*.

CUCAINE IN HAY-FEVER.

DR. SETH BISHOP, in a lecture recently delivered by him at the Chicago Medical College, alluded to the wonderful effects claimed for cucaine in the treatment of hay-fever. He had made a certain number of personal observations, and summed up his conclusions as follows. First, it was not to be expected that a drug with so ephemeral an influence should be successful in permanently arresting an affection of the nature of hay-fever. Secondly, undoubted relief often followed the application of a spray of the solution, but it required to be renewed every hour or two, if the effect were to be maintained; and such repeated applications were liable to be followed by the absorption and physiological effect of the drug. Thirdly, it produced an anæmic and contracted condition of the mucous membrane, followed, after some time, by congestion and hyperæsthesia, the suffering from which more than compensated for any relief obtained. Finally, this reaction was much more marked in some individuals than in others.

UNQUALIFIED ASSISTANTS AND BRANCH-DISPENSARIES.

THE pernicious practice of putting unqualified assistants in charge of patients, whose treatment they undertake without systematic supervision, is a prolific source of scandals which reflect great discredit on the profession. Mr. A. Braxton Hicks, coroner for Surrey, in his summing up to the jury at an inquest over which he presided recently at Kingston, condemned the practice in very strong terms. The inquest was held to ascertain the cause of death of a married woman, aged 43, who died somewhat suddenly while under the treatment of Mr. Lewis, who appears to have been described as the "resident medical officer" of a dispensary in Fairfield Road, Kingston, owned by Mr. Sheppard, who resides at New Malden. Mr. Lewis is unqualified, yet Mr. Sheppard only attended at the dispensary on three evenings in the week, and Mr. Lewis deposed that he attended patients, and prescribed for them, "in the absence of Dr. Sheppard." The woman, whose death was the cause of the inquest, belonged to the London and Manchester Industrial Assurance Company, to which Mr. Sheppard is the local medical officer. Under the rules of the company, the members could claim the services of the medical officer, but, in this instance, the deceased was treated by the unqualified assistant. The husband deposed that it was not until he applied for a certificate of the death that he became aware that the "resident medical officer" was not a qualified practitioner; and Mr. Lewis deposed that he had treated the deceased for exhaustion, due to alcoholism. *Post mortem* examination showed that the cause of death was phthisis. The coroner, in commenting on these facts, made, according to the report forwarded to us in the *Surrey Comet*, the following observations: "People were induced to join the society, and also the dispensary, on the supposition that, in illness, they would receive medicine and duly qualified medical attendance. A qualified man was at the head of the dispensary, but he placed, in residence, a man who had not passed a single examination. Mr. Sheppard attended three evenings a week, and, for the rest of the time, the poor people were going to a man who was unqualified. He considered that it was nothing less than obtaining money under false pretences, and he said that deliberately. If Mr. Sheppard could not look after his own business properly, it was his duty to depute some one who was duly qualified to act for him." The jury found that the deceased died from phthisis, and expressed their unanimous opinion that, if Mr. Sheppard kept on his dispensary, he ought to place a duly qualified medical practitioner in residence.

THE LEVÉE.

AT the levée, holden last Monday by the Prince of Wales, on behalf of Her Majesty the Queen, the following members of the medical profession were presented. By the Duke of Cambridge, Surgeon-Major C. E. Harrison, Grenadier Guards, on promotion. By the Field Officer of Brigade in Waiting, Surgeon A. C. A. Alexander, Coldstream Guards, on return from active service. By the Director-General of the Medical Department of the Navy, Surgeon G. W. Bell, R.N., on return from active service in the Soudan; Deputy Inspector-General W. J. Eames, and Deputy Inspector-General D. Hilston, M.D., on promotion; Surgeon H. W. Macnamara; Surgeon G. H. H. Symonds; Surgeon J. O'B. Williams. By the Deputy-General of the Army Medical Staff, Surgeon-Major J. A. Gourley, on promotion; Dr. J. Macpherson Lowrie (Weymouth). By the Adjutant-General, Surgeon-Major B. B. Connolly, Medical Staff, on return from active service. By the Secretary of State, Surgeon-General W. R. Cornish, C.I.E., on appointment as Honorary Surgeon to the Queen. By Admiral Sir T. Commerell, Surgeon Thomas M. Sibbald, R.N. Mr. Malcolm Morris was also presented by the Marquis of Ripon.

ANOTHER EFFORT AT MEDICAL REFORM.

THE Medical Act Amendment Bill, introduced by Mr. Morgan Howard and Sir Trevor Lawrence, at the instance of Mr. R. H. S. Carpenter and his friends, is a short measure of a few clauses. The principal clauses are Clause 8, which provides for the repeal of Section 40 of the Medical Act, 1858, and the enactment in lieu thereof that a medical title is not to be used or taken for gain without proper qualification and registration thereof; with a proviso to exempt persons, not British subjects, who hold diplomas, etc., from licensing bodies in British possessions and foreign countries. There is a clause securing payment of penalties to the General Medical Council only. Clause 5 gives power to the General Medical Council to register diplomas, etc. granted in British possessions and foreign countries; and an appeal, in respect to decisions on this head, lies to the Privy Council. Clause 7 is a valuable and well-drawn clause, which imposes a penalty against unregistered persons carrying on, or assisting, practice at so-called dispensaries. This clause, the preliminary memorandum explains, aims at the suppression of a very objectionable practice, extensively carried on during the last ten or twelve years; namely, the opening of so-called medical dispensaries, etc., which, in numerous instances, are not conducted by qualified practitioners, but to which, nevertheless, the public, especially the poor and unprotected classes, are invited to come for medical treatment.

THE VESICULÆ SEMINALES AND SKENE'S TUBES.

MR. J. BLAND SUTTON, in an important contribution to the *Journal of Anatomy and Physiology* for April, appears to have proved, from careful dissection of the genito-urinary tract in seventy cows, that

Skene's tubes, and the pair of urethral glands with which they are connected, represent the vesiculæ seminales and their ducts in the male. The orifices of Skene's tubes may frequently be detected on the margin of the meatus urinarius; and Böhm has described catarrh of the tubes, sometimes of gonorrhœal origin. Max Schüller has definitely traced the communication of Skene's tubes with a pair of glands in the upper part of the urethra. Sutton denies that the tubes are distinct from Gartner's ducts, and has found a glandular diverticulum springing from each, just above its termination in the wall of the vagina in the cow. Precisely the same condition exists, but in a far higher grade of development, in the terminal part of the vas deferens, the homologue of Gartner's duct in the male, and the diverticulum in this case is the vesicula seminalis. In the human female, Skene's tubes and their glands are entirely urethral, and not connected with the vagina, as in the cow.

THE UNIVERSITY OF LONDON.

The annual meeting of the Convocation of the University of London will be held on May 11th, when Mr. Magnus will bring up the report of the special Committee, appointed on December 8th, to draw up a scheme of reform by which the University may be placed upon a wider basis. Convocation will have before it an alternative scheme, propounded by an independent graduate; and the Senate, as we have already stated, has referred a third scheme, that drawn up by Lord Justice Fry, to a subcommittee. In a multitude of counsellors there is wisdom; too much time, however, may easily be spent in extracting this concentrated wisdom. Certain persons, it would seem, are agitated in mind because the University has no motto; let them beware lest, by reason of obstruction in the ranks, and indifference among the leaders, the only motto the University ever obtains, be that one adopted by certain decayed noble families—*Fuit.*

THE INFLUENCE OF DIABETES ON GESTATION, PARTURITION, AND MENSTRUATION.

According to many authors, diabetes renders women sterile. Six cases studied and treated by Dr. Lecorché contradict this theory. His six diabetic patients were delivered of children at term, but they were all delicate. One child died two days after its birth; another, when 21 months old, became hydrocephalic, with polydipsia. There was no sugar in its urine. A third had a double hydrocele, and was also hydrocephalic, and could not live. Dr. Lecorché concludes that diabetes does not render women sterile. When they do not conceive, it is uterine lesions, resulting from diabetes, that cause their sterility. Diabetes has direct influence on the process of gestation, impairs fœtal nutrition, and is favourable to faulty development, especially hydrocephalus. Diabetes often produces dysmenorrhœa and amenorrhœa. Early menopauses may result from an overlooked diabetes. The menses may reappear when the sugar disappears. According to Dr. Lecorché, metrorrhagia in a diabetic patient indicates a coexistent uterine affection, and is not the result of diabetes.

OPERATION IN HYDATID DISEASE OF THE LIVER.

Dr. Spisharny, of Moscow, describes, in the *Vratch*, three cases, under the care of Professor Sklifassovsky. All recovered. In one case, a cyst had already burst into the pleural cavity. The Professor is strongly in favour of free incision, and sewing of the wall of the cyst to the edges of the abdominal wound. Statistics are in favour of this proceeding. Neisser has collected 306 cases of hydatid disease of the liver treated after different methods, with Listerian precautions. The results were mostly unsatisfactory. The majority of this series were treated by puncture. Better results were claimed in 1885, by the Mecklenburg physicians and surgeons, in a series of 132 cases. In twenty-five cases, the cyst was allowed to burst spontaneously; 52 per cent. of these died. In seventeen, the cyst was punctured, with 58 per cent. mortality. In twenty-eight cases, incision and fixation of the cyst-wall was performed, with only 20 per cent. mortality. Korach has employed incision in eighteen cases; in six of these, the incision through integuments and cyst-wall was done in two stages. All of these latter recovered; one out of the remaining twelve died. Incision is becoming the most popular method amongst Russian surgeons, who have considerable opportunities of studying hydatid disease in their wards. There can be no doubt that aspiration is a dangerous proceeding. Incision is generally satisfactory, provided that there is no cyst behind that which is opened. If there be another, or several other cysts, the risk of fatal suppuration will be very great.

WEST INDIAN SANDAL-WOOD OIL.

It would appear that an article now comes into commerce under the name of West Indian sandal-wood oil, which, though not in great favour with the druggists in this country and Australia, is sold to a considerable extent in the United States; the probable explanation being that the price is only about one-third of that of undoubtedly genuine sandal-wood oil. As no species of santalum occurs in the American continent, Mr. E. M. Holmes, the Curator of the Museum of the Pharmaceutical Society, was led to suspect that the plant from which the West Indian oil is obtained must belong to some other natural order. This supposition was confirmed by the examination of some leaves of the tree sent by Mr. R. Conn, Her Majesty's Consul at Puerto Cabello, which proved to belong to a rutaceous plant, probably nearly allied to the genus *Xanthoxylon*, from which, however, it seemed to differ in several particulars. No plant corresponding exactly to the leaves could be found in the national herbaria, either at Kew or at South Kensington; and the mother-plant therefore probably belongs to a hitherto undescribed species, though, in the absence of flowers and fruit, it is at present impossible to fully describe it. At a recent evening meeting of the Pharmaceutical Society, Mr. Holmes was able to exhibit a young specimen of the tree, and he then stated that the subject was undergoing thorough investigation. So far as the use of the oil for perfumery is concerned, its value may not be so much affected by its botanical origin; but it is evident that an oil from an unknown rutaceous plant must not be substituted in medicine for that from the wood of santalum album, at any rate until more has been ascertained as to its therapeutic properties.

FEMALE MEDICAL EDUCATION IN RUSSIA.

The Russian press, of all possible political creeds, unanimously declares its sympathy with the St. Petersburg female medical courses, which are breathing their last. It would be difficult, indeed, to find out an intelligent and honest man or woman in Russian society who is not convinced as to the vast usefulness of the institution. Donations continue to come in for its sustenance. Mrs. E. G. Stepanova has subscribed £100 yearly for ten successive years; in Astrakhan, Tiflis, and Kharkov, theatricals were arranged by sympathising amateurs to raise some substantial sums for the purpose. A special society is about to be formed in St. Petersburg to protect and keep up the courses, several medical ladies being the nucleus of the undertaking. The St. Petersburg City administration, conjointly with the Committee of Social Health, has resolved upon giving a yearly subsidy, amounting to 15,000 roubles (£1,500), as well as a town-building (the Potemkinsky Dom) for lectures and laboratories, and upon opening all the town-hospitals for clinical teaching. And yet the institution breathes its last, dying from artificial asphyxia, induced by a hand as omnipotent as ignorant.

MORRHUOL, THE ACTIVE PRINCIPLE OF COD-LIVER OIL.

Dr. Lafarge, of Paris, has lately been engaged in a series of experiments with a view of separating the active constituents of cod-liver oil, in order that its good effect might be utilised without the, to many, insurmountable nausea which the crude oil is apt to cause. Opinions differ as to which constituent of the oil its value is attributable; the fatty part is credited with the good results by some, while

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thers attach more importance to the bromine, iodine, and phosphorus hich it contains. He advocates the following processes for this purose. The oil is, in the first place, to be treated with an aqueous olution of carbonate of soda, which dissolves the acids at a low mperature, or the oil may be shaken up with rectified spirit; the icohol is allowed to separate, and is then distilled; the product will hen contain the active principles with which Dr. Lafage has been exerimenting. This substance, which he calls morrhuol, is pungent, itter, and aromatic, and is semi-crystalline at ordinary temperatures. t contains twelve times as much iodine, bromine, and phosphorus as he original oil, but these elements exist in a state of combination ifficult to destroy. The quantity of morrhuol obtainable varies, acording to the quality of the oil, from 1½ to 6 per cent. When codver oil is deprived of the morrhuol, it no longer possesses the proerties which make it so valuable, and acts simply as a fatty subance. In order to cover the disagreeable taste of the morrhuol, is best given in capsules containing five grains of the extract, orresponding to a drachm and a half of the crude oil. Two of these apsules a day in young children, or four daily in older children, have, r. Lafage says, proved of great service in his hands. He does not ropose to dispense with the use of the crude oil altogether, but thinks at morrhuol may be used advantageously where an insurmountable pugnance is shown for the oil as ordinarily administered. Further, atients whose digestive faculties are not equal to the assimilation of e oil, may derive considerable benefit from the lesser bulk of the exact. Morrhuol has, in addition, been noticed as possessing a remarkable calming influence over the troublesome cough of phthisical atients, facilitating and diminishing expectoration. For the same eason, it is very useful in chronic bronchitis, especially when atnded with profuse expectoration.

THE MEDICAL REFORMER OF INDIA.

E have before us a number (for February, 1886) of a Native medical urnal; the English equivalent of its title is given above. It appears be intended to advocate the interests of the Native medical subornates of the Bengal army. It is written in Oordoo, in the Persian haracter, and is also intended to improve the professional knowledge the class for whose benefit it is written, a class for the most part norant of the English language. Not having seen any of the earlier mbers of the journal, we are unable to give any opinion on the anner in which it fulfils the first part of its professed object, which probably the most important in the eyes both of conductors and aders. We gather that Government has been asked in its pages to ant a more liberal scale of pay to Native hospital assistants, and to prove their social position. They claim to be placed on the same cial level with Tehsildurs, Subinspectors of police, Subadars, and madars (Native commissioned officers of the Indian army), and, e them, to be allowed seats on public occasions of ceremony, a point much importance in the eyes of their countrymen. In the number fore us, we observe articles on various professional subjects, such as e use of cucaine, cannabis indica, skin-grafting, and cynanche. We sh every success to this effort to raise the status and improve the ofessional knowledge of the class for whose use it is written. We pe its conductors will not imitate the tone of the Native press, but ll seek to attain its reasonable ends by the use of moderate and beming language.

BURIED IN CHAINS.

ME particulars of the mode in which the lunatics among the Boers South Africa were treated in the early part of this century have en brought to light in a curious manner, and are reported in *The lonies and India*. A new Dutch Reformed Church is being built Graaf-Reinet; and, while excavating the foundations of the west nsept, the workmen came upon several old graves. As it had been olved to place all the human bones found in a coffin, the workmen re taking them up for that purpose, when, to their surprise, they found the leg-bones of one skeleton inside two very heavy iron rings, connected by a bar about twelve inches in length, the whole weighing thirteen pounds and a half. At the other end of the grave was a heavy iron ring, or collar, and close to it an iron bar about eighteen inches in length, with a small ring at each end, which had evidently been used instead of our modern handcuffs. How such rings had been fixed to the ankles of the unfortunate wearer, is a question which might puzzle some of our blacksmiths. On the question, "Who was the possessor of the interesting manacles?" speculation was rife, when the following solution of the difficulty was given by an old lady resident of Graaf-Reinet, now bordering upon ninety, who states that she distinctly remembers, when about thirteen, coming into town from the Sneeuwberg, and seeing a maniac, named Koekemoer, heavily manacled, allowed to go about the streets; a perfect terror to little girls, who would hardly venture outside the door for fear of meeting him. Sometimes he was knee-haltered by a chain fixed to an iron collar about the neck, to prevent his getting into mischief. At other times, he might go erect, having only chains on hands and feet. If the question should be raised as to the improbability of burying such an object of pity with chains and all, it might be answered that a Government or a public that could thus treat him during life would find little scruple in saving themselves the trouble of removing, after death, such heavy iron rings as have been dug out of the old graves.

THE SCHOOL SCAPE-GOAT.

THE institution of the School Board has not, as yet, outgrown the feeling of political excitement which attended its birth and infancy, and is consequently exposed to enmity on grounds quite apart from considerations of educational propriety. Few persons are in a better position to appreciate the woeful consequences of ignorance on many points of the greatest importance in regard to health, than the medical man; and few, therefore, are, or ought to be, more alive to the necessity for the intellectual elevation of the masses. By such means alone can philanthropists hope to stem the tide of intemperance, extravagance, and stupidity, which sweeps many of the labouring classes to an abyss where their health, if not their life, is foundered. Since it is difficult to imagine any other means than a School Board, of securing that modicum of education, without which the perception of higher objects and more elevated motives is impossible, it behoves the medical man to lend his moral support to the working of the scheme, or, at the least, to carefully eschew the expression of opinions which may be construed as adverse to it, except upon the most unimpeachable evidence. A great deal has been said and written during the last year or two, on the alleged prevalence of cerebral mischief from overwork; and medical support has not been wanting to foster this view, which, even if true in some instances, has, beyond doubt, been grossly exaggerated. That some children, the equilibrium of whose nervous organisations was more than usually unstable, may have found in schoolwork the exciting cause of an attack of meningitis, is not improbable, and could not excite surprise; but that the average work would be likely to induce this condition in an average child, it is absurd to suppose. Not a few examples have occurred of late where, because the delirium partook—if one may use the expression—of a scholastic character, the medical attendant rashly jumped to the conclusion, and, what is worse, expressed it, that the work was the initial cause of the malady, and was, therefore, reprehensible. As well might he condemn universities, because occasionally an overwrought student relieves his cerebral pressure by means of a revolver-bullet, or lowers his arterial tension with a razor. To animadvert on the system on this account, is as unreasonable as to prohibit steam-hammers, because an unlucky or careless workman occasionally jams his own, or somebody else's fingers. A case in point, showing how easily the *post hoc* is construed as the *propter hoc*, occurred at Northampton a short time ago. An inquest was held on the body of a girl, aged 8, who, it was said, had died in consequence of "overpressure" at the local school. The child appeared to have been exceptionally intelligent, and was very fond of

her work. One evening she was "sick," and had a convulsion or two, and these were followed by typical symptoms of meningitis, with rambling, talkative delirium, ending in death. She appeared to have been worried about some sums, which she was unable to work out, but ultimately surmounted the difficulty by getting her schoolfellows to do them for her. Nevertheless, the medical man who made the *post mortem* examination felt himself justified in attributing the "congestion of the membranes, which would have led on to meningitis," to prolonged mental activity—not a common phenomenon, by the way, in girls aged 8. The coroner was evidently somewhat sceptical as to the justice of the induction, and asked the medical man whether he could always trace some definite cause for congestion of the brain; to which he replied that he could—rather a bold assertion. In any case, the jury declined to accept his inferences, and returned a verdict of death from natural causes; which, indeed, if one may judge from the published report of the case, was the only verdict they could reasonably arrive at.

SANITARY PROGRESS IN ST. OLAVE, SOUTHWARK.

DR. J. NORTHCOTE VINEN, having just completed his thirtieth year of service as health-officer for the district of St. Olave, Southwark, has taken the opportunity of issuing a very interesting and instructive report on the progress made in sanitation in his district during his term of office. He points out that, in 1856, the district was in a very neglected state. In many of the courts and smaller streets, the supply of water was obtained only from a small stand-pipe, where the water was turned on for an hour or less daily. During these precious moments, the inhabitants stood around waiting, with whatever utensils they might have at hand, for their turn to procure a portion of the miserably scanty supply; and this they then stored for use in probably the only room occupied by the whole family. Almost the only receptacles for water that existed at that time were wooden butts, which were frequently in a state of decay; and, these being for the most part without covers, the water was placed under favourable circumstances for the reception of dirt and refuse, and for the development of animal and vegetable growths. Open privies, cesspools, and untrapped drains were to be found in all parts of the district, poisoning the surrounding atmosphere, and favouring the development of infectious diseases, as well as increasing their intensity. In every part of the district, the back-yards of the houses were dirty, sodden, and ill-paved. Dust-bins were not generally to be found, and refuse was left to accumulate for weeks and months together in a corner of the small yard attached to the house. The closet-accommodation, too, was very inadequate, and contrary to all ideas of decency and morality. Now, however, Dr. Vinen is able to report that every house is plentifully supplied with water, which is stored in closely covered cisterns made either of metal or of slate, and which, moreover, is of better quality now than formerly, being taken from a better source, and being better filtered. Pans, traps, and water have been furnished to every closet, and better accommodation provided. Upwards of seven hundred cesspools have been abolished. Trapped drains have been constructed to every house. Yards of houses and public courts have all been well paved. Dust-bins have been everywhere provided, and house-refuse is removed with regularity. In addition to these, a number of other miscellaneous sanitary improvements have been effected, such as the better cleansing of streets, disinfection of houses, etc. Such, then, is the result of thirty years of sanitary effort; and, as some indications of its beneficial influence on the general health, it may be noted that, whilst prior to 1856, many localities in the district were perfect hot-beds of "fever," and were scarcely ever free from the disease, the death-rate from this disease has since been gradually diminishing. During the first ten years, from 1856, the mortality from fever was at the rate of 4.3 per 1,000 of the population; in the second ten years, it was at the rate of 3.2 per 1,000; and, during the third ten years, it has sunk to a little over 2.0 per 1,000. During the last five years, the mortality from fever has been five, or, on an average, only one a year. Dr. Vinen has reason to be gratified at the retrospect; and it is pleasing to find that, whilst he claims to have taken the initiative in recommending the adoption of the reforms that have taken place, he is not slow to recognise the loyalty with which his recommendations have continuously been adopted by the local authority.

THE PENJDEH PLAGUE.

SANITATION is now recognised as a prime element in the efficiency of armies in the field. The *St. Petersburgh Herald* gives an account of a lecture delivered by a Russian physician before General Komaroff and the assembled officers of the garrison at Askabad, on what is called the Penjdeh plague, an epidemic that attacked no less than 90 per cent. of the troops of the Murghab detachment, between January and November of the year before last. It consisted of an eruption of boils and swellings all over the body, which, although not very painful, and not apparently otherwise injuring the general state of health, still incapacitated the greater number of those affected with it for all active service on the frontier. The physician was deputed by imperial order to investigate the disease on the spot, where he studied it for several months past. Sometimes from forty to ninety boils gradually appeared on one man, each one lasting from four to six months. The physician produced a number of painted plaster casts of the eruption, in all stages of development. He attributes the cause to a kind of bacteria found in the air of the Murghab Valley, and blown with dust and sand on to the clothes in summer, and soon penetrating to the skin. The micrococcus come from the Murghab water, a drop of which is estimated to contain some millions of these organisms. Many of the deaths from drinking the water of this river have been due to this cause. Thirteen hundred cases were examined, and, by inoculation, similar boils were produced on various animals. The immediate object of the lecture was to prove the possibility of treating the disease in such a way, as to render the large army of observation on the Afghan frontier safe in future from being suddenly disabled by it in presence of an enemy. The lecturer satisfied the authorities on this score, and explained various mild remedies. In cases of urgency, where immediate healing was necessary, he recommended cauterisation.

RAILWAY DISCOMFORTS.

To grumble is the privilege of an Englishman; and it would seem that sometimes, and especially where vested interests exist, the act of grumbling in itself affords some consolation, and obviates the necessity for more overt measures. How much time is lost, and how much discomfort daily endured, by reason of the cupidity and the lax regulations of railway companies, who shall say? An ingenious writer estimated, for the edification of the Social Science Congress, not long ago, how much time was lost in the aggregate by the unpunctuality of trains; but who shall estimate how much health is lost through the misdeeds of railway companies? The traveller is submitted to the influence of a number of injurious influences, which might be easily removed, were the companies less given over to a shortsighted policy, penny wise and pound foolish. The Londoner, dragged underground through unventilated tunnels, where he is poisoned by noxious gases and choked by sulphurous fumes, is flung out, to wait for an unpunctual connecting train, on some draughty platform, where he is stunned by the clamorous banging of doors, and deafened by the piercing shrieks of unnecessary whistles. No wonder that he arrives at his suburban home jaded and tired, not merely by the legitimate labour of the day, but by these altogether unnecessary annoyances, inflicted because a railway company will not provide suitable engines, adequate brake-power, and well-built carriages, or because a penny is turned by leaving railway-stations unrepaired, and letting off railway-arches to persons engaged in noxious trades. A story is told of one large junction in the outskirts of London, where the booking-clerks, for want of a fireplace, light a fire on the floor of their office, filling the booking-office and its approaches with coal-

smoke, to the great distress of at least the more delicate passengers. That these various sources of present discomfort and eventual ill-health may be easily obviated, is clearly shown by the vast superiority of the lines which run out of the north of London over those which run into the southern districts or circulate in London itself. Perhaps it may be thought that the position in the share-lists may afford an explanation in some cases. That there is some relation of cause and effect, is probable; for there must be many who are deterred from venturing to live in some of the southern and eastern suburbs, by the long list of dangers and discomforts to which they would be thereby exposed.

LECTURES AND LECTURERS.

A CORRESPONDENT writes:—The system of obliging students to attend regulation courses of lectures on given subjects, is one which has been handed down to us by our forefathers, in matters educational, and is hallowed by its antiquity. It is probably a relic of the time when books were scarce, and oral instruction the best, and possibly the only means of obtaining information from those eminent men best qualified to give it, and whose ability with a pen did not always bear any proportion to their skill with the scalpel or the bleeding-bowl. Signs are not wanting at present to indicate that this system, venerable though it be, is destined to undergo serious modification, and, possibly, sooner or later, even to disappear. The reasons for the growing dissatisfaction are several. The lecturer may be a bad one. He may know what he is talking about, and be perfectly equal to carrying his ideas into execution, and yet be incomprehensible the moment he attempts to convey them by means of articulate speech. Or, on the other hand, the lecturer may be not only a scholar, and a ripe and good one, but able to convey his meaning concisely and intelligibly. Even then the result is scarcely better. While the wearied student seeks respite in slumber from the tediousness of the lecturer, who "is no orator as Brutus is," he may utterly fail to follow the facts and inferences of the abler man who condenses into one short hour the fruit of many hours, or it may be days, of labour. Those who have attended lectures on physiology during their first winter session, will readily appreciate this fact: the hopeless confusion of mind which supervenes after the first few sentences have been doled out, dealing with names and organs and functions, with which the aspirant physician or surgeon is intensely and pitiably unfamiliar, ultimately finds expression in a feeling of physical lassitude and indisposition to exertion, to which public attention may at length be called by an audible snore. Few people, probably, would venture to assert that they have derived much benefit from lectures on technical subjects, of which they knew very little beforehand. The major part of the lecture consists of matter which is contained in the text-books, and must, in any case, be assimilated therefrom; and the part which soars above that level is of necessity unintelligible to the student who follows, and does not precede, his lecturer. Such strictures, however, obviously do not apply to clinical lectures, which have to call attention to the signs and symptoms which are the outward and visible manifestations of disease. This means of instruction is of the highest practical value, and should enable the student to make his own observations and deductions in a way that cannot be achieved by any other method. Nor do these remarks apply to lectures intended for senior students, or young newly fledged practitioners, anxious to fill up the gaps left after completion of the curriculum. The listener is, in this case, possessed of a sufficient basis of information to enable him to follow the arguments and endorse the deductions of the lecturer. Even here, though, there can be no doubt that an attentive perusal of the printed lecture is a much more efficient and economical means of deriving the benefit, than by a personal attendance in the lecture-room, where the mind may be unequal to the task of criticising and collating the views set before it. In foreign schools, attendance at lectures is merely nominal, and no attempt is made to render it compulsory. The same latitude prevails in one of the two London medical schools, and the examination results are not sensibly modified thereby. The time is certainly approaching when the student will claim to exercise his discretion as to the best means of employing his time, so far as lectures are concerned; and, if by judicious modifications in the standard of preliminary education required, the age of the student for commencing his strictly medical studies be raised two or three years, the result would probably be found to be rather advantageous than otherwise.

COMMERCIAL EXTRACT OF BELLADONNA.

MR. WYNDHAM DUNSTAN, whose researches on the chemistry of the pharmaceutical preparations of nux vomica led up to the standardising of the preparations of that drug in the new *British Pharmacopœia*, has lately turned his attention to the preparations of atropa belladonna, and, in conjunction with Mr. Ransom, lately read a paper before a meeting of the Pharmaceutical Society, in which were embodied the results of analyses of some alcoholic extracts of the root, as met with in commerce. The authors reported that, in nine analyses, they found the percentage of alkaloid in the normal extract, that is, in the preparation as prescribed and dispensed, to range from 1.65 to 4.45, thus indicating the great difference in strength which may be experienced in actual practice. Mr. Dunstan is of opinion that the great variations which these analyses disclose are not entirely due to a corresponding variation in the alkaloidal content of the root, but arise from differences in the method of preparing the extract, and especially the relative quantities of alcohol and water employed. The method of the *British Pharmacopœia* consists in percolating with alcohol, and subsequently with water, to displace the spirit. As the water dissolves from the root the albuminoid and mucilaginous matter left undissolved by the spirit, the effect of continuing the displacement with water beyond the point ordered would be to increase the yield of the extract, but, at the same time, to proportionally decrease the percentage of alkaloid contained in it.

DANGEROUS PLAY.

IN the prospectuses of companies which assure against accidents, great stress is laid upon the fact that no person, whatever his position in life or occupation may be, is exempt from mishaps resulting in injury, or even in loss of life. It is, moreover, pointed out that the most careful man cannot avoid accidents, since no amount of care on his part can prevent damage from resulting from the carelessness of others, to which cause many accidents are due. These premisses are, undoubtedly, but too well founded, and no one is in a better position to ratify them than the medical man. Accidents may be divided into the preventable and the non-preventable; and the risks which come into the former class are largely increased by various means, currently employed by the juveniles, for the purpose of whiling away an idle hour. Top-spinning, for instance, appears at first sight to be a tolerably innocent amusement, but, when it is practised on the pavement of a busy thoroughfare, the lash of the whip, which is used to impart the necessary movement of rotation, is apt to find its way into the faces of the passers-by, or into their eyes. Trivial as the occurrence may seem, a "flick" in the eye with a whip is not only accompanied by intense discomfort, but may prove the starting point of disease and disorganisation of that precious organ. Much more serious than this variety of amusement, in its liability to cause injury, is a game known amongst the "small fry" as "tip-cat." A piece of stick, carefully pointed at both ends, is rendered a peculiarly dangerous missile by the method of employing it, which consists in causing it to jump by a slight tap on the bevelled end, and then, with the utmost indifference to the direction it is about to take, violently projecting it by a blow from a stick; not unfrequently it is arrested by the face or eyes of the inoffensive pedestrian. This game is just now in full swing all over London, and, notwithstanding the evident danger to the public, the police do not appear to have received any instructions with a view to its prevention, and the

youngsters simply monopolise all but the most crowded pavements for this particular pastime. It really offers an additional and undesirable inducement to insure against accidents, but it is a class of risks against which the public have a right to demand protection. Once or twice in a decade, an edict is enacted forbidding games involving danger to the public; but, after a little spasmodic repression, it gradually falls into disuetude, and the game goes on as merrily as ever. Somewhat akin to the foregoing, in the liability to inflict injury, is the reprehensible carelessness of individuals, temporarily in charge of sticks and umbrellas. These are rather thrown up under the arm, at an angle which enables them to penetrate the orbit of the person behind with the greatest facility; or they are recklessly twirled round in such wise as to impinge on the hat of the person most adjacent to them, or gently rasp a portion of skin from his face, ears, or hands. It is difficult to see exactly how this latter category of offenders can be satisfactorily dealt with, otherwise than by the means at present in vogue, which, however, as they can only take the form of reprisals, are without value from a prophylactic point of view. As regards the games which have just been indited, it is high time, now that the superfluous dogs have been disposed of, for the police to take the initiative in putting a stop to these inconveniences, by a little judicious rigour in enforcing existing regulations.

A COURT DOCTOR.

AT the first of his course of three lectures on the Historic Arts of Japan, on Monday last, at the Society of Arts, Mr. Ernest Hart showed some swords of physicians of the ancient *régime* of Japan. The sword was *de rigueur* for gentlemen in Japan, and the necessary sign of professional position, however unwarlike. The physicians, however, commonly carried a bladeless sword. Of these, Mr. Hart showed some exquisitely decorated specimens. One of these was of the seventeenth century. It was of iron-wood, delicately inlaid with floral scrolls in silver and gold, a work of great artistic difficulty and perfection. It is profusely decorated with the "kiri-mon and pho," crests of the mulberry leaf and the Japanese phœnix, which was the crest of the Empress. It was evidently a sword carried by the physician to the wife of the Mikado. The appliques, or "menouki," are chased in gold by Goto Jugio, a celebrated metal-worker of the 17th century. Another wooden sword was carved in the form of a fish, and on the hilt was mounted a reproduction of an ancient gold coin of the Chinese dynasty of Hang (800 B.C.). At the next lecture, on Tuesday, May 11th, at 8 P.M., the specimens of ancient lac will be discussed; they include a series of upwards of 300 inros, or small medicine-boxes in compartments, which Japanese gentlemen have, for many hundreds of years, carried suspended at their girdles, and on which the great *lacqueurs* of Japan have expended all their artistic skill, and which are frequently specimens of the most exquisitely delicate and refined work in gold and coloured lacs of every variety. The study of inros is, in itself, a historic study. The collections are open to inspection, at the Society of Arts, John Street, Adelphi, from 12 to 4, and from 8 to 10 P.M., during the next fortnight. A classified and dated catalogue is being prepared by Mr. Hayashi, the Japanese expert, of Paris, who has come to London for the purpose.

THE PATHOLOGICAL SOCIETY OF LONDON.

WE are requested to state that the next meeting of the Pathological Society of London will begin at 8 P.M. The last meeting began at the same hour, when there was a very thin attendance of members. These prolonged meetings are an attempt to meet the difficulty created by the congestion of papers, which appears to be even more intense than usual. It may be doubted whether the general body of members will look with favour on a repetition of this expedient. All-night sittings in "another place" failed to disperse obstruction, and the *clôture* had to be invented. There seems to be a general feeling that the Pathological Society will have to follow suit. The general understanding, that papers read at the Society should be confined to points of strictly pathological interest, is conspicuously disregarded by a growing number of members, who inflict upon their hearers detailed accounts of the daily progress of their cases, to the too often inevitable fatal terminations. The true remedy for the present block is not prolonged sittings, but some system of supervision by the officials of the Society, to which all papers should be submitted before being read. The Council, however, can only act on a clear expression of the general feeling of the members.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society on Wednesday, May 5th, Dr. Samuel Sloan, of Glasgow, exhibited a set of uterine dilators, of his own design. They were stout metal rods, numbered on the same scale as male bougies. Each end was bent at an obtuse angle, so that the portion beyond the angle formed a straight dilator, about three inches long. The dilator was shouldered, so that about half an inch of its extremity was the calibre of the main part of the bougie next below it in size. This facilitated its introduction. A shallow notch on the dilator, near the angle, indicated when the instrument had entered far enough for dilatation to begin—that is, when the notch reached the os externum, the dilator beyond the shoulder was well in the uterine cavity. The dilators being at both ends of the rod, the one served as a handle, whilst the other was being used. Dr. Sloan also showed a set of urethral dilators, shouldered on the same principle, but straight.—The Secretary then read a characteristically learned contribution "On Electricity, Retraction, and Polarity of the Uterus," from the fertile pen of Dr. Matthews Duncan. There was much active discussion; and, in reply, the author made some important observations on the action of ergot, which will be published in the full report of the meeting. He declared that, fortunately, no drug could produce abortion, whatever dangerous toxic effects, involving that complication as a mere occasional accident, it might set up. He had known cases where very large doses of ergot had been taken under suspicious circumstances, yet abortion had not occurred.—Dr. Amand Routh read a good clinical paper on a case of Serous Perimetritis. This led to an instructive discussion on the true character of those accidental coincidences of morbid conditions to which a certain school of systematic writers, conveniently, no doubt, apply the term serous perimetritis. Much was said on the remarkable absence of high temperature, which was consistent with the absence of pus in the effusion, as a distinctive character of this disease, and on the treatment of the effusion.

MEDICAL SOCIETY OF LONDON.

A CONVERSAZIONE was given in the Society's rooms, in Chandos Street, Cavendish Square, on the evening of May 3rd. The oration was delivered by Dr. Douglas Powell, who selected as his subject, Reparative Pathology. After some preliminary observations, he remarked that pathology was, in a large measure, reparative in its objects and tendencies, and that the processes of restitution, adaptation, and compensation were strenuous and stedfast in combat with hurtful and destructive agencies. The primary result of inflammation was what he would call a corpuscular œdema, having for its object the removal of the matter of offence. Mr. Bland Sutton, in his recent lectures at the College of Surgeons, had quoted the researches of others, and brought forward original observations of his own, to show that the function of the innumerable leucocytes which constituted this œdema, was the removal of irritant agents, and injurious and effete products, by a process of amœbal digestion; thus were they either rendered inert, or ready for elimination, in the form of abscess. The induration-layer, which, constituted of granulation-tissue, surrounded the scene of more active strife, formed at once a protective barrier against absorption of injurious products (efficacious only under conditions of absence of tension and free drainage), and a provision for cicatricial healing of the lesion as soon as its *débris* were

moved. Dr. Powell adduced the example of an empyema-sac as a r instance, in both functions, of this granulation layer. And, in ing so, he observed that an erroneous belief that the descent of the ng was an active force in closing an empyema, and an undue respect r the law of gravitation, had misled operators to choose too low a int for incision in empyema. An empyema closed by virtue of the ntraction of its saccular wall, drawing together lung, mediastinum, aphragm, and thorax-wall. Each of these boundaries yielded with a rying measure of resistance, according to the case; the point of solution of these contending forces was that to which the sac uld finally converge, and was that, therefore, to which e drainage-tube should most directly penetrate. It could be irly calculated, by considering the relative resistances of the ng and thoracic wall, and, in recent cases, would generally rrespond with a point a little below the middle of the oracic area of dulness, and a little way (perhaps an inch or so) thin the thorax. It could never correspond with the lowest part of e cavity, nor did it bear any necessary relationship to the so-called weak spots" in the thoracic wall. This law had also an important aring on the question of resection of ribs in chronic cases. Dr. well contended that Nature's method of dealing with certain consolitions of the lung in phthisis, by the process of softening and evacuan, was, in many cases, a necessary preliminary to cicatricial healing. nsolidation of lung, brought about by a certain intensity of process, s already a completed lesion, consisting of effete, irreclaimable, isonous material, fit only for removal. The hectic phenomena, endant upon the eliminative process, were due to its defects, and ecially to imperfect drainage. We could not, as yet, come to the l of Nature, in caseous abscesses of the lung, so effectually as in the e of an empyema, or a suppurating gland; but our endeavours uld be on the same lines as those of Nature, and we should recog- e the process alluded to as essentially eliminative and healing in ign and tendency. Dr. Powell further remarked upon the proses of repair and compensatory hypertrophy, to be observed in different organs.—Various appliances for illuminating the cavities of the man body, by means of electricity, were shown, the current for ich was generated by means of a thermal battery, heated by gas.—ine collection of water-colours, from the collection of Mr. James ock, was on view, together with some specimens of ware from ssrs. Doulton's works.—The music was furnished by the band of Royal Artillery.

SCOTLAND.

HE medical classes at Glasgow University opened for the summer ion on the 4th instant.

ROFESSOR TRAIL, of Aberdeen, has obtained the use of a room in new Art Gallery, with a view to establishing a general biological seum for Aberdeen.

HE new works connected with the extension of Glasgow waterworks e inaugurated last week; when completed, they will furnish an itional fourteen days' supply, at the rate of fifty million gallons a

VERY important addition to the water-supply of Paisley was le on the 1st instant, by the opening of the new Camphill Reser- on the Rye Water. By its completion, a copious supply of ex- ent water will be ensured to the town for many years to come.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

ING the month of April, the number of cases treated in the Royal pital for Sick Children numbered 113. The new cases admitted ng the month numbered 51, and 62 were in the hospital on March . Twenty patients were discharged from the hospital cured, and 7 were relieved. At the dispensary, 562 patients were treated, and 15 were vaccinated, making in all 577. Of the new cases during the month, 235 were from the city, 51 from Leith, and 17 from the country. Thus the total number of patients treated at the hospital during the month was 690.

EDINBURGH UNIVERSITY AND MEDICAL SCHOOL.

THE summer session in the Extra-mural School of Medicine in Edinburgh commenced on Monday, and, in the University, on Tuesday. The most noticeable feature was the opening lecture of Dr. D. Berry Hart, who is now Lecturer on Midwifery in the Royal College of Surgeons. The final examination for degrees in medicine in the University also commenced this week, and a larger number of candidates have entered for them than on any previous occasion. At present, clinical medicine and clinical surgery are the only subjects of examination till early next month, when the written and oral examinations in the remaining subjects will take place.

UNIVERSITY OF ABERDEEN.

PROFESSOR MCWILLIAM, the successor to Professor Stirling in the Chair of Physiology in this University, met his class on Wednesday, the 28th, being introduced by the Dean of the Medical Faculty. Dr. McWilliam did not deliver a formal inaugural address. The new Professor was accorded a hearty reception by the students.

ABERDEEN ROYAL INFIRMARY.

MR. EDMUND, one of the managers of this Institute, has submitted a memorandum to the Committee of Management, as to the best means of extending the present building. By some alterations and additions, space for 236 beds could be obtained, but it is proposed to limit the number of beds in the meantime to 200. The cost would be about £22,000. Mr. Edmund also suggests a scheme, whereby a limited number of subscribers might contribute for a period of five years to raise this sum.

THE HEALTH OF GLASGOW.

DR. RUSSELL'S report, for the fortnight ending April 24th, shows a death-rate of 24 per 1,000; that of the corresponding fortnight of last year being 27. The decrease seems mainly due to the absence of epidemic disease, and chiefly by the fact that, while last year, at the same time, there were 40 deaths from measles, this year there were none. No fresh cases of small-pox were registered. There was an increase in the number of deaths from diseases of the lungs, which numbered 190; and, of the 23 deaths from the infectious diseases of children, 20 were from whooping-cough. We observe that there have been some changes in the hospital-staff at Belvidere. After two years of good service there, Dr. Vost has resigned; and his place, as senior assistant, has now been taken by Dr. Stewart, the vacancy caused by his promotion being filled by the appointment of Dr. Alexander Jack.

DISPENSARY FOR SKIN DISEASES, GLASGOW.

THE annual meeting of the subscribers to the Glasgow Dispensary for Skin Diseases was held there last week, Sir Archibald Orr-Ewing, Bart., M.P., the President, in the chair. The medical report, which was read by Professor McCall Anderson, stated that, during the year, 1,314 new cases had been admitted, about 80 of the more serious of which were drafted into the cutaneous wards at the Western Infirmary. The total number of cases treated, since 1861, has been close on 30,000, most of whom were either cured or improved. Fifty-five students had attended the practical course of instruction during the summer, which was equal to the number of former years. The financial report submitted by the honorary secretary showed there was still a debt of £857 on the institution. The directors also proposed to alter the name of the dispensary to that of the Glasgow Hospital for Skin Diseases, as more accurately describing the functions of the

institution. The Chairman gave an excellent account of the good work which this hospital was doing; and he was sorry it was not appreciated to the extent he thought it was entitled, and appealed for help to remove the debt hanging over them. The reports were adopted, and the office-bearers were re-elected, and a vote of thanks to the Chairman closed the meeting.

THE GLASGOW UNIVERSITY COUNCIL.

THE half-yearly meeting of the General Council of the University of Glasgow took place on April 28th, and was very largely attended. This was, no doubt, due to the widely spread interest aroused by the prospect of an exciting discussion on a report to be presented to the Council, dealing with the subject of University reform. It will be remembered that, at the last meeting of the Council, a resolution was passed, approving of an increase in the teaching-staff of the University, and of an extension in the subjects of instruction, and that it was remitted to the Business Committee "to consider this subject in connection with the proposals of the last Scotch University Bill, and, in particular, the question of extramural teaching," and to report to next meeting of Council. In terms of this remit, a report was duly prepared, and, as it made proposals that amounted to a complete re-organisation of the University, there was no small degree of interest shown as to whether it would receive acceptance at the hands of the Council. Last week we alluded to the report, and briefly stated some of its leading features, which are the establishment of a common fee fund, from which all teachers appointed in future should be paid by fixed salaries, the raising of all class-fees to four guineas, the appointment of three orders of professors—senior, junior, and lecturing, and the disapproval of independent extramural teaching. It was only natural that such radical changes as the report advocates should give rise to considerable difference of opinion; but the tenor of the speeches made shows that there is present amongst the members of the Council a very liberal spirit of reform, and a desire to adapt the teaching powers of the University to the requirements of the time, and it was also clear that these feelings are shared by a large body of the professorial staff, who have been held responsible for many of those shortcomings that are in reality due to the ordinances of the University, and are inseparable from the terms of its present constitution. By a considerable majority of the Council, it was decided to adopt the report, the chief opposition to it coming from the members of the Council Association, who were not satisfied with the attitude assumed by the framers of the report towards extramural teaching. Taking the report as a whole, there can be no doubt that the suggestions contained in it must meet with general approval, and that, if carried out, they would greatly extend the teaching power of the University, and establish a curriculum more worthy of the high position such an institution holds as a factor in the higher education of the country. The only other matter of importance brought before the Council was an intimation by Dr. McVail that, at its next meeting, he would propose that the Glasgow Royal Infirmary School of Medicine should be erected into a College of the University of Glasgow. Whether this proposal is with the sanction of the directors of the Royal Infirmary, has not transpired.

IRELAND.

THE ROYAL UNIVERSITY OF IRELAND.

THE examinations of this University were commenced on April 30th, with the "second medical" in chemistry and physiology, and they will be continued until May 19th, when the Honour Examination for the M.B. will terminate.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

AN election of Examiners for the Letters Testimonial and Fellowship of this College was held on Tuesday. There were three vacancies, caused by the resignation of Messrs. Edward Stoker, William Frazer, and P. S. Abraham; and to the seats on the Board formerly occupied by these gentlemen, Messrs. Thornley Stoker, C. H. Robinson, and J. A. Scott, were elected. The other outgoing Examiners were re-elected, with the exception of Mr. Henry Gray Croly and Mr. Lambert H. Ormsby, who were replaced by Mr. Tobin and Mr. F. Alcock Nixon.

DUBLIN SANITARY ASSOCIATION.

UNDER the auspices of this Association, a series of popular lectures on sanitary subjects, to the artisan class, have been arranged for. The first of these was delivered by the Registrar-General for Ireland, Dr. Grimshaw, last Monday evening. He chose, as his subject, that of "Healthy Homes." Having spoken of the house as a sanitary unit, and what constituted a proper home, he said that figures proved that the worst houses were the most unhealthy, and that those who resided in them died at the greatest rate. The population of Dublin might be said to be the worst housed, the most criminal, and the most unhealthy, compared with the population of any of the great towns in the country. Unhealthy houses promoted sickness and poverty, and poverty promoted crime and intemperance and other vices. The lecturer urged that the people should be discontented with the present state of things, and said that at the last census upwards of 22,000 families in Dublin lived in what were called fourth-class houses, residences of one or two rooms, in which five persons lived, so that not less than 100,000 persons lived in Dublin under conditions not fit for human beings; more suited, in fact, as shelter only for savages. There were 102 houses in which 1,020 families dwelt. These 100 houses contained 5,000 people. Formerly, wealthy families resided in those large houses. Each of those houses sheltered a family with servants, say, of 10 persons—now ten families occupied a house. The result of the present state of things was disease, which was liable to spread.

CORK MERCY HOSPITAL.

DURING the past year, 5,015 patients were treated at this hospital while there were fifty patients admitted to the private wards, and forty-two part-paying patients in the general wards. The receipts for the year came to £1,655, and the expenditure to £1,462, leaving a balance to credit of £180.

THE CHOLERA.

THE CHOLERA IN ITALY.

(From our Special Correspondent.)

THERE is little noteworthy to report from Brindisi. The number of fresh cases this week is small, and the mortality remains low; but there are accounts of outbreaks, though of minor importance, in other parts of the province, and there is, naturally, much alarm lest these should only be the precursors of an epidemic when the heat really sets in, as, up to this date, the weather has been cool all over Italy. At Padua, the regiment, which was isolated, has been permitted to return to barracks; and in none of the large cities, fortunately, have any cases occurred. The dread of the importation of the disease into Naples seems to have greatly diminished. The new aqueduct-supply of the Serino has undoubtedly done much to give confidence to the Neapolitans, a confidence, to some extent, justified by the fact that the Rome physicians, practising among travellers, have not had, this spring, so many enteric fever cases from that city as usual. As nothing has, so far, been done for the drainage of Naples, the improvement, in this respect, can only be due to the difference in quality of the water-supply.

A little time ago, mention was made in the JOURNAL of the great prevalence of measles in Germany, but Rome has also suffered this winter from a severe type of that complaint. In the first quarter of this year, 321 deaths (81 per cent. being those of children under 5 years of age), were caused by measles, an enormous mortality in a population of 350,000; and small-pox, too, has been epidemically prevalent, 129 deaths having been registered from it in the same period. Of these, 54 are stated to have been unvaccinated, and 41 out of the 54 were under 5 years of age, 5 were stated to have been vaccinated, all more than 5 years old, and, in the other 70, there was no possibility of knowing whether vaccination had been performed at any time or not. Of the latter number, only 5 were under 5 years of age.

ECREASE OF GENERAL PARALYSIS, AND INCREASE OF INSANITY AT ADVANCED AGES, IN EDINBURGH.

ME passages, of general medical interest, occurred in Dr. Clouston's nnual Report of the Royal Edinburgh Asylum at Morningside for 85, read at the annual meeting of that corporation, held in the uncil Chambers, Edinburgh, February 26th, 1886; the Lord Provost siding.

Dr. Clouston points out that, in addition to an economical use (increase of rates of board) of decrease of our pauper lunacy fty new cases a year), he has reason to think that in the st five years there has been a real diminution of mental disease. his last year's report, he pointed out that the proportion cases of the disease due to alcoholic excess did not appear have been greater in the five years of plenty, 1873-77, than the five lean years, 1880-84; and this year contributes the ual alcoholic quota of over 15 per cent. But, instead of taking a ominent cause of insanity like alcohol, if we take a more definite st, namely, the most marked of all forms of insanity, general para-sis—a form perfectly distinct from every other—we get a result at undoubtedly points to a real diminution of brain-disease with ental symptoms in the past five years. General paralysis is more mmonly than any other form directly produced by wrong habits d modes of life. Its causes appear most vividly by the fact, that it the form of insanity that comprises one-sixth of all the mental sease among the Durham miners in prosperous times. It is, in ct, that form that is least dependent for its production on hereditary d unpreventable influences, and most dependent on controllable uses operating during the life of the individual. In the first five ars of my occupancy of my present office, 1873-77, mostly years of enty and inflation of wages, we had 115 cases of general paralysis ut, out of 1,580 of total admissions, or 7.3 per cent. of the whole; the last five years, 1881-85, years of dull trade and little money to quander, we had only 75 cases out of a total of 1,667 admissions, or per cent. Such a fall in the prevalence of any important and pical disease, comparing one period of five years with another, is a ost striking fact from a medical point of view; and whether this is resulted from lessened opportunity of drink and dissipation, or eater exercise of self-control, or a lessened excitement in the modes life, it is a most suggestive social fact. I think the prevalence of neral paralysis may fairly be taken as the index of the prevalence of l preventable insanity. This year, we had only eleven cases, which less than half our former average, and the lowest number I have er known. And there is not likely to be any error in the conclu-ons to be drawn from these numbers, through the possibility of an qual occurrence of the disease in those two periods, but an equal ndency to send them to the asylums; for its symptoms are usually unmanageable, that nearly all the cases among the poor have to be nt to asylums. It is a disease, too, from which the sufferers usually e within three years; so that there is no tendency to accumulate in ir wards, like the varieties of insanity that do not necessarily kill e patients. At the end of the year, we had only fifteen cases in the use, whilst he has often had over thirty.

The tendency to send many old people to the asylums still con-nues. There were thirty-nine persons over 60 years of age sent ring the year, or 12.8 per cent. of the admissions, which is double ir proportion thirty years ago. While there is a greater propor-on of insane persons to the general population of the same years tween the ages of 50 and 60 (1 to every 160), the largest proportion-e number of the newly occurring cases of insanity every year is und between the ages of 40 and 50. During the last thirty years, e average age of the new cases (the admissions to asylums) has eadily increased. The conclusion from this would seem to be, that e older parts of the general population are getting more subject to ental disease than they were. This would be fallacious. We lieve the fact to be simply that more people in their restless and oublesome dotage, and after paralytic shocks, are now sent to ylums, and so come under the category of technical insanity, than rmerly.

There is, however, a variety of mental disease connected with lvanced years which, it is his impression, is becoming more com-on of late. It is not the typical senile breakdown in mind occur-ng after 70, but a very sudden breakdown soon after 60, or even fore that, in men who have worked hard and continuously, their ork, perhaps, accompanied by excitement, strain, worry, or too gh living. Commonly they have been men with no hobbies, no untry tastes, and unable to get regularly, or to use rightly, a yearly oliday. Such men seldom take note of the premonitory signs of brain-wear. They insist on expecting from the machine as much work with ten pounds of steam-pressure on as it had done before, and done easily and safely with twenty. They commonly, but not always, have some hereditary brain-weakness that has been hitherto latent. But a breakdown comes all at once to them, that can only be called an acute form of old age. They lose flesh, become bloodless, cease to be able to sleep, find their work extremely irksome, cease to enjoy food, and become depressed and restless. They then knock off work, but it is too late. Nature's great power of brain-repair for them is gone. The machine is worn out, and will not mend. In a few months, the patient is mentally broken-down; in another few months, he is dead, or, if not really dead, is in a condition that he, in his senses, would have thought worse than death, namely, miserable or mindless, while he lives. We have had several such cases during the year. It is, in reality, climateric insanity in the male sex rather than senile insanity proper. We have had 149 admissions from 60 to 70 years of age in the past five years, against 50 of the same age in the five years 1850-54. It is a form of mental breakdown, which, at the end of the most active period of life, is the counterpart of that form which occurs at adolescence from 16 to 25, in the case of those predisposed to mental disease, who yet insist on working an immature unstable brain, as if it were a perfectly developed machine with no inherent weaknesses in it. This year, we have had the usual tale of thirty-three cases occurring at adolescence, some of them of brilliant promise, doing hard work at college, with late hours, little sleep, no fresh air, and little social relaxation, ending in a cataclysm in the shape of a sharp attack of brain-excitement needing asylum treatment, perhaps after a time recovering, or, if not, sinking into hopeless mental darkness. It is often very hard to persuade the youthful owner of a brain that is ambitious, poetic, receptive, that from 16 to 25 he should be most careful not to go in too much for pure mind-culture, on account of his mother being of a nervous constitution, or being insane; and that he should, on that account, develop his body generally, attend to his health, drink much milk, eat little flesh, breathe much fresh air, use his muscles, exercise self-control, and perhaps even return to nature and mother earth altogether in his mode of life and occupation.

THE ROYAL ACADEMY AND THE GROSVENOR GALLERY.

DESPITE the unfavourable criticisms of the daily journals, regarding the Royal Academy Exhibition, as compared with those of former years, it must be confessed that there is much to be found in it to please the eye, and to prove that art is not yet extinct in this country.

Medical portraiture is in the ascendant this year. Dr. Samuel Wilks, LL.D., F.R.S., by Emily M. Menich (I, 67), is a cleanly painted and faithful likeness of the eminent physician.

Sir Henry Pitman, M.D., by W. W. Ouless, R.A. (III, 163), appears to give a true representation of the expression and features of the distinguished Registrar of the College of Physicians. Less successful, to our thinking, is Mr. Ouless, in his portrait of Professor G. M. Humphry, M.D., F.R.S. (XI, 1073), painted for his present and past pupils. Those who have attended the great surgeon's lectures at Cambridge, would have expected more animation in the features than is here found; although, both as a work of art and as a portrait, the picture is quite up to our most sanguine expectations.

The next medical portrait is one of Dr. Hermann Weber, by J. B. Burgess, A.R.A. (IV, 308). It is satisfactory in every respect.

Mr. Clinton Dent, F.R.C.S., by T. Blake Wingmann, although excellent as a likeness, is less pleasing as a picture. The first object which strikes the eye is a row of brilliant scarlet *Medical Directories* over the head of the sitter. Granting that all colours may fade in a year or two, it seems to us that, in the present day, when tertiary hues are so much in vogue, some slight concession might have been made in favour of fashionable prejudice. Still, on the whole, this is a fine study.

The statue of the late Sir Erasmus Wilson, F.R.S., etc. (Central Hall, 1772) represents the great philanthropist at his best. This is to be executed in bronze, and erected in front of the infirmary at Margate. The sculptor is Thomas Brock, A.R.A.

The plaster cast of the statue of John Hunter (Central Hall, 1781), presented by H.M. the Queen to Oxford University Museum, by H. Richard Pinker, will perhaps interest the members of our profession more than any other object in the exhibition.

Messrs. J. S. and A. B. Wyon send a medal of the Medico-Psychological Association, in bronze (Lecture-room, 1803).

In the same room (1825) is found a noble marble bust of Sir James Paget, Bart., executed at the request of the Council for the Royal College of Surgeons of England. The eminent sculptor, J. E. Boehm,

R.A., has never turned out a finer work of art from his studio than is here to be found.

In the Grosvenor Gallery (245) is an artistic portrait of Dr. Farquharson, M.P., by his brother, Mr. Joseph Farquharson, who sends three powerful contributions to the Royal Academy.

A clever landscape picture is also sent to the Grosvenor Gallery by Sir Henry Thompson, entitled "The Sola Dei Pescatori, and Sasso del Ferro, Lago Maggiore."

Besides the above-mentioned, there are many pictures in both galleries which will prove indirectly interesting to the medical profession.

COLLECTIVE INVESTIGATION COMMITTEE.

THE quarterly meeting of this Committee was held on Wednesday, April 14th, at the Holborn Restaurant. The Committee of Direction met at 5 P.M. The members of the General Committee dined together at 6 P.M., and proceeded to business afterwards.

A communication from the Secretary of the Association was read, enclosing a copy of the resolution of the Council of January 20th, with reference to the relations of the Committee to the International organisation.

The report of the Standing Committee showed that interest in the earlier inquiries of the Committee was practically now almost exhausted. It was, therefore, resolved that the work of the Committee during the present summer, should be largely devoted to analysing and reporting upon these inquiries.

The falling off in returns to the earlier inquiries had been balanced by the returns from the geographical inquiry, to which nearly 3,000 replies had been received.

It was announced that the discussion to be held in the Section of Medicine at the Annual Meeting on "Cases in which Disease of the Heart-valves has been known to exist for upwards of five years without causing serious symptoms," would be opened by Sir Andrew Clark; and that to be held in the Section of Public Health on "The Duration of Infectiousness," by a paper from Dr. Arthur Ransome.

Branch or district meetings, in connection with the work of the Committee, had been held at Ventnor, at Dover, at Penmaenmawr, and at Birmingham; and meetings were in prospect at Guildford and in the Thames Valley.

It was announced that Mr. W. E. Green had retired from the local Secretaryship of the Isle of Wight District, and would be succeeded by Dr. Robertson, of Ventnor; and that Dr. Alexander Bruce had resigned his Secretaryship of the Edinburgh Branch, Dr. D. Noel Paton being appointed in his place.

The Subcommittee, appointed by the Therapeutic Section, having expressed a wish that the second therapeutic inquiry should be on Terebene, rather than on Paraldehyde, an inquiry-paper on the former subject was submitted and adopted, the Committee expressing a hope that paraldehyde would not be dropped. A proposal, made by Dr. Eastes, for an inquiry into the statistics of Anæsthetics in Hospitals and Dispensaries, was referred to the Standing Subcommittee for detailed consideration. The consideration of an allied proposal, made by Dr. E. O. Daly, of Hull, for an inquiry into the circumstances of deaths under anæsthetics occurring in private practice, was postponed until the next meeting.

The Committee hoped that efforts would be made by its members to obtain a further supply of returns to the inquiry on Habits of Intemperance before it was closed.

LIST OF RETURNS RECEIVED DURING THE MONTH OF MARCH, 1886.

Border Counties Branch: XIII, H. Lediard, M.D.
Dorset and West Hants Branch: III, T. G. Parrott.
East Anglian: X, E. A. Peck.
Gloucestershire Branch: Hamamelis, G. B. Ferguson, M.D.
Lancashire and Cheshire Branch: Liverpool District: Intemp., W. H. Vickerstaff.
Midland Counties Branch: Nottingham District: Hamamelis: W. Hunter, M.B.
North-Wales Branch: I, J. Lloyd Roberts, M.D.
North of Ireland Branch: Hamamelis, George St. George; T. A. Vasey, M.B.
North of Scotland Branch: X, J. Bruce Ronaldson, F.R.C.S. (3).
South-Eastern Branch: East Kent District: IV, Th. Eastes, M.D. (2).
Southern Branch: Isle of Wight District: Hamamelis, W. E. Green.
Thames Valley Branch: Hamamelis, F. P. Atkinson, M.D.; T. Corbett.
West Somerset Branch: Intemperance, F. Stockwell (2).
Worcester and Hereford Branch: XIII, G. Birt, M.D.
Yorkshire Branch: XIII, G. Oliver, M.D.

The Committee beg also to acknowledge (April 28th) the receipt, since their last acknowledgment on April 10th, of the following replies to the International Inquiry into the geographical distribution of certain diseases.

Aberdeen Branch, 2.
Dorset and West Hants Branch, 11.
Lancashire and Cheshire Branch: Bolton District, 12; Liverpool District, 6; Manchester District, 113.
Midland Counties Branch: Nottingham District, 1.
North of Ireland Branch, 3.
North Wales Branch, 32.
South Midland Branch, 3.
Shropshire and Mid-Wales Branch, 2.
Southern Branch: Wilts District, 1.
Thames Valley Branch, 2.

The Secretary to the International Committee begs also to acknowledge (April 28th) the receipt, since his last acknowledgment on April 10th, of the following returns to the same inquiry from members of the profession, not being members of the Association:

England, Wales, and the Channel Islands, 71.
Scotland, 2.
Ireland, 3.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN ordinary meeting of the College was held on Thursday, May 6th; Sir W. Jenner, K.C.B., in the chair.

The following gentlemen were elected Fellows of the College:—Edward Seaton, M.D.Lond.; Heinrich Port, M.D.Erlangen; Edwin Rickards, M.B.Oxon.; John Abercrombie, junior, M.D.Camb.; James Kingston Fowler, M.D.Camb.; Nestor I. C. Tirard, M.D.Lond.; Donald McAlister, M.D.Camb.; George Gulliver, M.B.Oxon.

The following were elected Members, having passed the examination of the Censors' Board:—E. A. Birch, M.D.Brussels; N. Dalton, M.D.Lond.; John Gerard, M.B.Aberdeen; T. Harris, M.D.Lond.; H. L. Jones, M.B.Camb.; T. G. Lyon, M.D.Camb.; J. H. Neale, M.B.Edin.; W. Pearce, M.B.Lond.; F. M. Pope, M.B.Camb.; H. T. Rutherford, M.B.Camb.

The Licence of the College was granted to seventy-seven gentlemen who had passed the required examinations.

The REGISTRAR read the report of the Examiners for the Murchison Scholarship, who reported that thirteen candidates had been examined, and that the general average of merit had been very high. The Scholarship had been awarded to Mr. John Stuart Hutton, of St. Thomas's Hospital; and the certificate was accordingly handed to him by the President, who expressed the hope that it would stimulate him to imitate the devotion to medical science exhibited by the late Dr. Murchison.

Sir Henry Pitman having resigned the position of representative of the College in the General Medical Council, a vote of thanks to him, for his long and valuable services, was unanimously passed. A ballot was then taken for the election of his successor, and the choice fell upon Dr. Duckworth, who, in a few words, expressed his sense of the honour thus conferred upon him.

A communication was received from the Association of Persons holding Sanitary Science Certificates, informing the College of the desire of the Association to obtain the right of registration of such certificates, and requesting the assistance of the College. The application was favourably received, and referred to the Committee empowered to watch the Medical Bill now before Parliament.

Dr. HABERSHON moved, and Dr. POLLOCK seconded:

"That the report of the Council, declining to consent to Dr. West's proposals, as to the formation of Standing Committees, be adopted."

An amendment was moved by Dr. WEST, and seconded by Dr. FARQUHARSON, approving of the principle of Standing Committees.

On a division, the amendment was lost by a large majority, and the original motion adopted.

ST. JOHN AMBULANCE ASSOCIATION.—A course of ambulance lectures ("First Aid") for ladies, was commenced in Sunderland some time ago, and has just been concluded. The class has been conducted by Mr. W. Percy Blumer, F.R.C.S.Edin., and has been attended by a very large number of ladies, who have so enthusiastically entered into the work, that upwards of fifty will present themselves at the examination which is about to be held. At the close of the last meeting, Mr. Percy Blumer was presented, by the ladies, with a case of eye-instruments, as a token of their respect and esteem, and as an expression of their deep gratitude.

MEMORIAL.—A few days ago, a beautiful obelisk of red granite, erected by a few friends to the memory of the late Dr. Alexander Hogg, of Workington, in the new cemetery of that town, was unveiled with appropriate ceremony. Dr. Hogg was medical officer of health for the town; and, during his short but successful practice of four and a half years, endeared himself to all. He died, while on a visit at his father's house, Larbert, Stirlingshire, at the early age of twenty-six years, on November 2nd, 1883.

ASSOCIATION INTELLIGENCE.

THE General Secretary of the British Medical Association acknowledges the receipt of three further essays for competition for the Middlemore Prize, with the mottos, "Ars longa vita breva," "Gradatim vincimus progedere ne regredere," and "Sperare temere est."

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into THE THERAPEUTIC VALUE OF HAMAMELIS AND THE VALUE OF PURE TEREBENE have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded by these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. J. MAITLAND, M.B., Honorary Secretary, Madras.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above district will be held at Tunbridge Wells on Friday, May 28th. Mr. Abbott will preside. Mr. Gorham will bring before the notice of the meeting Brief Reminiscences of Guy's Hospital in the year 1839, relating to Ovarian Dropsy. Gentlemen wishing to contribute short papers or cases should communicate with the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this district will be held at the Greyhound Hotel, Croydon, on Thursday, May 13th, at 4 P.M.; E. Diver, Esq., M.D., of Kenley, in the chair. Dinner, 6 P.M.; charge, 7s., exclusive of wine. The following papers, etc., are promised. Dr. George Harley, F.R.S.: The Crystalline Structure of Gall-Stones, illustrated by specimens and diagrams. Mr. J. Tweedy: The Treatment of the various forms of Hardness of the Eyeball. Mr. A. Matthey will exhibit some Pathological Specimens. Dr. Oxley: Notes of interesting cases. 1. Abdominal Tumour (myxoma); 2. Apepsia Nervosa. Dr. Rutherford Adams will exhibit a case of Cirsoid Aneurysm. Members intending to dine will greatly oblige by communicating their intention to P. T. DUNCAN, M.D., Croydon, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of this district will be held at the Kent and Canterbury Hospital, on Thursday, May 20th, at 3 P.M.; Mr. Sadler in the chair. The dinner will take place at the Royal Fountain Hotel, at 5 P.M. Mr. Raven, of Broadstairs, will open a discussion on the extreme duration of infectiousness in the following infectious diseases, Scarlatina, Small-pox, Measles, Mumps, and Diphtheria. The above is one of the subjects chosen for discussion by the Collective Investigation Committee. Gentlemen wishing to contribute short papers or cases, should communicate with the Honorary Secretary, W. J. TYSON, 10, Langhorne Gardens, Folkestone.

SOUTHERN BRANCH.—A meeting of the South Wilts district will be held at the Bath Arms Hotel, Warminster, on Wednesday, May 19th. Papers will be read by Dr. Coates, Mr. Willcox, and Mr. Luckham. Meeting at 4, dinner at 6, tickets (not to include wine, etc.), 5s. Members intending to be present are requested to communicate with the Honorary Secretary, H. T. MANNING, Laverstock, Salisbury.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 26th, 1886, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the secretary, not later than May 15th.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace, Spring Bank, Hull.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 27th. The president, Mr. J. T. Hartill, will take the chair, at 3 P.M.—VINCENT JACKSON, General Secretary.

BORDER COUNTIES BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Commercial Hotel, Dumfries, on Friday, April 9th, 1886. The chair was taken by the President, Mr. C. S. HALL, of Carlisle, at 3 P.M. Fourteen members and six visitors were present.

Communications.—The following communications were made.

1. Dr. Thomson (Dumfries) read a paper on Brain Surgery. In the discussion which followed, the President, Drs. Barnes, Maclaren, Campbell, Tiffin, Rutherford, and McLeod took part.

2. Dr. Maclaren (Carlisle) showed three specimens illustrating Injuries of the Cranium.

3. Dr. Campbell (Garlands) read notes of four Abdominal Cases.

4. Dr. Davidson (Thornhill) read a paper on Two Methods of Treating Lupus.

5. A paper by Dr. Eaton (Cleator Moor)—Illustrations of the Origin of certain Zymotic Diseases in an Isolated House—was taken as read.

6. A photograph of Elephantiasis of the Scrotum was shown for Dr. Dryden.

Lunacy Certificates.—On the motion of Dr. CAMPBELL, it was agreed to call the attention of the Parliamentary Bills Committee and the Scotch Commissioners to the anomaly of lunacy-certificates not holding good in different parts of Great Britain.

Dinner.—At the conclusion of the business, the members and visitors dined in the hotel.

The Next Meeting of the Branch, being the annual, will be held at some town to be fixed upon by the Council.

GLOUCESTERSHIRE BRANCH: MEETING.

A MEETING of this Branch was held at the General Hospital, Cheltenham, on Tuesday, April 20th, 1886.

Papers.—The following were read.

1. Dr. Gooding (President) read the notes of two cases of Cirrhosis of the Liver, and remarked on the necessity of total abstinence from alcohol, and the use of mercurials and the mineral acids in the treatment of such cases.—A short discussion followed, in which Drs. Wilson and Best, and Mr. Bower, took part.

2. Mr. Bower read a paper on Malingering in Ophthalmic Practice, relating two cases, one of feigned blindness, and another of self-injury to the eye.—Drs. Needham and Gooding, and Mr. Cardew, made a few remarks.

3. Mr. Cardew read a paper on the Treatment of a few common Diseases and Injuries of the Knee-joint, in which he advocated the use of light plaster cases, applied like Sayre's jacket for spinal disease, for obtaining rest to the joint, and the early, and, if necessary,

frequent, use of the aspirator in cases of effusion into the synovial membranes and bursæ.—Mr. Bower made some remarks, drawing attention to the common injury known as "Hayes' derangement of the knee-joint."

ABERDEEN, BANFF, AND KINCARDINESHIRE BRANCH: ORDINARY MEETING.

A MEETING of this Branch was held at 198, Union Street, Aberdeen, on Wednesday, April 21st, at 8 P.M.; Professor OGSTON, President, in the chair.

Communications.—The following communications were made.

1. Dr. Urquhart: the Action of Cascara Sagrada.
2. Dr. Dyce Davidson: Specimens of Strophanthus Hispidus and Erythrophlœum.
3. Dr. Garden: Case of Talipes Equino-Varus.
4. Dr. Edmond: Hæmatoma of the Labium.
5. Dr. Ogston: Dissection of a Flat-foot.
6. Dr. Ruxton: Unusually large Hydrocephalus: Spina Bifida.

NORTH OF ENGLAND BRANCH: SPRING MEETING.

THE spring meeting of the Branch was held in the Roker Hotel, Roker, Sunderland, on April 21st, 1886, at 3.30 P.M.

Visit to the Sunderland Infirmary.—Previous to the meeting, the members—nearly eighty—partook of the kind hospitality of the honorary staff of the Sunderland Infirmary, who entertained them to luncheon in that institution. After luncheon the Chairman, Mr. Morgan, the senior surgeon, welcomed the members of the North of England Branch, and invited them to visit the wards of the Infirmary. The President of the Branch, Dr. STAINTHORPE, on behalf of the members, thanked the honorary staff for their kindness.

The President occupied the chair, and about sixty members were present.

Election of Members.—The following gentlemen were elected members of the Branch: James Drummond, M.D.Glas., South Shields; J. C. Watson, M.D., Sunderland; W. Percy Blumer, F.R.C.S.Edin., Sunderland.

Papers.—The following papers were read:

1. Dr. Hume: A Case of Intussusception treated by Abdominal Section. An important discussion ensued, in which the President, Dr. Legat, Dr. Thomas Watson, Dr. Middlemiss, Dr. Arthur, and Dr. Gowans took part. Dr. Hume replied.
2. Dr. Murphy: Two Cases of Spurious Labour. Drs. Hopgood, Beatty, Embleton, Black (Harrogate), and D. Drummond spoke, and several interesting cases bearing upon the subject of the paper were cited. Dr. Murphy replied.
3. Dr. David Drummond: Remarks on a Case of Acute Yellow Atrophy of the Liver, with the specimen, and microscopical sections, and drawing.
4. Dr. Gowans exhibited a boy, after Mackenzie's Amputation of the ankle.
5. Dr. Gowans also introduced two cases of Molluscum Contagiosum. Dr. Legat made some remarks upon Dr. Gowans' first case, and Dr. Philipson discussed the cases of Molluscum.
6. Dr. Murphy showed a large uterine Polypus.

Dinner.—The members, about 30, and some guests, including Dr. Mair, of H.M.S. *Castor*, dined at five o'clock. The President, Dr. Stainthorpe, occupied the chair, and the Honorary Secretary, Dr. Drummond, the vice-chair.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE spring meeting was held at the County Asylum, Carmarthen, on April 21st; G. A. BROWN, Esq., President, in the chair. About twenty members were present.

Communications were read from (1) the Association of the Royal College of Surgeons of England, enclosing petition; (2) Messrs. Burroughs and Wellcome, offering to give a lecture and demonstration on Digestive Ferments; (3) the Secretary to the Medical Sickness and Annuity Society (copy of leaflet forwarded to every member of the Branch, with circular of notice for this meeting); (4) Secretary of the Medical Benevolent Fund, forwarding resolution of cordial thanks for cheque for £105, forwarded out of the surplus funds subscribed for the annual meeting at Cardiff in 1885; (5) Secretaries of East Anglian Branch, forwarding copy of resolution relating to Medical Defence; (6) Secretary of Collective Investigation Committee, asking for a discussion on Heart Valve Disease, or Duration of Infectiousness, etc.

New Members.—The following gentlemen were elected members of the Association and Branch:—Association and Branch: R. C. Joyce, M.B., Porth; John Powell, Carmarthen Asylum; A. E. Jones, Crickhowell; A. White, M.B., Brecon; J. O. Jones, Aberdare; W. V. Roberts, Aberdare; W. D. Steel, M.D., Abergavenny; H. C. Bevan, Lampeter. Association only: J. McAleer, M.D., Merthyr. Branch only: J. R. James, Cardiff; Geo. Neale, Barry; C. Downing, Cardiff; J. J. Lloyd, Llanelly.

Medical Defence Fund.—The following resolution was proposed by Dr. SHEEN, seconded by Mr. EVAN JONES, and carried unanimously:

"That, as medical men may at any time become liable to false and groundless charges of a ruinous nature, it is most desirable that a Medical Defence Fund be formed and administered in connection with the British Medical Association, and that its members should be asked to contribute a small sum, annually, to this legal fund. Those who do so to become entitled, should occasion arise, to legal advice and assistance."

Papers.—The following communications were made.

Mr. P. R. Griffiths (Cardiff) read some interesting notes of three cases of Brain-disease, illustrating the value of the experiments of Ferrier and others in localising the lesions.

2. Dr. Hearder (Carmarthen Asylum) read a paper on Heart-disease, with especial reference to Prognosis. Several illustrations were given of grave valvular disease and death at advanced ages from other causes.
3. Mr. Powell (Carmarthen Asylum) read notes of a case of Hydronephrosis, and showed specimens.
4. Mr. H. Nelson Jones (Swansea Infirmary) showed a modification of Liston's Splint, the chief points being a slot to increase tension of perineal band, and to lengthen or shorten splint, and a block at the foot to keep the limb from twisting.

Papers by Dr. Griffiths, Mr. J. Farrant Fry, and Dr. Sheen, were postponed.

Vote of Thanks.—A cordial vote of thanks was given to Dr. Hearder for his warm welcome and generous hospitality shown to the members.

Dr. Hearder conducted the members over the Asylum.

The College of Surgeons' Petition was signed by most of those present.

Dinner.—The members afterwards partook of an excellent dinner at the Ivy Bush Hotel.

OXFORD AND DISTRICT BRANCH: GENERAL MEETING.

THE general meeting of this Branch was held at the Radcliffe Infirmary, Oxford, on April 28th; Dr. GRAY, President-elect, in the chair. Twenty-eight members were present. The annual meeting in July was fixed to be held in Oxford.

New Members.—Mr. E. Franey, of Banbury, was elected a joining member. Messrs. W. Dyson-Wood, of Oxford; Rowland Pollock, of Wallingford; A. J. Drew, of Oxford; and G. Rodman, of Oxford, were elected members of the Association and Branch.

Presentation.—Dr. GRAY, with a very impressive speech, presented to Dr. Tuckwell a gold repeater watch, which had been subscribed for by Dr. Tuckwell's friends, teachers, and fellow-students, on the occasion of his retiring from practice. Dr. Tuckwell returned thanks in a few feeling and expressive sentences.

Cases and Specimens.—Mr. Morgan showed a case of Xanthelasma.—Mr. Symonds showed three cases of Operation for Radical Cure of Hernia, and a case of McEwen's Operation.—Mr. Rodman showed specimens of Melanotic Sarcoma of the Choroid.—Dr. Collier read a paper on cases of Leucocythæmia and Lymphadenoma.—Mr. Doyne read a case of extreme Myopia, of more than 20 diopters.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above District was held at Erith on April 30th; FLAXMAN SPURRELL, Esq., in the chair.

Next Meeting.—It was decided to hold the next meeting at Maidstone, if possible, in June, and that J. Knowles, Esq., be requested to preside on the occasion.

Election of Honorary Secretary of the District.—Mr. A. W. Nankivell, of St. Bartholomew's Hospital, Chatham, was unanimously re-elected Honorary Secretary for the ensuing year.

Communications.—The following papers were read and discussed.

Mr. Bryden: Foreign Bodies in the Ear; A Case of Facial Paralysis.

Mr. Maynard: The Impaction of a Piece of Tobacco-Pipe in the Posterior Pharyngeal Region.

Collective Investigation.—Dr. Isambard Owen brought forward the question of Collective Investigation, and placed before the meeting printed forms to be used in collecting the various data.

Lipoma.—Mr. JESSETT exhibited a large lipoma, which he had removed from the abdominal parietes.

Dinner.—Nine members subsequently dined at the Prince of Wales Hotel.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING.

HE fifty-fourth Annual Meeting of the British Medical Association ill be held at Brighton, on August 10th, 11th, 12th, and 13th, 386.

President: W. T. Edwards, M.D., F.R.C.S., Physician to the lamorgan and Monmouth Infirmary, Cardiff.

President-elect: Withers Moore, M.D., F.R.C.P., Senior Physician the Sussex County Hospital, Brighton.

President of the Council: Balthazar Foster, M.P., M.D., F.R.C.P., rofessor of Medicine in Queen's College and Physician to the General ospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster ospital, London.

An Address in Medicine will be delivered by Surgeon-General hn S. Billings, M.D., Director-General United States Army Medical epartment, Washington.

An Address in Surgery will be delivered by Frederick Abell umphry, F.R.C.S., Surgeon to the Sussex County Hospital.

An Address in Public Medicine will be given by E. D. Mapother, D., Consulting Medical Officer to the City of Dublin.

The scientific business of the meeting will be conducted in nine ctions, as follows, namely:

MEDICINE.—*President*, W. H. Broadbent, M.D. *Vice-Presidents*, ederick Bagshawe, M.D., Hastings; Joseph Ewart, M.D., Brighton. *norary Secretaries*, Francis Warner, M.D., 24, Harley Street, London; enry Seymour Branfoot, M.B., 42, Norfolk Square, Brighton.

SURGERY.—*President*, John Eric Erichsen, F.R.C.S., F.R.S., London. *ice-Presidents*, Frederick William Jowers, M.R.C.S., Brighton; John ard Cousins, F.R.C.S., Southsea. *Honorary Secretaries*, William hnson Walsham, F.R.C.S., 27, Weymouth Street, London; Wilghby Furner, F.R.C.S., 2, Brunswick Place, Brighton.

OBSTETRIC MEDICINE.—*President*, Alfred Meadows, M.D., London. *ce-Presidents*, Constantine Holman, M.D., Reigate; Frederick W. lzmann, M.R.C.S., Brighton. *Honorary Secretaries*, Charles J. right, M.R.C.S., Lynton Villa, Virginia Road, Leeds; Alban Doran, R.C.S., 9, Granville Place, W.

PUBLIC MEDICINE.—*President*, Richard Patrick B. Taaffe, M.D., ighton. *Vice-Presidents*, Sir Charles Alexander Cameron, K.Q.C.P., Dublin; Charles Kelly, M.D., Worthing. *Honorary retaries*, W. Brown, M.R.C.P.Edin., Carlisle; William Joseph son, M.D., Folkestone.

PSYCHOLOGY.—*President*, Thomas Smith Clouston, M.D., Edinrgh. *Vice-Presidents*, Charles A. Lockhart Robertson, M.D., ghton; Joseph Raymond Gasquet, M.B., Brighton. *Honorary Secreies*, Charles Spencer Waller Cobbold, M.D., Earlswood Asylum, dhill; James M. Moody, M.R.C.S., Surrey County Asylum, Canel, Purley.

PATHOLOGY.—*President*, Julius Dreschfeld, M.D., Manchester. *Vicesidents*, James Frederick Goodhart, M.D., London; Heneage bes, M.D., London. *Honorary Secretaries*, John E. Ranking, M.D., unt Ephraim Road, Tunbridge Wells; John Caldwell Uhthoff, D., 9, Brunswick Place, Brighton.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Thomas Lauder nton, M.D., F.R.S., London. *Vice-Presidents*, John Mitchell ice, M.D., London; Edward Mackey, M.D., Brighton. *Honorary retaries*, Cornelius William Suckling, M.D., 108, Newhall Street, mingham; John Theodore Cash, M.D., Drumearn, Earlsfield Road, ndsworth Common, S.W.

OPHTHALMOLOGY.—*President*, Chas. Oldham, F.R.C.S., Brighton. *e-Presidents*, Louis Tosswill, M.B., Exeter; George Anderson chett, F.R.C.S.Edin., London. *Honorary Secretaries*, Frank ry Hodges, F.R.C.S.Edin., 17, Horse Fair Street, Leicester; hur Nicholson, M.D., 98, Montpellier Road, Brighton.

TOLOGY.—*President*, G. F. Hodgson, M.R.C.S., Brighton. *Vicesidents*, Alphonso Elkin Cumberbatch, F.R.C.S., London; Edward sswell Baber, M.B., Brighton. *Honorary Secretaries*, Henry Albert ves, F.R.C.S.Edin., 6, Grosvenor Street, W., London; Patrick liam Maxwell, M.D.Edin., 10, Lower Mount Street, Dublin.

onorary Local Secretaries: Thomas Jenner Verrall, M.R.C.S., 95, stern Road, Brighton; Alfred Scott, L.R.C.P., German Place, ghton.

TUESDAY, AUGUST 10TH, 1886.

2 P.M.—Meeting of 1885-6 Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 11TH, 1886.

9.30 A.M.—Meeting of 1886-87 Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione*.

THURSDAY, AUGUST 12TH, 1886.

9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Surgery.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 13TH, 1886.

10 A.M.—Address in Public Medicine.
11 A.M.—Sectional Meetings.
4 P.M.—Concluding General Meeting.
8 P.M.—Reception.

SATURDAY, AUGUST 14TH, 1886.

Excursions.

ANNUAL MUSEUM.

THE twentieth annual museum will, by permission of the Town Council, be located in the Corn Exchange, a large hall, communicating with the Dome, and having a separate entrance in Church Road.

It will be open to the profession from August 9th to August 15th, and will be classified in three sections.

SECTION A.—Foods, drugs, hygienic and sanitary appliances. A specialty will be made of all kinds of prepared, peptonised, and other compound nutrients. (Honorary Secretary, Dr. Mackey, 1, Brunswick Road, Hove, Brighton.)

SECTION B.—New books, instruments, and appliances—medical and surgical; galvanic and other batteries and apparatus. (Honorary Secretary, Dr. Whittle, 65, Dyke Road, Brighton.)

SECTION C.—Anatomical and pathological specimens, diagrams, casts, or models; microscopes and microscopical preparations. (Honorary Secretary, D. W. Giffard, Esq., 5, Pavilion Parade, Old Steine, Brighton.)

A name and description, printed, if possible, must be attached to each exhibit, which should be sent to the Corn Exchange, Brighton (to the care of the Secretaries of the respective sections), between Monday, August 2nd, and Saturday, August 7th. Ample counter space will be provided, and, so far as possible, equal facilities will be given to every exhibitor.

A description, for insertion in the Museum Catalogue, should be forwarded to the private address of the respective Secretaries, at least one month before the meeting, that is, by July 10th.

CATALOGUE.—The catalogue will be provided gratis, but advertisements will be charged at the usual rate, namely, one page, £1; half-page, 12s. 6d.; quarter-page, 7s. 6d.

TO EXHIBITORS.—The expenses of carriage and of removal to be borne by the exhibitor. The Committee will exercise every reasonable care as to objects entrusted to them, but will not be responsible for risk or accident.

May 6th, 1886. FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The French Society of Ophthalmology.—Treatment of Sympathetic Ophthalmia.—D'Arsonval's Instrument for Measuring Auditory Acuteness.—General News.

THE French Society of Ophthalmology held its yearly meeting, last week, at the Surgical Society. A stranger was elected President; the choice fell on Herr Gunning, of Amsterdam. The meeting lasted from the 27th to the 30th April.

M. Dianoux, of Nantes, defined what he considered to be sympathetic ophthalmia. This affection, he said, could only occur after injury to the eye, and only after the third or fourth week, when the inflammation consequent on the wound had disappeared. He doubted the authenticity of tardy sympathetic ophthalmia, and believed that simple cases of irritation had often been described as sympathetic. He rapidly reviewed the different theories concerning the etiology of this affection, and pronounced in favour of its transmission by the lymphatics—a theory which is supported by facts observed at necrop-

sies, and by the results of Deutschmann's pathological experiments. M. Dianoux enumerated the different methods adopted to prevent sympathetic ophthalmia, and said that he preferred section of the optic nerve. He denied the possibility of a return of the affection several months after the nerves, with their sheaths, had become united. M. Poncet's anatomical studies had demonstrated that, after section of the optic nerve, the eye underwent certain modifications, which removed it from the dangers that threatened an eye not operated on. M. Dianoux had, since 1877, cut the optic nerve forty times, and had only once met with ciliary pains, which were cured by making a fresh section. Several times, section had proved successful when sympathetic ophthalmia was thoroughly established. The cornea regained its sensibility after the section of the optic nerve; thus the danger of ulceration was avoided. M. Dianoux had always found the pupil refractory to the action of eserine and atropine after the operation. M. Abadie observed that the works of Deutschmann rendered it more and more probable that sympathetic ophthalmia was transmitted by the lymphatics. In true sympathetic ophthalmia, enucleation must be practised at once; besides which, energetic general treatment, especially mercurial frictions, must be adopted. M. de Wecker rejected the treatment by cutting the optic nerve, and recommended exenteration. M. Sucrez (of Angers) thought that, in doubtful cases, section of the optic nerve was advisable; but, in actual sympathetic ophthalmia, enucleation was necessary. M. Boucheron observed that, if the morbid condition had already attacked the optic nerve, it was difficult to understand how an operation could have a favourable result; yet clinical practice proved that it was so. The nerve ought to be cut at the onset of the affection. M. Dransart had fourteen times cut the optic nerve, and had always been satisfied with the results. Nevertheless, he had discontinued this operation since Poncet's researches, which had demonstrated the regeneration and union of the fibres of the optic nerve after section, and especially since those of Deutschmann, who, also, had shown that the optic nerves were frequently the channel of transmission of sympathetic ophthalmia. M. Galezowski preferred enucleation, because he had seen bad results, in some instances, follow section of the nerve. Exenteration, or emptying out the eye, might, also, produce a phlegmonous condition, and be followed by sympathetic ophthalmia. This was observed ten years ago, in a case operated on by M. Richet. M. Cousserant mentioned Dr. Assaky's theses, which demonstrated that nerves could be sutured at a distance of four centimètres. He considered enucleation as the most rational treatment for sympathetic ophthalmia.

M. d'Arsonval showed to the Biological Society an apparatus for measuring auditory acuteness, or an acoumeter. This apparatus differs from other similar instruments. It is simple, and it indicates directly the proportional intensity of sound. It is composed of a sound-producer, consisting of a small tuning-fork giving the normal *la* (870 vibrations), kept at work by an electro-magnet placed according to the disposition adopted by M. Mircadier. A single element Leclanché's battery is sufficient to keep it in function. A telephone is placed in communication with the two ends of the thread forming the coil of the electro-magnet. The telephone is thus traversed by the extra interrupted current (*extra courant de rupture*) at each vibration of the tuning-fork. The tension of this extra current is much greater than that of the battery, and causes the telephone to vibrate intensely in union with the tuning-fork. In order to lessen the intensity of the sound in the telephone, it is necessary to pass a current along a glass tube full of water, by plunging a metallic stem into the water. The length of the column of water traversed by the current is increased until the intensity of the sound is reduced to its minimum, and is scarcely perceptible. The strength of the extra current, and consequently the intensity of the sound, is in inverse proportion to the length of the graduator, which lessens the sound. The length of the column of water gives the degree of the auditory sense tested.

A death has occurred at the St. Antoine Hospital, from a curious cause. Marie H., a cook, fell suddenly ill. She suffered agonising intestinal pain. Notwithstanding every medical attention, her condition grew worse. Her illness baffled all attempts at diagnosis. Before dying, she confessed to the house-surgeon that, during sleep, her false teeth must have been swallowed by her. At the necropsy, they were found in the stomach.

MEDICAL MAGISTRATE.—Dr. W. H. Paine, of Stroud, has been placed on the Commission of the Peace for Gloucestershire.

PRESENTATION.—Dr. James M. Moore, of Lurgan, formerly of Dungiven, who some time since took up his residence in Lurgan, was last week presented with an illuminated address and handsome silver salver, enriched with gold, by his many friends in Dungiven.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE PRESIDENCY OF THE ROYAL COLLEGE OF PHYSICIANS.

SIR,—Your judicous counsel to elect Sir William Jenner, K.C.B., F.R.S., once more to the presidency has been adopted, and that, too, by the bulk of the Fellows; only a small number supporting other candidates. To this action, no objection can be taken. But it does not solve the matter of the future President and Presidents; it merely postpones it. It is a tribute to the confidence felt in Sir William Jenner, and to his absolute integrity. But is it not a fact which reflects gravely upon the rest of the Senior Fellows eligible for the Presidency? Does it mean that the bulk of the electing Fellows dare not elect any one else? It certainly looks suspiciously like it.

The history of the College, so far as it can be traced in medical journals, has not been a happy one, or an encouraging one for its future. Its proceedings, *in camerâ*, prevent the outside world from knowing anything about its motives, and its reasons for its actions. These actions alone stand out before the world. "By their fruits ye shall know them,' as applied to the past history of the Royal College of Physicians of London, does not do any particular credit to their Council meetings. Its by-laws have notoriously been violated more than once of recent years; but no judgment has followed. Big fish and little fish alike have escaped scot-free. The elections to the Fellowship have not been more fortunate. It is notorious that many Members are elected to the Fellowship, without merits obvious to the outside world; while other Members, whose merits are fairly conspicuous, have been passed over. That the withholding of the Fellowship is the severest punishment of notorious evil-doers, whose conduct is unprofessional, is well known. But, are all Members, not advanced to the Fellowship, who, from their work, seem eligible, kept out for valid reasons? Is not there some suspicion that nepotism, on the one hand, and personal feeling, on the other, have much to do with election and rejection? The sternest condemnation of their system of election is furnished by the fact that, not long ago, the body of Fellows rejected *en masse* the Members selected for the Fellowship by the ruling powers. That is a fact which is unmistakable.

And, now, as to the election of President. It seems that Sir William Jenner is the one man in whom the Fellows, as a body, have absolute confidence. Certainly, that confidence is not misplaced. He possesses the confidence of all, from his Sovereign downwards. But, of the others? In the JOURNAL of April 17th, your comment regarding the re-election for another year of the present President is as follows. "It has been suggested that there is no other alternative, inasmuch as other Senior Fellows, otherwise qualified, could not be depended on to carry out, loyally, steps for cementing and giving effect to the tendencies to union between the two Colleges. But this is, of course, absurd." We must all devoutly hope so. But, if this be not the reason, what is the reason? In my experience of life, when any person, or set of persons, have had excellent and valid reasons for certain concrete action, they have never hesitated to proclaim them from the house-tops, and get all the credit they could therefrom for their behaviour. On the other hand, mystery and concealment tell a far different tale. Reticence is ever suggestive! When a prisoner at the bar declines to enter the witness-box (under the new rules), we all draw our own conclusions as to the why or the wherefore of his or her silence.

So, now, with the College of Physicians; if their career had been one of straightforward open dealing, they could for once have asked the forbearance of the profession. But, seeing that it is what it has been, the world can only—in the absence of an explanation—draw its own conclusions. That the ruling authorities of the College are making themselves a veritable laughing-stock, at which scoffers point the finger of scorn, is only too obvious and notorious. Respect begins at home; and the venerable, if not infirm, institution in Pall Mall will find itself no exception to the rule.

Would it not be as well if the managing body let a little more day light into their proceedings?—I remain, yours faithfully,

3, Henrietta Street, W. J. MILNER FOTHERGILL, M.D.

MEDICINAL PLANTS OF ANTIGUA.

SIR,—Will you permit me to draw the attention of members of the profession, and of others interested in matters therapeutical, to a collection of mine in the West Indian Section of the Colonial and Indian Exhibition, of the "medicinal plants of Antigua"? The specimens number fifty-three, and have their native and botanical names, natural orders, and uses, marked on them. Most of them have never had a scientific trial of their properties, but such virtues as they possess have been attributed to them by the natives. On the other hand, some of the plants are of undoubted value, such as Ricinus communis, Jatropha curcas, Carica papava, all three being found in abundance throughout these islands. In my collection, there is a specimen of Colubrina ferruginosa, a member of the Rhamnus family, which evidently possesses, to some extent, the same properties as its well known relative, Rhamnus purshiana. A bitter fermented liquor is prepared in this island (called *mabie*) from the Colubrina ferruginosa, a similar drink being used in St. Lucia, prepared from the Colubrina reclinata. I remember a patient, who has come to me, off and on, for four years, suffering from habitual constipation, and symptoms of gallstones. On seeing her a few weeks ago, and remarking to her that she looked very well, and that she seemed to be enjoying a comparatively long freedom from her usual gallstone-pains, she replied: "Yes, sir, I feel a good deal better since I began to take a tumbler of *mabie* every morning, and that keeps my bowels regular."

Besides the botanical specimens, I have also sent to the Exhibition a few oils, and resins, and seeds, amongst which will be found a phial of the milky sap from the Manchinoel tree (*Hippomane mancinella*), the dreadful West Indian blistering tree.—Yours truly,

GEORGE E. PIEREZ, M.B. and C.M.Edin.,
Long Lane House, Antigua. Medical Officer, St. Philip's.

ROSSI'S EXPERIMENTS.

SIR,—In the BRITISH MEDICAL JOURNAL of May 1st, page 811, M. Vignal writes: "It is interesting to recall to memory Rossi's experiment, made in 1808. He inoculated a dog with rabies, by placing in a wound a piece of crural nerve which he had removed from a living mad cat. This experiment was quite overlooked; and, probably, but for the experiments made by M. Pasteur and his assistants, would never have come to light."

M. Vignal is mistaken. Mr. Fleming, in his classic work, published in 1872, alludes to it in the following words: "The malady being one which appears to be more or less of a nervous character, several authorities have imagined that the contagious material might be lodged in the nerves; and Rossi made some experiments with the view of proving that it was so. He was led, from these experiments, to affirm that rabies could be induced by transferring a portion of nerve from a diseased to a healthy animal; and, indeed, he describes how he produced madness in a dog, by inoculating it with a morsel of nerve yet warm from the thigh of a rabid cat." Surely it has not been overlooked. Fleming continues: "Hertwig, the talented Professor of the Berlin Veterinary School, has several times repeated this experiment, with pieces of nerve and muscle, and has produced the disease."

It is well to know what has been done before. I may here point out that the "new disease," described by M. Pasteur (see BRITISH MEDICAL JOURNAL, April 10th, p. 671), was described by Dr. Wright, Physician to the Birmingham General Hospital, in 1844 (see *Lancet*, vol. i, 1844, p. 122), in his lectures on the saliva. These, and other facts, are more fully treated of in a pamphlet published by Mr. Lewis, 136, Gower Street, written by yours truly,

Horton House, Halifax. T. M. DOLAN, M.D.

MANCHESTER AND SALFORD PROVIDENT DISPENSARIES.

SIR,—In my last two letters, I brought under the notice of your readers the manner in which the provident dispensaries are managed, and the abuses which have arisen in connection with them; that the members are now chiefly recruited from the well-to-do working and lower middle classes, and that those persons, for whom the dispensaries were intended, have not cared much to avail themselves of them. The non-limitation of income, the absence of any rule stating what constitutes abuse, and the indiscriminate admission of almost any person willing to become a member, have been the principal causes in bringing about the present state of matters. I would suggest that the following rules be adopted by the dispensary authorities. 1. That the weekly income of families, as members, be limited to £1 12s. 2. That the weekly income of single persons, as members, be limited to 30s. 3. That the dispensary-books be submitted, every six months, to an independent investigation, so that cases of alleged abuse and improper admission be inquired into.

When the dispensaries were founded, the weekly limit of wages was 30s.; this we propose to raise to the above mentioned sum. I am of opinion that there ought to be a distinction made between a single member and a family. I know of a single young man, with wages of 30s. a week, who is a member, and, time after time, he sends to the dispensary for a cough-mixture, for which he pays one penny.

The persons who have most to do with the dispensaries are the medical men, collectors, dispensers, and others, who have a pecuniary interest in obtaining as many members as possible; it is, therefore, necessary that stringent rules should be enforced to protect the legitimate interests of the general practitioners.

In replying to Dr. Stewart's letter, I am of opinion that it would be more candid, on his part, to mention that, during the past year, he and his assistant made about £500 out of the dispensary, whilst his two other colleagues had to be satisfied with a £20 note divided between them. Dr. Stewart continues to assert, in his letters, that no money can be made out of a provident dispensary. If Dr. Stewart works on "principle," and for assisting his fellow-creatures, rather than for earning money, would it not be better for the patients if he would try and arrange to have the dispensary work more equally divided among the staff? Dr. Stewart has his private practice to attend to as well, so that, with fewer dispensary-patients, he could devote more time to his cases, and his colleagues would enjoy a more equable share of the receipts.—I am, your obedient servant,

Claremont Place, Pendleton. THOMAS N. ORCHARD.

SIR,—Permit me to say a few words in reply to Dr. Orchard's letter, which appeared in your issue of May 1st.

Dr. Orchard knows perfectly well that, so far from purposely avoiding the rule as to the admission of members of the provident dispensary at Pendleton, as elsewhere in Manchester and Salford, I have more than five weeks ago, in the local press, stated the rule verbatim.

Dr. Orchard further states that the rule as to the thirty shillings per week test "was abolished because the Committee found that, by adhering to it, they could not procure a sufficient number of members to keep the dispensary going." The Committee of the Pendleton branch of the Provident dispensaries had no more to do with the abolition of such rule than Dr. Orchard himself, who has been more than once publicly informed that the Council of the Manchester and Salford Provident Dispensaries, some years ago, abolished the rule at the suggestion of the Medico-Ethical Society, after it had made searching inquiries, of an unfriendly character, into certain alleged cases of abuse of the provident dispensary system. Notwithstanding this, Dr. Orchard ventures to make the above statement, which is contrary to acknowledged facts. Dr. Orchard proceeds to assert that, if families with an income of £2, £3, and £4, respectively, wished to join the dispensary, the "working men's managing committee could admit them."

The question, of course, is, have the Committee, in the exercise of whatever discretion may be vested in them, admitted as members persons who ought not to be admitted? The answer to this, I think, is not far to seek, and is to be found in the fact that not a single case of abuse has been established, either by Dr. Orchard or any other hostile critic, in respect of the Pendleton Provident Dispensary.

It is not for me to say that this dispensary is well managed; but I think that the above mentioned fact must furnish, in the opinion of all unprejudiced persons, a complete vindication of its character in this respect. Such being the result of the present inquiry, it matters little whether the Committee, who manage, are working men, or persons of a higher social status; but I may perhaps be allowed to state that, from my own experience, extending over a period of six years, the Committee, composed of clergymen, magistrates, and others, do "trouble their minds to inquire into the circumstances of persons who might be desirous of joining" the Pendleton Provident Dispensary. Hence the difficulty which the enemies of the system experience in proving their random statements.

If Dr. Orchard had objected to the system of provident dispensaries on general grounds, I could understand his contention; for that is, like most other great questions, open to argument. He has, however, admitted that he has no objection to the system, but only to its abuse, confining his complaints to the Pendleton branch. As Honorary Secretary of this branch, I have requested him to furnish proofs of his complaints; but this he has failed to do, and now declines to produce further evidence. Until he attempts to establish, or expresses a willingness to withdraw, his prejudicial assertions, I think I am justified in declining to continue the correspondence.—Yours obediently,

Buile Hill, Pendleton. HENRY HARWOOD.

SIR,—I have read several letters in the JOURNAL recently regarding provident dispensaries; and as this is a subject in which I have taken some interest, I should be glad if you would allow me to make a few remarks upon one clause of Dr. Stewart's letter in the JOURNAL of May 1st. Dr. Stewart states that no money can be made out of provident dispensaries. Now, I have ascertained, beyond all doubt, that Dr. Stewart makes close upon £500 a year out of his dispensary. If this be not making money, I should like to know what is.

Dr. Stewart asks us to imagine the state of mind of anyone who thinks that money can be made out of a provident dispensary; and he states that he himself works this dispensary on account of the good he does his fellow-creatures. Well and good! but what about the £500 a year he makes out of these same fellow-creatures? which large sum of money is made out of halfpenny fees, and the profit made from medicine sold at a penny a bottle.

In doing this good to his fellow-creatures, together with a substantial benefit to his pocket, does Dr. Stewart ever think that he may be doing an injury to his brother practitioners?—I am, sir, yours, etc.,

Manchester. E. S. SMITH, M.D.

CLIMATE CHART FOR MAY.

SIR,—I shall be obliged if you will allow me to invite the co-operation of the members of the Association throughout our islands in making observations on the blossoming of the following trees and shrubs, for the purpose of constructing a phenological chart for May. The observations required are, the dates of the opening of the first blossoms on several trees, that is, the average blossoming of the various species, and not the exceptional blossoming of individual trees, placed under favourable conditions.

If this date is sent to me on post-cards, I will send a copy of the resulting chart to each contributor, provided that sufficient data are received to give trustworthy results. The dates show the average time of blossoming, and the figures the temperature equivalents. Common broad-leaved lilac (May 5th, 487.8°); horse-chestnut (May 6th, 497.8°); whitethorn "May" (May 13th, 563.9°); laburnum and mountain ash (May 14th, 574 2°); elder (May 27th, 722°). The season is much later this year than usual, and neither the lilac nor the horse-chestnut are yet in blossom in London.—Your obedient servant, C. ROBERTS.

Bolton Row, Mayfair, London, W.

VACCINATION GRANT.—Mr. Durdin, of Desford, Leicester, has received the Government grant for efficient vaccination in his district.

THE LATE DR. S. MONCKTON.—At a special meeting of the Maidstone Town Council, on Monday, April 26th, a portrait in oil of the late Dr. Monckton, painted by Mr. Sydney Hodges, was unveiled in the Town Hall, and presented. It is a good likeness, and has the following inscription on a plate at the foot:—"Stephen Monckton, M.D., F.R.C.P., J.P., temp. 1824-1885."

ST. THOMAS'S HOSPITAL.—The William Tite Scholarship of £30 has been awarded to Mr. Arthur F. Stabb; the Peacock Scholarship of £42 a year, for two years, to Mr. Francis C. Abbott; the Third year Winter College Prizes, £20 to Mr. Charles Eccles; £15 to Mr. Edmund Hobhouse; and £10, in addition to second tenure of the Musgrave Scholarship of £42, to Mr. Frank Fawssett; the Second year Winter College Prizes, £20 to Mr. Thomas P. Cowen, and £10 to Mr. Horace G. Turney; the First year Winter College Prizes, £20 to Mr. Arthur C. Lankester, and £10 to Mr. Charles R. Box.

ROYAL METEOROLOGICAL SOCIETY.—The monthly meeting of this Society was held on April 21st. A paper on the Climate of Killarney, by the Ven. Archdeacon Wynne, was read. The climate is determined partly by its geographical position, and it has the benefit of proximity to the south-west coast, with all the modifying influence of the Gulf Stream. The temperature, however, is locally modified, and a decided difference is found to exist between that of Valencia and of Killarney. The author showed that Killarney is colder than many other places in Ireland, and this he attributed to the fact that it is in a great irregular basin, surrounded by mountain ranges for about a third, and by hilly plains, elevated some hundreds of feet above the lakes on most of the remaining two-thirds of the circle. Other papers read were the Probability of Weather Sequence, by Lieutenant-Colonel C. K. Brooke; Account of the Cyclone of June 3rd, 1885, in the Arabian Sea, by Captain M. T. Moss; Results of Solar Radiation Observations in the neighbourhood of Birmingham, 1875—1884, by Mr. Rupert T. Smith; Results of Meteorological Observations made in the Malay Native State of Selangor during 1884, by Mr. A. W. Sinclair, L.R.C.P. These observations were taken at four stations. The mean temperature of the district is about 80°, and the rainfall about 90 inches.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, May 3rd, 1886.

MEDICAL ACTS AMENDMENT BILL.

SIR L. PLAYFAIR, in moving the second reading of this Bill, said he was sorry to remind the House that, since the year 1870, twenty-one or twenty-two Bills, upon the same subject, had been brought before the House; but, owing to the interests affected, and the jealousies of different medical bodies, the measures had all failed. He trusted that the Bill, which he now asked the House to consider, had removed many of the difficulties which previous Bills had met with, and the House, on this occasion, might feel itself justified in carrying it through, and settling a long and harassing controversy among medical men, who were much disturbed by these Bills being constantly brought forward. There were 16,000 medical men throughout the country. These medical men came upon the *Register*, and practised through nineteen licensing bodies. These bodies were partly made up of the universities in different parts of the kingdom, and some of them were licensing corporations, such as the College of Surgeons, and the College of Physicians in the three sections of the kingdom, and the Apothecaries' Company. Through any one of these nineteen bodies, a medical man could come upon the *Register*, and might practise, and he might receive fifty or sixty titles and licences to practise from these bodies, and the bewildered public had no idea what was the value of the particular licences. He ought to state, at the outset, that the very fact of twenty-one or twenty-two Bills having preceded this one in the attempt to reform the medical profession, very great improvements had taken place in the examinations of the different licensing bodies throughout the kingdom. But the law remained the same. The state of the law was, that a man might pass the College of Surgeons, and go down to the country to attend a medical case, such as measles, or scarlet fever, without having ever passed a medical examination at all, or a medical man might get a licence from the College of Physicians, and cut a leg off without ever having passed an examination in surgery. Therefore, the state of the law (and he was not speaking now of the improved practice) was that, with any single qualification, a surgeon might practise medicine, and a physician might practise surgery, and both might go down to the country, and without knowing anything about it, practise in a thickly-populated district midwifery. Since the attempt to reform the medical profession, the different medical corporations had shown a tendency to combine. In England, the College of Surgeons and the College of Physicians had combined to have one qualifying examination both in medicine and in surgery; and the House would recollect that Her Majesty, a few days ago, laid the foundation-stone of a great examination-hall, which was to be the conjoint examination-hall of the two leading corporations. This was a voluntary combination, and not a statutory one. In Scotland, they had done the same thing; but, in Ireland, they had not yet combined. The College of Surgeons, the College of Physicians, and the Apothecaries' Company in Ireland, all had their separate examinations, without any conjoint examination so as to cover the whole area of medical knowledge necessary for practice. The leading principle of this Bill was, that no man, in future, could get into the profession without what he termed a qualifying examination. That examination consisted of this: that a man must pass a thorough examination in medicine, surgery, and midwifery; and, with that view, the Bill promoted the desire that had been shown by the profession itself for the corporations to combine. The Universities, and especially the Scotch Universities, examined both in medicine and surgery. The Bill said that they should continue to give the degrees which they now gave, and which they were enabled by charter to give. It also said that the medical corporations, if they desired to form a qualifying examination, must combine together to give a qualifying examination over the whole area which was considered necessary for the medical profession. But there might be injustice arising from this. In London, for instance, there was a body called the Apothecaries' Company, which gave a very useful class of medical practitioners; and it might be shut out by the two Colleges refusing to take it into their combination. In that case, the Medical Council, which was established in 1858 to rule the profession, would, under the Bill, have power to add a sufficient number of examiners, in order, by these additional examiners, to secure a qualifying examination to the Apothecaries' Company. The next part of the Bill dealt with the constitution of the Medical Council. That Council was established to regulate the profession, and see that the examinations were improved. There had

een great discontent that, while its nominees were appointed by the Crown to that Council, and the universities and corporations sent nembers, there was no popular representation of the large body of practitioners throughout the country. By this Bill, they gave four opular representatives to be added to the Council, which representatives would be elected by the whole of the practitioners in the kingdom—two for England, one for Scotland, and one for Ireland. These epresentatives would add to the strength of the Medical Council. But they might make all these rules, and the medical corporations night not do their duty and secure efficient examinations. The Bill, herefore, would give the Medical Council power to send inspectors to ee that the examinations were sufficient and efficient, and, if they ound any body not doing its duty, they might disqualify that body rom giving qualifying examinations: but the consent of the Privy Council must be obtained, so that the body to be disqualified should ave full opportunity of showing that they were giving, or were bout to give, these examinations in a fit and proper manner. These vere the main features of the Bill. He might say that the Bill also rovided that properly qualified practitioners from the colonies, ettling in this country, should be received, provided there was full eciprocity between the colonies and this country in this respect. art 3 of the Bill contained miscellaneous provisions, some of them eing of great importance. One of these provisions was to the effect hat, in the event of the Medical Council not doing its duty, and not eeping the corporations and universities up to the mark, it might be ut in default. In that case, the Privy Council would establish the ecessary rules to secure efficiency. As yet, he had heard of no opposition to this Bill from the universities or the medical corporations. ormerly, there was great opposition to these Bills; but, in 1884, hen the last came forward, he moved an amendment, which received he approbation of every corporation throughout the kingdom and of ll the universities. It was upon the basis of that amendment—that as to say, trusting to the licensing bodies in combination—to do hat they wished, and giving the Medical Council full power to enorce efficient examinations, that this Bill had been brought forward, nd he believed that the second reading would meet with no opposiion from them. He now recommended the Bill to the House, in the ope that it might be a settlement of a long-vexed question, and that e might at last obtain the means of getting upon the *Register* qualied practitioners who were skilled, by their education and by their xaminations, in the great branches of the medical profession. He oved the second reading of the Bill.

Sir H. HOLLAND congratulated the right hon. gentleman on the esult of his effort to surmount the difficulties of this case. Although he Bill met with the general approval of all branches of the proession, it was admitted to require amendment, and, as he understood, ne amendments to be proposed on behalf of the profession would be avourably considered in Committee. It was to be regretted that the ight hon. gentleman had not seen his way to make this a consolidaon Bill repealing the other Acts. The constitution of the General ouncil was to be entirely changed—and wisely—by this Bill. The epresentatives of the profession were to be elected for five years, and might be inferred that the other members were elected for life; but he Act of 1858 showed that they, too, were elected for the term of ve years. This was one of the details that showed the advantage of onsolidation. Only two sections of the Act of 1858 were repealed, ut others were incompatible with the provisions of this Bill. lauses 21, 22, and 23 of the Act, were replaced by Clause 4 of this ill, and a few words in Clause 4 would render it possible to repeal he clauses of the Act. Section 24 of the Act was entirely altered y Clause 19 of the Bill, and a similar remark applied. Having ad to deal with this question at the Colonial Office, and having assed the Act of 1868, he cordially agreed with the provisions of art 2 of the Bill. By the Act referred to, the Colonial Legislatures ere given full power to register, and insist upon the registration of a ractitioner, who had been examined and registered in England, and e had only to pay the fee. By Clause 25 of the Bill, the Act was be repealed. There was nothing unfair in this towards the colonies, ho were ready to avail themselves of the provisions of this Bill; but would be unreasonable to repeal the Act in the case of the colonies hich were not ready to come under this Bill. Therefore, the operaon of Clause 25 ought to be limited to the colonies which avail themlves of this Bill.

Dr. FOSTER said he would support the second reading of this Bill the interests of a body of 12,000 medical practitioners, although could not agree that it was, in all respects, perfectly satisfactory. he medical profession, for the last twenty-eight years, had con stently, but so far ineffectually, struggled for the amendment of the edical Act of 1858, and they naturally felt disappointed to find that, although, during this period, no fewer than twenty Bills had been introduced for the purpose of amending that Act, this measure was not wider in its provisions and more sweeping in its reforms. Nevertheless, they could not but recognise that it met the objects for which the medical profession had so long struggled—the first was that every medical practitioner in the country should be completely qualified in all the branches of his profession before being admitted to the legal status; and the other was that they should have a direct representation in the governing body; for, hitherto, they had been taxed to keep up the Medical Council, which had always most consistently thwarted their desires, without having been represented in it. They had heard a good deal, during the last few weeks, about taxation without representation, but, although he could not go quite so far as some in what had been said about that principle, he could, nevertheless, as a member of the medical profession, heartily sympathise with the views expressed by many of his hon. friends as to the injustice and impolicy generally of any portion of the community being taxed without being represented; for the medical profession had, for twenty-eight years, been taxed to keep up a Council in which it had been systematically denied any representation. He was, however, bound to recognise that the Bill under consideration made a considerable concession in this respect, although, when they came to consider the manner in which it was proposed to carry this concession into effect, they would probably be of opinion that its provisions were very inadequate. It was proposed that the Medical Council should consist of twenty-eight members, of whom thirteen would represent England, eight Scotland, and seven Ireland; but it would be found, on further consideration, that, of these twenty-eight members, no less than eighteen would be the representatives of corporations—that was to say, of the very bodies which it would be the duty of the Council to look after. He could not, therefore, consider that this was very fair to the members of the profession, who would have to find the money to keep up the Medical Council, that they should only have four representatives out of the whole number of twenty-eight members; and, in his opinion, this number might be very fairly increased at the expense of the Crown nominees, who were originally appointed in place of the direct representation of the profession. The proportions, also, between the different portions of the country were not altogether satisfactory, and he thought that a little too much had been conceded to Scotland and Ireland; but, after all, the right hon. gentleman (Sir Lyon Playfair) was to be congratulated on having produced a measure for which its simplicity and modesty were its best recommendations.

Dr. FARQUHARSON said the right hon. gentleman's tenure of office would be a memorable one if, after twenty-two different attempts had been made, he succeeded in placing this legislation on a satisfactory basis at last. He was of opinion that many of the charges which had been brought against the medical corporations, particularly in Scotland, had not been borne out by the facts. It was certainly an anomalous state of things that nineteen examining bodies should be allowed to compete for the right of conferring a qualification on a practitioner. Something was needed in the direction of consolidating those bodies, and of giving the public protection. He admitted that the Bill was a better one than that of last year, but there were one or two points in it to which the attention of the right hon. gentleman ought to be turned. Clause 3, dealing with a dual qualification, ought to be made a little more elastic, otherwise, some injustice would be inflicted on students. Again, he was not quite sure whether it was necessary that the inspectors of examinations should be appointed in the formal manner provided in the Bill. He concurred generally with the remarks of the previous speaker as to the constitution of the General Medical Council. It had been a great grievance on the part of the medical profession that they had had no direct representation on this body. The Council might be cut down one half with great advantage.

Sir H. ROSCOE supported the second reading of the Bill. In one respect it had a distinct advantage over its predecessors. It did not suggest any cut-and-dried examination; but, by the influence of the Medical Council, it endeavoured to bring all the various medical examining boards into harmony, and to raise and establish a standard in each. He was pleased to find that the Universities were to have a fair share of representation. It was important to bear in mind that it was teaching, and not examination, which created the medical man, and every advantage ought to be given to the University in which these subjects were taught according to the highest modern stand-point. He should be glad if his right hon. friend, when the Bill passed into committee, would consider the question of the representation of the newest University in the kingdom, the Victoria University, with which he had the honour of being connected. It was provided in the Bill that the Victoria University should be represented conjointly with the Uni-

versity of Durham. Without saying a word in disparagement of Durham, he should like to point out that the Victoria University was not only the University of Manchester, but that other colleges were connected with it, such as the University College of Liverpool and the University College of Leeds. He trusted, therefore, that, as this University represented a population as large as that of the metropolis, the right hon. gentleman might see his way to give it a representative to itself on the Council. While he was sure that the Bill would be received with great satisfaction, he hoped, at the same time, that the recommendations of the hon. member for Chester would receive due consideration, because he felt that the medical profession was not so fully represented as it deserved to be.

Mr. ADDISON expressed astonishment that the previous speakers had not referred to what he considered to be a serious defect in the Bill, and in the law of England. It had been stated that this Bill was for the protection of the public; but he desired to point out that, at the present time, there was no protection for the public whatever in any of these Bills. Is was true that the Bill permitted one general qualification for the medical profession, so that a medical man might not cut off a leg, or attempt to cure the measles, without it; but there was no law, at present, to prevent an ignorant and unqualified person from practising medicine as he pleased, or from attempting to cure the measles, without any qualification whatever. He was aware of the offences created by the Medical Acts, and also of the offence, in the eye of the law, if a person implied that he was a medical practitioner when, in reality, he was not. At the same time, it was well known that persons might really practice surgery and medicine, without being guilty of an offence, provided that they did not say they were licensed practitioners. That was a peculiarity of the law of England, and was not the case in any other civilised country. When they were so particular about the qualifications of medical men, and were dealing so admirably with the question as was done in this Bill, he hoped the right hon. gentleman would attempt to introduce some protection to the medical profession, and to the public, against those who were not only not duly qualified, but were not qualified at all.

Mr. BRYCE observed that he had been a member of the Royal Commission which had considered this question some years ago, and he was glad to say that this was a Bill which would probably have received the united support of that Commission, because it entirely avoided the objections and difficulties which had caused so much difference of feeling among that Royal Commission, which had made no fewer than four separate reports. This Bill did not propose to increase the number of examinations, but merely to secure efficiency and provide that, in all cases, the qualifications should be based upon examination. It was, therefore, in accord with the recommendations of the Commission; and, on account of its avoidance of the objections found by the Commission, he had no doubt that it would commend itself to the approval of the House. With regard to the suggestion as to Manchester, he was prepared to say that his right hon. friend would give full consideration to the matter, but was unable to give any promise at present. They all knew what a flourishing college the Manchester University was, but it must be remembered that representation given to it would be at the expense of some other institution. With regard to what had fallen from the hon. and learned member for Ashton-under-Lyne, while fully admitting the importance of the question, he thought that it was one which did not arise in that Bill, but was one which ought to be treated in a special Bill. This Bill was one for the better securing of those persons who had qualifications, and he would suggest that it would be better not to load it with any new subject of controversy such as that suggested by the hon. and learned member.

The Bill was then read a second time, and the Committee fixed for that day fortnight.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF LONDON.

EXAMINERS.—At a meeting of the Senate, held on April 28th, the following gentlemen were appointed Examininers for the ensuing year. *Chemistry*—Professor J. Emerson Reynolds, M.D., F.R.S., and Professor T. E. Thorpe, Ph.D., F.R.S. *Botany and Vegetable Physiology*—Professor Bayley Balfour, M.D., D.Sc., F.R.S., and Professor F. O. Bower, M.A. *Comparative Anatomy and Zoology*—Professor E. Ray Lankester, M.A., F.R.S., and Professor A. Macalister, M.D., M.A., F.R.S. *Practice of Medicine*—W. H. Broadbent, M.D., and S. J. Gee, M.D. *Surgery*—W. Morrant Baker, Esq., and Professor Christopher Heath. *Anatomy*—Professor D. J. Cunningham, M.D., C.M., F.R.S.E., and Professor John Curnow, M.D. *Physiology*—Professor E. A. Schäfer, F.R.S., and Professor Gerald F. Yeo, M.D. *Obstetric Medicine*—F. H. Champneys, M.A., M.B., and John Williams, M.D. *Materia Medica and Pharmaceutical Chemistry*—J. Mitchell Bruce, M.D., M.A., and T. Lauder Brunton, M.D., D.Sc., F.R.S. *Forensic Medicine*—Augustus J. Pepper, M.S., M.B., and Thomas Stevenson, M.D.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL EVIDENCE.

SIR,—I shall be glad to have an independent and unbiassed opinion, whether in the following case medical evidence was necessary or not. On March 12th, a boy, F. A., aged 10 years, was brought to my house, apparently drowned. He had been dragged out of a deep moat, where he had gone to slide with others. When brought to me, I was quite sure that death had taken place; but I endeavoured, though without hope of success, to restore animation, simply that the parents might know that everything had been done, which it was possible to do. An inquest was held, but, to my astonishment, the police constable informed me that the coroner did not consider it necessary to take my evidence. The body was viewed in the usual way by the jury, having been previously superficially examined by me, as to the presence of external injuries or marks of violence of any kind; no one knows but myself whether these were present or not. I am informed that the coroner himself did not view the body. The point in the case is this, and it appears to me an important one. Did the child meet with his death through an accident, or did he meet with his death, by having his skull fractured, or a limb broken, or some other injury, and then being thrown into the water afterwards? This did not, could not, have come out at the inquest without my evidence. I wrote to the coroner, asking him why medical testimony was not considered necessary, but he did not reply to my letter.—I am, sir, your obedient servant, A MEMBER.

*** We should have thought that the coroner, as a matter of courtesy, would certainly have replied to our correspondent's letter.

With regard to the question of medical evidence at inquests, we have often expressed the opinion that no inquest is complete without it. In the present case, it is possible that some of the boys, who were sliding with the deceased, saw him fall through the ice and disappeared under the water, and on the body being recovered, he was found to be dead, and evidence to this effect was given before the coroner, and thus a verdict was arrived at, of death by drowning, without medical testimony to the same. Most probably, in this instance, the verdict was a correct one. Nevertheless, as our correspondent points out, this was returned in the absence of medical evidence, and on supposition only. It seems astonishing that, in summoning witnesses, the chief witness, and the only one who could give scientific evidence as to the cause of death, should apparently be ignored; more especially as in this case he was called to inspect the body and ascertain the fact of death. It is the duty of the coroner to view the body.

FEES FOR ATTENDANCE ON PUPILS AT SCHOOL.

X asks for an opinion on the following case. A., medical man, is called in by the proprietor of a school to attend one of the boys. The bill, quite within A.'s customary charges to the school, is objected to by the boy's parent. To whom should the medical man look for payment for his services?

*** As we have often said before, the liability to pay for medical attendance is a matter of contract. Usually, the person who calls in the medical man is the person who is liable for his fees. But it may be shown that he only was the agent of some other person who is the one liable. If the course of practice on previous occasions have been to charge the parent, then the parent would be the person liable in the present case; but, primarily, that person is the schoolmaster. The real dispute seems to be as to the amount of the fees; and the fact that they are no more than has been charged on the previous occasions, would be good evidence to show that they are not unreasonable.

CLUB FEES AND MEDICAL ETHICS.

A. asks for an opinion upon the following circumstance. A. and B. are partners in a provincial town, but B. has only been practising for about two years. Prior to his entering into partnership with A., all the practitioners in the town had signed an agreement not to take any club appointments at a less fee than five shillings per member; but, subsequently to B.'s engaging himself as A.'s partner, a club offered itself at four shillings; and A., in spite of his agreement, took the club at the price offered, in the name of B.

A. wishes to know whether this was an ethical proceeding on the part of A.; and, under existing circumstances, ought not B. to have considered himself bound by the rule to which his partner had subscribed?

*** The proceeding of A. was decidedly irregular. When a rule of the kind referred to is made, all who are concerned should submit to it, otherwise it becomes a nullity.

MEDICAL ETIQUETTE AND HUMANITY.

IN the language of the *Cape Times*, from which we quote, our mind has been sorely exercised by a severely critical leader therein relative to "Professional Etiquette," as practised in the colony by divers members of the medical faculty, and which, if the allegation be true, cannot be too emphatically condemned as something more than discreditable to our humanity, and a scandal to the profession; indeed, so utterly repugnant is it to true professional feeling, and alike opposed to its honourable traditions, that we are tempted to exclaim, "*Credat Judæus Apella!*"

Nevertheless, it has been publicly averred (and such an arrangement, we need scarcely remark, is a matter for serious thought) that a practitioner is, by an "unwritten law of professional etiquette, restrained from rendering timely aid in cases of extreme emergency, on the plea that he is not the regular medical adviser, and is desirous not to give offence by poaching on a brother medico's private preserves" (so phrased by the editor); and, moreover, "that there is a strong tendency amongst several of the faculty to stretch it to such an extent that its operation becomes dangerous in the extreme to the public at large;" so much so that, in not a few instances, for the simple lack of prompt medical aid, "disease, otherwise remediable, makes rapid progress, and premature death is the result to the victim of professional etiquette."

Such, and more, is the openly proclaimed impeachment; and, if it be a strictly accurate narration of facts, the editor is, we regretfully submit, more than justified in publicly exposing and designating the practice as an "inhuman custom," fraught with peril to the community. Deploring, as we do, in the interests of humanity, and for the honour and credit of the profession, that such an un-Samaritan spirit should pervade any portion of the Cape faculty, we confidently venture to affirm that such "unwritten law" has, *de facto*, no existence in the "mother land;" and, as collateral evidence thereof, we deem it well to forward to the Editor a copy of the *Code of Professional Etiquette*, by the general principles of which we have reason to believe that not only the "home" faculty, but that of other nations are guided; and we, moreover, venture to hope and aver that such will eventually more or less direct and control the professional action and conduct of our brethren at the Cape, who, we cannot but think, have unwittingly erred in the matter, under an erroneous impression; that is to say, if the whole of what we have quoted be not a pure evolution from the inner consciousness of the editor of the *Cape Times*.

OBITUARY.

EVORY KENNEDY, M.D.

WE have to record the death, at his London residence, on Good Friday, of this gentlemen, who, before his retirement from professional life, some years ago, was one of the leading obstetric physicians in Dublin. Dr. Kennedy was a son of the Reverend John P. Kennedy, and was born in 1807. He took the degree of M.D. in the University of Edinburgh in 1827, and, in the following year, the licence of the King and Queen's College of Physicians. He soon turned his attention to obstetrics; and, at a period when auscultation was in its infancy, published, in 1830, an essay upon the "Placental *Souffle*," and, in 1834, one upon "Obstetric Auscultation, or Means of Detecting Life or Death of a Fœtus before Birth." As Assistant-Physician to, and subsequently as Master of, the Rotunda Lying-in Hospital, as well as from his large private practice, Dr. Kennedy acquired a large experience, which he drew upon, with advantage, in his numerous practical contributions to proceedings of societies and the medical journalistic literature of the day. He was the founder and first Honorary President of the Obstetrical Society of Dublin in 1838, and was twice subsequently elected President of the same Society, namely, in 1849 and in 1872. The year after the foundation of the Obstetrical Society, the honorary degree of M.D. was conferred on Dr. Evory Kennedy by the University of Dublin; and, at the same time, he was elected a Fellow of the King and Queen's College of Physicians in Ireland. He held the office of President of the College for two years (1853-55), and was also a President of the Irish Medical Association.

After his final retirement from the active work of his profession, Dr. Evory Kennedy resided chiefly at Belgard Castle, in the county of Dublin, and devoted himself largely to magisterial and other administrative duties in that county, of which he was a Deputy-Lieutenant. He took also a very active part in the question of Hospitalism, in connection, chiefly, with the sanitary condition of the Rotunda Hospital, which, at one time, caused much discussion in Dublin. Both by precept and example, he was an energetic supporter of temperance in the use of alcoholic liquors, and did much service as Chairman of a committee of the guardians of the South Dublin Union, in calling attention to the unnecessarily large amount of intoxicating stimulants consumed in that institution.

Dr. Evory Kennedy was a man of handsome presence, fine physique, and of genial and courteous manners. Apart from his eminence in his own profession, he was a well read and well informed man generally, as his addresses, papers, and private conversation fully showed. The funeral service was held at St. Ann's Church, Dublin, on Friday, April 30th, and was attended by many Fellows of the College of Physicians in official costume, with the Bedell and College Mace, and by several other professional and private friends. The interment subsequently took place at Mount Jerome Cemetery.

JOHN ARCHER, F.R.C.S., Birmingham.

THE report of the death of Mr. John Archer will be received with deep regret by his large circle of friends, in and out of the profession. Mr. Archer was engaged in general practice, and widely known and highly respected by his professional brethren. He secured and retained the confidence and esteem of his patients, by his kindliness and patience, which were shown alike to the rich and the poor. For many years, he was surgeon to the Lying-in-Hospital in Birmingham. He was a member of the Medical Societies in that town, and frequently attended their meetings. From its formation, he took a deep interest in the Medical Institute, and spared neither time nor money to promote its welfare. In all matters, he was always ready liberally to help where help was needed. At elections at the Royal College of Surgeons, of which he was a Fellow, he was frequently present to record his vote, and to shake hands with his many London friends. Mr. Archer died, aged 77, after a short illness, at his residence in Edgbaston.

NAVAL AND MILITARY MEDICAL SERVICES.

CASE OF RETIRED BRIGADE-SURGEON J. ROSS, MADRAS MEDICAL SERVICE.

BRIGADE-SURGEON DR. ROSS has forwarded to us from Madras a copy of a memorial which he has submitted to the Right Honourable the Secretary of State for India, in which he complains of the circumstances under which he has been compelled to retire from the service. The memorial is accompanied by copies of the proceedings of the examining boards, whose reports formed the grounds of his retirement. According to the statements in these papers, Dr. Ross entered the East India Company's service in January, 1857, and, in consequence of completing his fifty-fifth year of age in May, 1885, became liable, under the terms of the Royal Warrant of November, 1880, to be placed on the retired list from that date. Although, however, the Warrant referred to introduced the rule that all medical officers of the rank of surgeon-major should be placed on the retired list on attaining the age of 55 years, a special exemption was attached to it as regards medical officers of the Indian Medical Department who had entered the service before the Warrant of 1860 was promulgated. All such officers were exempted from the rule, and might continue to do executive duty after the age of 55 years, provided the perfect competency and fitness of the officer for the performance of executive duties were certified by a duly constituted board of military and medical officers, and this extension of service was to be no bar to promotion. Such a certificate, if furnished, was to hold good for three years, when the officer would attain the age of 58 years; and there was nothing in the terms of the exemption to show that it might not be extended even still further under similar conditions. There was an irregularity in the constitution of the first board by which Surgeon-Major Ross was examined, so that, altogether, Dr. Ross appeared before three boards for examination. This does not seem to be of any material importance in the case, as the enforced retirement complained of depended on the report of the third and final board. This report was to the effect that Dr. Ross, "although perfectly competent and fit for executive duties in India, was unfit for permanent active service in the field."

Dr. Ross complains that he has practically been deprived of the benefits of the exemption clause of the Warrant of 1860, because the board chose to introduce an opinion that he was unfit for protracted field service—a declaration which he believes to be foreign to the wording and spirit of the Warrant, and to be, indeed, unprecedented under like circumstances. Certainly, there is nothing in the terms of Paragraph 144, the exemption clause, of the Madras Regulations for Superannuation of Medical Officers, which requires an examining board to state the fitness of the medical officer for active service in the field, much less for permanent active service in the field. The paragraph in question only requires the board to certify "the perfect competency and fitness of the officer for the performance of executive duties," and this the board certified. We cannot, therefore, regard the application by the board of the terms of the Warrant, in the present instance, otherwise than as having been overstrained. The expression "permanent active service in the field" seems in itself to be utterly inconsistent, and there is nothing in the proceedings of the examining boards to show why it was introduced.

Although we are aware of the great difficulty that exists in obtaining a reversal of a decision once arrived at by the Executive Government of India, we hope that the case of Dr. Ross may receive the attention of the Secretary of State for India, as it is one which seems justly to demand investigation, and also because it may be used as a precedent with other officers on similar occasions.

CONGRESS AT CHRISTIANIA.—There will be a congress of scientists and medical men in Christiania, commencing on July 12th.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 6,100 births and 3,535 deaths were registered during the week ending Saturday, April 17th. The annual rate of mortality, which had declined in the four preceding weeks from 29.3 to 20.1, was 20.3 during the week under notice. The rates in the several towns, ranged in order from the lowest, were as follow:— Wolverhampton, 14.4; Sunderland, 14.7; Birkenhead, 15.3; Cardiff, 15.5; Norwich, 15.9; Leicester, 17.6; Bristol, 17.9; Sheffield, 18.0; Hull, 18.0; Preston, 18.0; Newcastle-upon-Tyne, 18.5; Liverpool, 19.3; Brighton, 19.3; Halifax, 19.3; Leeds, 19.4; London, 19.8; Salford, 20.0; Huddersfield, 20.0; Bolton, 20.8; Bradford, 21.4; Nottingham, 21.8; Birmingham, 24.6; Oldham, 24.8; Derby, 25.0; Plymouth, 25.2; Portsmouth, 25.3; Manchester, 27.1; and the highest rate during the week, 32.3 in Blackburn. The death-rate in the twenty-seven provincial towns averaged 20.7 per 1,000, and exceeded by 0.9 the rate recorded in London, which, as before stated, was 19.8 per 1,000. The 3,535 deaths registered in the twenty-eight towns during the week under notice included 140 which were referred to whooping-cough, 114 to measles, 43 to diarrhœal diseases, 26 to diphtheria, 26 to "fever" (principally enteric), 21 to scarlet fever, and not one to small-pox; in all, 367 deaths resulted from these principal zymotic diseases, against numbers declining from 430 to 363 in the four preceding weeks. These 367 deaths were equal to an annual rate of 2.1 per 1,000. In London the zymotic death-rate was 2.3 per 1,000, while it averaged 2.0 in the twenty-seven provincial towns, and ranged from 0.3 and 0.4 per 1,000 in Hull and Leicester, to 5.4 in Birmingham, 5.9 in Blackburn, and 6.1 in Portsmouth. The fatal cases of whooping-cough, which had declined in the four preceding weeks from 195 to 130, rose again during the week under notice to 140, and caused the highest death-rates in Plymouth and Salford. The deaths referred to measles, which in the two previous weeks had been 97 and 121, declined to 114, and showed the largest proportional fatality in Bolton, Blackburn, Birmingham, and Portsmouth. The 43 fatal cases of diarrhœa showed a slight furthur increase upon recent weekly numbers. The deaths from diphtheria, which had been 19 and 21 in the two preceding weeks, further rose during the week under notice to 26, and included 17 in London and 2 in Liverpool. The 23 fatal cases of fever showed a further decline from recent weekly numbers, and were fewer than those recorded in any week since the end of April, 1885. The deaths referred to scarlet fever, which had been 19 and 26 in the two previous weeks, declined to 21 during the week under notice. No fatal case of small-pox was recorded in any of the twenty-eight towns, but the death of a London resident from small-pox occurred in the Metropolitan Asylum Hospital ship *Atlas*, situated outside Registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 7 and 8 in the two preceding weeks, further rose to 16 on Saturday, April 17th; 6 new cases were admitted to these hospitals during the week under notice, against 2 and 5 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London during the week was equal to 4.6 per 1,000, and was considerably below the average. The causes of 76, or 2.1 per cent., of the 3,535 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

During the week ending Saturday, April 24th, 5,598 births and 3,456 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 20.1 and 20.3 per 1,000 in the two preceding weeks, declined during the week under notice to 19.8. The rates in the several towns, ranged in order from the lowest, were as follow:—Hull, 12.3; Leicester, 13.8; Bristol, 14.6; Birkenhead, 15.3; Brighton, 16.6; Sunderland, 16.8; Salford, 17.0; Cardiff, 18.1; Derby, 18.2; London, 18.4; Halifax, 18.7; Sheffield, 18.8; Leeds, 19.2; Huddersfield, 19.4; Bradford, 19.7; Norwich, 21.0; Liverpool, 21.8; Nottingham, 22.8; Wolverhampton, 23.5; Newcastle-upon-Tyne, 23.9; Oldham, 24.9; Birmingham, 24.1; Portsmouth, 26.0; Manchester, 26.3; Bolton, 26.3; Blackburn, 27.8; Plymouth, 30.7; and the highest rate during the week, 34.5 in Preston. The death-rate in the twenty-seven provincial towns averaged 21.1 per 1,000, and exceeded by 2.7 the rate recorded in London, which, as before stated, was only 18.4 per 1,000. The 3,456 deaths registered in the twenty-eight towns included 382 which were referred to the principal zymotic diseases, against 359, 363, and 367 in the three preceding weeks; of these, 155 resulted from whooping-cough, 114 from measles, 33 from diarrhœal diseases, 30 from diphtheria, 25 from scarlet fever, 23 from "fever" (principally enteric), and 2 from small-pox. These 382 deaths were equal to an annual rate of 2.2 per 1,000. The zymotic death-rate in London was equal to 2.4, while in the twenty-seven provincial towns it averaged 2.0 per 1,000, and ranged from 0.0 in Halifax, and 0.5 in Leeds and in Hull, to 4.1 in Plymouth and in Preston, 6.0 in Bolton, and 8.4 in Portsmouth. The deaths referred to whooping-cough, which had been 130 and 140 in the two preceding weeks, further rose during the week under notice to 155, and showed the largest proportional fatality in Bolton, Derby, and Portsmouth. The fatal cases of measles, which in the two preceding weeks had been 121 and 114, were again 114, and caused the highest death-rates in Preston, Blackburn, Bolton, and Portsmouth. The 33 deaths from diarrhœal diseases were below those returned in recent weeks. The fatal cases of diphtheria, which had increased in the three preceding weeks from 19 to 26, further rose during the week under notice to 30, of which 16 occurred in London, 3 in Liverpool, and 2 in each of five other towns. The 25 deaths from scarlet fever showed an increase of 4 upon the number in the previous week, and showed the highest proportional fatality in Manchester. The fatal cases of fever, which had fallen in the three preceding weeks from 30 to 23, were again 23 during the week under notice. Of the 2 deaths referred to small-pox in the twenty-eight towns, 1 occurred in London (exclusive of 4 deaths of London residents from this disease registered in the Metropolitan Asylum Hospital ship *Atlas*, situated outside Registration London), and 1 in Blackburn. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had increased in the three preceding weeks from 8 to 16, further rose to 17 on Saturday, April 24th; 6 new cases were admitted to these hospitals during the week, against 3 and 6 in the two previous weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.0 per 1,000, and was considerably below the average. The causes of 74, or 2.1 per cent. of the 3,456 deaths registered during the week in the twenty-eight towns, were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,283,977 persons, 864 births and 609 deaths were registered during the week ending Saturday, March 27th. The annual rate of mortality, which had steadily increased from 22.3 to 27.9 per 1,000 in the five preceding weeks, declined during the week under notice to 24.7, and was 1.7 per 1,000 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 13.9 in Greenock, 14.8 in Leith, 16.2 in Aberdeen, 21.1 in Dundee, 21.3 in Perth, 23.7 in Edinburgh, 30.4 in Paisley, and 30.5 in Glasgow. The 609 deaths registered during the week in these Scotch towns included 29 which were referred to whooping-cough, 11 to diarrhœa, 8 to scarlet fever, 8 to measles, 4 to "fever" (principally enteric), 1 to diphtheria, and 1 to small-pox; in all, 62 deaths resulted from these principal zymotic diseases, against 51 and 46 in the two preceding weeks. These 62 deaths were equal to an annual rate of 2.5 per 1,000, which was slightly above the average zymotic death-rate during the same period in the twenty-eight English towns. The highest zymotic death-rates in the Scotch towns were recorded in Edinburgh and Glasgow. The deaths from whooping-cough, which had been 20 and 14 in the two preceding weeks, rose again to 29, of which 27 occurred in Glasgow. The 11 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths referred to scarlet fever, which had been 5 and 4 in the two previous weeks, rose again during the week to 8, and included 5 in Glasgow, and 2 in Edinburgh. The 10 fatal cases of measles showed a decline of 2 from the number in the preceding week, and included 7 in Edinburgh. The deaths referred to different forms of fever, which had been 4 and 6 in the two preceding weeks, fell again to 4 during the week, of which 2 occurred in Glasgow. The fatal case of small-pox, and the death from diphtheria, were recorded in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.3 per 1,000, against 8.9 in London. As many as 53, or 8.7 per cent., of the 609 deaths registered during the week in these Scotch towns, were uncertified.

During the week ending Saturday, April 17th, 904 births and 507 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had declined in the four preceding weeks from 27.9 to 21.2 per 1,000, further fell during the week under notice to 20.5, and almost corresponded with the rate for the same period in the aggregate of the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 14.6 in Greenock, 16.2 in Aberdeen, 18.0 in Edinburgh 20.7 in Leith, 21.7 in Paisley, 21.8 in Dundee, 22.8 in Glasgow, and 24.5 in Perth. The 507 deaths registered during the week under notice in these Scotch towns included 34 which were referred to the principal zymotic diseases, against 62, 46, and 38 in the three preceding weeks; of these, 10 resulted from whooping-cough, 9 from diarrhœa, 8 from measles, 4 from "fever," 2 from diphtheria, 1 from small-pox, and not one from scarlet fever. These 34 deaths were equal to an annual rate of 1.4 per 1,000, which was considerably below the zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates during the week were recorded in Paisley, Edinburgh, and Aberdeen. The fatal cases of whooping-cough, which had fallen in the three preceding weeks from 29 to 11, further declined to 10, of which 8 occurred in Glasgow. The 9 deaths referred to diarrhœal diseases were below those returned in recent weeks. The fatal cases of measles, which had been 4 and 6 in the two previous weeks, further rose to 8 during the week under notice, and included 7 in Edinburgh. The 4 deaths referred to different forms of fever corresponded with the number in the preceding week; 2 occurred in Paisley. The two fatal cases of diphtheria showed a further decline from recent weekly numbers, and the death from small-pox was registered in Edinburgh. The mortality from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.2 per 1,000, against 4.6 in London. As many as 61, or 12.0 per cent., of the 507 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,283,977 persons, 809 births and 511 deaths were registered during the week ending Saturday, April 24th. The annual rate of mortality, which had been 21.2 and 20.5 per 1,000 in the two preceding weeks, was 20.7 during the week under notice, and exceeded by 1.9 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 13.1 in Perth, 13.9 in Paisley, 16.7 in Dundee, 17.0 in Edinburgh, 17.8 in Leith, 20.9 in Greenock, 22.1 in Aberdeen, and 25.0 in Glasgow. The 511 deaths registered during the week in these Scotch towns included 15 which were referred to whooping-cough, 9 to diarrhœa, 9 to measles, 5 to "fever," 5 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all, 46 deaths resulted from these principal zymotic diseases, against 38 and 34 in the two preceding weeks. These 46 deaths were equal to an annual rate of 1.9 per 1,000, which was slightly below the zymotic death-rate for the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Aberdeen, Glasgow, and Leith. The deaths from whooping-cough, which had declined from 14 to 10 in the four preceding weeks, rose again to 15, of which 14 occurred in Glasgow. The 9 fatal cases of diarrhœa were below the average, and included 3 in Aberdeen. The deaths from measles, which had been 4, 6, and 8 in the three previous weeks, further rose to 9, of which 4 were returned in Edinburgh, and 4 in Leith. The 5 fatal cases of diphtheria also showed an increase upon recent weekly numbers, and included 3 in Glasgow, and 2 in Edinburgh. The 5 deaths referred to different forms of fever included 2 in Glasgow, where all the 3 fatal cases of scarlet fever were also recorded. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 4.3 per 1,000, against 4.0 in London. As many as 63, or 12.3 per cent. of the 511 deaths registered during the week in these Scotch towns were uncertified.

FEE FOR REDUCTION OF HERNIA.

H. C. H. (Norfolk) asks whether he is entitled to claim the usual fee of £5 for the "operation for strangulated hernia" in a case where, after failing in the evening, taxis was successful on the following morning.

*** Our correspondent is not entitled to any fee under the conditions referred to in his question. A fee of £5 can only be legally awarded when the strangulation is complete, and only relievable by the knife, and under no other circumstances whatever.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND. First Examination, April, 1886. Pass-List.

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Simpson, St. Bartholomew's; Arthur H. Smith, Charing Cross; George S. S. Smith, St. Thomas's; *b* John W. Smith, Manchester; Stephen M. Smith, Guy's; David L. Soutter, King's College; *a* William D. Spurrell, Guy's; Arthur F. Stabb, St. Thomas's; Frederic A. Stabb, St. Thomas's; Robert F. Standage, St. Bartholomew's; *b* George H. Steele, Guy's; *b* William K. Steele, Guy's; Henry N. Stephens, Manchester; *b* Henry W. Stephens, St. Bartholomew's; Robert C. Stevens, St. Bartholomew's; Walter W. Stocker, St. Mary's; *a* Robert C. Storrs, Leeds; Henry R. S. Stradling, St. Thomas's; Charles F. Sutton, Manchester; Septimus Sutton, Middlesex; Allan J. Swallow, St. Thomas's; Charles R. J. A. Swan, St. George's; Francis E. Swinton, St. Bartholomew's; Frederic H. A. Taylor, Charing Cross; Percy Templeton, Westminster; Hubert Tibbits, St. Mary's; Robert P. Tillard, St. Bartholomew's; John L. Thomas, St. Thomas's; Abraham Thomas, Guy's; Charles Thompson, Charing Cross; John H. Tootal, St. Bartholomew's; Nevill P. F. Toller, St. Thomas's; *a* Ernest W. Toulmin, St. Mary's; Henry E. Tracey, St. Bartholomew's; Francis Trevelyan, St. Thomas's; Felix Turner, University College; Louis G. W. Tyndall, St. Mary's; Newton Wade, St. Bartholomew's; Frank A. Wagstaff, Middlesex; George Walker, St. Bartholomew's; Henry Walker, Leeds; Richard A. Walter, St. Bartholomew's; Wilfred B. Warde, St. Bartholomew's; Alfred J. Waring, University College; Stanley W. C. Warneford, Birmingham; William Watkins, London; Harold E. Watkins, Manchester; *b* Cholmondeley Webb, St. George's; *b* Arthur Webster, University College; Percy L. Webster, King's College; Stephen Weld, King's College; *b* Henry W. West, London; John A. T. White, St. Bartholomew's; Robert E. Wickes, St. Bartholomew's; Thomas R. Wiglesworth, Bristol; Ernest E. Wilbe, St. Bartholomew's; James H. Wilkinson, London; Robert Wilkinson, Leeds; Thomas Willey, St. Bartholomew's; David J. Williams, Middlesex; *a* Ernest M. Williams, St. Bartholomew's; G. Chrisholm W. Williams, St. Thomas's; John E. Williams, St. Bartholomew's; Llewellyn Williams, St. Mary's; Arthur M. Wilson, St. Thomas's; W. W. Wingate, Guy's; Percy F. Winslow, Charing Cross; Ernest W. Witham, Westminster; *a* Joseph Wood, Manchester; John F. Wood, St. Bartholomew's; Robert W. Woodall, London; Alfred F. H. Wray, St. Bartholomew's; Heyman Wreford, St. Bartholomew's; Walter S. Wright, Bristol; Wm. C. H. Wroughton, St. Thomas's; Percival M. Yearsley, Westminster; John Young, Guy's.

a Passed in Elementary Anatomy only. *b* Passed in Elementary Physiology only.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Medical Officer. Salary, £200 per annum. Applications by May 20th to the Secretary.

COVENTRY PROVIDENT DISPENSARY.—Surgeon. Applications by May 10th to the Honorary Secretary.

CUMBERLAND INFIRMARY.—Assistant House-Surgeon. Salary, £40 per annum. Applications by May 11th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental Surgeon. Applications by May 10th, to G. A. Ibbetson.

DORSET COUNTY HOSPITAL, Dorchester.—House-Surgeon. Salary, £70 per annum. Applications by May 19th to the Chairman of the Committee.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Assistant-Surgeon. Applications by May 21st to the Secretary.

HARTLEPOOL FRIENDLY SOCIETY'S ASSOCIATION.—Dispenser. Applications to T. Tweddell, Reed Street, West Hartlepool.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square.—Honorary Physician. Applications by May 26th.

NEWARK HOSPITAL AND DISPENSARY.—House Surgeon. Salary, £80 per annum. Applications by May 15th.

ROYAL SOUTHERN HOSPITAL, Liverpool.—House Surgeon. Salary, 100 guineas per annum. Applications by May 19th.

ROYAL SOUTHERN HOSPITAL, Liverpool.—Second House Surgeon. Salary, 80 guineas per annum. Applications by May 19th.

SEAMAN'S HOSPITAL (late *Dreadnought*), Greenwich, S.E.—House-Surgeon. Salary, £50 per annum. Applications by May 11th to W. T. Evans.

WESTMINSTER GENERAL DISPENSARY.—Honorary Physician. Applications by May 8th.

MEDICAL APPOINTMENTS.

BROWNE, A. E. N., M.R.C.S., appointed Medical Officer to the Pewsey Union, *vice* Victor Helsdon, M.R.C.S., resigned.

CHILD, H., M.R.C.S., appointed Medical Officer to the Fourth District of the North Bierley Union, Yorkshire.

DUFFUS, J. C. G., M.B., C.M., appointed House-Surgeon to the Royal Infirmary, Aberdeen.

HUDSON, C. L., M.R.C.S., appointed Registrar and Chloroformist to the London Temperance Hospital, Hampstead Road.

LEACH, Alfred, L.R.C.S., L.S.A., appointed Medical Adviser to the St. Gabriel's (Warwick Square) Maternity Charity, *vice* J. H. Lavies, M.D., resigned.

MURRAY, J., M.B., appointed Assistant Medical Officer to the James Murray Royal Asylum, Perth, *vice* David Greig, M.B., resigned.

REYNOLDS, E. S., M.D., appointed Pathologist and Assistant Medical Officer to the West Riding Lunatic Asylum, Wakefield, *vice* W. Dudley, M.B., resigned.

THOMSON, Henry Alexis, M.B.Edin., M.R.C.S.Eng., appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh.

WATSON, Alfred Watson, M.B., and C.M.Edin., appointed Resident Medical Officer to Rochdale Infirmary and Dispensary.

WILLIAMSON, George, M.B., C.M., appointed House-Physician to the Royal Infirmary, Aberdeen.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

CUFF.—On May 4th, at 22, Huntriss Row, Scarborough, the wife of Robert Cuff, M.B.Lond., of a son.

MURPHY.—At the Barracks, Tipperary, on April 28th, the wife of Dr. F. H. S. Murphy, Medical Staff, of a son.

MARRIAGES.

GODDARD—SKELTON.—On Wednesday, May 5th, at St. John's Church, Wembly, by the Rev. Canon Francis Goddard, M.A., uncle of the bridegroom, assisted by the Rev. A. M. Maynard, B.A., vicar, Charles Ernest Goddard Goddard, L.R.C.P.Lond., M.R.C.S.Eng., A.K.C.Lond., second son of the late Lieutenant-Colonel Goddard, H.M. Indian Army, of Kilburn, to Eleanor Lucy (Nelly), eldest daughter of Samuel Skelton, Esq., of WemblyOrchard, Middlesex.

MAIR—DUNBAR.—At Turriff, Aberdeenshire, on April 27th, Fleet-Surgeon George Mair, M.D., of H.M.S. *Durham*, to Mary, daughter of William Dunbar, Esq., J.P., Bank Agent.

MORITZ—WISE.—On May 5th, Siegmund Moritz, M.D., M.R.C.P.Lond., of 155, York Street, Cheetham, Manchester, to Amelia (Milly), eldest daughter of Emanuel Wise, Esq., of York House, Cheetham.

WINDLE—HUDSON.—On May 4th, at S. Chad's Cathedral, Birmingham, by the Rev. W. Greaney, Admr., Bertram C. A. Windle, M.A., M.D., Professor of Anatomy, Queen's College, Birmingham, to Madoline, daughter of the late William Hudson, Esq., of Small Heath.

DEATHS.

CHAWNER.—On May 3rd, at Clay Cross, Derbyshire, Emily Sophia Laird, aged 28, the beloved wife of Alfred Chawner, L.R.C.P.Lond., M.R.C.S., and daughter of William Clowes, Esq., of 86, Holland Road, Kensington, Chancery Registrar.

THOMSON.—On May 5th, at 1, Matheson Road, West Kensington, W., James Thompson, M.D., and B.A., T.C.D., L.R.C.S.I., formerly of Avenue House, Leamington, and 26, Burlington Road, Dublin.

ST. JOHN AMBULANCE ASSOCIATION.—A centre of the St. John Ambulance Association has been opened at Jerusalem, with Raouf Pasha, as president; Mr. Consul Moore, chairman; and Dr. Ogilvie, medical officer of the British Ophthalmic Hospital, lecturer.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—At the annual meeting on April 29th, the following officers for the ensuing year were elected. *President:* Dr. Cleaver; *Vice-President:* Mr. R. J. Pye-Smith; *Treasurer:* Mr. G. S. Taylor; *Secretary:* Mr. Simeon Snell; *Additional Members of Committee:* Dr. Keeling, Dr. Dyson, Dr. Porter, Mr. Thorpe, Mr. Garrard, Mr. E. Skinner; *Pathological Committee:* Dr. Gwynne, Mr. Atkin, Dr. S. White, and Mr. F. Harrison.

CHARING CROSS HOSPITAL MEDICAL SCHOOL.—The Governors' Gold Medal for Clinical Medicine and Surgery has been awarded to Mr. Ernest Alfred Snape; the Llewellyn Scholarship of £25 to Mr. J. G. Victor Sapp; and the Pereira Prize of £5, for the best clinical reports, to Mr. G. O. Richards, and Mr. Ernest Alfred Snape (equal).

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

SDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Ballance and Mr. Edmunds: The Ligature of the larger Arteries in their continuity: an experimental inquiry. Mr. Jonathan Hutchinson: Congenital Absence of Hair, with Atrophic Condition of the Skin and its Appendages, in a Boy whose mother had been almost wholly bald from alopecia areata from the age of 6. A series of Microscopic Specimens, illustrating the first paper, will be on view at 8 P.M.

ONESDAY.—Royal Microscopical Society, 8 P.M. Dr. G. M. Sternberg: Micrococcus Pasteuri (Sternberg). Mr. F. H. Evans: Photomicrography by the Woodbury-type Process. Mr. C. D. Ahrens: New Polarising Prism. —The British Gynæcological Society, 8.30 P.M. Specimens will be shown by Dr. Mansell Moullin, Dr. Fenton Jones, and others. Dr. Arthur Edis: On Serous Peritonitis.—Epidemiological Society of London, 8 P.M. The Office-bearers for the ensuing Session will be nominated. Dr. Buchanan: Certain Alleged Injuries by Vaccination in North Germany. Dr. Longstaff: Statistics of Hydrophobia in England. Council Meeting, 7.15 P.M.

RSDAY.—Parkes Museum of Hygiene, 8 P.M. Mr. R. Warrington: Recent Investigations on Well-Waters.

DAY.—Clinical Society of London, 8.30 P.M. Dr. Churton (Leeds): Aortic Aneurysm (Arch); Galvano-Puncture five years ago; Formation of Subcutaneous Outgrowths (recent); Galvano-Puncture; Death twenty minutes after last puncture from Rupture of First Aneurysm into Bronchus; Soft Clot only in Sac. Dr. Carrington: A case of Rheumatic Hyperpyrexia. Dr. Percy Kidd: Aneurysm of the Aorta: Extravasation of Blood into the Posterior Mediastinum, compressing the Œsophagus and Vagus Nerves, and Rupture into the Abdominal Cavity, associated, during life, with frequent Vomiting. Mr. Pickering Pick: Impaction of Stone in one Ureter: Atrophy of the Kidney on the opposite side.—Quekett Microscopical Club, 7.30 P.M. Exhibition of Micro-Photographs, with the Lantern, by Mr. F. H. Evans, in the Mathematical Theatre.

ERATION DAYS AT THE LONDON HOSPITALS.

DAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

SDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

NESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

RSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

AY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

RDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

UNICATIONS respecting editorial matters should be addressed to the Editor, , Strand, W.C., London; those concerning business matters, non-delivery ie JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, ld, W.C., London.

er to avoid delay, it is particularly requested that all letters on the editorial iess of the JOURNAL be addressed to the Editor at the office of the JOURNAL, not to his private house.

RS desiring reprints of their articles published in the BRITISH MEDICAL NAL, are requested to communicate beforehand with the Manager, 161A, ld, W.C.

SPONDENTS who wish notice to be taken of their communications, should enticate them with their names—of course not necessarily for publication.

SPONDENTS not answered, are requested to look to the Notices to Correlents of the following week.

HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of h if they will, on forwarding their Annual and other Reports, favour us *Duplicate Copies*.

NOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED

QUERIES.

ENDEMIC ANÆMIA.

MR. A. CUTFIELD (Government Medical Officer, Mackay, Queensland) asks if some one will kindly throw light on a number of cases that have occurred to him. He practises in Mackay, a small coast-town of North Queensland, of about 2,000 inhabitants. The whole district has about 3,000 whites and 6,000 Polynesians, and is the largest sugar growing district of Australia. The town is on a level alluvial plain, between the coast range and the sea, and is within the tropics (latitude 21° South). The place is generally healthy and entirely free from malaria, in the form of intermittent fever. On settling there, two years ago, he had to visit an orphanage, with about 60 children, situated fifteen miles from the town, on the sea coast. Of the children, about 1 in 3 were more or less anæmic. Twelve had proved fatal within two years. The first symptom was pallor, beyond which the case might never go; then came weakness, œdema of the hands and legs, cardiac murmurs, often obstinate vomiting, diarrhœa or œdema of the lungs; and some cases ended with dysenteric symptoms. Albumen is absent from the urine in the earlier stages, though frequently present when the case had lasted some time. Fresh cases continually occurred, and lately two died, who had not been in the place nine months, and entered strong and well. After careful examination, Mr. Cutfield found the food, clothing, water, and ventilation, all satisfactory. The institution is situated on a low sandy ridge, about a quarter of a mile from the sea, and surrounded on three sides by a swamp. The symptoms have appeared nowhere else in the district. If the disease be due to malaria, why has it manifested itself only in this form of anæmia, without a single case of intermittent or other fever?

Quinine appeared to do no good, but iron and arsenic seemed somewhat beneficial. After twelve months' agitation, the Government have removed the institution, which only consisted of a few wooden buildings. A continued fever (malarial?) is endemic in the district, and occasionally becomes very prevalent and virulent. The course of the severe cases exactly resembles enteric fever, and has the same complications; but the usual form is much milder, and lasts only ten to fourteen days. The temperature resembles enteric fever; but there is no rash, and when diarrhœa is present the stools are almost always very dark, though becoming lighter later in the disease. In about six fatal cases, where Mr. Cutfield has had the opportunity of making a *post mortem* examination, ulceration of the intestines has always been present, but chiefly in the cæcum and the ascending colon. Quinine has no specific effect, and intermittent fever is almost unknown. Dysentery is common, especially in the rainy season (January to March). Further north, on new land, intermittent and continued fevers, almost certainly malarial, are common. The fever described is also to be put down to the same cause; it is especially prevalent among new arrivals, though "old hands" frequently suffer, but not regularly, like people subject to ague.

ANSWERS.

DISEASES OF CHILDREN.

IN reply to "N. T." (April 24th) A Country Practitioner strongly recommends, as a most valuable and handy book, Dr. J. F. Goodhart's *Student's Guide to Diseases of Children* (J. and A. Churchill).

ERGOTINE FOR HYPODERMIC INJECTION.

IN reply to "M. N. G.," Dr. R. ROBERTSON (Ventnor) writes:—The preparation of ergotin for hypodermic use, which I am accustomed to employ, contains one grain of ergotine, and a fourth of a grain of hydrate of chloral in five minims. It is sufficiently stable, though it may spoil in time. (The chloral is merely preservative; and the formula is taken from a paper on "Treatment of Fibroid Tumour of the Uterus," by Professor Simpson, of Edinburgh, though he recommends a preparation a little stronger.) The quantity used in the first instance, is twenty minims of the preparation (four grains of ergotine); and ten or twenty minims more should be injected three or four minutes later if needed. No dilution is necessary. Unless injection be made deeply, into a mass of muscle, some local irritation always follows; but, with customary precautions against injecting air, etc., this irritation subsides in about forty-eight hours. I have never seen abscess, or serious after-trouble. The place for injection should be the largest and most convenient mass of muscle. The frequency of injection after the first dose, should depend on the recurrence of hæmorrhage, bearing in mind that exhaustion of the muscular coat of the blood-vessels will certainly follow, continually, maintained tetanic action which the ergotine induces; and that, therefore, the drug should be used to arrest profuse hæmorrhage, and not as a prophylactic against recurrence. When the hæmoptysis is arrested, an opiate should be given to quiet the patient, and, for the cough, ice to suck. Later, ten-drop doses of turpentine, in emulsion, every three, four, or six hours, answer well until expectoration of blood-stained sputa ceases. I have not used sclerotic acid; but ergotinine, though causing no local irritation, has not, in my hands, proved reliable.

J. R. I. writes: On July 26th, 1885, I received from Messrs. Brady and Martin, Newcastle-on-Tyne, a solution of ergotine for hypodermic use, containing eighteen grains to the ounce. I have used it twice since, with success, the last time on April 18th. In both cases I injected it into the arm (for epistaxis), and no local irritation followed.

FILLING VACCINE TUBES.

A BEGINNER.—The only way of filling a tube with lymph from a vaccinated arm, is to place one end of the tube in the bead of lymph which oozes from a punctured vesicle, and hold the tube horizontally or obliquely, so that the lymph rises by capillary attraction, and fills about half the tube. The lymph should then be allowed to gravitate to the centre of the tube, and the moist end of this held in a flame, until the carbon which first forms in the interior is burnt off and the end sealed, the lymph in the meantime being protected by the finger and thumb. The other end of the tube is then passed through the flame, so as to expand and drive out the air, and the tube sealed by melting its extremity.

GOUTY INFILTRATION OF PENIS.

G. W. B.—Presuming that "F.R.C.S." writes, in issue of April 17th, for advice as to treatment of the above, I may say that I was acquainted with an elderly gentleman, with so pronounced and hard an infiltration of similar character to that which "F.R.C.S." describes, that a distinguished Scotch surgeon looked on it as cancerous, and wished to remove the offending member. Nevertheless, it entirely disappeared under the prolonged use of full doses of iodide of potassium, given for another purpose.

T. D.—There is a misprint in the JOURNAL for March 20th (page 564, col. 2, line 31). "Aquæ ʒii" should be "Aquæ ʒii."

NOTES, LETTERS, ETC.

The Bartlett Case.

Mr. Alfred Leach (41, Charlwood Street, S.W.) writes:—Please accept my thanks for allowing me, last week, to clear myself of the imputations of Mr. Justice Wills, commented upon in your leading article of the previous week.

"M.D., F.R.C.P.," writing, last week (p. 858), deals, in a very able manner, with the main features of the Bartlett case. He finds grounds for believing in the platonic relations stated by Mrs. Bartlett to have subsisted between her and her husband; he accepts, as true, Mr. Dyson's statement that the gushing thanks of the deceased were tendered in return for an acknowledgment that he (Dyson) loved his, the deceased's, wife; and he is emphatic in expressing a belief in the absence of adulterous relations having existed between the two persons who stood together in the dock at the Old Bailey. To all of this, I cordially subscribe, and beg to congratulate "M.D., F.R.C.P.," upon the clearness of his judgment, and his ability in sifting evidence. I arrived at the same conclusions as himself, but then I had the assistance of far more ample opportunities. I must, however, respectfully, but firmly, differ from his opinion that the deceased was so degraded a creature as he suggests, and "an inveterate masturbator." In the lack of direct evidence in support of so grave and odious an accusation, I think it an unfair one to lay against my late eccentric patient; believing it to be an erroneous one, and at direct variance with disclosed facts, and with others that, for my part, will remain undisclosed, I feel moved, by a sense of deep commiseration, to enter this earnest and solemn protest against a cruel slur cast upon the memory of a dead man. The lips that could indignantly refute it are sealed for ever; many of the facts that would confute it are bound over to perpetual silence, and my ineptitude in the use of words furnishes but a weak denial to the accusation, and must fail to convince—to such even as read—how strongly my opinion sets against it.

In another part of his letter, "M.D., F.R.C.P.," hints (and rather broadly, too) at the likelihood of the deceased's wife having connived at suicide. This hint, if put into straightforward language, would be a well defined accusation of criminality, and, if unfounded, might rebound upon the accuser, under the law of libel, as a "criminal accusation." It was evidently written in haste, and I am sure the writer of it will thank me if I merely add to his own very reasonable argument against it these two suggestive remarks. Had the wife intended death, or any injury whatever, to result from the use of her chloroform, she would have taken the precaution to obtain it, through her agent, from more remote sources; or, in fact, she would have probably asked her husband to write for some himself. Again, had she connived at *feio de se*, she would hav left the bottle in bed with, or near to, the corpse, in order to render the theory of suicide at once obvious.

Far from denying the right of discussing these matters in the strictly medical papers, I think, with the writer I have had the honour to refer to, that it is highly desirable, in the public interest, that the medico-legal points, in a novel case, should be seriously and dispassionately worked out and thought over; but I am of opinion that each commentator should, in approaching so delicate a subject, guard himself against the danger of writing with anonymous haste, and protect himself from pitfalls by the ever present sense of weighty responsibility that the appending of a signature affords. I hope "M.D., F.R.C.P.," will recognise in what spirit, and with what motive, I have replied to his letter. In him, I recognise great ability and acumen in psychological matters; and it will be obvious to all that he can be generously liberal in his estimate of character, for he discovers in one of the actors in this drama religiousness and a conscientiousness that have escaped the notice of most other onlookers.

Cucaine and Sea-sickness.

Dr. Joseph Coats (Glasgow) writes:—There have been several communications in your paper as to the virtues of cucaine in sea-sickness. As I am rather liable to that complaint, and contemplated taking a voyage from Leith to Hamburg, I resolved to give this remedy a trial. I read in the Journal of February 27th, 1886, that Mr. Sumner had caused lozenges, each containing one-twelfth of a grain of cucaine hydrochlorate, to be made, with four of which, taken at intervals, he was able "to defy sea-sickness." I procured a box of lozenges called "Tabellæ cocainæ hydrochloratis," and each stamped "cocaine $\frac{1}{12}$ grn.," which, I presume, are the identical ones of Mr. Sumner. I thought that half a crown was a small sum to pay for an indefinite amount of relief from sea-sickness. Well, my wife and I began on the lozenges while on the deck of the steamer in Leith docks, about an hour before leaving, and we rejoiced in the prospect of an enjoyable voyage. The lozenges were undoubtedly active, as they produced a distinct numbing sensation in the fauces, but I should not call them highly palatable. We persevered with the lozenges, at intervals of about two or three hours, or in some cases shorter, till—till we became sick. It was not very stormy, but just a moderate toss, much as you always have in the North Sea, but, before my wife got downstairs to her berth, and after only five or six hours of the sea, she succumbed, and she inconsequently blamed the lozenges for having brought on the illness. In seven hours from leaving port, she had taken four lozenges. I persevered with the lozenges, and was able to continue them till next day, when I, also, was knocked over, after taking ten or twelve. We had an opportunity of making the control-experiment on the return voyage, when we did not resort to the lozenges. It is remarkable that our experience without the remedy was an almost exact repetition of that with it. My wife again succumbed on the first night out, and I held on till the next day, the weather, in both cases, being somewhat similar. I am sure that the cucaine had no effect whatever in warding off sea-sickness, and my wife asserts that it hastened it in her case, by the rather nauseating taste of the lozenges.

Removal of Foreign Bodies from the Ear.

Dr. J. Erskine (Glasgow) writes:—Neither Mr. Hutchinson nor Dr. Gramshaw insists on a careful preliminary examination of the meatus, under good illumination, in order to ascertain (1) whether a foreign body is present; (2) of what the foreign body consists; (3) the position it occupies with relation to the walls of the meatus; and (4) the presence or absence of swelling. The use of Mr. Hutchinson's wire-loop, the syringe, or any other instrument, should only be resorted to after these important facts have been ascertained. The nature of the case will indicate which instrument should be employed. Nothing ought to be done without continuous and steady illumination of the meatus, by means of a speculum and head-mirror. I think it is a dangerous and ineffectual method to grope in the dark, even with such a harmless and simple instrument as Mr. Hutchinson's, "turning it about," as he says, "until it is believed to have got behind the foreign body." I have had occasion to use Wilde's snare, for this purpose, with success, but I always took care to illuminate the meatus, and guide the loop of wire between the foreign body and the wall of the canal, wherever there chanced to be a chink or opening. While syringing is employed, the stream should be directed towards such an opening, so that the returning current may expel the foreign body. Both of these methods can only be adopted when the foreign body is not firmly jammed in the meatus, and does not occupy its entire lumen.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. E. White Wallis, London; Dr. Davies, Ebbw Vale; Dr. C. R. Illingworth, Clayton-le-Moors; Mr. E. Newell, Dublin; Mr. A. Chawner, Clay Cross; Mr. R. F. Sinclair, Belfast; Mr. H. F. White Caxton, Cambridge; M.D.; Dr. W. J. Kennedy, Kirkcaldy; Mr. Vincent Jackson, Wolverhampton; Mr. Robertson, Edinburgh; Mr. H. Harwood, Pendleton; Dr. Tatham, Manchester; Mr. J. Brewster, Bootle; Dr. E. S. Smith, Manchester; Mr. C. Soloman, Skirlaugh; Mr. S. Jebb-Scott, Wood Green; Dr. H. J. Hardwicke, Sheffield; Messrs. Cousens, Merry, and Co., London; Our Correspondent in Rome; Mr. J. Battersby, Dublin; Mr. J. Brendon Curgenven, London; Mr. Alfred Leach, London; Dr. A. Tucker Wise, London; Mr. Alex. Shannon, St. Mary's Cray; Our Dublin Correspondent; Dr. Idelson, Berne; Mr. A. G. Jeans, Liverpool; Mr. J. M. Wilson, Goole; Mr. J. H. Brown, Whitby; Dr. R. Harris, London; Mr. H. A. Thomson, Edinburgh; Mr. A. Porter, Madras; Dr. J. Hutchinson, Glasgow; Dr. J. Coats, Glasgow; Dr. Macleod, Beverley; The Secretary of the Faculty of Physicians and Surgeons, Glasgow; Mr. H. Sell, London; Mr. S. Snell, Sheffield; Dr. Danford Thomas, London; The Honorary Secretary of the Harveian Society of London; Our Aberdeen Correspondent; Dr. Dowse, London; Mr. D. Reid, Helensburgh; Mr. A. S. Foxwell, Birmingham; Mr. D W. Whitfield, London; Mr. A. G. R. Foulerton, Ryde; Dr. Edge, Manchester Dr. Drummond, Newcastle; Dr. T. M. Johnstone, Canterbury; Dr. Pritchard, London; Mr. W. Beevor, Woking; Mr. B. D. Taplin, Market Rasen; Dr. Duncan, Umballa, India; Dr. H. Bennett, London; Mr. S. A. K. Strahan, Berry Wood; Dr. Thin, London; Dr. S. Martin, London; Dr. Moore, Dublin; Dr. Richards, Birmingham; Mr. A. Jackson, Sheffield; Our Glasgow Correspondent; Dr. Saundby, Birmingham; Mr. Crosier, Newcastle-on-Tyne; An Old University Man; Messrs. C. Griffin and Co., London; Mr. J. Marchbank, Edinburgh; Dr. M. N. Gandevia, Bournemouth; Mr. E. Behnke, London; Mr. A. T. Watson, Liverpool; Mr. H. T. Manning, Salisbury; Mr. C. Roberts, London; Mr. G. C. Karop, London; Dr. Wolfenden, Burton-on-Trent; Dr. Prince, Great Bedwin.

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ABSTRACTS
OF THE
CARTWRIGHT LECTURES
ON CERTAIN PROBLEMS IN THE PHYSIOLOGY OF THE BLOOD-CORPUSCLES.

Delivered before the Association of the Alumni of the College of Physicians and Surgeons, New York, March 23rd, 1886.

By WILLIAM OSLER, M.D.,
Professor of Clinical Medicine in the University of Pennsylvania.

Lecture III.

The Relation of the Corpuscles to Coagulation and Thrombosis.

The White Corpuscles.—In his third lecture, Dr. Osler first gave an account of the part which the colourless corpuscles were supposed to play in the processes of coagulation and thrombosis. Buchanan, writing in 1831, had originated the view that the colourless corpuscles were concerned in these processes. He attributed the action of what he called washed blood-clot in inducing coagulation to the colourless blood-corpuscles included in the meshes, which, he said, acted as a sort of ferment, comparing the action to that of rennet. This view had been elaborated by Schmidt, of Dorpat, and his pupils; according to their teaching, the colourless corpuscles furnished the fibrino-plastin (or paraglobulin) and the ferment, while the third element, fibrinogen, existed in the blood-plasma. In yielding these two elements, the colourless corpuscles underwent destruction. Schmidt estimated that, in the plasma of the horse, seventy per cent. of the colourless corpuscles underwent destruction in the process of formation of fibrin. Dr. Osler shortly referred to certain experiments by Dr. Wooldridge, which tended to show that the leucocytes themselves formed the fibrin, perhaps even the entire mass; for the weight of the fibrin produced was the same as that of the leucocytes added, and the albumens in the plasma could be shown to have undergone no change.[1] Although the evidence in favour of the destruction of the colourless elements seemed conclusive, yet it was not possible, under the microscope, to demonstrate their participation in the process of coagulation. A study of the histogenesis of fibrin, as seen in the moist chamber, in the capillary tube, and on the ordinary slide, afforded no evidence in favour of the destruction of the colourless corpuscles, but, on the contrary, was directly opposed to this view. In a certain number of instances, the aggregations of blood-plaques had possibly been mistaken for colourless corpuscles.

Red Corpuscles.—The relation of the red corpuscles to coagulation was not regarded as very important; they played a more passive part. Vandois had supposed that the corpuscles underwent conversion into fibrin, but the appearances on which he founded that view might be accounted for on the supposition that the fibrin clotted about them under the influence of a ferment extruded by them.

Blood-plaques.—The relation of the blood-plaques to coagulation was particularly interesting. In the study of formation of fibrin, as seen under the microscope, it had long been noticed that the fibrin-filaments spread out as distinct rays from the minute aggregations which had been known as Schultze's granular masses. Schultze noticed these; as did also Ranvier, in 1873, who regarded them as centres of coagulation. That the fibrin set in a thick dense network about the plaques, was readily seen; but it could also be noticed, particularly if healthy blood were examined in which plaques were not very numerous, that the fibrin also appeared quite independently of the plaques. It formed as distinct little needle-shaped bodies, presenting an appearance not unlike that of crystals. That these crystal-like portions of fibrin appeared in regions of the field, quite apart from the blood-plaques, was well seen in studying the process of coagulation in the moist chamber. Although the fibrin-needles, when first formed, might appear in portions of the field unoccupied by blood-plaques, yet the network was usually most dense in their neighbourhood; and when the entire field was covered with fibrin-filaments, the disintegrated blood-plaques looked like centres from which the filaments radiated. The relation of the blood-plaques to coagulation, as examined experimentally, was even more interesting. If an ordinary ligature, partly teased out, were passed through the femoral vein of a dog, and allowed to remain for five or six minutes, or even less, the threads became coated with the plaques, as represented in Fig. 1; only a few white corpuscles would be entangled along with

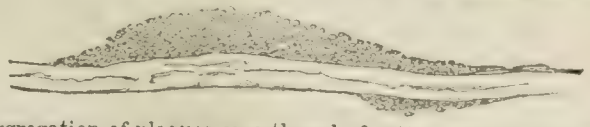


Fig. 1.—Aggregation of plaques on a thread of cotton passed through femoral vein of dog, and allowed to remain ten minutes.

them. The same coating of blood-plaques could be obtained by whipping freshly drawn blood with a brush of threads. If the threads, after having been whipped in the blood, were carefully washed in a saline solution, all the red corpuscles could be washed away, so that few, if any, were to be seen; if these threads were then dipped into a coagulable solution, clotting occurred. This experiment was performed by Bizzozero in 1882, and had been repeated by other observers. It had been urged against it, that possibly the threads beating about in the blood had absorbed some of the fibrin-ferment, but the chief elements in the clot were the blood-plaques; and the greater the number of the blood-plaques, the denser the coagulum.

Still more conclusive evidence of the participation of the blood-plaques was afforded by their relation to thrombi, as experimentally produced.

The femoral artery of a dog having been exposed, and a linear slit made in the vessel, the animal was allowed to bleed to death. This portion of the vessel was rapidly excised, and placed first in osmic acid, and then in alcohol. Section carefully cut through the part where the incision was made, showed the appearance seen in Fig. 2.

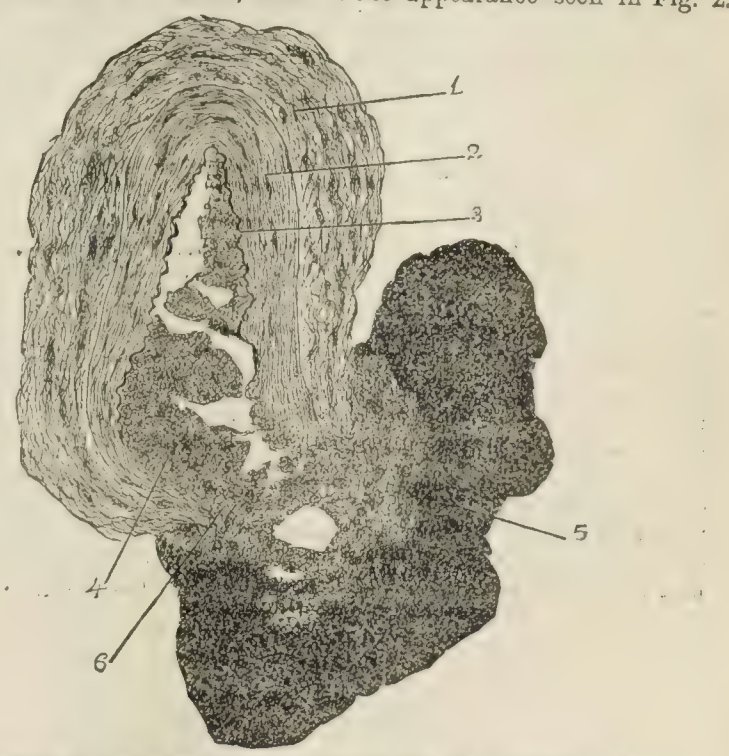


Fig. 2.—Section of femoral artery of dog at the site of longitudinal incision through which the animal bled to death. (Cut rather obliquely, low power.) 1, 2, 3, adventitia, media, and elastic lamina of intima; 4, aggregations of blood-plaques in enormous numbers about the intima and the cut margins of the vessel; 5, clot composed chiefly of red corpuscles; 6 ×, the cut end from which Fig. 3 was sketched.



Fig. 3.—End of small portion of adventitia indicated at × in Fig. 2. The fibres are everywhere surrounded with granular disintegrating plaques.

Occupying the cut edges, and filling in places the lumen of the vessel, a finely granular material was seen under a low power. Surrounding it, to the outside, as represented at (5) in the figure, there was a darker material, made up largely of dark clots composed of red blood-corpuscles. In the central portion, in immediate contact with the cut edges of the vessel, in contact with the elastic lamina of the intima, and occupying the interstices of the ragged surfaces, were the blood-

[1] Wooldridge, *Proc. Roy. Soc.*, 1881. He would seem to have materially modified his views since that date: see a leading article in the BRITISH MEDICAL JOURNAL, April 24th, 1886, page 789.

plaques. This was so stated by Bizzozero in 1882, and it had been confirmed in an elaborate investigation from the laboratory of Langhans (Lubnitzky, *Archiv für exp. Pathol. und Pharm.*, 1883), in Berne. Dr. Osler's observations were in harmony with these; the plaques, then, were the elements which first settled on the edges of a wounded vessel, and which formed the basis of the thrombus.

Fig. 3 represented the end of a portion of the adventitia indicated by a cross (×) in Fig. 2. The sketch showed the blood-plaques in a condition of granular disintegration; but under a high power the outlines could be distinctly defined, and anyone with a knowledge of these elements and of the changes they underwent, had no difficulty in recognising them. If the cut ends of the vessel were examined when fresh, in osmic acid or Pacini's fluid, the elements were still more clearly seen, and were readily determined to be identical with those in the circulating blood and in the granule masses. The elaborate investigations of Eberth, published in the January number of Virchow's *Archiv*, 1886, clearly demonstrated that the plaques were the first elements to settle and lodge on the lacerated portion of the vessel, or on a portion of vessel destroyed by acid or by caustic.

White Thrombi.—The relation which the blood-plaques bore to the so-called white thrombi was particularly interesting. Zahn (Virchow's *Archiv*, 1862) appeared to prove, by his observations, that white thrombi were composed exclusively of colourless corpuscles; and the current idea was that the colourless corpuscles adhered to a lacerated portion of a vessel, underwent disintegration, became granular, and formed in this way a white thrombus. Bizzozero, Hayem, and Eberth had shown, pretty conclusively, that if a needle were passed across a vessel in the omentum, or in the mesentery, so as to injure it, the first elements which were collected at the site of the injury were not the colourless corpuscles, or the red corpuscles, but the blood-plaques, which formed distinctly aggregated masses (white thrombi) and eventually made up the chief bulk of the thrombus, which formed at the seat of injury.



Fig. 4.—Plaques from thin clot on warty endocarditis.

A study of white thrombi, as met with in man, led to the same conclusion. These structures had been long recognised, and had been supposed to be made up largely of colourless corpuscles. They were found on atheromatous ulcers, forming thrombi in the femoral veins, in the auricles and ventricles, on the valves in endocarditis, and as the lining of aneurysmal sacs. The examination of the superficial part of a white thrombus in osmic acid, Pacini's fluid, or even salt solution, revealed the fact that it was composed of blood-plaques, in closest contact with the blood-column. In the peripheral part, where they had not undergone disintegration, such thrombi were made up of small circular disk-like elements, which anyone familiar with the blood-plaques would readily recognise as such. Fig. 5 represents



Fig. 5.—White thrombi, composed almost entirely of blood-plaques. Abdominal aorta; woman dead of cancer of the stomach. (From specimen in Museum] McGil Medical Faculty, Montreal.)

three white thrombi in the aorta, immediately above the bifurcation, from a case of cancer of the stomach. They were greyish-white in colour, soft, and the elements of which they were composed are shown at Fig. 6. There could be no doubt as to their nature; they were



Fig. 6.—Plaques from specimens illustrated at Fig. 5.

blood-plaques, presenting the circular appearance, and on profile the narrow linear aspect of these bodies. This was the first specimen in which Dr. Osler was able to demonstrate that the white thrombi were made up of the blood-plaques. Since then many specimens had been observed, particularly in connection with vegetations on the valves of the heart, the thrombi in aneurysms, and upon atheromatous ulcers.

In the deeper parts of the white thrombi, the blood-plaques were found to be disintegrated; but, in the superficial, they were distinct, and easily demonstrated.

The soft, greyish-white, curvilinear elevations seen on the lining membrane of an aneurysm (Fig. 7) were found to be composed of circular disc-like blood-plaques.

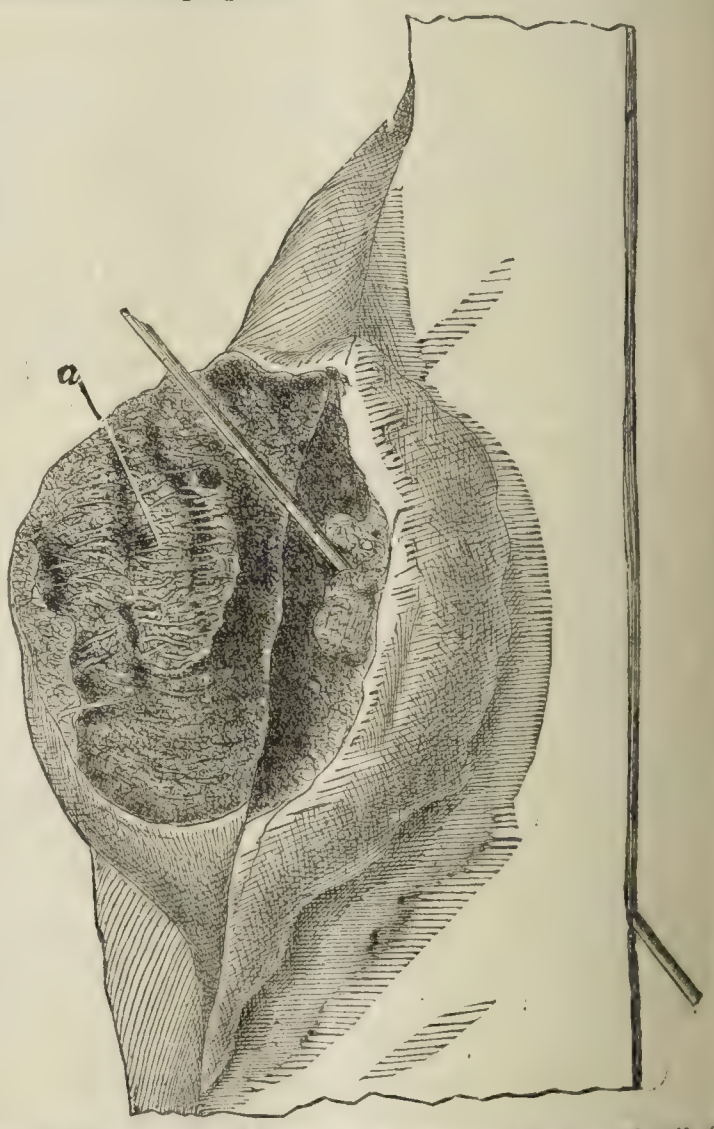


Fig. 7.—Small aneurysm of thoracic aorta, showing the internal wall of the sac covered with numerous curvilinear elevations, greyish-white in colour, and composed of blood-plaques (Museum of McGill Medical Faculty).

Eberth had put forward an explanation of the development of white thrombi. In the rapidly circulating blood, as seen in the mesentery or omentum of the guinea-pig or rabbit, the still layer, the peripheral portion contained no blood-plaques, and only occasionally a leucocyte; the corpuscles were separated from the wall of the blood-vessel by a distinct tube of plasma. When the circulation became slower, the plaques tended to collect at the periphery, and to become aggregated into groups at any point of the vessel which had been injured. Injury alone was not sufficient to cause the formation of these thrombi, as was well shown by the fact that atheromatous ulcers and roughened valves were often free from them.

Dr. Osler contended that the white thrombi were composed chiefly of plaques, and that the colourless corpuscles played an altogether

asignificant part in their formation. The further development of the hrombi resulted from the disintegration of the plaques. A granular or troma-fibrin (Landois), and a fibrillar or plasma-fibrin, must be recog-ised. The former, which was identical with the peculiar meta-orphosis of cells to which Weigert applied the term coagulation-ecrosis, was the process which occurred in the white thrombi; their ief mass was made up of a granular matrix, in which the outlines f the plaques had ceased to be visible. The central softening of a hite thrombus was a consequence of the disintegration and liquefaction f the plaques.

The whole question required to be studied again in the light of ese new observations on the connection of the blood-plaques with rombi, particularly the relation of the white and mixed thrombi, d the mode of formation of the clot in aneurysms. Dr. Osler felt sured of the truth of the statements here made regarding the con-ction of the plaques with thrombosis, from careful observation on e structure of the white thrombi (1) on atheromatous ulcers, (2) on e valves of the heart, (3) in aneurysms, and (4) in thrombi of the ins. Though he had not lately had an opportunity of examining "globular vegetation" of an auricle or ventricle, he ventured to ert that they were composed originally of similar structures.

A LECTURE
ON
A SOURCE OF UREA TOO LITTLE RECOGNISED.

Delivered at the College of Medicine, Newcastle-on-Tyne.

By THOMAS OLIVER, M.D., M.R.C.P.Lond.,
sician to the Infirmary, Newcastle-on-Tyne, and Lecturer on Practical Physiology, University of Durham College of Medicine.

our last lecture, we dealt with the subject of the acidity of urine, l its causes. We saw that, while the reaction of urine was normally l, there were yet certain periods of the day during which it would found alkaline. During the digestion of a meal—more particularly ards the termination of that process—it is the rule to find the urine aline, a reaction which I sought to explain, not so much by the oval from the blood of elements necessary to form the gastric juice, ch is acid, as by the entrance into the blood of a wave of alkaline erial—the absorbed products of gastro-duodenal digestion; and, in port of this latter view, is the fact that the urine gradually increases kalinity for the first three hours after meals, and when the tide again is in favour of acidity. In such a case, the alkaline reaction de-ls upon the presence of fixed alkalies, such as potass and soda, and ntirely different from the alkalescence of putrescent urine, to the existence of volatile ammonia. And I also drew your atten-to this fact, that, while admitting that the large and highly or-sed cells in the upper portion of the convoluted tubules assisted in removal of urea circulating preformed in the blood of the branches ie renal artery—for the knowledge of which we are indebted to the riments of Heidenhain—yet, as urea is a very soluble agent, pass-airly readily, without pressure, through the various chambers of alyser, I am inclined to believe that the greater part of it is ezed through the walls of the glomeruli of Malpighi, along with vater of the urine, and such soluble salts as chlorides. Urea re-s, in my opinion, no specially organised cell to remove it from blood, as is shown by its presence in the serous effusions of pleurisy n ascites, and by the presence of urea, in the form of crystalline s, on the skin of the feet and legs in certain cases of Bright's se. The function which these cells in the convoluted tubules per-s is, in my opinion, this. Surrounding these tubules are the laries, formed by the breaking up of the efferent vessels of the eruli. We have, on the one side of these cells, alkaline blood lating, which, in its passage through the glomeruli, has lost r, urea, and certain soluble salts. We know that the fluid n comes from the glomeruli is alkaline, for it is simply a filtrate the blood, and yet, no sooner does this fluid begin to pass down centre of the tubuli uriniferi than it becomes acid. Clearly, fore, the seat of the formation of that which causes the acid re-n of urine is the protoplasm of the cells lining the convoluted es. The acidity of the urine, however, depends, not upon the presence of a free acid, but upon that of the acid phosphate of soda. The blood is alkaline, owing to the disodic phosphate which it contains. According to Flint, phosphates exist in the fluids of the body in three different conditions. There is, first, the basic phosphate of soda. It possesses three atoms of the base, and has an alkaline reaction. In contact with carbonic acid, the salt loses one atom of the base, forming sodium carbonate and neutral phosphate, which is feebly alkaline. This neutral phosphate, in contact with uric acid, loses one atom of the base, becoming urate of soda and the acid phosphate of soda. It is in these cells that uric acid unites with the neutral phosphate of soda, forming the acid phosphate. This escapes from the cells into the interior of the tubules, where it is washed downwards by the fluid which has been pressed through the glomeruli, and, intimately mingling with it, changes its reaction from alkaline to acid.

While urea is thus, in my opinion, very easily removed by the kidneys from the blood, our task is more difficult when we come to inquire into its source or sources. Urea is no longer regarded as a special product of the kidney; it does not stand related to the kidney as bile does to the liver; it is not formed in, but simply removed by, the kidneys. The chemistry of urea is so complex, and its source in the body so recondite, that we cannot speak dogmatically upon the subject; and yet I must confess that the sources of urea described in the text-books have never seemed to me sufficient. Physiologists are agreed upon this point, that the amount of urea increases when the amount of proteid matter taken in the food increases. Generally speaking, this is true. Regarded as the end-product of the decomposition of proteids in the body, urea may have many antecedents. Considering that the muscular system constitutes a very large part of the animal economy, and knowing, as we do, how active are the changes going on in muscle, it seems fair to presume that the kreatin of muscle may, when it has passed into the blood, be transformed into urea by some of the tissues or organs. Kreatin, however, is eliminated by the kidney in the form of kreatinin; so that, unless this nitrogenous product be transformed into urea in some other organ, the kidney itself does very little to bring about that change. Experiments on man and animals have shown that muscular exertion has been followed by a slight increase in the amount of urea excreted. After all, it should be remembered that this increase is very slight. The experiments of Fick and Wislicenus, conducted upon themselves during their ascent and descent of the Faulhorn, showed that, when no albuminous food was taken, the amount of urea in the urine was really decreased. A food-source of urea having been, in this way, eliminated, it looks as though muscular exertion caused little, if any, perceptible disintegration of proper muscular-tissue; or, at any rate, that kreatin, a product of muscular metabolism, was not a source of urea. Power, in his *Elements of Physiology*, p. 164, says that it is an error to assume that muscular tissue, if wasted at all, should cause an immediate increase in the quantity of urea in the urine; for, on the ground of the possibility of the decomposition of the muscle into urea, the change may not be immediate. I take it, that the evidence of experiments, carried out for several days, for such a time, at least, as would suffice for the conversion of midway nitrogenous products into urea, would go far towards a settlement of this question. Professor Haughton found that, with a daily walk of five miles for five consecutive days, the quantity of urea eliminated was 501.28 grains (500 grains is considered the normal); while, with a daily walk of twenty miles, other conditions remaining the same, the amount of urea discharged was 501.16 grains, a trifle less than before. In this case, there was no increase in the amount of urea after muscular exertion carried on for five days. It is true that, in Pavy's experiments on Weston, the pedestrian, there was an excess of nitrogen eliminated over that which was taken in the food; but, as it is admitted that the nitrogenous waste, during the walking period, insufficently accounted for the mechanical work done, I am inclined to think that, as Weston broke down, on the morning of the fourth day, from utter exhaustion, there must have been some other cause for exhaustion on the one hand, and increased amount of urea on the other, than muscular exertion.

The close relationship which exists between the products of pancreatico-duodenal digestion and urea, and also between it and other nitrogenous products absorbed into the blood, such as uric acid, alloxan, and hypoxanthin (for, if these latter be injected into the blood, they appear in the urine as urea), compels us to acknowledge nitrogenous food as a source of urea, and these other substances as in all probability antecedents of urea. For some months past, I have been carrying out a series of experiments on urine—partly clinical and partly physiological—and I have been struck by two things; the first is that, while admitting that the specific gravity of urine is a gauge of

the urea present in it, the higher the specific gravity within limits, the greater the amount of urea, yet this is not absolutely correct; and the second is that, while the digestion of nitrogenous food is a great source of urea, it is not always so; and particularly is this noticeable where the liver is at fault. In one of my cases of splenic and hepatic disease, watched for several months, a greater amount of urea was thrown off by the kidneys when the patient was upon milk than meat diet. In fact, time after time, the substitution of animal food for milk was always followed by a diminution in the amount of urea, and by increased gastro-intestinal disturbance on the part of the patient. In health, however, it may be said that increase of nitrogen in the food is always followed by a corresponding rise in the urea excreted. Another thing which struck me is this, that the colour of urine is a better indication of the amount of urea present than the specific gravity. A deep amber-coloured urine I have always found to contain a large amount of urea, a lighter amber-coloured urine less, and a straw-coloured urine less urea still; and, knowing that the colouring matter of urine—urobilin—is a derivative of the biliary colouring matter bilirubin, and this again a derivative of hæmoglobin, I am in a position to show you that the blood itself, or rather its hæmoglobin, is one of the sources of urea. Besides forming bile and glycogen, the liver, in some way or other, causes a disintegration of red blood-cells; it is, in this sense, their grave. Bile-pigment, as already mentioned, is formed from hæmoglobin. The hepatic vein contains fewer red corpuscles than the blood of the portal vein. Well, since red blood-corpuscles are broken up in the liver, and the hæmoglobin goes to form bile-colouring matter; and that, again, urobilin—the colouring matter of the urine—what becomes of the rest of the protoplasm of the blood-cells so acted upon by the liver? I am strongly convinced that it is converted into urea to a very large extent. A healthy man eliminates about 500 grains of urea daily. The urine of such a man will be found of a pretty deep amber colour, and it will have a specific gravity ranging from 1015 to 1025. That the specific gravity of itself may be shown to have nothing to do with the amount of urea present, is shown by comparing the urine of a diabetic patient with that of a person in health. The average percentage of urea in healthy urine is 2.5 to 3.5; but, in diabetes, though the specific gravity may be 1060, I have not noticed more than .5 per cent. of urea in the urine. This, of course, is based upon the amount of urine passed in diabetes, which is excessive, so that, when the quantities passed in health and diabetes are compared, there is no diminution, but an excess, of urea. The simple percentage, however, is diminished. In diabetes, you have a pale greenish urine, containing a deficiency of colouring matter, and with that a deficiency of urea per cent. Or take a case of anæmia; here you have pale-coloured urine, with, it is true, a lower specific gravity than in health. In such, urea is deficient. It appears to me that the deficiency of urea is, supposing the kidneys to be sound and able to throw it off, always traceable either to a permanent diminution in the number of red blood-cells, as in anæmia and cachexia, or that it depends upon some imperfect transforming power on the part of the hepatic cells. It is from this latter point that I would supplement the opinion expressed by Sir Andrew Clark, in the interesting and valuable lecture which he gave on Renal Inadequacy, three years ago (BRITISH MEDICAL JOURNAL, February, 1883). Patients, the subjects of this affection, pass habitually, we are told, urine of low specific gravity, deficient in urea. You may give these people any amount of rich nitrogenous food you please, only to find that you tend to produce a still further diminution in the quantity of urine, and a further aggravation of the illness. The fault here is as much in the liver as the kidneys; the latter simply throw off, so far as water and urea are concerned, regulated by variations of pressure, what is brought to them. And in support of the fact that the kidneys are, in all probability, healthy, we are told by Sir Andrew Clark that the amount of uric acid is normal. This, as a very insoluble constituent of the urine, requires a special mode of elimination by the renal cells, and is not filtered off, as, I believe, urea to a great extent is.

Landois states (and the opinion is pretty general in the profession) that the amount of urea is increased by a rapid breaking up of the nitrogenous tissues of the body, that this breaking up is increased by a diminution of oxygen, and that, in fever, generally there is an increased elimination of urea. My observations do not support this *in toto*. I know of no disease which causes such a rapid diminution of the body-weight, no illness in which emaciation is so quickly progressive, nor one in which a high temperature is so constantly present, as phthisis pulmonalis; and yet, while you have rapid emaciation and a high temperature going on week after week—the very conditions favourable, as Landois would tell us—there is really no increase, but a most notable decrease, in the amount of urea eliminated. This defective elimination of urea lasts for a longer or a shorter period—months frequently—with, it is true, the appetite greatly diminished, a point which enables us to deal more exclusively, therefore, with the waste-tissue theory; and it will only be just as the terminal stage of the illness is reached, that the urine will be found not necessarily diminished in quantity or increased in specific gravity (in fact, I have frequently noticed a reduction in the specific gravity), and yet, with this, there will be noticed a fairly rapid rise in the amount of urea excreted.

I have noticed, time after time, during the course of phthisis pulmonalis, attended by high temperature and rapid emaciation, and with a complete absence of diarrhœa to complicate the investigation or the existence of any other source whereby urea might be vicariously eliminated save the sputum, that, for a period, the percentage of urea has been low, and that, when an increase took place, the colour of the urine correspondingly deepened; that the patient became, in addition to the loss of flesh, markedly paler day by day; and that a fatal termination was approaching. A patient, we shall say, has been ill with phthisis for a few months; there has been a fairly high temperature, and emaciation has been taking place; you examine his blood, and you find there is about the normal number of blood-cells in a cubic millimètre (5,000,000). At this stage, urea is not increased in the urine; more probably, it is diminished. A few weeks or months later, you find that the urea is increased in the urine; but, at the same time, you notice that your patient has become distinctly paler, and, on examination of the blood, you notice a marked reduction in the number of red blood-cells, only 3,500,000, or thereabouts, being found in a cubic millimètre. In such cases, no urea was formed out of the products of tissue-disintegration, the opportunities for so doing were most favourable were this the source; but towards the end of the illness, when, from some cause or other, the blood-cells were being rapidly disintegrated in the liver, as was shown by the deepened tint of the urine, depending upon the presence of a greater amount of urobilin, the urea rose accordingly. Nor is it the rise of temperature which explains the increased elimination of urea in fevers. It is admitted that, before the thermometer registers a rise of temperature in the early stage of fever, an examination of the urine always shows a very marked and sudden increase in the amount of urea eliminated; nay, more than this, that, during the height of the fever, the urea diminishes, to rise again during convalescence. This has sometimes led me to consider, whether the rigor and the period immediately preceding the rise of temperature in fever, may not be associated with a temporary increased disintegration of blood-cells; as if a wave of blood-cells had been suddenly engulfed, followed by disturbed hepatic function.

The amount of urea in urine is diminished when the blood has become permanently impoverished. I have, in another paper, drawn attention to the fact that, in lead-poisoning, no sooner is the peculiar anæmic condition developed in these cases, than the elimination of urea falls. In every case of anæmia, not only is the urine wanting in colouring-matter, but also in urea.

It is said that, in cancer, urea is increased. This applies to the early stage, when the cachexia is forming, and red blood-corpuscles are being rapidly disintegrated; for, in the fully developed cachectic condition, the urine becomes paler, and the amount of urea diminishes. There is one highly coloured condition of the urine which calls for some remark. I have frequently found a jaundiced urine to be one which did not contain an excess of urea. In many instances, it has contained less than the normal. And here I would say that this is the only kind of urine to which colour does not apply as a rough test of the amount of urea present; and the same may be said of urine accidentally coloured by medicines, etc.

In one of my cases of phosphorus-poisoning, the percentage of urea for the first five days was 1.99; but, when the patient became jaundiced, the amount of urine passed remaining about the same, the percentage of urea fell to 1.08; in a few days later still, the jaundice being very persistent, it even sank to 0.6 per cent., to increase again as the patient improved, and the urine ceased to give the reaction of bile. I have noticed a similar deficiency in the urine of patients suffering from jaundice, due to catarrh of the biliary ducts. In such cases, one can only suppose that, owing to the overfilling of the biliary canaliculi by bile (some of which is absorbed into the blood), the function of the hepatic cells has been, for the time being, disturbed; blood-cells have not been acted upon and transformed into urea.

I believe the liver to be the chief organ concerned in the formation of urea, and that, while urea may be formed within it out of leucin and tyrosin—the products of the pancreatic digestion of proteids—I am more than convinced that a great part of it is formed out of the red blood-corpuscles, the colouring matter of which goes to form bili-

rubin, and afterwards urobilin, and the greater part of the rest of the corpuscles to form urea.

Since delivering this lecture to my class at the College of Medicine, I have read, with very great interest and profit, the paper on urea by Dr. Noel Paton, which appeared in this JOURNAL during February. The clinical investigations, which I have made so fully, confirm the results arrived at by that gentleman, who, by experiments carried out in the larger and well equipped laboratories of the University of Edinburgh, has proved the close relationship which exists between urea and the secretion of bile.

Dr. Paton is, I believe, about to show experimentally how the blood-corpuscles and urea stand related to each other. It is in support of the same view, arrived at by clinical observation, that I have forwarded this paper to the BRITISH MEDICAL JOURNAL.

ONE HUNDRED AND THIRTY-NINE CONSECUTIVE OVARIOTOMIES PERFORMED BETWEEN JANUARY 1ST, 1884, AND DECEMBER 31ST, 1885, WITHOUT A DEATH.

Read before the Birmingham and Midland Counties Branch.

BY LAWSON TAIT, F.R.C.S.,
President of the British Gynæcological Society.

FROM our recent experience in ovariotomy, it would almost appear as if the time had arrived when we had the last word to say about it, and had now merely to refer to it occasionally in valedictory or inaugural addresses as one of the marvels of the nineteenth century. Certainly nothing more astonishing can be indicated than the advance during the last eight years, at the beginning of which period Sir Spencer Wells left ovariotomy with a mortality of 25 per cent., and the position it has now reached, having a mere fractional mortality, due to influences of a purely accidental kind. By accidental, I mean such influences as are not inherent to the operation itself, influences which may be avoidable, it is true, and ought to be avoided, but which may fairly be classed as outside risk. I do not see, for instance, how tetanus can be avoided; and, therefore, its occasional fatal influence in ovariotomy is sure to be felt. So also death, either directly or indirectly from the effects of the anæsthetic, will surely come occasionally forward as an unavoidable result. But all the truly intrinsic causes of death have been banished, and I wonder very much if this is true of any other grave operation in surgery.

We speak of the mortality of certain operations, but I doubt very much if we have arrived at any notion of what the mortality of any other operation really is; that is, the mortality due to the operation pure and simple, not to causes which are avoidable, as unsanitary surroundings, or bad surgery; not the mortality of this or that hospital, this or the other operator, but the lowest mortality which can be, and, therefore, that which ought to be, achieved.

This success in abdominal surgery has been the basis of a large number of lessons applicable within its own range, and not without benefit to other fields. It has, for instance, absolutely destroyed our fear of the peritoneum, and has justified our opening that sacred sac very much as we open our pockets. It has revolutionised our notions of pathology in some directions, and has confirmed them in others; and it, above all things, overwhelmed with confusion the utterances of therapeutic dogmatists. Baker Brown, after a series of disasters, uttered the truism, "It's the peritonitis that beats us." Now, we beat the peritonitis. On the slightest indication of peritonitis after an ovariotomy, we give a rapidly acting purgative, it matters not what; the patient's bowels are moved, and the peritonitis disappears. This practice I introduced in 1875, and it is now almost uniformly adopted. How different from the views we had drilled into us years ago, that opium was the sheet-anchor of the practitioner in all abdominal troubles, when I say now that all opiates are forbidden in my practice, unless they be required to ease a dying patient out of the world.

Peritonitis was formerly regarded as a bar to any abdominal operation, but, thanks to the courage of Keith and Wiltshire, it is now the most trenchant argument for immediately opening the abdomen. Let me briefly recite the subsequent history of one of the cases on that list (101), a young girl, only 14, from whom I removed a large dermoma of the left ovary on July 18th, 1884.

On March 4th of this year, I received a letter from Dr. Pearson, of Kingswinford, who placed her under my care, to say that he feared something had gone wrong with the other ovary. I telegraphed to him to bring her over at once, and, when I admitted her to my private hospital, there was abundant evidence to prove that Dr. Pearson was right. The pelvis was occupied by a firm doughy swelling pushing the uterus forward and upwards, and this mass could be felt above the pelvis. To the right side, another similar mass could be felt running up and over the right kidney. It was not clear whether these masses were or were not connected, and they both felt to me like soft cancer, an idea justified by the patient's age. What history could be obtained from the friends was not clear, and, therefore, I recommended that the abdomen should be at once reopened. After some demur, this was agreed to by the parents, and it is fortunate for the child that they gave their consent. I operated on March 5th, and found two large encysted peritoneal abscesses, containing about three pints of the most stinking pus I ever encountered. Neither of the cavities communicated, so far as I could discover, with the general sac of the peritoneum, nor did they communicate with one another, and I could detect no other fluid or mass in the abdomen. But, in a few days, it became evident that I had encountered and had overcome only half the difficulty. Whether from the lower cavities the rest of the peritoneum became infected, or whether the suppuration of the whole of the sac was the original scheme, I cannot tell, but the whole of the rest of the sac did suppurate, and I drained out of it about seven pints (eleven pints in all) of horrible stuff; and the child is now practically well.

The conclusion is now completely established in my own mind, and receives confirmation every month: "When in doubt, open the abdomen;" the doubt being one that my patient will not recover if left alone. In the case I have just narrated—and it might be supplemented by many other cases just as striking and quite as successful—I might have concluded that the second growth was a mass of soft cancer, and have sent the poor child home to die from my mistake. If it had proved to be cancer on exploration, the chances are infinitely small that I should have done any harm; and now, as the matter stands, I have achieved a brilliant success.

This is the doctrine which I want to preach, for the support of which I have recently had the powerful aid of Dr. Wade; and not all the foolish outcries about the laparotomy epidemic, raised either at Liverpool or elsewhere, or any other kind of opposition, is in the least likely to hinder its propagation. I have not spoken to Dr. Wade precisely on the subject, but I strongly suspect that a powerful and moving influence in his mind, towards the adoption of this view, is a case which was, to me, a revelation and a lesson of the most terrible kind. It was, I think I may say, the initiation of this new course of practice; for I have never since allowed a case of peritonitis to die without at least proposing abdominal section as the proper course.

Many years ago, a lady of high social rank, who honoured me by her friendship, and to whom I was deeply attached, had performed on her by me a trifling uterine operation, which had been done without ill effect many times before. It was the insertion of a sulphate of zinc pellet into the uterus, for the arrest of extreme menorrhagia due to a myoma. She died about fourteen days after, suffering from many symptoms which suggested peritonitis, save that her pulse and temperature always contraindicated this conclusion. Dr. Wade saw her just before the end of her illness. At the *post mortem* examination, we found a large quantity of pus, all of which could have been cleared out by an abdominal section and drainage.

Three great lessons were taught me by this case: first, that tinkering with the inside of a uterus occupied by a myoma is not satisfactory, and more dangerous than removing the appendages; second, that fatal peritonitis may occur with a low pulse and a low temperature—a fact I did not know before that; third, that suppurative peritonitis might be treated like any other abscess. And from all these lessons I have most abundantly profited.

The absolute want of fear of the peritoneum, which has grown out of our success as a matter of necessity, has brought about many other startling changes. We are now dignified by the name of the "Birmingham School of Gynæcology," and our views are treated with respect; but it is not many years since language of a totally different kind was levelled against my colleague, Dr. Savage, and myself, and many blows had to be received, and not a few were given back. But the incredulity which was so freely expressed in this country by people who would not come to see for themselves, was speedily overcome by the evidence of those who came in large numbers from America, and finally by a missionary tour which I undertook in the States, demonstrating on material freely supplied to me there, and to audiences neither stupid nor prejudiced, many of the most important facts

Table of 139 cases of Ovariotomy performed between January 1st, 1884, and December 31st, 1885, without a death.

No.	Residence.	Medical Attendant.	Age.	Married or Single.	Disease.	Operation.	Date.
							1884.
1	Tamworth	Dr. Fausset	26	Married	Cystoma	left ovary	January 3rd.
2	Newport, (Monmouth)	Dr. James	56	,,	Cystoma	right ovary	,, 5th.
3	Birmingham	Dr. Smith	37	,,	Parovarian cyst ..	removed	,, 7th.
4	Birmingham	L. T.	53	,,	Cystoma	right ovary	,, 10th.
5	Smethwick	Dr. Annie Clark ..	32	,,	Cystoma	right ovary	,, 12th.
6	Birmingham	L. T.	55	,,	Cystoma	right ovary	,, 15th.
7	Stafford	Mr. Weston	31	Single	Dermoid cyst ..	right ovary	,, 18th.
8	Hexham	Dr. Farmer	30	Married	Abscess of ovary ..	right ovary	,, 18th.
9	Oswestry	Dr. Beresford	54	,,	Parovarian cyst ..	removed	,, 19th.
10	Birmingham	L. T.	40	,,	Cystoma	right ovary	February 2nd.
11	Birmingham	Sir James Sawyer ..	59	,,	Cystoma	right ovary	,, 14th.
12	Bilston	Dr. Larkin	35	,,	Cystoma	left ovary	,, 14th.
13	Rugby	Dr. T. Duke	33	Single	Cystoma	both ovaries	,, 28th.
14	Birmingham	Dr. Simon	30	Married	Cystoma	left ovary	March 10th.
15	Birmingham	Dr. Craig	37	,,	Parovarian cyst ..	removed	,, 12th.
16	Birmingham	L. T.	32	Single	Parovarian cyst ..	removed	,, 13th.
17	Birmingham	Mr. Newton	34	Married	Cystoma	right ovary	,, 13th.
18	Aston	Mr. Hopkins	38	,,	Cystoma	both ovaries	,, 20th.
19	Luton	Dr. Evans	18	Single	Parovarian cyst ..	removed	,, 21st.
20	Birmingham	Mr. Pugh	27	,,	Cystoma	left ovary	,, 26th.
21	Birmingham	Dr. Ward	29	Married	Cystoma	both ovaries	,, 27th.
22	Birmingham	Dr. Hugh Thomas ..	45	,,	Cystoma	right ovary	April 3rd.
23	Wolverhampton ..	L. T.	63	,,	Cystoma	left ovary	,, 10th.
24	Birmingham	Mr. Briggs	22	,,	Cystoma	right ovary	,, 26th (See note next page)
25	Birmingham	Mr. Euan Smith ..	35	,,	Parovarian cyst ..	removed	May 3rd. ,, ,,
26	Birmingham	Mr. Harmar	22	Single	Cystoma	both ovaries	,, 3rd.
27	Birmingham	Mr. Palmer	42	Married	Cystoma	right ovary	,, 6th.
28	Derby	Dr. Bedford	57	,,	Cystoma	left ovary	,, 8th.
29	Kidderminster	Dr. Coulbourn	27	Single	Cystoma	left ovary	,, 9th.
30	Manchester	Dr. Handford	23	,,	Cystoma	left ovary	,, 12th.
31	Birmingham	Mr. F. Hopkins ..	40	Married	Cystoma	right ovary	,, 13th. ,, ,,
32	West Bromwich ..	L. T.	51	,,	Cystoma	right ovary	,, 13th.
33	Birmingham	L. T.	43	,,	Cystoma	left ovary	,, 16th.
34	Leamington	Dr. Wyer	29	Single	Cystoma	both ovaries	,, 24th.
35	Llantrissant	Dr. Davies	48	Married	Parovarian cyst ..	removed right side ..	,, 26th. ,, ,,
36	Bridgnorth	Dr. Thurstield	46	,,	Cystoma	both ovaries	,, 26th.
37	Aston	Mr. Whitcombe	34	Single	Parovarian cyst ..	removed right side ..	,, 27th. ,, ,,
38	Ross	Mr. Norman	44	Married	Cystoma	both ovaries	June 3rd.
39	Walsall	Dr. Sharp	42	,,	Cystoma	both ovaries	,, 12th.
40	Birmingham	L. T.	36	,,	Cystoma	both ovaries	,, 16th.
41	Leamington	Dr. Smith	64	,,	Cystoma	both ovaries	,, 20th.
42	Pershore	L. T.	28	Single	Cystoma	left ovary	,, 21st.
43	Birmingham	L. T.	22	,,	Cystoma	both ovaries	,, 27th.
44	Oswestry	Dr. Aylmer Lewis ..	33	Married	Cystoma	both ovaries	,, 29th.
45	Birmingham	L. T.	42	,,	Cystoma	both ovaries	July 2nd.
46	Coventry	Dr. Fenton	29	Single	Parovarian cyst ..	removed	,, 3rd.
47	Leamington	Mr. Morris	27	Married	Cystoma	right ovary	,, 4th.
48	Birmingham	Mr. Gilbert Smith ..	43	,,	Cystoma	both ovaries	,, 7th.
49	Wrexham	Dr. Davies	20	Single	Cystoma	right ovary	,, 21st.
50	Stonehouse	Dr. Walters	51	Married	Cystoma	left ovary	,, 22nd.
51	Wolverhampton ..	Dr. Lycett	45	,,	Cystoma	both ovaries	,, 22nd.
52	Kidderminster	Dr. Waddell	43	,,	Cystoma	both ovaries	,, 26th.
53	Birmingham	Dr. Haynes	26	,,	Cystoma	both ovaries	,, 28th.
54	Birmingham	Mr. Lawrence	22	Single	Cystoma	left ovary	,, 29th.
55	Oldham	Dr. Stanfield	38	Married	Cystoma	both ovaries	August 10th.
56	Coventry	Dr. Handford	37	Single	Cystoma	left ovary	October 10th.
57	Stourbridge	L. T.	35	,,	Cystoma	right ovary	,, 13th.
58	Birmingham	Dr. Hoare	27	Married	Cystoma	both ovaries	,, 17th.
59	Birmingham	Mr. Harmar	29	,,	Parovarian cyst ..	removed	,, 20th.
60	Birmingham	Dr. Kenny	28	,,	Cystoma	both ovaries	,, 23rd.
61	Birmingham	Dr. Hadley	41	,,	Cystoma	both ovaries	,, 23rd.
62	Birmingham	L. T.	24	Single	Parovarian cyst ..	removed	,, 31st.
63	Birmingham	Dr. Thomas	28	Married	Parovarian cyst ..	removed	,, 31st.
64	Birmingham	Mr. Green	50	,,	Cystoma	left ovary	November 10th.
65	Kidderminster	Dr. Langford	63	,,	Cystoma	right ovary	,, 20th.
66	Tipton	Dr. Price	32	Single	Cystoma	both ovaries	,, 23rd.
67	Southport	Dr. Craven	26	,,	Cystoma	both ovaries	,, 29th.
68	Birmingham	L. T.	27	Married	Cystoma	both ovaries	December 20th.
69	Birmingham	L. T.	28	Single	Cystoma	both ovaries	,, 23rd.
							1885.
70	Birmingham	Mr. Lloyd	32	Married	Cystoma	left ovary	January 6th.
71	Nottingham	Dr. Elder	59	,,	Cystoma	left ovary	,, 8th.
72	Birmingham	Mr. Harmar	30	Single	Cystoma	left ovary	,, 17th.
73	Derby	Mr. Taylor	40	Married	Parovarian cyst ..	removed	,, 23rd.
74	Wellington	Dr. Glissan	29	Single	Cystoma	both ovaries	February 3rd.
75	Melbourne	Dr. Elder	34	,,	Cystoma	left ovary	,, 7th.
76	Leamington	Dr. Tomkins	70	,,	Cystoma	both ovaries	,, 11th.
77	Harrogate	Dr. Myrtle	25	,,	Parovarian cyst ..	removed	,, 16th.
78	Birmingham	L. T.	32	,,	Cystoma	both ovaries	,, 19th.
79	Monmouth	Dr. Woollett	16	,,	Parovarian cyst ..	removed	March 2nd.
80	Wolstanton	Dr. Massingham ..	60	Married	Cystoma	right ovary	,, 27th.
81	Evesham	Dr. Blake	34	Single	Cystoma	both ovaries	April 14th.
82	Leamington	Dr. Jay	30	,,	Cystoma	right ovary	,, 17th.
83	Birmingham	Dr. Hoffman	30	Married	Cystoma	both ovaries	,, 18th.
84	Burton-on-Trent ..	Dr. Clements	23	Single	Cystoma	right ovary	,, 23rd.
85	Ashby-de-la-Zouch ..	Dr. Williams	23	Married	Abscess of ovary ..	right ovary	,, 24th.
86	Birmingham	Mr. Leech	40	,,	Cystoma	both ovaries	,, 28th.
87	Leamington	Dr. Whitby	43	Single	Cystoma	right ovary	May 2nd. ,,
88	Ashby-de-la-Zouch ..	Dr. Betts	33	Married	Cystoma	both ovaries	,, 14th.
89	Birmingham	L. T.	35	,,	Cystoma	both ovaries	,, 15th.
90	Birmingham	Dr. Malins	25	,,	Parovarian cyst ..	removed	,, 15th.
91	Ludlow	Mr. Brooks	44	,,	Cystoma	right ovary	,, 26th.
92	Willenhall	Mr. Hartill	26	Single	Cystoma	right ovary	,, 29th. ,, ,,
93	Bridgnorth	Mr. Rhodes	43	Married	Cystoma	both ovaries	June 5th.

No.	Residence.	Medical Attendant.	Age.	Married or Single.	Disease	Operation.	Date
							1885.
94	Birmingham	Dr. Parkes	25	Married	Cystoma	right ovary	June 9th.*
95	Birmingham	L. T.	27	,,	Cystoma	both ovaries	,, 16th.
96	Birmingham	Mr. Nicholls	24	,,	Cystoma	both ovaries	,, 20th.
97	Burton-on-Trent ..	Dr. Hooper	25	,,	Cystoma	both ovaries	,, 21st.
98	Birmingham	Mr. Hallwright.. ..	34	,,	Cystoma	right ovary	,, 22nd.*
99	Birmingham	Dr. Parkes	23	Single	Cystoma	both ovaries	July 3rd
100	Thirsk	Dr. Hartley	53	Married	Parovarian cyst ..	enucleated	,, 14th.
101	Stourbridge	Dr. Pearson	14	Single	Cystoma	left ovary	,, 18th.
102	Birmingham	Dr. Phillips	34	Married	Abscess of ovary ..	right removed ..	, 20th.
103	Birmingham	Dr. Shillito	40	,,	Parovarian cyst ..	removed	,, 20th.
104	Rugeley	Mr. Freer	50	Single	Cystic sarcoma ..	right ovary	,, 21st.
105	Birmingham	Mr. Marriott	36	Married	Parovarian cyst ..	removed	,, 23rd.]
106	Shrewsbury	Dr. Rigby	36	,,	Cystoma	left ovary	,, 25th.
107	Cheltenham	Mr. Cocks Johnson ..	25	Single	Cystoma	both ovaries	,, 25th.
108	Birmingham	L. T.	31	Married	Parovarian cyst ..	enucleated	,, 26th.
109	Birmingham	Dr. Fitch..	19	Single	Cystoma	right ovary	,, 28th.
110	Birmingham	Mr. Hollinshead ..	46	Married	Cystoma	right ovary	August 4th.
111	Hereford	Mr. Turner	31	Single	Cystoma	right ovary	,, 4th
112	Birmingham	Dr. Notley	47	,,	Parovarian cyst ..	enucleated	,, 7th.
113	Shifnal	Mr. Stubbs	46	Married	Cystoma	left ovary	,, 19th.
114	Birmingham	Mr. Hallwright.. ..	29	,,	Parovarian cyst ..	removed	,, 25th.
115	Oldham	Dr. Campbell	35	,,	Cystoma	both ovaries	,, 26th.
116	Birmingham	L. T.	25	Single	Cystoma	both ovaries	September 2nd.
117	Birmingham	Dr. Wilkes	26	,,	Cystoma	left ovary	,, 14th.
118	Leicester..	Dr. Clifton	31	Married	Parovarian cyst ..	enucleated	,, 18th.
119	Nottingham	Dr. Elder..	56	,,	Cystoma	right ovary	,, 21st.
120	Birmingham	Dr. Williamson	38	,,	Cystoma	left ovary	,, 25th.
121	Kidderminster	Dr. Addenbrooke ..	34	,,	Parovarian cyst ..	enucleated	,, 28th.
122	Birmingham	Mr. Hartley	35	,,	Cystoma	both ovaries	,, 28th.
123	York	Mr. Shann	31	,,	Cystoma	left ovary	October 3rd.
124	West Bromwich ..	Dr. Pitt	53	,,	Cystoma	left ovary	,, 12th.
125	Melbourne	Dr. Shrady	58	,,	Cystoma	left ovary	,, 13th.
126	Nottingham	Dr. Elder	30	,,	Cystoma	both ovaries	,, 17th.
127	Ireland	Dr. Evans	18	Single	Cystoma	both ovaries	,, 19th.
128	Birmingham	L. T.	44	Married	Cystoma	both ovaries	,, 20th.
129	Birmingham	L. T.	37	Single	Cystoma	right ovary	,, 23rd.
130	Denbigh	Dr. Prichard	23	,,	Cystoma	right ovary	,, 26th.
131	Coventry..	D. Fenton	27	Married	Parovarian cyst ..	removed	,, 29th.
132	Birmingham	L. T.	33	,,	Cystoma	both ovaries	,, 30th.
133	London	Dr. Orwin	49	,,	Cystoma	left ovary	November 12th.
134	Redditch..	Dr. Page..	29	Single	Cystoma	left ovary	,, 14th.
135	Derby	Dr. Foulds	47	Married	Cystoma	both ovaries	,, 20th.
136	Nottingham	Dr. Bland	33	,,	Cystoma	right ovary	,, 24th.
137	Birmingham	Mr. Bull	20	Single	Abscess of ovary ..	right ovary	December 4th.
138	Birmingham	Mr. North	29	,,	Cystoma	both ovaries	,, 5th.
139	Presteigne	Dr. Debenham	52	Married	Ruptured cystoma ..	left ovary	,, 7th.

* In all these cases (ten in number) the tumours had undergone axial rotation, and were gangrenous.

ich were capable of demonstration, according to Sir Spencer Wells, y in Birmingham, and were non-existent in London or elsewhere Europe. This attitude of Sir Spencer Wells is apparently still intained by him; for, in a recent address delivered here, he passed all these facts without allusion to them, "deaf as the adder which ieth her ear."

ir Spencer seems puzzled at the change which these few short years brought about; still more puzzled that the change should have n effected, not only without his aid, but in spite of his most nuous opposition. He laid down the law that an ovarian tumour uld not be meddled with so long as the patient was able to get ut, and he encouraged and practised tapping to obviate the major ration as long as possible. How mistaken this policy was, is shown wo facts. Not one of these 139 cases had been tapped; and for ty years past, I have not had a fatal case that had not been tapped. Stillings' strong words, we conclude now that tapping an ovarian our is a surgical crime, and it has accordingly been banished n practice, and ovarian tumours are removed as soon as they are gnised.

nother change effected within the last eight years, and wholly he result of work done here, a change which has most certainly considerable effect in reducing our mortality, is the shortening of incisions. Sir Spencer Wells talks of incisions over five inches eing "long incisions," whereas I regard anything over three inches xcessive, and my average incision is not more than two. To this as been objected, that it increases the difficulty of the operation; I answer that it is only so in the hands of a bungling operator. hing save irreducible solidity can justify a five-inch incision. The f argument in favour of keeping the incisions within the shortest ts is the diminution of risk of subsequent enterocele.

his sequel of abdominal section happens in the practice of every no matter how the wound be stitched; and any operator who it never happens in his particular practice, is merely one who ks rashly, and does not keep his eye on his cases long enough.

he method of stitching the wound together is of sufficient importance to demand a word, if only to condemn the practice, recommended by Sir Spencer Wells, of including only the peritoneum and skin. If you divide skin, fascia, muscle, and peritoneum, you must include all four tissues in your stitches, keeping the corresponding tissues on each side as correctly in relation to each other as possible if you mean the abdominal wall to have as much strength as it had before you cut it. If you exclude tendon and muscle, you exclude the chief elements of strength in the union. On this important matter, Sir Spencer Wells was led away by the experiments he made by vivisecting rabbits.

As to the dressing of the wound, I still adhere to the dry absorbent cotton-wool, quite free from any kind of germicide. My fear of germs has steadily diminished; so that, if I could get them in sufficiently large quantities, and found them dry, elastic, and absorbent, I would willingly stuff my pads with them instead of wool.

The main feature of change accomplished within the last eight years in ovariotomy is in the treatment of the pedicle. The clamp has been wholly deserted, and the intraperitoneal method adopted. The varieties of this method are practically only two, the silk ligature and the cautery. I adhere uniformly to the silk ligature used in the method known as the Staffordshire knot, and it has never failed me. Dr. Keith and I have a friendly rivalry in our respective advocacy of the cautery and the knot, but I prefer the knot because it is universally applicable, whereas the cautery cannot be employed for intrapelvic work.

The method of cleansing the peritoneum has also undergone a considerable change, and the elaborate system of sponging which I used to practise, as directed by Sir Spencer Wells, has gradually given way to a system of washing which is much better. I fill the abdomen with blood-warm water, and wash all the organs, and I repeat this till the water comes off clear; and I wish to say that the water used has not been boiled, and contains no drug or chemical substance beyond what is stated in the report of the Medical Officer of Health for the Borough. The water is plain unfiltered tap-water, warmed by the addition of enough from the boiler. It is full of germs, and spores,

and small beasts of thirty-four different varieties, according to a careful report of Dr. Alfred Hill, published some few years ago.

The only point remaining, and worthy of further allusion, is that all the conclusions formulated by Sir Spencer Wells in 1878, based on his own experience, have, without exception, been reversed by the statistics freed from his heavy mortality. One of his conclusions was a very serious one, for it hampered progress very much, especially in operations for removal of the uterine appendages. It was to the effect that removal of two ovaries was a far more fatal operation than removal of one.

This conclusion ought to have been, that two pedicles in a clamp were far more risky than one; now it is evident that it is in no way more risky to remove two ovaries for cystoma, or anything else, than to remove one. In connection with this point, it may be as well to say that, in the period embracing this series of 139 successful cases, there has not been in my practice a single incomplete operation.

Now that we have cleared away all our superstitions, and view the facts in a more reasonable light, we see this operation of ovariotomy not only the most successful achievement in surgery, but we have to regard it as a portal, which, opened within the last eight years, has led to innumerable other blessings to suffering humanity.

CONTAGIOUS PNEUMONIA.

By WILLIAM BRUCE, M.A., M.D., Dingwall.

The following paper was read at a meeting of the Inverness and Ross Sub-branch of the Northern Counties Branch of the British Medical Association, and is now published as a continuation of a former contribution, on Contagious Pneumonia, which appeared in the Journal on August 11th, 1883.

It may be taken as quite settled that epidemics of pneumonia, of an infectious character, do occur at rare intervals; the evidence being complete, not only on the side of the patients' histories occurring in groups, with definite connections locally, but also from the proof of active organisms, with well defined characters, having been found, when properly searched for and examined. I am sorry I did not possess the necessary knowledge, or physical means, of drawing and describing those organisms in the set of cases I have seen; but the fact will be noted that organisms were seen, at one stage numerous and active, and at a later stage either inactive, or not to be found at all.

There have been occasional cases of pneumonia observed since, in this district; but they have been very few (fifteen in 1884) in my practice, and do not exceed the usual number in similar localities. With regard to the natural history of contagious pneumonia, I would draw attention to the almost constant presence of pleurisy as a concomitant of pneumonia; indeed, it was often the first and most striking symptom. I think I have seen a run of pleurisy cases before, and may have missed the pneumonia. The interesting point is that, in cattle, a similar disease is called pleuro-pneumonia.

As to treatment, it will be noticed that one case was bled from the arm. This I have often previously done in pneumonia, and, twenty-five years ago, it was my common practice. My friend, Professor Dyce Davidson, of the University of Aberdeen, saw the case referred to, and urged me to bleed. He and others considered that the bleeding saved the patient's life. Certainly the girl was, that day, in the gravest danger, with respirations over 80 per minute and a running pulse. But I think the tide was turned before she was bled. Certainly the bleeding did no harm, and gave relief, as it usually does. On the whole, my experience is that venesection has no real influence on pneumonia—nor, let me add, on one or two other diseases in which, I may say, I have invariably bled patients freely from the arm, namely, puerperal and albuminuric convulsions. I am not, however, disposed to abandon the lancet, any more than many other doubtful remedies of the *Pharmacopœia*. I would draw the line, however, at the hither side of calomel and large doses of antimony, as I equally disapprove of brandy and beef-tea, given as a matter of routine. Poultices, continued for a reasonable time, say, two or three days, followed by firm strapping, mild expectorants, regulated nourishment, and good nursing, with plenty of fresh warm but not hot air, are, to my mind, the essentials of treatment in contagious pneumonia. The healthy and strong recover; the very old, and especially the dissipated, die off quickly. And this will continue to be the result in such patients, in spite of all treatment. I hope my neighbour, Dr. Adam, will contribute his cases and experience; and then, with Dr. Sutherland's (see Journal, August 11th, 1883, and *Collective Investigation Record*, vol. ii), we shall have a pretty complete picture of the disease I have endeavoured to describe, as witnessed in Wester Ross in 1882-83. I should like to know if any of our members have any reason to believe in the occasional epidemic character of acute rheumatism. I think I could bring forward a series of cases, tending to show that acute rheumatism does, now and again, become epidemic.

Group v. Case xvii.[1]—Mrs. R. was first seen on August 26th, 1883. The day before she had felt chilly, and, in the evening had a rigor; pulse 102, temperature 101°. August 27th. Pulse 102, temperature 101.5°. She had a flushed face, pain in the right side, and cough. August 28th. She had pain in the side and cough, with rusty sputum; pulse 112, temperature 102.4°, respirations 40. August 30th. She had a troublesome cough, with tenacious rusty sputum, great thirst, and foul tongue; pulse 112, temperature 102.5°, respirations 39. August 31st. There were dulness at both bases, bronchial breathing, and rusty sputum; pulse 128, temperature 101°, respirations 40. September 1st. Pulse 92, temperature 101.6°, respirations 52. The other symptoms continued. The sputum was examined microscopically, and found to contain numerous micro-organisms, 1-10,000th to 1-14,000th part of an inch in diameter, some round, some dumb-bell-shaped. September 3rd. Her condition was little altered. September 4th. Pulse 88, temperature 101.6°, respirations 60. There were dulness and bronchial breathing, with sonorous *râles*, all over the left and upper lobe of the right lung. Air was entering the lower lobe of the right lung fairly well. September 5th. Pulse 100, respirations 52. Both sides behind were full of moist *râles*. The sputum was tenacious, but not bloody. September 7th. Pulse 100 (emptying), respirations 52. The right lung was pretty clear. September 10th. Pulse 94, temperature 101, respirations 57 to 60. There was cough. The pulse was fairly strong, and had not the suddenly emptying character of the few former visits. The patient could lie down in bed on the left side with comparative comfort. The sputum was muco-purulent, tenacious, and in great quantity. The right lung was clearing up well; the breath-sounds were rough; there were no adventitious sounds. In the left lung were *râles* and bronchial breathing. September 13th. She was a good deal improved; pulse 90, respirations 30. The cough was much less troublesome, and the lungs were clearing up well. This case progressed favourably, and the patient is now quite well.

Case xviii.—Mary H., aged 16, residing at Novar, Ross-shire, was admitted to the Ross Memorial Hospital, Dingwall, on September 1st, 1883, suffering from acute pneumonia. Two years ago, the patient had typhoid fever, and was then treated in this hospital for three weeks, at the end of which time she was discharged convalescent. Since that time, her health had continued good until two days before admission, when the patient was seized with her present illness. The patient had acted in the capacity of domestic servant to Case xvii, who, on August 25th, was laid up by a very sharp attack of pneumonia. The patient continued to attend to her mistress until August 29th, when she herself became the subject of the same disease. On that day (29th), the patient had a rigor, and severe pain in the left side. She became very feverish and weak, and took to her bed. On the 30th, she was visited, when the following state of matters was found. She had pain in the left side. There was dulness up to within one inch of the inferior angle of the scapula behind, and to within one inch of the nipple in front. There were fine crepitation, cough, and rusty sputum. On August 31st, a small quantity of sputum, which had been collected in a stoppered bottle which had previously been thoroughly cleaned, was examined under the microscope. Great numbers of minute organisms were discovered, moving about in the most lively fashion. September 1st. The patient was removed to hospital. The temperature stood at 101°, pulse 105, respirations 42. She had flushed face and pain in the side. Dulness of the left side was well marked up to the angle of the scapula, two inches below which fine crepitation could be heard; and, in the axillary line, a distinct pleuritic friction-sound. On the morning of September 2nd, temperature 102.8°, pulse 125, respirations 46. She was flushed, had pain in the side, friction-sound, crepitation, and dulness; and, on the whole, there was little change from the previous day. The evening temperature was 103°, pulse 130, respirations 50. Today, the patient was made to expectorate upon a slide, which was immediately placed under the microscope, when numerous micro-organisms were found to be present in the sputum. It may be mentioned that, after this date, though the organisms were still present, they were never found to move about as they did in the earlier stages of the attack. September 3rd. The nurse reported that the patient had had a very restless night. On examination of the chest, it was found that the left lung presented no change from the records of the previous day, but that the right lung had also become affected, being

[1] The groups and cases are numbered in continuation of those in the former paper.

ull up to the level of the nipple in front, and to the lower angle of he scapula behind, with fine crepitation. There was lividity of the ace and lips. Temperature 102.8°, pulse 132, respirations 80. In he afternoon, there was little change, and the very hurried respira- ons were almost entirely bronchial. Blood to the extent of eight or n ounces was taken from the arm. This was followed by marked nprovement in the pulse; the respirations fell to 52; and the patient lt much easier, and slept a little. The temperature remained at 02.8°. September 4th. The patient had rested well during the night. emperature 98.4°, pulse 96, respirations 40. The physical signs re- ained the same as those of the previous day. In the evening, the ulse was 88, temperature 98.4°, respirations 32. There were dulness nd bronchial breathing, with a few loud *râles* and friction-sound on ie left side; small crepitation, with bronchial breathing, on the ght. The sputum continued rusty and tenacious. September 6th. orning: pulse 92, temperature 98.4°, respirations 40. Dulness was ot diminished. Crepitatio redux was heard. Evening: pulse 88, mperature 98.4°, respirations 26. September 7th. Pulse 80, re- irations 32, temperature 98.4°. Evening: pulse 76, temperature 8.4°, respirations 32. September 8th. Pulse 72, respirations 28, mperature 98.4°. Evening: pulse 70, temperature 98.4°, respira- ons 24. September 9th. Pulse 72, temperature 98.4°, respirations . There was dulness to within one inch of the spine of the scapula the left side behind, and to the nipple-line in front. Crepitatio dux was heard. The pleuritic friction-sound was disappearing. Air as entering the lung fairly well. On the right side, dulness was ore marked than on the left. Breathing was bronchial. There was creased vocal fremitus. The patient continued to do very well, and week later was dismissed.

Case xix.—G. Mc.L., on Wednesday, which was a wet, stormy y, was engaged in out-door labour. The same evening he felt un- ll; the next morning he felt worse, but did not consider himself fficiently ill to stay away from his work. Accordingly he went at e usual hour, but had to return home, feeling very cold, and com- aining of cough, and pain in the side. That night he had a gor. On the following Sunday he was seen, when he was und to have a pulse of 104, temperature 103.2°, respirations 30. ere were dulness at the base of the left lung, fine crepitation, and sty sputum. This, like the two preceding, was a typical case of eumonia. On the ninth day, the crisis took place. The patient pidly improved, and is now quite well.

Case xx.—J. S. was exposed to the weather on same day as the st case. On that (Wednesday) evening, according to his own count, he became very ill, and took to his bed. On Sunday he was en, and found to have marked symptoms of a double pneumonia; lse 104, temperature 103.4°, respirations 56. There was rusty utum, with fine crepitant *râles*, and dulness at both bases, and ere pain in the back. The heart-sounds were irregular, inter- ttent, and weak. The patient's aspect was very dejected, and, ogether, his symptoms were such as to hold out little hope of re- very. In two days he died.

All the cases of this group occurred within a radius of a quarter of nile.

Group vi. Case xxi.—McI. (child) was first visited on August 6th. ere were loss of appetite, pain in the side, and flush. Pulse 150, nperature 103°, respirations 52. There was dulness at the left base, e crepitation, and cough. August 10th. The sputum was rusty. ere was fine crepitation at the spine of the scapula, flush, and spnœa. August 12th. There was copious perspiration, with defer- scence. The cough was slightly abated. The pain in the side con- ued. Rapid recovery followed.

Case xxii.—J. McD., aged 8, was first visited August 10th. e patient had been ill for some days; pulse frequent, temperature °. There were signs of consolidation at the left base. August h. Pulse 105, temperature 100.6°, respirations 28. There re dulness over the left base, increased vocal fremitus, and resonance. gust 16th. Pulse 120, temperature 102°, respirations 32. There re dulness, pain in the side, and cough with tenacious sputum. gust 18th. Pulse 90, temperature 101°, respirations 28. The ient had cough, with tenacious sputum; he sweated a good deal, l was flushed. August 22nd. Pulse 100, temperature 98.4°, respi- ions 26; crepitatio redux was heard. There was dulness at the ht base. August 26th. Pulse 100, temperature 99°, respirations ; cough was still present, but the patient was much improved.

Case xxiii.—F., aged 50, was visited on August 16th. For a few 's previous he had felt unwell, with an occasional shivering fit. inking that he was suffering from an ordinary cold, he took a dose calomel. This did not relieve him, and, on the appearance of blood his sputum, he sent for a medical man. At the time of visit, there were cough with bloody expectoration, dulness, and fine crepitant *râles* at the left apex; pulse 65, intermittent. August 18th. There were dulness and fine crepitation at the apex of the left lung. The blood in the sputum was diminished; pulse 75. August 20th. Pulse 100, respiration 32; crepitation was heard at the left apex. There was a suspicion of commencing right pneumonia. Some of the sputum in this and the previous case was collected in a stoppered bottle and examined, when micro-organisms, similar to those already spoken of, were found. August 24th. The dulness and crepitation at the left apex continued. The rest of the pulmonary apparatus was clear. Blood had ceased to appear in the sputum; pulse 80, temperature 98.4°, respirations 28. The microscope was brought to the patient's house, and the sputum was examined; micro-organisms were found. A few days later the sputum was again examined (fresh supply), but no organisms could be found. This patient was weakly, and took a long time to recover.

A CASE OF PNEUMONIA, OCCURRING AT A COLD HIGH ALTITUDE.

By A. TUCKER WISE, M.D.

C. J., aged 30, an Italian, native of a malarious district in Italy, was seized with giddiness, sickness, and shiverings, on January 20th, at 8 P.M. He was in bed, complaining of pain over the left lumbar region. He looked pale and sleepy. Pulse 100, strong, large, and of moderate tension; temperature 101°, respirations 28, conjunctivæ blanched. He vomited during the examination of his chest. There was no delirium nor rigors. The chest presented signs of harsh entry of air over both sides of his back; general impaired resonance, but no absolute dulness. With the slight cough he had, there was rusty, gluey expectoration. His urine was normal. The bowels were open; tongue moist, not coated. He was given a hypodermic injection of morphine, and ordered liquid diet.

January 21st. He complained of pain in the left side; temperature 101°, respirations 28, pulse 100. His lips were bright-red, and his face flushed a little. There was dulness over the left infrascapular region, limited to an area of four square inches; fine crepitations were heard there, with bronchophony and tubular breathing. He was ordered a mustard-leaf over this spot, and half a drachm of compound spirit of ammonia, in water, every four hours; also 5 grains pilula hydrargyri with coloc., at night.

January 22nd. The bowels were open freely; his face was flushed; spleen enlarged. On inquiry, it was found that he had suffered, a a few years ago, from malarial fever; pulse 116, temperature, 104.1°; respirations 30. He had great thirst; his tongue was white and moist. He was ordered a grain of opium, and turpentine stupes.

January 23rd. Respirations 30, pulse 100, temperature 104; dulness and tubular breathing extended to the right side, and over the whole of the left lung. He slept well during the previous night. He was ordered to have 5 grains of quinine.

January 24th. Respirations 32, temperature 101.7°, pulse 100, regular, but weak. He was ordered to have half a drachm of compound spirit of ammonia, and half a grain of powdered opium, every four hours, in water.

January 25th. Respirations 33, temperature 103.2°, pulse 106 (dicrotus). The urine was loaded with lithates. Owing to the low temperature of the room, his medicine was frozen in the bottle. He was ordered to have 5 grains of quinine.

January 26th. Temperature 100.6°, respirations 24, pulse 104. Redux crepitations were heard over the whole of the right back. His tongue was moist, and coated with white fur. He had slept well, and coughed less. The sputum was still rusty coloured. All liquids in the room were frozen, and the vapour of his breath was plainly perceived from the other end of the apartment. The bottle of milk, and also the medicine-bottle, he placed under his pillow, to guard against their solidification. He had not felt the cold. His aspect was improved. The temperature in the open air this day was 2° Fahr. at 9 A.M., 16° Fahr. at noon.

January 27th. Temperature 98.2°, respirations 22, pulse 80. There was amelioration of all bad symptoms. The temperature of the room stood at 25° Fahr. at the time of my visit.

January 28th. Temperature 97.8°, respirations 23, pulse 64. The temperature of the bedroom was 21° Fahr.

January 29th. He was progressing favourably. The temperature of the bedroom was 23° Fahr.

January 30th. The temperature of the bedroom was 28° Fahr. at 2 P.M.; a minimum thermometer showed 23° since the previous day.

January 31st. I found him, at the time of visit, sitting out in the sun. The next day previously to the "visit," he wilfully left Maloja for Italy, descending 3,800 feet in five hours. It was reported that he gained strength slowly, but made a good recovery.

This man, who was a plasterer, contracted his pneumonia from the effects of rapid and extreme variations of temperature, and irritant coke-fumes. Although he was a native of Italy, tainted with malaria, and not a robust subject, he made a good recovery in the dry air of the Engadine during the coldest part of winter.

Externally, in a Stevenson's screen, thermometers indicated the following temperatures, during the man's illness: mean temperature, Fahr., 18.6° (9 A.M.), 25.8° (noon), 27.7° (3 P.M.); maximum, 38° Fahr.; minimum, 4° Fahr. The "mean weight of moisture suspended in the air," calculated at noon by Apjohn's formula, was 11 grains per 10 cubic feet of atmosphere; (at Kew, the mean for the whole month of January equalled 25 grains per 10 cubic feet). The mean "drying power of the air," or weight of vapour which 10 cubic feet were still capable of absorbing, was 5.3 grains.

MASSAGE AS A THERAPEUTIC AGENT.

By WILLAM MURRELL, M.D., F.R.C.P.,
Lecturer on Pharmacology and Therapeutics at the Westminster Hospital; Examiner in Materia Medica to the Royal College of Physicians of London and the University of Edinburgh.

MASSAGE is of such inestimable value in the treatment of many intractable diseases, that it is to be regretted that so little is known about it in this country, and that it is so rarely employed as a therapeutic agent. It is often spoken of as a new method of treatment, but it has been in general use on the continent for a long time, and, more than ten years ago, received the adhesion of Billroth, Langenbeck, Esmarch, and other authorities. In a crude and primitive form, it is very ancient indeed, and is probably as old as surgery itself. Amongst the Greeks and the Romans it was extensively employed, both as a means of hastening convalescence from long tedious illnesses, and to relieve pain, and render supple bruised or injured joints. The writings of Plato abound in references to this mode of treatment, and its virtues seem to have been very generally recognised.

It is to be feared that there is a certain amount of prejudice against the employment of massage, arising, probably, from the fact that it is frequently confounded with "shampooing" and "medical rubbing;" but it is, in reality, a scientific mode of treatment well worthy of attentive study at the hands of skilled physicians and surgeons. The literature of the subject is extensive, and it would be impossible to give, within the limits of a short article, even an abstract of it. There are several kinds of massage, but the system almost universally adopted in Germany is that associated with the names of Mezger and von Mosengeil. Mezger may be regarded as the father of the modern phase of massage, while Professor von Mosengeil, by his accurate and painstaking experiments, has done much to establish it on a sound scientific basis. Those who have studied under the last named distinguished surgeon, and have had an opportunity of seeing him practise his method, will appreciate the fact that there is much more in it than at first sight appears. It is essential for success that the various processes should be carried out systematically, and in a definite order; although, of course, the same method of treatment is not applicable to every case. Every "movement" begins and ends with *effleurage*, the palm of the hand, and sometimes the knuckles, being employed for the purpose. It is always centripetal, and is performed with considerable rapidity and force. *Pétrissage* is a more complex process, and is by no means easy to acquire, although it looks simple enough. *Friction* is performed with the tips of the fingers, and is used in conjunction with *effleurage*, chiefly in the treatment of various affections of the joints. This term, which was originally introduced by von Mosengeil, is an unfortunate one, for it has nothing in common with what we ordinarily understand by friction. *Tapotement* is a kind of percussion, and may be performed either with the tips of the fingers, the partially closed hand, or its ulnar or radial border. Mezger rarely employs electrical treatment in conjunction with the manipulative processess, but von Mosengeil attaches much importance to it, and, in suitable cases, uses both the interrupted and constant currents to stimulate the motor points. He dispenses with complex apparatus, and his sessions are of short duration, rarely exceeding five minutes. On the continent, the physician or surgeon is usually his own operator, it being considered inexpedient to employ, even as an assistant, anyone who has not been thoroughly and systematically trained, a process which requires, at least, two years of unremitting attention. It is known that, in many instances, incalculable harm has resulted to patients from ill directed efforts, or the selection of unsuitable cases. For the treatment of women and children, an accomplished *masseuse* is essential; but she must be well educated, and should have such a knowledge of anatomy and physiology as will enable her to carry out the instructions of the physician intelligently. It is not at all necessary that she should be physically strong, aptitude being of more importance than mere muscular strength. The hands must be soft; and, if proper precautions be taken, there is never any risk of abrading the skin.

It is no easy matter to say in what class of diseases massage proves most useful. Unfortunately, its employment has been advocated in many cases, for which it is essentially unsuited. Accurate diagnosis is of the utmost importance, and the sphere of usefulness of this remedy will, with increased experience, become more accurately defined. My best results have been in infantile paralysis; and it was in consequence of the success achieved in certain obstinate cases of this disease, that my attention, as has been elsewhere stated, was directed to the subject. Progress is often slow, but the ultimate results are most satisfactory. The nutrition of the parts is maintained until new cells in the spinal cord take on the functions of those which have undergone degeneration, or have been destroyed. Massage is, undoubtedly, of much value in many cases of obstinate neuralgia, and succeeds admirably in some forms of muscular pain, such, for example, as those described by the late Dr. Inman under the term "myalgia." There is a general concensus of opinion that it is well adapted for the treatment of chronic joint-affections; and most of those I saw treated by von Mosengeil were such as would, in this country, be considered incurable, or would drift into the hands of "bone-setters." There are some diseases of internal organs in which it is, undoubtedly, useful. Not long ago, a gentleman, aged 68, came to me complaining of shortness of breath, and increasing disinclination to take exercise. He had been in business, and had led a most active and energetic life. Three or four years ago he retired, and, from that time, experienced a gradual falling off in health. His appetite was poor, his bowels were obstinately confined, and he was nervous and anxious about himself. He was found to have a loud apex systolic murmur, and the heart's action was weak and irregular. I suggested massage, which was carried out systematically four days a week, for a period of six weeks. He improved from the very first, and, before the conclusion of the course, was better than he had been for many months. His appetite returned; his hands and feet were warmer; the bowels became regular; he slept well at night; and his spirits improved in a most satisfactory manner. In other cases of obstinate constipation, especially in women, I have known massage of the abdomen do a great deal of good.

In a well-known group of symptoms from which women frequently suffer, massage is essentially useful. I recently saw a lady, aged 45, or thereabouts, a professional singer, who was labouring under the impression that she was going mad. She was so nervous that she was quite unable to accept an engagement, although she had been constantly before the public, and had hardly missed a night for twenty years. She told me that she felt she was not to be trusted, and that, if left alone, she would do herself or her children an injury. She was afraid to go near an open window, so great was the temptation to throw herself out; and she even begged that the knives might be removed from the table at dinner. These symptoms were greatly intensified after each monthly period, and she insisted that she was suffering from cancer, or some organic disease of the stomach or womb. She was restless at night, and would often get up in the early morning, and walk for hours, until thoroughly exhausted. She was given full doses of the bromides—a drachm, or more, four times a day—but with only temporary benefit. Massage was then tried; and it seemed, to use her own expression, to soothe her, and calm her, and make her forget her troubles. The case was a prolonged one, but now, at the expiration of three months, she is much better, and will soon be able to resume her professional duties. In several other cases of restlessness and inability to sleep, the same method of treatment has proved efficacious.

Dr. Graham, of New York, speaks highly of massage in the treatment of neurasthenia. He uses it for those "who, in spite of rest, change and medication, have become chronic neurasthenics, the result of business reverses, overwork, worry, loss of relatives, disap-

pointed hopes, or as a sequel of some affection that has existed in some part of the system, but which has recovered or has become of secondary importance." These symptoms may be somewhat ill-defined; but, I have certainly found massage of the greatest use in what, for want of a better name, has been called "spinal nervous weakness," or "neurasthenia spinalis."

In the treatment of corpulence associated with constipation, massage is of much value. Some months ago I saw a lady, aged 38, who, as the result of much good living and little exercise, had become inordinately stout. She was very short of breath, and was disinclined for exertion of any kind. She had been fond of literary pursuits, but even those had lost their charm, and were irksome to her. She was extremely irritable, and a source of trouble and anxiety to her friends and relatives. Massage was prescribed, and in two months she lost a stone and a half in weight, and improved notably in other respects.

For many forms of menstrual disturbance, massage may be safely prescribed. I recently saw a young lady, aged 19, who suffered intensely at each monthly period, the pain being so severe, that hypodermic injections of morphine had to be resorted to. Massage of the abdomen and pelvis was prescribed, and from that time there was no return of the trouble. Cazeaux has reported several similar cases, in detail. In the convalescence from acute illnesses, this mode of treatment is a great help and comfort to the patient. There can be no doubt that massage is a very valuable therapeutic agent, and is likely to yield good results in many complaints other than those I have roughly indicated.

OBSTETRIC MEMORANDA.

ANTEFLEXION AND DOUBLE OVARITIS CURED BY REPEATED LEECHING OF THE CERVIX UTERI, AND AFTERWARDS BY GALABIN'S ANTEVERSION PESSARY.

Mrs. R. came under my care a year and a half ago. She suffered much from mental delusions, and was unable to walk from excessive pain. The patient, for some days, was kept in the recumbent position; and, when the inflammatory symptoms had to some degree subsided, an examination, by means of the speculum, etc., was able to be made. A very much hypertrophied anterior lip was disclosed, and a digital examination showed a very severe anteflexion; this was so great that it caused distressing bladder-symptoms; defæcation also caused a great amount of suffering. The treatment, which lasted nine months, was at last followed by a most happy result. The patient is now enjoying the best of health, with no probability of a return of the old malady.

She was leeched, altogether, fifty times, at repeated intervals; and, after the first three weeks, an anteversion pessary was introduced. This could not be tolerated; and, after a further rest in the recumbent position, another attempt was made—this time with success as regarded the toleration, but it failed to keep the uterus in position. Nearly every known pessary was tried, with no better success. Then I bethought myself of that invented by my old teacher; it acted like a charm, the patient being now able to get up, and take short walks. The menstrual flow, which had been suppressed for two years, was now re-established, and the patient rapidly recovered.

Haygarth Addison, L.F.P.S.G., Holloway, N.

ABORTION: ADHERENT PLACENTA: PARTLY REMOVED, PARTLY LEFT TO NATURE.

Mrs. G. S., aged 34, had nine children, born alive, and one miscarriage after the first child. She was supposed to be about five months pregnant, when her youngest child was fourteen months old. There was a family history of insanity, and the patient herself had hallucinations, and had to be watched during the puerperal month. She had suckled her last child for the whole thirteen months, and had menstruated about every three weeks for the last twelve months, so that she did not know she was pregnant; for the last month there had been a continuous discharge, and she felt very weak. During the last week, for two days and two nights, she felt severe pain in the back and the lower part of the abdomen, and vomited twice.

On February 5th, she felt better, and went to bed at the usual time. She soon afterwards felt very restless, and had a good deal of pain in the back and abdomen, feeling a desire to pass urine; the pain was very severe, and the fœtus was suddenly expelled into the chamber-vessel, along with a good deal of hæmorrhage, during micturition. I saw her an hour later, and found her half stooping, half sitting on the chamber-vessel, in bed. It was full of blood, and contained the fœtus, which was between the fourth and fifth month. On examination, the uterus could be felt above the pubes, contracted, and the os would just admit the tips of two fingers. The lower edge of the placenta could be felt, adhering to the uterus. I gave a drachm of liquid extract of ergot, and obtained the assistance of a medical brother, to give chloroform. We were enabled to introduce the whole hand, gradually, and found the placenta firmly attached to the uterine wall near the fundus. We removed what we supposed to be about one-third of the placenta. We did not think it advisable to persevere any longer, for the patient's pulse was rather weak, and it was with difficulty that the placenta could be distinguished from the uterine tissue. The funis had been detached, close to its insertion into the placenta, when the fœtus was expelled. The patient was kept under ergot, and I washed out the vagina night and morning with Condy's fluid. On February 7th, a large piece of placenta was washed out. It was very offensive, and larger than what we removed at the time. The temperature was 101° in the axilla, on the evening of February 6th. After this, the patient never had a bad symptom, and expressed herself better than she had been for the last month.

This case points out very clearly that it is better to remove only part of the placenta, than to persevere too much in efforts to remove the whole, when it is as completely adherent as in this case; and, further, that nature, if assisted, will complete all that we may be unable or unwilling to do.

Challoner Clay, L.R.C.S.Ed., Salisbury.

CLINICAL MEMORANDA.

SUPERNUMERARY NIPPLES.

Since Dr. Champneys' paper has opened this subject, I should like to place on record two cases of the above that I have amongst my patients. In each case, the supernumerary nipple, with rudimentary mamma, is on the left side, between three and four inches beneath the nipple of the left breast. The nipple is about a quarter of an inch in diameter, and the same in length. There is an areola around it, and the diameter of the rudimentary gland is two inches. During the first week of lactation, there is a flow of milk from the nipple, and, during the whole time of suckling, there is experienced pain and fulness in the small gland, when the child takes the breast on that side.

J. Brendon Curgenven.

SURGICAL MEMORANDA.

REMOVAL OF FOREIGN BODIES FROM THE EAR.

After the various "best methods" of removing foreign bodies from the ear, that have lately been described in these pages, I shall, I fear, seem almost presumptuous in recommending yet another, and that hardly an original one.

The ordinary ear-scoop of the instrument shops is obviously quite unfit for the purpose. The object is to get a small instrument, which can be readily slipped behind the stone, or other body, impacted in the canal, without any risk of pushing the obstacle further in. This can, I believe, be best effected by taking a full-sized half-curved surgical needle, heating the point in the flame of a spirit-lamp, and then turning it slightly in. This forms a small but strong tractor, with a sharp point, which can, after a little manipulation, be introduced behind the foreign body with, as I think, greater ease than either a loop of wire or the ordinary scoop. When once the point is fairly behind the impacted body, it can, with a little traction, be readily coaxed out of the passage.

Alex. G. R. Foulerton, M.R.C.S., L.R.C.P.,
House-Surgeon to the Royal Isle of Wight Infirmary.

The wire-loop is, no doubt, very useful for the removal of foreign bodies from the external auditory meatus, and comparatively safe, if the meatus be well illuminated. But by far the best and safest method is syringing; this has been insisted on by almost every authority on aural surgery; and, in my opinion, no other plan should be attempted until syringing has had a fair trial.

Urban Pritchard, Professor of Aural Surgery, King's College.

Vaccination.—The services of Dr. Hodgson, of Workington, as public vaccinator for the district, have been handsomely recognised by a cheque from the Local Government Board for the sum of £57 3s.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

CONGLETON COTTAGE HOSPITAL.

LOOSE BONE IN KNEE-JOINT: OPERATION: RECOVERY.

(Under the care of Mr. P. M. DAVIDSON.)

S. P., a hammerman, aged 55, was admitted on October 20th, 1885. For four years he had been subject to occasional attacks of severe pain in the knee; for the nine months before admission, they had occurred daily, and, on every occasion, he found a small body, the size of a pea, on one side or the other of the knee-joint; when touched, this small body glided away, and disappeared between the bones of the joint, whereupon the pain ceased. The knee had been injured twenty years earlier, but not since.

The joint was slightly flexed, but otherwise normal. After many unsuccessful attempts, extending over a month, the patient at length succeeded in fastening the body, as he said, against the edge of the articular surface of the femur. With strict antiseptic precautions, an incision was made, a little more than an inch in length, and a piece of bone removed by forceps from between the articular surfaces. There was a slight escape of fluid, but the wound healed without suppuration; and, in three weeks, the patient was discharged quite well, and able to resume his employment.

The bone weighed ten grains; it was of a pyramidal shape, the base and one side being quite smooth, and the other surfaces rough.

REMARKS BY MR. DAVIDSON.—The symptoms and history of this case seemed to point to its being one of loose cartilages, although it will be observed that, whereas the pain, in such case, occurs when the cartilages are in the joint, and is supposed to be due to pressure against the articular surface, here pain was felt only when the bone was outside the articulation. The separation of the anterior articular edges of the femur and tibia, that would result from the permanent semi-flexed condition of the knee in this case, may explain the return of the piece of bone into the joint being unattended with pain.

CRUMPSALL UNION INFIRMARY.

OCCLUSION OF OS UTERI AT FULL TERM OF PREGNANCY.

(Under the care of Mr. JOHN H. BROWN, Resident Medical Officer.)

F. R., aged 32, married, primipara, was admitted on October 17th, 1885, at 12.30 P.M. She stated that, about 9 A.M. the previous day, labour-pains commenced, and continued at regular intervals throughout the day. In the evening, liquor amnii commenced to dribble away, and continued until she was seen by the district medical officer on the morning of her admission.

The patient was a well developed woman. She had an anxious expression, with dry tongue and parched lips. The temperature was 101.4° Fahr., and the pulse 98. She complained of great pain all over the front of the abdomen, and tenderness on the slightest pressure, so that palpation was difficult. On making a vaginal examination, the parts were found to be hot and very much swollen; the presenting part, the head, was easily felt, low down, in the pelvic cavity, pushing the anterior wall of the vagina before it. No os uteri could be felt, nor anything to represent it.

The patient was put under chloroform, and a speculum introduced. After careful inspection, a very small aperture was found in the position of the os uteri, from which a small quantity of pus was exuding; this, evidently, represented the os. The end of Simpson's sound was introduced through it, with some difficulty; this touched the presenting part at once. The vaginal wall around the aperture was fixed with a vulsellum, a probe-pointed bistoury introduced, and incisions, sufficiently extensive to admit the index-finger, were made laterally. The tissue was hard and cicatricial. The finger was now introduced, and passed all round the opening; firm adhesions were broken down, and the os soon dilated to the size of a crown-piece. The patient was allowed to recover from chloroform, and the case left to nature for a short time. Although the pains were regular and strong, no impression was made on the presenting part. The patient was becoming exhausted; so Barnes's forceps was therefore put on, and she was delivered of a healthy female child.

In the evening, pulse and temperature came down, and she made an uninterrupted recovery. On examination, a few days before her discharge, the vagina was found to be shortened; the os uteri was represented by a small irregular opening; the uterus was freely movable.

REMARKS BY DR. BROWN.—The diagnosis in this case rested between congenital atresia of the os, and obliteration from endocervicitis. Although she gave a history of dysmenorrhœa, with diminished flow, yet, considering the cicatricial condition around what represented the os uteri, the firm adhesions and pus exuding from the small aperture, and from the fact that the woman had led an immoral life, it is probable she had suffered from endocervicitis, causing almost complete occlusion of the os uteri.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 11TH, 1886.

GEORGE POLLOCK, F.R.C.S., President, in the Chair.

The Ligature of the Larger Arteries in their Continuity: an Experimental Inquiry. By C. A. BALLANCE, M.S., and WALTER EDMUNDS, M.S.—The object of the paper was to show that, in the ligature of a large artery in its continuity, (1) it was neither necessary nor advisable to tie the ligature so tightly as to rupture the coats of the vessel; (2) the lumen of the vessel must be completely, or almost completely, obliterated; (3) the round ligature, of small size, and possessed of certain qualities, was the best. The authors commenced with a short historical sketch. They then stated the reasons which led them to perform the experiments which formed the basis of the paper. The experiments were made by kind permission of Professor Birch-Hirschfeld, in his laboratory at Leipsic. Sixteen sheep's and three horse's carotids were tied, some with catgut and some with kangaroo-tendon, and the animals were killed, at times ranging from nine hours to seventy-three days after ligature. The specimens thus obtained were exhibited embedded in glycerine-jelly; microscopic sections being also shown. The specimens showed that in no case had the inner coats been ruptured; that, within the ligature, the coats of the artery were alive, and apparently of unimpaired vitality; and that, although the coats of the artery had not been ruptured, the process of obliteration, by new material replacing the clot, and ultimately becoming connective tissue, took place. With respect to the ligatures, it appeared that they became surrounded by leucocytes, which gradually absorbed them; the absorption took place more rapidly in the case of catgut, for the leucocytes insinuated themselves into the crevices formed by the twisting of the gut, whereas, with kangaroo-tendon, the absorption took place from the surface only. The rapidity of the absorption of catgut varied in different specimens; but it was thought that good catgut (when the wound healed by first intention) held for one month, and kangaroo-tendon lasted for two months. When suppuration took place, catgut was rapidly becoming absorbed in fourteen days, while kangaroo-tendon appeared to be unaltered in the same time. As the obliteration of the vessel took place without rupturing the coat, it was thought unnecessary to do this, and, for fear of weakening the artery, unadvisable. It was also contended that, in those cases where suppuration took place, there would be less fear of secondary hæmorrhage, if the inner coats were intact, than if they had been ruptured. In conclusion, it was advised that, in tying large arteries in continuity, aseptic precautions should be taken, an absorbable ligature used, and that this should be drawn sufficiently tight to close the lumen of the vessel, but not so tight as to rupture its coats. The paper was illustrated by macroscopic and microscopic preparations, and by drawings.—Mr. BARWELL said he felt much indebted to the authors of this very interesting paper, and was much pleased to see that they confirmed some conclusions which he had brought forward, six or seven years ago, against the rupture of the inner coats of arteries in ligaturing them. To prevent such rupture, he had recommended the use of a flat ligature; for, with such a ligature, much more force was necessary to break the inner coats, and so this could be more easily avoided if desired. If the artery were lying loosely, it was indeed difficult to rupture the inner coats at all; if it were stretched and tense, it was remarkably easy, especially with a small ligature, such as Messrs. Ballance and Edmunds recommended. If a flat ligature were used, the knot certainly was large, but that, he thought, was no serious objection; indeed, with small knots, he had seen some small ulcers form close by the knots, and these had perforated the vessel. And, if thin ligatures were used, a less surface of the coats of the arteries was

brought into contact, and there was less opportunity for the adhesion of the two opposite surfaces of the *intima*, which was excellently shown in many of the specimens exhibited at the meeting.—Mr. SAVORY had been very much interested in the series of facts laid before the meeting, though he was sorry to say he could not agree to all the conclusions. The authors of the paper had said that it was "neither necessary nor advisable" to rupture the inner coats of the artery in its ligature. They had shown abundantly that it was not necessary, but, hardly, in his opinion, that it was not advisable. In fact, he should have liked to have had a second equally well prepared series of specimens shown, which had been taken from cases where the inner coats had been ruptured, in order that the comparison might be made. The paper read was somewhat of an *ex parte* statement; and, further, he considered that the argument from the processes in animals to the processes in man was especially defective in the case of arteries, for these were very different in animals and in men; there was much more power of contraction of the calibre, and less tendency to secondary hæmorrhage, in animals, as had been often shown, from the classical work of Mr. J. F. D. Jones in 1805 down to the present time. What principally determined the question as to whether to rupture the internal coats or not, was the nature of the ligature; if it could not be absorbed, as in the case of silk, and must come away by ultimately passing through the coats, it was just as well that they should be ruptured. The use of silk was continued by some surgeons, for the very important reason that it was the most absolutely trustworthy; there had been many more mishaps from the use of animal ligatures than from the use of silk.—Mr. HOLMES was grateful to the authors for the trouble they had spent upon the subject, but felt that their conclusions rather too vague for action in the case of human subjects. In some cases, where the inner coats were not ruptured, the arteries soon became again pervious, as in a case of Mr. Barwell's. In the hospital practice at St. George's Hospital, it was the custom to divide both the inner and the middle coats in ligature; he had seen no secondary hæmorrhage result from this; and, in his own private practice, had met with no death from it. He agreed with Mr. Savory in considering the results obtained in animals an unsatisfactory basis for operations of this nature on men. Mr. Pick had made a ligature, in a case he had seen, without rupture of the coats (*Path. Soc. Trans.*, vol. xviii), but pulsation recurred; in fact, it needed much experience to apply exactly the force requisite, and he doubted if, in human beings, the inner coat ever escaped some damage from the ligature, whatever might be the case in animals. He agreed with Mr. Savory, that a comparison of methods was wanted, and he declined to admit that the present investigation, interesting as it was, had settled the question.—Mr. CLINTON T. DENT had, some time ago, in concert with Mr. E. A. Stirling, who was at present in Australia, undertaken a series of experiments on the effects of tying femoral arteries in sheep with kangaroo-tendons prepared in chromic acid. Their principle had been to rupture the inner coats in all cases, so that their results might furnish what Mr. Savory required, namely, a parallel series to those of Messrs. Ballance and Edmunds, but they were not yet quite ready for publication. Flat tendons were used. The success of the operations, which were aseptic, left nothing to be desired, and led them to conclude that the rupture of the coats rendered the operation more certain. There was no secondary hæmorrhage in any case.—Mr. BARWELL asked to be allowed to explain that the unsuccessful ligature with a strip of ox-aorta, to which Mr. Holmes had referred, was the first he had attempted in that fashion; it became pervious, as he freely admitted, from his mistake in not tying it tight enough; but, since then, he had had no similar mishap in the use of ox-aorta.—Mr. EDMUNDS, in reply, urged that a flat tendon could not make as good a knot as a round one; that their series of experiments on sheep seemed at least as good as Mr. Dent's; and that the subject needed more study, as, during the eighty years since Jones's book, there had been constant change, and no completely satisfactory results.—Mr. C. A. BALLANCE observed that, in a part of the paper which the Secretary had not read, they had endeavoured to do justice to Mr. Barwell's experiments and results. It had been urged that more skill was wanted to tie arteries without rupturing the inner coats, but he confessed he thought the additional skill required was very slight, and very easily attained in the *post mortem* room. He thought that the breadth of the internal adhesion of the coats of the vessels, in their cases, though less than that advocated by Mr. Barwell, was quite sufficient. Mr. Savory spoke of Jones's experiments as classical, and certainly nearly everyone had clung to them. They had not brought forward a second series of cases, in which the coats had been ruptured in the usual way, because they considered that side of the subject had been sufficiently explored.

Congenital Absence of Hair, with Atrophic Condition of the Skin and its Appendages, in a Boy whose Mother had been almost wholly Bald from Alopecia Areata from the Age of Six. By JONATHAN HUTCHINSON, F.R.S.—This paper described the case of a boy, three and a half years old, who presented a very withered "old-mannish" appearance. His skin was remarkably thin, in some places being not thicker than brown paper. The genitals presented a marked contrast to the rest of the body, being in the state of a normally plump child. He had no nipples, their sites being occupied by little patches of scar. The history of the patient showed that it had been necessary to turn during delivery, but he had had no ailments since his teeth. He was liable to vary much in blueness, from temperature or excitement. From the age of 6, the mother had been bald from alopecia areata. The question of heredity in this case was discussed.—Mr. WILLIAM SEDGWICK referred to a case, reported many years ago, in which a lady with alopecia had had two grandsons who had both inherited alopecia, and also had very defective teeth, amounting, in fact, to only four in all. In them, there was an atrophic condition of sweat-glands and ducts. He had mentioned, in writing on heredity, that congenital alopecia could be produced by breeding in-and-in, and had known cases in which "top-knotted" canaries had offspring which were bald, and sometimes had almost a deficiency of skin.—Mr. HUTCHINSON observed that the case he had brought forward was, in his knowledge, unique; for it was not only a case of congenital alopecia, but was peculiar in this respect also, that the mother was born healthy, and had only acquired alopecia at the age of 6. The absence of the nipples was remarkable, and the small tract of normal skin about the genitals. There were several children of the same mother who were not abnormal; and how far this congenital alopecia was a genuine inheritance from the acquired alopecia of the mother, was very hard to say.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MAY 6TH, 1886.

JONATHAN HUTCHINSON, F.R.S., F.R.C.S., President, in the Chair.

EXOPHTHALMIC GOÎTRE.

THE PRESIDENT said that the evening was to be devoted to the subject of exophthalmic goître. It was not desired that a discussion of theoretical considerations should be entered upon, but rather that a mass of facts, for future analysis, should be brought together. One point of great importance which such an accumulation of facts might elucidate was the prognosis of the disease. As an example of recovery from the disease, he might mention that of a medical man whose case was published by Dr. Warburton Begbie ten years ago; at that time, the patient had a rapid pulse, bronchocele, proptosis, and albuminuria. Mr. Hutchinson had seen this gentleman on the day of the meeting; he had lost all these symptoms; though the carotids still pulsated vigorously, the thyroid was full, the pulse was intermittent and easily accelerated, yet the patient was in excellent health, and had been able to continue his practice up to the present time. With regard to the influence of treatment in this case, the chief good appeared to have occurred during a sea-voyage; and the patient himself thought that, during this voyage, doses of twenty grains of bromide of potassium, three times a day, had been of great use. The coincidence of albuminuria and Graves's disease was deserving of attention. Dr. Begbie had recorded another case, in which albuminuria had been persistently present at some parts of the day, that is, after meals, and especially after breakfast, for one year. This patient also recovered. The presence of albuminuria, in both these cases, had been confirmed by Dr. George Johnson. Mr. Hutchinson said that he felt great uncertainty with regard to the influence of remedies; his experience had been fragmentary and special, the cases having come under treatment on account of proptosis. He felt assured that a considerable number of the cases he had seen, under these circumstances, had recovered. Digitalis, aconite, iron, and bromide of potassium, seemed to be of use in different cases. In one middle-aged lady, tincture of aconite, long continued and pushed to ℿxx, three or four times a day, was said to have been followed by complete cure. With regard to the eye-symptoms (severe symptoms were rare), the treatment which produced the best results was the systematic application of ice to the forehead, eyes, and temples. Blindness had never been produced in any patient under his own care. The apparent connection between impaired menstrual functions and the disease was generally acknowledged. Its occurrence in young men, in unmarried women, and the fact that it never occurred in pregnant women, appeared to prove some connection between the sexual functions and exophthalmic goître. He was not prepared to entertain the opinion that the disturbance of the menstrual functions produced the disease, but thought rather that

both affections were probably the consequences of a common cause. He had only met with one case in which the disease occurred during pregnancy; in that case, the proptosis began during pregnancy, at the fifth month, but the patient did not suffer severely in general health, although she suckled the child for a year. The statistics recorded with reference to sex and to age were interpreted by Dr. Niemeyer as proving that the men who were affected were old; and von Gräfe stated that the disease was more liable to be fatal in men. Mr. Hutchinson, however, said he had never seen a case in a man which began after middle age.

Dr. BRISTOWE explained that he had no statistics to give, but that he proposed merely to place before the Society a group of interesting cases, which were already (when the announcement of the discussion was made) written out for publication, together with two or three additional facts furnished by other cases. He first gave very brief details of a recent case, in which, in a woman, aged 40, the symptoms of Graves's disease were distinctly referable to prolonged exposure to cold. He also mentioned one case, in which recovery appeared to be complete; and another, in which, all signs of proptosis and enlarged thyroid having subsided, the patient still suffered, at times, from severe palpitation. He referred also to a case of the disease, in which exophthalmos was associated with syphilis; and to one in which the patient died under his care, from organic heart disease. The cases of chief interest were three in number. Of these, the first was that (which had already appeared in *Brain*) of a young woman, who, about the year 1877, first showed signs of proptosis, enlarged thyroid, and palpitation, which symptoms, after continuing for a few years, became complicated with those of ophthalmoplegia externa. In 1882, she came under Dr. Bristowe's care. She was then suffering from nearly complete paralysis of all the external ocular muscles, ptosis, and proptosis. Moreover, she had complete hemianæsthesia on the right side, with colour-blindness, and loss of taste and smell on the same side. Later, fits, apparently epileptic, supervened, with rigid paralysis of the right arm and leg. She also suffered from hæmorrhage from the ears. She was under Dr. Bristowe's care for two years, who, not at the time knowing she had suffered from Graves's disease, attributed her proptosis to weakness of the paralysed eye-muscles. The thyroid body was not visibly enlarged. She had no palpitation, but her temperature, from first to last, varied daily between 100° and 103°,° 104° or 105°. Finally, she died of an acute attack of bronchitis. At the necropsy, no disease was discovered in the nervous centres; the thyroid gland was a little larger than normal; there was much fat in the orbit, and the ocular muscles were pale. Excepting for the prominence of the eyeballs, the patient appeared, so far as the signs of Graves's disease were concerned, to have recovered. The second case was that of a young married woman, who had suffered for three or four years with Graves's disease, and in whom the thyroid had become so large, as latterly to cause attacks of severe dyspnœa. It was on this account that she came into the hospital. Her breathing was stridulous; but, no immediate danger being anticipated, no operative procedure was contemplated at the time. Unfortunately, a day or two after admission, she was attacked by a severe paroxysm of dyspnœa, and, before anything could be done to relieve her, died. The third case was that of a young woman, who had been suffering from the usual symptoms for some years, but who was also the subject of serious organic heart-disease, there being evidence of aortic, mitral, and tricuspid affection. On admission, her breathing was stridulous; and, having regard to the result of the case last narrated, Dr. Bristowe consulted with his colleague, Mr. Sydney Jones, as to whether any operation was feasible. The goître was unusually large, but, fortunately, the isthmus was narrow; and it was, consequently, determined to remove a portion of the isthmus, and dissever the two lateral lobes—an operation which Mr. Jones had performed with admirable results, in a case of ordinary goître, of Dr. Bristowe's, in which suffocation threatened. The operation was successfully completed in this case, and was followed by dwindling of the lateral lobe of the thyroid body, and cessation of stridor. No other definite improvement followed. The prominence of the eye-balls continued, and the cardiac symptoms, unfortunately, progressed unfavourably, so that, at the end of about four months, the patient died of the heart-disease.

A paper by Dr. WILKS was read by the Secretary (Dr. Sharkey). Dr. Wilks stated that, of the many cases which he had seen, some had recovered, others had died, and others had been lost sight of. He had also seen slight cases, which were probably modifications of the complaint. As to the question, what were the characteristic symptoms? he considered that these were increased frequency of the heart's action, enlarged thyroid, prominent eyeballs, a loud murmur heard in the veins with a thrill, and, in severe cases, great emaciation, with outbursts of sweating and diarrhœa. The increase in the cardiac rapidity he regarded as a primary and necessary symptom; quickened cardiac action, combined with exophthalmos and emaciation, or with enlarged thyroid and emaciation, he would regard as characteristic. The theory which attributed the symptoms to disease of the sympathetic in the neck was not good, and had not been found true in fact; though there was, probably, some disturbance of the sympathetic, giving rise to the extreme relaxation of the blood-vessels. The relaxation gave rise to murmurs which were much louder and harsher than any met with in simple anæmia; the diarrhœa and sweating might also be due to the sympathetic disturbance. Apart from the proptosis and enlarged thyroid, which could not come on suddenly, the symptoms resembled those seen in nervous women, especially at the climacteric. Violent palpitation, clammy sweat, diarrhœa, starting eyes, and choking were the symptoms produced by sudden fright. It was, therefore, reasonable to look to some relaxation of the sympathetic as a cause of the combination of symptoms seen in Graves's disease. The disease also seemed to have some relations with anæmia and chlorosis. Belladonna was the only drug in which he felt any confidence; he had observed the symptoms, even in severe progressive cases, so speedily reduced, that he could not doubt the value of the drug. After using it for some weeks, it was his custom, as the cases were tedious, to substitute iron, iodide of potassium, or digitalis, but he had observed no good effect attributable to these drugs. He gave the following categorical replies to the series of questions circulated by the Society (see BRITISH MEDICAL JOURNAL, March 13th, 1886, p. 519). 1. He had performed one necropsy; no lesion was found in the nerves or elsewhere. 2. No cause could be assigned in any case. 3. He had seen several cases in young women where the symptoms were modified. 4. He thought the disease removable (or curable). 5. He had had cases under treatment for two or three years with great improvement; but relapses occurred. 6. He had never seen a case recover without treatment. 7. In none of his cases had the eye become diseased, or vision imperfect. 8. He had never seen a case of simple exophthalmos. 12. He had never seen Graves's disease in conjunction with others (but he referred to Dr. Carrington's case, mentioned below). 13. He had only seen two males affected with the disease; they were aged 24 and 26 respectively. He thought that the disease was in some way associated with the reproductive organs; in women, he had seen it generally in middle-aged women with families, or in young girls with anæmia and amenorrhœa.

Dr. HUGHLINGS JACKSON attached great importance to von Gräfe's sign, but had seen well marked cases of Graves's disease in which it was absent; mentioning, in illustration, the cases of two sisters. Again he had found the sign present in a man who had no Graves's disease. These observations had been confirmed by Mr. Couper. Referring to the cases of the two sisters above mentioned, Dr. Hughlings Jackson remarked that a third sister was said to have the same morbid affection. Dr. Cheadle had seen four cases of Graves's disease in one family. Dr. Hughlings Jackson suggested a comparative study of such cases with some other "family diseases," such as pseudo-hypertrophic paralysis, Friedreich's disease, etc. In all the recent (eight) cases of Graves's disease he had seen, the right lobe of the thyroid was the larger: a fact bearing on the question as to central pathology, as Dr. W. A. Fitzgerald had suggested. The right vagus had, in some lower animals, more inhibitory influence on the heart than the left. Dr. Hughlings Jackson thought the hypothesis of a central pathology the most probable; and, in this connection, referred to the experiments of Brown-Séquard and Filehne on the production of exophthalmos by injuries of the restiform body. He believed that most would be learned as to the seat of changes in Graves's disease from experiments on lower animals. In all cases of fatal Graves's disease, the medulla oblongata and pons Varolii should be carefully searched microscopically. He referred to so-called complicated cases, mentioning the remarkable case recorded by Dr. Warner and Dr. Bristowe, in which there was ophthalmoplegia externa, and a like case which he had seen, a case complicated with asthmatic paroxysms, one with paroxysms of right-sided facial spasms, unlike cortical facial spasm, and a variety which he supposed to depend on discharge of facial centres in the pons Varolii. Dr. Pavy had noted the association of Graves's disease with diabetes. In the so-called complicated cases, the associations might be accidental, but Dr. Hughlings Jackson thought they deserved very careful consideration. He did not remember seeing a case of Graves's disease in man.

Dr. FITZGERALD (Dublin) said he had never yet seen the visible pulsation of the arteria centralis retinæ described by de Wecker. Visible pulsation of the veins was very frequently seen. Von Gräfe's sign was not constantly present. In the cases in which a perfect cure occurred, some of the ordinary symptoms were absent, or little marked. In some cases, only one eye was affected by proptosis. He had seen

one well marked case in a man, aged 28, at the Meath Hospital, under the care of Dr. Foot, in whom the affection had come on after an occasion on which he had danced excessively.

Mr. HILL GRIFFITH read a statistical paper, founded on thirty cases observed in the Manchester Eye Hospital. Of the thirty cases, twenty-seven occurred in women. The symptoms commenced in two cases under the age of 20, in sixteen cases between 20 and 30 years of age, in seven between 30 and 40 years of age, and in five between 40 and 50. Eighteen of the individuals were single, and twelve married. The eye-symptoms were bilateral in twenty-three cases; the right eye only was affected in four cases, the left eye in three cases. The upper lid was retracted (Stellwag's symptom) in twenty-two cases, and in four of these the lower lid was also retracted. This sign was the most constant sign of all. Loss of consensual downward movement of the upper lid (von Gräfe's sign) was present in four cases, absent in four, and not noted in twenty-two. Goître was present in seventeen cases, and was bilateral in all but two. In three of the cases in which the enlargement was bilateral, the enlargement was greatest on the right side; in four, there was increased pulsation of the carotids; and, in two, a thrill was noted in the swelling. Vision was normal in seventeen cases, and less acute than normal in twelve cases. In ten of these twelve cases, the imperfect vision was due to lasting high degrees of myopia, with staphyloma posticum; in two, there was amblyopia. With regard to refraction, it was normal in twenty-two cases; there was high hypermetropia in one, myopia in four, and astigmatism in three. The fundus oculi was normal in twenty-six cases. In two cases, there was monocular high myopia, with staphyloma posticum; in one, "corkscrew" veins, and in one a glistening striated patch at the upper and outer part of one disc. Spontaneous arterial pulsation was looked for in every case, and its absence was distinctly established in twenty-six cases, and no note was made in four. Acute gastric symptoms occurred at the beginning of the illness in twelve cases; in two cases, there was loss of flesh; and, in six other cases, there were minor complaints. The nervous symptoms noted were, a choking sensation, a distinct hysterical attack, great nervousness, flushing. Mr. Griffith thought the fussy agitated behaviour of these patients was very characteristic. With regard to heart-sounds, there were an anæmic murmur in three cases, an aortic systolic murmur in three cases, a mitral systolic murmur in three cases, and an aortic regurgitant in one. The remaining twenty cases were probably all normal. Sugar was found in the urine in two cases. Menstruation was irregular in two cases; was accompanied by severe headache in one; had ceased six months after the beginning of the symptoms in one case, and two years before their beginning in one. In seventeen cases in which goître and exophthalmos were both present, the goître preceded by two years in one case, by one year in another, and by six months in a third. In one case, the exophthalmos was noted first (by the patient), and in one case only did the two conditions appear simultaneously. In a very large number of cases no information could be obtained, for the reason that the patient was quite unaware of the existence of the goître.

Dr. SAMUEL WEST read a paper on thirty-eight cases of exophthalmic goître. About one case in every 1,000 out-patients represented, perhaps, the relative frequency of the disease. Two-thirds of the cases occurred before the age of 30. There were three male cases, in a total of 51. The ocular, thyroid, and cardiac symptoms all appeared simultaneously in six cases; the thyroid enlargement occurred first in eight cases; palpitation appeared alone and first in nine cases; exophthalmos came first and alone in four cases. From these and other facts, it seemed that there was great irregularity in the relative time of appearance of the cardinal symptoms. The right lobe of the thyroid was larger than the left, where there was a difference between the two. In one case, a marked decrease in size of the thyroid occurred after an acute attack of pneumonia. Exophthalmos appeared generally to be a late symptom. Von Gräfe's sign was noted only in seven cases. Von Gräfe's statement, that the pupils were never dilated, was not absolutely true. In one case, there was slight ptosis of both eyes; in another, there was persistent crossed diplopia and an external squint of the left eye. Attacks of profuse sweating were noticed in four cases. Seven times, uncontrollable and unaccountable diarrhœa was observed, and six times paroxysms of vomiting. Diabetes mellitus was present in one case. A bronzing of the skin, suggestive of Addison's disease, was remarked in one case. Inexplicable changes in bodily temperature were recorded seven times; twice there was remarkable pyrexia, recalling that met with in cerebro-spinal disease. Other nervous symptoms, noted in some cases, were change in manner and character, somnambulism, trembling, fits, megrim, neuralgia, insanity, and chorea. In eight cases, there was a definite history of rheumatic fever. Considering the rarity of exophthalmic goître, it was remarkable that rheumatic fever should be so often associated with it; possibly, the severe organic valvular disease, noted sometimes, might be due to antecedent rheumatic fever. Overwork, severe parturition, blows, fits, and rheumatic fever, were causes assigned in a few cases in the majority, no cause was given. No constant relation could be established between the disease and the catamenia. In some cases, there was a family history of nervous diseases. The longest duration of the disease was nine years; the shortest, two months. In three fatal cases, the disease had lasted respectively four years, two years, and three months. The constant application of cold seemed to have undoubted influence for good in the treatment of some cases.

Dr. CARRINGTON related the case of a woman, aged 23, who gave a family history of phthisis; she had suffered from megrim; palpitation and proptosis had been noticed for three years. Two months before admission, she began to suffer from vomiting, great exhaustion, amenorrhœa, and epistaxis. When admitted, she was fairly nourished; the skin was generally dark, the pigment being most marked on the eyelids, chin, neck, abdomen, the flexure of the joints, the axillæ, and the areolæ; numerous small, freckle-like spots had come out since admission. Proptosis and von Gräfe's symptom were well marked, but the other orbital muscles were normal. The pupils were almost immovable. The thyroid was moderately enlarged, the right lobe being larger than the left. At the base of the heart was a loud systolic murmur. The pulse was extremely small and feeble, as in Addison's disease. Three fatal cases of exophthalmos had occurred during the last two years, at Guy's Hospital. Two of the patients died of acute enteritis, and one of mitral regurgitation.

Mr. C. HIGGENS related the case of a woman, aged 29, in whom the exophthalmos was so extreme, that it appeared desirable to attempt to partially unite the margins of the lids; the patient died under the influence of an anæsthetic. The case was fully recorded in the *Transactions of the Pathological Society*, vol. xxv, p. 240. The main points noted at the necropsy (by Dr. Goodhart) were enlargement of the thyroid gland and thyroid veins, and slight hypertrophy of the heart; thickening of the sympathetic capsule, and of the mediastinal and cervical connective tissue; growth of gland-tissue in the region of the thymus, and tendency of the lymphatic glands, elsewhere, to enlarge.

Mr. MASON, of Bath, described the case of a woman, aged 35, in whom the eye was dislocated, slipping in front of the lids on the slightest touch.

The PRESIDENT said that a tendency to dislocation had been noted in other cases.

Mr. A. QUARRY SILCOCK described the *post mortem* appearances observed in the body of a woman, aged 30, who died of uræmia while suffering from exophthalmic goître. The orbits were most carefully examined; there was nothing abnormal about them, except that the muscles were infiltrated with fat (not degenerated). The nerves were quite normal; the sympathetic, in the neck, was normal; the thyroid gland was enlarged, the right lobe being larger than the left. This enlargement was due to overgrowth of the epithelium of the acini, and of the connective tissue of the gland. He referred to a case in which Dr. Cheadle had described remarkable increased vascularity of the medulla oblongata and pons Varolii. He also related the case of a man, under the care of Dr. Alex. Morison, of Highbury, in whom, though the enlargement of the thyroid was cured by electrolysis, the proptosis still persisted.

Mr. LANG read an epitome of six cases observed by Dr. J. J. Pringle and himself, in which unilateral "lid-phenomenon," without proptosis, was associated with no other evidence of Graves' disease, except slight thyroid enlargement in two of the cases. In four of these, paresis of orbital muscles was present, and, in three, sensory phenomena (pain, scalding lacrymation, etc.). In none was there cardiac disease or disorder, nor had the patients ever noticed implication of the lower lid. They were inclined to consider their observations as lending support to the theory of the central origin of Graves's disease, and to regard a tonic contraction of the levator palpebræ superioris as the immediate causal agent of the lid-phenomenon, in opposition to the well known views of von Gräfe.

Mr. W. H. JESSOP said that, when the eye was brought under the influence of cucaine, the palpebral aperture was widened, and distinct proptosis produced. By dropping cucaine into the eye, in a case of Graves's disease, he had intensified the exophthalmos, and made von Gräfe's symptom more marked.

DEATH OF A PROFESSOR FROM BURNING ETHER.—Dr. D. J. Barnet, one of the Professors of the Faculty of Pharmacy in the Cuban Royal University of Havana, has just died, in consequence of burns received during an accidental conflagration of some ether in his laboratory.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 5TH, 1886.

J. B. POTTER, M.D., President, in the Chair.

Dilators.—Dr. SAMUEL SLOAN, of Glasgow, showed graduated uterine dilators, and also graduated dilators for the female urethra.

On Elasticity, Retraction, and Polarity of the Uterus.—Dr. J. MATTHEWS DUNCAN read a paper bearing this title. Retractility had been defined as that property of the uterine tissue, in virtue of which the womb, emptied of a part, or of the whole, of its contents, acquired a greater thickness of wall, at the same time that its volume and its capacity were diminished. It was a function of muscular tissue, and it got only a little supplementary aid from elasticity. The elasticity of each of the three layers of the uterine wall was discussed, as it existed in healthy and in morbid conditions. Retraction was not merely a condition, it was a force. During pregnancy, it was a mere tonic tightening. In labour, its action was necessary; in labour, there was inhibition of it in the circular fibres of the lower segment of the uterus, and in the whole cervix and vagina. Retraction implied expulsion of contents, but the retraction was not necessarily in proportion to the advance of contents. There was, probably, an essential difference between contraction and retraction; each might go on without the other. The usual comparisons of the action of the uterus and of the heart were criticised, and a new comparison suggested between the whole of pregnancy and a diastole, and the whole of labour and a systole. The expulsion of a fibroid was cited in corroboration and illustration. Cases of morbid retraction, and of morbid absence of retraction, were mentioned. Ergot caused retraction and not contraction, and hence its failures, its injuries, and its benefits. Dr. John Williams described the retraction of menstruation. Uterine polarity, described by Reil, and re-described by Champneys, was referred to, and illustrations of its action given.—Dr. GALABIN agreed with almost the whole of the author's description of retraction of the uterus. He was surprised to hear it stated, however, that ergot produced only retraction, and not contraction. If this were so, then the general opinion that, in some cases, ergot acted as an oxytoxic, and hastened delivery, or completed when nature could not, must be wrong. Rupture of the uterus occurred in some cases of obstructed labour after the use of ergot, intense rhythmical pains having preceded the rupture. In such cases, he did not think rupture could be accounted for by continuous tension and pressure, due to retraction, having weakened the vitality of the tissue. Perhaps the explanation was, that Dr. Duncan refused the title of contraction to that kind of contraction which was the initial stage of retraction. Such a use of the words could not be maintained. By contraction, he understood shortening and thickening of the muscular fibres; by retraction, a similar shortening and thickening not followed by relaxation and lengthening, but leaving a permanent shrinking after the tension of the contraction had passed off. Retraction was contraction and something more. The contraction itself was identical in the two cases. Thus, in *post partum* hæmorrhage, the contraction was the same, whether it were followed by relaxation and renewal of hæmorrhage, or ended in retraction and arrest of hæmorrhage. He believed that ergot had the power of intensifying both effects in variable degrees in different cases, both the initial rhythmical contraction, and the subsequently persisting tonic contraction which maintained the shrinking produced by it.—Dr. HORROCKS observed that elasticity of muscular fibre, though nearly perfect, was not sufficient in amount to diminish the size of the uterus after labour. With removal of the stretching force, muscular fibre regained its normal size. Retraction meant contraction not followed by relaxation. A contracted muscle felt hard; a retracted one did not. Retraction after parturition was probably due to the absence of sufficient force inside the cavity to stretch the fibres to their former length. Polarity of the uterus was merely a part of the great general question of relaxation of opponent muscles. He illustrated this by reference to various groups of muscles. Relaxation of fibres of the cervix during the contraction of those of the fundus was merely one example of the general law. He then discussed "reflex tone" of muscles, and pointed out that in defæcation, micturition, and parturition, there is a reflex tonic contraction kept up in the muscular fibres, especially in the sphincter. The contraction of the sphincters would be inhibited, and the nerve-centres for inhibition were closely associated with those for contraction. Defæcation, micturition, and parturition, could take place independently of volition, or even of consciousness. The will had, however, a modified power over them, and could help to start them. Finally, ergot would cause contraction of muscular fibre, because it had been given successfully, many times, to bring on premature labour.—Dr. CHAMPNEYS had difficulty in accepting the teaching that ergot produced retraction. He did not believe that it produced true contraction, neither did he believe that it produced true retraction. Ergot often produced a contraction of limited extent, and then tetanus; the organ contracting, and then remaining of the same size, but hard and rigid. This was rather tonic contraction than retraction. With regard to polarity, the action of opponents, referred to by Dr. Horrocks, was exemplified in the uterus by conditions involving a disturbance of the normal condition, in which consentaneous, though opposite, action was observed in the upper and lower poles, such as incarceration of the placenta, after-pains, and some forms of dysmenorrhœa—conditions analogous to colic in other hollow muscular viscera, the pain being due to violent opposition instead of normal yielding of one muscle to another.—Dr. SLOAN, of Glasgow, thought it must be admitted that retraction differed from contraction; for, after the uterus was quite emptied, we found, in the intervals of the pains free from tonic contraction, the uterus smaller, that is, retracted. He thought morphine was the exact opponent of ergot in its action on the lower segment of the uterus. It caused inhibition of this segment, and thus accelerated dilatation. He suggested that great mental distress, as in unmarried women, by preventing healthy retraction, favoured absorption and puerperal fever.—Dr. BROWN said that light might be thrown on the question as to whether ergot caused retraction or contraction by noting its action in small doses in threatened abortion, or in preventing habitual abortion. In the former, its use stopped the uterine contractions, if not too far advanced; and, in the latter, the habitual tendency could be cured. On the principle of the double action of medicines, these facts might elucidate the point at issue.—Dr. ROPER remarked on the difficulty of separating contraction from retraction. Retraction could not occur without antecedent contraction. Retraction, persistent contraction, of the fibre after active contraction ceased. Thus, muscular fibre not returning to its original length became shorter after action. At the end of a contraction of an uterine muscular fibre, there was no return to the original state, or to relaxation, as in a voluntary muscular fibre. On this view, contraction was the cause of retraction, and no retraction can take place without previous contraction. Retraction could, therefore, never precede or cause contraction. The first effect of ergot was to cause contraction; then followed retraction, according to the potency of its stimulation. Ergot interrupted the rhythm, and caused tonic spasm, both in the body and cervix. It seem questionable whether it directly stimulated the fibres of the cervix, or whether it interrupted their inhibition.—Dr. PERIGAL asked Dr. Duncan how he would explain the action of ergot, given in fairly large doses, to restrain hæmorrhage, when that action seemed expended on the lower segment and cervix, stopping the bleeding, but allowing the body of the uterus to enlarge and retain the clot. He had lately seen several cases in which this had happened; then pain set in, and a large clot was expelled. Ergot seemed to expend its action on the lower segment, and affect the fundus but little.—The PRESIDENT and Dr. M. HANDFIELD JONES also made remarks.—Dr. DUNCAN, in reply, was gratified at the critical remarks. It was plain, from them, that there was much need of drawing attention to the great and long recognised, but little known, difference between contraction proper and retraction. He could not recognise in ergot the power to induce labour or abortion, except in an indirect and uncertain way. It was common to hear of great pains induced by ergot; but he had not seen them. We much wanted a medicine which had that power; it was a want not yet supplied.

Case of Serous Perimetritis.—Dr. AMAND ROUTH read this contribution. The disease was brought on by a chill, during menstruation, in a woman, aged 27, suffering from subinvolution and its consequences. The uterus was fixed, and there was bulging downwards of the pouch of Douglas, with two fluctuating points. Each was aspirated, 3½ and 1½ ounces of clear serum being drawn from them. The intestines were matted, forming a large hypogastric tumour, which varied with their distension. The patient speedily recovered after the aspiration; but had a slight relapse at her next menstruation, the temperature rising to 100° Fahr. The researches of Drs. M. Duncan and J. Williams were noticed; and the opinion was hazarded that these cases were more common than was supposed, and were often diagnosed as hæmatocele. The diagnosis between serous and purulent perimetritis was only certain after aspiration. Mr. Burton's theory that these effusions were due to pelvic hæmatocele was opposed to the author's opinion, that they were due to physiological congestion of the uterus during menstruation, being changed into inflammation by a chill; such inflammation spreading, by continuity of tissue, either along the Fallopian tubes, or through the uterine tissue to the peritoneum. Extreme cases of bulging of the pouch of Douglas were alluded to, caused, as Dr. John Williams had shown, by adhesive lymph fixing the intestines above, and so preventing the serous fluid from rising up into the pelvis.—Mr. DORAN said that the case tended to prove the true

signification of the term "serous perimetritis." Some irritant material from the tubes or elsewhere set up peritonitis. The uterus, tubes, and intestines happened to adhere in such a manner as to cut off a segment of the peritoneum. This was the first essential condition. The inflammatory process not being of a low type, serum, instead of pus, was poured out into the portion of peritoneum shut off from the general cavity. This was the remaining essential feature in that accidental variety of pelvic peritonitis, conveniently termed "serous perimetritis." He could not understand Dr. Routh's theory about the share which the posterior layer of the broad ligament might take in this disease. He described the actual anatomical relations of the parts, and pointed out that they explained the rapid matting of ovary, tube, and broad ligament in such cases; but, in some, intestine might displace the tube, and come into contact with the broad ligament, and adhere to it.—Mr. THORNTON wished to emphasise the remarks that had been made as to the inflammation forming serum instead of pus, and to point to the analogous conditions frequently seen in the pleura. If advantage of this knowledge were not taken, and the serum evacuated, then tension would lead to suppuration and its attendant dangers. But, in the earlier reports of these cases, aspiration and tapping usually led to suppuration and death, just as the removal of serum from the pleura used frequently to end in empyema and death. The great fact brought out by Dr. Routh's case was that, properly performed, aspiration of the serum, in these cases, ended in speedy cure, just as the removal of serum from the pleura, in the present day, usually ended in cure. The difference in result was to be found in the careful antiseptic management of the operation. Dr. Routh cleansed the vagina with corrosive sublimate lotion, and packed it with iodoform-gauze, hence the speedy cure. Had he, with his aspirator, introduced putridity into the peritoneal sac, suppuration, instead of cure, would have resulted.—Dr. A. ROUTH said a few words in reply, and the meeting adjourned.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 15TH, 1886.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

CLINICAL EVENING.

Bulbar Paralysis.—Dr. BROADBENT showed the following case. J. H., aged 35, a stonemason, was admitted into St. Mary's Hospital on January 29th, 1886. He had served in India, and there suffered from syphilis, sunstroke, dysentery, ague, etc. One year before admission, he began to lose his voice, and had difficulty in swallowing, the food collecting in the sides of the mouth, necessitating manipulation with the fingers, the saliva dribbling away. These conditions, and a gradually increasing muscular weakness, had continued, with occasional remissions, until admission, when he was found to be unable to speak, except in a whisper, every syllable being produced by a long forcible expiration. The vocal cords were seen to be widely separated, and could only be partially approximated on phonation. The tongue was small and shrunken, and could be moved from side to side, but not properly protruded. There was impaired movement of all the facial muscles of expression, general muscular wasting, with paresis, traces of the reaction of degeneration, increased superficial reflexes, and good sensation. Since admission, there had been a general improvement in all these symptoms, the chief trouble arising from the profuse amount of saliva, which frequently blocked the pharynx and larynx. The present condition included all the foregoing symptoms, the patient complaining, also, of pain in the left side of the face and head, with occasional nausea. The vision was impaired, the ophthalmoscope showing pallor of the centre of the discs, and very small vessels. The pupils reacted to light and accommodation, but were somewhat contracted. Hearing was also impaired; the heart's action was weak, but regular; respiration was chiefly abdominal. The patient walked with a stiff but steady gait, but had great difficulty in going upstairs, or in rising from a seat, owing to weakness of the extensor muscles of the thigh, which, in common with most of his extensor muscles, were wasted, exhibiting, to a slight extent, the reaction of degeneration. The superficial reflexes were exaggerated, and there was ankle- and thigh-clonus in the left leg. Sensation was complete. Treatment had consisted of rest in bed, with thirty grains of iodide of potassium daily.—Dr. MAGUIRE related a case of chronic poliomyelitis, with rigidity and excess of reflexes, in which the symptoms of bulbar paralysis showed themselves towards the end of the case. Sclerosis had been found spreading from the anterior horns to the lateral columns, and a microscopic hæmorrhage had been discovered in the nucleus of the vagus. There had been no renal disease in the case.

A Peculiar Form of Choroiditis.—Mr. JONATHAN HUTCHINSON exhibited drawings of a peculiar form of choroiditis, in which, with a very extreme degree of disease in the choroid, sight had been well recovered.—The PRESIDENT related a similar case, which had occurred in association with locomotor ataxy.—Mr. JULER had seen a few such cases, in which there appeared to be no trace of syphilis.—Mr. HUTCHINSON advocated the use of antisyphilitic remedies in all such cases.

Nodding Spasms (Spasmus Nutans).—Dr. STEPHEN MACKENZIE exhibited two infants, aged respectively 9 and 15 months, each presenting a series of more or less rhythmical movements of the head, partly consisting of a nodding of the head forward, and partly of a rotatory movement, the latter being more marked in one case than in the other. In each, there was nystagmus, which, in one case, was almost entirely confined to one eye. This was increased, or evoked if absent, by restraining the movements of the head. In both cases, the nodding movements came on without apparent cause, and ceased during sleep. The condition had been well described by Henoch. It occurred especially during the dentitional period, and usually terminated spontaneously, often after the eruption of a tooth. —Dr. BUZZARD described a case of rotatory movements of the head, with uniocular nystagmus. The fundus of the eye was normal, and the case improved under bromide of potassium.—The PRESIDENT thought that the movements were allied to those seen in the chorea of dogs, which had been shown to be due to affections of the anterior cornua.—Dr. GAIRDNER (Glasgow) observed that the cases were new to him. He related a remarkable instance of nodding and rotatory movements of the head in a young girl, ultimately proved to be due to deception, which for years had defied detection. In these cases, hysteria was out of the question.—Dr. BRISTOWE related two cases of movements of the occipito-frontalis, which had been described as nystagmus of the muscles. Both had recovered.

Excision of the Knee-Joint.—Mr. A. J. PEPPER exhibited a successful case, complicated by an attack of erysipelas, notwithstanding the use of spray and gauze.—Mr. HUTCHINSON advocated the use of irrigation by a spirit and lead lotion, in all cases of excisions of the knee, or of compound fractures and dislocations. By this means, he had never got erysipelas in his cases, and wounds frequently healed within eight days.

Albuminuric Retinitis.—Mr. JULER showed a case of albuminuric retinitis, which had come on for the first time, in a young woman, during the eighth month of her third pregnancy.

Left Lateral Hemiopia.—Mr. JULER showed a case of complete loss of vision over the left half of each visual field, at first accompanied by partial paresis of the left arm and leg. The limbs had, however, recovered power.

Dislocation of Crystalline Lens.—Mr. JULER exhibited a patient, aged 50, in whom the crystalline lens had suddenly become dislocated, and could only be restored to its position by partially inverting the head.—An interesting discussion followed.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, APRIL 9TH, 1886.

T. EVELYN LITTLE, M.D., President, in the Chair.

Rupture of a Pelvic Cyst.—Dr. C. B. BALL communicated a case of rupture of a pelvic cyst. The specimen was removed from the body of an unmarried lady, aged 68, who died shortly after the performance of a very trifling operation. She stated that, at the time of her menopause, a tumour formed in her abdomen, which was attended, at the time, with considerable menorrhagia; but, subsequently, it ceased to grow, or give her any inconvenience. About six weeks ago, she consulted him for piles, from which there had been considerable bleeding. She had been operated on for them before, and he operated by clamping two or three small piles. For two days she went on fairly well; and then, about forty hours after the operation, she was suddenly seized with sickness of the stomach, and a state of intense restlessness followed. Her abdomen was somewhat distended, but was not tender, and there was no very definite evidence of peritoneal mischief. She died in ten hours after she was attacked with those symptoms, none of which were referable to the operation. At the *post mortem* examination, he had been prepared to find a fibro-myoma attached to the uterus. The tumour was a fibro-myoma, as shown by section and microscopic examination, but it was attached, not to the uterus, but by a broad pedicle to the neighbourhood of the right ovary. He thought there could be no doubt that this tumour was principally composed of non-striped muscular fibre. There was no evidence of peritonitis, or adhesions to the viscera. In the broad ligament, on the same side, was a ruptured and collapsed cyst, which, when distended, would have been about the size of a small orange. The left broad liga-

ment was occupied by a cyst, evidently similar to the one on the right side, which had ruptured. The contents of the cysts very closely resembled thin fæces; and, at first, he thought the material might have proceeded from a ruptured intestine; but it had no fæcal odour, and it filled the cysts in both broad ligaments. The rectum exhibited the remains of the piles, and these showed no evidence of inflammation or thrombi in the hæmorrhoidal veins, beyond what one would expect to find. Consequently, it was concluded that death was due to the rupture of the cyst on the right broad ligament. The fluid which the cysts contained was semi-pultaceous, and proved, on microscopic examination, to be composed of large plates of cholesterin and fat-granules. He, therefore, concluded these tumours to be old extravasations of blood—pelvic hæmatoceles which had undergone change.—After some remarks from the PRESIDENT and Dr. H. KENNEDY, Dr. BALL replied.

Laryngeal Changes subsequent to Laryngo-tracheotomy.—Dr. E. H. BENNETT showed a specimen, consisting of the larynx and trachea of a man, on whom he performed laryngo-tracheotomy fourteen years ago. He had previously suffered from typhoid fever, from which he had had a tedious recovery; and, pressed by the necessities of life, he undertook work sooner than he should have done. He was admitted into Sir Patrick Dun's Hospital, suffering from extreme dyspnœa. His distress was so great that no detailed examination was possible; and he (Dr. Bennett) opened the air-passage by an incision through the crico-thyroid membrane and the cricoid cartilage. Immediate relief followed, and a tracheal-tube was introduced. It was an ordinary double tracheotomy-tube, with a loop-shaped orifice cut in it to facilitate respiration through the larynx. During his convalescence, after the operation, a laryngeal examination was made, from which it was discovered that the dyspnœa had been caused by suppurative perichondritis of the larynx. All the tissues were swollen and infiltrated; and, on the left-hand side of the vocal cords, there was an opening, through which an abscess had penetrated into the larynx. No necrosis of any part of the larynx ensued. The point of interest was, why it was that, in such cases as this, in which laryngeal operations were performed on adults for syphilitic ulceration, or for any other affection, the tube had to be always worn afterwards. Dr. Bennett was indebted to the President for having called his attention to observations made on this subject by Dr. Pilcher of New York, and recorded in the *Annals of Anatomy and Surgery.*—The PRESIDENT observed that the practical conclusion derived from pathological observations, up to the present, was, that the surgeon should remove the tube as speedily as possible.—Dr. BALL said he could point to two cases, in both of which the tube was worn for considerably longer than a month, and in both of which it was subsequently dispensed with.—Mr. BRYANT recommended tracheotomy, to afford physiological rest for the larynx, where there was extensive syphilitic ulceration, and the use of a tube, which should be removed after the ulceration had healed; but if the long-continued wearing of the tube produced the results Dr. Bennett had stated, it would be better to leave ulceration to cure itself, than to perform tracheotomy.—Dr. BENNETT, in reply, said he had omitted to mention that the man, whose case he had brought forward, died of malignant disease of the stomach, and his death had nothing whatever to do with his laryngeal affection. He many times attempted to give up the tube, but without success; and he (Dr. Bennett) used to be summoned to him, even at night, to reintroduce it, so rapid used to be the process of constriction set up in the passage. The operation of tracheotomy was one which he (Dr. Bennett) believed should never be performed, except for the relief of dyspnœa, or under other circumstances of the most urgent necessity.

Granular Disease of the Kidneys.—Dr. M. A. BOYD communicated a case of granular disease of the kidneys. The patient, a lad, aged 20, was received, a couple of months ago, into the Mater Misericordiæ Hospital. He had had tympany of the abdomen, sickness, and vomiting, for some days previous, with brown typhoid tongue, and was sent into a ward as a case of typhoid fever. On seeing him, he (Dr. Boyd) found that his temperature was normal, and, on examining the case more closely, he found him to be suffering from congestion of the base of the left lung, with bronchitis, while his face, upper extremities, and whole body were cyanosed. He was very stupid and lethargic; but his friends said that he had had those symptoms for a considerable time. He had, also, loss of memory, and puffiness of the face, and had not been able to do his work, which was that of a grocer's assistant. For twenty-four hours before his admission, he had not passed any urine, and it was withdrawn by a catheter. After the first day in hospital, his symptoms were those of uræmic coma, and the lethargic appearances seemed to increase. He complained of pain in the occiput, and in the right side of the head. The urine, which was drawn off by the catheter, contained albumen. He (Dr. Boyd) concluded that it was a case of disease of the kidneys, with uræmic coma. He died, comatose, on the fourth day. It proved to be a case of what Dr. Hammond called red granular disease of the kidneys; but there had been no previous affection of the kidneys. Ten years previously, he had had scarlatina, but no symptoms of dropsy afterwards, or of acute nephritis. He had pains in the knees and ankles, with effusion at the right knee-joint. A section of the kidney also disclosed small hæmorrhagic points here and there, and a granular condition of the cortex itself, and the area of the cortex was very much narrowed.

Malignant Disease of the Stomach.—Dr. WALTER SMITH exhibited the stomach from a man, aged 42, on whom Dr. Bennett had previously performed laryngo-tracheotomy, and who had been under his care in Sir Patrick Dun's Hospital. Fourteen or fifteen years previously, he had fever, followed by perichondritis of the larynx, in consequence of which urgent dyspnœa arose, for the relief of which laryngo-tracheotomy was performed. From that time, the man wore the tracheotomy-tube, and, except for constipation, always enjoyed good health, until a year ago, when he began to suffer from frequent attacks of vomiting. Upon admission, he was found to be greatly emaciated, having eaten no solid food for three weeks. The vomit was dark and turbid, and, under the microscope, showed blood-discs and sarcinæ among the *débris* of food. The urine was free from albumen. The fæces were sometimes covered with tarry-looking matter. For a few days preceding death, the vomiting ceased; and, on February 6th, exactly a month after admission, he died, quietly and suddenly, without warning. The intestines were healthy. The mucous membrane of the stomach was anæmic and puckered. There was fibroid thickening of the pyloric end, especially at the posterior wall, and the pylorus scarcely admitted the passage of the handle of the scalpel. There was some fibroid thickening also at the cardiac end. There was no trace of ulceration. There was diffuse thickening of the gastric submucous membrane; the microscope showed only fibrous thickening. The principal question was as to the pathology of the changes in the stomach, and the diagnosis of them. It was sometimes difficult to distinguish between carcinoma and mere fibroid thickening; but, in the present case, the affection was localised, and he thought it an example of simple fibroid disease, which proved fatal from the atrophy of the glandular apparatus, from which an interference with the peptic functions of the stomach resulted, and also from the thickening of the pylorus, causing a mechanical obstruction. Careful investigators had found that, in cases of true gastric carcinoma, there was an absence from the vomit of free hydrochloric acid. He (Dr. Smith) had tested this in a case in the hospital, in which gastric carcinoma was diagnosticated, and found it to be true. In cases of this kind, accurate diagnosis was important, in view of the possibility of surgical interference.—A discussion ensued, in which Dr. BENNETT, Dr. BOYD, Dr. H. KENNEDY, and Mr. LENTAIGNE took part, and Dr. SMITH replied.

REVIEWS AND NOTICES.

THE MANAGEMENT OF LABOUR AND OF THE LYING-IN PERIOD. By HENRY G. LANDIS, A.M., M.D., Professor of Obstetrics and Diseases of Women in Starling Medical College, etc. London: Griffin and Co.

THE author commences by a reprimand to those who deprecate "meddlesome midwifery," and, within certain limits, his strictures are perhaps justified. The duties of the man-midwife are described in lucid and unassuming sentences, free from the tedious and didactic phraseology of many writers on the subject. His directions for the woman to lie on her back during examinations or operative interference, accord with the continental plan; their observance would be attended by real, if somewhat sentimental, difficulties, at any rate, in this country. The same observation applies to his plan of facilitating delivery by means of the fingers in the rectum, while his advice as to pulling back the perinæum is in direct and violent opposition to the tenets in vogue here. It is useful to know, if the information be correct, that the dynamic value of an uterine contraction is often in inverse ratio to the pain suffered by the woman. Generally the terms are used synonymously.

Dr. LANDIS professes a scepticism and a distrust of ergot as regards its action as an oxytoxic, which is rather startling. It certainly shakes one's faith in the value of clinical and therapeutical observation, if a drug which has been so widely adopted, and reported so useful, be shown to be not only "the most uncertain drug in the *Pharma-*

copœia," but frequently inert when its specific action is desired, and dangerous when this is produced. The use of chloroform during normal labour by no means meets with the author's approval, but he displays indulgence for the employment of opium and chloral, the latter having, in his opinion, "few, if any, contra-indications."

In *post partum* hæmorrhage, he advocates the introduction into the uterus of a handkerchief steeped in vinegar, or a lemon with the rind removed; and, if these fail, hot water injections, with or without tincture of iodine.

On the whole, the book is of a practical nature, and will be found to convey, in a clear manner, the information which, while useful to the student, is not less so to the practitioner anxious to be prepared for the routine and emergencies of obstetric practice.

La Circulation et le Pouls: Histoire, Physiologie, Séméiotique, Indications Therapeutiques. Par Ch. Ozanam, Docteur en Médicine de la Faculté de Paris. Paris: Baillière et Fils. 1886.

(The Circulation and the Pulse: History, Physiology, Semiology, Therapeutic Indications.)

This work is a volume of 1,060 pages, dealing with all that is known of the circulation and the pulse. The history of the subject from 1300 B.C. to modern times is detailed in twelve chapters, and is the most valuable part of the book, since the references to original works are full and complete, as might, indeed, be expected from the fact that Dr. Ozanam was for some time librarian to the Académie de Médicine in Paris.

The greater part of the book is devoted to the discussion of the modern views of the circulation and the pulse; there is nothing strikingly original either in the matter or in the method of treatment of the subject. Though an attempt has been made to make the work a complete treatise, in some parts an account of recent experiments has been omitted. Thus, in considering the innervation of the heart, the important work on the hearts of the tortoise, frog, and eel, which has appeared since 1876, is entirely omitted; certainly a grave error, since these experiments have thrown much light, not only on the automatism of the heart, but on the action of the vagus and sympathetic.

NOTES ON BOOKS.

We have received from J. F. Bergmann, of Wiesbaden, a translation of Dr. Sayre's *Lectures on Orthopædic Surgery and Diseases of the Joints*. It is translated from the second and enlarged American edition, and is fully illustrated. Dr. Sayre's methods have now such universally recognised currency and value throughout English-speaking countries, and are so well known and largely practised throughout Europe, that it is surprising that these valuable lectures have not before been translated into German—if, indeed, this be the first translation of them. Time, which tries all things, has set its seal of emphatic and general approval both on the principles and methods which Dr. Sayre has ingeniously devised, ably illustrated, and successfully carried into practice. He has removed a great mass of painful, tedious, and almost incurable complaints into the region of curable and easily manageable affections. He has substituted a simple and practicable method, within the reach of every practitioner, for costly, complicated, and heavy mechanical devices, which were accessible only to a few, and which only imperfectly and occasionally fulfilled their objects. Few men have, in their generation, accomplished so much for the relief of humanity, and his name will go down to posterity, with that of Marion Sims, as among the most distinguished benefactors whom the American medical profession has produced for the glory of medicine and the good of mankind during this century. The German translation (by Dr. F. Dumont) has all the American illustrations, and does full justice to the author.

Medico-Psychological Association.—The next quarterly meeting will be held at Bethlem Hospital, St. George's Road, S.E., on Wednesday, May 19th, at 4 P.M. Dr. Savage will read a paper on "A Case of Insanity Cured by Removal of the Beard in a Woman;" and Dr. Percy Smith will read "Notes on a Case of Ovariotomy in an Insane Patient." Members of the Association will dine together at the Holborn Restaurant, at 7 P.M. Members intending to dine should send notice to Dr. Paul, The Terrace, Camberwell, S.E.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

Subscriptions to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 15th, 1886.

MEDICAL ACTS AMENDMENT BILL.

The Committee on the Medical Bill should commence on Monday next. It is not pretended that the Bill is a perfect measure; but, even as now drafted, it is a decided step in advance, and, as such, the profession would be blind to its own interests not to accept it.

Every effort has been made for many years, by different powerful Governments and by the profession, to establish the one portal. The battle for it has been fought with unswerving persistence, but events have proved that it is unattainable. Scotland alone, with its seventy members, all zealously guarding the interests of the Scottish universities and corporations, would prevent its enactment; and, to the power of Scotland, that of Ireland must also be added. The struggle for the "one portal" must, therefore, be abandoned, at any rate for the present; and the profession must be content to receive the boon of direct representation in the Medical Council, and the establishment of the threefold examination in medicine, surgery, and midwifery of all candidates for admission to the *Medical Register*.

The achievement of these two points will give a better platform for future advance.

In some respects, there is manifest room for improvement in the Bill of the Government. In the first place, as regards the number of direct representatives in the Medical Council, Dr. Foster clearly established the fact that the number of two representatives accorded to England was absurdly out of proportion to the number of the profession in England, as compared with that in Scotland and Ireland; and that it was, therefore, insufficient. The Government, while fully impressed with the importance of not making the Council unduly bulky, is prepared to rectify this disproportion, and will add to the number of English direct representatives. If the Crown nominees be three for England, one for Scotland, and one for Ireland, and the same proportion be observed as regards the direct representatives of the profession, an independent and compact body of ten members will be formed in the Council, which should be fully equal to safeguarding the interests of the public and the profession.

The representation of the universities and corporations will remain much as at present; but it is known that any attempt at their disfranchisement, however desirable, would encounter such hostility as would, to a certainty, wreck the Bill. Should any of them hereafter cease to retain such weight, as medical authorities, as to entitle them to a voice in the Medical Council, the Bill provides for their disfranchisement; and, thereby, for the consequent diminution of the numbers of the Council.

The question of making the visitation of all examinations compulsory is open to difficulty, on the ground of expense; still, assessors might be appointed, whose province it should be to report to the Council respecting the character of all the examinations.

Objection is also taken, and with good reason, to the reiterated introduction of the Privy Council into the Bill as it now stands. The British Medical Association has always evinced extreme jealousy respecting the undue interference of the Privy Council with the proper work of the Medical Council, as shown by all the Bills promoted by the Association. The Government, fortunately, are desirous of meeting the wishes of the profession, at any rate to a very considerable extent, in this respect also; in fact, the Government has evinced a most conciliatory spirit.

The Medical Reform Committee and the Council of the Association have adopted, without a division, the principles embodied in Sir Lyon Playfair's Bill; and it is to be earnestly hoped that, with modifications in the direction indicated, nothing will occur to mar its progress through Parliament.

Another Bill has been introduced, endorsed by Mr. Morgan Howard, Sir Trevor Lawrence, and others, dealing with the question of illegal practice; but the Government are of opinion that this should be made the subject of distinct and separate legislation.

PERITONEAL SURGERY.

THE remarkable article which Mr. Lawson Tait contributes to the present number of the JOURNAL certainly deserves the attention of all surgeons. The relative claims of specialists are better left to the judgment of competent critics outside their speciality. The profession and humanity are, after all, more concerned with the improvements which have been established, than with the surgeons who have established them. Yet justice must be measured out to all men. Cheselden did not invent or discover lithotomy; Sir Spencer Wells did not invent ovariotomy; yet, the claims of these distinguished British surgeons, as the chief establishers of two important operations, are historical, and can never be set aside.

There are matters far more edifying, however, to consider in relation to Mr. Tait's contribution. If ovariotomists would never attack each other's methods again, either in print or at societies, the profession would be relieved of something highly objectionable, and the dignity of an important speciality would be greatly increased. With practical subjects, such as those Mr. Tait discusses, on the other hand, the medical public will never grow tired. Some may sneer at a display of brilliant results; but they cannot avoid taking into account the manner in which these results have been obtained. In the first place, Mr. Tait's views as to the proper treatment of peritonitis deserve deep consideration. He eschews opium as deleterious; and many others agree with him, at least, in so far as they admit that the drug masks symptoms which were better exposed. He gives active purgatives as a remedy for acute peritonitis—a practice entirely opposite to that pursued by most living physicians and surgeons. Then, he treats suppurative peritonitis as others treat an abscess. That is to say, he opens the abdominal cavity, and washes out or drains away the pus. This is certainly a very logical kind of practice, the following out of a recognised surgical principle to an extreme extent. Yet, most improvements in any science are effected by bold pioneers, who carry out first principles, under circumstances where others have hesitated through fear or want of experience. For it is only after great experience, in recognised methods, that a surgeon can advance safely; and then he may have reached that mental condition, common amongst successful experienced men, which distrusts all innovations. Thus it is that only a minority of the skilled make conspicuous advances in the midst, as well as at the onset, of their careers. Once, again, however, the psychology of surgeons is not so important to surgery as these practical details on the surgical treatment of peritonitis.

Again, Mr. Tait believes that he has improved upon the toilet of the peritoneum, the elaborate sponging carried out by most living operators. This was a great improvement upon former methods. It taught surgeons, above all, to get over that pernicious dread of touching the peritoneum, which led to their leaving blood-clots and other noxious materials behind, in the recesses of its cavity, to the imminent peril of the patient. On the other hand, the sponges are a source of anxiety to the operator. They may be torn in halves, and a fragment may thus be left behind in the abdomen; or they may be inaccurately counted, so that a whole sponge comes to be overlooked. The irritation of the sponging process often causes the exudation of clear red serum, mistaken by the inexperienced for blood, so that more sponging and more exudation follow. Mr. Tait simply washes out the peritoneal cavity with water warmed to blood-heat, till the fluid returns out of the abdominal wound perfectly clear. He uses no antiseptic solutions, and declares that the water which he pours, with such successful results, into the peritoneal cavity, "is full of germs and spores, and small beasts of thirty-four different varieties."

Mr. Tait is a great believer in short incisions through the abdominal walls. No doubt the shortest possible incision is the best; but "possible" depends upon certain circumstances, and particularly on the skill and experience of the operator. Every surgeon has not done so many ovariotomies as Mr. Tait, and, therefore, cannot judge so readily how long the incision should be. The beginner wants as much light and as much room to handle the tumour as possible, and this involves an incision of at least three inches. As the surgeon gains experience, and not before then, he will learn how to remove large tumours through small incisions. That should be his aim, no doubt, from the first. In this respect, Mr. Tait's teaching is thoroughly sound.

It is for the bold innovations which it advocates, and for no other reason, that we dwell especially upon Mr. Tait's paper. Free discussions on treating suppurative peritonitis as abscess, and on flooding and baling out the peritoneum, will do nothing but good, and will be more satisfactory than recriminatory epistles on questions of priority in the introduction of these practices.

SMALL-POX IN THE ARMY AND NAVY.

WE have already referred to the unwonted prodigality with which the Local Government Board have lately been distributing extracts from the report of their medical officer for 1884, dealing with the questions of small-pox and vaccination.

Looking to the class of readers that it is hoped to attract by this distribution, it is, perhaps, to be regretted that an effort was not made to bring the statistics somewhat more up to date. An unbeliever or a sceptic, receiving, in 1886, a pamphlet which argues from the figures, sometimes of 1884 and sometimes of 1882 and earlier years, is apt to reject, or at least to question, the conclusions arrived at, on the flimsy plea that later figures have, perhaps, upset them. It is better always to avoid this danger; and there could, as regards

several of the tables at least, have been no difficulty in incorporating the figures of at least two more years.

The small-pox mortality in the revaccinated army and navy is instructive, and might well have been enlarged upon in Dr. Buchanan's report. By the kindness of the War Office and the Admiralty, we have been enabled to complete the statistics given in the printed pamphlet up to date, but no special object would be gained at this particular juncture by giving them in detail. We may state however, generally, that, in the army, the mortality by small-pox has become greatly lessened, as the order of 1858 has come to have more and more effect, and the death-rate is now materially below that of the civil population of the same ages. The average annual strength of the army is about 170,000 men, and the number of new admissions in each year is from 35,000 to 40,000. The number of deaths from small-pox in the army in 1883 was 11 ; but, of these, 9 were in India, where also 8 of the 9 deaths in 1884 occurred. In these years, as well as in 1882, small-pox was very prevalent in India, particularly in Bengal. In 1885, there were 10 deaths from small-pox in the army. Of these, 7 occurred amongst the troops in Egypt, when small-pox was rife amongst the civil population. The rates of death from small-pox per 1,000 soldiers has, since 1880, been as follows :—1880, .01 per 1,000 ; 1881, .02 per 1,000 ; 1882, .03 per 1,000 ; 1883, .07 per 1,000 ; 1884, .05 per 1,000 ; 1885, .05 per 1,000.

In the navy, the death-rate by small-pox has been reduced since the operation of the order of 1871, to a third of the amount at which it stood before revaccination was required. The small-pox death-rate of the navy had previously been in excess of that of the civil population, and of the army. Now, it happens that, two years ago, a very misleading Parliamentary return was obtained on the motion of Mr. Burt, which gave, in the usual official fashion, exactly what was asked for without any explanation whatever. This return showed that forty-three deaths had occurred in the navy since the Admiralty Vaccination Order of 1871 had been promulgated. But, on reference to the reports of the Navy Department, this figure is found to be made up of 13 persons who were vaccinated once, and once only ; of 12 persons (including 11 Kroomen) who had never been vaccinated at all ; of 12 persons (including 2 foreigners) about whom no information was to be had ; and of 6 persons who had presumably been successfully vaccinated and revaccinated. These were the deaths from small-pox occurring during eleven years on a mean strength of nearly 60,000 men; and, since the return was published, no further deaths at all appear to have occurred amongst those borne on the Admiralty books. We commend these figures to the careful attention of our antivaccination friends.

HER ROYAL HIGHNESS THE PRINCESS OF WALES has graciously consented to open the new wing of Queen Charlotte's Lying-in Hospital, Marylebone Road, which is now approaching completion. The ceremony will take place at a date subsequent to June 1st next, to be fixed by Her Royal Highness.

IT is announced from Chicago that, during the riot last week, several anarchists raided into a chemist's shop and drank some of the liquors on the shelves, taking them to be spirits. A large number were poisoned by colchicum and other tinctures, eight having since lied in great agony, while several others are expected to die.

THE President of the Royal College of Surgeons, Mr. Savory, has issued cards of invitation to his *conversazione* in the College on Wednesday, June 9th.

THE *Journal Officiel* publishes the twenty-second subscription-list of the Pasteur Institute : 643,441 francs (£25,737 9s.). The *Temps* newspaper has received for the fund £73 9s.

THE vaccination officer of the Dewsbury Union has a stupendous task before him. There are, as reported to the guardians, as many as 15,000 unvaccinated children in the union.

AT the last meeting of the Academy of Sciences in Paris, Herr Baeyer, of Munich, was elected Corresponding Member by a majority of forty-one votes. Two votes were given to Herr Wislicenus, of Würzburg, and one to Sir Henry Roscoe.

AT a meeting of the Administration of the Department of the Bouches du Rhone, the Prefect asked that a sum of money should be voted, in readiness to send people, who might be bitten by mad dogs, to M. Pasteur.

ON April 17th, Dr. Waller, of London, read a paper before the Biological Society of Paris, on the results which he has obtained by a series of experiments, made with Dr. Reid, on Hearts removed from Mammalia.

ON May 5th, Dr. Gilbertson, of Preston, was elected Coroner for the Hundreds of Amounderness and Leyland, in the County of Lancaster, in succession to his brother, the late coroner. Dr. Gilbertson had acted as deputy coroner for eight years. The election was unopposed.

Two meetings of Convocation of the University of London are to be held ; one on the 25th instant, at which the report of the special committee on the scheme for the constitution of the University, which was not ready for consideration at the annual meeting on Tuesday last, will be discussed ; and a second on Tuesday, June 29th, when a list of three persons is to be nominated in order to fill up a vacancy existing in the Senate.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

THE annual election of pensioners and scholars in this excellent institution will take place on the 24th instant. There are three vacancies for pensionerships, and twenty-three candidates, only three of whom have been subscribers. For scholarships, there are ten vacancies, and fifty-seven candidates, the parents of only nine of whom have been subscribers. When will the profession realise the great advantages of becoming subscribers to such an excellent institution ?

CENTENARIANS.

PROFESSOR HUMPHRY is engaged in collecting, for publication in the JOURNAL, the reports which friends have been good enough to send, respecting centenarians ; and he will still be glad to forward the form, for particulars, to any member of the profession who will kindly take the trouble to fill it up, from his knowledge of a person who has attained, or passed, the age of a hundred years.

THE BRITISH HYDROPHOBIA COMMITTEE.

WE understand that the members of the Hydrophobia Committee, who went to Paris before Easter, have returned to London, and that a meeting of the whole Committee has been held since their return. The members who went to Paris were received with great courtesy by M. Pasteur and his assistants, who placed all the available evidence at their disposal, and afforded every facility for the study of the methods in use in the laboratory. We understand that, from the total number of cases treated by M. Pasteur, a certain number have been selected, in

which the evidence as to the rabidity of the dog, and the position of the bites on the naked skin, can leave no room for doubt. These cases will be thoroughly studied; and the evidence thus obtained will, after being sifted, afford a basis for a report, which will undoubtedly be of considerable interest.

BIRTH OF QUADRUPLETS.

A WORKWOMAN, in Paris, recently called up a midwife attached to the Assistance Publique, at 4 o'clock in the morning; labour-pains had already begun. Madame Gilbert was six months pregnant. Soon after her arrival at the midwife's in the Rue St. Martin, a male infant was born. Whilst the baby was being attended to, fresh pains came on; a second male child was born. This, in its turn, received the necessary attention, and its mother was again seized with labour-pains, and a third was born. Whilst the third child was being washed and attended to, a fourth was born. The four children were perfectly well formed; each measured 22.5 centimètres. Notwithstanding every care and attention, all four died a few hours after their birth. The mother recovered rapidly.

CLINICAL TEACHING AT THE LONDON INFECTIOUS HOSPITALS.

THE Metropolitan Asylums Board, on the motion of Sir Edmund Currie, on behalf of the General Purposes Committee, have carried a resolution to the effect that, as the Committee were still of opinion that it was desirable that the several infectious hospitals under the Managers' control should be made available for clinical instruction, in order that members of the medical profession might be afforded the means of obtaining a more accurate knowledge of the diagnosis and treatment of fever and small-pox, the Managers should urge upon the Local Government Board the desirableness of obtaining from Parliament such powers as would reimpose upon the Asylums Board the necessary authority.

SUDDEN DEATH FROM CORPULENCY.

PROFESSOR KISCH, of Prague and Marienbad, has recently collected statistics, and written a contribution in the *Berliner Klinische Wochenschrift*, on the frequency of sudden death amongst extremely stout persons. In nineteen cases of this occurrence, acute congestion of the lungs was discovered in twelve cases, cerebral hæmorrhage in six, and rupture of the heart in one. The pulmonary congestion arises, as Dr. Welch has already shown, from paralysis of the muscular walls of the left ventricle, while the right side of the heart continues to act with almost normal vigour. The apoplectic symptoms were traced, in most of the cases, to arterial sclerosis, a very frequent concomitant of extreme corpulency. Rupture of the heart is due to the overworking of the walls of the left ventricle, which, being involved in fatty infiltration and degeneration, can no longer increase in size, in proportion to the extra work which it has to perform. The failure of heart-power appears always to be the immediate cause of death, which generally follows immediately after violent exertion, or an excess in drink or diet. Stout subjects over 50 years of age are very liable to fatal syncope, which, however, is frequent amongst the corpulent at earlier periods of their life.

DEATH OF PROFESSOR LEWIS, F.R.S., OF NETLEY.

IT is with very deep regret that we announce the death of Surgeon-Major T. Lewis, Medical Staff, the distinguished Assistant-Professor of Pathology in the Army Medical School, at Netley. The sad event, which has caused profound grief in the establishment in which Professor Lewis was actively occupied up to a few days prior to his decease, occurred on the 7th instant, and was due to pneumonia, associated with a depressed state of constitution, which appears to have been the result of septic poisoning, contracted while he was engaged in some professional investigations in the early part of the present year. It will be fresh in the memory of our readers that, within the last few weeks, the Royal Society conferred on Dr. Lewis their Fellowship, in recognition of the importance of his various contributions to science. We hope, shortly, to publish a full account of this eminent pathologist's professional career and public services. Dr. Lewis had only just reached his forty-fifth year of age at the time of his decease. Dr. Lewis was buried in the large military cemetery at Netley, on the afternoon of Tuesday the 11th instant. All the staff of the Royal Victoria Hospital and Army Medical School, together with a large concourse of friends residing in the neighbourhood, attended the funeral. In many instances, friends and admirers came from long distances to pay the last tribute of regard to the deceased, and among these were Sir Thomas Crawford, the Director-General of the Army Medical Department, and Surgeon-General Mackinnon, C.B., Head of the Medical Branch in the War Office, who arrived from London in time to join in the procession to the grave.

THE OPHTHALMOLOGICAL SOCIETY.

THE discussion on Exophthalmic Goître afforded a good illustration of the value of this Society as a common meeting ground for those engaged in special and general practice. Ophthalmology comes into contact with general medicine and surgery at so many points, that there is little danger of its degenerating into a narrow specialism; still, it is well that the connecting links should, from time to time, be more securely riveted. Exophthalmic goître being somewhat rare, and usually running a very protracted course, it was hardly to be expected that the isolated experience of individual speakers would be sufficient to establish any general conclusions, or that many of the rather formidable array of questions propounded by the Council would find a decided answer. The Council have, however, asked for the contribution of further facts from members and others, and, should the invitation be liberally responded to, a sufficient mass of evidence may be collected to establish some important general conclusions in regard to an affection, the pathology of which is still very obscure. Perhaps the most interesting parts of the discussion were the relation of a few severe and protracted cases, ending in complete recovery, and the beneficial effect upon the general symptoms that was attributed to belladonna and aconite, and to the application of ice when the safety of the eyes was endangered by the proptosis. The statement by Mr. Jessop of the effect of cucaine in increasing the proptosis and Gräfe's symptom in a marked manner, was both novel and interesting, and may be held to throw some light upon the pathology of the latter. Statistical statements are always uninteresting, and, when they have reference to a small number of cases only, are useless. We think, therefore, that the marked impatience with which the Society listened to the reading of a tabular account of thirty-eight cases was fully justified. Such statistics, when added to others, will prove of great value, but, considering that they were already in the hands of members, the meeting would have lost nothing had they been taken as read. Whether the inquiry will establish any new facts in reference to this still somewhat obscure affection will only be apparent when the evidence, which, it is to be hoped, will be liberally supplied, shall have been collated and sifted.

A POST-GRADUATE COURSE.

THE post-graduate course of demonstrations in ophthalmology, conducted by Dr. Hill Griffith, at the Manchester Royal Eye Hospital, has just been concluded. The practitioners, who attended the course, have presented Dr. Griffith with a purse containing twenty-five sovereigns, as a token of their appreciation of the great ability and courtesy with which he has carried on the class.

CONGRESS ON HYDROLOGY AND CLIMATOLOGY AT BIARRITZ.

AN International Congress on Hydrology and Climatology is to be held at Biarritz, from the 1st to the 8th of October next, under the honorary patronage of the French Minister of Commerce, and the presidency of Dr. Durand-Fardel. Communications and inquiries on the subject may be addressed to Dr. F. Garrigou, the General

Secretary, at Toulouse, until May 31st; and at Luchon, Haute-Garonne, after that date.

THE METHODS OF LIGATURE OF LARGE ARTERIES.

AT the meeting of the Royal Medical and Chirurgical Society, this week, there was a remarkable show of microscopic specimens and drawings, in illustration of the processes of repair in arteries, which have been ligatured without rupture of their inner coats. They had been prepared by Messrs. C. A. Ballance and Walter Edmunds, during a research conducted on animals, at Leipzig, where investigation is much easier than in England. They showed, in a most complete fashion, the processes which follow after coagulation in a ligatured vessel, in which the intima is intact; the rapid coagulation; the influx of leucocytes through the intima, probably from the vasa-vasorum chiefly; the slight proliferation of the intima; the gradual change of the coagulum into connective tissue, and absorption of the catgut ligature in about one month, and of the kangaroo-tail ligature in about two months. In one case the intestine, used to form the catgut ligature, had been inadequately scraped before preparation, and it was easy to note the remaining intestinal villi on it, under a low power, when it was in its place as a ligature. The main contention of the authors of the paper was, that it is neither necessary nor advisable to tie the ligature so tightly as to rupture the coats of the vessel. That it was not, strictly speaking, necessary, was generally allowed; that it was not advisible, was not considered to be at all adequately proved, nor, indeed, provable by argument from the behaviour of arteries in healthy animals to the prospects of arteries in unhealthy men. The processes of repair are too vigorous in animals to allow accurate comparison with man; especially in a matter of this sort, when the least diminution of certainty in the result is supremely important, seeing that life so often hangs upon the complete perfection of success. Mr. Savory, while complimenting the authors on the excellency of their specimens, very justly remarked that, for purposes of comparison, he should have like to see another series of specimens, in which there had been rupture of the two inner coats of the arteries, by ligature; and, most appropriately, Mr. Dent was able to promise him the opportunity for such a comparison, with specimens that he had in preparation, in concert with Mr. E. A. Stirling, of arteries in animals, ligatured with kangaroo-tendon, in which the cardinal condition throughout had been that the inner coats should be ruptured. They showed, as far as he had as yet examined them, results as unimpeachable in excellence as those of Messrs. Ballance and Edmunds. Hence, after all, we may have to admit that these experimental results are inconclusive, and to fall back upon a question that cannot be determined in a physiological laboratory; namely, which of two operations, both perfectly successful in animals, is the more appropriate to man?

COWS AS BREEDERS OF SCARLATINA.

THE official report by Mr. W. H. Power, on the outbreak of scarlatina in South Marylebone and Hendon, last December, has now been issued by the Medical Department of the Local Government Board. To a large extent, its interest has been discounted by current rumour, and by the paper read by Dr. Cameron on the same subject, at the last meeting of the Epidemiological Society (see p. 883). But Mr. Power has the happy art of taking his reader with him throughout his narrative, so that the report now presented may still be read with much profit by epidemiologists. We need not follow Mr. Power through the maze of facts and inferences out of which he constructs his tessellated story. The essence of the latter is, that external scarlatina was excluded with a good deal of confidence, and that the importation of particular cows into the dairy-farm was associated with the presence of scarlatina in London districts. The most scientifically interesting part of the report is yet to come. Two of the cows affected with the constitutional disease, which appeared competent to produce scarlatina among human consumers of the milk, were purchased for the Medical Department, and were conveyed to the Brown Institution for further observation and pathological investigation, at the competent hands of Dr. Klein. The result of that gentleman's investigations are, for a reason which is left unexplained, not published with Mr. Power's report; so that, for the present, a final judgment on the matter must be reserved.

SCARLATINA AND DISEASE OF THE COW.

A CORRESPONDENT writes to us as follows, with reference to the outbreak of cow-disease, described by Dr. James Cameron, at the last meeting of the Epidemiological Society, as reported by us last week (page 883).—Pending the appearance of Mr. Power's report, it would be premature to express an opinion as to the probability of the hypothesis suggested by him and Mr. Wynter Blyth, that the scarlatina occurring in Marylebone families in December, was the direct result of ingestion of the milk of cows suffering from this disease, rather than that the milk was the vehicle only of scarlatina poison of human origin. But, supposing that this should be satisfactorily proved, the further question arises, whether the disease was originally bovine, or whether the first cow was infected with human scarlatina; in other words, whether this disease may be looked on as scarlatina, modified by its passage through the cow. This view was advanced by some speakers, at the meeting of the Epidemiological Society, but it is not supported by the analogy of small-pox, which retains its character of vaccinia when reintroduced into the human organism. The other view seems to be also open to grave doubt; firstly, from being unsupported by analogy; and, secondly, from the improbability of a disease, so nearly universal in the human race, being produced by one which, even if it have been generally confused with others, cannot be very prevalent, must be rare among cows. Foot-and-mouth disease, anthrax, and glanders, are communicated to man unmodified, and there are no such striking differences between rabies and hydrophobia as between a vesicular or pemphigoid eruptive fever, like this and the erythematous eruption of scarlatina. It is much to be desired that medical men, trained to pathological and clinical observation, would turn their attention to the diseases of animals, especially those of the cow; for it is certain that human beings must be, in some way, affected by the use of diseased milk; and the cordial appreciation of the services which might be rendered by medical men, expressed by the dairymen and farmers present as guests at recent meetings of the Epidemiological and Medical Officers of Health Societies, encourages the hope that the day is not far distant when much more light than we enjoy at present will be thrown on this most important but difficult subject, of the relations between bovine and human diseases.

SCARLET FEVER AT HUDDERSFIELD.

DURING the first quarter of the present year, 90 cases of scarlet fever were reported at Huddersfield, of which 55 were sent into hospital. Of the 9 deaths, 4 occurred in hospital. During the fifteen months since the beginning of last year, 340 cases of scarlet fever have been reported, or heard of, in the borough, and there have been 20 deaths. Of the 340, 239 have been taken into hospital, and amongst these there have been 8 deaths. Deducting from the reported cases, and from the deaths, the cases in which death was so sudden that there was no time to report the illness; and deducting the death of one patient, whose medical attendant considered him too ill to be sent to hospital; but including the death of an infant, whose illness, occuring in the house where another case had already been reported, was not notified, the deaths amongst those sent to hospital were 3.3 per cent., and of those treated at home 7 per cent. This is about the same proportionate mortality, inside and outside the hospital, as that given in Dr. Spottiswoode Cameron's annual report for 1885. The cold weather of the quarter did not, however, diminish either the number of cases, or the mortality amongst them. During the first quarters of the six years 1881-86, 327 cases of scarlet fever had been reported; and, during the same periods, there had been 33 deaths, the cases reported bearing to the deaths registered the ratio of 10 to 1. During

the other three quarters of the years 1881-5, the ratios have been 22, 13, and 14 to 1 respectively. The first quarter has thus had the largest proportion of deaths to cases of previous years, and we may expect the same this year. Of the 90 cases of scarlet fever reported in the thirteen weeks, 61 were notified in the six earlier of those weeks; and, although occasional cases are still heard of, the disease is less prevalent now than at the beginning of the year.

YELLOW FEVER AT BAHIA.

YELLOW fever has become epidemic at Bahia. Several deaths amongst the English have occurred from the disease, which has also, in some cases, spread to vessels in the harbour.

DR. OLIVER WENDELL HOLMES.

LAST Monday afternoon, May 10th, arrangements were made for a reception to be given at the Medical Institution, Liverpool, in honour of Dr. Holmes. A large number of invitations were issued, and it was intended to present an address. But, to the great disappointment of all, Dr. Holmes was unable to be present; and the reception had, consequently, to be postponed. It is hoped, however, that Dr. Holmes will be able to visit Liverpool before leaving that part of the country.

THE LATE SIR ERASMUS WILSON.

THE unveiling of the statue of the late Sir Erasmus Wilson, executed by Mr. Brock, A.R.A., will take place, at Margate, on Tuesday, May 25th, at 3 P.M., when the presentation to the Royal Sea-Bathing Infirmary, Margate, will be made by Sir James Paget, Bart., on behalf of Lady Wilson. A special train will leave Victoria Station (London, Chatham, and Dover Railway Company) at 1.30 P.M., returning from Margate at 4.30 P.M., on the conclusion of the ceremony.

SIR DYCE DUCKWORTH.

THE newly elected Treasurer of the College of Physicians of London, Dr. Dyce Duckworth, went to Windsor on May 8th to present to Her Majesty the trowel employed in laying the foundation-stone of the new Examination Hall of the joint Colleges, and the Queen was pleased to confer upon him the honour of knighthood. Sir Dyce Duckworth has before him a career of much professional and official usefulness, and is popular both in the College and at St. Bartholomew's Hospital, where his professional attainments and business capacity are much appreciated.

THE GENERAL MEDICAL COUNCIL.

THE meeting of the General Medical Council has been fixed for June 2nd. The Executive Committee of the General Medical Council will meet on the previous day. The Council can hardly avoid discussing the new Medical Bill, even if they refrain from expressing an opinion on it. The Bill modifies the constitution of the Council in several important particulars. It introduces the principle of election of members by the profession at large, and does away with the present anomalous custom, by which the President of the Council may be a person who is neither a nominative nor elective member, but some person altogether outside the Council until his election as President.

HOME NURSING.

THE Annual Meeting of the Paddington and Marylebone District Nursing Association will be held at the residence of Mr. Bonham Carter, 5, Hyde Park Square, on Thursday, May 20th, at 5 P.M. The useful work done by this, and kindred institutions, is deserving of more support than is generally received, and we regret to learn that the Association is in great need of funds. Though the expenditure is small, the Association is able to nurse a very large number of cases in their own homes; in cases of chronic illness, unsuitable for general hospitals, and in certain infectious diseases, such as measles, the assistance and advice given to the friends of the sufferers by the trained nurses of the Association, are invaluable in preventing the spread of disease, and encouraging habits of self-help and independence. The work of the Association only requires to be known to be approved.

AN OPHTHALMIC HOSPITAL FOR CONSTANTINOPLE.

AN Ophthalmic Hospital was established in Constantinople last year, through the exertions, chiefly, of Viscountess Strangford, who placed twenty beds at the disposal of Dr. Van Millingen. At the Hôpital de la Paix, which is under the charge of the Sisters of St. Vincent and St. Paul, the treatment of ophthalmic cases has been systematically carried on since July, 1885, on a small scale. The work accomplished in this tentative way has been sufficient to show that an ophthalmic hospital, properly equipped, on a larger scale, would fill a very real gap in the charitable institutions of Turkey, where a very large proportion of the most wretched inhabitants owe their abject poverty and misery to blindness, produced by preventible maladies. A small committee has been formed to collect funds to erect and furnish a suitable hospital.

PROPOSED CONFERENCE OF MEDICAL OFFICERS OF HEALTH.

AT a meeting of the Yorkshire Association of Medical Officers of Health, on April 28th, Dr. Britton moved the following resolution: "That this meeting is of opinion that it is desirable that a conference of Medical Officers of Health should be held during the Congress of the Sanitary Institute, at York, in September next; and that such conference should be called by and on the authority of the institute, as part of the business of the Congress, and that that conference might include others interested in sanitary science than officers of health; and, in the opinion of this meeting, the following would form suitable topics of discussion: The notification of diseases, and the question whether infectious hospitals should be free of charges made for admission; county government, so far as related to sanitary questions; and the tenure of office of Medical Officers of Health."

THE PROSPERITY OF THE UNIVERSITY OF LONDON.

THE speech of Sir James Paget, on May 12th, the "degree-day" of the University of London, may be taken to be, in some sort, a defence of the University against the severe criticisms to which it has been subjected during the past year. He had no difficulty in showing that, during the fifty years of its existence, the University had done much useful work, and that the number of persons who matriculate in her increased decade by decade, until the last five years showed an average of nearly 950 a year. These facts, however, seem to show rather that the desire for an University exists, than that this desire has been fulfilled. If this relatively large number of matriculated undergraduates be compared with the very small average annual number of graduates, it will be seen that the mere number of persons matriculating cannot accurately gauge the usefulness of the University. Moreover, the argument leaves altogether untouched the question of a University for London Students. It is not that the standard is set too high. Sir James Paget had an easy task in showing that a large number of the graduates attain distinction in after-life, and might easily have increased the list of names he chose. Sir Henry Roscoe, Sir William Jenner, and Lord Herschell, are a trio of names of which any University might be proud; and there is no lack of other men to come forward to fill similar positions in the future. Where the regulations of the University happen to suit the domestic and pecuniary arrangements of undergraduates, the University system affords a healthy stimulus, and its examinations have no injurious effect. The contention, all along, has been, that it was the want of elasticity in the regulations, and the want of sympathy with the needs and necessities of students and teachers, which have conspired to make the the University the comparative failure which, in spite of Sir James Paget's hopeful speech, we fear it must be still considered to have been. The jubilee of the University occurs this year, and would be a fitting epoch for a new departure.

THE ARMY MEDICAL SCHOOL, NETLEY.

A CORRESPONDENT writes: Reports from the Army Medical School at Netley are not satisfactory. Upwards of seventy young medical officers are now going through their course of instruction there, but the accommodation for them seems very defective. In the first place, the want of sufficient quarters in the vicinity of the school causes great inconvenience, as the surplus students have to live as best they can in the villages around. Further, the laboratories and instruction-rooms are too small for the work to be done in them, and in this way the already very short course of four months is handicapped by want of full means to carry it out. Year after year, requests for better accommodation have been put forward, and year by year they are struck out of the Army Estimates. Last autumn, a board of officers, consisting of the Surveyor-General, the Director-General of the Army Medical Department, Sir Joseph Fayrer, and General Sir Andrew Clarke, inquired into the condition of affairs; and it is understood that they reported strongly in favour of a new school-building and further accommodation for officers' quarters; but no attention has been given to the recommendation, and things continue in the same unsatisfactory condition. While continual efficiency is required of the medical officers of the army, practically no aid is given them in developing their scientific knowledge. Without a staff-college, without any courses of secondary instruction, without any facilities to visit foreign armies, such as are given to other army officers, the medical service, entrusted with most responsible duties, receives no State help in its struggle to develop itself. We trust that, during the approaching discussion of the Army Estimates, some inquiry will be made into this subject by members of the House of Commons. No intelligent member of either party in the House should refuse funds to be expended in the scientific training of the army medical officers.

PROFESSOR STIRLING'S INAUGURAL ADDRESS AT OWENS COLLEGE.

DR. STIRLING, the newly appointed Brackenbury Professor of Physiology at Owens College, commenced his duties by giving an inaugural address to the students, at which the Principal, Dr. Greenwood, and many of the professors and lecturers, were present. After paying a graceful compliment to his predecessor in the chair, Dr. Gamgee, and also to Mr. Waters, who had undertaken the lectures during the past winter session, he proceeded to dwell upon the importance of physiology as the basis of rational medicine, and constituting what is spoken of north of the Tweed as the "institutes of medicine." He showed how many of the more recent advances in medicine, surgery, and pharmacology, were made *viâ* the physiological laboratory, and strongly advised all those who were training for the higher posts in the profession, in either medicine or surgery, to spend, if possible, a year in a physiological laboratory, such as Ludwig's at Leipsic. In no part of his address did he carry his audience more thoroughly with him than when he expressed a hope that the degrees to be obtained at Victoria University should be accessible, as were the Scotch degrees, to every hard-working and diligent student. The average student, at the end of his career, ought to look to his own university for the crowning honour of a degree, and not have to turn to distant corporations or universities for what he had a right to expect of his own. He distrusted examinations which could only be accomplished by the few, that demanded every moment of a student's time, too often to the exclusion of work more fitting for his future career. The student must study for the sake of his subject, as a gleaner in the great field of knowledge, and not simply for the sake of an examination, which was but an incident by the way, and not the goal or end-all of a student's work. The address was practical throughout; and it augurs well for Professor Stirling's future work, that his physiological teaching will have special reference to practical medicine, and that he will lend his influence towards modelling the teaching and examinations of Victoria University to the wants of the modern student, instead of attempting an impossible standard, which, however many may strive after it, few will be able to attain.

SCOTLAND.

THE late Mr. Thomas McKechine, Girvan, has bequeathed to Ayr Infirmary the sum of £250.

SPANISH RAGS.

THE prohibition of the importation into Scotland of rags from Spain has been extended, by order of the Board of Supervision, until August 26th next. Thus, the regulations on this subject made by the Scotch and by the English Departments now correspond.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

AT a meeting of the directors of the Royal Hospital for Sick Children, held on May 6th, Dr. R. Mackenzie Johnston, F.R.C.S.E., was appointed one of the extra physicians to the hospital for a period of five years.

MEDICAL EDUCATION FOR WOMEN, EDINBURGH.

ARRANGEMENTS have now been completed whereby a course of instruction in medicine for women can be obtained in the Edinburgh Extramural School. Dr. Sophia Jex-Blake has intimated that classes for the medical education of women will be opened in that school in October, 1886.

UNIVERSITY OF ABERDEEN.

AT a meeting of Aberdeen University Court, held on May 11th, the vacancy in the examinership in Institutes of Medicine (caused by the appointment of Dr. McWilliam to the chair of Institutes of Medicine in Aberdeen University) was filled by the appointment to it of Dr. D. Noel Paton, of Edinburgh.

CONVALESCENT HOME FOR PAISLEY.

THERE has recently been erected at West Kilbride, near Ardrossan, Ayrshire, a Convalescent Home for patients from Paisley; and, since February, about forty convalescents have enjoyed its benefits. It is capable of accommodating fifty patients, and has cost, together with its furnishing, over £5,000, which we are glad to observe has also been subscribed. The site on which it was built was generously presented by the late Mr. Arthur from his estate of Carlung. The institution was formally opened on Saturday, May 8th, by the president of the institution, Mr. John Clark.

VENTILATION OF DRAINS.

THE Subcommittee of the Public Health Committee of Edinburgh Town Council have made an inquiry into the subject of the ventilation of the drains in the city, and have, as the result of their deliberation, remitted to the burgh engineer and the Medical Officer of Health to prepare a plan, embodying the principles of the three main drainage systems in the city, from which they might be able to devise some method of ventilation, superior to that at present in existence, which is by means of rain-delivery pipes, and which has against it the important objection of the proximity of such rain-pipes to the windows of inhabited houses.

THE BURGH POLICE AND HEALTH (SCOTLAND) BILL.

IT appears to be the unhappy fate of this Bill to be thrust through its several stages, either with indecent rapidity, or at unholy hours of the morning. The only stage of the Bill in the House of Lords at which there was even a pretence at discussion was in Committee; and this was comfortably got over in something like an hour. Considering that the Bill contains 553 clauses, to say nothing of schedules, and is 243 pages long, this is a legislative record of which the House of Lords may well be proud. The third reading provoked no debate whatever; and, accordingly, the way was smoothed for its transference to the House of Commons. It was issued to members of the Lower

House on Monday; and, at 2 A.M. on Tuesday, the Lord Advocate, thinking, no doubt, that sufficient time had been allowed to master its provisions, attempted to snatch its second reading. Some of the Scotch members were, however, not too sleepy to resist this; and, accordingly, the debate on the second reading was "adjourned." Considering that the measure is, in its way, a sort of Home Rule Bill for Scotland, we really think it is deserving of more respectful treatment.

FIFESHIRE MEDICAL ASSOCIATION.

AT the May meeting of the Fifeshire Medical Association, held at Cupar on May 8th, and presided over by Dr. Macdonald, of Cupar, a number of interesting papers were read, some of which led to considerable discussion. The papers read included one by Dr. Turnbull, of the Fife and Kinross Asylum, on the diagnosis of insanity, with special reference to a criminal case that occurred at Inverkeithing. Dr. Nasmyth, of Lochgelly, gave an account of organisms which may sometimes be found in ordinary drinking-water. Dr. Douglas, of Cupar, read a paper on the irregular invasion of pneumonia in children; and Dr. Turnbull exhibited preparations from a case of general paralysis of the insane, while Dr. Dow, of Dunfermline, read a paper on conservative surgery, especially as exemplified by the operation of excision of the elbow-joint, in place of the operation of amputation. These formed the principal part of the work done at the meeting, which was one of the most successful in the life of the Association.

CIRCULATING LIBRARIES AND INFECTIOUS DISEASES.

A VERY full report has been presented on the above subject to the Aberdeen Public Health Committee, by its Sanitary Inspector, and there can be no doubt that it draws attention to what is a very possible source of disease. Books taken from a circulating library, and read in a room where infectious disease exists, if returned without being properly disinfected, may transmit the poison of fever as effectually as any portion of clothing or bedding. This may take place sometimes from mere thoughtlessness, especially among the less intelligent classes of the community, who are often apt to regard the ordinary precautions against infection as overstrained and unnecessary; the report therefore very wisely suggests that, when sanitary officers visit premises where infection exists, they should ascertain if any of the household are in possession of books from any of the public libraries; and, if so, that they should see that the volumes are properly fumigated.

IRELAND.

HEALTH OF CORK.

FOR the four weeks ending April 17th, the deaths amounted to 132, which included 7 from zymotic diseases. It is very satisfactory to find that the mortality from typhus fever has decreased so much within the past few years. For example, if we go back to April, 1881, we learn that 134 fatal cases occurred; in April, 1882, 75 cases were returned; in April, 1883, 31 cases; in April, 1884, 51 cases; in April, 1885, 11 cases; and in April, 1886, only 2 deaths were returned from this disease. The annual mortality for the month gives a rate of 21.41.

HEALTH OF BELFAST FOR PAST MONTH.

DR. BROWNE, medical superintendent officer of health, in his monthly report, states that the severity of the weather, and the prevalence of easterly winds, kept up the mortality, especially for diseases of the lungs, and amongst old people and young children. The deaths from zymotic diseases only show a death-rate of 1.8, and an indication that the town has been nearly free, as for the past two months, from any infectious diseases.

THE CHOLERA.

ITALY.

(From our Rome Correspondent.)

IN previous letters, allusion has been made to the strong undercurrent of uneasiness prevailing throughout Italy, at the startling suddenness with which, from time to time, the news of local outbreaks of cholera has been sprung upon the country. It was naturally surmised, either that the authorities had been singularly remiss in discovering and isolating the first suspicious cases, or that local interests had been too jealously guarded, and had been permitted to outweigh all considerations for the general welfare, by the suppression, for as long as possible, of any mention of the dreaded disease having appeared in a particular district.

It was just as persistently denied as it had been strenuously affirmed, that cases of cholera of the true Asiatic type had shown themselves, now and again, in Venice, during the winter; and the Syndic of that city, not long ago, sent a circular to the various capitals of Europe, containing an explicit denial of all the statements made detrimental to the well-being of his special charge. Equivocation certainly is a failing not entirely confined to Italians; but the Syndic in question had probably studied Machiavelli to some purpose, and thus held himself justified, in the interests of the city he represented, in carrying his protest somewhat too far. There is no other feasible explanation of the fact that the Municipality of Venice have finally made a virtue of necessity, and, in order to prevent exaggeration, have determined in future to publish a regular sanitary bulletin. The unexpected and alarming telegram, containing this notice, added that, up to the evening of May 5th, there had been ten cases, and three deaths (presumably within the preceding twenty-four hours), and that a lazaretto had been opened on the Giudecca. Since that date, there have been twenty-nine fresh cases, and seventeen deaths, many of the latter evidently being those of persons attacked before the publication of the bulletin began. Coincidently, we hear of several cases at Vicenzo and Treviso, so it is clear that the north-eastern angle of the kingdom is widely affected. It is impossible to use words too strong in reprehension of the culpable suppression of what must have been known to the authorities, as many strangers have been induced to visit Venice lately, trusting to the positive assurances so widely promulgated.

This short-sighted policy will, no doubt, carry with it its own punishment, as the quarantine regulations are certain to be made much stricter against all vessels from Venice, while other parts of Italy, unfortunately, are likely to suffer, too, from the general distrust which the conduct of the Venetian authorities has awakened.

In Apulia the disease still continues, though in no virulent manner. In Brindisi, the number of cases seems rather to tend to diminish, but more are reported from Ostuni; and Bari, too, has become infected.

The cholera returns for May 9th showed, in the province of Brindisi, 5 cases and 2 deaths; in the city of Venice, 13 cases and 8 deaths; and at Bari, 26 cases and 10 deaths.

The cholera epidemic has abated in some of the Italian towns. The last bulletin stated there had occurred two cases at Brindisi, five at Ostuni, and three at two small southern towns.

EGYPT.

NEWS comes from Cairo that the reappearance of cholera in Italy causes great anxiety in Egypt. The Press calls on the Government to begin the proposed sanitary reforms. The Government of Alexandria has summoned all the sanitary authorities, and insisted on their keeping the city in a state of absolute cleanliness. At Cairo, a special commission is entrusted with the duty of advising concerning the report drawn up, some time ago, by Surgeon-Major Green, indicating the reforms that are necessary in the sanitary service. In Egypt even, the most primitive sanitary institutions are wanting. The field of Tel-el-Kebir is still covered with the remains of dead bodies, and the ruins of the large barracks built by the Khedive Ismail. The English, it is said, hold the destiny of Egypt in their power, and pocket large sums of money. They are, therefore, responsible for the sanitation of Egypt.

EXPLOSION AT A HOSPITAL.—One of the wards of the Portsmouth Military Hospital was wrecked last week by a gas-explosion. There were several patients in the wards, but they all escaped injury. One man, who was delirious, tried to jump out of the window, and was with difficulty restrained.

ASSOCIATION OF MEDICAL OFFICERS OF SCHOOLS.

THE annual general meeting of this Association was held at the Rooms of the Medical Society of London, Chandos Street, on Thursday, May 6th; the President (Dr. FULLER) in the chair.

The report of the Council was presented, and adopted. It stated that the resignation of Dr. Diver had been tendered and accepted by the Council; that Dr. Fletcher's paper, on the Management of Athletics in Public Schools, had been published by Mr. Lewis, as directed by the general meeting, and that copies had been distributed amongst the members of the Association to the head-masters of the public schools; and that Sir Andrew Clark, Bart., Consulting Physician to the East London Hospital for Children, and Mr. William S. Savory, F.R.S., Surgeon to Christ's Hospital, had been elected members of the Association. Dr. Batterbury, Medical Officer of the Berkhamsted Grammar School; Dr. Hetherington, Medical Officer of the Ipswich Grammar School; Dr. Edward Penny, Medical Officer of Marlborough College; Surgeon-Major Pratt, Medical Officer of the Royal Military Asylum, Chelsea; Mr. Howard Marsh, Senior Surgeon to the Children's Hospital, Great Ormond Street; and Mr. F. W. Salzmann, Medical Officer to St. Mary's Hall School for Daughters of Clergymen, Brighton, were elected members of the Association. Dr. George Buchanan, Medical Officer to the Local Government Board, was elected an honorary member of the Association.

The audited accounts, showing the finances of the Association to be in a satisfactory state, were then presented, and adopted.

The following gentlemen were elected as officers for the year 1886-7. *President:* W. S. Savory, Esq., F.R.S. *Vice-Presidents:* Sir Andrew Clark, Bart.; Dr. Farquharson, M.P.; Dr. Fuller; Surgeon-Major Evatt, M.D. *Treasurer:* Noble Smith, Esq. *Honorary Secretaries:* Dr. Alder Smith; Dr. Charles Shelly. *New Members of Council:* H. Armstrong, Esq. (Wellington); R. Brudenell Carter, Esq.; Shirley Murphy, Esq.; Dr. J. Ellison (Eton).

Mr. BRUDENELL CARTER proposed a hearty vote of thanks to the retiring President (Dr. Fuller), which was carried with acclamation.

Dr. FULLER, in acknowledging it, referred briefly to the history and objects of the Association, which now included eighty-three members, and quoted instances in which its labours had proved directly beneficial to medical men, and to the public generally. He gladly welcomed Mr. Savory as their president, because his occupation of that office could not but add prestige and authority to the work accomplished by the Association.

Mr. SAVORY said that he accepted the presidency as a valued compliment from the members of the profession, which knew him best; and he did so the more willingly, because he could thoroughly assent to the purposes for which the association was founded. He was aware that the Association had already done good work, and that it was now doing good work; and he believed that it would do still better work in the future, by the attention which it directed to the prevention of disease, in its endeavours to discover the causes which provoke it.

Dr. HAIG BROWN read a paper on the Causation of Follicular Tonsillitis.—In the discussion which followed, Mr. H. ARMSTRONG argued against the contagiousness of tonsillitis.—Dr. FYFFE, Dr. BRETT, and Mr. HUGH STATHAM were not prepared to admit the contagiousness of the disease, but believed that many groups of cases owned a common cause in defective sanitation.—Dr. ALDER SMITH thought it would be a very serious matter if every case of follicular tonsillitis must be isolated, in order to check the spread of the disease; he agreed with Dr. Fyffe, and other speakers, in recognising at least three types of the malady, although their distinction was not always easy.—Dr. HAIG BROWN replied in detail; and the PRESIDENT proposed a cordial vote of thanks to him, for a valuable and very suggestive paper, which was carried unanimously.

The members subsequently dined together at the Holborn Restaurant.

THE NEW PADDINGTON INFIRMARY.

AN inspection of the new Infirmary for the Sick Poor of the parish of Paddington, which has recently been completed, and was first occupied in February, was held on May 6th. The building has been erected on a site adjoining the workhouse in the Harrow Road, but the new infirmary is entirely separated, both in construction and administration, from the latter institution. Dr. Savill, the medical superintendent, is the principal administrative officer of the infirmary, which contains 284 beds, equally divided between male and female.

The principal building consists of a central administrative block, with pavilions, running north and south, connected with it by corridors on the ground floor, and by bridges on the upper floors. Each pavilion is provided with a large lift capable of transporting a patient. The floor of each pavilion contains one large ward, and one or more small wards. The large wards contain 32 beds; the superficial area for each bed is 75 square feet, and the cubic space 886 cubic feet. These wards have windows on each side, facing east and west, and a balcony at the free end. Great attention has been given to ventilation, as was necessary, considering the small cubic space allowed; air is admitted through Sherringham valves above each window, through an aperture, with a sliding shutter, behind the hot water pipes, and covered by the lockers; air is removed by upcast shafts, in the same stack as the flues for the stoves, of which there are two, placed centrally, in each ward, and through transverse hollow beams in the ceiling, which communicate with perforated bricks above, and the level of the next storey. Dr. Savill informs us that the ventilating arrangements work very well; that the wards, when quite full, can be kept very fresh, without opening windows, when the stoves are going; and that there is no down-draught from the perforated ceiling-beams, except when there is a strong breeze on one or other beam; when this is the case, the apertures on that side can be closed. The gaslights are provided with flues, which open obliquely into the smoke-flues. This arrangement has been found to work well in practice, and it is satisfactory to find this provision for carrying off the products of the combustion of gas, a matter too often neglected by architects.

The three upper stories contain each a small ward, in each pavilion, for special cases; each of these small wards can make up four beds, and has a cubic space of 1,170 cubic feet for each bed. The doors have been made sufficiently wide to allow a bedstead to pass, so that a patient can be wheeled from the long ward into the special ward without disturbance. On the ground floor, the special wards are smaller, having accommodation for only two patients in each, with a cubic space of 1,004 cubic feet for each bed. Each long ward has a good service-room, with kitchen-range and water-appliances, on the side nearest the administrative block, and on the opposite side of the corridor to the special ward. At the free end of the pavilion are two turrets, connected with the long wards by cross-ventilated corridors; the one turret contains a lavatory and bath, the other w.cs. The sanitary appliances throughout are of good patterns, and the drains are well planned in straight lines, with inspection and manholes at convenient points.

The comfort of the patients in the wards has been well considered; the bedsteads are of a light, strong, iron pattern, and the double lockers are commodious. The nursing arrangements appear to be excellent, each ward being in charge of a competent trained nurse, with trained nurses, the whole nursing staff being under the direction of a lady trained in the Nightingale School, who is assisted by an assistant-matron and a night-superintendent. Rooms are assigned to the nurses in the two upper floors of the administrative block. These rooms are lofty, and well furnished; ample water-closet and bath accommodation has also been provided for the nurses. On the ground floor is a consulting-room for the medical superintendent, a dispensary, and other offices; the kitchens are in the rear. The assistant medical officer resides in the infirmary, but a separate house near the entrance in the Harrow Road is provided for the medical superintendent. The laundry—a separate building, entirely detached from the infirmary—is fitted with all the modern labour-saving appliances.

Another detached building contains the mortuary, which opens into the *post mortem* room. This room is well lighted with a top north light, and is provided with every requisite for the proper performance of necropsies.

The Infirmary has been built from the designs of Messrs. A. and C. Harston, of 15, Leadenhall Street. The cost of the building and engineering has been £36,500, or about £128 10s. per bed.

PROPOSED MEDICAL DEFENCE UNION.

ON Thursday in last week, a largely attended meeting of the members of the medical profession was held at the Medical Institute, Birmingham, to consider the advisability of forming a Medical Defence Union.

Mr. LAWSON TAIT occupied the chair, and moved the first resolution, remarking that in the comparatively short period over which his own experience ran—twenty years—he had been engaged in no fewer than twenty-one cases in which charges, sometimes of a criminal kind, and others which formed the basis of civil action, had been made against gentlemen of the medical profession, and, in every one of these instances, the charge had broken down, and a successful result had been obtained. He alluded, in particular, to three cases. The first was that of Mr. Croft, of Sitterfield, in which twelve or fourteen

years ago, he had to undertake, almost single-handed, the defence of a gentleman who was most unjustly accused of having falsely signed a certificate. In spite of the discharge of the bill by the grand jury, at Warwick, a very large sum, for one in Mr. Croft's position, had to be raised to meet legal expenses. In the case of Dr. O'Leary, which had only recently occurred, that gentleman had practically been ruined by a charge which had been most improperly brought against him. For the part which Mr. Tait took in the defence, he had to bear the brunt of a threatened action for libel. In the recent, and still more painful case of Dr. Bradley, a conviction had been secured, and a sentence of hard labour passed upon an innocent man. The expenses of defending such cases had to be met by contributions obtained with much trouble, and it seemed to him (the Chairman) that it was time to put an end to such a state of matters when men who were poor, or who were timid, were left practically helpless, unless some one or two of their professional brethren would stand forward to their help. If it were known that a body was in existence charged with the duty of defending such men, and possessed of sufficient money to secure a competent defence, these improper actions would become necessarily much rarer, and, even when entered upon, they would fall with much less terror on those against whom they were directed. He therefore moved that: "In the opinion of this meeting, it was desirable to form a Medical Defence Union." The details upon which the defence of such actions would be based, would be left in the hands of a competent committee; and in answer to a question, which was made by Mr. Burton, as to whether such cases were really sufficiently numerous to make such an institution as the Union necessary, he would say that, since the circulars had been issued calling the meeting, he had received applications from four sufferers, who each hoped that his case might be taken up.

Dr. E. B. WHITCOMBE, superintendent of the Borough Asylum, seconded the resolution, which was carried unanimously.

The second resolution was proposed by Dr. SAUNDBY, and seconded by Mr. WRIGHT WILSON, to the effect: "That a committee, for the purpose of arranging the details of the establishment of the Midland Branch of the Medical Defence Union, should consist of all such gentlemen as were present and should agree to join, and also such as sent letters of apology for absence in which they express approval of the scheme."

This resolution was also carried unanimously, and about sixty at once joined the Union.

THE ROYAL VISIT TO LIVERPOOL.

THE DUKE OF CONNAUGHT AT THE SOUTHERN HOSPITAL.

LAST Tuesday morning, May 11th, the Duke of Connaught paid a visit to the Royal Southern Hospital, which was opened by His Royal Highness, on Whit-Tuesday, 1872. The royal party arrived in Liverpool at 8 A.M., and proceeded at once to Newsham House, which had been set apart for their reception. The Duke of Connaught drove from Newsham House to the hospital, arriving shortly before 11 o'clock. He was accompanied by the Mayor of Liverpool (Sir David Radcliffe), Dr. Reid (physician in attendance upon Her Majesty), and Major Egerton (equerry). The Chairman of the Hospital Committee, Mr. G. H. Horsfall, many members of the committee, and the medical staff, received His Royal Highness, who was loudly cheered by an enormous crowd that had collected in front of the building. Mr. Horsfall read the following address.

"To His Royal Highness Arthur William Patrick Albert, Duke of Connaught and Strathearne, K.G., K.T., K.P., etc.

"May it please your Royal Highness—We, the President, Treasurer, and Committee of the Royal Southern Hospital, Liverpool, desire to offer to your Royal Highness a hearty and respectful welcome on the occasion of this, your second, visit to this institute.

"Fourteen years have elapsed since you were graciously pleased to open this hospital, during which time the beneficient work done may, perhaps, be best indicated by the number of patients who have been treated within its walls, no fewer than 106,813 cases having received medical or surgical care. The present available accommodation of 180 beds, has often been severely taxed; and, with a revival of trade, it may be found necessary to open a ward which has never yet been occupied.

"Ever grateful for your former kindness in opening and naming various wards, we would respectfully ask your gracious permission to name the ward, which has hitherto been known only as the Children's Ward, after Her Royal Highness the Duchess.

"Our pleasure on this occasion is intensified by the presence in our city of her most gracious Majesty the Queen, to whom we tender our dutiful expression of devoted loyalty; and we pray that every blessing may attend your Royal Highness, the Duchess, and every member of your family.

"Dated this 11th day of May, in the year of our Lord 1886.

"Signed, on behalf of the Committee,

"GEORGE HY. HORSFALL, President."

The Duke of Connaught, having replied to the address, made a tour of the building, accompanied by the medical staff and the members of the committee. On coming to the Children's Ward, he named it "The Margaret Ward," after the second name of the Duchess of Connaught. Before leaving, His Royal Highness signed the visitors' book, and expressed to Mr. Horsfall the pleasure he had derived from his visit to the hospital.

THE LATE DR. AUSTIN FLINT.

THE following short address, by Dr. Sayre, at a meeting in New York, memorial of Dr. Flint, will be read with sympathetic interest.

MR. PRESIDENT AND MEMBERS OF THE ASSOCIATION,—The summons which brings us here to-night is one of mingled sadness and pleasure; sadness and grief at the sudden loss of one of our most distinguished members, who was America's greatest physician; and yet the sadness caused by this irreparable loss is tinged with the deepest pride and consolation in the recollection that our profession has produced such a distinguished man, whose stainless life has left an example which must produce a salutary influence on all the younger members of our profession.

There were many points in the character of Dr. Flint well worthy the imitation of us all. His strict integrity, his unswerving fidelity and faithfulness in his devotion to his professional duties, were the most marked characteristics in his life. He was most punctilious in keeping, to the very moment, all his appointments with a brother practitioner, so as not to rob him of any of his valuable time; and no man in the consulting-room was ever more faithful or conscientious in the discharge of all of his professional duties to the patients, and, at the same time, more cautious and considerate in never giving offence, or wounding the feelings of his professional brethren who had called him in consultation. There was such dignity in his manner, and such earnest and positive sincerity in all his conversation, as at once to inspire confidence and command respect.

He was always a most indefatigable worker, ever engaged in the discharge of his professional duties, or else in the pursuit of his professional studies. He never wasted a moment of his time. When not visiting his patients at the hospital, or in professional consultation, he was in his library pursuing his studies to keep himself abreast with all the improvements in medical science, or else recording the careful observations from his vast experience, for the benefit of the profession. Hence his numerous writings, which have been translated into many foreign languages, and have become the standard text-books of the civilised world.

There was one very remarkable trait in Dr. Flint's character, which is well worth the imitation of everyone. Whatever he had to do, he did at once, and never procrastinated. Whenever appointed to prepare a paper, or to make an address at some distant period, he immediately commenced the work, as soon as the duty had been assigned to him, and always had it perfectly completed long before the time it was to be presented, and therefore nothing ever came from his pen in a hurried and unfinished manner.

I have been informed that among his papers, since his death, has been found the address he had been appointed to deliver before the British Medical Association, at its annual meeeting in Brighton, in July next.

This paper was perfect and complete, all ready for the press although it was not expected to be used for some months to come. The perfect completion of this paper, so many months before it was expected to be used, is a beautiful illustration of the general character and habits of the man. I hope the British Medical Association may become cognisant of the fact, and request the same for publication in their *Transactions*, so that the profession at large may be in the possession of his latest writings.

Brothers, while we bow in humble reverence and submission to the Divine power, which has so suddenly bereft us of our beloved companion, let us rejoice in the noble example he has left for our imitation.

BEQUESTS AND DONATIONS.—The Charing Cross Hospital has received £100, less duty, under the will of Mr. Francis H. Windsor.—The Rev. Thomas G. Carter, of Linton, Honorary Canon of Canterbury Cathedral, bequeathed £100 to the West Kent General Hospital, Maidstone.

ROYAL MEDICAL BENEVOLENT COLLEGE.

THE twenty-third festival dinner of this institution took place at the Holborn Restaurant, on Tuesday evening last. Sir ANDREW CLARK occupied the chair; and more than a hundred friends of the College were also present. The Chairman proposed the toast of "The Queen" in glowing language; and Dr. E. Waters that of "The Army, Navy, and Reserve Forces." Sir Lewis Pelly, M.P., in replying for the Army, said that nothing could be more sublime than the attitude of the physician who, during the heat of a battle, kept his self-possession, and made his diagnosis amid all the horrors of the carnage. He trusted that the expansive English-speaking race might weigh down the balance of civilisation and peace, and gradually make that of barbarism and war kick the beam. Admiral Sir A. Hoskins replied for the Navy, and remarked that he had served on a Commission for improving the position of the medical officers in the Navy, by which the Government had been able to obtain many more candidates for the naval service.

Sir A. CLARK proposed "Success to the Royal Medical Benevolent College." He remarked that John Propert fought, struggled, and endured, and lived to see his great idea succeed. The work of the College might be divided into three divisions. First was that of the fifty pensioners, twenty-four of whom were resident, and twenty-six dwelt outside the College precincts. Secondly, as to the College itself, he thought that, in respect of its failures and successes, it would compare well with any other school in the kingdom. One or two great principles should be remembered in the management of all schools. The physical health of the scholars was of paramount importance. In many public schools, the diet was far less good than it should be. As regarded the moral health, the tone and atmosphere of a school not only made the boys what they were at school, but made their character through life. In reference, also, to the educational part of a scholar's life, the whole of the faculties of the boy should be "led forth" in harmony, not in discord. With education should also go culture. The Council must foster, too, the feeling of *prestige* and of *esprit de corps* in the school. The expense of the College was about £5,000 annually, and the income only £3,800, and that was decreasing. This deficiency must be wiped out, and soon would be, if more of the spirit of John Propert were abroad. Fresh subscribers were required, particularly amongst all classes of the medical profession. But they could not do all that was required. The medical men gave their own health, comfort, and rest for the public; and the public, in return, should help the College. Their charity in this matter might, and should, go before their political economy.

The SECRETARY then read a list of donations and subscriptions, amounting to about £4,000, amongst which was a sum of £2,000 from a lady, and another of £200 from the chairman.

Dr. C. HOLMAN proposed the toast of the head-master, and enumerated several beneficial changes for the comfort and moral improvement of the boys, which Mr. Wood had introduced.

The MASTER returned thanks.

Mr. F. HIRD proposed the toast of the Chairman, which was received with musical honours, and duly acknowledged.

Sir GUYER HUNTER, M.P., proposed "the Honorary Local Secretaries," remarking that all rivers would be useless without their tributaries; to which toast

Dr. ARNISON, of Newcastle-on-Tyne, replied.

The pleasures of the evening were considerably augmented by the performance of selections from *H. M. S. Pinafore*, admirably rendered by Dr. and the Messrs. Lavies, Messrs. T. Cobham, G. A. Critchett, A. Smith, and D. Hepburn.

UNIVERSITY OF LONDON.

THE annual meeting of Convocation was held, on Tuesday evening last, at Burlington House; Mr. F. W. WOOD, LL.D., in the chair.

Mr. H. E. Allen having been appointed Clerk of Convocation, the CHAIRMAN moved that Convocation approve of the step he had taken in signing, on their behalf, a resolution, drawn up by the annual committee, and forwarded to Mr. J. R. Storrar, expressing their deep regret at the death of Dr. Storrar, the late Chairman of Convocation. —The motion was unanimously agreed to.

Mr. W. C. UNWIN, B.Sc., presented the report of the Annual Committee, and moved that it be received; which was seconded by Mr. SPRATLING, and agreed to.

Mr. W. C. UNWIN moved: "That it is desirable that a scientific degree, suitable for engineering students, should be instituted by this University." There were now recognised schools of engineering in many universities. A school of engineering had been established in Cambridge, and only last week it was decided that the subject was of sufficient importance to have a tripos to itself.

Mr. W. L. CARPENTER, B.A., B.Sc., seconded the resolution, which was carried; as were also one approving of the provisional scheme drawn up by the Annual Committee, and another that the regulations for the examination for the degrees in laws be referred to a special committee of seven.

Dr. M. BAINES moved: "That Convocation approve the movement to celebrate the jubilee of this University," the first charter of which was dated November 28th, 1836.

Mr. BONE seconded the motion.

Mr. HUTTON thought the University would detract from its dignity by such a celebration. It had not had fifty years even of teaching, but fifty years of examination, which had ended in a great dispute as to whether they were occupying their proper place as an university or not.

After a short discussion, the motion was agreed to; but while discussing the terms of a resolution appointing a committeee on the subject the House was counted out.

The following graduates of the faculties of medicine and science were elected to serve on the Annual Committee: M. Baines, M.D.; A. W. Bennett, B.Sc.; W. L. Carpenter, B.Sc.; W. C. Coupland, B.Sc.; J. Curnow, M.D.; G. Eastes, M.B.; W. H. Holman, M.B.; H. G. Howse, M.S.; P. Magnus, B.Sc.; H. Morris, M.B.; R. Neale, M.D.; M. F. O'Reilly, D.Sc.; W. J. Spratling, B.Sc.; F. Taylor, M.D.; S. P. Thompson, D.Sc.; and W. C. Unwin, B.Sc.

The University Presentation Day was held on Wednesday, in the Theatre of the University Buildings, Burlington Gardens. In the absence of the Chancellor, Earl Granville, the Vice-Chancellor, Sir JAMES PAGET, took the chair. The graduates who had passed in the several Faculties were presented, and their diplomas were handed to them. Those graduates who had won scholarships, medals, and prizes, were presented separately for every such distinction.

After the ceremony, the VICE-CHANCELLOR addressed the assembly. He alluded to the losses the University had sustained in the deaths of Dr. William Carpenter, and of Dr. Storrar, both of whom had worked with the most thorough devotion for the interests of the University. He had had the great pleasure of having known Dr. Carpenter for more than forty years—a man who was, throughout his career, not only a bright example in the scientific firmament, but in every relation of life. His fame was greatest, perhaps, in biology; but in every other branch of science, he was not only learned, but communicative, and he delighted to impart his admirable knowledge to others, on every question brought before him, and was ever ready to sacrifice himself for the welfare of his fellow-men. One eminent quality of his mind was the marvellous manner in which he combined the exactness of scientific knowledge with a knowledge of the common details of business. Dr. Storrar had devoted the greater portion of his life to the University, giving up his valuable connection in the medical profession to devote himself to the work of education. They had to deplore him not only as an eminent representative of the University, a member of the Senate, and Chairman of Convocation, but as a member of the Council of University College, and a friend of every institution and work which interested the University. During the fifty years of its existence, the University had passed 54,630 graduates. In the first five years, the total number passed was 251; in the second similar term, 1,415; while, in the last five years, the candidates numbered 4,728. The most prominent subject which at present engaged attention was the establishment of a teaching University for London. The matter had been thoroughly considered in Convocation. A strong committee had been formed; and he hoped that great good would come out of their conferences, and that something would be done for the advancement of knowledge and in the bringing together of teachers in London. The character of the movement would be gathered when he mentioned the names of those of the members of the Senate who were giving their attention to this matter—Lord Justice Fry, Professor C. Foster, and Dr. Pye-Smith. That something very satisfactory would be derived from the movement was the more certain, that it was not proposed to interfere with the working of the University. It was proposed to add something better, rather than to create something different; and it would certainly not tend to lower the standard required in any one degree.

BEQUESTS AND DONATIONS.—Mrs. Pemberton Heywood has given £50 to St. John's Hospital for Skin Diseases.—The Goldsmiths' Company have given £50 to the Royal Medical Benevolent College.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary meeting of the Council was held at the College on Thursday, the 13th instant. The minutes of the quarterly Council, held on April 8th, were read and confirmed. Mr. Bruce Clarke attended, and received the Jacksonian Prize, which had been awarded to him.

Regarding the Medical Bills now before Parliament, it was referred to the President and Vice-Presidents, along with Mr. Marshall, the representative of the College in the General Medical Council, to take any action they may think necessary in the interests of the College.

The report of the Council of the Royal College of Physicians, on the question of granting degrees in Medicine and Surgery to those who have obtained their qualifications, was referred to the committee on that subject.

Mr. John Marshall was unanimously re-elected representative of the College in the General Medical Council, for a period of five years from the date of expiry of his present term of office.

A letter was read from Her Majesty's Secretary of State for Foreign Affairs, announcing that an International Congress of Hydrology and Climatology will be held at Biarritz in October.

A letter was read from the Chancellor of the University of Adelaide, which was referred to the Committee of Management.

The following arrangements have been made for the summer courses of lectures. As usual, the lecture-hour will be 4 P.M. precisely each day. Dr. L. C. Wooldridge, Arris and Gale Lecturer, will deliver three lectures on the Pathology of the Blood, on Monday, Wednesday, and Friday, May 31st, June 2nd and 4th; Professor Henry Power will deliver three lectures on the Diseases of the Lacrymal Organs, on Monday, Wednesday, and Friday, June 7th, 9th, and 11th; and Professor W. Cadge will deliver three lectures on Stone in the Bladder, on Monday, Wednesday, and Friday, June 14th, 16th, and 18th.

On Headache in School Children.—Professor N. J. Bystroff has examined 7,478 boys and girls, in the St. Petersburg schools, during the last five years, and found headache in 868; that is, in 11.6 per cent. He states that the percentage of headache increases almost in a direct progression with the age of the children, as well as with the number of hours occupied by them for mental labour; thus, while headache occurred in only 5 per cent. of the children aged eight, it attacked from 28 to 40 per cent. of the pupils aged from fourteen to eighteen. The author argues that an essential cause of obstinate headache in school children is the excessive mental strain enforced by the present educational programme, which leaves out of consideration the peculiarities of the child's nature and the elementary principles of scientific hygiene. The overstrain brings about an increased irritability of the brain, and consecutive disturbances in the cerebral circulation. Professor Bystroff emphatically insists on the imperative necessity for permanently admitting medical men to conferences of school-boards. Of palliative measures, he mentions methodical gymnastics, mild aperients in well-nourished children, steel in the anæmic, bromides, inhalation of oxygen, and, in severe cases, a temporary discontinuance of all studies.

Hospital Saturday Fund.—The Board of Delegates of this fund met on Saturday, at the central office, 41, Fleet Street. Mr. R. Frewer, the secretary, reported that the ladies' out-door collection would be held on July 17th next, the third Saturday in the month, as in last year. The workshop collections would, as usual, continue until Saturday, September 4th. The council had issued an appeal, to which the names of the president, Mr. S. Morley, and the treasurer, Mr. H. N. Hamilton-Hoare, were appended, inviting the co-operation of employers, foremen, and others, and mentioning that there was an increasing desire manifested by the working people of the metropolis to assist, to the best of their ability, the hospitals and dispensaries to which they were so much indebted. The bazaar to be held at Prince's Hall, Piccadilly, on May 17th, and the two following days, in aid of Morley House Workmen's Seaside Convalescent Home—connected with the Hospital Saturday Fund—would probably, the secretary intimated, be opened by Princess Christian. The Princess Frederica of Hanover, and the Duchess of Teck, headed a long list of distinguished patrons; and it was confidently anticipated that the £1,600, needed to remove the debt on the purchase of the building, would be obtained, Mr. S. Morley undertaking to supply the remaining £400.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Inquiries are in progress on the subjects of

Diphtheria, Acute Rheumatism,
Old Age, Cancer of the Breast,
The Value of Hamamelis,
The Value of Pure Terebene.

Memoranda on the above, and forms for recording individual cases may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

The Etiology of Phthisis.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patient's thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into the Therapeutic Value of Hamamelis and Pure Terebene have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

Prognosis in Heart-Valve Disease, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; the Extreme Duration of Infectiousness in Infectious Diseases. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

South Indian Branch.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary.—J. Maitland, M.B., Honorary Secretary, Madras.

Southern Branch.—A meeting of the South Wilts district will be held at the Bath Arms Hotel, Warminster, on Wednesday, May 19th. Papers will be read by Dr. Coates, Mr. Willcox, and Mr. Luckham. Meeting at 4, dinner at 6, ticket (not to include wine, etc.), 5s. Members intending to be present are requested to communicate with the Honorary Secretary, H. T. Manning, Laverstock, Salisbury.

East York and North Lincoln Branch.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 26th, 1886, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the secretary, not later than May 15th.—E. P. Hardey, Honorary Secretary, 17, Brunswick Terrace, Spring Bank, Hull.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 27th. The president, Mr. J. T. Hartill, will take the chair, at 3 P.M.—VINCENT JACKSON, General Secretary.

GLOUCESTERSHIRE BRANCH.—The next meeting of the Branch will be held at the Infirmary, Gloucester, on Tuesday, May 18th, at 6.45 P.M., under the Presidency of Dr. Gooding. Agenda: 1. To elect a representative on the Council of the British Medical Association. 2. To elect new members of the Branch. 3. Tumours of the Kidney: Dr. Oscar Clark. 4. Intrathoracic Aneurysm: Dr. Batten. 5. What is the Duty of the Profession in the present state of the Vaccination Question? Dr. Batten. The half-yearly supper will be held at 8.15 P.M., at the Bell Hotel, the charge for which will be 2s. 6d. per head, exclusive of wine. —G. ARTHUR CARDEW, Honorary Secretary.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—An ordinary general meeting will be held in 198, Union Street, Aberdeen, on the evening of Wednesday, May 19th, at 8 P.M. Professor Ogston in the chair. Business: 1. Cases of Spina Bifida, by Dr. Taylor Keith. 2. Case of Detachment of the Retina, by Dr. Mackenzie Davidson, Aberdeen. 3. Case of Tumour of the Orbit, by Dr. Mackenzie Booth, Aberdeen. 4. Details of *Post Mortem* Examination of a Case of Spina Bifida, by Dr. Gordon, Aberdeen.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above district will be held at Tunbridge Wells on Friday, May 28th. Mr. Abbott will preside. Meeting at 3.30 P.M. Dinner at 5.30 P.M.; charge, 6s., exclusive of wine. The following papers are promised: 1. Dr. J. Herbert Stowers: Rodent Ulcer, its Nature and Treatment (microscopical sections). Coloured Drawings and Microscopical Sections of several rare Skin-Diseases. 2. Mr. John Gorham: Reminiscences of Guy's Hospital relating to Ovarian Dropsy. 3. Mr. C. Lamminan: Thoracic Aneurysms. 4. Mr. G. S. Watson: A Case of Abscess of the Internal Ear. 5. Dr. T. Elliott: Ascaris Lumbricoides. It will be proposed that, in future, there should be three district meetings in the year, instead of four. This being the last meeting of the session, an Honorary Secretary will be elected for the ensuing year.—T. JENNER VERRALL, Honorary Secretary, 95, Western Road, Brighton.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of this district will be held at the Kent and Canterbury Hospital, on Thursday, May 20th, at 3 P.M.; Mr. Sadler in the chair. The Chairman will be glad to see members and their friends to luncheon, at his residence, Oswald House, Watling Street, between 1.30 and 2.30. The dinner will take place at 5 P.M., at the Royal Fountain Hotel. All members of the South-Eastern Branch are entitled to attend these meetings, and to introduce professional friends. All gentlemen purposing to dine are particularly requested to inform the Chairman by Tuesday, the 18th, that proper arrangements may be made. Agenda: 3 P.M., usual business of annual meeting. Mr. Raven will open a discussion on the extreme duration of infectiousness in the following infectious diseases, Scarlatina, Small-pox, Measles, Mumps, and Diphtheria. The above subject has been chosen by the Collective Investigation Committee for discussion during the current year. The Secretary of the Collective Investigation Committee, Dr. Isambard Owen, will be present, and speak on the subject of debate. Dr. Fitzgerald: Some remarks on the Treatment of Ulceration of the Os Uteri.—W. J. TYSON. Honorary District Secretary, 10, Langhorne Gardens, Folkestone.

METROPOLITAN COUNTIES BRANCH.—A special General Meeting of this Branch will be held at the Royal School of Mines, Jermyn Street, on Monday, May 31st, to consider the subject of degrees in medicine for London students. The President, Dr. Walter Dickson, will take the chair at 8 P.M. precisely. A resolution to the following effect will be submitted to the meeting: "That negotiations with the University of London not having led to the desired result, this meeting recommends that the Royal College of Physicians of London and the Royal College of Surgeons of England be requested to endeavour to obtain power to grant degrees in medicine." All registered medical practitioners residing in the Metropolitan District are invited to attend.—ALEXANDER HENRY, M.D.; W. CHAPMAN RIGG, M.D., Honorary Secretaries.

DORSET AND WEST HANTS BRANCH.—The next meeting will be held at Christchurch, on Wednesday, May 19th, 1886. The business meeting will be held at the King's Arms Hotel, at 2 P.M. Agenda: Secretaries' accounts for 1885. Election of Branch Council (seven members). Election of a Representative of the Branch on the Council of the Association. Election of New Members of the Branch. Place of the Autumn Meeting. Communication from the East Anglian Branch. Communication from the East York and North Lincoln Branch. Address by the President: The Modern Theory and Treatment of Phthisis. Communications: Mr. Parkinson: Case of Tumour of the Thigh (patient to be shown). Mr. Lawton: Induced Labour for the Relief of Reflex Irritation of the Pneumogastric. Mr. Mahomed: Notes of a Case of Excision of the Knee (specimen). Dr. Macdonald: Heart-lesions in relation to Mental Symptoms (specimen). Dr. Macdonald: Specimen of Calcareous Degeneration of Aortic Valves. Mr. Parkinson: Rupture of an Extra-Uterine Fœtation (Fallopian Tube). Hæmorrhage and Death. Mr. Parkinson: Cases of Imperforate Anus. Mr. Marsh: Case of Skin-Grafting (specimen). Discussion on the Administration of Chloroform in Private Practice. Visit to the Priory Church at 4.30 P.M. Dinner at 5.30 P.M. Charge, 6s. each, without wine. Members intending to be present are requested to notify the same to Mr. Watmough, Christchurch, on or before Monday, May 17th.—WILLIAM AUDREY LUSH, M.D., Weymouth; C. H. WATTS PARKINSON, Wimborne, Honorary Secretaries.

YORKSHIRE BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held in the School of Medicine, at Leeds, on Wednesday, May 5th; the PRESIDENT (Dr. Alexander) in the Chair.

Papers.—The following papers were read.

1. Dr. Myrtle: On Eczema, Psoriasis, Acne, and Pruritus.
2. Mr. A. W. Mayo Robson: (*a*) An Operation for Imperforate Anus, with the question of establishing a new principle in dealing with such cases; (*b*) Removal of large Uterine Polypus in the seventh month of Pregnancy.
3. Mr. T. R. Jessop exhibited some Surgical Cases.
4. Dr. Churton: (*a*) Three cases of Chorea during Pregnancy; (*b*) A case of Hæmorrhagic Pleurisy.
5. Mr. T. Smailes: Four cases of Croupous Pneumonia.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The French Ophthalmological Society.—Sulphate of Quinine.—The Microsporon Furfur as a Parasite of Tuberculosis.—The Action of Hypnon on the Blood.—Epidemic Diseases in Paris.—The Boat Wash-houses and Public Health.—General News.—Death of Dr. Legrand du Saulle.

TENOTOMY in muscular insufficiency was discussed at the meeting of the French Ophthalmological Society. M. Landolt stated that he always followed the method of his teacher, Dr. Arlt of Vienna, slightly modified. He used forceps with more slanting blades, and curved scissors. M. Gaval had never met with muscular insufficiency; it disappears when the power of refraction is corrected. M. Parinaud stated that paralysis of convergence is distinct from insufficiency of the rectus internus muscle of the eye; it results from a lesion of the centres innervating those muscles. There are two kinds of paralysis of convergence of central origin; one which may be called essential, and another combined.

M. de Vrij, of the Hague, well known for his researches on cinchonas, read a paper, at a recent meeting of the Academy, on the composition of the sulphates of quinine sold by the principal chemists and druggists. He recommended physicians to prescribe neutral, instead of acid sulphate. The latter varies in composition; the neutral sulphate is always pure; hydrochlorate of quinine is also pure.

MM. Duguet and Héricourt read a paper, at a recent meeting of the Academy of Medicine, on the Evolution of the Microsporon Furfurans, constituting a Parasite of Tuberculosis. In two cases of tuberculosis, the authors were unable to detect either Koch's bacillus or the zooglœa of Malassez and Vignal, but found voluminous spores. The patients, besides being tuberculous, had pityriasis versicolor. MM. Duguet and Héricourt conceived the probability of a pseudo-tuberculosis, microsporic in character, and having its origin in pityriasis. Artificial cultivations were made, and afterwards used for inoculations, which reproduced the parasitic affections, and also granular lesions. In the cultivation-fluids, there were two strata: an upper one, containing a bacillus analogous to Koch's bacillus, and a considerable quantity of spores; a lower one, consisting of spores and filaments of mycelium. These latter were found if the cultivation fluid were heated to 40° C. (104° Fahr.). As the mycelium grow mature, they break up into granules. These granules, when exposed to the air, develop into bacilli. These, which, when in the form of spores, contract and become granules, in contact with the air reproduce mycelium and spores, which multiply by budding. The investigators believe in the microsporic nature of tuberculosis, and think it possible that the facts they describe will throw light on many now obscure points of bacteriology, and furnish the reason why bacilli are not found in tuberculous viscera, when they are present in sputa. MM. Malassez and Vignal inoculated zoogloeic masses, and produced bacillary tuberculosis. MM. Duguet and Héricourt consider it possible that pityriasis versicolor may be the starting point of a visceral tuberculosis. The susceptibility of the microsporon to the influence of sulphur indicates the advisability of treating pulmonary affections, that cannot be distinctly diagnosed, with this remedy. The arrested development of bacilli in acid media may possibly explain why bacilli are not found in the lungs of gouty patients, nor in their sputa. MM. Duguet and Héricourt terminated their communication by stating that pityriasis versicolor ought to be carefully sought out, and treated with energy.

At the meeting of the Biological Society on April 18th, M. Quinquaud made known the result of his and M. Laborde's joint researches concerning the action of hypnon on the blood. After an injection of acetophenon, the proportion of carbonic acid in the arterial blood is much greater. If the arterial and venous blood of any given region, arm, head, or thigh, be studied comparatively, it will be observed that, during intoxication, more oxygen is consumed in those regions than in any others; the animals also present symptoms of asphyxia, if the dose

of hypnon be sufficiently large ; if it be not, the process of combustion is more slowly effected. In large doses, hypnon is an asphyxiating agent ; in small doses, it renders the process of nutrition slower. The respiratory capacity of the blood remains the same. During the intoxication period, the glycogenic function has double its normal activity. All the animals experimented on died. Hypnon is a dangerous substance, which requires careful handling.

M. Gustave Lagneau, in his report to the Conseil d'Hygiène et Salubrité of the department of the Seine, on the epidemics of Paris in 1884, states that three diseases are on the decrease, typhoid, whooping-cough, and small-pox. Diphtheria, on the contrary, is on the increase ; and one cause is believed to be the dampness of the ground on which some suburban houses are built. The decrease in whooping-cough is believed, in a great measure, to be due to the precautions taken in schools. This affection is especially fatal in the districts outside Paris, among the poor and needy classes.

The Prefect of the Seine applied to the Conseil d'Hygiène et Salubrité for advice concerning the suppression of the boat-washhouses on the rivers Seine and Marne. A commission was appointed to study the question. M. Jungfleisch has sent in the report, which states that there are sixty boat-washhouses on the Seine. Of these, twenty-two are on that part of the river which runs through the heart of Paris ; six others are on the Saint Martin Canal. The first operation in washing the linen is to steep it and rub it in cold water, to remove the principal impurities ; thus a considerable number of microbes, possessing their full vitality, are deposited in the water. Dr. Miguel's microscopic examination of the water after the first rubbing of the linen confirms this belief. The Conseil d'Hygiène consider that boat-washhouses ought to be suppressed.

The annual general meeting of the General Association of French Medical Practitioners was held a few days ago. Dr. Passant read a report on the subject of statement of the cause of death, and dwelt on the difficult position of a medical man who would not betray the secrets of his profession. Dr. Ranse, editor of the *Gazette Médicale de Paris*, read a paper on the Rank and and Order of Medical Men.

Dr. Depierris offers a prize of 1,000 francs (£40) for an essay on the effect of tobacco on the health of literary men, and its influence on the future of French literature.

Dr. Jules Guérin's teratologic and orthopædic museum is to be sold by auction on May 27th. This museum consists of 19 skeletons, trunks, anatomical preparations, and normal and pathological osteological preparations ; 42 models (moulded on the human subject) of dentition ; 3 models of monsters, moulded from nature: besides many other preparations and anatomical objects. The copyright of his work on *Difformites Congenitales chez les Monstres, le Fœtus, et l'Enfant*, with maps and plates, will also be sold, with that of several manuscript works on deformities.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

Meetings of Glasgow Societies.—The Proposed Annual Meeting of the Association at Glasgow.—Geological Society.—The Teachers' Guild. —Glasgow University.

THE Glasgow Medico-Chirurgical Society held its last ordinary meeting for the session in the Faculty Hall, on the 7th instant, under the presidency of Professor G. H. B. Macleod, when Professor Gairdner made a communication on the subject of Internal Aneurysm. Dr. Gairdner reviewed the diagnosis, prognosis, and treatment of the affection, and, in so doing, traversed familiar ground ; but he brought to bear on the subject a wealth of personal experience and a richness of illustration that made what he had to say of the utmost practical value. In further illustration, he had arranged on the table a set of upwards of twenty-four specimens of aneurysm, brought from the museums of the Royal and Western Infirmaries. Classifying thoracic aneurysms according as they were (1) in immediate proximity to the heart, (2) on the anterior aspect of the ascending aorta, (3) on the posterior aspect of the ascending aorta or of the transverse aorta, or (4) on the descending aorta, he proceeded to discuss the symptoms due to the varying positions, illustrating from the cases before him. Dr. Gairdner discussed Valsalva's and Tufnell's methods of treatment, the treatment by iodide of potassium and by cardiac depressants, such as veratrum viride, and, finally, the treatment by galvano-puncture. He was disposed to believe that great benefit was derived from iodide of potassium. He had not found Tufnell's system successful. Galvano-puncture he had abandoned, and was not prepared to recommend its adoption in any case under his care. A slight discussion followed, the only point on which any of the members disagreed with Dr. Gairdner being that of the value of the treatment by galvano-puncture.

A meeting of members of the medical profession was held in the Faculty Hall on May 7th, to consider what further steps should be taken in view of the invitation to the British Medical Association to visit Glasgow being accepted. Dr. Fergus, President of the Faculty of Physicians and Surgeons, was in the chair ; and the meeting, although not large, was well representative, not only of the medical profession, but also of learned and scientific societies. After some consideration, it was agreed to adjourn the meeting till Wednesday, May 19th, at 4 P.M., to permit all the medical men in Glasgow and the West of Scotland being communicated with.

The Geological Society has, during the past week, held two special meetings to listen to lectures on carbonic acid in Nature, as evidencing design, delivered by the Emeritus Professor of Chemistry of St. Andrew's University, Dr. Foster Heddle. The lectures were largely attended, and were specially interesting on account of the experiments shown.

A proposal to establish in Glasgow a local branch of the Teachers' Guild of Great Britain and Ireland was warmly supported by a meeting of those interested in education, held on May 10th. The objects of the guild are not only to promote a better knowledge of improved educational methods and appliances, but also to advance the interests of teachers, and to create an organisation suitable for mutual defence and help. A preliminary meeting was held a few weeks ago in Queen Margaret College, under the presidency of Professor McKendrick. A further meeting is to be held shortly, to arrange a programme and elect office-bearers. The medical teachers have been represented on both the former occasions, and it is to be hoped a more general interest in the proposal may be evidenced by them at the next meeting by increased representation.

Although the entries at the University of Glasgow are not yet complete, most of the classes show a considerable advance in numbers over last summer. Thus, 207 have already entered the systematic class of botany, as against 183 last year ; and the attendance at the practical botany class is also increased. The entries in zoology number 124 against last year's 93, while, in practical physiology, the number is 148 against last year's 115. The anatomy classes alone are not yet up to last year's level. Every year the number of men who take extra subjects is being added to. For example, Professor Leishman's voluntary class on Diseases of Women has, this year, nearly doubled its numbers.

Operations have been begun at the University gate for erecting the gateway of the old College, the expense of which, along with that of a lodge, is being borne by Mr. Wm. Pearce, the shipbuilder and M.P. for Govan. The lodge will contain not only a keeper's apartments, but also a lecture room and laboratory for naval architecture, and it is expected to cost nearly £3,000.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication ; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

MEDICAL ACT AMENDMENT BILL.

SIR,—The following clause in the Medical Act Amendment Bill of 1884 has been omitted in the present Bill.

"On and after the said appointed day, if any person, who is not a registered medical practitioner, and who practises or professes to practise, or publishes his name, as practising medicine or surgery for gain, or who receives any payment for practising medicine or surgery (*a*) uses the designation of, or represents himself to be, a physician, surgeon, doctor, or apothecary ; or (*b*) uses any designation or description denoting that he is qualified by law to practise medicine, surgery, or midwifery, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds."

It is too much to expect, at present, the passing of a law to prevent unqualified persons from practising either medicine or surgery—indeed, it is doubtful whether such a law will ever be passed; but it is not too much to expect that legally qualified members of the medical profession shall have their titles protected by law. At present, any quack can assume any title that he may feel disposed to adopt, provided that he do not pretend to be registered ; and the burden of disproof—

often well-nigh impossible—lies upon any body taking action thereon; but, by the insertion of the above clause, this assumption is rendered impossible.

It is intended to bring the matter before Sir Lyon Playfair (and other Members of Parliament who have expressed themselves favourable to the clause) before the Bill reaches the Committee stage, on Monday, the 17th instant; and, if necessary, to petition the House of Lords for its insertion, when the Bill is sent to the Upper House.

All members of the profession, who are in favour of the insertion of this clause, will greatly assist in the matter, if they will signify their acquiescence to me, without delay, either by post-card or letter.—I am, sir, yours, etc.,

ARTHUR WIGLESWORTH.

Brougham Terrace, Liverpool.

TIP-CAT.

SIR,—Your article on "Dangerous Play," in the JOURNAL of May 8th, draws attention to the dangers attending the so-called game of tip-cat. In April 1853, I wrote a letter to the *Times* on this subject. I was then in the habit of seeing out-patients at Moorfields, and within one month no fewer than three cases of eyes smashed with these detestable tip-cats had come under my own observation. The editor of the *Times* took up the question; the police-magistrate (I think at Bow Street) noticed it from the bench, and directed the police to bring before him any boys found playing at tip-cat in the streets or any public thoroughfare. In a few days, all tip-cats had disappeared.—Yours faithfully,

JAMES DIXON.

Dorking.

CASE OF ALLEGED QUININE-BLINDNESS.

SIR,—A case of "quinine-blindness," on board ship, is recorded in the JOURNAL for May 1st (page 823). The blindness is ascribed to the administration by the surgeon of another ship, three weeks previously, of quinine, "in large and repeated doses, giving twenty-five or thirty grains every two hours," for the purpose of reducing the fever of pneumonia. As Medical Superintendent of the Company to which the ships belong, I have before me the diary of that surgeon; and the amount of quinine given is stated to be, altogether, "five grains at nine, at two, and at six o'clock." This was on the second day of the disease, and the patient was landed and sent to hospital early next morning. The concluding paragraph of the communication points to a much more probable poison than quinine as the cause of the blindness.—Yours, etc.,

EDWARD NICHOLSON,

Liverpool. Brigade Surgeon, A.M.S.

A CASE OF LAPARO-NEPHROTOMY.

SIR,—Under the above heading, in the JOURNAL of May 1st, Mr. Langley Browne reports a very interesting case, in which he removed some very large calculi from the right kidney through an incision in the median line below the umbilicus. It was found impossible to enucleate the shell of the kidney, which was, therefore, stitched to the margins of the wound, and drained. The patient progressed favourably, but died suddenly on the eleventh day.

Might I suggest that this case would have been better operated upon through the loin? It presents an almost exact analogy to a case on which I operated last year, where the symptoms had lasted seven-teen years, and the tumour, consisting of a kidney-shell filled with enormous calculi, weighed twenty-one ounces. This was removed, without difficulty, through the loin, and the patient rapidly recovered. Mr. Langley Browne would, I feel sure, have met with a like success, had he chosen the lumbar operation. Even supposing the operator to fail in removing the shell, subsequent drainage is far more easily carried out, and more efficient, through the loin, than through the anterior wall of the abdomen.—Your obedient servant,

Finsbury Square. R. CLEMENT LUCAS, B.S., F.R.C.S.

SLOW *v.* QUICK COMBUSTION GRATES.

SIR,—The editorial note, in the JOURNAL of April 17th, appended to the correspondence on the subject of slow *v.* quick combustion grates, suggesting that this institution should make an exhaustive series of scientifically accurate tests of the relative advantages of the two systems, meets with the hearty concurrence of the officers of the Institution.

The question is a thoroughly practical one, which is, as a rule, not sufficiently considered by architects and builders, who too often select grates by their appearance only, without due regard to their capabilities for performing their work of warming dwellings.

This is, no doubt, in part due to the absence of definite information on the subject, which the report on the proposed series of tests would provide in a form available for general use; but the ordinary funds of the institution are not applicable to the purpose, and it is proposed to raise a special fund to meet the cost of the tests, and of the publication of the report.

For a purpose of such great importance, not only to architects, builders, and makers of grates, but also to the public at large, who pay for and use the grates, there should be no difficulty in raising the comparatively small fund necessary, contributions to which may be sent to the Secretary, National Smoke Abatement Institution, Parkes Museum, Margaret Street, W.—I am, sir, yours obediently,

H. SOWERBY WALLIS, Secretary.

MANCHESTER AND SALFORD PROVIDENT DISPENSARIES.

SIR,—It is useless to continue making charges against the Provident Dispensary Association; as, no matter how true the charges may be, those who support the dispensaries will deny them.

We, as general practitioners, were the means by which the provident dispensaries were started; and, as we have been most unjustly treated by those who manage these places, we have a right to demand an unbiassed scrutiny of the lists of patients. It is not for us to act the part of spies and detectives, although that is the course which the dispensary authorities challenge us to adopt.

I think it is time now, seeing that the dispensaries will do nothing, for the general practitioners to request the co-operation of the physicians and surgeons attached to the infirmary, and to those hospitals which recognise the dispensaries. It is only by their help, together with that of the medical societies of Manchester, that the dispensary medical officers can be reached, and it is these individuals who mostly deserve censure.—Yours, etc.,

GEORGE H. PINDER.

98, Great Clowes Street, Broughton, Manchester.

SIR,—In replying to Mr. Harwood's letter, I may mention that I have already stated, so often, the reasons why we decline to send cases for investigation, that I need not repeat them. The rule to which Mr. Harwood refers is as follows: "Members shall be artisans and others, whose application for membership shall be approved by the committee. Cases of alleged improper admission may be referred to the District Provident Society for investigation." There is nothing in this rule which refers to income or wages, or states what constitutes abuse; and, as I have already said, these dispensaries are worked as a branch of the Provident Society.

A medical man, attached to one of the provident dispensaries, remarked to me that, if the thirty-shilling limit of weekly income were adhered to, a sufficient number of members could not be procured to make the dispensaries self-supporting. I will venture to say that there are few families connected with the Pendleton Provident Dispensary who have an income under thirty shillings a week.

I can understand why the Medico-Ethical Society might have recommended the abolition of a hard and fast line as regards weekly income or wages, believing that the dispensary committees would adhere to the principle embodied in the rule limiting the weekly income of members to thirty shillings. The Medico-Ethical Society never intended that the dispensaries should be thrown open to all those of the well-to-do working and lower middle classes, who might wish to join them. It was an unfortunate recommendation, although made in good faith by the Society.

Mr. Harwood, in a letter, says, "although the thirty shillings per week test was some time ago abolished, this principle is, I have reason to believe, acted upon in all the branches of the provident dispensaries in Manchester and Salford. I can, of course, speak with more confidence respecting the branch established in Pendleton." As regards Cases 2 and 3, mentioned in my first letter, one a husband and wife with one child, earning £1 16s. a week; the other, a husband with wife, one child, and daughter working, combined weekly income over £2, Mr. Harwood says, "I venture to express my opinion that the cases 2 and 3 are not abuses of the system at all, but are just the kind of people who ought to be members of the dispensary."

This is not acting on the principle referred to in Mr. Harwood's first sentence.

It was with the co-operation of the general practitioners that these dispensaries were established, and it would, therefore, be only just on the part of the Council to alter their rules so as to remove the abuses which exist; for it is very apparent that the principles embodied in the rule regarding the thirty shilling limit of weekly wages, is entirely disregarded. Without a limitation of income, I am unable to perceive how abuses are to be avoided, especially as members are admitted by a committee composed of working men, and if the dispen-

saries be as fairly and well conducted as Mr. Harwood would lead us to believe, the committees ought not to hesitate to submit their books to an independent investigation.—I am, your obedient servant,

THOMAS N. ORCHARD.

SIR,—Dr. Orchard had previously constituted himself the champion of the (according to him) "injured" and "aggrieved" practitioners of Manchester and Salford; and now he extends the sphere of his all-embracing care and solicitude so as to include my colleagues on the dispensary staff. Nay, even the interests of my patients receive his fatherly attention! Dr. Orchard is to be congratulated on the progress he has made in provident dispensary principles. If I mistake not, at a public meeting called to consider the matter, he opposed the opening of the Pendleton branch; but now, so far from opposing the scheme, he puts forth ideas of his own as to how the authorities should manage the dispensaries. With these ideas I have no fault to find; the theory of them is good, but I am afraid there is this objection to them: that they could not be carried out in practice, and the attempt to do so would cause heart-burnings and confusion.

The chief cause of complaint, now, against the Pendleton Provident Dispensary, as evidenced in the two letters, in the JOURNAL of May 8th, by Dr. Orchard and Dr. E. S. Smith, seems to be narrowed down to the fact that the sum of nearly £500 was paid for my partner's and my own services to the dispensary during the past year. It affords me great pleasure to testify to the truth of this statement. Dr. Orchard is inaccurate, as usual: (1) in the amount which, he says, was paid to my two other colleagues; (2) in his preliminary complaining assertions; and (3) in speaking of my partner as "assistant."

I have often thought, with regret, that patients of other practitioners must join the dispensary, necessarily to the pecuniary loss of these practitioners. At the same time, it has to be said that members, thus joining, generally do so after they have incurred a medical debt they are unable to wipe off, and when they find themselves no longer in a position to pay the charges for private attendance. This, I suppose, is equally a question everyone who starts practice has to consider. Can he do so without injury to his fellow practitioners, and is not every patient he gets, to that extent, an injury to them? The complaints against the Pendleton Provident Dispensary have not been sustained, and the injury inflicted on anyone must be largely or altogether imaginary. The dispensary absorbs about one in fifteen of the inhabitants of the district, and I should be sorry to depend on the members for private practice.

With your permission (not as a matter of controversy, but for the benefit of all who desire information on the subject), I shall state, briefly, the pecuniary remuneration I have received, and the work done since my connection with the dispensary. This connection commenced in October, 1880, a year after the dispensary was established, and, at the following Christmas, I got a cheque for 10s. 10d. From January to June, 1881, I can only give, with approximate accuracy, the number of consultations and visits; but this number cannot be far wrong, when judged from the payments, and in conjunction with the other figures. The figures for the other years are as accurate as a careful daily record can make them, and the whole is as follows.

1881....	Visits,	900....	Consultations,	930....	Payments,	£34	1s.	0d.
1882....	,,	3,419....	,,	3,696....	,,	£117	0s.	4d.
1883....	,,	4,773....	,,	6,493....	,,	£289	3s.	9d.
1884....	,,	8,675....	,,	8,801....	,,	£411	12s.	11d.
1885....	,,	8,564....	,,	8,509....	,,	£497	7s.	0d.

These sums include confinement-fees and other charges for special visits and certificates, which do not pass through the dispensary books, and which, in 1885, amounted to £34 18s. Since the end of 1883, I have had the able and efficient co-operation of my partner, Dr. Mackenzie, and I frequently blame his good nature, in that he makes more visits than are necessary. It is my belief that one man could overtake the work represented by the above figures for 1885—the members residing within a mile of the dispensary. Hostile critics may call that "making money;" I call it hard work, and am content to leave it to more enterprising souls to make money out of it. This is what was in my mind when I said, in a former letter, that I believed a medical man could make a living by the provident dispensary system; that is, a living of £500 a year, without one penny of expense in earning it; without any drudgery whatever (such as book-keeping, etc.) beyond the purely professional work; without any qualms of conscience that the patients are undergoing a hardship in paying for what they get; and without resort to the undignified practice of a medical man having to send a collector for weekly or other instalments of the amount charged for the attendance that has been given. And, when all is said and done, I doubt greatly whether the members of the Pendleton Provident Dispensary, taking them all in all, would otherwise pay as much as they do now for medical attendance.—Yours faithfully, ALEXANDER STEWART.

*** This correspondence must now cease.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CHARGE OF MANSLAUGHTER AGAINST A DISPENSARY ASSISTANT.

AT the Central Criminal Court, last week, before Lord Chief Justice Coleridge, a young man named Arthur William Head was charged with the manslaughter of William Hibbert. Mr. Poland and Mr. Gill prosecuted, and Mr. J. Gladstone defended. The deceased had for some time suffered from sleeplessness, and had had Dr. Money, a medical practitioner, who has a dispensary in Tachbrook Street, Pimlico, to prescribe for him. On 28th March last, the deceased was ill, and his wife went to the surgery and spoke to the prisoner. She thought he was Dr. Money, and she requested him to go at once to see her husband. The accused did go, and prescribed for him, giving verbal instructions as to how the medicine was to be taken, and also placing on the bottle a written instruction for the contents to be taken in three separate doses. It appeared, however, that the deceased's wife, without looking at the written instructions, gave the contents of the bottle to her husband in two doses instead of three, the second dose following very closely on the first. From the effects the man died; and, at the coroner's inquest, the defendant was committed for trial. Mr. Poland, in opening the case, after stating these facts, went on to say that, according to the law, no person not properly qualified and holding a diploma to practise had a right to prescribe for another; while everyone, qualified or not qualified, is responsible for the consequences, if he does not bring to his patient ordinary care and skill. It would be for the jury to say whether such care and skill had been used; but there could be no doubt that the accused, as not being a qualified practitioner, had no right to prescribe for the deceased at all. Evidence having been given, and counsel on both sides having addressed the jury, the Lord Chief Justice summed up, leaving three points to the jury: first, that there should be reasonable skill on the part of everyone discharging responsible duties; secondly, did the prisoner exercise reasonable skill, if he possessed it? and, if he did not, did his omission amount to culpable negligence? After a few minutes' consideration, the jury returned a verdict of "Not guilty."

RAILWAY COMPANIES AND SURGEONS' FEES.

SIR,—Will you kindly advise me in the following case? On Sunday night, April 4th, at 8.15, a cab was sent by the station-master (Farnborough Station, South-Eastern Railway) for me to go and attend to an accident there. I returned in the cab, with the porter who brought the message, and found the case to be that of a girl with severe crush of left leg, necessitating speedy amputation. I sent for Brigade-Surgeon Clark, of Sandhurst, and, after consultation, we agreed that it would be best to accompany the girl to Guildford Hospital, which plan was duly carried out, a special train being provided. Amputation was performed the next morning, but the poor woman succumbed shortly afterwards.

An inquest was held, and all those concerned in the case complimented me on the care and attention given to the girl.

I arrived home about 2 A.M. on the 5th, thus giving nearly six hours' continuous attendance, and making a journey of thirty miles.

On April 8th, I sent in my bill to the South-Eastern Railway Company through the station-master. Exactly one month later, May 8th, the Company sent me a letter, desiring to point out that they were in no way to blame in the matter, and that they were not liable for a claim of the kind, and they must decline to entertain it accordingly. The directors, in any case, consider £5 5s. in such a matter "beyond the question."

Please inform me, 1st, whether you consider the charge "beyond the question?" 2, against whom should I proceed in the county court, the station-master or the company? 3, is the company liable?

I may add, the cab to and from the station was paid for by the company.—Yours truly, T. G. LITHGOW.

P.S.—The station where the accident occurred is a wretched place, and very badly lighted.

*** The person liable to pay for medical attendance is the person who employed the medical man. In the present case, the station-master acted apparently as the agent of the railway company, and there should be no difficulty in inducing a court to hold them responsible. The fees claimed do not seem unreasonable; and, if they be the same as would be charged to a private patient, they ought to be allowed. If the case go into court, it would be advisable to secure the services of a good advocate.

PUBLIC VACCINATORS AND GRATUITOUS VACCINATION.

LUPUS writes that "Public Vaccinator" is not alone in his grievance. In his village, "A Medical Brother" boldly announces that he vaccinates all children brought to him gratis! He also insinuates a charge of cruelty against "Lupus," because he vaccinates in four places; and he asserts that "two are quite enough." "Lupus" asks: "Can nothing be done to stop this wholesale free

vaccination by private practitioners? They are not under the checks which control public vaccinators, and the public have no guarantee that the operation is efficiently performed. Surely the Local Government Board should see to such matters."

WHAT OUGHT I TO DO?

SENIOR writes:—Will you kindly inform me what course I should follow under the following circumstances?

1. I expect to remove to a village in Scotland, four miles from a town of 20,000 inhabitants, and connected with it by rail. There is no medical man in the village, and I purpose practising a little among those residing near my house, who, I am given to understand, are very glad to hear of my coming. I know one of the medical men in the neighbouring town, and shall, of course, keep up my acquaintance with him, but will it be necessary or proper for me to call on any of the other medical men?

2. If I should see my way to make the application of electricity a specialty in the neighbouring town, how should I make it known? I may very likely have a class for giving instruction in electricity in its commercial applications in that town; and its use in medicine might arise out of that, and I might fit up an electrical room. If so, how should I make it known that I would see suitable patients?

*** Under the circumstances stated in our correspondent's note, it is not, in our opinion, ethically necessary that he should make the customary professional visit of courtesy to the practitioners in the adjoining town; nevertheless, it would be judicious to seek for an introduction, through the medium of his medical friend, to as many of the resident practitioners as may be, and to state his wish to "fit up an electrical room for the use of suitable patients."

In reference to the proposed "class for giving instruction in electricity in its commercial applications," there would, we take it, be no ethical objection to make known his intention through the usual medium of a public advertisement in the daily papers; but, as regards its remedial "use in medicine," any advertisement relating thereto should be strictly limited to the medical journals.

NAVAL AND MILITARY MEDICAL SERVICES.

MIDLAND VOLUNTEER MEDICAL ASSOCIATION.

THIS Association held its first annual meeting and mess on Thursday, May 6th, at the Great Western Hotel, Birmingham. About twenty medical officers from various battalions in the neighbourhood were present. A letter was read from Surgeon-Major Evatt, regretting his inability to be present as promised, but wishing every success to the Association.

Surgeon-Major Thompson, 1st Volunteer Battalion Royal Warwickshire Regiment, was elected President; Surgeons-Major Fraser and Pearse, Vice-Presidents; Acting-Surgeon Freer, Honorary Secretary and Treasurer, together with a Committee consisting of one representative from each regimental district.

Surgeon-Major Thompson, in a short address, explained that the object of the Association was the improvement of the Volunteer Medical Service and regimental ambulance-work in the Midlands; that he was sure that the Association would work harmoniously with the branches of the Volunteer Medical Association, which were being inaugurated under the direction of Surgeon Cantlie, from whom a congratulatory letter had been received. He dwelt upon the present unsatisfactory condition of the Volunteer Medical Service, which, he stated, would break down at the first strain that was put upon it; and impressed on members the necessity, not only of perfect regimental aid, but, also, of assisting in the formation of bearer-companies and field-hospitals that were being introduced into the service, by which means alone, together with improved commissariat and transport, the volunteer army could take the field with any claim to efficiency.

Suggestions for a meeting of ambulance-detachments, for drill-purposes, each year, and for forming centres for lectures and drills to outlying companies, were brought forward and approved.

After the meeting, the members dined together, the mess-arrangements being highly satisfactory.

THE NAVY.

FLEET-SURGEON WILLIAM CONOLLY, M.D., whose retirement was announced in the BRITISH MEDICAL JOURNAL for April 17th, has received permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets.

Staff-Surgeon JOSEPH CALDWELL died, on April 27th, from paralysis. He joined the Royal Navy, as Surgeon, March 7th, 1842; became Staff-Surgeon, January 1st, 1852; and retired, April 1st, 1870.

The following appointments have been made at the Admiralty:—SAMUEL KEAYS, Surgeon, to the *Royal Adelaide;* B. S. MENDS, Surgeon, to Haslar Hospital; HORACE ELLIOTT, Surgeon, to the *Minotaur;* RICHARD BANGAY, to be Surgeon and Agent at Lyme Regis; T. M. MORLEY, to be Surgeon and Agent at Barton-on-Humber, New Holland, and Ferriby; J. B. B. TRIGGS, Surgeon, to the *Excellent;* H. R. OSBORNE, Surgeon, to the *Ajax;* P. E. MAITLAND, Surgeon, to the *Lion.*

Inspector-General J. T. U. BREMNER, M.D., died at Walmer, a few days since, aged 64. Dr. Bremner entered the Royal Navy as Surgeon, July 26th, 1844; became Staff-Surgeon, November 13th, 1854; Fleet-Surgeon, December 1st, 1865; Deputy Inspector-General of Hospitals and Fleets, March 6th, 1877; and Inspector-General, October 21st, 1882; he retired November 3rd, 1882. He served at the bombardment of Odessa and destruction of Redout Kaleh, Georgia; assisted to take charge of the wounded after the battle of Alma; was Senior Medical Officer of the Naval Brigade at the commencement of the siege of Sebastopol, 1854; was present at the battle of Inkerman, and in medical charge of 1,200 seamen and the Royal Marines under Captain Hopkins. (Crimean and Turkish medals, Sebastopol clasp, Medjidie of the 5th class.) He was also in India during the mutiny in 1857, taking 300 wounded soldiers from Lucknow to England.

Surgeon JOHN JENNINGS has been placed on the retired list of his rank; his commission as Surgeon bears date November 12th, 1872.

MEDICAL STAFF.

SURGEON-MAJOR J. N. STOCK, serving in the Madras command, has obtained leave of absence for six months, on medical certificate.

Brigade-Surgeon SAMUEL FULLER is appointed Deputy Surgeon-General, *vice* J. O'Nial, C.B., promoted. Mr. Fuller entered as Assistant Surgeon, July 23rd, 1835; became Surgeon, November 12th, 1870; Surgeon-Major, March 1st, 1873; and Brigade Surgeon, October 1st, 1881. He served with the 9th Lancers in the suppression of the Indian mutiny in 1858-59, and was present at the capture of Meeangunge, siege and capture of Lucknow, the summer campaign in Oude and Rohilcund, with actions at Rhodamow and Allygunge, capture of Bareilly, action near Shahjehanpore and pursuit to Mahomdee, passage of the Gogra at Fyzabad (medal with clasp). He was also engaged in the war in Egypt in 1882, and was present at Tel-el-Kebir (medal with clasp, and Egyptian bronze star).

Brigade-Surgeon T. N. HOYSTED is also made Deputy Surgeon-General, *vice* W. Skeen, M.D., deceased. Mr. Hoysted's previous commissions are dated, Assistant Surgeon, September 28th, 1855; Surgeon, February 4th, 1871; Surgeon-Major, March 1st, 1873; and Brigade Surgeon, October 23rd, 1881. He served with the 59th Regiment at the operations before and capture of Canton, on December 28th and 29th, 1857 (medal with clasp); with the 54th Regiment in the Indian mutiny campaign at the last advance into Oude, under Lord Clyde, in 1858, including the capture of Fort Ameetie (medal); and in the Afghan war in 1878-79, and was at the capture of the Peiwar Kotal (medal with clasp).

Surgeon-Major J. J. CHAPPELL, M.D., is promoted to be Brigade-Surgeon, *vice* S. Fuller. Dr. Chappell's Assistant Surgeon's commission bears date January 19th, 1860; Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1875.

Surgeon-Major WILLIAM CHERRY, whose previous commissions are contemporaneous with those of Dr. Chappell, is also made Brigade-Surgeon, *vice* T. N Hoysted.

INDIAN MEDICAL SERVICE.

Surgeon-Major W. P. WARBURTON, M.B., on return from furlough, has resumed charge of the duties of medical officer to the Kapoorthala State, relieving Brigade-Surgeon J. Fairweather, M.D.

Surgeon B. DOYLE, Bengal Establishment, on the abolition of his appointment as Deputy Sanitary Commissioner, is appointed as Civil Surgeon of the 2nd Class in the Punjab from April 1st, *vice* Surgeon F. F. Perry, who is confirmed in the appointment of Professor of Surgery and Anatomy, Lahore Medical School.

Surgeon-Major J. J. L. RATTON, M.D., Madras Establishment, Professor of Surgery Medical College, is appointed a Fellow of Madras University.

The services of Surgeon-Major C. SIBTHORPE and Surgeon H. St. C. CARRUTHERS, both of the Madras Establishment, are placed at the disposal of the Public Department.

The services of Surgeon E. R. DA COSTA, Madras Establishment, are replaced at the disposal of the Commander-in-Chief.

Surgeon-Major P. MURPHY, M.D., Bombay Establishment, has been appointed to act as Superintendent of Mahableshwur, during the absence of Surgeon-Major J. Davidson.

Surgeon J. S. WILKINS, Bombay Establishment, is ordered to act as Civil Surgeon of Rajkote, in addition to his other duties, during the absence of Surgeon-Major F. C. Barker.

Surgeon S. T. AVETOOM, Bombay Establishment, on general duty, Mhow Circle, is ordered to officiate in medical charge of the 23rd Native Infantry, during the absence of Surgeon C. B. Maitland.

Surgeon W. H. QUICKE, Bombay Establishment, on being relieved of the medical charge of Asseerghur by Surgeon A. C. Thomson, is placed on general duty Mhow Circle.

Brigade-Surgeon W. E. CATES, Bombay Establishment, has returned from sick leave, to duty as Examiner of Medical Accounts.

The services of Surgeon J. SYKES, Bengal Establishment, are permanently placed at the disposal of the Government of the North-West Provinces and Oude.

Surgeon D. F. BARRY, M.D., Bengal Establishment, is appointed Garrison Surgeon, *vice* Surgeon G. Bomford; this cancels the appointment of Surgeon C. H. Beatson, recently announced. Surgeon Barry is reappointed to the Medical charge of the Jail, Police, and Civil Station of Shillong, in addition to his military duties.

Surgeon G. A. CONES, Bengal Establishment, is appointed to the medical charge of the 17th Loyal Poorbeah Regiment, *vice* Surgeon-Major R. T. Lyons, who has retired.

Consequent on the departure on furlough to Europe of Surgeon-Major J. C. G. Carmichael, M.D., Surgeon J. C. SMITH, M.B., of the Bengal Establishment, has been appointed to hold Civil Medical Charge of Almora.

Deputy Surgeon-General G. BIDIE, M.B., C.I.E., of the Madras Establishment, is directed to act as Surgeon-General with the Government of Madras, during the absence of Surgeon-General Furnell, on leave.

W. E. POUNTNEY, M.D., has been appointed Surgeon to the Bristol Brigade of the Royal Naval Artillery Volunteers.

On April 6th, Brigadier-General GREEN, C.B., commanding the troops at Assouan, Egypt, attended at the Field Hospital for the purpose of distributing medals to the detachment, Medical Staff, for the operations on the Nile. The detachment formed up in review order, and after going through some preliminary movements under the adjutant, Surgeon Mallins, the General, in a short but concise speech, congratulated the non-commissioned officers and men about to receive their decorations, and spoke in high terms of their general efficiency, etc.; also upon the most satisfactory manner in which, he said, they performed the onerous and responsible duties imposed upon them. After the distribution of medals, Surgeon Markey, their commanding officer, ordered a pint of beer to be supplied to each man of the detachment.

OBITUARY.

JAMES THOMPSON, M.D.

ONE of the most familiar figures at the annual meetings of the British Medical Association will be missed at the next gathering of members at Brighton, in the person of the late Dr. Thompson.

Always ready to promote any object which tended to bring medical men into closer union, he spared no pains to make any movement of a social character a success. Many members will recollect how thoroughly Dr. Thompson worked out the plan to prevent the levying of blackmail by the proprietors of hotels on those attending the meetings subsequent to the one at Norwich. The success of these efforts on his part was due to the genial disposition and kindliness of heart so conspicuous in Dr. Thompson.

A native of the North of Ireland, he graduated as B.A. in the University of Dublin in 1860, and proceeded, subsequently, to the M.B. and M.D. degrees in due course. He studied medicine at the schools of Trinity College and of the Richmond Hospital, Dublin. At the latter, he obtained the Carmichael Medal in Surgery.

In 1860, after he had taken out the diplomas of the Irish Colleges of Physicians and Surgeons, he obtained, by competitive examination, a commission as an army surgeon, which, after he had served for six years in the West Indies and British Honduras, as well as on home-stations, he resigned, in order to enter on private practice. He settled at Droxford, Hants, whence he removed to Leamington, and, finally, to West Kensington, where he died on May 5th, after a few days' illness, in the 49th year of his age.

Dr. Thompson founded the Irish Graduates' Association in 1878, and lived to see his excellent idea for bringing together, in pleasant gatherings, old fellow-students at Irish medical schools, expanded much beyond what he ever hoped for. The Irish practitioners, resident in Great Britain, owed much to him for the indefatigable energy with which, first as Honorary Secretary, and subsequently as Treasurer, of what is now called The Irish Medical Schools and Graduates' Association, he devoted himself to their interests.

His remains were interred at the Brompton Cemetery. He leaves a wife and two daughters.

INDIA AND THE COLONIES.

NOVA SCOTIA.

THE HALIFAX PROVINCIAL AND CITY HOSPITAL.—An account of the difficulty which had arisen between the medical staff of the Halifax Provincial and City Hospital, and the Board of Charities of the Province, was published in the BRITISH MEDICAL JOURNAL, March 27th, 1886, page 618. It is very much to be regretted that the Board of Charities has not, so far as we have been able to ascertain from public statements, made any attempt to inquire into the merits of the case upon which the whole of the medical staff resigned. Meanwhile, a great deal of bitter personal feeling, and, if we may judge from the reports and articles in a local newspaper, even political animosity has been imported into the dispute, which appears to have degenerated into a quarrel between the old medical staff and the new. The profession is placed in a most undignified position, when charges of ignorance and incorrect treatment, levelled by one medical man against another, are made the subject of an inquiry before a lay tribunal, and verbosely discussed in the daily papers. The constitution of the Board of Charities appears to be responsible for the scandal which has arisen; and only a reform of that anomalous body can either set right the present evil, or prevent the occurrence of fresh difficulties in the future.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, May 7th, 1886.

Medical Officers at Suakim.—Mr. HERBERT GLADSTONE informed Mr. M. Henry that three medical officers serving at Suakim had died, and that ten had been invalided. The medical officers of the British army were being removed from Suakim, as the British garrison was withdrawn.

Mr. R. H. S. Carpenter and Mr. Hentsch write, on behalf of the Medical Alliance Association, that the Bill, to which we last week referred with approval, is brought forward by that body, and backed b Mr. Morgan Howard, Q.C., Sir Trevor Lawrence, Mr. Tomlinson, an Mr. Addison, Q.C.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in th Registrar-General's Weekly Return, which have an estimated population o 9,093,817 persons, 5,688 births and 3,518 deaths were registered during the wee ending Saturday, May 1st. The annual rate of mortality, which had bee 20.3 and 19.8 per 1,000 in the two preceding weeks, rose again during the wee under notice to 20.2. The rates in the several towns, ranged in order from th lowest, were as follow:—Brighton, 16.1; Hull, 16.3; Bradford, 17.1; Birkenhead 17.5; Sunderland, 17.6; Wolverhampton, 18.3; London, 18.5; Norwich, 18.7 Leicester, 19.1; Leeds, 19.2; Sheffield, 19.6; Nottingham, 19.7; Derby, 19.9 Liverpool, 20.0; Huddersfield, 20.0; Bristol, 21.0; Cardiff, 21.2; Salford, 22.5 Birmingham, 22.7; Oldham, 24.8; Bolton, 24.8; Newcastle-upon-Tyne, 25.9 Halifax, 26.0; Plymouth, 26.6; Blackburn, 26.8; Preston, 27.3; Portsmouth 27.9; and the highest rate during the week, 29.2 in Manchester. The death-rat in the twenty-seven provincial towns averaged 21.6 per 1,000, and exceede by as much as 1.8 the rate recorded in London, which, as before stated, wa only 18.5 per 1,000. The 3,518 deaths registered in the twenty-eight town during the week under notice included 138 which were referred to whoopin cough, 104 to measles, 39 to diarrhœa, 29 to scarlet fever, 28 to diphtheria, to "fever" (principally enteric), and 3 to small-pox; in all, 364 deaths resulte from these principal zymotic diseases, against numbers increasing from 359 t 382 in the four preceding weeks. The zymotic death-rate was equal to 2.1 per 1,00 In London, the zymotic rate was 2.4, while it did not exceed 1.8 per 1,000 in th twenty-seven provincial towns, and ranged from 0.0 in Norwich and Halifa to 3.4 in Plymouth, 3.6 in Preston, and 5.7 in Portsmouth. The fatal cases whooping-cough, which had risen in the three preceding weeks from 130 to 15 declined again during the week under notice to 138, and caused the highe death-rates in Bolton, Cardiff, and Newcastle-upon-Tyne. The deaths referred measles, which had been 114 in each of the two previous weeks, declined to 10 and showed the largest proportional fatality in Blackburn, Preston, Plymout and Portsmouth. The 39 fatal cases of diarrhœa differed but slightly from rece weekly numbers. The deaths referred to scarlet fever, which had been 21 an 25 in the two preceding weeks, further rose to 29 during the week unde notice. The 23 fatal cases of fever corresponded with the number recorded each of the two preceding weeks. The deaths from diphtheria, which had rise in the four preceding weeks from 19 to 30, declined to 28, of which 20 occurred London, 2 in Liverpool, 2 in Birmingham, and 2 in Oldham. The 3 fatal cas of small-pox included 2 in Bristol and 1 in Liverpool. The number of small-po patients in the Metropolitan Asylum Hospitals, which had increased from 8 17 in the four previous weeks, had further risen to 19 on Saturday, May 1s 3 new cases were admitted into these hospitals during the week, against 6 in eac of the two preceding weeks. The death-rate from diseases of the respirator organs in London during the week under notice was equal to 3.8 per 1,00 and was considerably below the average. The causes of 89, or 2.5 per cent of the 3,518 deaths registered during the week in the twenty-eight towns wer not certified, either by registered medical practitioners or by coroners.

During the week ending Saturday, May 8th, 6,177 births and 3,585 deat were registered in the twenty-eight large English towns, including Londo dealt with in the Registrar-General's Weekly Return, which have an est mated population of 9,093,817 persons. The annual rate of mortality, which ha been 19.8 and 20.2 per 1,000 in the two preceding weeks, further rose during th week under notice to 20.6. The rates in the several towns, ranged in orde from the lowest, were as follow:—Derby, 13.6; Norwich, 14.7; Wolverhampto 15.7; Huddersfield, 16.5; Nottingham, 16.8; Cardiff, 17.1; Brighton, 18.4; Hul 18.5; London, 18.7; Leeds, 19.1; Sheffield, 19.6; Bradford, 20.2; Birkenhea 20.2; Bristol, 20.5; Sunderland, 20.9; Leicester, 21.7; Plymouth, 21.8; Oldha 23.6; Halifax, 24.0; Salford, 24.0; Newcastle-upon-Tyne, 24.2; Birmingha 24.3; Liverpool, 24.6; Blackburn, 25.5; Portsmouth, 26.0; Preston, 28.3; Bolto 28.8; and the highest rate during the week, 29.1 in Manchester. The death-ra in the twenty-seven provincial towns averaged 22.1 per 1,000, and exceeded b 3.4 the rate recorded in London, which, as before stated, was only 18.7 per 1,00 The 3,585 deaths registered in the twenty-eight towns during the week und notice included 367 which were referred to the principal zymotic diseases, again 382 and 364 in the two preceding weeks; of these, 141 resulted from whoopin cough, 114 from measles, 41 from diarrhœa, 32 from different forms of fev (principally enteric), 21 from diphtheria, 18 from scarlet fever, and not 1 fro small-pox. These 367 deaths were equal to an annual rate of 2.1 per 1,000. Th zymotic death-rate in London was equal to 2.1 per 1,000, and corresponded wit the average rate in the twenty-seven provincial towns, among which the zymoti rates ranged from 0.0 in Huddersfield, and 0.4 in Sunderland, to 5.7 in Port mouth, 6.9 in Bolton, and 7.7 in Preston. The deaths referred to whoopin cough, which had been 155 and 138 in the two preceding weeks, were 141 durin the week under notice, and showed the largest proportional fatality in Salfor Birkenhead, and Brighton. The fatal cases of measles, which in the two previou weeks had been 114 and 104, rose again to 114, and caused the highest rates Blackburn, Oldham, Portsmouth, Bolton, and Preston. The 41 deaths from dia rhœa showed a slight further increase upon recent weekly numbers. The fat cases of "fever," which had been 23 in each of the three preceding weeks, ros during the week under notice to 32; this disease was somewhat prevalent Sheffield. The 21 deaths referred to diphtheria showed a considerable further d cline from recent weekly numbers, and included 9 in London, 3 in Liverpool, an 2 in Halifax. The fatal cases of scarlet fever, which had increased in the thre previous weeks from 21 to 29, declined again to 18, of which 6 occurred in Londo and 5 in Leeds. No death from small-pox was recorded in London, or in any the twenty-seven provincial towns. The number of small-pox patients in th Metropolitan Asylum Hospitals, which had slowly increased in the six precedin weeks from 7 to 19, had further risen to 27 on Saturday, May 8th; 11 new case

ere admitted to these hospitals during the week under notice, against 6 and 3 the two preceding weeks. The death-rate from diseases of the respiratory rgans in London was equal to 3.8 per 1,000, and was below the average. The auses of 83, or 2.3 per cent. of the 3,585 deaths registered during the week in he twenty-eight towns, were not certified, either by registered medical practiioners or by coroners.

HEALTH OF SCOTCH TOWNS.

URING the week ending Saturday, May 1st, 1,051 births and 571 deaths were egistered in eight of the principal Scotch towns, having an estimated population f 1,283,977 persons. The annual rate of mortality, which had been 20.5 and 0.7 per 1,000 in the two preceding weeks, further rose during the week to 23.1, and xceeded by 2.9 per 1,000 the average rate in the same period in the twenty-eight nglish towns. Among these Scotch towns, the rate was equal to 17.4 in undee, 18.5 in Leith, 20.9 in Greenock, 22.5 in Edinburgh, 23.0 in Perth, 24.8 Aberdeen, 25.4 in Glasgow, and 26.0 in Paisley. The 571 deaths registered uring the week under notice in these Scotch towns included 51 which were eferred to the principal zymotic diseases, against 34 and 46 in the two preceding eeks; of these, 21 resulted from whooping-cough, 15 from measles, 6 from iarrhœa, 6 from scarlet fever, 2 from "fever," 1 from diphtheria, and not one om small-pox. These 51 deaths were equal to an annual rate of 2.1 per 1,000, hich corresponded with the average zymotic death-rate during the same period the twenty-eight large English towns. The highest zymotic death-rates uring the week were recorded in Glasgow and Edinburgh. The fatal cases of hooping-cough, which had been 10 and 15 in the two preceding weeks, further se to 21, and included 18 in Glasgow. The deaths referred to measles, which the four previous weeks had increased from 4 to 9, further rose during the week nder notice to 15, all of which were recorded in Edinburgh. The 6 fatal cases diarrhœa showed a decline from those returned in recent weeks. The deaths ferred to scarlet fever, which had been 10 and 3 in the two preceding weeks, rther rose to 6, and included 4 in Glasgow. The two fatal cases of fever showed decline of 3 from the number in the previous week, and occurred in Glasgow. he death from diphtheria was returned in Greenock. The death-rate from iseases of the respiratory organs in these Scotch towns during the week under otice was equal to 5.2 per 1,000, against 3.8 in London. The causes of 74, or 3.0 per cent., of the 571 deaths registered during the week in these Scotch towns ere uncertified.

In the eight principal Scotch towns, having an estimated population of 283,977 persons, 889 births and 550 deaths were registered during the week end- g Saturday, May 8th. The annual rate of mortality, which had increased in e three preceding weeks from 20.5 to 23.1 per 1,000, declined again during the eek under notice to 2.3, but exceeded by 1.7 per 1,000 the average rate for e same period in the twenty-eight large English towns. Among these Scotch wns, the rate was equal to 17.3 in Paisley, 17.8 in Leith, 17.8 in Edinburgh, .8 in Greenock, 21.1 in Dundee, 22.6 in Aberdeen, 26.1 in Glasgow; and 27.9 in erth. The 550 deaths registered during the week in these Scotch towns in- uded 20 which were referred to whooping-cough, 17 to measles, 12 to diarrhœa, to scarlet fever, 2 to diphtheria, 2 to fever, and 1 to small-pox; in all, 62 aths resulted from these principal zymotic diseases, against 46 and 51 in e two preceding weeks. These 62 deaths were equal to an annual rate of 2.5 r 1,000, which slightly exceeded the average zymotic death-rate during the me period in the twenty-eight large English towns. The highest zymotic death- tes in the Scotch towns were recorded in Aberdeen, Perth, and Edinburgh. e deaths from whooping-cough, which had increased from 10 to 21 in the ree preceding weeks, were 20 during the week under notice, and included 15 Glasgow, and 4 in Aberdeen. The fatal cases of measles, which had steadily creased in the five previous weeks from 4 to 15, further rose to 17, of which 13 curred in Edinburgh, and 3 in Leith. The 12 deaths referred to diarrhœal seases exceeded those returned in recent weeks. The 8 fatal cases of scarlet ver showed a further increase upon the numbers in the two previous weeks, and cluded 7 in Glasgow. Of the 2 deaths from diphtheria, 1 occurred in Greenock d 1 in Glasgow. The 2 fatal cases of fever corresponded with the number in e preceding week. The death referred to small-pox was returned in Edinburgh. he death-rate from diseases of the respiratory organs in these Scotch towns as equal to 4.5 per 1,000, against 3.8 in London. The causes of 73, or 13.3 r cent., of the 550 deaths registered during the week in these Scotch towns, ere uncertified.

HEALTH OF IRISH TOWNS.

the week ending March 27th, the number of deaths registered in the sixteen incipal town-districts of Ireland was 503. The average annual death-rate repreented by the deaths registered was 30.3 per 1,000 of the population. The deaths gistered in the several towns, alphabetically arranged, corresponded to the folwing annual rates per 1,000: Armagh, 15.5; Belfast, 29.1; Cork, 27.3; Drogheda, .1; Dublin, 33.1; Dundalk, 21.8; Galway, 47.1; Kilkenny, 25.4; Limerick, .3; Lisburn, 29.0; Londonderry, 32.1; Lurgan, 20.5; Newry, 10.5; Sligo, .1; Waterford, 32.4; Wexford, 21.4. The deaths from the principal zymotic seases in the sixteen districts were equal to an annual rate of 2.1 per 1,000, e rates varying from 0.0 in nine of the districts to 4.8 in Lisburn; the 6 deaths om all causes registered in that district comprising 1 from enteric fever. The deaths from all causes registered in Belfast comprised 2 from scarlatina, 3 from ooping-cough, and 6 from diarrhœa. In the Dublin Registration District, the aths registered during the week amounted to 234. Twenty-one deaths from motic diseases were registered in Dublin; they comprised 1 from scarlet fever, from whooping-cough, 1 from enteric fever, 4 from diarrhœa, etc. Sixty-two aths from diseases of the respiratory system were registered; they comprised from bronchitis, and 11 from pneumonia. Nineteen deaths (including 15 ants under 1 year old) were ascribed to convulsions. Six deaths were caused apoplexy, 2 by epilepsy, 18 by other diseases of the brain and nervous system clusive of convulsions), and 9 by diseases of the circulatory system. Phthisis used 19 deaths, mesenteric disease 5, and cancer 5. Seven accidental deaths re registered. In 30 instances the cause of death was "uncertified," there ving been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

appears from the statistics published in the Registrar-General's return for the ek ending March 27th, that the annual death-rate recently averaged 30.3 per 00 in the three principal Indian cities; it was 24.3 in Bombay, 26.9 in Calcutta, d 40.9 in Madras. Cholera caused 37 deaths in Calcutta, and 2 in Madras, and ier diarrhœal diseases 34 in Calcutta, 23 in Bombay, and 58 in Madras; greatest mortality from "fever" occurred in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty of the largest European cities averaged 31.9, and was 5.5 above the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 40.3, and considerably exceeded the rate in any recent week; the 716 deaths included 30 from scarlet fever, 26 from "fever," 15 from measles, and 10 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 25.7, ranging from 21.0 in Christiania, to 28.3 in Stockholm; diphtheria and croup showed considerable prevalence in each of these three cities, and scarlet fever caused 6 deaths in Christiania and 4 in Stockholm. In Paris, the 1,469 deaths were equal to a rate of 34.1 (which exceeded the rate in London by 7.2), and included 57 from diphtheria and croup, 29 from measles, 11 from typhoid fever, and 8 from small-pox. The 234 deaths in Brussels gave a rate of 27.6; 12 resulted from diphtheria and croup, 5 from "fever," and 2 from small-pox. The rate in Geneva was equal to 28.8. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 30.7, the rates ranging from 28.5 in the Hague, to 32.3 in Amsterdam; measles caused 17 deaths in Rotterdam and 12 in Amsterdam, the 8 deaths also resulted from diphtheria and croup in the latter city. The Registrar-General's table includes seven German and Austrian cities, in which the death-rate averaged 29.6, and ranged from 21.6 in Dresden and 24.9 in Berlin, to 35.9 in Vienna, and 38.5 in Prague. Diphtheria and croup showed more or less fatal prevalence in all these German and Austrian cities; small-pox caused 7 deaths both in Vienna and in Prague; and 10 deaths from "fever" were recorded in Hamburg. The death-rate averaged 34.4 in three of the principal Italian cities; it was 32.4 in Rome, 33.6 in Venice, and 36.4 in Turin. Small-pox caused 9 deaths in Rome, and 3 in Venice; 25 deaths from measles occurred in Rome, and 12 from diphtheria in Turin. The death-rate was equal to 34.9 in Alexandria and to 44.1 in Cairo; typhoid fever caused 23 deaths in Cairo, and 2 in Alexandria. In four of the principal American cities, the mean recorded death-rate was 24.0, the rates ranging from 17.5 in Baltimore to 26.8 in New York. Diphtheria, croup and scarlet fever caused considerable mortality in New York, Brooklyn, and Philadelphia; 9 deaths from typhoid fever occurred in Philadelphia.

THE NATIONAL VACCINE ESTABLISHMENT.

C. B. G. writes: Will you be so kind as to tell me if the National Vaccine Establishment has the right to decline, under the following circumstances, to send me vaccine-lymph.

Last August, when sending me some calf-lymph, they, as usual, forwarded a form, in which the inspector said, he would feel much obliged if I would kindly furnish information as to the result. This I unintentionally forgot to do; and now I am told, before sending me any more vaccine (not calf) lymph, I must fill up the form they had already sent me. Of course, I have no objection to doing this, and regret my omission; but I should be glad to know if they have the right to deprive me of the advantages of the establishment, on account of my not having complied with their request.

Please answer this question in the JOURNAL to C. B. G.

P.S.—On applying a second time, the only answer I receive is that the form has not yet arrived from me.

*** There is no law requiring the National Vaccine Establishment to supply lymph to every applicant. But, if it could be shown that improper difficulties were put in the way of applicants for such supply, there would undoubtedly be grounds for interference with the method of administration of the grant. It does not, however, appear unreasonable for the establishment to require the information referred to by our correspondent.

RECOGNITION AND REGISTRATION OF DIPLOMAS IN SANITARY SCIENCE.

S.Sc.C.CAMB., M.D., writes: It is extremely gratifying to note the formation of an "Association of medical practitioners qualified in sanitary science," and that at length, efforts will be made to obtain official recognition and registration of diplomas in sanitary science. Truly, as your editorial paragraph remarks, "we proceed by steps in this country," specially, to wit, our ineffective and "tumbled up" sanitary legislation and service; organisation it cannot be called. Pending our much needed statutory amendments in these matters, it would be well if the Local Government Board, in the appointment of all future medical officers of health, required local authorities to have regard to diplomas in sanitary science, and would themselves give preference to candidates (where forthcoming at any place) holding such diplomas.

A.D.—An equal division of the fee would be an equitable arrangement.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BENWELL AND FENHAM.—Mr. Hardcastle's report for 1885 is strictly confined to facts, and is not specially interesting. The deaths compare favourably with those of preceding years, showing a rate of 17 per 1,000, against 17.8 in 1884, and 20.8 in 1883. An outbreak of small-pox occurred at Delaval, and two cases were fatal. No effective means of isolation or removal were possible. With but few exceptions, vaccination or revaccination was complied with. Typhoid was fatal in two cases. In a case of diphtheria, it was found that the family, nearly all of whom showed symptoms of blood-poisoning, were then dependent for their water-supply on an open ditch contiguous to a manure-heap. Every effort was made to prevent members of infected families from attending school, and disinfectants were provided in forty-nine houses by the officers of the Board.

TORQUAY.—Mr. Karkeek has every reason to be satisfied with the improvement in the public health of this popular health-resort. The attention that has been paid to its sanitary welfare is evidently bearing abundant fruit. The number of deaths in 1885 was 396. The average is 397; but, in view of the increase of population, the mor-

tality is very favourable. Excluding the deaths of visitors and strangers, a death-rate is recorded of 13.9 per 1,000. There was one death from malignant scarlet fever. Mr. Karkeek testifies to the increasing usefulness of the sanatorium in providing for the isolation of cases of infectious disease. Most of the persons attacked were of the poorer classes; and the benefits of such an institution in checking the spread of disease can hardly be overestimated. There were very few deaths from diarrhœa, and only five from measles. The number of deaths from phthisis was higher than in any year since 1878. Mr. Karkeek had a novel experience, in examining a vessel in which there had been deaths from yellow fever. It is not every health-officer that can record that his sanitary authority have spared no pains or money to improve their district, and that plans are constantly devised to make it as nearly perfect as possible.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having passed the required examination, were admitted members on May 6th, 1886.

Birch, Edward Alfred, M.D.Brussels, Exmouth.
Dalton, Norman, M.D.Lond., 15, Bentinck Street, Manchester Square.
Gerard, John, M.B.Aberd., 37, Keppel Street, Russell Square.
Harris, Thomas, M.D.Lond., 98, Mosley Street, Manchester.
Jones, Henry Lewis, M.B.Camb., 5, Barnard's Inn, Holborn.
Lyon, Thomas Glover, M.D.Camb., 39, King Street, Cheapside.
Neale, John Headley, M.B.Edin., Leicester.
Pearce, Walter, M.B.Lond., St. Mary's Hospital.
Pope, Frank Montague, M.B.Camb., Leicester.
Rutherfoord, Henry Trotter, M.B.Camb., 44, Bedford Gardens, Kensington.

UNIVERSITY OF EDINBURGH.—The following candidates passed the first professional examination for Degrees in Medicine, in April, 1886.

J. H. Bayley, H. R. Bellamy, W. H. H. Bennett, J. J. Beveridge, M.A., W. T. Blackledge, T. P. Blades, R. L. Booth, J. A. Bower, William Bower, E. W. R. Branch, T. L. Brander, Reginald Broadbent, Barend Burger, Thomas Burns, Robert Cattley, Albert Coleman, M. W. W. Cowan, Peter Crerar, Rhys Davies, Walter Dickson, D. S. Dixson, J. A. Forrest, W. A. Fowler, W. J. Greenham, Alfred Griffiths, A. H. Hallen, R. E. Howell, W. H. Hughes, Walter Hume, David Huskie, M.A.; J. Huskie, H. M. Inglis, B.A.; Hugh Jameson, W. E. Jennings, J. L. Jones, A. B. Kenworthy, J. M. Laughton, A. S. Lawrence, O. R. Lewis, J. S. S. Lumsden, Robert Macfarlane, J. T. M'Kay, W. R. Main, Frank Mason (with distinction), F. A. Maynard, G. Melville, G. S. Mill, Vincent Milner, J. L. Morrison, J. M. Morrison, J. P. Morton, Alexander Nasmyth, Andrew Newall, Athelstane Nobbs, A. J. Prentice, Robert Renton, C. G. Robson-Scott, R. R. Ross, J. C. Rossie, W. V. Sinclair, G. B. D. Smart, A. E. Taylor, C. T. T. Water, D. F. D. Turner, Gilles Vandewall, J. J. Vernon, G. A. Waith, Charles Waterston, A. R. A. Wilhelm, John Wilkinson, Arthur Wilson, G. C. Winchester, R. E. B. Yelf, C. W. Yeoman.

The following candidates passed the second professional examination during April.

J. H. Acheson, William Allan, D. H. Anderson, Mihangel Ap Iwan, I. J. André, L. E. Barnett (with distinction), G. H. Bartlett, G. T. Beatton, C. H. Bedford (with distinction), W. L. Bell, Arthur Bentham, J. T. Borthwick, Edward Brooks, C. W. Brown, A. A. Bruère (with distinction), E. J. Burnett, M. B. Burton, T. W. Butcher, Edmund Capper, G. A. Casalis, W. W. Chamberlain, Joshua Chayter-White, Douglas Crawford, A. J. W. Dalzell, W. R. Davidson, Walter Denby, H. B. Densham, Duncan Drummond, C. W. Duggan, W. E. L. Elliot, R. H. J. Fetherston, A. L. Gillespie, S. E. Godfray, John Grant, D. A. Gray, George Hardyman, F. J. Hart, Charles Harvey, J. G. Havelock, John Hewat, William Hewat, J. R. Holmes, P. E. el Howie, J. B. Jameson, E. J. Jennings, W. E. Jennings, J. H. Jones, G. E. Keith, W. Kemp, A. Kirkwood, J. A. C. Kynoch, W. Langwill, J. T. C. Leishman, W. H. Lewis, Frank Liddell, A. G. S. Logie, Thomas Luson, J. M. Lyon, D. H. M'Closky, G. O. C. Mackness (with distinction), D. M. Maclachlan, Alexander Macleay, James MacLeod, David MacNish, Christopher Martin (with distinction), Alan Matheson, James Meir, F. H. Morison, R. H. Mortlock, James Mowatt, C. D. Musgrove, M. F. X. Nalletamby, J. T. C. Nash, W. S. Nason, G. F. Odhams, William Parker, C. S. Patterson, J. A. Perez, F. U. Purchas, Charles Ramage, G. A. O. Reid, G. F. Rhodes, Walter Rigby, R. F. Robertson, M.A. (with distinction), W. G. A. Robertson, C. G. Savary, Walter Scott, W. C. Sillar, J. B. Simpson, M.A.; G. T. Smith, W. J. Smyth, J. W. Somerville, John Somerville, W. C. Sprague (with distinction), W. H. S. Stalkartt, C. B. Stiles, G. W. Sutherland, Joao Teixeira, C. L. Terry, Evan Thomas, G. R. Thomson, E. B. Turner, T. H. Underhill, George Wade, Thomas Walcot, Q. M. Wallace (with distinction), J. W. Wells, P. J. White, Thomas Whitelaw, H. T. Wickham, A. H. Williams, J. C. Williams, W. W. Williamson, James Wilson, Robert Wise, Percy Wisewould, D. J. Wood, Walter Wynne, Andrew Young.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at a meeting of the Court of Examiners, on April 29th.

W. H. Paine, L.R.C.P.Lond., Lewisham; G. W. F. Paul, L.R.C.P.Lond, Ladbroke Grove Road; O. H. Beddall, L.R.C.P.Lond., Denmark Park; G. K. Pearson, L.R.C.P.Lond., St. Peter's Park, and G. B. M. Jones, L.R.C.P.Lond., Sydney, N.S.W., Students of University College; D. L. Hubbard, L.S.A., Clapham, and C. H. East, L.S.A., Titering, of King's College; W. R. H. Hains, L.K.Q.C.P.I., Plymouth, of Westminster Hospital; J. C. Morgan, L.R.C.P.Lond., Blackheath, and W. G. Hall, L.S.A., Swindon, of the London Hospital; W. C. Spiller, M.B.Edin., Trinity Square, of Edinburgh and Guy's Hospital; P. B. T. Stubbs, L.S.A., Canonbury, St. Bartholomew's Hospital; A. W. F. Noyes, L.R.C.P.Lond., Melbourne, of Melbourne and Charing Cross; E. S. Blaker, Brighton, of Guy's Hospital; A. H. Leech, L.S.A., Woolpet, Suffolk, of Charing Cross Hospital.

Three candidates were referred for 3 months, and 4 for 6 months.

Admitted on April 30th.

W. McD. Ellis, L.R.C.P.Lond., Lee, and F. S. Toogood, L.S.A., Southampton, of University College; T. R. Alexander, L.S.A., Upper Norwood, of Guy's Hospital; C. E. L. Gilbert, L.K.Q.C.P.I., Paddington, of St. Mary's Hospital; C. S. Evans, L.S.A., Fentiman Road, and A. B. Druitt, L.S.A., West Kensington Park, of St. Thomas's Hospital; J. R. Pugh, L.S.A., Llanon; J. R. Wilson, Caistor, Lincs., and G. A. G. Simpson, L.S.A., Warwick Road, N.W., of London Hospital; H. A. L. Pope, L.S.A., Donegal, H. W. Haydon; L.S.A., Highgate, and A. F. Dimmock, L.S.A., Ely, of King's College; T. J. Fletcher, M.B.Edin., Northwich, of Edinburgh and London Hospital; R. B. Anderson, L.S.A., Bodmin, of Middlesex Hospital.

Five candidates were referred for 3 months, and 6 for 6 months.

The following gentlemen were admitted on May 3rd.

A. J. Wright, L.S.A., Markfield Terrace, of Charing Cross Hospital; F. M. Sealy, L.S.A., Gosberton; S. Peake, L.S.A., Coventry, and S. C. Buckland, Wimbledon Park, of Middlesex Hospital; H. C. Smith, L.R.C.P.Lond.; Torquay, of University College Hospital; D. Williams, L.S.A., Carmarthen, of the London Hospital; W. A. B. Potts, L.S.A., Amersham; H. S. Turner, Wandsworth Common, of St. Mary's Hospital; C. H. Gage-Brown, M.B.Ed., Sloane Street, of Edinburgh University; R. L. Hildyard, L.S.A.; Newcastle-on-Tyne, and T. F. Shackleton, Catford Bridge, of King's College.

Five candidates were referred for 3 months, 1 for 6 months, and 1 for 9 months.

The following gentlemen were admitted on May 4th.

J. Wheatley, L.S.A., Huddersfield, of King's College; F. N. Gaudin, L.S.A., Staines, of University College; R. H. Lucy, M.B.Edin., Worcester, of Edinburgh University; F. St. I. Bullen, L.S.A., Dulwich Road, of St. Thomas's Hospital; E. J. Norris, L.R.C.P.Lond., St. Peter's Park; G. Locke, L.S.A., Kingsland Road, and H. P. Gaston, L.S.A., Nettlebed, of Charing Cross Hospital; H. S. Baumgartner, L.S.A., Newcastle-on-Tyne, of Guy's Hospital, and Newcastle-on-Tyne Infirmary; A. Vernon, L.S.A., Macauly Road, of St. George's Hospital; A. T. Ozzard, Southsea, of the London Hospital.

Two candidates were referred for 6 months, and 1 for 12 months.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the Examiners, the following candidates have been admitted Licentiates in Surgery.

J. H. Kenrick, W. C. Leitch, Murdoch Mackenzie, and M. M. Williams, of the Glasgow Medical School; Joseph Robinson, of the Edinburgh School; J. W. Lichfield, Charing Cross Hospital; Frederick Stephenson, Owens College; G. F. C. Gardiner, Bristol School.

The following have been admitted Licentiates in Dental Surgery.

Matthew Nisbet, Glasgow; John Spotswood and Frederick Dale, Sheffield.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. DOUBLE QUALIFICATION.—During the April sittings of the Examiners, the following gentlemen passed their Final Examination, and were admitted L.R.C.P.Edinburgh, and L.R.C.S.Edinburgh.

Frederick Buckham, Hereford; John Connell, Cork; Alfred O. Davies, Barmouth; Henry Caudwell, London; Sidney E. P. Cade, Cork; Thomas V. Devey, Wolsingham; Jonathan Clerke, Cork; William H. Carter, Jumalpour; Devereux Gwynne-Hughes, South Wales; Henry B. Goulding, Dublin; James A. Haggart, Malta; David Hume, Lauder; Thomas J. Jones, Merionethshire; William J. Morton, New South Wales; Edwin Priestley, County Down; James W. Patrick, County Cavan; Alexander W. Mackenzie, Linlithgow; James McGaw, County Down; Charles W. Reilly, Kilboy, Ireland; Alexander Smith, County Cork; Alexander Rajagopal, Madras; Henry Powell, County Tipperary; John J. Tuohey, County Mayo; William Shaw, County Antrim; William J. Vander Vyver, Cape Colony; Charles Wicks, Maxwelltown; and Robert J. Willis, County Antrim.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—During the April sittings of the Examiners, the following gentlemen were admitted Licentiates of the College.

James McNish, Creetown; and William H. Clarke, Longsight, Manchester.

The following gentlemen passed their first professional examination for the Licence in Dental Surgery.

John Girdwood, Edinburgh; William J. Fick, Brixton, London; and Charles M. Cunningham, Leith.

The following gentlemen passed their Final Examination, and were admitted L.D.S.Edinburgh.

Edward P. Rose, Leicester, and John T. Fripp, London.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, and FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The examinations for the Triple Qualification of these bodies were held at Edinburgh in April and May, with the following results. Passed First Examination.

James Ratcliff-Gaylard, Uxbridge; Joas C. Duarte, Goa, India; Albert Beverley, Skipton in Craven; Maughan M. M. Adam, Boston; Edwin D. Duffett, Bristol; John Morton, Mooltan; James A. R. Stollmeyer, Trinidad; William M. Joyce, Ashby-de-la-Zouche; Alfred Green, London; Henry R. Hodges, Cholesbury; Thomas Readman, Whitby; David M. Wilson, Ayr; Richard Arthur, Kirkcaldy; William J. Visser, Cape of Good Hope;

Francis T. S. Savile, Yorkshire; Charles D. Stewart, Perthshire; Frederic F. Armytage, Huddersfield; Sydney Booth, Lancashire; Daniel R. Bowen, Glamorganshire; William J. Baird, County of Londonderry; David Barry, County Cork; John Cowe, Roxburghshire; Peter Campbell, Perthshire; John P. Corcoran, County Mayo; John R. H. Dyson, Honley; Edward McC. Campbell, Lisburn; William P. Everard, Roscommon; Alexander J. Keiller, Edinburgh; John M. Forbes, Aberdeen; William K. Lochhead, Newcastle, New South Wales; Frederick G. Jackson, Warwickshire; Archibald Greer, County Armagh; Morton E. Leicester, London; James Murphy, County Limerick; Francis Murphy, Cork; John T. McArthur, County Tyrone; Frederick McDowell, Aldershot; Joseph A. Nolan, Kilkenny; Walter H. Macdonald, Inverness-shire; Leonard G. Peters, Tunbridge, Kent; Bangowd Anassamy Simmatambou, Mauritius; Herbert Osborne, Notts; William P. O'Meara, County Limerick; Edward E. Craster, Yorkshire; John E. Sang, Edinburgh; William Tiplady, Durham; John Tighe, Dublin; William Shortt, King's County; Joseph Smith, Yorkshire; Archibald M. Weir, Worcestershire; George A. Wolfendale, Staffordshire; Charles E. H. West, Liverpool; Frederick J. Woods, Banbridge; and John C. Thompson, Middlesburgh.

Passed Second Examination.

Thomas Readman, Whitby; George Cormick, Persia; Henry W. Cross, Hull; Donald M. Campbell, Ontario, Canada; Alexander B. Cochrane, Dudley; Samuel J. Dunlop, County Antrim; Frank A. Sweetnam, County Cork; Alfred W. Douglas, Aldershot; David E. Edwards, Carmarthenshire; Edwin D. Duffett, Bristol; William A. Gibson, Dublin; James Ratcliff-Gaylard, Uxbridge; William A. K. Hanna, Bombay; Idrice A. Goumany, Mauritius; Henry R. Hodges, Bucks; Alfred J. Hamilton, Omagh; John Morton, Mooltan, India; Charles R. Hailes, Mangalore, B.I.; Edmund R. Kavanaugh, London; Joseph McDowell, Down; Alexander L. Murray, Belfast; James A. Murray, Cork; Bernard MacDonogh, Surrey; James Metcalfe, Tongue; Frederick Primrose, Nova Scotia; Richard Nugent, Bengal, India; Reinhard J. Reimcke, Cape Colony; James A. R. Stollmeyer, Trinidad; Henry Smith, Yorkshire; John Steele, Ayrshire; Philip C. P. Taylor, Weston-super-Mare; William W. Shrubshall, Margate; William K. Walker, Pollokshaws; William C. Robinson, County Antrim; and John Westwood, Birmingham.

Passed Final Examination, and admitted L.R.C.P.Edinburgh, L.R.C.S.Edinburgh, and L.F.P. and S.Glasgow.

Edward Armitage, Cape of Good Hope; George A. Armstrong, Ireland; Alfred Duckworth, Lancashire; Charles E. Dew, Weston-super-Mare; James Gordon, County Down; Adelbert Hanna, Canada; James Lychlander, Madras; Robert N. Horton, Canada; James G. Holmes, Leeds; John Lyon, Glasgow; William M. Mackay, Caithness; Sydney Rumboll, Cambridge; Percy J. Wilkinson, Manchester; and Alfred H. Whittell, Plymouth.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on April 5th, 1886, and following days, the undermentioned gentlemen passed their Final Examination for the Letters Testimonial, and, having taken the declaration and signed the Roll, were admitted Licentiates of the College.

John A. Coen, Shuldham H. Dunlop, Martin Fitzgerald, Edward Garraway, Laurence Geoghegan, Edward W. Hamilton, John C. Jellett, Peter M'Swiney, Andrew E. Murphy, William J. Shee, Patrick Stephenson, Charles P. Tennant, Archibald M'Leod, and Guy C. L'Estrange.

Thirty candidates entered for examination, two of whom withdrew, one was absent, and thirteen were stopped.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, April 29th, 1886.

Gaudin, Francis Neal, Clydesdale, Staines.
Lewis, Philip King, 147, Adelaide Road, N.W.
Wright, Alfred John, Markfield, Leicester.

The following gentlemen passed on May 6th, 1886.

Bowden, Walter, 45, Hilldrop Crescent, N.
Damian, Francis George Claxton, Trinidad, West Indies.
Edwards, Percy, Hawarden, Dartmouth.
Hardy, Albert Edward, Somerville House, Buttershaw, Bradford.
Nicholson, Edgar, 52, Clarendon Road, Notting Hill, W.
Stone, John William, Richmond, Yorkshire.

The following candidates passed the Preliminary Examinations in Arts on May 7th and 8th, 1886.

J. E. F. André, L. W. Bathurst, T. H. Bishop, E. W. Brewerton, A. V. Chapman, H. Clift, A. T. Cocking, A. T. Cooper, J. George, J. E. Godson, R. Ingram, S. James, J. C. King, J. M. Martin, T. J. F. Morrison, E. W. Northcote, E. P. Oates, H. C. Perkins, E. Plowright, J. A. Rooth, M. S. Rorke, R. H. Shaw, F. Spurr, L. H. Y. Stephen, E. H. Willock, W. B. Winckworth, A. T. White, T. F. Woolley.

The following passed in Elementary Mechanics alone.

F. S. Byass, J. H. Crouch, W. W. Darlington, E. T. P. Eames, F. Ellis, V. H. Ellis, A. A. Fenning, F. E. France, S. R. Hallam, H. T. Hinton, D. K. McDowell, E. S. Marshall, G. D. Martin, A. A. J. Price, A. O. Raine, R. L. Romer, J. S. Sewill, R. Skinner, W. D. Slyman, S. R. Strouts, R. M. H. Walford, H. C. Will, E. E. Willis, W. J. Woods.

MEDICAL VACANCIES.

The following vacancies are announced.

SGARTH UNION.—Medical Officer. Salary, £40 per annum. Applications by May 22nd to W. E. M. Wynn, Askrigg, *via* Bedale.

RMINGHAM FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Medical Officer. Salary, £200 per annum. Applications by May 20th to the Secretary.

CHESTER GENERAL INFIRMARY.—Visiting Surgeon. Salary, £80 per annum. Applications by May 22nd to the Chairman of the Board.

DORSET COUNTY HOSPITAL, Dorchester.—House-Surgeon. Salary, £70 per annum. Applications by May 19th to the Chairman of the Committee.

EASTBOURNE UNION.—District Medical Officer. Salary, £110 per annum. Applications by May 20th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Assistant-Surgeon. Applications by May 21st to the Secretary.

HARTLEPOOL FRIENDLY SOCIETY'S ASSOCIATION.—Dispenser. Applications to T. Tweddell, Reed Street, West Hartlepool.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square.—Honorary Physician. Applications by May 26th.

NANTYGLO AND BLAINA DISTRICT.—Medical Officer of Health. Salary, £40 per annum. Applications by May 17th to J. A. Shepard, 87, Queen Street, Tredegar.

NEWARK HOSPITAL AND DISPENSARY.—House Surgeon. Salary, £80 per annum. Applications by May 15th.

PORTSMOUTH ROYAL DOCKYARD MEDICAL BENEFIT SOCIETY.—Medical Officer. Salary, £300 per annum. Applications by May 15th to W. Peyton, 21, Broad Street, Southsea.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone Road, N.W.—Two Physicians to the Out-Patients. Applications by May 31st.

ROYAL SOUTHERN HOSPITAL, Liverpool.—House Surgeon. Salary, 100 guineas per annum. Applications by May 19th.

ROYAL SOUTHERN HOSPITAL, Liverpool.—Second House Surgeon. Salary, 80 guineas per annum. Applications by May 19th.

ST. GEORGE'S, HANOVER SQUARE, DISPENSARY.—Surgeon. Applications by June 1st to the Secretary.

ST. MARY'S HOSPITAL, Paddington, W.—Surgeon. Applications by May 21st.

UPPERMILL LOCAL BOARD, Saddleworth.—Medical Officer of Health. Applications by May 18th to W. Broadbent.

WESTON-SUPER-MARE HOSPITAL AND PROVIDENT DISPENSARY.—Second Medical Officer. Salary, £50. Application by May 24th to the Honorary Secretary.

MEDICAL APPOINTMENTS.

BARENDT, Frank H., M.R.C.S., L.R.C.P.Lond., appointed House-Physician to the Royal Infirmary, Liverpool, *vice* W. M. Bristow, M.R.C.S., L.R.C.P.Edin.

BARLING, G., M.B., B.S., F.R.C.S., appointed Assistant-Surgeon to the General Hospital, Birmingham, *vice* W. G. Archer, M.A., M.B., F.R.C.S., resigned.

BARRETT, J. W., M.B., M.Ch., F.R.C.S., appointed Assistant-Surgeon to the Western Ophthalmic Hospital, Marylebone Road, N.W.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

HART.—At 4, Wemyss Place, Edinburgh, on May 10th, the wife of D. Berry Hart, M.D., of a daughter.

SANDERS.—On May 5th, at 29, Church Street, West Ham, the wife of Charles Sanders, M.B., M.R.C.S., of a daughter.

DEATHS.

LEWIS.—May 7th, at Bywood, Woolston, T. R. Lewis, M.B., (F.R.S. elect) Surgeon-Major Army Medical Staff, aged 44 years.

WILLIAMS.—On May 6th, at Isola, Ventnor, Isle of Wight, John Williams, M.D., M.R.C.S.Eng., L.S.A., formerly of Tronant Lodge, Pontypool, Monmouthshire.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Pathological Society, 8 P.M. Mr. Eve: Adenoma and Adenosarcoma. Mr. Hutchinson: Adenoma of Palate. Mr. Hutchinson, Junr.: Neuroma of Parotid. Dr. Acland and Mr. Ballance: 1, Noma; 2, Actinomycosis in Man. Dr. Payne: Erythrasma. Dr. Silcock: 1, Gangrene of Lung; 2 (for Dr. H. Jones), On the Vessels in Meningitis. Dr. West: Mediastinal Tumours. Dr. Turner: Miliary Tubercle in Pulmonary Artery. Dr. Sharkey, Perforation of Vermiform Appendix. Dr. Sainsbury: Tubercular Mass in Suprarenal. Dr. Hale White: Case of Peripheral Neuritis, Myelitis, and Pachymeningitis. Mr. Bilton Pollard: 1, Duct Papilloma of Breast; 2 (for Mr. C. Heath), Secondary Epithelioma of Lower Jaw. Mr. Battle: 1, Osteo-chondrosarcoma of Breast; 2, Osteo-chondroma of Thigh. Dr. Hadden (for Mr. Paul): Rupture of Aorta. The following card specimens will also be shown. Dr. P. Kidd: Aspergillus Mycosis of Kidney; Dr. Silcock: Fibroid (? syphilitic) Thickening of Pleura; Dr. Sharkey: Mediastinal Tumour; Dr. Hadden: Tubercular Mass in Suprarenal; Mr. Battle: Bones from a case of Congenital Syphilis; Mr. E. H. Fenwick: Calculus extracted per Anum; Mr. Churchill: Central Necrosis of Great Trochanter; Mr. E. Crookshank: Photographs of Micro-organisms.

THURSDAY.—Parkes Museum of Hygiene, 8 P.M. Lecture, Mr. R. Warrington, F.C.S., Recent Investigations on Well-Waters.—Harveian Society of London, 8.30 P.M. Dr. E. Downes: Treatment of Leprosy and Sciatica by Nerve-stretching. Dr. R. Maguire: On the Albumens of the Urine.

FRIDAY.—West London Medico-Chirurgical Society, 8.30 P.M. Mr. Ballance: Demonstration in Bacteriology, including the cultivation of Micro-Organisms in Nutrient Media.—Society of Medical Officers of Health, 7.30 P.M. Will be held at the Scottish Corporation Hall, Crane Court, Fleet Street. Mr. William Eassie, C.E., will read a paper on The Waters derived from the Bagshot Beds, considered as drinking supplies.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED

QUERIES.

OBSTINATE EPISTAXIS.

MR. R. A. SHANNON (St. Mary's Cray, Kent) writes: A young gentleman (farmer otherwise apparently in perfect health, suffers great inconvenience fro epistaxis, occurring almost every morning and during the day on the slighte irritation to the nose. The nose is somewhat painful in frosty weather. I ha tried every remedy I know of in vain, and should be extremely thankful for a suggestions as to treatment.

EXCESSIVE PERSPIRATION OF THE HANDS.

A MEMBER asks for advice on the following case. The patient, aged about 28, rather nervous disposition, suffers from excessive perspiration of the hand He has always led a very steady, regular life; is a total abstainer, and h latterly given up drinking tea. He does not smoke, nor does he know of a cause to give rise to the unpleasant affection.

WHOOPING-COUGH.

ENQUIRENS writes: Two or three years ago, a chemist and druggist sent me preparation of his own for the above complaint, which, in some cases, I ha found very useful. Can any of your numerous readers give me his name a address? The dose for children is half a drachm to two drachms, in water.

CHRYSOPHANIC ACID.

D. S. G. has used this acid, with complete success, in the treatment of ringwor but finds that it leaves an ugly red stain on the skin. He would like to kn how it can be removed.

ANSWERS.

HIP-JOINT DISEASE.

SUBSCRIBER writes:—I have a case of hip-joint disease, and wish to apply Thomas's splint or Sayre's appliance. I would prefer the latter, as I am anxio my little patient should get a little out-door exercise. Could you, or any of yo readers, inform me as to the mode of applying it, by illustrations or otherwis I think I saw in the JOURNAL about two years ago some illustrations, but ca not remember.

*** Thomas's splint is excellent for the purpose. All splints whi are intended to allow the patient to walk about require great experie in application, and even then are not highly satisfactory. See E. Stanm Bishop "On the Combined Use of Thomas's and Furneaux Jordan's Laminat Splints" (JOURNAL, July 7th, 1883, p. 8).

THE M.D. BRUSSELS.

DR. M. N. GANDEVIA (Bournemouth) writes: The Secretary to the University Brussels will, on application, forward a prospectus to "Physician and Surgeo from which he will be able to gather all the information he needs. Qualifi practitioners, on presenting their diplomas, are admitted to the M.D. exami tion, and are examined by thirteen different examiners in thirteen different su jects. The examination is conducted orally, and is divided into three par and candidates rejected in the first part are not allowed to proceed for t second. The subjects of the first part are medicine, pathology, therapeuti natural history of diseases or etiology. In the second part, the subjects surgery, midwifery, medical jurisprudence, and hygiene; and for the third pa clinical medicine, clinical surgery, clinical obstetrics, surgical anatomy, a operative surgery. As text-books, I would recommend Green's *Patholo* Farquharson's *Therapeutics*, Carter's or Bristowe's *Medicine*, Keetley's or Holm *Surgery*, Bellamy's *Surgical Anatomy*, Husband's *Forensic Medicine and Hygie* Meadows's or Playfair's *Midwifery*, and Smith and Walsham's *Operative Surge* An intimate knowledge of all these, or similar works, is absolutely essential; a I would strongly advise particular attention being paid to pathology and surgi anatomy, two subjects in which most of the candidates flounder. Surgi anatomy is not included in operative Surgery, but candidates are examined it separately, and have to dissect a region. Examinations are held with o doors, and generally a few students are present, watching the questions a answers. The examinations extend about a week. The examination-fee is £ and board and fare will amount to another £10. Candidates can present the selves for re-examination three months after rejection. Candidates are trea most courteously, and examinations are conducted in the most fair and partial way possible, and the conscientious and painstaking manner in wh Professor James discharges his onerous duty of interpreting leaves nothing be desired.

HEALTH-RESORT WANTED.

"A MEMBER" wishes to hear of a pleasant southern country town, possessing dry, bracing air, and suitable for a rheumatic. A correspondent suggests Br port, Dorset, which is beautifully situated in an undulating country, one m from the sea. The climate is bracing, and temperature singularly equal There is a railway from the town to the sea. Should "A Member" wish further particulars, they will be supplied with pleasure.

LUPUS ERYTHEMATOSUS.

DR. H. S. PURDON (Physician, Belfast Hospital for the Skin) writes: In resor we have a remedy likely to prove valuable to the dermatologist. I have under treatment a chronic case of the obstinate disease lupus erythematos situated in the usual locality, namely, nose and cheeks. The most magi results have followed painting with a solution, 15 grains to ounce, once or tw daily, and then covering with an india-rubber mask.

DR. A. HILL (Cambridge).—Has already appeared. (See notice of Academy tures in JOURNAL of May 8th).

G. CERBERF writes on a matter with which he is evidently not at all conversan

NOTES, LETTERS, ETC.

CASE OF DEATH OF FŒTUS THROUGH KNOT IN CORD.

NEMO writes: A few days since, I delivered a woman of a still-born infant, wh had evidently been dead some weeks. On making an examination, I foun perfect knot on the funis. As this is the second time running this has pened with the same patient, I thought it worth mentioning. I have preser the specimen in spirit, and shall be happy to forward it to any museum, if think it worth while.

The Disinfection of Phthisical Sputum.

H. Handford (Nottingham) writes: I do not doubt that the inhalers described by Dr. Hassall are much more efficient than many of the older forms, of ich, as he has shown, my remarks are certainly true. My contention, however, remains unaffected; namely, that, in the present state of our knowledge, is hopeless to expect to destroy micro-organisms, and more especially their ores, in the tissues of the lungs by the inhalation of germicide remedies. ntiseptics may, perhaps, reach micro-organisms lying in the mucus or pus on e free surface of the bronchi, in a sufficiently concentrated form to destroy em. It is conceivable, though not probable, that the same may be true in e case of those lying free in the alveoli, or very superficially placed in the sues. Micro-organisms more deeply placed, and especially those in areas of nsolidation, as in tubercle, can only be reached by germicides introduced to the fluids which bathe the tissues. And as these fluids are in constant culation, it is necessary, to obtain even a local action of any long duration, at the whole of the fluids of the body should be impregnated with a pertage of the remedy sufficiently high to enable it to act as a germicide. This, the case of all germicides hitherto tried, is incompatible with the life of the st.

Taking a man of ten stone, it is a low estimate to put the total weight of ood and lymph at fifteen pounds, disregarding the fact that all the so-called lid tissues, with the exception of bone and epidermic structures, contain an erage of 60 to 70 per cent. of water. Fifteen pounds contain 105,000 grains. make this fluid into a solution of 1 in 100,000 of corrosive sublimate—far too ak a solution to kill spores, though they might not grow in it—would require ose of more than 1 grain, that is, 2 ounces of liquor hydrargyri perchloridi the *British Pharmacopœia*. To make a 1 per cent. solution of carbolic acid uld require a dose of more than 2 ounces. This difficulty was ably pointed t by Koch, in his article on disinfection.

Phosphorus Necrosis.

E. A. Kirby (Beckenham) writes: As it is probable that the discussion at the eting of the Clinical Society on March 12th on Mr. Hutchinson's case of crosis may have left some of your readers in perplexity as to the possibility phosphorus producing necrosis when given in a pill over a long period, the llowing extract from an undoubted authority will perhaps be read with erest.

Writing upon the "Action of Phosphorus," Dr. Lauder Brunton says: "Its tion on the bones is somewhat peculiar, and has been fully investigated by egner." "In men exposed to the fumes of phosphorus, caries of the lower jaw a frequent occurrence. This is not due to the action of the phosphorus after sorption into the circulation, but to the direct action of the fumes upon the ne itself. For it has been shown that, when a bone of an animal fed upon osphorus was exposed, no carious change took place; but if one were exposed the fumes, caries was produced; and amongst lucifer match-makers, it has en noticed that only those who have carious teeth suffer from necrosis." runton's *Pharmacology*, 2nd edition, p. 638.)

Again, in Dr. Ringer's *Handbook of Therapeutics*, 7th edition, page 304, we d the following confirmatory statement. "The effects of chronic phosphorus isoning have lately been elaborately worked out on animals by Dr. George egner, and with singular results. It has long been known that workmen exsed to the fumes of phosphorus are liable to necrosis of the jaw; and Dr. egner believes that this results from the direct action of the phosphorus on nuded bone, and that necrosis will not set in unless, through wounds or rious teeth, there is some destruction of the soft tissues, thus enabling the osphorus to reach the exposed bone; in support of this view, he adduces e following reasons.

"1. If the periosteum of an animal is severely wounded, and phosphorus is en in the form of a pill, even for months, the periosteal changes do not take ace.

"2. When the tibia of a rabbit is partially bared, a healthy granulating wound soon established; but under exposure to a phosphorus-atmosphere, periostitis set up similar to that in the jaw.

"3. Many workers in phosphorus escape, whilst those who do suffer have rious teeth."

Therapeutic Use of Chloral.

W. J. Mackie (Turvey, Bedford) writes:—About three years ago, I saw a se published in the British Medical Journal, in which chloral seemed have been markedly beneficial in Bright's disease; but this was accounted by attributing its beneficial action to its power of lessening arterial tension. the same time, its use was condemned, in consequence of its lowering action the heart. I offer the following cases, first, as strongly suggesting that this not the true explanation; and, secondly, as a plea for further investigation.

A. F., aged 43, married, a pluripara, had suffered for nine years from caries crotica of the ischio-pubic rami, with more or less incessant discharge. On ne 25th, 1885, she was unable to do anything, but would not stay in bed. She essed, and lay in a semi-recumbent position on a couch. The legs and feet re very much swollen, and she complained of shifting œdema of the face. e had constant headache and diarrhœa. The urine was of specific gravity 1009, l contained one-seventh of albumen. The liver seemed slightly enlarged. The art was normal. She began to take chloral, and improvement soon followed. July 23rd, the albumen in the urine was the same; specific gravity 1010. e œdema of the legs was diminishing. The headache was much less frequent. e said she felt better than she had done for a long time, and had resumed rk at a lace-pillow. On August 6th, the albumen was rather less; the specific vity of the urine was 1013. The œdema of the legs and feet was now very fling. Diarrhœa had quite ceased. I now gave her tincture of perchloride of n. From this date to the end of September, my notes are very much a retition of the same; sometimes she had chloral, but she finished with iron. om June 25th, when she began to take chloral, her progress was steady and pid. I had previously given her nitro-glycerine; and, although I had evidence its physiological action in the increased secretion of urine, which was previously somewhat scanty, yet there was no decided improvement in her symoms. In the first instance, I gave the chloral to relieve the diarrhœa, but the nefit to her general condition was much more marked and rapid than the sest of diarrhœa, and the ultimate result was her speedy restoration to a comative state of health from a very critical condition. She took on an average y six grains of chloral daily. On February 27th, 1886, she remained as well when I left off attendance.

On December 24th, 1885, Mrs. W., aged 45, pluripara, was unable to attend to domestic duties. She suffered from continuous dyspnœa, increased on exera. There was anasarca of the feet, legs, thighs, and abdomen, sometimes considerable under her eyes, variable in the face. There were some anorexia and anæmia. The urine was scanty, moderately coloured, of specific gravity 1014, with a white cloud of albumen, no blood. I ordered four grains of chloral thrice daily. On January 11th, the anasarca was gone; the breathlessness was very slight, on exertion only. She passed urine in average quantity. The appetite was better. She could now attend to her domestic duties. I now gave her liquor ferri perchloridi, and she rapidly regained her usual health.

E. G., a labourer, aged about 45, first consulted me in the middle of December suffering from anasarca, with great swelling of the scrotum, headache, diarrhœa, and tremulousness of his muscles. The urine was of specific gravity 1025, with a trace of albumen. I gave him four grains of chloral thrice daily for a month, and finally put him on tincture of perchloride of iron. In this case, the anasarca and diarrhœa, etc., improved rapidly, as in the two other cases; and in none of them were any accessory measures employed.

The failure of nitro-glycerine in the first case to afford any relief is antagonistic to the theory that the benefit derived from chloral is the result of lowered arterial tension. They undoubtedly differ either in the quality or in the sphere of their physiological activity. Possibly, the rhythmic action of vessels described by Dr. Lauder Brunton may be in some way connected with the therapeutic merit of chloral. He also recognises its value in the later stages of Bright's disease associated with sleeplessness. I find, on reference to the *Year-Book of Treatment* for 1885, that it has been recommended by Barduzzi, Dr. Wilson, etc.; but still its value in albuminuria is so little recognised, and its merits in these three and other cases in which I have used it are so marked, that I trust I have made out a case for further investigation.

P.S.—My three cases most probably represent different pathological conditions of the kidney.

Sanitary Science in Paris.

Dr. F. B. Holman (Paris) sends us the following account of his experience of domestic sanitation at Paris, which he assures us is by no means an extraordinary one.

On October 15th, 1883, he took, on a three years' lease, an entresol in a house in one of the avenues leading up to the Arc de Triomphe. Judging by appearances, the house was one of the best in the avenue. A few days after taking possession, he paid a visit to the cellars, and found that the passage was literally flooded with a foul-smelling liquid, which was oozing from the tinette and down the outer wall of the places in which it stood. A tinette is a metal tub—a sort of movable cesspool on a small scale, which receives all the dirty water from the kitchens and the excreta from the water-closets. It is so contrived that it retains the solids, and allows the liquids to flow into the sewers. A tinette ought to be changed at least once a week; but, for the sake of economy, landlords often omit to take this precaution, and leave their tinettes untouched until they think them about full. The consequence of this is, that the strainer is choked up, and the sewage escapes from the tinette, or is retained in the pipes, and escapes through the cracks and joints into the adjacent walls, or escapes from both tinette and pipes, according to the defects in the apparatus.

A few days afterwards, Dr. Holman felt very chilly, and, in the course of a short time, had a severe attack of typhoid fever. He complained ineffectually, first to the concierge, and afterwards to the landlady's son—a medical student. Later on, the concierge admitted that his wife had been laid up with "le fièvre muqueuse" three months after coming to the house. On February 11th, 1884, another flooding took place. Dr. Holman immediately wrote to the sanitary authorities. His letter, countersigned by two witnesses, was posted on the 13th. An engineer, belonging to the Salubrité, called on the 27th. The subsoil being sand, the sewage had by this time soaked in; but the wall was still damp and most odoriferous. An engineer came from the Commission des Logements Insalubres on March 5th, and another engineer from the Salubrité a few days later. The result of their several investigations was that, on May 21st, a letter was received from the Prefecture of the Seine, stating that "the drains are in perfect order; it will suffice to raise the shafts of two of the ventilators to make the house perfectly healthy." Before he received this letter, Dr. Holman had placed the matter in the hands of a solicitor, and requested him to take proceedings to set aside the lease.

A third overflow took place on March 14th. In December, a further effort was made to get the Salubrité to force the landlady to disinfect and clean the underground part of the house. Professor Brouardel kindly helped, also Dr. Du Mesnil, President of the Commission des Logements Insalubres; but all their efforts ended in merely bringing another engineer on the scene—a head man, however, this time. This engineer avowed that he was unable to understand why the sewage came through the wall, and declared that the subsoil did not smell of ammonia, which, to him, was a positive proof that it did not contain anything noxious.

On May 3th, 1885, Dr. Holman left the house, for the safety of himself and family; and, in order to be allowed to remove his furniture, had to deposit in the hands of a third party the whole of the rent for the then residue of the lease, namely, £280. As to his law-suit, the case was put upon the roll in May, 1884, and was pleaded on January 21st, 1886. The Court accepted the evidence of the sanitary engineers, and that of the two architects paid by the landlady, and was so completely satisfied with this testimony that it refused to submit any questions to Professor Brouardel as medical expert. Judgment was delivered on January 28th, when the Court declared that the house had been properly constructed, and that the drainage was perfect, and it dismissed the case, with costs. The sanitary question—the really important question—was not even mentioned.

Bovine Ringworm.

Mr. F. L. C. Richardson (Rhayader) writes: For the information of an "Amateur Shorthorn Breeder," I may state that, a short time ago, bovine ringworm very extensively prevailed in this neighbourhood. It affected the younger cattle principally, and the disease, in most instances, was confined to the head, its favourite situation being around the horns, and in their immediate vicinity. Several patients have lately come before me for treatment, and, in each instance, the disease was contracted from cattle occurring in those whose duties brought them into contact with cattle, such as cowmen and milkmaids. In the greatest number of patients, the disease manifested itself on the arms, but, in a few cases, the neck and chin were affected. In each case I used iodine liniment (which is better than the tincture), and every time with success. I did not test its application to bovine ringworm; but, as it was the same disease attacking man, it follows that it would yield to the same treatment, and, beyond any doubt, was communicated from cattle to human beings.

In conversation with local farriers, I am informed that they obtained good results from the application of creasote and vaseline, and, in some cases, that tincture ferri perchloride effected a cure.

Foreign Degrees and the Medical Act Amendment Bill.

Dr. H. J. Hardwicke (Sheffield) writes: Permit me to call the attention of the profession, and especially holders of foreign degrees, to the unsatisfactory nature of the proposed Medical Bill as regards the admission of foreign degrees to the *Register*. It is proposed to admit to the *Register* only foreign degrees which grant the right to practise in their respective countries. This, Sir, will be a great injustice to all holders of German, Dutch, Swiss, and Brussels degrees, which are quite as honourable as those of America, France, Austria, and Italy, although they do not grant a licence to practise, the State Boards performing this function in Holland, Germany, and Switzerland. The precaution of admitting to the *Register* only such degrees as are licences to practise, may be an useful one for future purposes, but it must necessarily entail serious injustice to those who have obtained foreign degrees in the past. To admit an American M.D. to the *Register*, and to refuse a Berlin M.D., will be to bring social obloquy upon the holder of the latter, perhaps even amounting to professional ruin; for the unthinking public will naturally believe that the State recognises the one, and rejects the other as a fraud. Surely, the least the Government can do is to register all existing foreign degrees, properly acquired by already registered practitioners. This would not be granting the licence to practise to men who hold such degrees, for their British diplomas give them already that privilege; it would be merely protecting them from grave injustice and annoyance, and serious professional loss.

Salicylate of Soda in Tinea.

Dr. E. G. Wake has been very successful in the treatment of tinea tonsurans by an ointment of salicylate of soda. He does not use it when the disease first appears, because the application of liquor epispasticus seems never to fail; but when the patch has spread, he can find no remedy that gives such pleasing results as the salicylate of soda.

The Voice as a Stringed Instrument.

Mr. Charles Lunn writes: It is gratifying to find, in Dr. Grant, one gentleman willing to admit that an instrument created by Nature is greater than those instruments fabricated by man.

Mr. Lennox Browne says: "It is almost unnecessary to say that tone cannot be directed in the fashion here suggested upon any given point, like a jet of water out of a fire engine." Why, then, do seamen use speaking-trumpets? Again, he says: "The vocal ligaments meet before the air has time to meet them." What created the vacuum? Then, again, he says: "If you have a feeling as though it went away from you, and you had to run after it to catch it, it will never be a 'telling' tone."

In 1873, I wrote the original of this: "In false emission, it is not so; the point of resistance breaking loose makes him feel as though he were running after a note to catch it." I did not write of present feelings of a past act in relation to the future, but I wrote of a present feeling during false production of voice.

Mr. Browne, by his support of what the late Mr. Maas, Mr. Maccabe, and others call the "Cuckoo" system, has done incalculable mischief to the art of voice-training.

Dr. Greville Macdonald (Throat Hospital) writes: In the discussion on this subject, the disputants appear to have lost sight of an important point. The essential difference between a string and a reed in the production of a musical note is, that the former continues to generate aërial vibrations after the nitial force has ceased to act, while the latter vibrates only so long as the air is forcing its way through the aperture.

A note produced by the vocal cords stops immediately the blast of air is checked; whereas, if the human voice were a stringed instrument, the cords would, or at least could, continue to vibrate after the expiration had ceased. Even laryngoscopic examination, I imagine, will not demonstrate the possibility of this.

Let Mr. Stoker obtain an ox's larynx, and attempt in any way, other than by a continued blast of air through the trachea, to set the vocal cords in vibration. If, for instance, by twanging one of them, he can produce a musical note, I will consider his argument substantiated.

As for the production of *portamento* notes enhancing the value of Mr. Stoker's theory, let me ask whether the human whistle resembles most a stringed instrument, seeing that it too will emit *portamento* gradations. Moreover, it is quite beyond the facts of acoustics that a string, an inch or so in length, could generate notes extending over two octaves, except, perhaps, by such an amount of tightening as would infallibly rupture the vocal cords.

The Local Government Board Lymph.

J. B. G. agrees with "Nemo" that the Local Government Board lymph is most uncertain. On several occasions, it has proved quite inert; and he prefers to use lymph which he has had stored for six months, and which he never finds to fail. He suspects that it is diluted with glycerine, or something of the kind.

Hibernia quite agrees with "Nemo's" letter, as to the worthlessness of the Local Government Board's vaccine-lymph. He now advises his patients to procure some calf-lymph themselves, and tells them that the resulting action will probably be more severe, but that this will be more satisfactory than having to revaccinate two or three times.

He thinks that the subject is serious, for if, on vaccinating a child three times, we give a certificate of insusceptibility, we have no moral grounds for so doing, if the lymph be, as of late it has been, entirely worthless. In two cases lately, he unsuccessfully vaccinated children twice with lymph from the above institution. Upon obtaining some tubes from a brother-practitioner in the country, he succeeded..

M. Pasteur's Researches.

The following corrections require to be made in Part iv of M. Vignal's Report on M. Pasteur's Researches. They came too late to be made in the Journal of May 1st. Page 809, column i, line 31 from bottom, for "veal-broth," read "chicken-broth;" lines 22 and 23 from bottom, omit "A portion of its fur is cut away from its head," and insert "Chloroform is administered, and;" line 13 from bottom, after "sutures," add "The whole operation is effected in ten minutes;" lines 2 and 3 from bottom, for "antiseptic fluids cannot," read "only a few drops of antiseptic fluid can." Column 2, in description of figure, add "M. Pasteur now only puts a plug of sterilised wool." Page 810, column i, line 49, for "Eiranguliez en vic," read "Eiranguliezenvic;" and omit "nearly." Page 811, column i, line 17 from bottom, for "Desboué," read "Duboué." Column 2, last paragraph but one, last line but one, omit "unless coloured."

On Alcohol for the Medical Staff.

Mr. George Sturge writes:—The public attention has lately been called t distress of King's College Hospital, and a writer in the *Philanthropist* gives of hospitals deeply in debt, from £3,000 to £8,000 each, and seems to think attributable to commercial and agricultural depression. To a certain exte is likely to be correct, but, probably, there are other causes silently opera In many hospitals, a large portion of the wine, spirits, and beer suppli supplied to the medical staff and attendants. Thus, part of the money scribed for the sick and suffering is spent on alcohol for the medical staff this way, in 1884, £218 13s. 7d. was spent in a London hospital; and at B ley, Yorkshire, more was spent on the staff than on patients. Most subscr will, I think, agree that this is wrong and discreditable, and it will be no der, while it exists, they do not subscribe freely.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. T. J. Verrall, Brighton; Mr. T. F. Raven, Broadstairs; Mr. C. B. Gabb, F ings; Dr. H. Snow, London; Mr. R. D. Pedley, London; Dr. A. Hill, C bridge; Surgeon H. Hathaway, Calicut, India; Mr. J. E. Lane, London; W. Clibborn, Bridport; Mr. T. G. Lithgow, Farnborough; Dr. J. L. And Moseley; Mr. F. Bennett, Birmingham; Dr. A. Stewart, Pendleton; Mr McGrath, Gipsy Hill; Mr. J. R. Irwin, Whitehaven; Mr. F. E. Lovegr Nottingham; Dr. T. N. Orchard, Pendleton; Mr. T. Smailes, Honley; Mr. Berry, Wigan; Secretary Obstetrical Society, London; Dr. Hughes Benn London; Mr. A. J. Campbell, West Boldon; Mr. G. Kerbey, London; Dr. M kenzie, Glossop; Mr. R. C. Chicken, Nottingham; Mr. H. L. Wallis, Lond Dr. W. A. Duncan, London; Dr. L. A. Sayre, New York; Dr. Edge, Manc ter; Mr. J. E. Edwards, Chester; Dr. E. T. Tomlinson, Southsea; Mes Gilson and Co., Gosport Dr. F. C. Reeve, Ohio, U. S. A.; Mr. J. E. Gemm Liverpool; Mr. C. G. Ethelson, Balham; Dr. H. S. Purdon, Belfast; Dr. Thornton Parker, Newport, U. S.; M.B.; Mr. E. Nettleship, London; Dr Hale White, London; Honorary Secretary of the Trained Nurses Ann Fund; Messrs. Thompson and Ritchie, London; Dr. Sutherland, Lond Mr. Gurner, London; Dr. J. A. Lindsay, Belfast; Mr. A. E. Weight London; Mr. F. Craddock Palmer, Chalford; Dr. J. Phillips, London; Burnet, London; Mr. J. Charlebois, Joilette, Canada; Mr. A. B. Simp Birmingham; Mr. R. Batten, Gloucester; Honorary Secretary of the M veian Society of London; Dr. G. Beatson, Glasgow; Mr. G. H. Pi Broughton; Mr. R. Clement Lucas, London; Mr. H. P. Dunn, London; G. Stillingfleet Johnson, London; Secretary of the Local Government Bo London; Mr. W. Hind, Stoke-on-Trent; Dr. Cranstoun Charles, London; J. R. Philpots, Birkenhead; Mr. C. E. Shelly, Hertford; Mr. R. Osw London; Mr. T. Crewe, Manchester; Mr. T. Taylor, Braintree; Dr. W Cousins, Southsea; Dr. J. B. Gilbertson, Preston; Messrs. C and F. M. Pal Buxton; Dr. Bailey, Marple; Lady Wilson, Westgate on-Sea; Mr. W. Ad Frost, London; Our Manchester Correspondent; Mr. J. Dixon, Dorking; W. William Mold, North Wales; Mr. G. H. Leach, London; Mr. Fitzger Birmingham; Mr. W. J. Stevens, Brighton; Dr. W. Campbell, Liverpool; E. J. Carver, London; Mr. J. A. Price, Reading; Mr. W. C. Bull, Lond Mr. L. Jeffery, Eastbourne; Messrs. N. C. Duffy and Son, London; Saundby, Birmingham; Dr. W. R. Grove, St. Ives; Dr. W. Collier, Oxfo Mr. A. Wiglesworth, Liverpool; Mr. C. Norman, Monaghan; Mr. E. T. F Birmingham; Mr. F. H. Davis, Dawley; Mr. S. A. Lucas, Liverpool; Tatham, Salford; Dr. J. Cameron, Hendon; Dr. B. Foster, Birmingham; E. Cresswell Baber, Brighton; Dr. Hardwicke, Sheffield; Dr. Aitken, Ro Dr. Lush, Weymouth; Dr. H. I. Fotherby, London; Mr. C. S. Loch, Lond Mr. T. Ryan, London; Mr. Romeike, London; Our Liverpool Correspond Mr. Cadge, Norwich, etc.

BOOKS, etc., RECEIVED.

What is Consumption? By G. W. Hambleton, L.K.Q.C.P.I. London: J. a Churchill. 1886.

Notes on Analytical Chemistry, for Students of Medicine. By Albert J. Ber Ph.D., F.C.S., F.I.C. Second Edition. London: J. and A. Churchill.

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A CLINICAL LECTURE
ON
DEFORMITIES OF THE SKELETON, AND THEIR TREATMENT BY GENERAL AND SURGICAL MEANS.

Delivered before the Students of the Yorkshire College, at Leeds.

By C. G. WHEELHOUSE, F.R.C.S,
Consulting Surgeon to the General Infirmary at Leeds.

ENTLEMEN,—Look through the world wheresoever we will, and specially in those directions in which we, as physicians or surgeons, chiefly see it, we cannot fail to be struck by the many sad and sorrowful scenes which constantly arise before our view. I had almost said ful, sorrowful, and disgraceful scenes, and, even yet, I will venture do so; for, however sad, or however sorrowful they may seem, ey may be, it is rare, so far as the subject on which I am about to ldress you is concerned, that they are the outcome of conditions other an such as are truly disgraceful to our knowledge, disgraceful to ur humanity, and disgraceful to our boasted civilisation.

Sometimes they are such as Nature, in freaks of uncontrollable ort, apparently, and in spite of all our boasted power to guide, and restrain, to cultivate her laws, determines to produce under our very es; and, without appreciable reason, and in spite of all possible exanation, a "General Mite" is born, sufficiently perfect indeed in ery detail for the physiological necessities of existence, and even for physical requirements, but inadequate entirely to meet the uggle, or to wrestle with the dangers and vicissitudes involved in ery-day life.

Or it may be, on the other hand, that she presents us with an treme example of her power in the opposite direction, and declares, the giant form of an O'Brien, that her power is illimitable; and at, to which end soever of the scale her attention may happen to directed, she is equally able to produce examples of perfect workanship and perfect symmetry, as well as to adapt them with pertion to all her laws of physiological action. And, in the majority average imaginations, such examples as these excite only feelings of asant admiration and wonder. We call them "lusus naturæ"; accept them as inexplicable manifestations of a power we are unable gauge; we admire, and we sympathise with them; and, straightly, we forget them altogether, or think of them only as matters ich have given us a certain amount of pleasure or amusement; d then we, perhaps, think of them no more, until our imagination gain excited by a repetition somewhat similar.

would desire you, however, to note that we do not connect with h objects, generally, any associations which are essentially painful. ey are wonderful, they are beautiful, they are unusual,—but they not painful. They are attributable to no fault that can attach to one; they depend in no way on broken physiological or social s, and they are as little amenable to prevention or modification as y are to improvement or to cure; they are freaks of Nature, and ks of Nature only; and, for some inexplicable reason, as they e been permitted to occur from time to time in the past, so, till end of time, and when least expected, they will probably con-ue, now and again, to recur.

Why, then, you may ask, do I associate disgrace with the hideously shapen forms of both men and women, that we see daily in our ets? with the limbs which are not only deformed, but are as unal to the tasks imposed upon them, and are so unsightly, that you should prefer to sink into the ground rather than be compelled to the burden of such an existence through our whole life? Simply use they are diseases, and diseases which are the direct results of bedience, whether inherited, or induced by indiscretion on the of our parents, their ancestors, or ourselves, and of which we efore, whether for ourselves or for them, have just reason both to and to be ashamed. You may wonder that I should speak in is so strong; you may, perhaps, be inclined to think that the uage I use is scarcely justified or called for in the consideration of subject that is to occupy our attention this evening; but, before part, I think I shall have succeeded in convincing you that only is general ignorance largely to blame for their production, but that we, as medical men, are also to blame, in that we, as her chief husbandmen, have allowed the fair face of Nature's garden to be so rankly overgrown with weeds, that are bred only of ignorance.

I am about to speak to you of malformations of the bones; of diseased growth as it affects those structures; of the varying kinds of distortion which are the result; and of the means at our disposal for their prevention, their rectification, or their cure.

Let me introduce the subject by showing you this wretched skeleton, as an example in which not a single bone has grown correctly; not a single one but is unsightly and misshapen, and the aggregate of which must have inflicted upon the poor sufferer to whom it belonged a burden of life-long degradation, of suffering, and of distress both bodily and mental.

An observed of all observers, he or she must have passed through life weighted by a burden inconceivable to you and me, endowed, as we have been, with the perfect symmetry of healthy growth. It is, of course, impossible, within the limits of a single lecture, to enter fully into an explanation of all that has happened in the growth of this skeleton. You see that every bone has yielded easily and freely to pressure or to traction, in whatever direction, and in whatever degree applied. Hence there must, during their growth, have existed an undue softness and pliancy of structure, which must have been attributable to a want of their natural earthly constituents. You will note, also, that there has been throughout an excess, on the other hand, of their animal elements, as is shown most clearly in the thickening and undue solidity of the flat bones, such as the bones of the skull, the scapulæ, the pelvis, and so on. This will indicate that there has been excessive growth on the one hand, accompanied by deficient ossific development on the other; and, if we look to the microscopical aspect of the structure of such a bone during its growth, we see, not a healthy expansion of all its elements, not a healthy and vigorous circulation through it, but, in truth, a very feeble bone, overloaded with connective tissue, and ill strengthened by its normal earthly constituents.

You do not find this condition of skeleton in the children of healthy parents; and, if you will look carefully to the family life-history of such as exhibit these symptoms in the growth of their children, you will learn how sad, and yet how certain, a part "heredity" has played in its construction. I have often made it my business, as part of my duty, to make somewhat full inquiries into the antecedents of the family-history in cases such as these; and I have many times been struck with two points, which have not seemed difficult to elicit that such history has been tainted (1) by hereditary syphilis; and (2) by improper, or, at any rate, unadvisable, marriages.

In my student and early days, such conditions were commonly set down to scrofula, and were spoken of as "scrofulous" diseases of the bones. But I failed, generally, when I looked for them, to find any evidence of such so-called scrofulous disease. I did not find tubercular glands, nor any evidence of tubercular deposits in internal organs. I did not find such subjects especially prone to other tubercular diseases. I did not see them dying, in their early years, of abdominal or cerebral tuberculosis, nor of phthisis or pulmonary tubercular disease in later life; they were not especially prone to diseases of the joints; nor, after death, did I find any tubercular or other abnormal deposits in the bones, whether I looked for it in the shafts, in the expanded ends, or in the epiphyses. On the contrary, I saw them, not indeed growing, but advancing in a misshapen life, endowed with preternatural acuteness of intellect, and, for their proportions, endowed rather with undue physical power; and hence I early rejected the "scrofulous" theory.

To my mind, everything appeared to point with greater probability to syphilis as the fundamental and basic poison of the evil, aided and developed by an environment which, while insufficient to originate the disease, was efficient to light up the fire of which syphilis had previously laid the materials.

Pray understand me. I do not desire you for a moment to imagine that I mean either personal syphilis, or syphilis in only the immediate parentage. I mean hereditary syphilis in its broadest sense, often repeated from generation to generation, until it has become an ingrained element in the individual constitution. Such, at any rate, have been the views I have held ever since I have considered myself qualified to form an opinion, based on personal observation and judgment, on the subject; but I should be dealing unfairly with you if I did not candidly tell you that this doctrine is by no means universally held. There is a general consensus of opinion that some such constitutional taint is at the bottom of the mischief, and, more generally, perhaps, than otherwise, it is attributed to syphilis; but there are those who doubt this theory, and it is right that you should know it. There

are some who avowedly dissent from it; some who, while inclined to believe in it, need yet more convincing proof of its truth than has, so far, come before them. Some eminent pathologists have openly declared in its favour, and teach the doctrine unreservedly; but I do not desire to be dogmatic in the matter. I believe it myself, and I give you my belief for what it is worth; but, at the same time, I earnestly advise you to observe for yourselves, and to rely rather on your own han on the deductions and observations of others.

Within the last few days, Mr. Jonathan Hutchinson, the great modern seeker after the secrets of syphilis, has expressed his opinion on the subject in his recent Lettsomian Lectures, and these are his words (BRITISH MEDICAL JOURNAL, February 6th, 1886, page 241).

"The dependence, or otherwise, of the bone-affections usually known as rickets upon an inherited taint of syphilis, is one which has been much discussed during the last ten years. The late M. Parrot ventured on the bold heresy that all rickets is due to syphilis, and in the course of his investigations he made known to us some very important matters of pathological fact. He had been to a large extent preceded by Wegner, of Berlin, and by Taylor, of New York, and he has since been admirably supplemented amongst ourselves by the investigations of Dr. Barlow and Dr. David Lees. I cannot now venture on more than a very brief summary of the facts which have been elicited. It is now quite certain that, during the second stage of syphilis in infants, that is, from the first to the sixth month, or longer, bone-affections are very apt to occur, and that they are attended by extensive deposits of new porous bone, constituting what have been called bosses on the skull. The long bones also suffer, but more rarely, and they are affected chiefly near to their epiphyses. Suppuration may, in rare cases, occur. These nodes are at this stage always multiple, and usually symmetrical. They disappear under specific treatment, and do not usually recur until some years later. As childhood advances; for example, from the age of from 5 to 10 years, or more, bone-affections of another class are common. The shafts of the long bones now chiefly suffer, and the skull but seldom. Suppuration is very uncommon, and sclerosis, or the production of large osseous nodes, is common. Sometimes the nodes are large enough to simulate new growths. Now, at both stages, syphilitic bone-affections may be, and often are, mistaken for rickets. Many years ago, I called attention to the fact that children with chronic periostitis, producing alterations in the form of the tibia and overgrowth, found their way to the orthopædic hospitals, and were literally treated by splints. These cases are, however, far less common than those in which, in early infancy, it is difficult to tell whether the child has syphilis, or rickets, or both. The simultaneous occurrence of the two is very common, and hence the difficulty which investigators have found in coming to clear opinions as to the relationship between them. We may, however, I think, believe with confidence that there is a pure rickets, dependent upon dietetic causes, which has nothing whatever to do with syphilis. It may easily be the fact that the existence of the rachitic state in an infant, who has also an inherited taint of syphilis, may give a decided tendency to bone-disease, and more especially to affections near the epiphyses. The local pathological product may also be a mixed one, and partake of the combined influence of the two causes. There is no reason why the two causes should not mix."

I read all this with an anxious desire to learn how far Mr. Hutchinson's views accorded with my own; and, after reading all that he has said, with the thoughtful attention and care which every word that comes from the pen of so patient, so industrious, and so truthful an observer as Mr. Hutchinson demands and deserves, I am the more inclined to think that a poison, which can so contaminate the pulp of the teeth, as permanently to arrest the development of those organs, and impress its mark upon them for life; which can so interfere with the constitution of the cornea, as to produce such frequent interstitial keratitis; can pre-ordain the perforation of the palate and other fibrous tissues by ulceration; can hardly fail to affect that greatest of all the fibrous developments of the body, the growing skeleton; indeed, it is incomprehensible to my mind that it should. I do not fail, of course, to remember that the teeth constitute a portion of the exo-, and not of the endo-skeleton, and are, physiologically, more nearly allied to the skin than to the bones; and yet, as all parts of the frame are knit together in one common growth, and no single organ is free from the liability to syphilitic taint, is it likely, I would ask, that the bones alone should escape its influence?

I have sometimes, too, thought I could distinctly weave in with this belief another, namely, that of intermarriage between members of families, in both of which the tainted strain could be traced; or, in which, even though one might be pure and free the relationships of consanguinity might be so much too near as to taint, or, at any rate, enfeeble the constitutional health of the offspring.

When I have noted the care with which breeders of stock, whether of horses, cattle, sheep, or dogs, have selected mothers and sires in their efforts to produce prize animals, and have contrasted it with the reckless way in which they would permit their own offspring to intermarry, to marry into impure strains, and with relationships so near, that the husband and wife might almost as well have been brother and sister; and, lastly, when I have looked upon some such of the sires as rise up at this moment in my memory, I have thought it little wonder that those who "sow the wind should reap the whirlwind"; but, nevertheless, my heart has bled for the product of the whirlwind when it has been my duty to minister at its entry into the world.

In exhausted, or well-nigh exhausted syphilis, I have seen, or have believed that I have seen, one of the primary factors of this terrible affliction. And, at one time, it almost seemed, from the action taken by the Government of these realms, and in the effort made to stay the ravages of this national pestilence, by the passing of the Contagious Diseases Acts, that others had seen it also; and a guarantee appeared to have been given that an attempt would be made to minimise the evil of its hitherto uncontrolled spread among the population. In such salutary efforts as I have seen made by the law to prevent the spread of this foulest of all foul contagia, I have hailed attempts to escape from the thraldom of ignorance, as well as of disease and death, and have seen distant glimmerings of better things to come.

But, gentlemen, the cloud of ignorance is not so easily dispelled or lifted. Life and sentiment have, in this matter, been opposed to each other, and in the struggle, so far, sentiment has conquered, and life has gone to the wall.

An attempt, I regret to say an apparently successful attempt, has recently been made to suppress these beneficent Acts. Effect has been given in response to the persistent efforts that have been made by those who, animated, as I cannot but consider, by mistaken motives of morality, to remove what they, in want of a full appreciation of the evil with which they were contending, believe to be an immorality, and to wipe out these Acts from the Statute Book; and, in their suppression, a blow has, in my opinion, been struck at the progress of civilisation, which is well nigh fatal, and which will become absolutely so if their unconditional repeal should ever follow.

So much, then, for faulty breeding; and next in the chain of evils stand a host of conditions which are even yet more distinctly traceable and chargeable to ignorance—ignorance of the sanitary conditions necessary to healthy life, improper feeding of the young, unsanitary occupations, and such like.

Gentlemen, consider the care with which a gardener, bent on producing a healthy and vigorous plant, will surround it; how he will flood it with light, and warmth, and air; and how tenderly he will watch it, will cleanse it from impurities, will protect it from parasites, and will feed it with soil suitable for its nourishment, its growth, and maintenance; what a study he will make of each and of all these things, and what ceaseless attention he will give to them; and contrast all that with the conditions under which millions of human families are permitted to grow. Not that parents would not, if they only knew how, do all this for their children, and more also; for, if they could only be made to appreciate the absolute necessity of it, or possessed the power to do it, they would not fail cheerfully to make any sacrifices to attain so desirable an end; but here, unfortunately, ignorance again comes in, and mars all the good that lies naturally around their hearts. They do not *know* that it is unhealthy to shut the air out of their houses, or to bar out the entrance of the sun's rays; they do not *know* that it is antagonistic to the laws of healthy life to crowd any number of children into their ill-ventilated, ill-lighted, and perhaps undrained houses; and, until they are taught these things, and taught that they are of more vital importance to them than the more scholarly learning with which, in these days, everyone is anxious, and laudably anxious, to provide children, but little advance or progress can possibly be made.

Now you may ask me, and may very fairly ask me, how does all this bear on the question of the malformations of the bones to which you profess to be drawing our attention, and on the means of preventing or curing them?

They are the very foundations out of which these mischiefs mainly spring; they are the conditions by which, in the main, they are fostered; they are the ignorances which must be eradicated from the minds of the masses before we can either hope to see such diseases prevented, or their virulence perceptibly mitigated in extent.

That such diseases exist at all, is mainly attributable to two great factors; 1, the hereditary incompetency, the direct, unchangeable, and necessary gift of the parents to form truly healthy and untainted blood and bone; and, 2, the unhealthy environment in which the body is placed, and by which it is surrounded during its development, and under the influences of which it cannot attain to perfection. The former cannot be modified; it is one of Nature's most inexorable laws, and one on which the evolution of all things, as they exist, have been brought about and matured. The latter can, and ought to be, and will be more and more, as knowledge spreads.

To those among you who, when your studies are completed, elect to settle in country life—if such a thing ever recur to you at all—this, and similar lectures, may occasionally come back to you as a visionary memory, reminding you of the fact that, in your instruction, such things were neither wholly omitted, nor forgotten; and, from time to time, when some rare example of rickety disease shall present itself to your observation, you may, perhaps, recall what I am saying to you now; for these are cases which will be comparatively unfamiliar to you, and of which you will, probably, only see rare and isolated examples. They are essentially diseases of the town, as distinguished from country life, and are mainly developed under influences of which town life is full; but from which the freer life of the country child is exempted.

As I said in my opening remarks, in the crowded streets of our large manufacturing towns you will, especially if you be strange to them, be rudely shocked by the almost numberless examples of rickety deformity that you will see; while, in the rural districts, you will find that they are almost unknown. And yet, though this may undoubtedly be taken as a general law, there are circumstances, in both kinds of life, which may serve to produce illustrations to the contrary. Thus a rural population may be engaged in unhealthy occupation, such as mining; or may be surrounded by such unhealthy conditions as will neutralise its other advantages, and tend to the development of this form of disease. Or, by care and knowledge, on the other hand, town life may be so robbed of its disadvantages, the house may be made so far healthy, the diet so wholesome, and the family arrangements such, that even large families may be so housed and accommodated, that they may grow up in health, and strength, and symmetry. And, even in the very lowest strata of town-life, the Arabs of the streets, you will often see the most perfect, and, indeed, enviable developments of form and figure; for the subjects, though poor and ill-cared for, are yet not robbed of those greatest of all God's blessings, a life in the open air; the bath of sunshine; and the freedom from wearing and exhausting thought upon which their more highly educated neighbours pride themselves so much, and to which they, or rather those in charge of them, are ready, at all times, to sacrifice the inestimable blessings of health and strength that come of a life of freedom and unfettered activity. These children, at any rate, remain children, and enjoy life as only children can; and a happy elasticity of mind, and activity of frame, aid Nature in her efforts on their behalf, and enable them to grow up as men and women with form and physique such as the most noble and patrician members of society may well envy for their more carefully and tenderly nurtured offspring, and for which they would often give the world.

Of the first of these factors, "heredity," I need say no more; but of the conditions which constitute the second I must say something, if only to indicate the nature of what I mean by unhealthy environment; and, first, I mean the evil influence of an unsanitary and overcrowded house. It is but a few years since house-sanitation was first forced upon public attention, and it was not, in the main, the class of diseases which we are now engaged in considering that brought the subject prominently forward.

Numerous and terrible in nature as are the diseases which we now know to depend upon imperfect drainage, they are not of this order. They are of a more malignant and deadly kind, it is true, but it is not to this kind of imperfections that we attribute the evils of the rickety skeleton.

A close, damp, overloaded atmosphere, the air of which has been breathed and rebreathed, again and again, and by many people, is a much more powerful factor in their production than even the presence of sewer-gas; and, accordingly, we find these diseases where no drains exist, and no perfection of drainage will ever suffice to eradicate them. They will continue to exist to the end of time in the presence of overcrowding, and especially of overcrowding during the night and during the hours of sleep.

The want, too, of sunlight in the house, as well as the loaded atmosphere, has a fatally deleterious effect; and yet it is one which, in the present state of general knowledge, is rather encouraged than otherwise. Light shows up the defects of the house, and, save for necessary purposes, it is banished as far as it can be.

But by far the most important factor of all is the kind and character of the food upon which such subjects live.

The staff of infantile life—sound, unadulterated, and unchanged milk, the one real necessary of their lives—the children of the city artisan can rarely obtain; and, if all the accounts one sees be true, the children of the agricultural labourer will soon, if they are not now, be in an equally sorry plight.

I have recently read a statement, published in the medical journals,[1] that in some, if not in many, of the large dairy-farms of the midland counties, the supply of milk is so scrupulously collected and sent for sale into the towns, that the labourers on those very farms are unable to obtain any for their children's consumption; and, if this be so, and the dearth be permitted to continue and increase, it will not be long before rickets becomes as common a disease in country as it is already in town life.

And, as you see more of life, you will be astounded at the amount of ignorance on this matter of infantile feeding, that you will see mothers as ignorant of what is really right and proper for their infant children as the children are themselves; and food of all kinds, more frequently unsuitable than otherwise, being that which is provided for them. Of their natural food, that provided by a healthy breast, they are often wholly deprived.

In the upper and in the better classes it has, of late years, become only too common for mothers to decline to suckle their infants, that they themselves may be free to follow their own pleasure; and, under the flimsy pretext that they are "unable to nurse," they leave their children to be brought up "by hand," and reared on artificial media, which they are unable to assimilate or digest; but which the mothers seek to flatter themselves into believing to be better for them than that which they, at some personal inconvenience it may be, could provide for them in abundance. And, among the lower orders, the same evil is also too often seen, and is justified by the plea that the necessities of the mill, or the workshop, or the service demanded by the needs of the other members of the family, make it impossible for them to fulfil the natural duties of the mother.

That these evils should exist to the extent they do is, truly, a disgrace to our society and our time, and is, in my humble belief, a prolific source of much of the sickliness, the deformity, the feebleness, and the death of the hosts of children who die in the earlier years of infancy.

It has often been to me a source of infinite sorrow to see the wretched food thus provided as a substitute for the mother's breast. Milk, that has been carried about for hours in the milk-carts of the town, often under the influence of a broiling sun, and churned almost into decomposition, is given them in bottles, which are kept warm by placing them in their cradles, and are left there to become sour and still further decomposed; and this is often all they get for hour after hour. Further, it is sucked through long india-rubber tubes, which cannot possibly be cleansed, and which, if they be split open, are found coated with *débris*, and foul with the development of sulphuretted hydrogen; and then, commonly, they are stuffed with sweetened bread and water to alleviate their unappeased hunger, or to still their pitiful wailings; or they are drugged with so-called "cordials," which, while they lull them to uneasy and unwholesome rest, serve only to hasten their downward path to convulsions and death.[2]

I once saw a young mother feeding her infant, only seven weeks' old, with chopped mutton, in the vain hope that she would thereby make it strong; and she was amazed when I told her that she was only cramming convulsions down its throat!

Gentlemen, was I wrong when I said, in the opening sentences of this lecture, that such things were a disgrace to the education and civilisation of our times?

What wonder that the death-rate of infants under one year, and of children under five, is such a blot on the boasted knowledge of our day? Under such circumstances, can we wonder that the bones should be deformed in their growth; that they should be unable to resist the effects of the traction on them of the muscles, or of the weight that is put upon them; and that the skeleton, instead of assuming and maintaining its healthy proportions and relationships, should exhibit the frightful deformities we often see, and are often called upon to remedy?

[1] See leading article, BRITISH MEDICAL JOURNAL, December 5th, 1885, page 1073, entitled, The Supply of Milk for Village Infants; and also a letter in BRITISH MEDICAL JOURNAL of December 19th, 1885, page 1182, by Mr. S. Montgomery, on same subject.

[2] A singular statement was made at an inquest on the body of a child, at Totnes Workhouse. The child died from being overfed, and the medical man strongly condemned the system of giving infants solid food. The matron stated that, unless the orders of the Local Government Board were to the contrary, she was compelled to allow three ounces of bread each day to all infants.

I could show you photographs of some such as have passed through my hands alone, which would make you cringe with horror, and which have horrified me when they have been brought to me for inspection.

But, while we bemoan the existence of such deformities, and are saddened by the numbers of them them that we see, it is our duty, as medical men, to brace ourselves to see how much we can do for their prevention and cure; and, fortunately, we can do very much, and much more now than was possible in former years.

I do not purpose to enter at any great length into the details of the constitutional treatment by which we endeavour to mitigate the evils of approaching or apprehended rickets. Fortunately, the oncoming of the disease is heralded by unmistakable signals; and, long years ago, Sir William Jenner pointed, with unerring certainty, to the signs of its approach; (1) tenderness of the general frame, which makes the child shrink from playfulness and the romping so generally loved by children; (2) the child's exceeding quietude and "goodness" so long as it is left motionless and undisturbed; (3) its determined efforts to kick away its bedclothes, and to lie naked at night; (4) the profuseness with which, notwithstanding such nakedness, it sweats, especially about the head, whenever it sleeps; (5) the precariousness with which it sleeps, and the uncertainty with which it feeds. Then, next, there come into prominence the disproportion between the cranium and the face, the prominent protuberant forehead, the enlarged and thickened joints, especially the wrists and ankles; and, finally, the general distortion of the bones; the ill-formed chest, the flattened pelvis, the twisted and bent limbs, the weakened and yielding joints; and so the disease becomes established.

Now, if I have been correct in my estimate of the causes by which this condition has been brought about, the general line of its constitutional treatment must be clear and well defined. A healthy home, sunlight in abundance, fresh air in unlimited supply; warm, porous, and light clothing; carefully chosen and nutritious food; and a tonic antisyphilitic line of medication, with iodide of potassium as the salt of life; iron, in some form, as the aid of the staff of life; and mild occasional mercurials as the scavengers of the blood and *primæ viæ*, will effect all that the physician can do; but, when the efforts of the physician fail, or have proved futile, the surgeon is still able to bring further help to his assistance.

Until recent years, such deformities were chiefly treated by forcible bending, by steadily maintained counterpressure, by the persevering use of splints, of bandages, of springs, and such like appliances and mechanical aids. And even yet many such cases are still so treated, and many are so cured. But many which, in former times, could not be so cured, are now also well within the range of surgical treatment.

In those times, the premeditated section of the bone, or of the tendons of the muscles by which they are pulled out of shape, were things unthought and unheard of; and it is only since three great advances in general surgical science became established, that the power which we now possess over them was obtained. The first of these was the discovery of subcutaneous surgery; the second, the discovery of anæsthetics; and third, that of antiseptics; and, since these discoveries have been made, the whole domain of surgery has been extended to an untold area in the treatment and cure of these deformities.

I am not old enough to go back to the earliest days of subcutaneous surgery, but I can remember the time when the orthopædists of the day were hailing with great triumph the possibility of rectifying the deformities of clubbed feet, of twisted and distorted joints, by the subcutaneous section of the tendons of the muscles and fasciæ by which such deformities are often produced; and when the almost painless use of the tenotomy-knife was superseding the horrors of Stromeyer's and Scarpa's shoes, of screw-instruments of various kinds, and of appliances which remind us vividly of the horrors of the inquisition chamber, and when the cure of such deformities was beginning to be looked upon as one of the certain, rather than of the chance, results of surgical interference; and, year after year, I have seen fresh acquisitions made in this department of surgery, until now we fly to the tenotomy-knife as an almost infallible resource. But it is only of very recent years that the possibility of dealing in the same way with the deformed bones themselves has come into practical use, and that we have learned that they may be as safely divided as the tendons by which they are surrounded.

I wish I could pourtray for you the excitement produced by the first cases in which Mr. William Adams succeeded in subcutaneously dividing the neck of the thigh-bone, ankylosed at a right angle to the pelvis, and in thus straightening a supposed hopeless and incurable deformity.

The territory of the joints, too, has of late years been conquered by the surgeon, and operations are now performed upon them which, in my young days, would have been regarded as reckless and unjustifiable; and now, every week of your lives, you will see both bones divided, and joints disregarded in the operations that are in daily use for the cure of malformations of the bones. But, if it had not been for the two other discoveries I have named, this could not have been accomplished; for, without anæsthetics, the boldest of us, or, as the public would say, the most cruel of us, would have shrunk from undertaking them; parents would never have been found consenting to and courting them; and Nature would have failed to carry our subjects through them. And it is only by the beneficent aid of antiseptics that the comparatively much larger wounds we are compelled to inflict could have been kept harmless and aseptic, and have been reduced to the condition of subcutaneous ones; or could have been made with the certainty that they would heal as readily, as primarily, and with as little danger.

I was the first, in 1878, to perform Professor Ogston's operation, in this Infirmary, for the cure of genu valgum. Of my own inspiration, I am free to confess I should never have dared to venture upon anything, as it seemed to me, so full of surgical risk and danger; but, in social communication with the late Mr. Callender, of St. Bartholomew's Hospital, I heard from him of the wonderful success that, in his hands, had been attained by it, and by his kindness I was permitted to accompany him to St. Bartholomew's, and I was there shown and saw him dress a patient, upon whom he had only recently performed the operation; and I was so carefully instructed by him in the details of its performance, and so confidently assured that the proceeding was a justifiable one, that I promised him I would give it a trial. He himself provided me with the necessary instruments, and you know how unfortunately numerous are the opportunities which, in this large centre of surgical work, are presented for its performance.

My first case, undertaken purely as a surgical duty, and performed under an anxiety which, in my long professional career, has rarely been exceeded, was so perfectly successful, and the benefit which resulted was so marked, that I repeated it again and again, until, at last, I began to do it almost without any anxiety at all—almost, but never quite. I could not divest my mind of the fear of a suppurating knee-joint, or of a possible subsequent necessity to amputate a limb which, though deformed and crippled, was not an useless one, and which always made me approach the operation with a shrinking dread.

Neither of these evils, however, I am even now thankful to be able to tell you, ever happened to me; and, often as I have performed it within these walls before I resigned my active surgeoncy, I never saw any really serious consequences follow it. Nevertheless, it was a day of rejoicing with me when I was able to supersede it by the more efficacious, and unquestionably less dangerous, method proposed by Dr. Macewen, of simply dividing the shaft of the femur above the joint, and without risk of interfering with it; and I never take up our operation-list, and read therein, as I do almost every week, of one or more "Macewen's operations for genu valgum" to be performed, without thinking how happy both surgeon and patient ought to feel that the one operation has superseded the other.

Since the day I performed the first Ogston's operation, no fewer than sixty-nine such operations have been undertaken in this Infirmary; and, though Macewen's operation is the newer proceeding, I learn from the records of the institution that it, too, has been performed two hundred and eleven times; and so successful have both operations been, that, out of all this great number, only two have died—one from pyæmia, due to the operation, and one of scarlet fever, contracted after the operation, and during the process of healing. And of other sections of bones for the cure of deformities I could give you a long list (236, which have been done in the same time). Of the satisfaction they have afforded me, I can give you no comprehensible idea; but I can congratulate you, and I do very heartily, that a means of safely effecting untold good, and of mitigating indescribable misery, has, by the experience of the past few years, been placed at your disposal.

COLOUR REACTION OF PHYSOSTIGMINE.—The smallest portion of salicylate of physostigmine, dissolved in a warm solution of ammonia, forms a yellowish red liquid, which, when evaporated over a water-bath, leaves a blue, or brownish green residue, soluble in alcohol, which becomes of a blue colour. This alcoholic solution turns red and fluorescent on supersaturation with acetic acid. The same residue treated with sulphuric acid turns it green, changing to red on dilution with alcohol, the green colour returning on the evaporation of the alcohol.

REPORT

ON THE

CHOLERA EPIDEMIC OF 1885 IN NEPAL;

WITH A SHORT DESCRIPTION OF THE TOPOGRAPHY AND INHABITANTS OF THE VALLEY.

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(*Communicated by the* SURGEON-GENERAL *with the* GOVERNOR-GENERAL *of India.*)

NEPAL Proper, the most important, but by far the smallest, district of the country, consists of a densely populated central valley, together with five smaller surrounding ones—Banepa, Duna Baisia, Kulpu Baisia, Nyakōt, Chitlong—usually considered with it, and to which, also, Europeans are admitted.

The outline of the central valley is irregularly oval. The long diameter running from N.W. to S.E. is about sixteen miles in length, and the shorter from twelve to fifteen miles; the inhabited area, including parts of the sides of the adjacent mountains, may be estimated at 300 square miles. Its elevation is 4,700 feet above sea-level. A circle of hills surrounds it on all sides; their elevation varies from 500 to 4,600 feet above the valley, and from 5,200 to 9,300 above the sea. These hills shut in the valley so closely on every side, that only one narrow outlet remains in the S.E. corner, through which the river Baglunati escapes in its course towards the plains; this river carries off the whole of the drainage of the valley, and the hills encircling it; it flows through the valley from N. to S.E., receives several tributaries in its course, and is joined by the Gishnumati at Kathmandu; the united streams form a broad river, which is partly dry during the hot weather, but swollen to a torrent in the rains.

The surface of the valley is divided into portions of two different levels, the higher called Sars, and the lower, through which the rivers flow, Baisiyas; there is often a considerable difference in the level of adjacent Sars and Baisiyas, as much as 80 to 100 feet. It is most densely populated, besides containing three cities, each formerly the capital of a separate kingdom; there are many towns or large villages, and a great number of smaller villages and hamlets; in addition, the open country is studded with isolated dwellings.

The population is estimated by the Nepalese at half a million, and is probably not far short of 400,000; estimating the area, as I have done, at 300 square miles, this gives the almost incredible number of 1,333 inhabitants to the square mile.

The climate of the valley is most temperate, much resembling that of the south of Europe, with the exception of its far greater humidity. The year has been well divided, by one of my predecessors, into the following seasons: spring, from March 1st to May 1st; summer, May 1st to June 15th; rains, June 15th to September 15th; autumn, September 15th to November 15th; and winter, November 15th to March 1st. During this last season, heavy morning fogs, lasting to 9 or 9.30 A.M., fill the valley; hoar frosts are frequent, and the thermometer sometimes falls, in December, to 27° at night.

A table is attached showing the average maximum, minimum, and mean temperatures for each month in the year, from which the average yearly mean appears to be 61°. During the hottest months, the highest temperature in the house, with doors and windows open, seldom goes above 82°, and punkahs are unnecessary. The average yearly rainfall, calculated from a series of twenty-four years, is 55.9 inches, three-fourths of which fall between June 1st and September 30th. A result of the situation of the valley is the irregularity in the direction of the wind. Observations, at any one point, cannot be taken as representing accurately the general direction over the whole area, currents rushing down the sides of the hills into the valley from every quarter. Through the spring and hot weather, the wind blows pretty steadily from the west; during the rains, the atmosphere remains remarkably calm; what wind there is, blows generally from the S. and and S.W.; during the rest of the year, most often from the N. and N.W. With the exception of the months from February to the middle of June, however, the wind is fitful and varying.

The soil is composed mainly of alluvial deposit, *débris* from the surrounding hills; sand is generally distributed through it, even where it is of the nature of clay, and lime is almost entirely absent. The valley is said, by tradition, to have been originally a lake, from which the water was drained by supernatural agency.

Average Temperature for each Month in the year from 1880 to 1884 inclusive.

	Maximum.	Minimum.	Mean.		Maximum.	Minimum.	Mean.
January	70.0	34.9	47.2	August	86.2	66.7	72.3
February	71.1	36.6	49.8	September	86.1	62.7	71.0
March	80.1	45.2	58.9	October	84.2	54.3	63.3
April	87.9	49.6	63.5	November	77.6	41.8	53.5
May	85.7	57.5	67.2	December	73.1	34.9	47.5
June	87.4	65.3	72.0				
July	88.2	66.8	72.7	Average	81.5	51.3	61.5

Average Temperature during 1885.

	Maximum.	Minimum.	Mean.		Maximum.	Minimum.	Mean.
January	73.2	37.3	47.7	May	88.1	54.2	65.5
February	72.5	33.9	46.9	June	91.7	64.6	73.6
March	84.8	44.2	59.1	July	90.6	67.7	73.9
April	89.1	50.4	64.3	August	90.0	65.9	72.1

The daily mean temperature has been calculated approximately from the mean of the minimum and the 4 P.M. reading.

Average Rainfall from 1880 to 1884 inclusive.

January	1.22	April	1.99	July	12.41	November	0.14
February	1.05	May	3.95	August	13.60	December	0.19
March	1.37	June	8.95	September	6.87		
				October	1.72	Total	53.46

Rainfall during 1885.

January	0.88	March	0.54	May	2.61	July	10.91
February	0.37	April	3.39	June	10.57	August	17.76
						September	8.40

Every available yard is under cultivation; but, to supply the need of so large a population, large quantities of grain are brought into the valley from the hills.

The inhabitants may be roughly divided into two classes: Newars, descendants of the original dwellers in the valley; and Parbatiyas, the descendants of their conquerors. The Newars are industrious and skilful agriculturists; the trade and handicrafts of the country are in their hands. They form a large majority in the towns of Kathmandu, Patan, and Bhatgaon, and, indeed, all over the valley. They are of mixed Thibetan and Indian origin, and, in appearance, of a Mongolian type, with flat features, and short sturdy frames. The Parbatiyas, a general term for hill Hindus, are much less devoted to agriculture or other peaceful pursuits; and the army is composed almost exclusively of them. They have many subdivisions: the true Gorkhali is a tall slightly made man, with Rajput features. The army is, besides, largely recruited from other hill-tribes, particularly from Magars and Gurungs.

Fifteen or sixteen thousand troops are stationed in the valley; this number includes almost the entire standing army; 11,000 are kept at Kathmandu, 2,000 at Patan, and 2,000 at Bhatgaon. During the cold and hot weather, the troops are assembled at head-quarters, and diligently drilled; just before the rains set in, they disperse to their houses on leave, 2,000 or 3,000 only remaining as a garrison. Both classes are, as a rule, well clothed and nourished, and comfortably housed. In the way of food, much more flesh is consumed by the bulk of the people than in the plains; the Parbatiyas eat goats, and th Newars buffaloes; the staple food consists of grain, such as rice, makai, millet, and vegetables, particularly garlic and radishes; the latter are eaten in a form called "sinki," which consists of the roots buried till almost putrid, and then dried. Another food, peculiar to the country, is "hakwa," prepared by allowing rice to partially ferment, and then drying it. Rakshi, a spirit distilled from rice, is largely used by Newars, Magars, and Gurungs, and by low castes of all tribes. The personal habits of the Nepalese are dirty in the extreme; the women appear to wash rather more than the men, and are very particular about dressing their hair.

As regards religion, the Parbatiyas, and about one-third of the Newars, are all Hindus; the remaining Newars professing Buddhism; the Buddhism is, however, much mixed with Hinduism, and caste distinctions obtain among all classes. Although somewhat lax in minor matters, there is no more bigoted Hindu than a Gorkhali; caste in Nepal is upheld by the law of the land, and breaches of its rules are punished severely. One difference between these rules in Nepal and those of Hindustan, consists in the fact that every Hindu, no matter what his caste, is free to drink water from the hand of any other Hindu, Newar or Bhutia; and it would be worse for him, should he refuse to do so without good reason—outcastes, such as Huhters, Dhobies, Chamars, Kosais, etc., are, of course, excepted.

Every stream, every glen, every wood in the country has its mythological story and presiding deity. The shrines in the valley are said to number 2,733, but the centre of all the sanctity is the Baghmati, on which the most sacred temples are built, as well as two of the three

large towns, and many villages; several extensive and well built stone ghats line its banks in different situations.

A most fixed article of faith is the supposition that a necessary condition for the salvation of the soul, is that it should pass away while the body is partially immersed in the sacred river; and it is a common and painful sight to see a dying man being hurried at top speed to its banks—a race with death in which the welfare of the spirit is more considered than physical suffering.

Kathmandu is built at the junction of the Baghmati with one of its largest tributaries. It is said to have been founded in A.D. 723, and, until comparatively recent days, was surrounded by a high wall, with thirty-two gateways; a few of these latter are still standing, but all traces of the wall have disappeared. The filth of the city is indescribable; along each side of the narrow lanes and streets run deep gutters, a foot to eighteen inches wide, filled with a stagnant mass of black stinking mud, into which fæcal matter and every sort of refuse find their way. The stench of the thoroughfares is at all times bad enough, but, on a warm morning in the rains, it becomes sickening. Adults of the lower classes resort to the fields around for purposes of nature, and the better off employ mehters to remove excreta from their houses; some of the refuse of the town also is carried away by Puriyas—a class whose savoury occupation it is to prepare manure; but a very considerable residue remains to perfume the air. The foundations of the city must be saturated with the filth of generations. The streets, most of them little more than lanes, are paved with brick or stone; in the city itself, the houses are two, three, or four stories high, and built of brick; the roofs are tiled, and have projecting eaves. In the suburbs, the houses become smaller, and the roofs are thatched. The general plan of the dwellings in the city is that of a square round a central courtyard, the condition of which is, at least, as filthy as that of the streets; the ground floor is generally occupied by domestic animals, buffaloes, goats, etc., who add their share to the general mess; the interiors of the houses are divided into small low rooms, the floors connected by step-ladders and narrow trap-doors; they are generally overcrowded and ill-ventilated.

The King's Palace stands at about the centre of the east quarter of the city. It is a rambling collection of buildings arranged in quadrangles, of which there are said to be forty, covering a considerable extent of ground.

The water-supply is partly from dharas, or springs, situated in different parts of the city; the palace contains two or three within its precincts; the mouths of these springs are, as a rule, below the level of the surface, and open into a clear square space, the floor and walls of which are paved and faced with stone flags, or brick; steps lead down to the water. Besides these springs, wells are largely depended on. Some people who live near its banks drink the water of the Baghmati; and a few of the more wealthy and pious have their drinking water brought from Baghduar, the source of the river, a distance of ten or twelve miles.

The dead are burned by the better classes, and help is given gratis by the Durbar to poorer caste Hindus, to enable them to dispose of their deceased relatives' remains in the orthodox manner, if they choose to avail themselves of it; but I believe they seldom take the trouble to make the necessary application, preferring, together with the outcaste classes, to content themselves by flinging the corpse into the nearest water-course, after first applying a torch to its lips. When there is little water in the rivers, the body is generally concealed from view by a few inches of sand; but dogs quickly disinter it, and the banks of the Tishnumati and Baghmati are, in some places near Kathmandu, strewed with the *débris* of human bodies in different stages of decomposition.

The population of Kathmandu is about 50,000, mostly Newars, one third of whom are Buddhists, and the rest Hindus.

The above remarks apply generally to the other two large towns, Patan and Bhatgaon. The former is older than Kathmandu; many of its houses are in ruins; and, although the town covers a larger area, the population is fewer, and the town far less prosperous. The bulk of the inhabitants are artisans and artificers, the majority of whom find work in Kathmandu and other places during the day, returning to their homes at night. Consequently, Patan presents a somewhat deserted appearance. The outskirts of the town are particularly filthy, littered with heaps of refuse, in which numbers of pigs wallow. The population is estimated at 30,000, the majority of whom are Buddhist Newars. The town is situated on the south bank of the Baghmati, nearly opposite Kathmandu, and only two miles distant from it.

The third large town, Bhatgaon, is about ten miles east of Kathmandu, at the foot of the hills bounding the valley in this direction, and is said to have been founded A.D. 865. It is reached by a good driving road. The town is built on high ground, and there is good drainage in one direction at least—towards the south side. It is rather cleaner than either Kathmandu or Patan, and presents a much more flourishing appearance than the latter. The population is estimated at 30,000, mostly Hindu Newars.

The Residency is situated on a piece of high ground, a mile to the north of Kathmandu. It is said that the site was originally assigned by the Durbar in 1816, as being the most undesirable spot to be found near the capital; barren, desolate, and haunted; the grounds are now about the most beautiful to be found in India, and thickly wooded. A high road from the hills to the north, leading to Kathmandu, runs through the Residency limits, and along it, during the day, there is a considerable amount of traffic; this road divides the Residency grounds from the lines of the escort, originally two companies of Sepoys, but for many years reduced to one. The lines are well situated, and, having been planned on a liberal scale for 200 men, afford very ample accommodation for less than 100; the huts are old, but in fairly good repair, and are divided into roomy compartments, three of which are allotted to every two men. Originally, the space intervening between the city and the lines was quite clear of houses, but, unfortunately, owing to the spread of the town in all directions, the clear space is being rapidly encroached upon by dwellings. The low land surrounding the Residency limits on the three other sides is, through the rains, under rice-cultivation, and partially submerged. The water-supply for the lines is from a spring just outside the boundary, reserved for the use of the Sepoys, and well under control.

The prevailing diseases in the valley are, fever, typhoid in character, but whether true typhoid or not I have not as yet had opportunities of determining; it occurs chiefly in the towns and large villages. Syphilis is extremely common; it is, in fact, rather the rule than the exception for a man to be infected at some period of his life; I have, however, seen few severe cases. Goître is a most prevalent disease; so is, also, chronic dyspepsia, resulting from a diet of coarse grain and vegetables. Malarial fever does not occur, except among individuals who have been exposed to the malaria of the terai during the unhealthy season.

It is almost impossible to make any estimate of the rate of mortality—I imagine it to be rather high, especially among infants, in the large towns, and low among the rural population, who live in scattered and detached dwellings—the population, there is little doubt, is increasing.

The first recorded epidemic of cholera took place in 1823; in the native history, it is said to have been caused by the influence of Saturn and other planets, "owing to which Mahamai appeared in Nepal, and many persons died from the effects of her evil eye." It appeared first in the East, and spread all over the country, as far as the river Kali, causing great mortality. The disease lasted, in an epidemic form, for two months. The next outbreak mentioned was in 1831; the cause, on this occasion, assigned was that, according to the Gambat era, the year was 1888, and that, to make matters worse, the Raja was in the eighteenth year of his age. Any year in which the number 8 occurs is considered particularly unlucky, so that the calamity was scarcely wondered at.

Epidemics occurred in 1843, 1856, 1862, and 1867. That of 1856 was the most severe; it lasted for several months, and the mortality in Kathmandu was said to have been, for some weeks, 200 to 250 daily.

Records are found, in the office of the Residency Hospital, of a severe epidemic in 1872, and of milder ones in 1874 and 1875; since then, a few cases have occurred every year. There were more than usual in 1882; but, between 1875 and 1885, there has been no severe outbreak. A few deaths, as usual, were reported, both in Patan and Kathmandu, during the hot weather of last year. Very little intercourse with the plains takes place after April 1st; the Nepalese have an almost exaggerated dread of the Terai malaria. There is no doubt that cholera is endemic in the large towns, and appears in an epidemic form every few years.

The summer of 1885 proved, from its commencement, unusually hot; the average maximum temperature, during March, was 4.7°; during April, 1.2°; during May, 2.4°; during June, 4.3°; during July, 2.4°; and during August, 3.8° above the average for the preceding five years. The rainfall during the same months, excepting March and July, considerably exceeded the average. No rain fell on twenty days in May, on thirteen days in June, on seven days in July, and on one day in August; and, on these days, the weather was sultry and oppressive, the atmosphere scarcely disturbed by the lightest breeze.

Cholera first appeared towards the middle of May, in the city of Kathmandu, five or six deaths being reported daily. A large body of troops, about 16,000 or 17,000, were collected in the valley; they had

not been allowed to disperse to their homes for the usual furlough, on account of the possibility of their services being required by the British Government on the north-west frontier. Towards the end of May, the deaths had increased to ten or twelve daily, and some cases had appeared among the troops. A big parade was held on June 1st, after which, acting under advice from the Residency, the Durbar resolved to disperse the men to their homes at once. The rains commenced on the 10th, and, between that day and the 14th, two and a half inches fell. On the 14th, there was a sudden increase in the number of cases, and the total mortality in the city was said to be between fifty and sixty. The disease invaded the Palace, which was at that time inhabited by 300 or 400 people, twenty-five of whom died before evening, chiefly slave-girls and servants. A panic ensued, and the Durbar was quickly emptied of its inmates; the affected and dying were hurried off to Pashpati, a sacred spot on the banks of the Baghmati, and placed in pátis, or verandahs, on the ghats, to await their end; while those of the household, who had up to that time escaped, were divided amongst the Durbars of Patan and Bhatgaon, and other places in the valley. Several cases subsequently occurred among the scattered parties, which served as fresh centres of the disease.

Nothing could possibly have been more unfortunate for an individual attacked than the treatment he received from those around him. As soon as the symptoms had declared themselves, the patient was hurried off to the ghats on the banks of the Baghmati, and laid in some pāti by its side, often on the bare ground, without any bedding or covering of any kind. His friends generally sat by him, sleeping, cooking, and eating their food, until death appeared near, when the moribund would be taken to the edge of the water, and his legs, to the knees, placed in the stream. Occasionally, the watchers becoming impatient, this last ceremony of happy despatch would be hastened, with the object of anticipating the termination of their task. I frequently saw people, still breathing, who had been lying thus partly immersed for perhaps an hour or more. In one case, which had promised well, the patient, a woman, was found in this position, and taken out of the water by H. A. Mahomed Hossein, after she had been in it for that length of time. She lived for three days afterwards, but, unfortunately, died eventually from the effects of the exposure. Some unfortunate wretches, when attacked, were simply brought to the edge of the river, and there abandoned. The dead, in the case of those whose relatives could afford it, were burned on the ghats, in the full view of the sick lying there; but the bodies of the poor and low castes were thrown into the middle of the shallow stream by hundreds, to be pulled again piecemeal to the banks by the dogs, jackals, and vultures, who feasted on them.

The epidemic continued through June with little intermission, the daily mortality in Kathmandu being 50 or 60. On June 29th, after heavy rain had fallen for a week, the maximum temperature in the shade was 96°, and there was an increase in the disease, the deaths reaching 100; that number was reported for a few days. There appeared to be, throughout the epidemic, fewer cases on the days when rain, in any quantity, fell; but a heavy rainfall was always followed by an exacerbation on the next day free from rain.

The first week in July was cooler, and there was a corresponding intermission in the cholera, which soon, however, became as bad as ever, and, during the second and third weeks of the month, it decimated the lower lying quarters of the city; during the last week it rapidly declined, and the daily mortality came down to twenty or thirty. It hung on, gradually decreasing through August, and finally died out early in September.

In the meanwhile, the epidemic had spread to the other towns, all over the valley and through the hills. Cases began to occur about the middle of June in Patan, a large town on the bank of the Baghmati, opposite to Kathmandu and higher up stream, and, in a very short time, the mortality was equally great there. A week or two later, the disease broke out in Bhatgaon, nine miles east of the capital, on a small tributary of the Bagmati, and also up stream as regards Kathmandu. Heavy mortality continued here for some time after the disease had commenced to subside in Kathmandu.

During the first week in July, news was received of cholera at Negakōt, a small town situated in a neighbouring valley to the north-west, twenty-six miles distant from the capital.

The 12,000 Sepoys who were dispersed to their homes early in June on furlough, scattered in all directions except south; very many were attacked, and died on the road, and their head-dresses and accoutrements, the property of the State, were brought into Kathmandu. Judging from hearsay evidence (it must be confessed, not of a very trustworthy character), it seems that cholera broke out in several villages in the hills, consequently on the occurrence of a case or cases among Sepoys who had arrived in the villages from Kathmandu. There is no doubt that the dispersion of the troops was followed by the appearance of the disease simultaneously in several different quarters.

Looking at the course taken by the epidemic, there seems small reason to doubt its spread along lines of intercourse. After Kathmandu, the next place of note attacked was Patan, the nearest large city, and in most direct communication with the locality in which the disease first appeared. Shortly after, the third large town, Bhatgaon, nine miles distant, but connected by a good road, over which there is considerable traffic, was invaded. On this road, midway between the two towns, is a large village called Lenimi, and I obtained evidence, as reliable as any evidence can be in a country where truth is so carefully economised, of the occurrence of cases here before any were reported from Bhatgaon.

The total mortality in the whole valley is said by the Durbar to have been between 9,000 and 10,000. It is possible that, from certain motives of policy, this number may be an intentionally exaggerated estimate; but there are no means of judging, with any approach to accuracy, to what figure the total loss of life amounted; it must have been very great.

From the commencement of the epidemic, frequent and urgent representations were made to the Durbar from the Residency as to the desirability of erecting some sort of temporary hospitals for the reception and treatment of cholera-cases; they were entirely disregarded, as, indeed, might have been expected. At last, the authorities were induced to give the lower storey of a small house in the city to serve as a dispensary, from which medicines might be issued to all who chose to apply for them; but I failed entirely in obtaining any place into which patients could be admitted and treated continuously. A few were seen in their own homes, and a daily visitation was made from June 21st to August 26th to the ghats by the river, and attempts, tolerated by the Durbar, were made to treat the cases found there. The register shows a total of 909 persons either treated in this manner, or to whom medicines were issued from the dispensary. I regret my inability to give any statistics as to the proportion of recoveries; patients were often moved from one ghat to another, and thus lost sight of. It has been found impossible to trace a great proportion of the cases; a large number, however, seen in the first stage, recovered, and many were attended through all the stages to convalescence. On the whole, I imagine the rate of mortality to have been much higher than that usually observed in epidemics in the plains; the conditions were unfavourable, the grossest superstition, ignorance, and indifference, even among well-to-do people, combined against the sick; they lay, for the most part, exposed to wet and chill at night; and it is not, therefore, surprising that, in an excessive proportion of cases of those who had rallied from collapse, uræmia supervened, and carried off the patients. It was with the greatest difficulty that friends could be induced to give rallying patients any nourishment whatever, some prejudice existing against doing so until several days had elapsed after the cessation of the violent symptoms; and I saw many cases die of pure exhaustion, which might have been saved by a little care and nursing—this, owing to the Durbar's refusal of accommodation, I was not able to afford.

A few cases came under my notice of hæmorrhage from the bowel, following cholera as a complication; and in one of these recovery took place.

A Chinese practitioner, who had taken up his quarters in the upper storey of the house given by the Durbar as a dispensary, exercised some unusual methods of treatment. His favourite proceeding was to stick brass-headed iron needles, three or four inches long, into the limbs of his patients, and leave them *in situ* until they were required for some fresh victim; the object was said to be to induce local inflammation and fever.

It is a subject for congratulation that cholera did not invade the Residency lines. The immunity must be attributed to the superior hygienic conditions which obtain there. The risks of infection were great; the disease was prevalent in hamlets and detached dwellings within a few hundred yards of the lines; and corpses of persons who had died from the disease were sometimes found, thrown into nullahs within a short distance.

The Sepoys of the escort were prevented from visiting the city during the epidemic, as were also the servants and followers belonging to the Residency. No further attempt at quarantine was made. A thoroughfare from Kathmandu to the hills runs through the Residency limits. It would not have been practicable to close this, and traffic went on along it as usual. The passers-by, however, as a rule, held no communication with the lines. On one occasion, a man in the first stage of cholera lay down on this road underneath a tree,

and out of sight, nearly opposite the Quarter Guard, and was not noticed and removed until he had been there for one or two hours.

I regret the meagre nature of this report as regards details of clinical or pathological interest, but hope that the circumstances will be considered sufficient excuse. All that was possible, under such conditions as I have described, was to endeavour to, in some small degree, relieve suffering and save life.

HYDROA.

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The term "hydroa" was used by many of the older authors for various vesicular eruptions—for example, sudamina; but it had fallen into disuse until it was revived, by Bazin, for certain cases of bullous eruption which could not be classed under pemphigus or herpes. Recognising that there were such cases, many French, English, and American dermatologists have taken up the term; while the German school, for the most part, ignore it. Among those by whom it has been adopted, there has been a lack of unanimity, hitherto, as to the limits of its employment; by many, it has been used as a sort of intermediate limbo, into which anomalous bullous eruptions may be placed until we are able to classify them properly. It is in the hope of giving the term a more definite meaning that this paper is written. I will examine, therefore, the eruptions designated by this name, and see how many it is worth while to retain; and, first, I would get rid of Mr. Hutchinson's hydroa for the bullous eruptions occasionally seen during the administration of iodide of potassium. The association is a valuable fact, for the knowledge of which we are indebted to Mr. Hutchinson; but surely a special name is not required to designate it. Bazin set up three varieties—Hydroa vesiculeux, H. vacciniforme, H. bulleux. It is now acknowledged, even by Bazin himself, that hydroa vesiculeux is the disease that Bateman described under the name of herpes iris; the term therefore has no reason for existence. The late Dr. Tilbury Fox, however, in an interesting and very instructive posthumous paper on Hydroa,[1] stated his belief in a residue of cases which could still be brought under the name of hydroa vesiculeux, but for which he would prefer the term hydroa simplex. During the three years that I was associated with him, I saw no cases which he called by that name; and, since his brother, who edited the paper, saw several, but considered them either varieties of acne vulgaris or papular urticaria, I think we must pause before accepting such a doubtful species. Hydroa herpetiforme was another of Tilbury Fox's varieties, of which he relates several cases; he considered them merely an exaggerated form of hydroa vesiculeux, there being no line of demarcation between the extreme conditions, while mixed cases are common. It is to this variety that I would draw special attention, but will first discuss the remaining kinds. Hydroa vacciniforme was originally described by Bazin from a single case, but afterwards he says he saw several.

"It appears after exposure to much wind or to the sun. There may be slight malaise or anorexia, and then the eruption comes out on the uncovered regions, such as the nose, cheeks, wrists, hands, and then other parts, including sometimes the mucosa of the mouth. Red spots first appear, on which rounded vesicles, like those of herpes, spring up. On the second day, distinct umbilication is produced; then the contents become opaque, and they resemble a small-pox or vaccine pustule, each dries up into a crust from the centre toward the circumference, and when the crust falls off, leaves a depressed cicatrix; these scars, when numerous, give the aspect of antecedent small-pox. When the sero-pus is abundant, the crusts are thick and yellow, like impetigo. Successive crops prolong the eruption for months, and recurrences from change of temperature are frequent. Arthritic symptoms often precede the eruption."

Dermatologists have long puzzled over this description, and, with others, I fail to recognise the disease intended to be represented. Tilbury Fox thought it was a variety of hydroa bulleux, in which umbilication occurred earlier and more markedly than usual; separate recognition is, therefore, scarcely made out.

Hydroa bulleux, or, as Fox preferred to call it, H. pruriginosum, is a very rare affection, and is attended, at its development, with intense itching, and sometimes preceded by slight febrile symptoms, followed by the formation of small bullæ, not exceeding the size of a split pea, and commencing as vesicles, without any antecedent lesion; they increase in size, with the contents clear at first, but becoming turbid in a few hours. As the contents become absorbed, slight umbilication is produced, and ultimately the bulla dries up, leaving a thin leafy scale, or, if scratched, a blood-crust, or, where many have coalesced, foliaceous crusts, something like pemphigus foliaceus; when these are thrown off, a hyperæmic, subsequently pigmented, surface is left. The eruption comes out in a succession of almost continuous crops, the bullæ being discrete, or grouped irregularly, but never in circles; it may be partial or general, but with free intervals, affecting even the palms and soles, but more abundantly in some parts than others; thus, in the case alluded to, the back, head and face were only slightly affected, while the front of the trunk and limbs were thickly covered. The eruption may continue for many months, and tends to recur in subsequent years. The only constitutional disturbance is such as may arise from want of rest, and from the constant itching, while the secondary consequences of long continued scratching may result.[2]

But the disease does not always begin with bullæ of the preceding characters; thus, the text-case began with a circinate erythematous eruption, like that described under hydroa herpetiforme;[3] in another, bullæ of the ordinary pemphigus type developed on the feet, and the small bullæ came out subsequently; and, on the other hand, G. Fox, of New York, published a case[4] which began as an herpetiform eruption, and lapsed into a pemphigus. A variety, according to Tilbury Fox, consists of outbreaks of small bullæ, not very distinct, which leave behind small red indurated boutons, with puckerings in towards their centres; the eruption runs a very chronic course, and is intensely pruritic. Tilbury Fox regarded these as the pemphigus pruriginosus of Willan and Bateman, but the bullæ are smaller than those of pemphigus.

Since we shall find the same features of circinate erythema, bullæ on the feet, and the inclination to vesicles on the one hand, and to bullæ on the other, but always with itching, in hydroa herpetiforme, it is certain that the two are closely allied, and probably hydroa bullæ is only a rare phase of hydroa herpetiforme. They are thus all reduced under one head only, which we have now to consider.

Hydroa herpetiforme (Fox) is the pemphigus pruriginosus of Chausit and Hardy, the herpes gestationis of Milton and Bulkeley, the herpes circinatus bullosus of Erasmus Wilson, and the dermatitis herpetiformis of Duhring.[5] It is the most important member of the group, and was originally, as one of its names signifies, supposed to be limited to pregnant women. Thanks to the able papers of Fox, and, more recently of Duhring, dermatologists have begun to realise that this is by no means the case, and I shall bring forward additional proofs of this, by the cases to be presently narrated. Duhring does not appear to recognise that Fox's cases, related under hydroa herpetiforme, are the same as his dermatitis herpetiformis; and I have adhered to Fox's selection, because he was the first to give the disease a comprehensive designation, and because it is evidently so closely allied to hydroa bulleux, that it would be unphilosophical to treat them as separate diseases. As no fewer than eight cases have come under my notice within the last twelve months, the disease is probably not so rare as it has hitherto been considered, cases having been regarded as some variety of herpes, pemphigus, or erythema, according as one or other feature was prominent in any one case. I will relate, first, a typical instance of what would be usually described as a herpes gestationis.

Case I.—Emma H., aged 34, came to the hospital on September 24th, 1885. She was rather thin and pale, but otherwise healthy, except for the eruption. It commenced in 1874, in the third month of her second pregnancy, and continued throughout; three days after her confinement, she had a severe exacerbation, but from that time it began to get well, and was gone in three weeks. The second attack began in the third month of her third pregnancy in 1877; it followed the same course, except that, after the same exacerbation, three days after her confinement, she continued to have attacks, of diminishing severity, every fortnight for three months. The present attack began in the third or fourth week of her fourth pregnancy, about a week ago. The general history of all the attacks

[1] *American Archives of Dermatology*, vol. vi, 1880, p. 16.

[2] The description is taken from the case of a man, aged 32, which I had the opportunity of observing all the time he was under the care of Dr. Tilbury Fox. It is Case vii in his paper.

[3] Sangster and Bruce on a Rare Form of Itching Vesicular Eruption (?) Hydroa Bulleux (*Medical Times and Gazette*, January 5th, 1884).

[4] *Archives of Dermatology*, July, 1878, p. 211.

[5] Dermatitis herpetiformis (*Journal of the American Medical Association*, August 30th, 1884), and several subsequent papers, well worthy of study by those interested in the subject; but as Fox was the first in the field, I hope Duhring will give way as to the name, and secure uniformity in nomenclature.

was that each began on the flexor surface of the forearms, or on the feet, preceded by "dreadful itching"; then red, slightly raised roundish patches, about half an inch in diameter, appeared; they enlarged, and, perhaps, coalesced with their neighbours, and sometimes extended all round the arm in three days. A bulla soon formed on the patch, but the redness still spread; and, though one part might get somewhat better, while others formed, it did not heal, and might ultimately come up afresh. Every fortnight there was an exacerbation, and then a gradual diminution in the amount of fresh eruptions. When at its worst, as at the end of pregnancy, or just after the confinement, it covered the whole of the trunk, the thighs, feet, and ankles; but the legs, below the knee, were less affected, and the face and neck only slightly; but it was all over the arms, forearms, and palms, and each of the hands. On the buttocks, it was at its worst, with blebs; but, on the upper part of the trunk, it was only in red patches, with or without small vesicles. There was a tendency to form rings of vesicles or bullæ on the red patches, sometimes with a central bulla; and a brownish stain was left where the eruption had been. The itching was very intense until the bulla formed, and was then replaced by pain and tension, "like a gathering," which was much relieved when the fluid was evacuated. On the feet, there were bullæ on the dorsum, but only redness, with itching, on the soles. When she was seen by me, the eruption had been out about a week. It occupied the lower half of the forearm, and the back of the hands and fingers, was very abundant on the abdomen and thighs, with a few spots on the legs, and was commencing on the borders of the feet: it corresponded in character with the preceding description. A week later, a fresh crop of erythematous patches appeared on the arm, apparently composed of an aggregation of papules, of the size of a large pin's head; they were in distinct circles, and, with a lens, showed commencing vesication. The patches were spreading peripherally, with vesicular border. The patient returned home shortly afterwards.

The next case afforded a very good demonstration that the disease was not necessarily connected in any way with the uterus.

Case II.—An unmarried lady, aged 48, was brought to me by Dr. Cox, of Kensington, on December 19th, 1884. She was a somewhat delicate and anæmic woman; the catamenia had stopped for some time, and she had no uterine troubles. She had been a good deal exhausted by anxiety, and by nursing a sick sister in the summer; and had suffered from time to time from malarial fever, contracted in the Mauritius twelve years previously. For this she had been treated with large doses of quinine, but was not taking this when the eruption appeared.

In July, she had a slight attack of this eruption on the left thigh, which soon yielded to four-minim doses of liquor arsenicalis three times a day, and a carbolic acid lotion. The present attack began about three weeks before I saw her. She first noticed a large patch of transitory urticaria on the left thigh, and she had had some wheals since. Then the present eruption began on the front of the left thigh, then on the flexor surface of the wrists, and then on the hips and the lower part of the abdomen. It was chiefly in those positions when seen, but there was a little on the outer side of the leg, just below the knee, and on the arms, chest, and neck; there was a good deal on the buttocks, and a comparatively small amount on the backs of the forearms and thighs. Its distribution was roughly symmetrical, with more on the left side than the right. The itching was most intense; but she was able to get sufficient relief to obtain sleep by taking a warm bran-bath the last thing. The eruption began with intense itching, followed by the development of a convex bright red papule, about a quarter of an inch across, which enlarged into a patch, half an inch or more in diameter; this cleared up in the centre, which became of a purplish hue, and the centre increased *pari passu* with the enlargement at the periphery; in many, a bulla formed in the centre and papules, which became vesicular, developed around as the circle grew to the size of a crown-piece, and, coalescing with its neighbours, formed large irregular patches, many inches in diameter, which covered a great part of a limb; isolated lesions existed in the neighbourhood in all stages. They did not come out in crops, with free intervals, but fresh papules continually appeared. When she was seen by me, all the above phases were present in different parts of the body; in some were bullæ, a quarter to three-quarters of an inch in diameter, grouped in a more or less circular arrangement, with a bulla in the centre; at others, bullæ were scattered between, irregularly, the contents being clear or only slightly turbid; whilst in other parts, again, the erythematous element predominated, forming large papules, patches, circles, or segments of circles. Where the eruption had cleared up entirely, purplish red stains marked their previous site. Although the itching was great, the lesions of scratching were not prominent. Regarding the eruption as a vaso-motor neurosis, I recommended arsenic to be given in the form of Fowler's solution, well diluted, and pushed gradually to the extreme extent of her tolerance, and a lotion of liquor carbonis detergens (two drachms to eight ounces of water), as a local application to allay irritation temporarily, and alkaline and bran baths as before. Quinine was also to be given for any return of the malarial symptoms, if the arsenic did not control them. In response to my inquiries, Dr. Cox kindly informed me, on July 31st, 1885, that "the treatment recommended (arsenic and quinine) had been very successful, the arsenic appearing to have had the greatest share in the cure. No improvement was perceptible until the dose reached eight minims three times a day; and the dose was increased to ten minims and maintained for ten days, the eruption steadily improving, and by this time was nearly well; then, as the gastric irritation was considerable, the arsenic was suspended for a fortnight, when a few small vesicles and some itching having again recurred, the medicine was resumed for twelve days, and there has been no need to give it again; for, although malarial symptoms have recurred occasionally, the eruption has not reappeared, but brown spots and patches are left as a record of its existence."

The following case occurred after pregnancy, and although possibly due to the condition of the uterus after parturition, was more probably due to the nervous depression from worry over the loss of the child, combined with exposure to noxious drain-emanations.

Case III.—A. G., aged 21, married, was admitted into the hospital on January 24th, 1885. She was a strong, healthy-looking woman, and was confined on November 10th, 1884, and the child died on December 5th, since which she had been much depressed in mind. She had been exposed to the emanations from bad drains, while on a visit a week before Christmas, and felt unwell when she returned home on December 22nd; but there was no eruption until January 5th, when she noticed a rough chapped-looking patch under the jaw, on the right side. It extended over the face, chest, back, and arms; a week before admission, a "little blister" came on the face, and others gradually broke out over the neck, behind the ear, and then over the chest, arms, and back.

On January 24th, there was extreme hyperæsthesia of the skin, of the face, neck, and back; the slightest touch making her start. The eruption occupied the sides of the face and neck, mostly on the neck, extending from the scalp to the sternum; at the sides of the sternum were vesicles, of the size of a split pea, surrounded by a red areola. The rest of the eruption on the face consisted of patches of small red convex papules, not larger than a millet-seed; there were some patches of dried skin on the neck, where previous bullæ had burst. The back of the neck was nearly well, being only rough and dry. There was a slightly red papular rash, tending to become vesicular over the back, as far down as the inferior angle of the scapula; and over the left latissimus dorsi were a few blebs, of the size of a sixpence, while on the right side there were only the marks of them. The eruption extended down the back, terminating with circular well-defined patches. There was a papular eruption over the sternum and left breast, and some round the right nipple; and there was a band of eruption round the abdomen. In the axillæ the eruption was papular, the papules being somewhat larger than elsewhere; there were also some papules on the flexor surface of the forearms, but scarcely any on the back. There were some small blebs over the left deltoid, but none on the right. On the backs of the hands were some patches, and on the outer border of the right some red raised rings. The papules were of an erythematous character, convex, and formed groups which coalesced, and formed circles or segments of circles as they enlarged. On these the vesicles or bullæ formed in some places, or they might be formed from a single papule, which she compared to a gnat-bite; when it reached the size of a pea, it began to subside in the centre, and at the same time extended peripherally, thus forming rings or gyrate patches. The border of these might become vesicular also. There was itching as well as hyperæsthesia on the erythematous part of the eruption, but the itching diminished when vesicles formed, but remained tender. On the whole, the eruption was symmetrical, but not rigidly so.

On January 29th, the eruption was spreading down the arms in the erythematous form; and, on February 2nd, there appeared, on the middle third of the back, on each side, erythematous patches arranged in parallel lines, in the direction of the lower dorsal and upper lumbar nerves. The heat of the fire or bed brought out an erythematous eruption quite suddenly on the palms and forearms, which often disappeared almost as fast as it came.

Very soon, a case appeared to show that the eruption was not confined to the female sex; and while he was still under treatment, another male patient presented himself.

Case IV.—Samuel P., aged 45, railway porter, came to the hospital

February 18th, 1885. He was a tall spare man, with venously congested face, and more or less venous dilatation elsewhere, especially in the arms and hands, where the valves of the veins were plainly perceptible, even on the palms, but with no œdema anywhere. The heart's impulse was weak; the first sound at the base was weak, but there was no murmur. He suffered from dyspepsia, and was easily breathless, but otherwise complained of nothing except the symptoms due to the eruption, which commenced three weeks before, without apparent cause, as red patches on the abdomen, which itched intensely from the first. Bullæ appeared three days after the commencement of the rash, and almost every day afterwards; they were, however, always confined to the feet and ankles, and were not preceded by erythema. The erythematous part of the eruption was most abundant on the abdomen, and on the back below the scapulæ; it was, however, fairly abundant on the front and outer sides of the thighs and buttocks, and, to a less extent, on the outer part of the upper third of the leg, and flexor surface of the wrists. The inner side of the thighs, and all the leg except the parts mentioned, were free to the ankles, where the bullæ began. On the abdomen, the aspect of the eruption was that of an exudative erythema, but with intense itching. It consisted of patches slightly raised, with bright pink margins, while the centre was of a purplish hue, and level with the rest of the skin. Evidently the eruption had spread centrifugally, leaving purplish staining. The shape of these patches was that of circles, or segments of circles, for the most part; but it was also in flat papules, about a quarter of an inch in diameter, arranged irregularly in groups. He was put upon liquor arsenicalis, after a preliminary treatment for dyspepsia; but, although the dose was increased to 10 minims three times a day, he still continued to have bullæ occasionally on the ankle, and erythematous eruptions frequently on the abdomen and chest; each attack, however, lasting two days instead of a week. On May 6th, therefore, the treatment was changed to tincture of belladonna, three times a day, subsequently increased to 25 minims. Under this, he gradually improved; the attacks became milder, and occurred at longer intervals; and, on August 12th, he reported himself as quite well. For the temporary alleviation of the itching, a lotion of liquor carbonis detergens (℥ij to ℥viii of water) was used; it always gave relief, and was continued throughout.

Case v.—Henry N., aged 29, postman, came to the hospital on March 4th, 1885. He was a well built, healthy-looking man, and said he was in perfect health. He did not remember having had a chill, and could suggest no cause for the eruption, but thought it came out worse in cold winds. The eruption began four or five weeks before, on the flexor surface of the left arm; then it came on the left leg, then on the trunk, and then on the right leg and arm. It then extended more or less over the whole body-surface, except the scalp, but was most abundant on the front of the trunk, and the extensor surface of the limbs, but was more on the thighs than below the knee. It consisted of irregular patches, mostly about half an inch in diameter. Except where they had coalesced, they tended to subside in the centre, and form irregular circles, very slightly raised above the surface, of rose-pink tint, not completely disappearing on pressure. On close inspection, they appeared to be composed of very slightly raised papules, and the papules were scattered, as well as in groups. On both palms, vesicles had formed, the majority about one-eighth of an inch in diameter, but a few had coalesced into irregular bullæ. When left alone, the fluid was absorbed, leaving only desquamation. On the trunk, the eruption, as a whole, presented a mottled pink aspect; there was intense itching, especially at night. I only saw him twice, as he speedily recovered with five-minim doses of liquor arsenicalis, three times daily, and lotion of liquor carbonis detergens.

If the descriptions of these cases be compared, it will be seen that Cases iv and v differ very considerably from Cases i and ii; for, while the bullous and vesicular elements were the conspicuous part of the disease in the first two, they were localised to one region in the last two cases, and Case v was only just recognisable, and, had it followed immediately on Case i, I must confess I should have failed to appreciate that they were only different phases of the same disease; but Case iii is most valuable as a link to connect the two ends of the chain. It is this immense variety in the amount of development of the vesicular element on the one hand, and of the erythematous on the other, also in the size of the bullæ, and the condition of the contents, whether serous or purulent, which has, until quite recently, prevented these clinical variations from being united under one name.

An attempt has been made to define hydroa as a bullous eruption, where all the bullæ are of a variable but small size, from a millet-seed to a pea; this is true for only a certain proportion, as the following case, which first came under my colleague, Dr. Barlow, to whom I am indebted for permission to use the notes made while under his care, will demonstrate.

Case vi.—James C., aged 18, came to University College Hospital for admission on July 25th, 1885. In the first week in June, he had a severe attack of sore-throat, to which he had been subject for the last four years; at the same time, he had a papular rose-red rash on the abdomen, which lasted for days; the throat soon recovered, and, with the exception of dyspeptic symptoms, to which he was subject, kept well until the end of June, when a rash appeared on the chest, with raised, dark-coloured margins dotted with pale pimples; these itched unbearably at night, and the next morning were replaced by small blisters; the itching subsided, the part feeling stiff and sore. The rash followed the same course on the inner side of the arms, thighs and legs, hands and feet, including the palms and soles; but, on the face, blisters appeared, without antecedent rash, on each cheek, the orbit, and side of neck; from the centre of the chest, the eruption extended to both sides, and down over the abdomen.

The patient's general health had been good hitherto, except his liability to tonsillitis. His mother was subject to rheumatic gout; his father died of paralysis; two brothers and three sisters were in good health. On admission, he was a fairly nourished, well developed lad; his internal organs were all sound, his tongue slightly furred, and tonsils not enlarged. The following description of the eruption is by Dr. Barlow.

"On both forearms, on both surfaces, are large bullæ, about one inch in diameter, containing sulphur-yellow clear fluid. On the dorsal surface of the hand are numerous small bullæ, with limpid fluid. On the arms are many scales, left by the collapse of bullæ. On the point of the elbows are distinct semicircular erythematous patches, partly united to one another, and becoming fused together into an irregular rounded figure. There are many semicircles up the right arm, and some also on the bend over the left elbow. Over the trunk are many irregular scabbed areas, following the lines of the margin of the thorax; and just above it, and coming down on each side, and uniting just above the pubes. There are several brownish-red round stains left on each side of the sternum. On the face, there are many scabs on the front of the neck and on each cheek, evidently collapsed bullæ; on the back of the neck, there are many semicircular patches, with a few scabs. Above the nates are some large erythematous patches, with numerous minute vesicles. On the front of each knee are some scabs, a few bullæ, and erythematous patches, likewise on the ankles, and there are some very marked bullæ behind the heel. There is slight glandular swelling in the groin."

The mucous membranes were not affected. A few fresh vesicles appeared on the abdomen and eyelid on July 30th; and on the 31st, a circinate eruption, consisting of circles three-fourths of an inch in diameter, appeared on the soles of the feet on their borders, but more on the right than the left; at this time, he was febrile, and the temperature reached 102.2°, but soon fell again, the febrile period lasting only four days. There was no cause other than the eruption to account for it. Vesicles, which enlarged to bullæ, sometimes one inch and more in diameter, and once in circles of small vesicles, appeared in varying numbers, every day or two; vesicles appearing in various parts, including the hard palate, the tongue, on the under surface and border, where they only lasted a day. Circinate erythema also came out on the buttocks, thighs, and abdomen, also lasting only a few days. On July 31st, he was ordered three-minim doses of liquor arsenicalis, subsequently increased in frequency, but not in dose, and the eruption began to diminish. On August 25th, he was transferred into my ward; the arsenic was continued in increased doses, fresh lesions ceased to appear, and he left the hospital, apparently well, in September.

After spending three weeks at the sea-side, and gaining health and strength, he returned to his employment, and almost immediately the eruption reappeared, becoming daily worse, until he was readmitted on October 15th, under me, worse than ever, and greatly prostrated. The eruption was chiefly on the lower limbs, and the blebs were, in some places, very large, from one inch to an inch and a half in diameter, and the contents were sero-purulent, and even purulent. Some also came out on the soft palate and tonsils, and he felt as if they were in his œsophagus; the itching and feeling of tension of the skin was very great, but there was no erythematous lesion until November 11th, when he had an outbreak of circinate erythema on the abdomen, not followed by blebs in this position, though they continued to appear daily elsewhere. Soon after this, improvement occurred, apparently the result of treatment; and, though bullæ still occurred daily, they were not so large, the contents were clear, and they were no longer in groups, while the itching gradually ceased. Slowly he gained strength and flesh, the eruption became less and less, and, on December 10th, he left the hospital well, and I have not seen him since.

At first (October 19th), he was treated by hypodermic injections of $\frac{1}{120}$th of a grain of atropine daily; but, as it had no good effect upon the eruption, five-grain doses of quinine every four hours were given on October 24th, but the hypodermic injections were not stopped until November 4th. The quinine, however, with occasional aperients and cod-liver oil, were continued until the end, but no improvement took place until the atropine was given up.

The very antithesis of this is one I saw recently at the Children's Hospital, Shadwell, under my colleague, Dr. Donkin, who kindly allows me to make use of it.

CASE VII.—Elizabeth T., aged 13, was admitted into the East London Hospital for Children. One month before admission, she was attacked with acute rheumatism, which left her with an apex systolic murmur. A week before the acute rheumatism, she had an eruption exactly similar in position and characters to the present attack, which began, August 19th, on the hands. It now occupied the forearms, both on the extensor and flexor surfaces, being most extensive on the flexor side on the ulnar border; there was a little on the back of the hands, but none on the palms. The other positions were the buttocks and the back of the thighs, the lower third in front; it extended over the knees, and for two inches beyond. The popliteal spaces were almost free, but the rash was abundant on the calves and down to the knees, but more upon the left side than on the right. In front, it was on the lower two-thirds of the legs, and upon the dorsum of the feet; the soles were free. The sides of the face behind the malar eminence were slightly affected. The eruption consisted of patches of erythema, irregular in shape, and varying from an eighth to a quarter of an inch in diameter, except where they had coalesced into irregular areas. All the patches were surmounted by minute vesicles not exceeding a pin's head in size, which tended to form groups of from two to five in number, but were single in some places. In one or two parts, there was a tendency to crescentic grouping of the patches, but this was not true of the eruption as a whole. The vesicles were pearly and glistening, and their contents were quite clear. There was slight itching at night, but not enough to keep the patient awake. On August 21st, it was noticed that the patches of erythema had spread and coalesced over very large areas, but infiltration was less marked, while the redness was of a much deeper tint; the vesicles were still present; the rash was more abundant on the back of the hands, and consisted of many closely set discrete papules, surmounted by small vesicles. On the 22nd, the general characters of the rash were much the same, but it had spread so as to include all the legs, arms, and face. She was ordered a saline aperient, and, on the 23rd, the rash had faded almost entirely, and the vesicles were drying up; and, on the 24th, there was no redness, and only a little desquamation to mark the sites of the vesicles. The rash had, therefore, lasted five days only.

This case resembles the others in the herpetiform grouping of the vesicles, but differs from them in the uniform small size of the vesicles, the eruption being thickest over the articulations, the very slight itching, its apparently close connection with acute rheumatism, and its short duration; in all of which points it is most in accord with erythema multiforme, though Bazin claims for hydroa a strong arthritic relationship, which I must confess I have not been able to trace in most of my cases. The case appears to be a link between erythema exudativum and hydroa, and may be considered as a herpetiform vesicular erythema. That the size of the bullæ is an inconstant feature, is demonstrated by their variation at different periods of eruption in the same individual, of which the following unpublished cases of Dr. Tilbury Fox's, which I observed throughout its course, is a good example.

CASE VIII.—William P., aged 40, baker, was admitted into University College Hospital on October 24th, 1878. His left leg was useless, from infantile paralysis, but his physique was otherwise good. He was in good health until February, 1876, when, after a good deal of trouble and anxiety, an eruption, of circular erythematous patches, appeared on the abdomen, which rapidly spread at the margins over the chest, till the circles were eight or nine inches in diameter, and were accompanied with a good deal of irritation, each patch continuing for about a week. Very soon afterwards, groups of six or eight vesicles, from a pin's head to a pea in size, appeared on the patches. Some months later, the patient took a course of waters from a mineral spring in North Wales, which appeared to aggravate the eruption, vesicles as large as a shilling coming out. Then the eruption extended to the back, and, after discontinuing the waters, the vesicles again became small. During the last two years, the whole body had been more or less involved. It had been out more in spring or autumn, and was invariably worse after excitement, sudden changes of temperature, or indigestible food or drink. When the eruption first appeared, he lost weight, and felt "out of sorts" generally; but now he felt very well, except for the itching, which was worse at night, or when he was warm. On admission, the eruption was pretty generally distributed on the arms and legs, abdomen, chest, and neck, and, to a less extent, on the face and back. All parts of the body were studded with white spots, which marked the site of previous lesions. The eruption then appeared as irregularly outlined vesicles, of small size, generally without any areola, and were most marked in the neighbourhood of the beard. The rest of the body was covered with scabbed patches, the result of the irritation of the eruption. On November 2nd, a fresh crop of vesicles, from a millet-seed to a quarter of an inch in size, except where they had coalesced into irregular bullæ, broke out on the chest and neck. All the vesicles were more or less grouped, and some of the patches were very thickly distributed, and varied much in diameter. The patient attributed the outbreak to the weather changing, and becoming much colder. No further notes are recorded concerning him, except that he left the hospital relieved on November 13th, 1878.

There can be no doubt of the similarity of this case with the others; but the diagnosis made at the time was that of hydroa bulleux, and it is another point in favour of the close alliance of the two forms. Another alliance that Duhring[6] claims for this disease is with the impetigo herpetiformis of Hebra, which he regards as only another phase of the eruption we are considering.

That, in addition to the lesions of hydroa herpetiforme being erythmatous, vesicular, and bullous, they may also be pustular, I do not doubt. An occasional pustule I have often seen; and, in the relapse of Case VI, the eruption was generally pustular for some time. Duhring[7] records a case with pustules, and calls it impetigo herpetiformis. Judging from the perusal of this case, I cannot acknowledge its identity with Hebra's disease of the same name, though I quite see that the case related is a phase of hydroa herpetiforme which it resembles in every particular, except that many of the lesions were pustular. On the other hand, the impetigo herpetiformis of Hebra differs in many ways from our disease. It resembles it in the pin's head-sized pustules being formed in groups, often circular, while the patch enlarges peripherally, and dries up in the centre; it differs from it in the total absence of erythematous, vesicular, or bullous lesions, the eruption being pustular from the first, without previous eruption, and there being no pruritus; while the general symptoms are extremely severe, and have ended fatally in all but one case. I would not lay much stress on the size of the pustules, though, in all the Vienna cases, they have been small and of uniform size. Admitting that it is possible that the same neurotic disturbance may have such very different results, on account of their occurring in a septicæmic organism in impetiginous cases, I submit that the proof that they are of the same nature is inconclusive at present; and that it is wiser to wait for further evidence before lumping them all together. It is interesting to note that, while the first eleven cases were in pregnant and puerperal women, last year a case occurred in a young man at Vienna, in whom *post mortem* purulent peritonitis was found.

The preceding considerations appear to me to admit the following conclusions. 1. There is a group of diseases distinct from pemphigus, herpes, and erythema exudativum, whilst sharing some features with all of them, for which the term "Hydroa herpetiforme"[8] is convenient, and has the advantage of being already partially adopted. 2. It would give greater clearness to the term hydroa, if it were restricted to diseases of the type discussed, and not made to include diverse anomalous bullous eruptions. 3. The features which characterise the group are the presence, at some period of their course, of erythema, chiefly, but not exclusively, of a circinate type, of vesicles, bullæ, or pustules, with a tendency to group herpetiformly. These different elements are present in varying ratio to each other, now one, now another, predominating and overshadowing the other; but the disease is always accompanied by intense pruritus, and the eruption tends to undergo evolution and involution at the periphery and centre respectively. The disease generally runs a long, but ultimately favourable, course, with frequent exacerbations and remissions, with a strong tendency to recur, even after long intervals, but it is generally amenable to careful persevering treatment.

The treatment may be deduced from the foregoing cases. Improvement, as far as practicable, in the general surroundings is often necessary; a well-selected and nutritious dietary, but usually with abstention from alcohol, and mental and bodily rest, are usually indicated. Internally, I have found arsenic the most reliable remedy, but it must be

[6] Dermatitis Herpetiformis, its Relation to Impetigo Herpetiformis (*The American Journal of the Medical Sciences*, October, 1884).
[7] *Medical News*, June 2nd, 1883.
[8] If general agreement could be obtained, the specific title might be omitted.

given in full doses, and often requires to be pushed to its physiological limit; improvement seldom sets in until six-minim or eight-minim doses of the liquor arsenicalis are reached, but the dose should be small at first, and gradually increased. Where that has failed—and, like all such remedies, it fails sometimes—I have usually succeeded with tincture of belladonna, also given in unconventional doses, up to thirty minims or more. Dr. Tilbury Fox advocated quinine in two-grain to five-grain doses; and, no doubt, it is useful in some cases—for example, Case VI, in which atropine failed; while cod-liver oil for the broken-down is strongly indicated.

Locally, the object is to relieve the pruritus; for this, the best agent, in my hands, has been a lotion of two drachms of liquor carbonic detergens to eight ounces of water, applied freely whenever the pruritus is troublesome; this has always given temporary relief, and the prevention of scratching is very important. Other antipruritics may be used, such as sanitas diluted with equal parts of water, etc.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

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I PURPOSE, in a series of short papers, to describe, very briefly, certain rare symptoms and conditions of disease. I shall not attempt to observe any order, or to classify, but shall endeavour to make each record as much as possible complete in itself.

I.—Advancing Hypertrophic Lesions, almost Congenital, and limited to the Ulnar Region of one Hand and Forearm.

THE subject of the following narrative was an intelligent young farmer, aged 34. His hand presented a most peculiar condition. At first sight, it might have been thought to be the seat of multiple cartilaginous tumours in the phalanges and metacarpal bones. But on more minute examination, the lumpy swellings (which affected the little and ring fingers, and the ulnar part of the hand) were found to be, in part, hypertrophies of cellular tissue and skin, and in part bony outgrowths. There was also ankylosis of two of the phalangeal joints of the little finger, and of one, the second, of the ring finger. These fingers were, both of them, bent downwards to the palm, and there fixed. They were fixed by the ankyloses of their joints, not as in Dupuytren's disease, by any contraction of their fascia. The hand looked much wider than its fellow, and measured in girth round the knuckles two inches more. There was also an increase in the girth of the wrist, of three-quarters of an inch, as compared with the other side. The bony outgrowths were near to the articular ends of the bones; they were low and sessile. The exact appreciation of their shape was rendered difficult by the hypertrophy of the soft parts over them. There were thick ill-defined pads of hypertrophied subcutaneous tissue, and the skin itself was thick and horny. My patient told me that he had been assured by his mother that nothing was noticed amiss with the hand at birth. It was not until he was three or four years old that the thickenings were observed.

A very remarkable feature in this case, is the restriction of the disease to the ulnar region, and to the little and ring fingers. That this restriction is due to the distribution of the ulnar nerve seems improbable, for there is no defect of sensation, and the whole of the ring finger is affected, not alone its ulnar side. There is even a small pad of hypertrophied cellular tissue in front of the middle finger. The localisation of the changes is, perhaps, due to some cause more analogous to that which induces arrest of development of certain associated parts, as when the radius is wanting together with the thumb and forefinger. The man's belief that the condition was not congenital, is by no means conclusive. It is true that it was first noted at the age of three; but, in all probability, some peculiarity of the parts which led to these strangely progressive changes of growth was present at birth.

On passing the finger up the ulna, at several places, the bone seemed somewhat thickened and enlarged. The olecranon projected much more than its fellow, and seemed to be thicker. I speak cautiously as to there being any real enlargement of bone, because there was a bursa over the olecranon, and the subcutaneous tissues along the course of the ulna presented little masses of ill-defined induration. I believe, however, that the bone was in the general condition of slight hypertrophy, which was more pronounced at some parts than others. The patient had been under the care of different medical men, and had taken a good deal of medicine under the diagnosis of gout, from which his father had suffered. There did not appear to be, however, any reason for believing that the changes present were in any way directly connected with that disease. They were slowly progressing, and the patient was in great anxiety lest his hand should become more disabled. I suspected that the enlarged bursa under his olecranon was due to some pressure on a table or chair-arm. He assured me that he never sat in an arm-chair, "except on Sunday afternoons," but added, in confirmation of my opinion, that it was on one of these occasions that pressure on the elbow had first caused him pain.

The only case really analogous to this which I have seen, was that of a certain Miss B. In Miss B., the little and ring fingers of one hand have undergone changes almost precisely similar, being made lumpy and distorted by enlargement of the bones, and of the soft parts over them. She also inherits gout, and has a very feeble circulation. The latter feature is so marked, that, when I first saw her hand, I was inclined to attribute the changes to a sort of periosteal chilblain limited to these two fingers, due to some peculiarity of innervation in connection with the ulnar nerve. The investigation of this second case, however, leads me to doubt this hypothesis, and inclines me to refer them both to some more obscure and congenital defect in developmental tendency. They are exceedingly different from Dupuytren's contraction of fascia, not only in that they both began in very early life, but also in their final results. Yet we may perhaps profitably keep in mind that the same fingers are affected in the two affections, and that the disease advances in a not dissimilar manner. Nor must we wholly forget that, in each case, the parents had suffered from gout, although it is very difficult to trace any connection with that diathesis.

[*To be continued.*]

ON THE AFFECTIONS OF THE JOINTS, WHICH COMPLICATE OR FOLLOW SCARLET FEVER.*

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IT serves an useful purpose at times to take stock, as it were, of some group of allied diseases, and, while refreshing our memories with the collective wisdom of the past, to compare with it whatever personal knowledge or experience we may have to add to the common store.

With this end in view, I propose considering an important group of complications which are apt to be associated with a disease which has much of interest and importance for every practitioner of medicine. Scarlet fever is truly many-sided, and claims our interest, not only in consequence of its infectious and fatal character, but also on account of the many complications which attend it, and the sequelæ which may supervene when the disease itself has spent its force.

It has been known since the beginning of the century that, in some epidemics of scarlet fever, the joints became affected; but it is only in later times, through the writings of Underwood, Betz, Trousseau, Henoch, and others, that we have any definite information concerning these affections, or any attempt to clear up their pathology.

Trousseau, in his clinical lectures, calls especial attention to what he designates "scarlatinal rheumatism," stating that it occurs much more frequently than is generally believed, and he does not appear to doubt its identity, or at least close relationship with acute rheumatism, though he notes some of its most important eccentricities. His description has been largely followed in our own text-books, though the accounts given have been meagre; most writers, like Bristowe, remarking that scarlet fever is at times followed by rheumatism, which does not differ from the ordinary kind, though noting the fact that suppuration occasionally occurs. The opinion that the common form of joint-lesion occurring in scarlet fever is due to the rheumatic diathesis of the patient, rather than to any synovitis produced by the scarlatinal poison, has been commonly held by continental and English writers; and, in a discussion which took place at the annual meeting of the British Medical Association, in Liverpool, in 1883, on "rheumatism in childhood," nearly all the speakers stated their belief that scarlatinal was essentially the same as the ordinary form of rheumatism. In a short paper (see BRITISH MEDICAL JOURNAL, vol. ii, 1883, p. 514), which I read on that occasion, I tabulated some cases which had come under my care, and pointed out that they supported the belief that one form at least of the joint-affection is connected rather with a septicæmic than with a rheumatic condition. A further experience has made it clear to me

* Read at the Manchester Medical Society.

that the difference of opinion which existed on that occasion was due to the fact that the different observers had really been observing different diseases; that, while my cases were all confined to those seen in the fever-ward of a children's hospital, those described by the physicians who took part in the discussion were rather those of adults who had recently recovered from scarlet fever; the former being septicæmic in nature, the latter being true rheumatism.

It may, perhaps, be worth our while to analyse the various forms of joint-affections which may occur in connection with attacks of scarlet fever. They may be divided thus: 1. Synovitis; 2. Acute or chronic pyæmia; 3. Acute or subacute rheumatism; 4. Scrofulous disease of joints.

Synovitis.—Of this form I have notes of twenty cases that have come under my care in the last few years, in which there was a more or less acute inflammation of the joints, and which subsided in a few days without going on to suppuration. It is not easy to say how frequently it occurs, or what percentage of cases of scarlet fever suffer from it, inasmuch as it is much commoner in some epidemics than others. It not unfrequently happens that two of the same family suffer from it; in four out of my twenty cases, it was followed by nephritis. It is important to notice that it rarely supervenes in mild cases; at least, such is my experience, though true rheumatism does appear often after light attacks. In my own cases, the attacks of fever were certainly severe, the throat-symptoms well marked, and an elevated temperature was maintained beyond the average. In an uncomplicated case of scarlet fever, the temperature goes down towards the end, or at least well within the limits, of the first week, the rash disappearing, and the throat regaining its natural appearance. Among my own cases, in no one of them did the temperature fall to normal, and remain so during the first week, but the fever continued into the second and third weeks, caused in nearly all instances by the severity of the throat-complications. Thus the tonsils were excavated, or sloughy, the mucous membrane of the nose joined in the inflammatory catarrh, the lymphatic glands were swollen, and often surrounded by cellulitis.

In four of the cases, excluding one who died on the ninth day, the temperature fell to normal within a fortnight; in the remaining fifteen, the febrile symptoms did not abate till the third or fourth week. It thus clearly comes out that the synovitis appertains to those cases in which the symptoms are severe, and the fever unduly prolonged by the ulcerative and sloughy condition of the tonsils and soft palate. Of the twenty cases two were fatal, one on the ninth, the other on the twenty-fourth day. The joints which were most commonly attacked were the wrists and finger-joints, the inflammation often involving the synovial membranes of the flexor and extensor tendons in the palm and back of the hands. The knees and ankles were frequently involved, and, with the latter, the soles of the feet. The hips and shoulders were less often attacked. In several cases the joints of the cervical vertebræ were affected; movements of the head and neck caused acute pain. For the most part, the joints were painful on movement and tender, less often red and swollen; in most instances the synovitis was fugitive, lasting only a few days, and rarely or never returning to the same joint.

In some few cases the wrists only, or knees only, were affected. In one case the synovitis became chronic in the knees, the effusion lasting for several weeks (sixtieth day), but eventually the fluid was absorbed, and the girl quite recovered. In two other cases the synovitis remained exceptionally long, in one case lasting from the seventh to the twenty-second day, and in another from the eighth to the seventeenth; in five only did the pain and tenderness last beyond the week; in the remainder, the patients were free from pain in two to five days.

In the majority of cases the synovitis supervened at the end of the first week, or beginning of the second; the earliest commencing on the fourth day of the fever, and the latest on the thirteenth, fifteen out of the twenty beginning from the sixth to the ninth day. This knowledge that synovitis nearly always commences at the end of the first or beginning of the second week may be an important element of diagnosis, inasmuch as true rheumatism, when it supervenes, generally does so during convalescence, or, in some cases, at the very commencement of the attack.

The question of cardiac complication is a very important one as bearing upon the rheumatic origin of the synovitis. In seven cases out of the twenty, soft *bruits* were heard, or the first sound was "murmurish," in one of these with a well marked *bruit* which ended fatally, but no valvular lesion was found. In the greater number of cases the murmurs disappeared before the children left the hospital. It must be borne in mind that *bruits* are often heard in scarlet fever, both at the apex and left base, which disappear completely during convalescence; and I have every reason to believe that those heard in my cases of synovitis were not due to any endocarditis, but were simply hæmic or functional. In one case there was a pericardial friction sound heard, followed by signs of fluid in the pericardial sac, and in another a pleuritic-pericardial rub, as if due to effusion of lymph on the pleura and external surface of the pericardium. In no case, as far as I have been able to ascertain, did chorea follow the attack.

The drug commonly given directly the joints became painful was salicylate of soda. It is difficult to estimate its effects on a disease which is, as a rule, so fugitive as scarlatinal synovitis; and I am inclined to think that, in some cases, where the patient was quickly free from pain, this was only the natural course of events, and was not due to the treatment employed.

It must, I think, be tolerably clear from the foregoing account that there is good reason for classing this joint-affection outside the pale of what is ordinarily termed acute rheumatism. On the other hand, the symptoms point to a condition which may be termed "scarlatinal septicæmia," arising from the absorption of putrid matters from the ulcerative or sloughing process going on in the throat, and resembling the acute or chronic septicæmia in puerperal cases, gonorrhœa, ophthalmia, or diphtheria.

That synovitis differs essentially from rheumatism, may be seen by a consideration of the following points.

1. Synovitis is more common in some epidemics than in others, and occurs more especially in those cases where the febrile stage is prolonged on account of the severity of the throat-affection.

2. The joint-lesions nearly always supervene at a definite stage of the attack, namely, at the end of the first week; a fewer number of joints are affected than in acute rheumatism; the attacks are more fugitive, and rarely recur.

3. Pericarditis and pleurisy are not common, and endocarditis is very rare.

It must appear tolerably certain that, if these attacks were really rheumatic, the scarlatinal poison bringing into activity the latent rheumatism, the frequency of the attacks would not vary with the epidemic, or supervene so constantly at one period, or, above all, would so rarely give rise to peri-endocarditis, as it is well known that an attack of acute or subacute rheumatism during childhood only exceptionally spares the heart.

Acute or Chronic Pyæmia.—I have already spoken of scarlatinal septicæmia resulting from the absorption of septic matters from the throat; but, in addition to this condition, there is unquestionably a further stage in which phlebitis, septic embolism of various organs, abscesses in the joints, and purulent inflammation of various serous membranes, take place. Pyæmia is by no means uncommon in scarlet fever, yet it cannot be said that suppurating joints often occur. I have only seen three such cases. In one case, which was fatal on the nineteenth day, there were *ante mortem* clots in the right internal jugular vein, infarcts in the spleen, minute abscesses in the kidneys, and suppuration in both ankle-joints. In a second case, there was suppuration in the distal joint of the thumb, in a boy who died on the fifteenth day. In a third case, in a boy aged 2½ years, in which recovery took place, there was redness and swelling of the finger-joints on the eleventh day; the next day, pain and tenderness in the knee and ankle; on the fifteenth day, two ounces of pus was let out from the knee; and, on the twentieth day, pus was evacuated from the palmar surface of the hand. On the thirty-seventh day, an abscess was opened over the crico-thyroid joint; on the forty-ninth, pus was evacuated from the hip and also from the popliteal space. The boy finally recovered; and, seven months afterwards, was strong and well. In no one of these cases was there any definite cardiac complication (see BRITISH MEDICAL JOURNAL, *loc. cit.*). Similar cases are related by Henoch (*Charité Annalen*, Jahrg. vii, p. 645) and Bokai (*Jahrbuch für Kinderheilkunde*, Band xxiii, p. 320).

Acute or Subacute Rheumatism.—Whilst, in children, at least, by far the commonest joint-affection in scarlet fever is the synovitis above described, yet it must be admitted that true rheumatism does sometimes complicate scarlet fever, and is apt to follow during convalescence. What part the effects of the scarlet fever poison plays in producing or calling latent rheumatism into activity, it is difficult to say; it is possible that the tissue-waste leads to an accumulation of effete materials in the system, which, in those prone to rheumatism, brings about an attack. An attack of scarlet fever certainly does seem at times to stir up an attack, or a recurrence, of joint-pain or peri-endocarditis. Thus, in four cases which have come under my notice, who had previously suffered from endocarditis and rheumatism, and who contracted fever, the attack was quickly followed by joint-pain, pericarditis, or erythema nodosum. In one case (*Abstracts of Cases at Children's Hospital, Manchester*, page 16, 1883), John M., aged 9, who

was admitted on the eighth day of an attack of scarlet fever, a pericardial rub was detected, as well as mitral disease, which latter was evidently old; a few days later, there were joint-pain, and an eruption of erythema circinatum. In another case (*loc. cit.*, page 62, 1884), M. E. J. B., aged 13½, admitted to the general wards for acute rheumatism and endocarditis, during convalescence, when she had been free from pain for two or three weeks, contracted scarlet fever. On the fifth day, there was a recurrence of rheumatism in the joints; and on the ninth day pericarditis occurred.

In another case (*loc. cit.*, page 63, 1884), Eleanor H., aged 5, admitted for mitral disease, having suffered from rheumatism six months before, contracted scarlet fever. There was a pericardial friction-sound heard the same day; and on the fifth day there was an erythematous rash. The association, however, of scarlet fever and acute rheumatism is rather that the latter follows during convalescence, which I am inclined to think it does more commonly in adults than in children. Two cases of this kind, which were under the care of my friend Dr. Massiah, of Didsbury, and which he was good enough to ask me to see, impressed me very much. Two brothers, 8 and 10 years old, suffered from a mild attack of scarlet fever; during the fourth week, when they were up and about in their room, and still desquamating, they began to complain of pain in their joints, which, however, was never severe, and also of pain in the region of the heart, with dyspnœa. Both quickly developed both mitral and aortic *bruits*, and later on pericarditis; one died within three weeks, and the other within five weeks, of the commencement of the rheumatic attack. Both evidently suffered from acute or malignant endocarditis. Such cases are of great importance, and easily mislead, especially as the joint-pains may be comparatively slight.

Scrofulous Disease of Joints.—Disease of the hip, or of other joints, is not, as far as I have seen, a common sequence of scarlet fever; though it is quite possible it may happen oftener than I think, as the cases occurring would gravitate to the surgical side. Presumably, the weakened condition of health produced by the fever, predisposes to tubercular disease of bone or other organs. There can be little doubt that an attack of scarlet fever, as a rule, greatly aggravates chronic disease of joints which have already becomes established. Suppuration quickly takes place in a perhaps hitherto quiescent hip-joint, and possibly a condition of septicæmia or pyæmia supervenes. It seems probable that sometimes a joint, which has suffered from scarlatinal synovitis, may become the seat of chronic disease, though I cannot say I have ever been certainly able to trace out such a sequence. Much of the variance of opinion with regard to the rheumatic or septicæmic origin of the joint-lesions in scarlet fever has, no doubt, originated from the fact that observers have been describing the different forms which occur. Personally, I have no doubt that the form which occurs most commonly in children is of septicæmic origin, and rarely leaves behind any damage to the heart; but it is also certain that an attack of scarlet fever will sometimes cause a recrudescence of true rheumatism, or in some way predispose, so that an attack supervenes in the course of the patient's convalescence.

A CASE OF DIAPHRAGMATIC EMPYEMA.

By VINCENT D. HARRIS, M.D., F.R.C.P.,

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The following case illustrates a condition which appears to be sufficiently interesting and uncommon to be recorded. The symptoms, as will be seen from the following account, were such as might possibly have given some clue as to the nature of the affection, that is to say, a localised collection of pus between the under surface of the right lung and the right convex upper surface of the diaphragm, had they not been obscured and masked by those of chronic bronchitis, which existed in considerable severity at the same time.

The account of the case, and of the necropsy, is based upon the very full and accurate notes of Mr. P. M. Earle, who was the resident clinical assistant at the hospital, in charge of the case at the time, and to whom my thanks are due.

Emily B., aged 59 years, residing in Bethnal Green, was admitted into the Victoria Park Hospital, under my care, on October 13th, 1885, as an urgent case. She was a married woman, a silk-weaver by occupation, in poor circumstances. She gave the following history of her illness. Having been for many years subject to winter-cough, she was this year attacked in the autumn, much as usual; but, three weeks before she applied for relief, she was rather suddenly seized with a considerable increase of her usual difficulty of breathing, and with pain in the right side. After this, her cough and dyspnœa gradually increased, and the pain continued. She denied having had shiverings at any period during her illness; and her sputum, which was white and frothy, was never rusty or blood-stained. So anxious had become her condition by October 13th, that, when she came to the hospital as an out-patient on that day, she was found to be too ill to be sent away, and was at once admitted as an in-patient.

Condition on Admission.—She was ill-nourished; had a sallow complexion; her expression was distressed; lips and tongue bluish; cheeks not at all flushed; extremities cold. She answered questions feebly, and with difficulty. She complained of pain at the lower part of the right chest, increased on deep inspiration, and after cough; respirations 34, costo-abdominal. She had frequent short cough, with yellowish-white, frothy expectoration, chiefly mucus; no hæmoptysis. Pulse 114, regular, but small and weak. There was no swelling or œdema of the feet or ankles; no ascites. The tongue was thickly coated on the dorsum, with dirty-white fur. Her appetite was much impaired; the bowels were said to be regular. Temperature 99.4°, evening 102.6°. On physical examination, the signs of severe bronchitis and of emphysema were discovered, and, in addition, slight impairment of percussion at the right base, and slight crackling at both bases, but, perhaps, more on the right side. There was no diminution of vocal fremitus at either base. The heart-sounds were weak, but natural, but the cardiac dulness was absent. The hepatic dulness commenced in the right nipple-line, at the sixth rib above, and extended downwards to just below the costal margin; splenic dulness was not increased; there was some tenderness over the right hypochondrium. She was ordered—milk Oiij; beef-tea, eggs, and 4 ounces of brandy; an ether draught every four hours, and a poultice of linseed and mustard.

Course and Termination.—The patient distinctly improved for some days after admission. The breathing became much less embarrassed, and the cough, although very troublesome, became looser. The pulse varied from 120 to 128. The temperature was always high: in the morning about 100.5°, and in the evening 102° to 102.6°. No fresh physical signs were found on careful examination, but it was noted that the liver was tender. The medicine was changed on the 16th, to senega and ammonia three times a day. On October 18th, however, without any apparent cause, the patient became very much worse; her complexion became dusky, and she was delirious, and tried to get out of bed at night.

Her state was too serious to admit of careful examination, and, from that time until her death, which occurred the next night but one, she was in a semi-moribund condition. On superficial examination of the right base, on the day of her death, the clerk's notes state that there was distinct dulness. During the whole period after admission into the hospital, the lips were singularly blue.

Necropsy, sixteen hours after death.—Slight rigor mortis was present. There was no *post mortem* staining. There was about half a pint of serous effusion in the right pleural cavity, apparently quite recent. The lower edge of the right lung was firmly adherent to the ribs and diaphragm; and, below the lung, thus shut off from the rest of the pleural cavity, and between it and the upper convex surface of the diaphragm, was a collection of thick creamy pus, localised by thick walls of fibrinous material. The abscess-cavity thus formed was irregular in shape, and encroached upon the lower lobe of the lung, as it were pressing it upwards. There was no communication between this and the lateral pleural cavity, and it was, as it were, surrounded on all sides by lung-tissue. There were several fibrous bands passing between the lower surface of the lung and the diaphragm, and across the abscess cavity. The fluid was very thick, as above stated, but not offensive. There was a slight excess of fluid in the left pleura. The lungs exhibited signs of emphysema and bronchitis; but were not, in any part, at all consolidated. With the exception of congestion, the other organs were healthy. The heart was normal.

Remarks.—The diagnosis of a localised diaphragmatic empyema, or of an abscess between the under-surface of the lung and the diaphragm, is not, one would imagine, by any means an easy matter; and in this case, where the symptoms were masked by those of severe bronchitis, it is not wonderful that the affection should have escaped detection during life. At the same time, there were certain symptoms and physical signs which, if rightly interpreted, might have suggested a clue. These may be shortly stated to be as follows. 1. The high temperature, which persisted throughout the time the patient was under observation, with a regular, or almost regular, evening rise, amounting sometimes to about 2° Fahr. High temperature such as this is not likely to arise in uncomplicated emphysema and bronchitis. With the high temperature was coupled more than usual prostration. 2. The complaint of pain in the right side, and tenderness over the liver

These symptoms were, however, considered to be due to congestion of that organ, which often accompanies chronic pulmonary affections, and, as such, were disregarded. 3. The extreme blueness of the lips and tongue, almost amounting to blackness, suggesting congenital heart-disease more than anything else, was certainly a sign more marked than in the majority of cases of bronchitis; but even this is not impossible in a few cases of uncomplicated bronchitis. 4. The presence of liver-dulness up to sixth rib in the right nipple-line, when the cardiac dulness was absent, is certainly uncommon in ordinary emphysema. At the same time, it should be remembered that the physical signs, at first, were such as to exclude pleurisy with effusion. The signs which a collection of pus, such as has been described, should present, were obscured by the fact that a layer of fairly healthy lung intervened between it and the chest-wall. Very few direct references to the possibility of the occurrence of localised empyemata between the lung and the diaphragm, are to be found in text-books of pathology or medicine, or, indeed, in special works upon chest-diseases. This is the more strange, because one is familiar with diaphragmatic pleurisy, which is believed by many to be far from uncommon. The most pointed allusion to the subject which I have been able to find occurs in Wilks and Moxon's *Pathology*, second edition, 1875, p. 307, and is as follows. "Not long ago, we had an opportunity of examining the body of a woman, who had a local collection of pus, or an abscess, at the very bottom of the chest, between the lung, diaphragm, and ribs; this was shut in, and probably had existed for some years; for..... and we think we have met with other similar instances." This is an almost exactly parallel case to the one here reported; but my case differs in that there were with it no definite physical signs, while the duration of the affection was much shorter; in all probability, a few weeks only. It is doubtful whether operation, even if a correct diagnosis had been made, would have afforded relief. It has been pointed out to me, as not unlikely, that those cases of empyema which discharge into and through the bronchi by perforation of the lung, may not unfrequently be cases of localised diaphragmatic empyema; and I confess the suggestion appears to be a good one. In the present instance, if the patient had been able to get over the severity of the coincident bronchitis, one could conceive nothing as more likely than that the pus should have burrowed its way into the lower lobe of the lung, upon which its pressure must have been already considerable; burrowing in other directions being, at the same time, prevented by strong fibrous adhesions.

CLINICAL MEMORANDA.

TETANUS NEONATORUM.

THE above disease is of such rarity, that I think the following cases are worthy of record.

CASE I.—Mrs. D., the mother of six healthy children, was delivered of a fine male child on January 6th, 1883. He appeared to be well developed, and everything was perfectly natural, with the exception of the umbilical cord, which had three or four times its ordinary thickness, and was of a much darker colour than usual. It was of about the normal consistence. For six days, all seemed to go on well, when the parts in the immediate neighbourhood of the umbilicus became somewhat inflamed and irritable. On the seventh day, these appearances increased, and the cord separated. The child progressed favourably until the sixth day, when it refused the breast, and, about the same time, its jaws became fixed, and an occasional spasm occurred, the whole body being rigid from head to foot. These spasms soon became continuous, with frequent exacerbations, until, on the eighth day, the child died. During the last two or three months of pregnancy, the mother had complained of very violent pain in the left side of the abdomen, coming on every night when getting into bed, and continuing for several hours, which prevented her from obtaining any rest. On April 1st, 1884, she was confined of a child, who is now alive and healthy.

On March 16th, 1886, she gave birth to a male child. He was healthy in appearance, but the cord was of a dark, dusky colour, not having its usual translucency, and far softer and more yielding than natural; so that, when the ligature was applied, it appeared as if it would be completely divided. On the third day, it had a very offensive smell; the linen in which it was enveloped was, therefore, changed, and the parts were washed in weak Condy's lotion. On the sixth day, the cord separated, and the navel looked uninflamed and perfectly natural. On the seventh day, early in the morning, when the child awoke, he could not take the breast, as his jaws were "set," and could not be opened wide enough to admit the nipple. He sucked anything introduced into his mouth, and took a little milk from a spoon. In a few hours, his neck, back, and legs became rigid. At first, this rigidity would, after a time, almost entirely disappear; then, after a few minutes, return with greater severity than before, causing the child to scream with pain. The spasms increased in force and frequency, becoming, at last, almost continuous, until the child's death on the eighth day. The mother had again complained of the violent pain in the left side of the abdomen, during the last month or two.

I wish to call attention to the following facts. Two children in the same family died of this rare disease, a healthy child having been born between them. Both died on the eighth day. The condition of the umbilical cord, at birth, in each case, was abnormal; this, I think, must in some way be connected with the occurrence of the disease. A peculiar pain was complained of by the mother in both cases, which had been absent in every other pregnancy.

FRANK M. WRIGHT, M.R.C.S.Eng., etc.,
Bottesford, Nottingham.

OBSTETRIC MEMORANDA.

VIBURNUM PRUNIFOLIUM IN ABORTION.

I THINK that Dr. Macfie Campbell and I are nearer agreement than appears on the surface. While I cannot wholly depart from my attitude of friendly critic, I admit that Dr. Campbell's note in the JOURNAL of April 17th contains little but what everyone must endorse. If Dr. Campbell refer to my first article again, I think he will allow that it was written in no captious spirit, but with the object of elucidating more clearly the merits of a drug which had given us both satisfaction. Dr. Macfie Campbell has now recorded his experience, precisely as I felt sure he must, that viburnum is by no means the specific for abortion which one, unacquainted with the drug, might have inferred from his first article.

I have had a case under treatment by viburnum for over three weeks, which terminated prematurely May 13th, about the thirty-first week; the child lived four days. In this case (a multipara), the os externum was patent. Liquor amnii and mucoid discharge escaped, more or less freely, for over three weeks, with no pains, except at the beginning of the illness, when they were slight, and for a very short time before birth. In this instance, the drug was of as little real value as in the last case mentioned in Dr. Campbell's note.

Every new drug, like every new bonnet, has a period of fashionable favour, when it is liable to be overlauded. I believe that viburnum will gain a permanent place as a remedy for abortion (more especially "habitual early abortion"), but it can never wholly displace some of the remedies we have employed in the past.

It is only by comparing our experiences that reliable data can be obtained; and I have pleasure in knowing that viburnum is now recognised as worthy of trial by a number of competent observers.

A. D. LEITH NAPIER, M.D., Dunbar.

PATHOLOGICAL MEMORANDA.

INTRA-AURICULAR GROWTH: INTERESTING *POST MORTEM* EXAMINATION.

THOMAS SPRAGG, farm-bailiff, aged 59, had enjoyed good health until last Christmas. Since then, he had had occasional shortness of breathing, but had kept at his work except for four weeks in February. On the morning of April 26th, after eating a hearty breakfast, he started with three horses and a harrow to work on the farm. Three-quarters of an hour afterwards, he was found dead, suspended across the connecting chains between the leader and second horse of the team. The horses were standing still, but the condition of the field indicated that they had worked well that morning. No evidence of external injury was found. The brain and its membranes were intensely congested. The heart was somewhat large and dilated, and there was more than the normal amount of fat on its surface. The mitral and tricuspid valves were somewhat thickened and indurated. The aortic and pulmonary valves, and their respective blood-vessels, presented no deviation from health. Within the left auricle, just above the mitral valve, and attached to the auricle, there was a growth (of the size of a pullet's egg). It was attached by a short, broad, firm, solid pedicle, and had no communication with any other structure. The exterior of the tumour resembled the remainder of the lining membrane of the auricle; whilst the upper interior portion of it was filled with a curdy, cheesy-looking material, and the lower

portion with a solid non-laminated fibrinous or gelatinous substance. The growth weighed nine drachms and a half. The pericardium was healthy. The left lung was healthy; the right was firmly adherent to the chest-wall, and bore evidence of chronic congestion. The left kidney was larger than the right, and contained in its cortical substance a sacculated cyst, the walls of which were infiltrated with a deposit of calcareous hardness. Its capsule was adherent. The right kidney was healthy. The stomach was healthy, and contained a fair quantity of partly digested food. There was no trace of disease in any other part of the body. The cause of death was the growth within the left auricle, and disease of the mitral and tricuspid valves, which obstructed the proper circulation of blood.

I have not met with a case like to this in about 300 *post mortem* examinations at which I have been present; nor do I remember having read of or heard of an exactly similar affection. It would probably be impossible to diagnose such an affection during life.

JOHN T. HARTILL, L.R.C.P.L., M.R.C.S.Eng.,
Manor House, Willenhall.

SURGICAL MEMORANDA.

REDUCTION OF DISLOCATION OF THE SHOULDER BY ABDUCTION.

RESPONDING to Dr. Macleod's appeal at the end of his paper in the BRITISH MEDICAL JOURNAL of January 30th, I have to relate the following case.

A man, aged 28, muscular, but not in very good health, had a subcoracoid dislocation of the left shoulder. Sixty hours after the accident, I found him, supine, in bed. Abducting the arm to a right angle with the trunk, I pulled from above the wrist with moderate force. Reduction was immediate, and the pain trifling. No anæsthetic was used, and no counter-extension, beyond the weight of the body, was necessary; but I had my left hand on the head of the dislocated bone, to ascertain the progress of the case. A slight snap was heard at the moment of reduction.

At a meeting of the Bradford Medico-Chirurgical Society, where I mentioned the case, Dr. Murray, of Burley-in-Wharfedale, related having reduced a case by a similar method, the patient being in the standing position. I suspect that abduction is often the effective part of the reduction by manipulation. Dr. Macleod has done service in formulating the procedure distinctly; and, if his method prove frequently successful, it must be considered a decided improvement, consisting, as it does, entirely in counteracting muscular resistance, to the exclusion of attempts to force the bone directly into its place.

PHILIP MIALL, Consulting Surgeon to the Bradford Infirmary.

As Dr. Neil Macleod, of Shanghai, after describing this method in the JOURNAL of January 30th, 1886, asks for the results of further experience in the reduction of dislocations of the shoulder by his plan, I think it due to record a most satisfactory case.

A very muscular young soldier, aged 24, height 6 feet 2½ inches, was brought into hospital with the following history. When at gymnasium practice, he fell over "the horse" on the point of his shoulder, and sustained a very marked subglenoid dislocation of the head of the humerus; there was a hollow below the acromion, large enough to hold the fist, and the head of the bone could be felt far down on the anterior border of the scapula. The slightest movement towards adduction of the limb, caused him great pain down the inside of the arm, and at the insertion of the deltoid; and, without chloroform, it would have been impossible to reduce the dislocation by the usual methods without causing great suffering, and attempts thereat most probably would have ended in failure.

I placed him on a mattress laid on the floor, and gently moved the limb to a position at right angles with the body, the pain being thus completely relieved. I then placed the approximate heel in the axilla, or, rather, against the side of his chest, and gradually applied traction to the upper arm, in the "right angle" direction, the force never exceeding more than about two pounds, and not causing the least pain or spasm. In about thirty-five seconds, this formidable dislocation was reduced, entirely without the patient's knowledge, without pain or spasm, without the usual click, or, in fact, any subjective symptoms whatever. He could not believe the joint was all right, until complete adduction without pain convinced him of the fact. I must mention that the joint had not been dislocated before.

Such a satisfactory result as this, I think worth recording; for, if further experience teach us that such results will be general, all will, I am sure, agree that one of the most frequent, formidable, and painful injuries of everyday life, will be robbed of all its terrors. When a house-surgeon, I have reduced many dislocations of the shoulder by Koch's method of manipulation, but have failed in some, and had to give chloroform; but in no case could I have given a more unfavourable prognosis, and produced so pleasing a result, as this one, reduced by Dr. Neil Macleod's "right angle traction" method.

W. BEEVOR, M.B., Surgeon Scots Guards.

SCIRRHUS OF THE BREAST: RECURRENCE LONG AFTER REMOVAL.

THE interval that must elapse before a patient, whose breast has been removed for cancer, can be pronounced free from the risk of recurrence, is longer than some recent memoranda in the BRITISH MEDICAL JOURNAL would show. The following case, at present in St. George's Hospital, may be of interest as bearing on the question.

E. H., aged 45, had the left breast removed by Mr. Henry Lee, in 1872, for cancer. Recurrence took place in the centre of the cicatrix, and the nodule was removed by the same surgeon in 1875. The woman remained in good health till 1886, when two growths were found, one at the sternal, and the other at the axillary end of the original cicatrix. These were removed by Mr. Rouse in May, 1886. In each instance, the growth was scirrhus. The interval between the removal of the original disease and the second recurrence was fourteen years.

WILLIAM C. BULL, M.A., M.B.Cantab., Surgical Registrar,
St. George's Hospital.

A METHOD OF APPROXIMATING THE EDGES OF WIDELY GAPING OPERATION-WOUNDS.

IN excising the female breast, etc., for cancer, it is especially essential to make our incisions very wide of the visible disease; otherwise, recurrence in or or about the cicatrix may safely be predicted—a phenomenon which invariably denotes a too meagre operation, whether unavoidable or not. The surgeon, in carrying out this object, is frequently compelled to make a widely gaping wound, the edges of which it would, at first sight, seem utterly impossible to approximate. I have found the following plan, which utilises the natural elasticity of the skin, very useful in such cases.

I first insert three or four silk interrupted sutures, making the needle enter and emerge from the skin at a long distance from the wound (three inches or more), and tie these as tightly as possible; the first twist of the cord being held by an assistant with dissecting forceps until the knot is completed. I then introduce a similar row of shorter ones, making the needle enter and emerge at about two inches' distance from the wound; and then a third series, still shorter. By this time, the edges of the skin-incision are brought so closely together (in all but very extreme cases) that a continuous horsehair suture will serve to unite the whole length of the wound. The first and second rows of long sutures are now removed, having become flaccid and useless; but a few of the third are retained, wherever there is very marked tension, for the first forty-eight hours—not longer. By this means, it is often possible to procure union by first intention in a wound which would otherwise take months to heal by granulation. It need hardly be added that careful support afterwards, by antiseptic strapping, will greatly promote a successful result.

HERBERT SNOW.

PRESENTATION.—On Wednesday, April 28th, at the Radcliffe Infirmary, a testimonial was presented to Dr. H. M. Tuckwell, by the medical men of Oxford and the surrounding district, with a few of his old friends and fellow-students at St. Bartholomew's Hospital. The testimonial consisted of a very handsome, gold, minute repeater watch, with a choicely bound presentation volume, containing a short address in the names of the seventy-three medical men who had subscribed. The address ran as follows:—"We, the undersigned members of the medical profession, desire to convey to Dr. Tuckwell an expression of the regard we have for him, as a physician whose generous and straightforward conduct has done much to elevate the tone of our profession. We wish to express our sincere regret at his retirement from practice, and more especially for the ailment which has necessitated his doing so. We beg his acceptance of this watch, as a token of our esteem and sympathy."

DONATIONS AND BEQUESTS.—Mrs. Adelaide Mildred Livins, of Hampton Park, Redland, Bristol, has bequeathed £100 to the Royal Infirmary, £50 to the General Hospital, £50 to the Hospital for Sick Children and the out-door treatment of Women, and £50 to the Redlands Dispensary, all at Bristol.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ST. GEORGE'S UNION INFIRMARY, FULHAM.

THE HISTORY OF A FAMILY IN WHICH A SIMILAR HEREDITARY DEFORMITY APPEARED IN FIVE GENERATIONS.

(Reported by HENRY A. FOTHERBY, L.R.C.P.Lond., S.Sc.Cert.Camb., Assistant Medical Officer.)

J. A. was admitted, suffering from phthisis and Bell's paralysis; from the former disease he died. The chief features of interest in his case, however, were not these diseases, but the peculiar congenital deformities with which he was afflicted, and the still stranger history of his claw-footed family. The apparent abnormalities began below the carpus, where only four metacarpal bones could be traced, the fourth and fifth bearing the little and ring fingers, which were closely webbed together, though each had the normal number of phalanges; the remaining metacarpal bones were, so far as could be judged, the second and first. The fleshy masses over the hypothenar regions were well represented, and muscular movements were considerable, the chief being those of cupping the hand, and the firm apposition of the webbed digits to the fleshy nodule which covered the head of the first metacarpal bone; by this means, the patient was enabled to earn his living as a cab-driver. Full extension of the digits was, however, limited, which caused them to assume a hooked or claw-like form.

The deformity in the feet was still more curious, for in them was found an abnormality, the exact similitude of which had existed in almost every deformed member of his family for five generations. The deviation from the normal seemed to begin immediately below the tarsus, where the metatarsus on each foot bifurcated to form two truncated cone-like masses; the outer mass, which was the more slender and tapering, supported, at its apex, the little toe; the inner, and more solid, the great toe. It was impossible to estimate the number of metatarsal bones entering into each cone, as they appeared to be blended together, especially towards their distal extremities. In the interval lay a large ovoid gap. The amount of movement between these two digits was really remarkable, the movement of apposition being especially powerful and well controlled. No further malformations were observed, except that his arms were abnormally long.

An almost exactly similar condition of things was to be observed in the patient's married sister, M. A., who was the third in the family of which the deceased was the eldest. Her hands, however, differed considerably in form, being broader and shorter, and having only one digit, namely, the little finger, which was fairly well formed. Her child also was very deformed—differing, again, especially as regards the feet, the representative of the little toe completing the apex of the metatarsus in each instance, there being no bifurcation or great toe present. The feet of this infant were so prehensile that it could take up even small articles, such as pins, off the floor. The hands, however, of these three cases, although differing much in shape, agreed in that they were all digitally represented by the little fingers, the thumbs remaining as rudimentary nodules.

In the accompanying drawings, Mr. Fotherby has sought to convey an idea of these three cases. Figures 1 and 2 represent a foot and hand of the deceased J. A.; 3 and 4, a hand and a foot of the married sister, M. A.; and 5 and 6, a hand and foot of M. A.'s only child.

M. A., who was a very intelligent woman, supplied the following particulars of the family history. The deformities, with which the greater portion of her family had been afflicted, had existed through five generations; she herself and the patient belonged to the fourth. She distinctly remembered, in her father and grandfather, a condition of feet similar to that presented by herself and the patient; and also that their hands were more or less deformed. Her great-grandfather, she had been informed by her father, had the same malformations. Her father and grandfather were eldest sons. The following genealogical table is a brief summary of the remaining facts stated by her.

FIRST GENERATION.—Great-grandfather: Claw-footed and handed.
SECOND GENERATION.—Grandfather: ,, ,, ,,
THIRD GENERATION.—1st in family, father: ,, ,, ,,
2nd ,, : Perfect.
3rd ,, : Claw-footed, hands perfect.
Rest of family: Perfect.

FOURTH GENERATION.—Family of father.
1st in family: J. A. (the deceased patient), claw-footed and handed. (See drawing.)
2nd ,, ,, Male. Hands: Each has a broad and flattened thumb in the normal position, with two useless rudimentary fingers placed at right angles to outer border of hand. Feet: After family type. See above.
3rd ,, ,, M. A. (patient's sister) the narrator. Hands: with one little finger each. Feet: As above. (See drawing.)
4th ,, ,, Female (deceased). Hands: Had two fingers on one, and six on the other. Feet: As above.
5th ,, ,, Female (deceased). Hands: Had seven fingers on one, and six on the other. Died from results of amputation of finger. Feet: As above.
6th ,, ,, Male. Hands: Right hand like M. A.'s; left, like J. A.'s Feet: As above.
7th ,, ,, Hands and feet as M. A.'s.
8th ,, ,, Hands: Has all the fingers, but three on each hand are represented as stumps. Feet: Three toes on one foot, and two on the other.
9th ,, ,, Hands and feet same as 8th in family.
10th, 11th, 12th ,, ,, Hands and Feet: All perfect.

FIFTH GENERATION.—1st family (of deceased): Two children, perfectly formed.
2nd family (of second brother): Five children.
1st child Hands: Seven fingers on one, and six on the other, like 5th, generation fourth. Feet: After family type.
2nd, 3rd ,, Hands: Variously deformed. Feet: As above.
4th, 5th ,, Hands and feet perfect.
3rd family (of M. A.): One child only. Hands and feet represented by little fingers and toes only. (See drawing.)
4th family (of 6th above): One child, perfect in hands and feet.

The remaining members of the fourth generation were either deceased, unmarried, or without issue. In none of the families allied by marriage were there any instances or history of deformity.

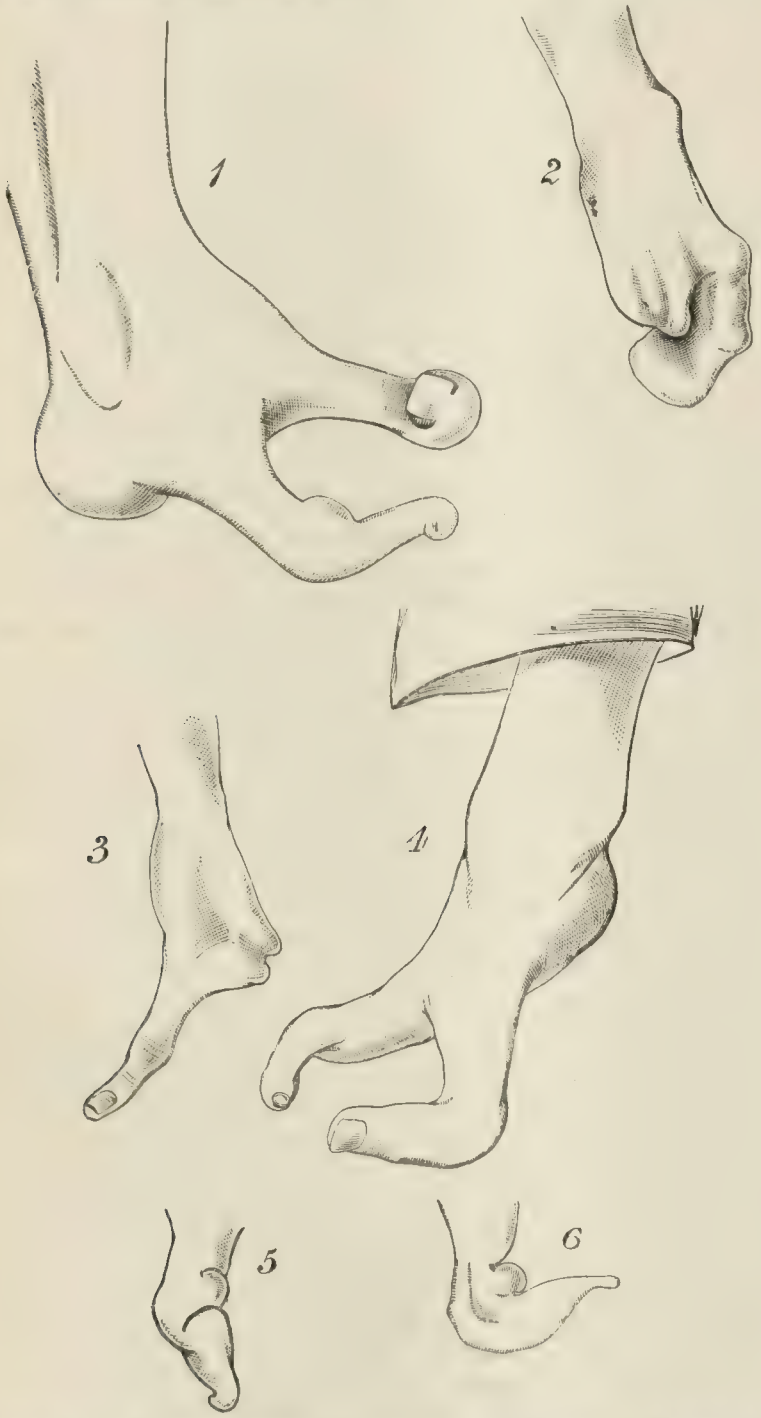
REMARKS BY MR. FOTHERBY.—The history of this family, especially when studied in a tabulated form such as the above, seems, I think, to suggest at least four points worthy of comment.

First, is the prolonged hereditary tendency to malformations, and the universality of type in the feet. Here, we have physical abnormalities with as marked an hereditary tendency as any disease could have; just as some special form of feature, some strong trait of character, has been handed down through successive generations of a race, and has stamped and distinguished it from all others.

Secondly, there is the selective affinity exhibited by one member of the family for another, in the reproduction of a deformity of the hands, without any apparent reason or order of sequence. Thus, the seventh, in Generation 4, had both hands like M. A.'s; and the sixth, in the same, has right hand like M. A.'s, and left like J. A.'s, the interval between those compared being filled up by the fourth and fifth in the family, whose hands were quite of a different conformation. But more striking still is the case where the eldest child of M. A.'s second brother (Gen. 4), reproduces the manual characteristics of its aunt, that is, the fifth in Generation 4, above named. Why members of a family, while conforming to the leading family type, differ so much in their individual peculiarities, has not been, at present, elucidated. Why one should partake of the abnormalities of one or more members of a past generation, although it may be not in the direct line of descent, seems as strange as the oft-noted psychological parallel.

Thirdly, what strikes one is the tendency to return to the normal and completely formed limb, the farther one departs from the main line of descent in which the deformity first existed. This is illustrated in the third generation, where the later members of the family were stated to be perfectly well formed; and, in fact, all would have been progressively so, were it not for the third being possessed of the typical feet. In the fourth generation, this is again seen, with greater clearness even; here one observes an almost completely progressive development from the great and striking deformity of the deceased, J. A., down to the well formed extremities of the tenth, eleventh, and twelfth in family, the change being first shown in the hands, and afterwards in the feet also. In the sixth, however, there is a retrogression, so that this generation cannot be called absolutely progressive. In the fifth generation, there are, also, exceptions; J. A.'s two children being perfect, while M. A.'s only child is, if anything, one of the most deformed of the race. The family of M. A.'s second brother, although much deformed at first, reaches the normal condi-

tion in a strict order of progressive sequence. One fact may be regarded as of importance in the offspring of the fourth generation; that, in every case, where they resulted from the male alliances, there was a more or less rapid return to the normal, whereas, on the female side, as represented by M. A. only, one finds her child, if anything, more deformed than any of the others. It would be interesting to know, in the case of her having any more children, whether they would be still more ill-formed. It appears, in fact, that, just as the seed of a delicate plant may, when planted in a rich soil, develop into a well proportioned tree, so, in like manner, a healthy woman may arrest the downward tendency, in spite of impregnation with the seeds of degeneracy; whereas, even the seed of a hardy one may, if placed in poor mould, not strike root, or, if it do, may grow up dwarfed and abortive; so, also, a woman, born of a decaying family, will give a poor nidus for the production of a healthy offspring, even though her husband be of good normal standard.



Lastly, is this not a case of evolutionary interest? Mental pathology teems with strange facts, which, while indicating the steps of intellectual descent, shows the path by which we have ascended. In destruction, the more recent acquisitions of structure are usually the first to be thrown down in the progress of decay, because, being most recent and most complex, they are less stable; hence it is that the more material examples of human involution are less numerous than the mental. The above history seems, however, to show that even the more solid products of development are capable of being shaken to and fro, of being evolved and involved in the same family, and that in the short period of five generations. The apposition of the great toe to the remaining representative of the digits; the dexterity with which they could be used—in one instance, even to the picking up of a pin; and, lastly, the length of the arms, all of which facts are recorded in the history of members of the A. family personally observed, demonstrates, I think, a near approach to the Quadrumanants.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 18TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Report of Morbid Growths Committee.—The report of the Morbid Growths Committee on Mr. Peeke Richards's specimen of tumour of the brain was read by Dr. COUPLAND (Secretary). It stated that the tumour was a cyst, containing a very vascular sarcomatous tissue, into which fine hæmorrhages had taken place. The growth arose from the infundibulum, and projected into the third ventricle.

Adenoma and Adenosarcoma.—Mr. EVE showed three specimens of adenoma of the ovary, illustrating the mode of origin of such tumours. He described the development of the cysts of cystic adenoma from nests of cells, and pointed out that the explanation brought the cystic adenomata of the ovary into the same category as the cystic tumours of the breast and testicle.—Mr. ALBAN DORAN had examined two hundred specimens of diseased ovaries, and could find no evidence of any connection between adenoma and cystic disease, such as Mr. Eve had supposed to exist.—Mr. EVE said that he had observed glandular growths in cystic disease.

Adenoma of Palate.—Mr. JONATHAN HUTCHINSON described two cases of slowly growing tumour, at the junction of the soft and hard palate. In the first case, the growth ulcerated; the probe went down to bare bone; there was no surrounding inflammation. Ten years ago, the growth in this case was removed, and a portion of bone exfoliated; the wound then healed, and the patient had had no recurrence. The second case was seen six months ago; the tumour was ulcerated, had bossy edges, and was freely removed. This tumour was shown, on microscopic examination, to be an adenoma. No return of the growth had occurred. Writers of surgical hand-books stated that adenomata of the palate had a distinct capsule, and were easily shelled out; but, in these two cases, the growth was diffuse, and, in operating, it had therefore been thought necessary to cut wide of the apparent edge of the growth, and apply caustic.—Mr. A. E. BARKER had seen a similar case.

Neuroma of Parotid.—Mr. J. HUTCHINSON, jun., showed a small superficial tumour, removed from the most superficial part of the parotid by Mr. Waren Tay. The operation was followed by persistent facial paralysis. On section, the tumour was seen to be chiefly composed of minute round or oval bodies of concentrically arranged fibres and cells. Nerve-tubercles were seen in some of these, and, in other parts of the tumour; these structures resembled end-bulbs. He advanced the opinion that the tumour was a neuroma, developing in connection with the facial nerve. Billroth had described a somewhat similar arrangement in a fibrous tumour.—Mr. BUTLIN had examined the specimen, and agreed with the description given; he had been unable to find any parallel case.—Dr. HALE WHITE questioned whether the structures could be end-bulbs, which would be very elaborate organs to be developed in connection with a pathological growth.—Mr. HUTCHINSON, jun., in reply, said that the growth had probably developed from some sensory branch ending in the parotid gland.

Actinomycosis.—Dr. T. D. ACLAND showed specimens from two cases of supposed actinomycosis. In cattle, the characteristic growth consisted of a tufted rosette, made up of club-shaped bodies, the whole surrounded by inflammatory material. In the specimens shown from man, the rays consisted of rods and twisted filaments. The larger growths formed of spheres containing degenerating fibres and cells. The organism of bovine actinomycosis had not been cultivated until recently, and the disease had not been transmitted from man to animals. The filaments from the cases in man had not been cultivated, and their identity with the organism of bovine actinomycosis was not proved; in fact, they were probably two distinct organisms. The reaction of the filaments to chemical reagents and stains, was considered to prove that the bodies were living organisms, and not crystals of fat, as had been suggested. He also showed a specimen of aspergillum-mycosis in the mouse. In a specimen from man, given to him by Dr. James Israel, of Berlin, the filaments were distinctly club-shaped, resembling those seen in bovine actinomycosis; but in his own case, the clumps had more the appearance of threads of bacilli joined together.—The PRESI-

DENT considered that there was some resemblance between the microscopic appearance in actinomycosis and Madura foot.—Dr. CROOKSHANK showed some specimens of bovine actinomyces. In actinomyces, it was easy to demonstrate clumps of club-shaped elements. He was inclined to think that, in Dr. Acland's specimens, the masses of growth consisted of some pathogenic mucor.—Dr. PERCY KIDD thought that Dr. Acland had established that there were two sets of cases, and that the cases of so-called actinomycosis in man were distinct from bovine actinomycosis.—Dr. T. D. ACLAND admitted the resemblance of the appearances seen in actinomycosis, and those seen in the Madura foot.

Erythrasma.—Dr. PAYNE showed specimens of epithelial cells from a case of erythrasma. The patient was a man, aged 40, who for ten years had had a scaly brown patch on the scrotum, and on the corresponding part of the thigh. The patch resembled tinea versicolor, but, by staining with methyl-violet, a small organism, showing threads and cocci, was seen, identical with an organism found by von Bärensprung, in a case described by him under the name of erythrasma. The organism was by some regarded as a minute mould-fungus, but Bizzozero had described it as a leptothrix, and did not regard it as having anything to do with the disease; but Dr. Payne could not accept this view, for the cells on the patch in his case swarmed with the fungus, which, if present at all elsewhere on the body, was at least very rare.—Dr. COLCOTT FOX showed a specimen from a similar patch on the thigh of a man suffering from diabetes. The fungus seemed to have a structure analogous to the trichophyton fungus, but was very much smaller.

Blood-vessels in Meningitis.—Dr. HANDFIELD-JONES made some remarks upon a series of specimens, which tended to support the following propositions. 1. The corpuscles so abundant in the rete of the pia mater in meningitis originated, to a large extent, by the subdivision of the pre-existing or escaped corpuscles, as well as by diapedesis, both of which changes were demonstrably present in the specimen. 2. The changes occurring in the minute vessels, consisted in their normal structure being greatly altered, and their corpuscular layer dispersed. 3. The generation of corpuscles occurred most abundantly and densely in the immediate vicinity of the small vessels. 4. The formation of corpuscular columns and processes as outgrowths from the vessels occurred. 5. The corpuscles had a tendency to pass outwards from the wall or channel of the minute vessels to the exterior. 6. Not unfrequently more or less numerous elongated corpuscles, in all probability endothelial, were present in the vesicles. In conclusion, Dr. Jones maintained that inflammation was essentially a despecialising, degrading process, a low but abundant cell-growth replacing the normal structure.

Gangrene of Lung.—Mr. A. QUARRY SILCOCK showed a specimen of gangrene of the lower lobe of the lung, from a woman aged 44, who had suffered from Bright's disease, hypertrophy, and dilatation of the heart. The middle lobe of the right lung was occupied by a large cavity, containing fœtid purulent material. There was no evidence of pneumonia, but the branch of the pulmonary artery leading to the lobe was filled with old clot. There was clinical evidence of the occurrence of pulmonary embolism, followed by gangrene.

Mediastinal Tumours.—Dr. SAMUEL WEST showed some specimens of mediastinal tumours, and drew attention to the mode of death in three cases. In one, the patient died suddenly; the vagus nerve was found to be much thickened, being infiltrated by the growth, which separated the nerve-tubules. In another case, the patient had hemiplegia before death, and one of the vessels involved in the tumour was invaded by the growth; it was suggested that the embolism, to which the hemiplegia was due, had originated in connection with this intravascular growth. In a third case, the innominate vein was completely occupied by the new growth, and small venous thrombosis had been noticed during life.

Miliary Tubercles in the Pulmonary Artery.—Dr. TURNER exhibited part of a lung from a case of tuberculosis, showing clusters of miliary granulations on the inner surface of four of the primary divisions of the pulmonary artery on that side, which were surrounded by and adherent to enlarged and caseous bronchial glands. In a section through a branch of the artery, and part of a caseous gland to which it was adherent, corpuscular infiltration and nuclear proliferation of the tubercular lesions were seen, extending from the capsule of the gland into the outer and middle coats of the vessel. A section from the lung showed caseous masses in tubercular growth, and proliferation of the alveolar walls in the exudation into them. In one caseous nodule, an arteriole was seen plugged by an adenoid growth from the endarterium. The specimen was the lung of a boy, aged 14, who died with tubercular disease of the abdominal and thoracic lymphatic glands, and extensive tuberculosis of the peritoneum, with ulceration of the bowels. In the lungs there were masses of consolidation, clustered granulation, and miliary tubercle, with a few old cavities and fibroid condensation of the apices. Miliary tubercle in branches of the pulmonary artery, in cases of pulmonary tuberculosis, had been observed by Weigert, and were figured in Vol. lxxvii of Virchow's *Archiv*. Mügge (Virchow's *Archiv*, vol. lxxvi) had found miliary tubercles in the smaller branches of the pulmonary veins in nine out of ten cases of tuberculosis of the lungs. He had rarely found them in the pulmonary artery.

Peripheral Neuritis.—Dr. HALE WHITE showed specimens taken from a woman, aged 52, who gave a history of syphilis and alcoholism. She had occasional right-sided attacks of convulsions for some months before death. When admitted, she was partially demented. The optic discs were healthy, and there was no facial paralysis. There was wasting, rigidity, and contraction of the right arm and leg. She had a series of sixty-three right-sided epileptiform seizures during seven hours; the temperature rose to 103° Fahr., and the patient became unconscious, and died. At the necropsy, syphilitic ostitis of the posterior part of the frontal lobe was found; the membranes beneath were adherent. Under this ostitis, and over the whole of the outer surface of the left frontal lobe, the membranes were thick and dense, being of yellowish gummatous colour in parts, and adherent to the brain, except when separated by patches of thick yellow pus. The underlying brain-substance was little affected. The same condition, in a less degree, was present on the under surface and on that of the marginal convolution immediately over the genu of the corpus callosum, causing these marginal convolutions to be adherent. With the exception of cirrhosis of the liver, the rest of the body appeared healthy. Microscopic examination showed that the pachymeningitis was syphilitic. The nerve-cells in the convolutions beneath were not affected. The frontal lobe over the pachymeningitis was affected with syphilitic ostitis. Examination of the skin from the finger showed that the fibrous sheath around the nerve-funiculi was considerably thickened, and sent in thick septa between the individual nerve-fibres. These were much degenerated; in many of them no axis-cylinder could be seen, and all that could be observed was the granular material into which the white substance of Schwann had become converted. Under very high powers, sometimes the axis-cylinder could be seen among all this granular material, itself so much distorted and degenerate, that it could only be with difficulty distinguished from its surroundings. In the same section, there were many affected and many healthy fibres; the change was always very chronic, there being no small-celled nor vascular increase. The median nerve appeared healthy to the microscope. The columns of Goll and central parts, the lateral columns in the spinal cord, stained rather deeper than the rest of the cord, and there seemed to be a slight increase of neuroglia. This case presented many points of interest. In the first place, a syphilitic pachymeningitis, following syphilitic ostitis, was a rare, though recognised sequence. 2. The right-sided Jacksonian epilepsy, following the left-sided lesion, was very interesting. 3. The peripheral neuritis, in view of recent discoveries, chiefly by French workers, was important, as showing that the usually received notions concerning it were correct, with respect to its etiology; it was probably due to the alcohol, but possibly to the syphilis. Lastly, the slight change in the spinal cord, also probably alcoholic, should be noted.

Papilloma of the Breast.—Mr. BILTON POLLARD exhibited two specimens of duct-papilloma of the breast. The first was a growth removed from the breast of a woman, aged 50, who had noticed a small warty growth for three years. This growth was repeatedly removed. In October, 1885, a growth in the breast, beneath and around the nipple, was removed. This growth, which was encapsuled, except on the surface, where it was sprouting, consisted of two portions; one, friable, had the structure of an arborescent papilloma; the other, denser, was an adeno-fibroma. In the second specimen, the tendencies of the growth were towards malignancy; the growth, which closely resembled the first specimen in its structure, was in many places invading the fat. Mr. Pollard thought the specimens supported the view that papillomatous growths within the mammary ducts might, under certain conditions, develope into simple tumours, adeno-fibromata, and, under other conditions, develop into true cancers.—Mr. SHATTOCK referred to two cases of papillary growth in a mammary cyst.

Secondary Epithelioma of Jaw.—Mr. BILTON POLLARD showed, for Mr. Christopher Heath, a specimen of secondary growth of the jaw and the tissues in the left submaxillary space. The jaw was only superficially diseased. The growth was removed, together with the left half of the jaw and the attached muscles, and the patient recovered. The growth was a squamous epithelioma and, though it had excavated the bone (thus simulating a primary growth

in the bone), it must have originated in the lymphatic glands. The primary growth was situated in the lip, and was excised two years before the second operation.

Osteo-chondro-sarcoma of Breast.—Mr. WILLIAM HENRY BATTLE showed a specimen of osteo-chondro-sarcoma of the breast. The patient was a widow, aged 73, who had had five children. The right breast was amputated. The tumour commenced as a hard lump, to the inner side of the nipple, six years before. The growth was painless, and the patient's general health unaffected. It grew slowly until within a year of its removal, when it had attained the size of a large orange; it consisted of two portions, an inner, very hard and rounded, about the size of a walnut, which the patient had noticed for a long time, and an outer, more elastic, of the size of a large egg, a more recent development. The nipple was much retracted. The skin was adherent, red, and tense at the inner part. One small freely movable gland was detected in the axilla. The larger portion of the growth consisted of a soft, friable, extremely vascular material, in which there had been numerous hæmorrhages; and of a smaller very hard portion which resembled bone, and could not be cut with a knife. Microscopic examination of the tumour showed it to consist, in the softer parts, of round and spindle cells, and in the harder, of cartilage which had in parts become ossified, the section showing well marked Haversian canals. Mr. Battle stated that this variety of breast-tumour was extremely rare; and, in the *Transactions* of the Society, there were only a few cases recorded by Mr. Bowlby (vol. for 1882, p. 306), which in any way resembled it; they were examples of chondro-sarcoma, and had not undergone osteoid changes.

Osteo-chondroma of Thigh.—Mr. WILLIAM H. BATTLE showed a specimen of osteochondroma, removed from the thigh of a man aged 25. He had been kicked by a horse, three and a half months previously, in the left groin. A fortnight later, he noticed a lump, of the size of a walnut, where he had been kicked, and the tumour had developed without pain. It was of stony hardness, with a slightly irregular surface, and was situated in the diverging angle between the sartorius and the tensor vaginæ femoris, and apparently under the deep fascia. It was movable laterally, but not from above downwards. It measured three inches from side to side, and four in its long axis. It was found to be lodged in a bed of alveolar tissue, without any definite connections, being easily and quickly removed from under the deep fascia. Its structure was very hard, requiring a saw to divide it. The surface was very hard, but unequally so; and the inequality in this respect depended upon the distribution of the cartilaginous, bony, and calcareous elements of which the growth was composed. The bony part occupied chiefly the centre, but was also scattered somewhat irregularly throughout the section, forming almost an equal proportion with the cartilage; whilst in various parts, nearly always where the cartilage and bone passed into one another, rarely isolated in either, were well marked patches of white calcareous deposit.—Mr. BUTLIN referred to a similar case which he had recorded, where the growth recurred twice after removal.

Card Specimens.—Dr. SHARKEY: 1, Two cases of Laryngeal Disease in Typhoid Fever; 2, Perforation of Vermiform Appendix.—Mr. W. H. BATTLE: Bone-Disease in Congenital Syphilis.—Mr. E. HURRY FENWICK: Biliary Calculus, extracted *per anum*.—Dr. COLCOTT FOX: Fungus of Erythrasma.—Mr. F. T. PAUL: Rupture of Aorta.—Dr. W. B. HADDEN: Yellow Tubercle in Suprarenal Body.—Mr. QUARRY SILCOCK: Fibroid Thickening of Right Pleura (? Syphilitic).—Dr. HALE WHITE: A Series of Leprosy (for Dr. RAKE).—Mr. CROOKSHANK: Photographs of Micro-organisms.—Mr. CHURCHILL: Central Necrosis of Great Trochanter, with Rarefying Ostitis of Hip-joint.—Mr. S. PAGET: General Symmetrical Psoriasis (living specimen).

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 14TH, 1886.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Aneurysm of the Thoracic Aorta treated by Galvano-Puncture.—Dr. CHURTON (Leeds) read notes of the following case. A strongly built man, aged 45, had, in 1880, an aneurysm, which protruded through the left chest-wall. He was then in the Leeds Infirmary, under the care of Dr. Clifford Allbutt, and was treated by iodide of potassium (afterwards continued for three years), and by galvano-puncture upon two occasions. After each puncture, pulsation ceased for two or three days, but finally remained as before. The aneurysm, however, did not increase in size until last year. In June, 1885, he was admitted under the care of Dr. Churton, a second tumour having appeared in front of the lower part of the sternum. This grew rapidly. With the concurrence of Dr. Allbutt (now Consulting Physician to the Hospital), Mr. Teale, who had operated upon the patient previously, applied the galvanic needles, fifteen cells of Leclanché's battery being used for twenty minutes. Blood-*débris* ran from the negative puncture. The pulsation ceased, but returned on the fourth day. The operation was repeated on October 2nd, with like result. He began, about this time, to expectorate two or three drachms of blood-stained mucus daily. On October 27th, galvano-puncture was used for the third time. The tumour was tympanitic for a few hours, but did not cease to pulsate. On November 9th, it was so much increased in size, and its walls were so thin, that a fourth puncture was made; Dr. Griffith, the resident medical officer, operating in the absence of Mr. Teale. The current was passed for twenty minutes. Pulsation entirely ceased, and the patient seemed to have gained a respite; but he suddenly died, twenty minutes after the operation, from rupture into a bronchus of the first aneurysm, which had hitherto given no new sign, except the very small quantity of bloody sputum. At the necropsy, an erosion, half an inch in diameter, almost blocked up by a clot, described below, was found in the upper division of this sac. Except in the arch, the aorta was only moderately atheromatous. One testis had undergone fibrosis. The orifice of the first aneurysm was about an inch in diameter; the wall of the sac was as firm as cartilage. The middle of the sac was occupied by a firm clot, larger than a cricket-ball; the lower part of the sac was lined by laminated clot, thin around the orifice, gradually becoming thicker above, and quite smooth. The upper aspect of the central clot was rough. A fissure between the wall and the clot connected the two chambers, into which the primary sac had been divided by the formation and subsequent partial separation of the clot. It seemed to the author that, after the deposition of clot upon the entire sac, with closure of the upper part by formation of a very thick layer, the layer had been stripped from the roof of the sac by the blood which found a way through the fissure; and then, enlarging this part of the sac, formed a projection on the exterior of the chest. A constriction in the sac, marking the position of the large mass of clot, suggested this view. The growth of this sac was arrested by the firmness of its wall, except at two points—both in the upper division or chamber. At one of these points, the rupture into the bronchus had occurred. At the other, an orifice, one-third of an inch in diameter, which existed at the lower part of the chamber, led to the second sac, which, as well as a third and very small sac, was altogether outside the chest-wall. The third sac appeared to have originated by an orifice in the small piece of the wall of the primary sac which had yielded, and had become the upper limit of a short canal leading into the second sac. (The specimen and drawings were shown.) The walls of the second sac were soft, and its interior irregular, except where the sternum, quite uninjured, formed its limit. The front wall was composed merely of skin, and irregular bands or trabeculæ of connective tissue, of varying thickness, disposed like the columnæ carneæ of a right ventricle. This was the cavity, as large as an orange, in which the galvanic needles had been inserted. It contained no laminated clot; the surface was smooth and uninflamed. A soft jelly of pinkish colour, too fragile to be preserved, and some blood-*débris*, were contained in the cavity. The cessation of pulsation had been due to entanglement of this clot in the short narrow canal leading from the orifice into the cavity. The temporary cessation of pulsation, noted in the large aneurysm five years ago, was probably due to a similar entanglement of soft clot in the narrow fissure above mentioned. The formation of such a clot, and of blood-*débris*, in the cavity of a perfectly open aneurysm, one would suppose to be not free from danger.—Dr. GIBBONS had the opportunity of seeing the *post mortem* examination in two cases of aneurysm treated by galvano-puncture. The first was a woman, suffering from aneurysm threatening to rupture externally, which was galvano-punctured successfully. Later, she died, and a firm clot was found at the point of previous puncture. The second case was that of a man suffering from thoracic aneurysm, which also threatened to rupture externally. This was punctured with needles attached to a battery of six Smee's cells, the operation lasting fifteen minutes. Nine days later, a second puncture was tried for one hour, and a firm clot was formed. After a time, all benefit of former operations having disappeared, puncture was a third time performed; solidification ensued, and the man resumed work. Six weeks later, he returned to hospital; sloughing of the skin appeared; puncture was again performed, but, the edges of the wound becoming unhealthy, death occurred, apparently from pyæmia. The aneurysm was found, *post mortem*, to be of the thyroid axis. He believed there was a future in store for electrolysis, especially in gynæcology.—Dr. CHURTON, in replying, said that, while disclaiming any right to speak positively, he thought that the clots, which were found in the cases mentioned by Dr. Gibbons, being closely adherent to the wall of the

sac, must have been deposited slowly upon the lining membrane, and could not have been formed around the needles introduced into the sac, which would, he supposed, be insulated, except at their points.

Aneurysm of the Aorta: Extravasation of Blood into the Posterior Mediastinum, compressing the Œsophagus and Vagus Nerves, and Rupture into the Abdominal Cavity, associated, during Life, with frequent Vomiting.—Dr. PERCY KIDD contributed this case. A labourer, aged 31, was admitted on December 4th, 1885, in a very exhausted state. He stated that he had been ailing for six weeks, and had suffered from a slight cough, but was able to do his work until four days previously, when he took to bed on account of vomiting, shortness of breath on exertion, headache, and a feeling of *malaise*. He continued to vomit frequently, the headache and shortness of breath persisted, and his bowels were constipated. His previous health had been very good, with the exception that, some years back, he had contracted syphilis, and, six years ago, he had "pleurisy." On admission, the patient was muscular, and well nourished, but extremely anæmic. On the lower part of one leg, there was some partially healed ulceration and pigmentation. His pupils were slightly unequal, the right being larger than the left. The pulse was small and weak, but equal in the two radials. In the chest, slight scattered rhonchus and slight dulness at both bases existed posteriorly. The breath-sounds were rather weaker in the left than in the right interscapular region; over the manubrium sterni was weak tubular breathing, but no dulness. The heart-sounds were healthy, the abdomen soft and natural: no spots. The ophthalmoscopic appearances were normal. The urine was healthy. Temperature 99°. The next day there was no noteworthy change, except that his pupils became equal. He continued to suffer from vomiting and retching; he had a troublesome cough, and his temperature became subnormal. Early on the 7th, he became very restless, the pallor increased, and he sank in two hours. At the necropsy, the peritoneal cavity was filled with blood, but no source for the hæmorrhage was found in the abdomen. There was a small sacculated aneurysm, springing from the third part of the arch of the aorta, which had ruptured into the posterior mediastinum and subpleural tissue on the left side. The effused blood was shut off from the pleural cavity by adhesions, and had burrowed down along the œsophagus, compressing it and the vagus nerves, and had entered the abdominal cavity behind the crura of the diaphragm. The aorta was atheromatous in the arch, but elsewhere was healthy. The heart was slightly hypertrophied, the lungs were œdematous, and one testicle was fibroid. The other viscera were healthy. The vomiting was considered to have been due to irritation of the vagus fibres lying along the œsophagus, by the pressure of the effused blood.—Mr. H. CRIPPS thought the diagnosis of intraperitoneal hæmorrhage, with consequent vomiting, was an important point. He instanced a man, injured by being thrown from a dog-cart, who vomited every half-hour; prostration was not extreme, and some constipation existed. Strangulation of the intestine was diagnosed; the abdomen was opened, and found full of dark blood, which was continuously poured out, and could not be stopped. Death occurred in two days; and, at the *post mortem* examination, only a slight lesion of the liver could be found to account for the hæmorrhage. A similar case, in a boy, occurred soon afterwards; and, on *post mortem* examination, nothing save a laceration of the spleen could be found, to explain the hæmorrhage to which the vomiting was due.—Dr. DAWTREY DREWITT referred to a possible similarity of symptoms, as occurring in purulent peritonitis.—Dr. HADDEN asked Dr. Kidd if the œsophagus was much narrowed by the effused blood, in his case?—Dr. KIDD said a good deal of narrowing did exist. He argued against the theory that effusion of blood into the abdominal cavity caused the vomiting in his case.

Case of Impaction of Stone in one Ureter, with Atrophy of the Kidney on the other side.—Mr. PICK gave notes of this case. He said that the patient was first seen on February 1st, 1884, when he was found to be suffering from almost complete suppression of urine. The following history was obtained. The patient, aged about 45, had all his life been the subject of dyspepsia, with high coloured lithatic urine. Fifteen years ago, he passed a small calculus. In August, 1883, he was attacked with severe pain in the hypogastric region, accompanied by inability to pass urine. A catheter was introduced, but no urine was drawn off. The pain, which was of a very intense character, and was accompanied by sickness and vomiting, suddenly ceased, and shortly afterwards he passed a small calculus by the urethra. Two days before he was seen by Mr. Pick, he was again seized with intense pain in the region of the bladder, extending upwards in the course of the left ureter, and downwards to the testicle on the same side. The pain was accompanied by a feeling of sickness, but no actual vomiting took place. It lasted for about four hours, and then passed off. Since that time, until he was seen, a period of over forty-eight hours, he had only passed five ounces of urine. Upon examination, he was found to be in no pain, but nervous and anxious about himself. He was sweating profusely. There was no urine in the bladder. The urine which he had passed was light coloured, almost like water, of specific gravity 1006, and contained no albumen or abnormal deposit. The diagnosis arrived at was, that the case was one of impaction of a calculus in the ureter of a patient who had only one kidney, or who had already, from some cause, had the other kidney permanently destroyed. The patient was ordered to drink half a gallon of distilled water daily, in the hope that this would act as a non-stimulating diuretic, and cause the secretion of a large quantity of urine, which would mechanically wash the stone into the bladder. Two days afterwards, his condition was manifestly altered for the worse, though it appeared to be due more to nervous anxiety than to anything else. His principal complaint was his inability to pass urine; he, however, also complained of a considerable amount of pain in the left side of the abdomen, and here there was to be felt a firm, hard, and resisting circumscribed swelling, which was dull on percussion. He remained much in the same state, gradually, however, becoming more restless, and complaining, but without presenting any fresh symptoms, until the seventh day of his attack, when he was suddenly seized with an intense desire to pass urine; and, in the course of a very short time, he passed no less a quantity than seven and a half pints of urine; and, in doing so, passed three small calculi. From this time, his symptoms were at once relieved. His urine, which he passed in natural quantities, contained a little blood, but this soon passed off, and in a week or two he was, as he expressed it, "quite himself again." He continued well for about a year, until February, 1885, when he had a severe attack of lumbar pain, followed by the appearance of blood in the urine, and some time afterwards passed a small calculus by the urethra. On August 3rd, of the same year, he had a third attack of renal colic, which lasted five or six hours, and then passed off, but was followed by the appearance of blood in the urine. On the 11th, he had an attack of retention, from the impaction of a calculus in the urethra. This was relieved by the passage of a catheter, during which the stone was pushed back into the bladder. This was followed by vomiting, hiccough, almost complete suppression of urine. He became comatose, and died on August 17th. Permission could only be obtained to examine the urinary organs. The right kidney was found to be atrophied, very granular on its surface, and with only a trace of secreting structure remaining. The left kidney was of twice its natural size; its cut surface was of a deep red colour, and much congested. It contained about six or seven small calculi studded throughout its substance, and one large calculus was contained in the pelvis, and blocked up the ureter. The ureter itself was natural. The bladder contained a small stone.—Mr. BRYANT asked how far the lumbar swelling extended.—Mr. PICK said it was four inches long, and as thick as his arm; it was, he felt convinced, a dilated ureter.—Mr. GODLEE said it was interesting to note how rapidly secretion occurred in these cases after relief of distension of the kidney and ureter, by removal of the obstruction.—Mr. BRYANT asked in what way the right kidney suffered, whether from calculous formation, cystic degeneration, or otherwise. The treatment Mr. Pick adopted was both ingenious and successful; but the success possibly arose from the fact of a single kidney existing. From the appearance of the stones shown, he judged they were arrested in the upper part of the ureter. He did not think this passage capable of much dilatation. He mentioned the case of a child suffering from calculus in the bladder. The stone could not be felt when the child was on the table, and the operation was deferred. On the same evening, the child died; and, on *post mortem* examination, it was found that but one useful kidney existed; this was congested, and a little blood was found in the pelvis. The stone was found in the bladder; and, if the operation had been performed, it would have been held to be the cause of death.—Mr. BARKER suggested the desirability of making a lumbar urinary fistula in cases in which danger arose from the possible arrest of the function of a single kidney. The result of such a proceeding was unpleasant, but the risk very small. Such a case had occurred in his own practice. The patient had worn an urinal for twelve months, and appeared quite well; she was not very greatly inconvenienced.—Mr. R. W. PARKER mentioned the case of a boy, aged 4½, injured by falling over a form. Blood appeared in the urine, but soon passed away, and but little pain was experienced. Later, he returned to the hospital with a large abdominal swelling, which was punctured, when urine, containing blood, was evacuated. An opening was made into the side, the urine, *per urethram*, being bloody. The discharge from this opening soon ceased, and death occurred from convulsions. At the *post mortem* examination, the right kidney was found to be sacculated; the ureter was blocked, and surrounded by a sac, out of which pus

had been evacuated. Numerous small calculi were found. The boy was doubtless the subject of calculous hydronephrosis. The left kidney appeared to have been useless.—Mr. PICK said that the right kidney, in his case, was atrophied, being about an inch long; it was really a non-developed kidney, owing to arrest of development of its supplying artery. The mode of treatment, by washing out the kidney with distilled water, could only be applied to cases of the particular kind in question, namely, where but one working kidney existed. He believed the calculus was lodged at the vesical end of the ureter, and not, as Mr. Bryant suggested, at the renal end. He did not think the ureter might not ultimately contract, even after considerable distension. The formation of an urinary fistula had been considered, and was left to be resorted to later on, if absolutely called for.

Living Specimens.—Mr. PEARCE GOULD exhibited a case of local asphyxia of the hand and foot on one side.—Dr. WHITE showed a patient having a cervical rib.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 28TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimens.—Dr. BANTOCK exhibited the following specimens of uterine fibroid, removed by supravaginal hysterectomy. 1. An interesting example of multiple tumours, consisting of the uterine body enlarged by a number of small fibroids in the walls, and several pedunculated tumours scattered over the surface. A portion of the tumour filled the pelvis, and caused the patient great discomfort in standing, and great difficulty in the evacuation of the bowels. It was so wedged into the pelvis that it was difficult to extract it. The operation was performed on March 25th. The patient had done so well that the temperature never reached 100° Fahr. The weight of the tumour was a little over 5 lbs. There was a great drag on the pedicle, sufficient to cause sloughing of the skin under the pins. 2. A specimen of the soft fibroids, weighing 4½ lbs. Hæmorrhage was becoming excessive, and the patient anæmic. The operation was done on April 8th, and the patient was now convalescent, without a single bad symptom. 3. Another specimen of the soft fibroid, weighing 12 lbs. In this case, the left broad ligament was enormously developed; and, in applying the serre-nœud, it was necessarily folded upon itself. After the tumour was cut away, and the stump trimmed, a portion of this folded broad ligament slipped out on the lower or front aspect, and it was not till the third serre-nœud was applied that the whole was secured, the cut edges being picked up by forceps, to ensure that the whole edge was secured. The patient was doing well. 4. Another specimen of the soft fibroid, weighing 15 lbs., removed the same afternoon. The tumour was so elastic as to simulate fluctuation. The cavity was enormously enlarged, measuring, in the specimen, about ten inches. A very long incision was required, but there was no special difficulty in the operation.—Dr. CULVER JAMES showed an ovary that had undergone calcareous degeneration. He had removed it, at a *post mortem* examination, from a patient who had died from hæmorrhage of the stomach in her eighty-third year. Within the vagina was found an India-rubber pessary, which had evidently been forgotten, and had, in all probability, been there for over twenty-five years.—Dr. AVELING and Mr. J. BLAND SUTTON presented their report on the extraperitoneal tumour exhibited by Dr. Aveling. It appeared to be an allantoic cyst, the walls of which had become sarcomatous, affording an illustration of the great tendency which aberrant and ill-developed structures often exhibited to become the seat of morbid growths.

ADJOURNED DISCUSSION ON VICARIOUS MENSTRUATION.

Dr. BANTOCK, in resuming the discussion, would say nothing of the various theories referred to, but would confine himself to the practical aspect of the question. This condition was said by many authors to be a common one. He was of opinion, on the contrary, that it was exceedingly uncommon; and it was partly because of its great rarity that there was still so much scepticism on the subject. It was no argument against it, that well known authors had said nothing about it. What he understood by the term vicarious menstruation was the occurrence of a hæmorrhagic discharge, observing some amount of periodicity, from a part of the body other than the generative passages: whether that part were healthy or unhealthy, was immaterial. Now, it was a well recognised fact that, as a rule, menstruation ceased as soon as impregnation had taken place. But it was also well known that many women had a hæmorrhagic discharge, a so-called menstrual discharge, for one, two, or three periods after impregnation had taken place; that is to say, the hæmorrhage occurred at the time when the flow would have made its appearance but for the impregnation. It was asserted that this discharge sometimes occurred during the whole course of pregnancy. He had never seen such a case, but was not, therefore, going to deny its occurrence. Now, suppose hæmorrhage occurred from another part of the body other than the genital passages under these circumstances, he contended that that was a case of vicarious hæmorrhage. Such a case was that of a lady who, in her first pregnancy, had an attack of hæmatemesis, at the time when the monthly period should have made its appearance. The same thing occurred in her next pregnancy. This lady had been in the habit of menstruating rather freely. He offered no explanation, but was satisfied with mentioning the fact; others might theorise as they pleased. It was not necessary, to prove the case, that the hæmorrhage should recur with the regularity of a normal menstruation. It was well known that true menstruation was often very irregular, occurring at intervals varying from a week or two to several months; and no one would think of denying that a hæmorrhagic discharge from the genital passage, even at the longest intervals, was a true menstruation. Such cases, he was satisfied, came under his definition. He could quite sympathise with scepticism, but he thought, in this instance, the idea was well founded. Anyhow, the discussion could not fail to produce a good result.

Dr. AVELING thought it impossible to ignore the existence of a phenomenon, which had been observed and recorded by medical writers from the time of Hippocrates to the present day. There was, undoubtedly, in some women, a periodic discharge of blood, often accompanied by excessive secretion, coincident with menstruation; but there was, perhaps, some question as to the causation of this flow. Twelve years ago, he had introduced two new words into the gynæcological vocabulary, which had been more widely adopted and used in America and on the Continent than in this country, "nidation" and "denidation." The former consisted of the periodic development of the mucous membrane lining the interior of the body of the uterus; the latter, of the throwing off of the nidal decidua, which act determined the discharge of the menstrual fluid. It had been shown that a wave of vital energy took place between each catamenial period, the climax of which occurred four or five days before the appearance of the menstrual flow. About this time the temperature was highest, the excretion of urea greatest, and the blood-pressure most marked. At this period, he thought an escape of blood, which Dr. David Davis had wisely called "an analogy of menstruation," was most likely to take place from the mucous membrane or skin, especially if any weak points in these tissues existed. Menstruation took place when the blood-pressure was reduced to its mean. It was analogous to lochiation, as nidation and denidation were to gestation and parturition, and was of a retrogressive character, being only the sequel and unimportant conclusion of the nidatory function. He believed vicarious menstruation was not synchronous with denidation and missed menstruation, but that it occurred when nidation had reached its climax of functional activity. If this were so, he suggested, as a more appropriate name for the "analogy of menstruation," *nidal epistaxis*.

Dr. MURPHY (Sunderland) related the case of a young woman, aged 19, who had been under his care for three years. The menstrual flow had become very irregular, owing to her getting a wetting on one of those occasions. Hæmoptysis took place, for a few days, every month or six weeks, except when menstruation occurred. The blood would come into her mouth of its own accord, or with a slight cough; and, in the twenty-four hours, she would sometimes bring up six or seven ounces. The patient was plump and looked well, and had no cough. He examined her chest carefully, and all the organs appeared to be sound. When seen two years subsequently, she was found to be eight months pregnant. There had been no menstruation for a year and seven months—that is, she had not menstruated for eleven months before she became pregnant. Since then, there had been no hæmoptysis whatever.

Dr. GRIGG stated he had met with three cases of vicarious hæmorrhage of a periodical character. The first case was in a young woman, aged 19, who had a free monthly hæmorrhage from a large nævus on the left side of the body. Being about to marry, she wished the nævus removed, to prevent the hæmorrhage. This was done, and she died on the third day after the operation. The second was a woman, about 36 years of age, who had gone the round of all the London hospitals. She stated that she menstruated normally up to her twenty-second year, when, catching a severe cold during a menstrual flow, she had had ever since a monthly loss of blood from the stomach, lasting two or three days. He had tried every remedy without success, and had since lost sight of her. The last case was in a lady, aged 33, who was one of five sisters, four of whom had stopped menstruating by 33 years of age. She had been subject to

bleeding of the nose at the menstrual epoch for some years. The menses had ceased at the age of 31; since then, she had had a monthly loss from the nose, lasting for two or three days. The uterine organs and appendages were perfectly healthy.

Dr. ROUTH said vicarious menstruation was in strict analogy with other physiological and pathological examples. There were many instances in which one organ did compensatory work for another. He related the case of a young domestic, aged 17, to whom he was called for epistaxis. He tried several means to arrest it, but without much success, if any. Although it went on for five or six days, and copiously, the girl appeared to be the better from it. There were no proper catamenia; and this state of things continued regularly for several months, till, apprehending the true nature of the case, he began to treat the uterus by local measures and emmenagogues. These brought on the catamenia, and the epistaxis ceased.

Dr. MANSELL MOULLIN thought the term menstruation was very loosely employed. Of one hæmorrhage taking the place vicariously for another, up to a certain point, most were willing to admit the possibility. There were three points to be borne in mind with regard to so-called vicarious hæmorrhages. First, a profuse hæmorrhage from a distant organ, or a continued hæmorrhage of less severity, might cause a suppression of the catamenial flow. Secondly, in certain states and conditions, suppression of the monthly discharge was of common occurrence, while pathological hæmorrhages from other organs were by no means unfrequent. This was seen notably in young women of delicate constitution and scrofulous tendency, in whom, while the catamenia were often suppressed, hæmorrhages from the nose, throat, bronchi, and stomach were frequently met with. Again, in women, about the period of the climacteric, similar phenomena were sometimes witnessed, the hæmorrhage most frequently taking the form of epistaxis, or proceeding from hæmorrhoids. Thirdly, it was well known that, at the menstrual period, there was increased vascular excitement, as evidenced by fever, rapid pulse, flushing of the face, and headache; and it was only rational to suppose that such vascular excitement might determine a hæmorrhage from a surface already disposed to bleed, as, for example, ulcerated piles, or the spongy gums of a scurvy patient. He believed every case of so-called vicarious menstruation might be included under one of the three heads just mentioned. Dr. Barnes had contended that vicarious menstruation did not, necessarily, seek a diseased surface from which to escape, but that, in some instances, at any rate, the surface became diseased secondarily, owing to the periodical determination of blood to that surface. He could not agree with that view, and thought that those cases in which the uterus and vagina were absent, instead of affording most crucial evidence in favour of vicarious menstruation, were the strongest evidence against it. He had seen many such cases; they were much commoner than was generally supposed, in some cases not being suspected even after the patient was married. It followed, if the function of menstruation were so essential, if the consequences of its suppression were as grave as was contended, vicarious menstruation must be much more frequently observed than was the case.

Dr. BEDFORD FENWICK held there were two questions to be considered: first, was there *primâ facie* ground for believing that vicarious menstruation could occur? secondly, was there definite proof that such cases did occur? He agreed with the previous speaker in his objection to the term vicarious menstruation, and proposed to discuss the subject instead under the title of vicarious hæmorrhage. The blood, which came vicariously through some other channel, would necessarily differ from that which carried with it uterine and vaginal *débris*. There was no need for a learned disquisition upon vaso-motor and cerebral centres in this connection. It was well known that, if menstruation were checked abnormally, the vascular fulness showed itself in flushing of the face, suffusion of the eyes, headache, and other like symptoms. A sharp hydragogue cathartic was the surest remedy. If this were not forthcoming, nature could relieve the strain in her own way, by an attack of hæmoptysis or epistaxis. A weakened surface of some kind, however, was necessary; and the fact that she required this local injury to be present just when the vascular tension demanded relief, explained why cases of vicarious hæmorrhage were so unfrequent. Again, the very cause that produced the local weakness might also diminish the vascular tension. Given amenorrhœa, *plus* undiminished vascular tension, *plus* an exposed surface of weakened tissue, it was quite probable a vicarious hæmorrhage might take place. He had searched medical literature, and found a sufficient number of well authenticated cases, which, with those that had come under his own notice, he thought sufficiently proved that vicarious hæmorrhages did occur.

Dr. MUTCH (Nottingham) related the case of a patient, aged 25, to whom he was called for hæmatemesis. She had always menstruated regularly, and was then expecting her period. She continued to vomit blood for four or five days, in spite of treatment; at the end of that time, the blood ceased, and she was quite well. She did not menstruate that month, but was regular the one following. This case, he thought, showed distinctly that there was a positive connection between menstruation and the escape of blood from the stomach, as she was in good health, and had not suffered from any gastric symptom whatever.

Dr. ELDER (Nottingham) confessed to a feeling of disappointment at the result of the night's debate. He had listened with much pleasure to the honest learned scepticism of Dr. Wilks on this matter; and, when he boldly threw down the gauntlet, expected fully that Dr. Barnes and the other advocates of this much questioned pathological condition, would meet it with well attested and authentic cases. What was the result? Not one history had been given which might not, and much more reasonably, be explained by the existing diseased conditions. After an experience of hospital and private work, extending over eighteen years, he had never been able to satisfactorily class any case as one of vicarious menstruation. As a pathological entity, he did not believe it had any existence; and the profession owed Dr. Wilks a debt of gratitude for an honest endeavour to rid the text-books of a disease which clinical experience failed to recognise.

Dr. FENTON JONES, Dr. HEYWOOD SMITH, Mr. BLAND SUTTON, and Mr. PHILLIPS HILLS, took part in the discussion.

Dr. BARNES, in reply, said the interesting discussion with which his paper had been honoured, tended to confirm the views he had put forth in affirmation of the doctrine of vicarious menstruation. It was no argument against it, that a satisfactory reference to the subject was not to be found in text-books. In reading his paper he had, he feared, dwelt too much on the physiological argument, slurring over the details of cases for want of time. He dilated rather on the physiological argument, because this had been too much neglected, and because it was always wise to establish the rational foundation of a theory. They had been favoured that night with several valuable cases. He had noted similar examples himself. Dr. Bedford Fenwick's collection of cases would form a most valuable supplement to the paper. The postulate of a diseased surface, from which the blood could escape, was opposed to his own precise observations. He had seen a vicarious discharge of blood from the nipple, and the skin, which was perfectly healthy, although it was true a damaged surface was preferred. He did not assert that there was any menstrual peculiarity in the blood discharged vicariously. He did not imply that there was metastasis of menstrual fluid from the uterus. Escape of blood alone was enough to bring down the vascular tension, one of the objects of menstruation. A want of strict periodicity, in cases of ectopic hæmorrhage with amenorrhœa, was no reason for not accepting the case. In many women, ordinary menstruation was irregular. Another difficulty had been raised: namely, that in amenorrhœa there might be no compensating bleeding. That was true; but it did not follow that there was no other compensating condition. In many cases of amenorrhœa, there was leucorrhœa; and a point made by Dr. Routh was very important in this relation. When there was no natural relief by blood or other discharge, there was not seldom a tendency to local congestion and inflammation. The belief that vicarious menstruation was not common, was entertained by many who, however, recognised the reality of the phenomenon. Upon this point he would urge that, if cases of complete absence of uterine menstruation, with punctual or exact periodicity of blood-discharge from some other source, were considered as the only cases of vicarious menstruation, then he might admit that vicarious menstruation thus rigidly postulated, was not common; but, if a broader survey were taken, and a just appreciation were made of the cases in which blood and other discharges occurred at intervals more or less strictly regular; and of cases in which cognate affections arose in connection with absent or imperfect uterine menstruation, then it would be found that vicarious menstruation was not at all uncommon.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 6TH, 1886.

MALCOLM MORRIS, F.R.C.S.Ed., Vice-President, in the Chair.

Sudden Death in Pregnancy, Parturition, and the Puerperal State.—Dr. M. HANDFIELD-JONES briefly traced the history of the evidence on which hypertrophy of the left ventricle in pregnancy rested, and raised the question whether this hypertrophy was ever wanting; and, if so, what were the results. He showed, by details of cases, that signs of cardiac failure and insufficiency were traceable where no hypertrophy was present. Attention was drawn to the close tie existing between the heart and the uterus, and the extreme probability

that the return of the heart to its normal state after delivery was due to a gradual process of fatty metamorphosis, which, under healthy conditions, was devoid of danger. In some patients, this fatty change might overstep the normal boundary, thereby weakening the cardiac muscle, and rendering it fatally susceptible of strains which it would normally be able to withstand. Cases were adduced in support of this view.—Dr. JOHN PHILLIPS mentioned a case in which albuminuria and œdema had been present, but no hypertrophy of the heart, nor evidence of actual renal inflammation. Premature labour had, therefore, not been induced. Was it always advisable to induce it where there was reason to suspect fatty degeneration during the later months of pregnancy?—Dr. CHAMPNEYS thought that the changes in the vascular conditions, before and after pregnancy, were not yet fully understood. Cases of true cardiac insufficiency from rheumatism were often unsuspected until pregnancy occurred. In 75 per cent. of the cases recorded by Dr. Angel Money, there were murmurs of some kind, but mostly transient. Fainting and sudden death were liable to occur, even without hæmorrhage; and, for this reason, especial care was necessary for many hours after delivery, when there had been much loss of blood.—Mr. GEORGE EASTES referred to clotting of blood in the pelvic veins and pulmonary embolism, and to ruptured uterus and *post partum* syncope, as other causes of sudden death.—Dr. MORTON believed that the alteration in the character of the blood had much to do with the formation of the clots referred to by Mr. Eastes.—Dr. M. HANDFIELD-JONES, in reply, advocated induction of premature labour in the cases referred to by Dr. Phillips. He did not know what was the average duration of the physiological hypertrophy after delivery.

On some Practical Points in Percussion and Auscultation of the Chest.—Dr. W. EWART read a paper on this subject, prefaced by a brief description of the instruments used in percussion and auscultation. Manual percussion, in the author's opinion, was to be preferred to the use of the hammer and pleximeter. The relative advantages of monaural and binaural auscultation were discussed from a practical stand-point. Differential stethoscopy was thought to be of little value; but Dr. Ewart advocated the use of the comparing stethoscope, an instrument differing from the ordinary binaural, in possessing two chest-pieces, connected with the ear-tubes by means of a four-way-tube shaped like the letter X. By this instrument, special facilities were afforded for the rapid examination of the chest, and for the accurate comparison of sounds heard at widely distant spots. This comparing stethoscope had been constructed by the author, before he had become acquainted with Dr. Spencer's instrument. The priority of the latter was freely acknowledged, and a tribute was paid to its ingenious and elegant construction. The paper was concluded by some practical suggestions as to the methods of using the various means of physical examination.—Dr. SANSOM advocated the use of the pleximeter in percussion. He regarded the finger as the medium least of all adapted for the purpose, believing that it was nearly impossible to obtain precise outlines by its means. For his own use, he had devised a pleximeter, consisting of a small pillar of vulcanite, furnished with flat plates at each end, of different sizes, adaptable to broader or narrower intercostal spaces, or other surfaces. By percussion with the finger, the sense of tactile vibration was fully preserved, and outlines could be so clearly defined as to admit of being marked out in pencil on the chest itself.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MAY 6TH, 1886.

J. H. Ross, M.D., Vice-President, in the Chair.

Destruction of Parotids.—Mr. N. P. BLEKER brought forward a woman, of over middle age, in whom both parotid and both submaxillary glands had sloughed away after acute inflammation, that resembled ordinary "mumps." There was some dryness of mouth, but no marked inconvenience.

Myelitis, or Reflex Paraplegia (?).—Dr. BLACK showed, for Dr. WITHERS MOORE, a man, aged 53, admitted into the County Hospital with partial loss of motor power in his legs, and of control over the bladder and rectum. Most of the reflexes were exaggerated. The gait was stiff and spastic, but there was no marked wasting, and no rigidity. The urine was alkaline, free from albumen. There was much vesical pain; there was no stricture, but chronic dysuria, and retention had occurred, requiring the catheter, seven weeks before. About the same time, he rather suddenly lost power in the legs. On the other hand, in favour of the syphilitic origin of the symptoms (from a disseminated myelitis), was the history of chancre and secondary symptoms two years previously. He was ordered one grain of hydrargyrum cum cretâ three times daily, and five to ten grains of iodide of potassium. The bladder was ordered to be washed out daily with solution of boracic acid. Under this treatment, all the symptoms improved in a few weeks.

Congenital Dislocation of Both Thighs.—Dr. BLACK showed, for Dr. WITHERS MOORE, a boy, aged 10, with this deformity. He was born by the breech, after protracted labour, and never walked properly. His pelvis seemed broad, of female type; the thighs approximated, and were shorter than the legs below the knee; the trochanters were near the anterior superior spines of the ilia, and two inches above Nélaton's line. The gait was "waddling," and there was much lordosis. Sayre's jacket had been applied, four years before, at another hospital, without benefit.

Lichen Ruber Planus.—Dr. MACKEY brought forward a characteristic case of this kind in an adult male, with red flat papules, some umbilicated, confluent over the face and body and part of the limbs, discrete in other parts, especially on the wrists and hands, but with sufficient scaling near the larger joints to justify Mr. Hutchinson's term of lichen psoriasis. The hair-follicles were mostly affected. The attack was acute, and of a few weeks' duration, and accompanied with much pruritus and nerve-depression, but was now getting better with rest, alkaline baths, and carbolised oil, and arsenic internally.

Suppurative Peritonitis.—Mr. WILLOUGHBY FURNER showed the pelvic organs removed, *post mortem*, from a case of suppurative peritonitis. There was a small cyst in one ovary; the other had been removed, eighteen months before, for cystic disease; the stump was tied with thick silk, no trace of which was found.

Gravel and Calculus.—Mr. ALFRED SCOTT related a case of severe persistent urethritis, occurring in a man, aged 25, simulating, and taken for gonorrhœa, but really dependent on oxaluria, rebellious to treatment, but ceasing after passage of an oxalate of lime calculus. During more than two years that the man suffered, he had married, and the wife suffered from vaginitis, apparently corroborating for a time the diagnosis of specific disorder. Another case reported was that of a woman, who passed small oxalic calculi, at intervals of a few months, whatever diet or treatment was adopted. Almost her only relief was from chloroform, or full doses (half a grain) of morphine during the paroxysm; and Mr. Scott strongly advised copious draughts of water during this medication, to obviate ill effects. He referred to its value in his own case, having suffered much from sciatica of gouty origin, and later from renal colic, and the passage of a small uric acid calculus. The waters of Bath had proved of much service to him, their main physiological effect being profuse diuresis of acid urine; the painful acidity was markedly increased after bathing in the waters, and, although trying at the time, resulted in relieving him of a chronic acid dyspepsia, and of all renal symptoms. He had also met many patients who "had lost their pain, their indigestion, and their bad temper" under similar treatment. He further noted how often gravel or calculus was formed in one kidney only, and inquired how it happened that the malady was comparatively frequent amongst vegetable feeders (rice), such as the Hindoos, as well as young children. Too exclusive a diet did not answer, and he only refused such food as "turned acid," for example, beer, tea, cheese, pastry, and meat, oftener than once daily.—Dr. UHTHOFF referred to nephritic and gouty cases benefited by copious draughts of hot water, taken regularly two or three times a day.—Mr. EDWARDS considered it difficult to explain why more uric acid should form at one time than another, for, in his experience, diet made little or no difference. The urine of later life, containing uric acid, was often of low specific gravity from "kidney inability," a condition benefited by strychnine.—Mr. W. FURNER explained the low specific gravity of gouty urine by the crystallising and sinking of solid constituents; he also found little effect from diet, except from lessening meat, and emphasised the fact as to Hindoos being subject to calculus; he considered rice "acid."—Dr. BLACK quoted cases of oxaluria, in which nitrogenous, diabetic, and non-nitrogenous dieting had been successively tried, without effecting any alteration in the excretion.—Dr. EWART referred to the dependence of such disorders on dyspepsia, and to the careful regulation of diet at Carlsbad and other foreign spas, where, also, a course of bathing was prepared for by drinking the waters first. Calculus was rare in Bengal, where rice was most consumed, but frequent in the North-Western Provinces, where the heat was more intense, and the skin drier; the chief food there was wheat flour.—Dr. MACKEY considered that the drinking water should be taken into account when judging of causation of calculus. It was noteworthy that, at Bath, the waters were taken at 115° Fahr., though they did not seem so hot to the taste.—Dr. WHITTLE referred to the hepatic and neurotic origin of rheumatic and gouty disorders.—Mr. SCOTT agreed as to the benefit obtained from drinking hot water.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

WEDNESDAY, APRIL 28TH, 1886.

S. W. NORTH, M.R.C.S.Eng., President, in the Chair.

Some of the Difficulties with which Medical Officers of Health have to contend relative to Infectious Diseases.—Dr. GOLDIE read a paper on this subject. Foremost in the difficulties, he placed the want of timely notice of the first cases of an outbreak of infectious disease. Medical officers of health could not guarantee that the infection would then cease with the first case; but, clearly, if that method failed in any degree, the total absence of that knowledge must lead to greater chance of these diseases spreading, and to greater public disaster. Early notification of the occurrence of infectious disease could not be looked upon as a hardship, nor as an interference with the liberty of the subject. A second difficulty was, how to define the words in the Public Health Act, 1875, Section 24, "without proper lodgings or accommodation." Was a back-to-back cottage house in a long row to be deemed proper lodging for an infectious disease? In such houses, the mother had the sufferer brought into the kitchen to be near her, and would nurse, do domestic duties, cook, and go out into the crowded streets. If health-officers were to be of substantial value to the public, they must be permitted more precise and powerful measures. The third difficulty was in connection with the disinfection of houses, clothing, bedding, etc. Meat-inspection was another serious difficulty; there were too many portals for admitting cattle into towns, too many places for the slaughtering of cattle in almost every English town, and such places were, also, imperfectly constructed, and inconvenient for the purposes of proper meat-inspection. To remedy the difficulties described, Dr. Goldie suggested (1) a Compulsory Notification Act, to dispose of the want of early knowledge of the outbreak of dangerously infectious diseases; (2) that, as such a class of diseases could not be safely treated in the crowded streets of large towns, and as the homes of the vast majority were inconvenient, wherever suitable hospitals were provided in such large towns, the cases should be removed into them at once; (3) the difficulty of disinfection could only be met in one way—by providing proper sanatoria at convenient distances, and in sufficient numbers, in all large towns, with baths, disinfecting apparatus, and proper housing accommodation for a night or two. This was consistent with public economy. The people of large towns had better support a few sanatoria than a large number of patients isolated into hospitals, and a larger number filling beds of sickness in crowded localities. As to meat-inspection, the only safeguards against the disposal of diseased and unsound meat was in public abattoirs and markets, which Leeds had adopted.—Dr. BRITTON (Halifax) concurred with Dr. Goldie as to meat-inspection.—Dr. MASON found, at Hull, that isolation could only be satisfactorily secured by removal to hospital. Accommodation should be accepted by all classes, free of charge to themselves, and all under one roof. As to notification, nothing short of an imperial measure would meet that difficulty.—Dr. CAMERON remarked that his town (Huddersfield) was the first to adopt compulsory notification. The system of notification by medical men had not worked well, but the compulsory system had acted better both for the medical officer and the medical practitioners. From experience, he could state that there was a great saving of life from taking cases into hospital.—Dr. MITCHELL WILSON said that the mere removal of patients to an infectious diseases hospital did them good at once. In one hospital, of which he was medical superintendent, opened in 1876, there had been forty cases of scarlet fever treated without a single death. While in favour of removals to hospital, he thought it ought not to be made compulsory on rich patients who were ready to satisfy certain medical requirements.—Dr. BRUCE LOW considered that disinfection often seemed to fail, and especially in scarlet fever, because less attention was given to the discharges from the throat than to those of the skin.—The CHAIRMAN stated that notification was now in force in York, and had been since August last. So far as could be judged, it had acted advantageously, and the spread of scarlet fever had been limited thereby.—Dr. GOLDIE stated that early information had recently enabled him to stamp out outbreaks of typhus and small-pox in Leeds.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.

THURSDAY, MARCH 6TH, 1886.

A. A. NAPPER, Esq., in the Chair.

The Period of Incubation and Duration of Infection of the Principal Zymotic Diseases.—A discussion on this subject was opened with a short paper by Mr. S. G. SLOMAN, junior, of Farnham. In the course of his remarks, Mr. Sloman suggested that continued exposure to the infectious poison might possibly lessen the duration of the latent period. He divided the chief zymotic diseases into two groups, according to the duration of their incubation periods; and he argued that those with short periods of incubation were generally associated with a long duration of infection; and with especial reference to the time in which infection persisted, he strongly maintained the theory that infection lasted as long as any characteristic symptom remained.—Dr. FREDERICK PEARSE read a short paper on the same subject. From several sporadic cases peculiarly adapted for calculation, which had come under his observation, he submitted the following periods to the consideration of the members.

	Incubation	Duration of Infection.
Mumps	18 days	under 3 weeks.
Small-pox	12 ,,	,, 1 month.
Diphtheria	14 ,,	,, 3 weeks.
Measles	10 ,,	,, 1 month.
Scarlet fever	3 ,,	7 weeks.
Whooping cough	14 ,,	8 ,,

In the course of his paper, Dr. Pearse urged the absolute necessity for more definite observations; as the uncertainty and wide latitude in dates, given even by the best authorities, showed our knowledge on these points to be greatly deficient in practical value. Moreover, the periods of latency and infection were urgently needed to prevent the spread of the zymotic diseases. He maintained that, although the periods of incubation might vary very slightly, dependent possibly on the manner in which the infection was conveyed, or upon the receptivity of the part which admitted the poison (as was shown by the shortened period of incubation when, for example, measles or small-pox was conveyed by inoculation), yet each disease had its own well defined period, and the dates were becoming more and more fixed by more accurate observations. He contended that the duration of infection was also probably fixed, and that the characteristic symptoms, for example, the desquamation of scarlet fever, were pathological conditions left by the contagia, and were not, beyond the fixed periods, any guides to their continued or prolonged infectiousness. The time during which a patient was infectious corresponded possibly with the life-history of the contagium, and the pathological conditions induced were not criteria as to the duration of infection. Upon this hypothesis, he argued that a mild case of measles or scarlet fever was as infectious, and as long infectious, as a severe one.—Mr. NAPPER, senior, considered it was almost equally important to find out how long infection attached to clothes, etc., as the time in which it was attached to the person of the patient.—The Chairman remarked that, as medical officer to the Cranleigh School, he had found that, if the patient were well disinfected from the first, the duration of the infectious period was diminished; and he had made it a practice of receiving cases of measles at the end of three weeks, and had had no further cases due to this.—Mr. FOWLER remarked that, when connected with the Fever Hospital, he had repeated opportunities of noting cases of scarlet fever caught from the ambulance; and in these cases, the incubation-period was invariably found to be from sixty-eight to seventy-two hours.

Prognosis in Heart-Valve Disease.—Dr. ISAMBARD OWEN read a short paper on this subject, pointing out the great need that existed for further data, drawn rather from practice among the upper classes of society than from the records of hospital cases. He showed, by quotations from several standard authorities on heart-valve disease, how discrepant opinions were, both upon the prospects of life under heart-valve disease, and on the relative seriousness of its different forms. He quoted from statistics of cases, recorded by himself in St. George's Hospital, to show the prospects of patients suffering from this form of disease among the working classes, especially drawing attention to the fact that, in his tables, nearly all the cases of aortic disease were in males, and nearly all those of mitral stenosis in females; and, further, that a very small number of deaths had occurred in the hospital from mitral insufficiency alone.—In the discussion which ensued, the CHAIRMAN remarked upon a case of mitral regurgitation which had been under his own and his father's observation for upwards of twenty years, and in which no particular discomfort had yet been experienced.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, APRIL 30TH, 1886.

J. M. FINNY, M.D., and afterwards F. R. CRUISE, M.D., President, in the Chair.

On the Quantitative Estimation of Sugar in the Urine by the Polariscope.—Dr. CRUISE read a communication upon the estimation of sugar in the urine by the polariscope, and demonstrated the operation with the instrument known as the Yvon-Dubosecq diabétomètre. Dr.

Cruise dwelt upon the the great advantages of this method over volumetric analysis, inasmuch as it was very accurate, very easily used, and occupied only about ten minutes; while chemical determination was surrounded by errors, both possible and serious, required special skill, and could scarcely be accomplished in less than an hour.—The CHAIRMAN said the members were much indebted to the President for this method, which, he believed, would be of great use to practitioners in testing the amount of urine.—Dr. TICHBORNE said he was indebted to Dr. Cruise for his first introduction to this instrument, and was in a position to bear testimony to the utility of the very excellent polariscope, which would be effectual in estimating the quantity of sugar in any substance. The paper issued by the makers of the polariscope stated that either charcoal or acetate of lead might be used for decolorising the urine. He thought that charcoal was not desirable, because it slightly reduced the percentage of sugar. In some cases, the volumetric analysis was more reliable than this polariscopic method; but, generally speaking, the latter proved the more reliable in two out of three cases. In using the polariscope, it was necessary to guard against fluctuations of temperature, and too high a temperature. He had found that 60° Fahr. was the best temperature in which to use the method. In certain conditions of urine, where urates and oxalates predominated, the speaker had noted, by the volumetric process, that he got 4.8 per cent., and by the polariscope 4.5 per cent. The presence of ammoniacal salts was also a disturbing factor, and must be taken into account in estimating the result. Another advantage of the polariscope was the ease with which it could be worked in artificial light, as compared with the volumetric method. The instrument was really only a well-made and simplified polariscope, working with a monochromatic flame, and capable of determining right- or left-handed rotation. The only excuse for naming the instrument diabetometer, was the system of graduation adopted, which required to be multiplied or divided, as the case might be, by 2.256, to convert it into polariscopic degrees.—Dr. WALTER SMITH said this instrument was sufficiently accurate for clinical purposes. If great accuracy were required, the palm must be yielded to chemical methods. This optical method was not reliable for percentages of sugar smaller than half per cent. It was not a positive test of sugar, for it went on the assumptions that urine contained no active substance except glucose, and that the optical behaviour of glucose was the same as that of distilled water. Again, it had been made out that a large class of substances, several of which were now used in medicine, passed out in the urine in a chemical form, which excited a left-handed rotation in polarised light. This was true of a large group of bodies, including aromatic compounds, alcoholic derivatives, chloral, etc.—Dr. QUINLAN had used, for some years, the Rev. Dr. Jellett's saccharometer. It was well suited for research, but it was too tedious for the purposes of the physician. That proposed by Dr. Cruise was quite accurate enough for clinical purposes; it obtained a comparatively rapid result.—Dr. NIXON agreed with Dr. Smith, that strict scientific accuracy could not be obtained by the polariscope exhibited. But, in the case of a patient who had been for some time under treatment for diabetes, and concerning whom observations had to be made as to the influence of restricted dietary, it was desirable to ascertain quickly, especially in reference to prognosis, whether any material change had taken place in the condition of the urine; and he considered Soliel's instrument, or its modifications by Duboscq and Mitscherlich, very valuable in arriving rapidly at a conclusion on the point. Dr. Nixon, however, regarded one point as of special importance in the use of the saccharometer. It had been noted that a solution of albumen had the power of rotating the plane of polarisation to the left, and of course this would be of the utmost importance to bear in mind in those cases, not uncommon, where diabetes mellitus coexisted with albuminuria.—The PRESIDENT replied.

Clinical Notes in a Case of Lichen Planus.—Dr. FINNY reported the case of a patient, Mrs. H., aged 53, who had never before any cutaneous affection. She was supposed to be rheumatic and dyspeptic. For some months, her nervous system seemed to have been depressed, and she was easily tired, because irritable; and, on two occasions, her bowels moved suddenly in the street, although she had had a natural evacuation in the morning. Her life was an easy one, and her circumstances comfortable. She consulted Dr. Finny, at the end of August, 1885, for a very itchy affection of the skin, of six weeks' duration, the irritation of which had quite deprived her of sleep, and caused loss of appetite. The disease began in small patches below the knees, and gradually spread, until, in the first fortnight in September, there was no part devoid of papules, except the head and face. The eruption was, however, both as to size of the papules and extent of the patches, greatest over the back, loins, abdomen, and thigh, over the vastus internus. The papules in the palms and soles were few and scattered. The colour was very striking, being of a dull or purplish red, and resembled a papular syphilide. Each papule was solid; free from all serous or purulent discharge; abruptly raised from the adjoining skin; round or polygonal in outline, with sharply defined edges. Its surface was smooth, waxy, or glazy, to which in some, but by no means all instances, was attached a slight filmy desquamation. Many of the papules were slightly depressed, or quasi-umbilicated. The papules formed extensive plaques, and, by their contiguity rather than their confluence, they produced a peculiar tesselated or mapped-out appearance of the skin. In such places, the pigmentation of the skin was between the papules, which stood out whitish-gray on a brown-red ground. The treatment consisted in narcotics and hypnotics, to procure sleep, and in the internal administration of arsenic, the dose of Fowler's solution being pressed to 13 minims, three times a day, until its physiological effects were produced; it was then intermitted, and, after resumption, was continued for a month after improvement had set in. The local remedies which gave most relief to the pruritus, were warm alkaline baths, and a lotion of carbolic acid and liquor carbonis detergens. Profuse diaphoresis, from pilocarpine, was also of use in the early stage. A fortnight after the arsenic was being pressed, improvement began, and, at the end of October, six weeks from the commencement of its use, not a papule remained, though the skin, for many weeks subsequently, was deeply stained and mottled. Dr. Finny referred to the ætiology of the disease, and inclined to the view of its being due to lowered nerve-force, quoting various authorities, who considered the disease to be of neurotic origin, and who, like Mr. Jonathan Hutchinson, based the treatment by arsenic on this view. At the same time, he pointed out the adverse opinion of Tilbury Fox, in 1873, to the use of arsenic, and to the excellent results by local treatment alone, which Taylor, of New York, and Unna, of Hamburg, had reported. It was of very great importance that the eruption should not be taken for a papular syphilide.—Dr. WALTER SMITH said he saw Dr. Finny's patient, and he had to congratulate both him and the patient on the successful result of his treatment.—Dr. HENRY KENNEDY said his experience of the use of arsenic in this disease was that, in the vast number of cases, it at first made the skin worse; but that he looked on as an useful sign, and as indicating that the skin had come under the power of treatment.—Dr. JAMES LITTLE said he had only seen two cases of lichen planus. In one of these, the patient derived great benefit from the waters of Aix-les-Bains. He admitted that some persons could not take arsenic; but if all the directions in Hunt's most valuable chapter on the mode of administering arsenic were attended to, he believed that a great many could be made to bear it.—Dr. FINNY replied.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 21ST, 1886.

JAMES HARDIE, F.R.C.S.Eng., President, in the Chair.

A Cleanly and Economical Method of Applying Ointments.—Dr. BROOKE exhibited a number of ointments, prepared with a solid base, composed of cacao, butter, wax, and oil, or lanolin, and cast into the form of sticks ("salve-sticks"). He had found them particularly useful in making applications to the face and hands, since, their melting point being high, they did not run at the temperature of the body, as did ointments prepared with the ordinary bases; and, when dusted over with powder, they were practically invisible. When covered with Mather's, or Seabury and Johnson's adhesive rubber (waterproof) plaster, they offered a mode of applying remedies to the skin which was more durable than the Unna-Beiersdorf plasters, and less expensive. With this protective covering, they were especially applicable to the treatment of psoriasis by chrysarobin, and possessed several advantages over the methods of Pick, Auspitz, and Besnier, in that the fatty menstruum was preserved; they did not need such frequent renewal; they were more readily applied, and did not cause any disagreeable dragging on the skin and hairs. The fear of staining the clothing was completely removed, and the patient might, moreover, bathe without disturbing the dressing. They were supplied enclosed in small cases, like those used for cosmetics, so that they could be conveniently carried in the pocket. Somewhat similar preparations, which had been since brought out and described by Dr. Unna, were also shown.

Diagnosis of Œsophageal Obstruction.—Dr. THOMAS HARRIS showed some patients, illustrating the difficulty in diagnosing the cause of œsophageal obstruction.

Syphilitic Affections of the Eye-Lids.—Dr. HILL GRIFFITH read a communication on chancres and syphilitic ulcerations of the lids, based upon twenty-two cases, which were laid before the Society in

tabular forms supplied to each member present. The cases (which occurred at the Eye Hospital, under the care of Drs. Little, Glascott, and Mules) fell under three heads: (1) primary chancres, nine in number, in all of which there was induration, and, in all but one, glandular enlargement; in each of these cases, a subsequent eruption confirmed the diagnosis; (2) secondary and tertiary ulcers, six in number, in which there was no induration; in this group, cutaneous manifestations had, for the most part, occurred previously; (3) in seven cases, there was no evidence of syphilis, except the local lesion; but, in all these, the resemblance to the first class was very striking.

Bronzing of Skin caused by Arsenic.—Dr. OWEN showed a patient, in whom bronzing of the skin had occurred after the administration of arsenic. The case was that of a girl, aged 10 years, suffering from chorea, for which disease liquor arsenicalis had been prescribed. The dose had never exceeded five minims three times a day. In about a month from the commencement of treatment, discolouration of the skin was noticed on the trunk. It extended to the arms and legs, and, lastly, affected the lower eyelids slightly. The arsenic was given up, and in a few weeks the discolouration began to fade. Dr. Owen pointed out the resemblance which this case bore to the bronzing of Addison's disease; but the absence of asthenia, and the fact that the discolouration affected the covered parts almost alone, and the flexor rather than the extensor aspects of the arms, rendered the diagnosis free from error in that direction.

New Splint for Excision of the Knee.—Mr. WHITEHEAD showed a new form of splint for excision of the knee.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 7TH, 1886.

T. CLIFFORD ALLBUTT, M.D., F.R.S., in the Chair.

M. Pasteur's Treatment of Hydrophobia.—Dr. BARRS reopened the adjourned discussion on Dr. C. Chadwick's paper on Pasteur's treatment for hydrophobia. He pointed out that corroboration was required in certain points, especially as to whether the dogs were really the subject of rabies.—Dr. DOLAN, while fully appreciating Pasteur's work, referred to the work done by past experimenters on the question, such as Wright, Röll, Haubner, Hesting, and others. He pointed out the improbability of the large number of persons who had visited M. Pasteur, having been really bitten by rabid dogs. He dwelt on the difficulties of the statistical side of the question. With regard to the deaths of the Russians, the explanation was not scientific. It was said they came too late. If the Russians who died came too late, all the Russians came too late. He could not accept a theory which worked two ways, one for failures, one for recoveries. If M. Pasteur limited the time to fifteen days, what was the use of taking over cases of old date? The microbe theory was the basis of treatment, but that could not be reconciled with the quantity theory. The rabbits were treated in one way, men in another. On man, the injections produced not even an abscess, but were, to all appearance, innocuous; but injections into the brain of a man might have produced a different result. He shared in the desire to have the method properly tested, but commented on the smallness of the sum allowed by the Government (£300) for such a purpose. In view of the contradictions he had indicated, he thought the case at present as regards the treatment, was "non proven." He thought that a much more stringent dog Act was required; by police measures, hydrophobia had been completely stamped out in several countries.—Dr. HIME (who had recently returned from Paris) referred to the report of a commission appointed by the French Government to investigate Pasteur's work, who found that, of five ordinary dogs inoculated in the brain by virus, all died, whereas, of those presented by Pasteur as protected, none died when treated similarly. The strength of the final injection given to the persons treated was sufficient to cause rabies in a dog in half the time required for an ordinary bite of a mad dog.—Dr. FARQUHAR had, for personal reasons, made much inquiry as to the incubation period of hydrophobia, and found that, in some cases, it had extended to five years.—Dr. EDDISON spoke of the futility of rubbing caustic over a bite.—Dr. CHURTON had found caustic of great use in preventing injury from *post mortem* wounds, if applied immediately.—Dr. JACOB thought that, on general principles, it was advisable that M. Pasteur's experiments should be repeated by an independent authority, and that, at present, there were considerable difficulties in comprehending the *rationale* of the process. Still, if of the 600 persons who had been treated in Paris, 100 had been really bitten by rabid dogs, he should expect six of these to become hydrophobic, and, if these escaped, a great deal would be proved in favour of the treatment.—Dr. CHADWICK replied.

Static Electricity.—Mr. ROBERTS read a paper on static electricity as used in medicine. He referred to the practice of using static electricity as he had seen it in M. Charcot's practice, and described the machine which he himself used (Casse's). The method usually adopted was to charge the patient on an insulated stool, and draw sparks from the part of the body affected. He had found it useful in various neuralgic and rheumatic affections.

Spida Bifida treated by Excision.—Mr. MAYO ROBSON showed a child, three months old, on whom he had operated for lumbar spina bifida by excision of the sac three weeks previously. The baby was in good health, had all its movements perfect, and presented a scar where the tumour had previously existed.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

WEDNESDAY, APRIL 7TH, 1886.

Surgeon-General LAMPREY, M.B., President, in the Chair.

Excision of the Knee.—Several patients who had recently undergone the operation were introduced by Dr. Ward Cousins. No sutures had been employed, but, in each case, the bones were carefully cut, and then pressed firmly together. Hæmorrhage was arrested by sponge-pressure, a straight splint applied, and the limb suspended. The results were considered very satisfactory.

Radical Cure of Hernia.—Dr. WARD COUSINS exhibited several children on whom he had recently operated for radical cure. The inguinal canals appeared very securely closed. The various methods of performing the operation were referred to; and the practical importance of selecting an operation adapted for every individual case.

Lymphatic Leukæmia.—A male patient was exhibited, labouring under well marked lymphatic leukæmia. He had been admitted into the Royal Portsmouth Hospital, under the care of Dr. Ward Cousins, for an abdominal tumour. The patient suffered from dyspepsia, general prostration, and dyspnœa on exertion. The tumour could be felt in the epigastric region as a hard nodule, and it could be freely moved from side to side. The spleen was not enlarged, and no other glandular disease could be detected. The patient had never suffered from any form of hæmorrhage. The blood was very thin, and light coloured. On microscopic examination, the colourless elements were considerably increased, and many crenated cells were also present.

Pathological Specimens.—Mr. G. H. SNOWDEN showed a specimen of malignant disease of the bladder and prostate. Some years since, the patient had undergone lateral lithotomy. During the last two years of his life, he had again suffered from bladder-symptoms. By rectal examination, a large mass was discovered, blocking up the pelvis. Mr. Snowden also showed a large fibroid tumour, removed from under the gluteal muscles.—Dr. F. J. DRIVER exhibited microscopic sections of epithelioma of the tongue; cancer of the lip; round-celled sarcoma of the tibia; and scirrhus of the breast.—Dr. C. C. CLAREMONT showed specimens of (1) polypus of the vocal cord, removed by forceps; (2) aneurysm of the concavity of the arch of the aorta; (3) ulcer of the stomach; (4) malformation of the heart; (5) epithelioma of the tongue.—Surgeon-Major W. M. HARMAN exhibited a large white kidney.

Hydrophobia.—The PRESIDENT read a paper on hydrophobia.

Pressure-Forceps.—Dr. WARD COUSINS showed a new form of pressure and torsion forceps.

DONATIONS AND BEQUESTS.—The Mercers' Company (on account of the Earl of Northampton's Charity) have given £210 to the Royal National Hospital for Consumption and Diseases of the Chest, at Ventnor; £105 to the Metropolitan Convalescent Institution; and £52 10s. to the Bexhill-on-Sea Convalescent Institution.—Mr. Richard Henry Vade Walpole, formerly of Upper Brook Street, but late of Cheltenham, has bequeathed £200 to the Royal Hospital for Incurables, at Putney; £100 each, to the Cancer Hospital, St. Mark's Hospital for Fistula, etc., the Fever Hospital at Pelly, Leckhampton, Cheltenham, and the Metropolitan Free Hospital; and the "residue" of his personal estate, which will be very considerable, to the following, in equal shares, namely, Westminster Hospital, Charing Cross Hospital, King's College Hospital, St. Mary's Hospital, London Hospital, Royal Free Hospital, London Fever Hospital, City of London Hospital for Diseases of the Chest, Norfolk and Norwich Hospital, Cheltenham Hospital and General Dispensary, and the Great Yarmouth Hospital, and one non-medical charity.—Mr. Edward Cohen, of Harley Street, and of Windermere, has bequeathed £200 each to the Middlesex Hospital, St. Mary's Hospital, and University College Hospital.—Mrs. Frances Acton, of Elgin Crescent, Notting Hill, has bequeathed £100 to the Royal Hospital for Incurables.—The West-end Hospital for Nervous Diseases, Welbeck Street, has received £100, under the will of Mrs. Loornes.

REVIEWS AND NOTICES.

TWENTY-FIRST ANNUAL REPORT OF THE SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA. 1884.

WE have already passed in review the Sanitary Reports for Madras and Bombay for the year 1884, as presented by the Sanitary Commissioners for the two so-called minor Presidencies. We have now to notice the most important of all, that for all India, by Surgeon-General SIMPSON, M.D. (the successor of Dr. James Cunningham), and Dr. BARCLAY, his Secretary.

The report opens with a summary of the meteorological phenomena of the year, month by month, by Mr. H. F. Blandford, F.R.S., the meteorological reporter to the Government of India. It is impossible to abridge to any good purpose this valuable report. It is clearly a most important thing to connect, in this way, the health of a community with the meteorological phenomena of the year, in the various provinces of India. In time, data will thus be collected on which to form an estimate on the relations between disease and all that is comprised in the term climate, more particularly with regard to the origin and distribution of cholera.

The health of the European Army of India, in the year under notice, is reported as not so favourable as in the previous year, which was a singularly favourable one. The admission-rate in 1884 was 1,513 per mille; the daily average sick ratio, 67 per mille; the death-rate, 12.56 per mille, which is considerably below that of the last ten-year period. The loss by invaliding was one per mille less than it was in 1883. In the Bengal Presidency proper, although sickness was more prevalent, the mortality-ratio was favourable—namely, 11.68 per mille, which comes very near that of the previous year, said to have been the most favourable on record. The total loss to the army from death and invaliding was 44, or 18 per mille less than the average of the ten-year period. Having previously reviewed the Madras and Bombay reports, we need only repeat that, in the former, the death-rate was only 8.53, the lowest on record for that Presidency, while the loss from invaliding was 17 per mille less than the average of 1870-79.

In the Bombay Presidency, there was a considerable mortality from cholera, which raised the death-rate to 19.39. Enteric fever and malarial fevers were also more prevalent, and contributed to raise the death-rate—still, as the loss from invaliding was less than usual, the combined loss from deaths and invaliding was 51, being 7 per mille less than the average total loss during 1870-79. In Southern Afghanistan, an average strength of 1,441 men belonging to the Bombay Army were serving, giving an admission-rate of 2,053, a daily sick-ratio of 83, and a total mortality of 68.70; cholera, of a virulent type, accounting for 27 deaths per mille. The admissions in this small force from malarial fevers alone amounted to 865 per mille of the total admission-rate. The other admissions were made up of enteric fever, apoplexy, sunstroke, dysentery, and respiratory diseases.

The part played by malaria in swelling the admission-rate into hospital in India is, as usual, conspicuous in this report. In the Bengal Presidency, malarial fevers account for 683 admissions per mille; in the Madras Presidency, there were 166; and in Bombay, 504 per mille. It is startling to see the extent to which venereal diseases impair the efficiency of the European Army of India. The decennial averages of admissions for these diseases in the three Presidencies are: in Bengal, 209; in Madras, 198; in Bombay, 191. These high averages are exceeded, in all the Presidencies, in the year under notice. Enteric fever, as usual, is prominently noticed. During 1883, 429 cases were admitted into hospital, or 7.7 per mille of strength. In 1884, the admissions rose to 644 cases, or 11.7 per mille of strength; the deaths per mille were 2.74, and, of those treated, 23.45 per cent. died. We are glad to see the Sanitary Commissioner maintains the opinion, always upheld in this JOURNAL, that enteric fever is not a new disease in India; that it has always been present there; and that the greater prominence given to it in later years is due to greater accuracy in diagnosis. The diagnosis is not at all times easy. Malarial fevers, and the lesions they cause, are everywhere present; and pathologists need not be surprised, when a fatal case of enteric fever leads to a *post mortem* examination, that the lesions of both affections are found. We know when an epidemic of yellow fever breaks out, if a doubt arises as to its nature—that is, whether it be specific yellow fever, or merely a severe form of malarial fever simulating yellow fever in some of its symptoms—the difference in the death-rate between the two settles the question. In the one, it is a flea-bite; in the other it is very high. The same is true in the case before us. A table is given which brings this out strongly. In Bengal, in 1884, the death-rate from enteric fever was 3.31 per mille; from all other fevers, it was 0.36. In Madras, the mortality in the same year from enteric fever was 1.67 per mille. In the Bombay Army, there were nearly three times as many admissions from enteric fever as during 1870-79, and the total death-rate was also greater: 4.19 in 1884, against an average of 2.89. A careful account is given of the distribution of this fever over India. It appears that the largest proportion of cases occurred in the Carnatic Provinces and Oudh—the admission-rate being 22 per mille, and representing 139 cases treated.

The table of death-rates, at different ages, once more brings out the fact that it is the young soldiers that chiefly suffer from this disease. There is the usual discrepancy as to the causation of this fever; the medical officers, as a rule, maintaining that the barracks and their surroundings are in a high sanitary state; but it always appears to us that the simple but notorious fact that soldiers in India, any more than at home, are not confined to barracks, is overlooked. They go into villages and places outside barrack supervision, and what they eat or drink there, is not known to those who are charged with their health. We notice that one observant medical officer traced his cases to the fact that the earthenware vessels in the latrines, not having been glazed, were saturated with decomposed excremental matter, and gave out an abominable odour; that, when they were removed and glazed vessels substituted, the offensive odour (the substitute for sewer-air) vanished, and no more admissions from enteric fever occurred. Was this an exceptional case? Was this an exceptionally vigilant medical officer?

Here we must pause for to-day; but there is much more matter in this excellent report, to which we hope to invite the attention of our readers on a future occasion.

LECTURES ON HERNIA AND ITS RADICAL CURE. Delivered at the Royal College of Surgeons of England in June, 1885. With a Clinical Lecture on Trusses, and their application to Ruptures, delivered at King's College Hospital. By JOHN WOOD, F.R.S., F.R.C.S. Illustrated by forty-four fine Wood Engravings. London: Henry Renshaw. 1886.

THE subject chosen by Mr. WOOD is one so peculiarly his own, that these lectures will be read with interest by the profession; and we look carefully to see his mature experience of the operation for radical cure; what light time has thrown upon it; what influence Listerism has had upon the operation; and what new suggestions have occurred to the practical mind of the author.

He goes carefully over the anatomy of the parts concerned; and we find here some new and excellent illustrations of the steps of the operation—illustrations which have been wanting to make clear a proceeding which the eye can follow better by this means than by description. No doubt, much more is learned and understood by watching the operation skilfully performed than by any other means; but, next to this, carefully executed illustrations are the most valuable.

We find a table of cases operated on by the author, as long ago, in some instances, as twenty-five years, and the results are most encouraging; and we are glad to see his approval of combining the operation for radical cure with that for relief of strangulation, where it is possible; but, naturally, he prefers his own proceeding to others which have been recently proposed; and we recognise that it is more thorough and more likely to be followed by good results, though often rather more difficult of execution. Listerism, too, has enabled the operation to be performed within sight—what is called the open operation; but, even here, the operator is more guided by his sense of touch than sight; for the mere stitching up of the pillars of the ring is insufficient, and the removal, or twisting up, of the sac is equally inadequate in the majority of cases.

The author maintains that the operation has been an undoubted success in relieving patients of a worry which only the sufferers can estimate, and he lays down the rules which have guided him in selecting suitable cases for the operation. Children above five years old, in whom trusses are for any reason useless; young adults, whose prospects in life are seriously impaired by the hernial condition; cases of reducible hernia, where the sac is thick and indurated from truss-pressure, or where the omentum is continually slipping down under the truss; favourable cases of strangulated hernia, and certain cases of irreducible hernia, are all included by the author, as requiring or allowing his operation for radical cure to be performed upon them with advantage. He prefers, when it is possible, to remove the sac, and uses the spray during this process; but the suturing of the canal and rings is effected as in the subcutaneous method.

He has added to these lectures a very useful Clinical Lecture on the

application of Trusses to Herniæ, and this will be of great value to practitioners and students alike. Too often, the surgeon leaves the fitting of trusses entirely to the instrument-maker, and has no clear view of the principles which should be attended to in this matter, and the patient may be the sufferer in consequence. Of course, different cases require different forms of truss; but, in the simpler cases, Mr. Wood recommends a very simple and practical form of instrument, of a modified horse-shoe shape and with a flattish face.

The lectures will supply a want which the text-books on surgery can hardly meet; and it is of advantage to have here, in a handy form, the ripe experience of a very practical surgeon on what is a difficult matter in surgery. The book forms a most reliable treatise on the subject; and will, doubtless, become the recognised authority on the radical cure of hernia by the author's well known method.

PUERPERAL CONVALESCENCE, AND THE DISEASES OF THE PUERPERAL PERIOD. By JOSEPH KUCHER, M.D. London: Trübner and Co. 1886.

THIS volume represents the views of an American author who, having passed some time at Vienna, has returned to his native country, and now endeavours to enlighten his fellow-countrymen on certain points connected with the puerperal period, upon which he conceives further information to be needed. The chapters on the ordinary *post partum* disorders are fairly good, but some of the advice given would be rather difficult to carry into practice. When, for instance, he counsels restricting the diet of the newly born "baby" to pure water for the first two days, if the natural supply of milk be delayed, he cannot but be aware that even to whisper such a suggestion to a fond mother or anxious nurse would be fraught with peril, possibly even immediate discomfort, to the adviser.

Then, again, however desirable it may be, from a theoretical point of view, to thoroughly and carefully disinfect the arm before introducing it into the uterus in cases of *post partum* hæmorrhage, probably few practitioners brought face to face with this terrible emergency would pause to carry out these instructions, preferring the risk of a casual microbe to the more imminent danger attending even a moment's delay.

According to Dr. KUCHER, the use of injections of perchloride of iron "enough being used to make the water wine-coloured" (what wine?) is very common indeed in Vienna, and is not attended there by the same untoward consequences which its employment is apt to cause in this country.

The motive of this book seems to be the inculcation of the doctrine, labelled as that of Semmelweiss, of the non-specific nature of puerperal fever, in virtue of which he asserts that, "patients confined outside the hospital do not become infected when put among patients suffering from puerperal fever." It is doubtful, however, whether the managers of lying-in hospitals, here or in America, will be willing to put this assertion to the test, even on Dr. Kucher's authority, any more than his views on the small importance to be attached to thorough ventilation.

The great value of the so-called antiseptic methods doubtless depends, to a very large extent, on the habits of personal cleanliness which its observance implies. The system, therefore, merits every attention, but it is unnecessary to claim for it the good results obtained, to the exclusion of the accessory measures now generally employed.

NOTES ON BOOKS.

The Refraction of the Eye. By GUSTAVUS HARTRIDGE. Second Edition, 1886. (London: J. and A. Churchill.)—The little book, the first edition of which we have already noticed, is what it professes to be on its title-page, "a manual for students." The fact that a second edition has been so soon called for, proves, it may be assumed, that the book supplies a want, as we have already suggested; that there should be a need for an elementary treatise on a subject so intimately connected with all ophthalmic practice, speaks badly for the ordinary text-books, or for those who read them. As regards what may be called the introductory part of the book—the chapter on optics—it is to be wished either that it had been omitted altogether, or that it had been much fuller. We are convinced that those "whose school-education did not include this subject"—for whose benefit Mr. Hartridge says this chapter is intended—would not gain sufficient knowledge from it to be of any practical use in working out problems in refraction, while, for a student who has received an ordinary education, it would be superfluous. The chapters which deal with the practical methods of estimating errors of refraction are excellent, those on myopia and the symptoms of hypermetropia being, perhaps, the best. The various methods of measuring the amount of astigmatism are well described, but the method by which the student is advised to ascertain whether astigmatism be present, appears to us to be untrustworthy. In a book which should contain something more than the ordinary text-books on ophthalmology, we should like to have seen an explanation of some of the phenomena of astigmatism, which are merely mentioned; such, for instance, as the fact that, in simple astigmatism, when the mirror is held at a distance, only those vessels are seen whose course is at right angles to the ametropic meridian. If such an explanation had been given, it could also have been utilised to explain some of the phenomena of the shadow-test, which would have been far better, we think, than a long quotation from Dr. Charnley, which is excellent in its way, but which, we are persuaded, would be incomprehensible to the average student. The book is freely illustrated, and most of the woodcuts are excellent. We would, however, take exception to Fig. 40, which, as at present drawn, does not illustrate the text; the pencils of rays from *a* and *b* should overlap each other, thus contrasting with the corresponding pencils in Fig. 39.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CRYSTALLINE HYDROCHLORATE OF CUCAINE.

WE have received from Messrs. Fletcher, Fletcher, and Stevenson, of the North London Chemical Works, Holloway, a specimen of hydrochlorate of cucaine, which is beautifully crystalline, and is guaranteed to be absolutely pure. We are told that over ten thousand grammes of this salt have already been sold by this firm. It is impossible to overestimate the importance of obtaining active drugs in a state of absolute purity; and we feel assured that, on examination, this specimen will be found to answer the requirements of even the most exacting.

MARTINDALE'S CUCAINE-TABLETS.

WE have received from Mr. Martindale a specimen of his cucaine tablets, each containing one-twentieth of a grain of the alkaloid. They are especially designed to stay the pangs of sea-sickness, in the prevention of which cucaine appears to be useful. The dose of one-twentieth of a grain is rather small for the purpose; but we are informed that tablets can be obtained with a tenth or an eighth of a grain, or more, in each, if desired. They constitute a portable and convenient vehicle for the administration of the drug; and, should cucaine maintain its reputation, they will doubtless become rapidly popular among those who are called upon to risk the distressing sensation of sea-sickness.

THE KEPLER SOLUTION OF COD-LIVER OIL IN MALT.

WE have recently had submitted to us, for analysis and examination, specimens of the Kepler solution of cod-liver oil in malt. This preparation is a decided novelty, and is a great advance on anything hitherto attempted in this direction. On examining it microscopically, using a Zeiss D. for the purpose, we are unable to detect the slightest indication of the presence of oil-globules, a proof that it is a true chemical solution, and not merely a mechanical mixture or emulsion. The possibility of obtaining a solution of cod-liver oil in malt was at one time denied, and, only a few months ago, the question formed the subject of an animated discussion at the Chemical Society, in which Dr. Dupré, of the Westminster Hospital, and other well known authorities, took part. It is to be regretted that the Kepler solution was not then more generally known, for its examination would have demonstrated the feasibility of what was by many denied, and have finally settled the matter. The production of a solution of cod-liver oil in malt is a great advance in pharmacology, and marks an epoch in the history of rational therapeutics.

SCHIEFFELIN AND CO.'S SOLUBLE PILLS.

MESSRS. SCHIEFFELIN AND CO., for whom Mr. W. E. Sacker, 79, Fenchurch Street, London, is the agent, have prepared soluble pills, containing one grain each of valerianate of quinine, iron, and zinc—a very useful formula in many cases of debility and hypochondriasis. The pills are exceedingly well put up in soluble coating, and likely to be useful in practice.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 22nd, 1886.

THE REFORM OF THE UNIVERSITY OF LONDON.

THE reforming energy and fertility of suggestion exhibited within the University of London, since the question of increasing the facilities for obtaining degrees in London has been raised, undoubtedly affords evidence of a healthy vitality. At the present time, there are two committees in existence, charged with the duty of formulating schemes of reform; the one, Lord Justice Fry's Committee of the Senate, holds its first meeting this week; the other, Mr. Magnus's Committee of Convocation, has prepared a report, which will be taken into consideration by Convocation on Tuesday next (May 25th). The draft scheme which Lord Justice Fry will, we have reason to believe, submit to the Committee of the Senate, will probably be found to be almost identical with that presented by another Committee, over which he presided, to Convocation; an outline of this scheme was published in these columns last July. The alternative scheme, propounded by Mr. Magnus's Committee, is confessedly an amendment of the older scheme, but is also in part founded on certain resolutions which have been passed by Convocation, from time to time, since 1878.

Lord Sherbrooke, when Mr. Lowe, was the great exponent of the doctrine that the functions of teaching and examining should be kept apart; and the complete success with which this severance was maintained in the University of London was to him, and to the influential section of educational authorities to which he belonged, a source of great satisfaction; indeed, there was a time when the peculiarities of the constitution of the University of London in this respect were held up for the admiration and imitation of other bodies. We are now witnessing a reaction from this position of extreme distrust of teachers; and Lord Justice Fry's scheme was designed to meet the wishes and fulfil the just claims of teachers to a share in the conduct of the University. The main objections advanced against this scheme were the restriction of the work of the University to London, the creation of "Faculties," consisting largely of persons not otherwise connected with the University, and the further curtailment of the already limited powers of Convocation.

The new scheme is intended to obviate those objections. It proposes that, in future, the University should consist of a Senate, Convocation, Constituent Colleges, and a Council of Education. It is only the last-named body which is a novelty; it would consist of representatives of the constituent colleges and the examiners of the University. In order that all interests might have representation, a certain number, not to exceed one-fourth of the whole Council, would be elected by Convocation, voting by Faculties; this Council would have four standing Committees or Boards of Studies, one for each of the Faculties of Arts, Laws, Medicine, and Science. As the medical schools in London (and any provincial medical schools not yet affiliated to other Universities) would be entitled to become "constituent Colleges," and to appoint representatives on this Council, they would have a direct influence on the deliberations of this body, and would thus be able to bring pressure to bear on the reformed Senate, which would be the governing body of the University. The degree of representation accorded to each school, would no doubt be governed by its importance, as evidenced by the number of students and the excellence of its teaching arrangements. The representatives of the medical schools would thus undoubtedly have a large working majority on the Board of Studies; medical matters affecting only one Faculty would be discussed by the Board of Studies in that Faculty, and only those affecting several Faculties would be brought up to the Council of Education before reference to the Senate. The functions of this body would be to advise the Senate in all matters connected with examinations; and it is urged that, by thus allowing the examiners and teachers to co-operate, an important step would be taken towards removing the dissatisfaction now expressed by the latter. It must be remembered, however, that this Council would be able to do no more than advise the Senate, and the success of the scheme will hinge very much on the constitution of the latter body.

The proposed changes in the constitution of the Senate appear to be, as a rule, in the right direction, though exception will doubtless be taken to certain of the proposals in different quarters. In addition to a Chancellor and Vice-Chancellor, there would be six *ex officio* members—the Chairmen of Convocation, of the Council of Education, and of each of the Boards of Studies—and twenty-five ordinary members, six appointed by the Crown, eight elected by Convocation, four by the Council of Education, and one each by the Royal College of Physicians, the Royal College of Surgeons, the Council of Legal Education, the Incorporated Law Society, the Royal Society, University College, and King's College. The advantages of this scheme are, that it would greatly diminish the number of nominative members, and make it necessary for all other members to seek re-election every four years, and that it would introduce the principle of the representation of teachers on the Senate. The objections that will be raised will probably originate with those who have personal reasons for desiring the continuance of the present arrangement, or those who will take exception to the direct representation assigned to University and to King's Colleges. It must be remembered, however, that this part of the proposal is to be set down, not to the importance of the medical schools, but to the completeness of these two Colleges in all departments, and the large number of students who attend the classes in the various Faculties. The provision, however, will undoubtedly excite much opposition, in which the champions of the medical schools, and perhaps also of the Royal Colleges, may be expected to take part. Considering the number of medical schools in the metropolis, the great concourse of students who attend them collectively, and the individual importance of such schools as those connected with St. Bartholomew's Hospital, St. Thomas's Hospital, Guy's Hospital, and the London Hospital; and considering also that the judicious adjustment of the standard of medical education is a matter of far greater public concern than the standard set up in science or in arts,

there undoubtedly seems to be good grounds for demanding a reconsideration of this part of the scheme.

At the present moment, it does not appear to be necessary to examine the scheme at further length, or to do more than mention the proposal that the University should obtain powers to hold real property, and to accept gifts to form an Endowment Fund, out of which it would be possible to subsidise laboratories, libraries, and museums. The administration of the Brown Trust, by means of which, as was recently shown in these pages, much good scientific work is being done, affords reason to hope that the University would know how to make good use of such funds. If the scheme survive the dangers which await it in Convocation, where the opportunities for obstruction are very numerous, it will be time enough to discuss objections to details. Mr. Magnus has wisely given notice of a series of resolutions, each embodying a separate division of the scheme ; and there is, therefore, some hope that Convocation may be induced to affirm the general principle.

THE MALAISE OF SPRING.

THAT the great upheaval of nature, which takes place in the season of spring, should exercise a potent influence upon the human organism, is both inherently probable, and has long been an article of popular belief. We do not allude to those facts which are certain and palpable, such as the proneness to various inflammatory affections—especially of the respiratory organs—the results, no doubt, of the vernal instability of temperature, and hygrometric condition. Such facts do not admit of any doubt, and harmonise too easily with our ideas regarding the etiology of disease, to call for any explanation. We refer rather to certain seasonal influences manifest in spring, which cannot be explained by any reference to such obvious considerations as temperature or humidity. Are there such influences? and, if so, what is their nature and probable explanation?

In the dark ages of medicine, the existence in the organism, during spring, of some *materies mali*, was universally assumed. Hence arose the custom of the annual spring blood-letting, which the seniors of the profession can still easily recall; and to the same source may be traced the practice, still much in vogue, of marking the same season by a routine course of purgation. These ideas were, no doubt, crude and unscientific ; but it is not impossible that, under the guise of quackery and superstition, a germ of truth may lie hidden. If we appeal to universal experience, we shall find a very considerable consensus of opinion, that many people are at their worst during spring. The dyspeptic is then, more than ever, vexed with capriciousness of appetite, and unsatisfactory intestinal action. The nervous and hypochondriacal are then frequently at their lowest ebb. Many neuralgics and epileptics dread spring as their season of severest trial and most constant suffering. Some cutaneous affections seem to share in the same seasonal influence. That large and ever-increasing class of people, the product, apparently, of advancing civilisation, who are free from organic disease, yet always below par, always feeling the stress of existence too strong for them, seem to feel their incapacity for sustained effort most during the months when nature is most active. Such facts may not be so universal as to admit of definite formulation into a general law, but we feel sure that most practitioners will, on reflection, recognise the frequency of such phenomena. Most frequent of all is, probably, that condition which gives the title to this article, a feeling of malaise which may be analysed into a condition of nervous and digestive weakness and irritability.

Of this spring malaise, whose existence will, we think, be readily admitted, much may be said in explanation. Spring is the season when the work and confinement of winter begin to tell upon the organism. It is the time when nature invites to renewed muscular activity. It is the time for changes of diet, habit, and occupation. With such facts in view, it is hardly surprising that it should be a period of the unstable equilibrium of health. Changes of temperature, which tend to modify the balance normally subsisting between skin, liver, and kidney, are, no doubt, also largely influential. The east wind is one of the most potent and most obnoxious factors which produce the climatic conditions of spring. It is often bitterly cold; but, unlike the cold of mountain-winds, it parches and withers, instead of stimulating. Popularly, the east wind is credited with the capacity to aggravate a whole host of ailments; and there can be little doubt that the epoch of its prevalence is the most trying and least agreeable period of the entire year.

When we have fully weighed all the above conditions, it is doubtful whether we have thoroughly exhausted all the factors that make spring a period of trial to the weakly and ailing. There is much more in climate than responds to thermometer, barometer, or hygroscope ; and it is probable that some elements of seasonal influence must still remain as ultimate facts. It has been shown by a vast mass of observations, that the body-weight undergoes regular fluctuations during certain months, and these changes do not appear to be proportionate to changes of temperature, or any other obvious climatic condition.

The malaise of spring is no doubt largely a matter of individual proclivity, and varies in intensity with the peculiarities of the individual constitution. The robust and vigorous feel it little or not at all, while the neurotic and the dyspeptic look forward to the period that follows the vernal equinox, as a time of certain trial and probable suffering.

For the relief of such symptoms as we have described, this age is not likely to have recourse to the bleedings and purgations popular with past generations. An instinctive suspicion of routine treatment ; a disbelief in all measures which tend to enfeeble the vital powers ; and a scepticism regarding the efficacy of mere drugging, are among the most prominent features of the medical opinion of to-day. Rather are we inclined to combat the dangers of spring by care regarding food and clothing ; by watchfulness against passing too abruptly from habits suitable for winter, to those more appropriate to the period of summer ; seeking assistance from such medicinal remedies as individual symptoms may demand. If we are right in thinking that spring is the season of greatest stress upon the organism, we should supplement such measures by slackening the pace of existence, and endeavouring to find more frequent opportunities for rest and recuperation.

REGISTRATION OF SANITARY DIPLOMAS.

THE correspondence in our columns on this subject, and the subsequent movement in support of it, have borne good fruit.

Sir Lyon Playfair, on behalf of the Government, has agreed to the insertion, in the Medical Acts Amendment Bill, of a clause providing that every registered medical practitioner, to whom a diploma for proficiency in sanitary science, or any branch thereof, has (after examination) been granted by any University in the United Kingdom, shall be entitled to have such diploma entered in the *Medical Register*, in ad-

dition to any other diploma or diplomas in respect of which he is registered. This is a step which is altogether in the public interest, and of which the profession will entirely approve. It is opportune, judicious, and valuable.

The wording of the clause will, however, require modification. As it stands, it excludes the medical corporations, by using the term "university" alone, as a qualifying body. Besides, the word "diploma" is employed, instead of the general expression "qualification." This is wrong; since a certificate of this class is differently denominated "certificate," "degree," etc., at different universities; and in only one instance, the Royal University of Ireland, is there a "diploma" in Sanitary Science. The clause speaks of a diploma for proficiency in sanitary science, *or any branch thereof*—a vague expression, which might refer to plumbing, epidemiology, or to numerous other "subjects" of an indefinite kind. Besides, the legal recognition of the "diploma" is indifferently to be referred, according to the terms of the clause, "to the Privy Council or to the General Council," for recognition as a registrable qualification.

Mr. Cooney, Honorary Secretary to the Association of Medical Practitioners qualified in Sanitary Science, states that the clause, which was sent by him to several Members of Parliament, and which has been pronounced to be legally perfect, and to meet with every requirement, is not open to this criticism, and the wording ultimately adopted will, no doubt, be re-arranged.

At the suggestion of the above mentioned Association (of which we spoke in the JOURNAL of May 15th, p. 953), Sir Henry Holland has put on the paper the following amendment: "All registered medical practitioners, who have obtained from any university or medical corporation of the United Kingdom a qualification in Public Health, after public examination, shall be permitted, and are hereby empowered, to register the same as a qualification under the Medical Act, on the payment of such fee as the Council may appoint, not exceeding five shillings."

THE REFORM OF LOCAL GOVERNMENT.

THE reform of local government, which was one of the most prominent planks of the earlier Midlothian platform of September, 1885, has now been relegated to the dim and distant courses of the future. There was some excuse, therefore, for the hilarity which greeted Mr. Morley's remark on Wednesday, that "he should not be surprised if it was found, when the Government brought in their Local Government Bill, that proxy voting would disappear in England." The House felt this renewed reference to the phantom Bill which is always going to be, but never is, introduced, to be so exquisite a joke, that t could not restrain its merriment. Apparently, we ought to enter heartily into the spirit of farce which seems now to dominate the attitude of the Ministry with regard to Local Government reform. The supposed difficulty of grappling with the question under present Parliamentary conditions affords an agreeable excuse for delay in doing many things about which honourable members are inconveniently troublesome.

This notable device was so successful in the last Parliament, across the greater part of which local Government and taxation cast its cold shadow, that the Cabinet are encouraged to believe it will be equally efficacious in this. They venture, indeed, to push it to lengths previously undreamt of, as when Sir William Harcourt excused himself from dealing with the death-duties in his Budget, because "it is so mixed up with local taxation that everyone feels they ought to be dealt with together." This is an entirely new doctrine, to which we are not prepared unreservedly to subscribe. But even if it were true, the Government have no excuse for delaying further the promulgation of their mysteriously veiled Bill, since the House of Commons passed, on May 11th, a resolution which had Mr. Stansfeld's cordial sympathy to the effect that "a comprehensive measure for regulating the valuation of property, for the purpose of imperial and local taxation, is essentially necessary." We should not like to say how many resolutions of this kind have been passed by the House since Sir Massey Lopes first drew attention to the subject in 1868. They have one and all been sterile; and if the House should pass many more without seeing that they are translated into action, it will stand convicted of as great indifference to the subject as successive Ministries themselves.

THE TITLE OF DOCTOR FOR DOUBLY QUALIFIED PRACTITIONERS.

IT is stated that Dr. Allchin, who has held the post of Subregistrar of the Royal College of Physicians for some time past, has resigned the post on account of his views with reference to the scheme for granting degrees to London students. While we regret that he should have taken this step, which will deprive the College of the services of an efficient officer, we must welcome any sign that a consummation, devoutly to be wished in respect to facilitating the acquisition of the title of doctor, is in course of realisation. That the new scheme may alter, to some extent, the position of the Colleges, is possible; but the change will be in answer to an imperious demand for relief on the part of the metropolitan students and teachers, and of the doubly licensed practitioners, whose position, under existing circumstances, is ambiguous and disagreeable. The incentive will then be removed to the traffic in foreign degrees, the purchase of which is to be traced to the ignorance of the public on the subject of the relative value of British diplomas. The evil is not by any means merely sentimental in character, but is one which carries with it certain well-defined social and professional inconveniences, and it symbolises a grievous injustice to English students and practitioners. We were the first to point out, and to prove by tabular statements, the extent of the existing evils. They are now pretty universally recognised, and that is one step towards cure.

THE next meeting of the Canadian Medical Association will be held in Quebec, on August 18th and 19th.

DR. QUAIN'S *Dictionary of Medicine* is about to be translated into Italian by Dr. Tamburini of Milan.

M. DUJARDIN-BEAUMETZ commenced, on May 5th, a series of lectures on Hygiene in Therapeutic Treatment. These lectures are given at the Amphitheatre of the Cochin Hospital.

A FANCY dress ball, in aid of the funds of University College Hospital, will be held at Willis's Rooms, King Street, St. James's, on Tuesday, June 1st. On Friday and Saturday, July 2nd and 3rd, there will be a grand bazaar, for the same object, in the grounds of University College. H.R.H. the Princess Louise has graciously consented to open the bazaar.

DR. HERMANN EMMINGHAUS, Professor of Psychiatry in the University of Dorpat, has been appointed to the chair of the same subject in Freiburg.

A DENTIST in Berlin has been sentenced to three months' imprisonment for kissing a lady, on whose teeth he was operating in his house.

AT a meeting of the Local Committee of the British Association, which is to be held in Manchester in 1887, Sir Henry Roscoe, President, in the chair, Professor A. H. Young and Professor Marshall, of the Owens College, and Mr. Sidebotham, were appointed local secretaries.

THE report, recently current, that the Duke Carl Theodor of Bavaria was about to proceed to Paris to study M. Pasteur's system of preventive inoculation for hydrophobia, is declared by His Royal Highness's assistant, Dr. F. Tausch, to be without foundation.

A RUSSIAN gentleman, M. Nemvioff-Colodkin, of Moscow, who has lately died, has bequeathed his house as an institution for the blind, and has also left an endowment of 100,000 roubles (nearly £14,000) for the same object.

THE ROYAL COLLEGE OF PHYSICIANS AND THE MEDICAL BILL.

WE understand that the Vice-President of the Council (Sir Lyon Playfair) has consented to receive a deputation from the Royal College of Physicians this day (Friday). The deputation is authorised to express the views of the College with regard to the Medical Act Amendment Bill.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE library of the College will be closed on Thursday, May 27th, for the clinical examination ; and, on Friday, May 28th, at 4 o'clock, for the *viva voce* part of the Final Examination for the Fellowship, for which twenty-eight candidates have entered their names.

GERMANIUM, A NEW ELEMENT.

THE *Abstract of the Proceedings of the Chemical Society*, just received, publishes an intimation from Herr Clemens Winkler, that he has just discovered a new element of a non-metallic nature, but allied to arsenic and antimony. He found it in a mineral called argyrodite.

CONVALESCENT HOMES.

THE increase of convalescent homes is greatly to be encouraged and desired. Princess Mary, Duchess of Teck, accompanied by Princess Victoria, and attended by Lord and Lady Compton, on Monday, May 17th, formally opened the "George Holland Dovecot," one of a series of convalescent homes for the East-end poor, erected and endowed by Lady Louisa Ashburton, on her estate at Addiscombe, Croydon. The home now opened is intended for the reception of mothers and infants needing a change of air and rest.

INVESTIGATION OF OUTBREAKS OF DIPHTHERIA.

THE Local Government Board have appointed Mr. George Turner, who some years ago acted as medical officer of health for Portsmouth, and who is at present health-officer for Ware, and some adjoining sanitary districts in Hertfordshire, to investigate the prevalence of diphtheria at Hartley Wintney, Farnham, and other districts in the valley of the river Blackwater. The department seem of late to have given special attention to diphtheria prevalences, and their meaning.

THE PHARMACEUTICAL SOCIETY.

THE annual *conversazione* of the Pharmaceutical Society, held on May 19th, in the South Kensington Museum, was even more largely attended than usual. A great many visitors from the provinces and from Scotland were present, as well as a considerable number of colonial guests. The museum, brilliantly lighted as it now is, is in itself a source of never-failing enjoyment, and additional attractions were afforded by the excellent music discoursed by the string-band of the Royal Artillery, and by a glee company.

A BEQUEST TO DARWINISM.

HERR PAUL VON RITTER, of Basle, has left to the University of Jena the sum of 300,000 marks (£15,000), the interest of which is to be applied solely to the promotion of the study of phylogenetic zoology according to the doctrines of Darwin, of which Professor Häckel, of the above-named university, is an able exponent. Of the above named sum, 130,000 marks are to be received at once, and the remainder on the death of the testator. Professor Häckel proposes to apply a portion of the money to the foundation of a new extraordinary professorship of zoology, to be called the Paul Ritter Professorship.

THE BRITISH HYDROPHOBIA COMMISSION.

WE understand that certain investigations are being conducted by Mr. Victor Horsley (Secretary) for the British Hydrophobia Commission. M. Pasteur presented to the Commission two rabbits which had been inoculated by him with the virus of rabies. The rabbits exhibited, after a somewhat prolonged period of incubation, the peculiar paralytic symptoms which M. Pasteur considers to be characteristic of rabies in these animals. Such further investigations as may appear necessary will be made, and will much enhance the value of the report of the Commission.

EAST LONDON HOSPITAL FOR CHILDREN.

THE eighth festival dinner of the East London Hospital for Children, Shadwell, was held on May 19th, at St. James's Hall. The chair was taken by Sir Richard Webster, Q.C., M.P., and about two hundred guests, including many ladies, were present. The chairman made a moving appeal for increased pecuniary support for the Hospital, which he said was emphatically in the right place, in the centre of the teeming population of East London. Children of all ages were taken in, even infants in the first weeks of life ; in the past year no less than 264 infants under six months of age had been treated as in-patients. The secretary was, subsequently, able to announce that the chairman's list of donations amounted to over £800, and that the total sum presented to the Hospital, as the outcome of the festival, was over £1,300.

HYGIENE IN SCHOOLS IN HUNGARY.

AT an Educational Conference, recently held in Buda-Pesth, under the presidency of M. Trefort, the Minister of Public Education, the following regulations were established. Every middle-class school is to have a medical officer, who will receive an annual salary of 200 florins in schools where a complete course of instruction is given, and 100 florins in other schools. He must examine every pupil at the commencement of each scholastic year, and keep a constant watch over their health, and must give special attention to the prevention or eradication of infectious diseases. He will also give advice during gymnastic exercises. He will also keep a watch over the instruction in general ; and, if he observe any deleterious influence in operation, with regard either to the whole school or to individual pupils, he will bring the same under the notice of the director of the school. In the complete schools, he will give instruction in hygiene, for two hours each week, to those pupils of the higher classes who may desire to receive it, the subject being treated in an easy and popular manner.

PRIZE ESSAYS ON INFANT HEALTH.

THE Society for the Protection of Infant Life, Paris, offers a prize of £20 for an essay on the following subject. Prove, by facts drawn from personal observation, the causes of purulent ophthalmia in children, its symptoms, and the precautions necessary to prevent con-

tagion. This prize will be given this year. Another is offered for 1887, the subject to be: Prove, by facts furnished by personal observation, the influence on the mother's and child's health exercised by a rest of fifteen days before and after delivery, as enforced in many factories; also show the influence of a *crèche* near the factory. The kind of factory must be stated, and the nature of work done in it must also be specified, the locality and owner being given. The essays are to be written in French, and sent, post free, on November 1st in each year, to the Secretary of the Society, Dr. Blache, 4, Rue des Beaux Arts, Paris.

PORTRAIT OF PROFESSOR LONGMORE.

AMONG the portraits exhibited at the Royal Academy this year, is that of Surgeon-General Longmore, C.B., by George Reid. This picture is a testimonial, presented to Professor Longmore by his brother-officers of the Army Medical Department, as some recognition of the great services he has rendered to the Department by his writings and teaching, enhancing the reputation of British Military Surgery, and earning for the School at Netley and himself a high position in the estimation of the profession, both in this country and abroad. The portrait is an excellent likeness, and is treated with much breadth and vigour. Professor Longmore is represented standing, in uniform, in the act of delivering a lecture; and we think that the artist is peculiarly happy in catching that expression of earnest thoroughness, usual to the Professor's features on such occasions.

HOSPITALS ASSOCIATION.

AT the sixth general meeting of the Hospitals Association, held at the rooms of the Social Science Association on Wednesday last, Surgeon-Major Evatt explained the ambulance arrangements of an English army on the battle-field, and the hospital organisation by which these men, when sick or wounded, are cared for, and conveyed from the battle-field to London. Surgeon-Major Evatt feared that the volunteers, for the want of medical reserves, if called out, must break down. It was needful to raise a volunteer medical staff corps to supplement the existing regimental surgeons and ambulance men, and to provide bearer-companies and field-hospitals for the volunteer forces. He concluded by stating that he found the present war system of medical aid so little understood by the nation, that it was rather to serve as an educating agency than to express his own opinions that he had laid before them this very meagre outline of the present system. A discussion ensued.

TESTIMONIAL TO DR. GEORGE JOHNSON.

THE long and honourable services which Dr. George Johnson, F.R.S., has rendered to King's College, have been brought to a close by his resignation of the Professorship of Clinical Medicine, and of the office of Physician to King's College Hospital. It was felt that an opportunity ought to be afforded to his old pupils and fellow-workers to testify their personal regard for Dr. Johnson, and their appreciation of his services as a teacher and a physician. A meeting was accordingly held, under the presidency of the Principal of King's College; and it was resolved, on the motion of Sir William Bowman, to present a testimonial to Dr. Johnson, "in recognition of his long and invaluable services to King's College and Hospital, and of the distinction he has conferred upon the medical school by his eminence as a physician, and his contributions to medical science." An influential committee was appointed; and Dr. T. C. Hayes and Mr. Royes Bell will act as the Honorary Secretaries. Subscriptions will be received by Professor Robert Bentley, 38, Penywern Road, Earl's Court, S.W. The testimonial will be of a personal character.

THE HOSPITAL FOR DISEASES OF THE THROAT.

A FRESH crisis has arisen in the affairs of the Hospital for Diseases of the Throat, in Golden Square, and five members of the acting staff, out of a total of six, have tendered their resignations. The reasons for this step appears to be that the acting medical staff considered that they were not sufficiently represented upon the Committee of Management; that the Committee made appointments and arrangements affecting the working of the medical business of the hospital without consulting the medical staff; and that the resigning members consider the Chairman of the Committee and Dr. Morell Mackenzie sought to exercise powers which deprived the medical staff of the necessary initiative. It can hardly be necessary to enter into the merits of the particular dispute which has brought matters to the present pass; the general principle involved is well acknowledged, namely, that in all matters affecting the conduct of the medical business of a hospital, the medical staff should be consulted, and that, in order that its views may have due weight, it should be adequately represented on the committee of management of the hospital. It is clear that, at the Hospital for Diseases of the Throat, this is not the case, and the staff which has just resigned cannot be absolved from all responsibility for accepting office under these conditions.

SUPRAPUBIC CYSTOTOMY FOR TUMOUR OF BLADDER.

AT the Manchester Royal Infirmary, last week, the above operation was performed by Mr. Southam, in a case of papilloma of the bladder, occurring in a man, aged 41, who, for some years, had suffered from severe hæmaturia. The nature of the tumour had previously been established, for, on several occasions, typical villi were detected in the urine. The bladder was first explored from the perinæum; but as it was found that there were numerous growths, some of large size, involving its anterior and lateral walls as well as the base, Mr. Southam, after consultation with Mr. Whitehead and Mr. Wright, who were present at the operation, and with their assistance, proceeded to open the organ from above the pubes. By this means, and without any distension of the rectum, free access was obtained to the growths, which were detached and removed with the fingers without much difficulty. Though their separation was attended by somewhat free oozing of blood, this was readily checked at the conclusion of the operation by washing out the bladder for some minutes with a stream of hot water, and then applying a solution of perchloride of iron. The operation was well borne by the patient, in spite of his anæmic condition from previous loss of blood. The urine has been almost entirely free from blood since its performance, and the patient is reported to be progressing very satisfactorily.

THE DICTIONARY OF PRACTICAL SURGERY.

MR. CHRISTOPHER HEATH'S *Dictionary of Practical Surgery by Various British Hospital Surgeons* appeared last week. It consists of two handsome octavo volumes, containing over eighteen hundred pages. It is furnished with an excellent general index, so as to facilitate reference to sub-headings; as in a work of this class the principal subjects only are arranged alphabetically, and the index is therefore required, to save the reader from having to search through an entire subject for a special question. The type and paper are of excellent quality. The articles are all contributed by surgeons selected by Mr. Heath as recognised experts. We intend, shortly, to publish a review of this dictionary, and shall content ourselves at present with congratulating the compiler on the energy which he has displayed in producing a work which supplies a great want, notwithstanding much hindrance from a serious attack of illness, added to the natural difficulties of the task. The dictionary will occupy a prominent place in medical libraries, by the side of that already prepared by Dr. Quain for the benefit of the physician.

VACCINATION MATTERS IN DEWSBURY.

FOR several years past, vaccination matters at Dewsbury have been in a very unsatisfactory state, and constant friction has prevailed between the vaccination-officer and the guardians. Matters became very strained in the autumn of last year, when a committee of the guardians reported on certain irregular proceedings on the part of the

vaccination-officer. A lengthened public inquiry, at which Mr. Marriott (the officer in question) was able to be represented by counsel, was thereupon instituted by the Local Government Board, who, after considering the report and evidence, which showed that he had summoned certain defaulters without notice, called upon him, in January last, to resign his appointment as vaccination-officer. The guardians, some of whom are hostile to vaccination, have not been expeditious in filling up the vacancy; and the Local Government Board have just issued an order requiring them, "within two calendar months, to appoint a fit and proper person to be vaccination-officer" for the union. This order is interesting, as it proceeds to modify, in some particulars, the Board's General Order of October 31st, 1874, as regards Dewsbury. It requires the guardians to remunerate the vaccination-officer by means of a fee of tenpence in respect of each certificate of successful primary vaccination registered by him. All the expenses incurred by the vaccination-officer in the performance of his duties are to be defrayed by him, except the costs and expenses incurred in any proceedings taken by him for enforcing the provisions of the Vaccination Acts. All sums received by him for his attendance, or otherwise, in respect of such proceedings, as well as the costs or penalties recovered by him, are to be paid to the treasurer of the guardians; but the guardians are empowered to pay to the vaccination-officer a reasonable compensation on account of extraordinary services, or other unforeseen circumstances connected with his duties, "or the necessities of the union." The vaccination-officer is required to devote the whole of his time to the performance of the duties of the office, and he is also required, in every case, before taking proceedings against any person in default, to "make personal inquiries at the house of the person so in default, with a view to obtaining the requisite certificate; and if, on such inquiry being made, the person is found in default, the vaccination-officer shall leave at the house, for such person, or afterwards send to him by post, a notice," in a certain prescribed form. It is to be hoped that a judicious officer will be appointed, and that the Vaccination Acts, which have effected so much good to humanity in general, will in future be harmoniously, but firmly, administered in Dewsbury. We are afraid, however, that these are counsels of perfection.

HOME-NURSING.

At the tenth annual meeting of the Metropolitan and National Nursing Association for providing trained nurses for the sick poor, the report told of extending fields of labour, of the continuance of careful training in the Central Home, and of a demand for trained district nurses exceeding the supply, although that supply was itself an increasing one. At the close of 1885, the nursing staff in the Central Home consisted of the superintendent, nine nurses, and two probationers; every bed in the home was occupied, and there had been times when it had been so full that a lodging had to be engaged. The branch homes were working thoroughly well. Five hundred and seventy-seven cases had been nursed, 17,944 visits had been paid, and £30 13s. had been received in small sums from patients or their friends. The nurses spoke gratefully of the ready attention invariably paid by the sanitary authorities and medical officers of health to any cases of defective drainage, etc., to which they had drawn attention; and they also reported that they had no difficulty in obtaining from the parish authorities, clergy, and existing charitable institutions, the medical comforts and nourishing food required by the patients. There had been many encouraging cases of improvement in order and sanitary care, which, begun during the visits of the nurses, had been kept up when their services were no longer needed. Mr. W. S. Caine, M.P., said that, when the Association was formed a few years ago, district nursing was almost unknown in the metropolis; but now they were within measurable distance of the time when there would be not a single poor person anywhere within the metropolitan area who would not have within reach, in case of sickness, educated ladies who were prepared to nurse any who were sick. After giving particulars of the establishment of branches of the Association, he said that it had fairly carried out its objects, which were as follows: "(1) to train and provide a body of skilled nurses to nurse the sick poor at their own homes; (2) to establish in the metropolis, and to assist in establishing in the country, district organisations for this purpose; (3) to establish a training school for district nurses in connection with one of the London hospitals; and (4) to raise, by all means in its power, the standard of nursing and the social position of nurses." So useful and beneficial was the aid of skilled nurses, that there was, Mr. Caine said, an increasing demand for those who were trained for that purpose. Sir James Paget dwelt upon the great improvement in nursing the sick poor within his experience. Almost throughout the country, now, the poor were nursed better than they were nursed in the best hospitals fifty years ago, and the nursing was equal to that in any of the hospitals in Europe, except the best English medical charities.

SCOTLAND.

BEQUESTS TO MEDICAL CHARITIES.

The trustees of the late Mr. David Mackenzie, Claremont Gardens, Glasgow, have just paid the following bequests—Glasgow Royal Infirmary, £250; Glasgow Western Infirmary, £250.

INFECTIOUS DISEASES AT PORTPATRICK.

The Greenock Police Board have written to the Board of Supervision, pointing out the number of cases of infectious disease sent from Portpatrick to the Greenock Hospital, and requesting the Board to call upon the Port Glasgow authorities to provide a hospital for themselves.

THE NEW LUNATIC ASYLUM FOR THE GLASGOW DISTRICT.

The General Board of Lunacy have approved of the plans submitted to them for the new asylum at Hartwood, subject to certain modifications. On the application of unsuccessful competitors, it has been resolved to hold a public exhibition of the whole of the drawings submitted.

MEMORIALS OF THE OLD INFIRMARY, EDINBURGH.

Many of our readers will be interested to learn that the four large pillars, that formed a conspicuous feature in the architecture of the Old Royal Infirmary, Edinburgh, have been preserved, and are likely to have a long continued existence. When the old building was demolished, they were secured by Mr. Macfie, of Dreghorn, and were by him removed to his estate at Dreghorn, and re-elected at Redford Brae, where they are now intended to commemorate certain historical events intimately connected with the locality. A more limited number of our readers, who have acted as resident physicians and surgeons in the Old Infirmary, will also take an interest in the fact that their old dining hall has also been removed to Dreghorn, and re-erected, and a marble tablet affixed to it, bearing a long metrical inscription.

EDINBURGH UNIVERSITY COURT.

At a meeting of the Edinburgh University Court, held last Monday, there was laid before the Court a minute of Senatus, instituting a Lectureship on the Philosophy of Natural History in the University; appointing Mr. G. L. Romanes, M.A., F.R.S., to be lecturer for five years; requiring the lecturer to give a course of six lectures on the subject in each of the winter sessions during which he holds the lectureship; and declaring that the lectures shall be free to all matriculated students of the University; and that the remuneration of the lecturer shall be the sum of £50 *per annum* for five years, provided by the Earl of Rosebery for the purpose. The Court, acting under the regulations of date February 19th, 1868, on the subject of new classes,

sanctioned the opening of a class by Mr. Romanes, for the course of lectures on the Philosophy of Natural History, on the conditions above stated.

VACCINATION CONTROVERSY IN GLASGOW NEWSPAPERS.

A DISCUSSION on vaccination, initiated by Mr. William Tebb, President of the Antivaccination Society, has been carried on for a couple of weeks past, in the columns of the *Glasgow Herald*. Probably Mr. Tebb would have been allowed to have his little fling at his pet grievance in silence, but for Mr. John Edmund Fairlie, L.R.C.S., Edinburgh, a district medical officer of Glasgow, who deemed it wise to bring his six years' experience of practice to bear, in order to crush Mr. Tebb, and, at the same time, to show the superiority of his method of vaccination with one vesicle, over that of all public vaccinators in general. Dr. Hugh Thompson, the Vaccinator of the Faculty of Physicians and Surgeons, and Dr. J. B. Russell, the Medical Officer of Health, entered into the correspondence, with the laudable intention of bringing Mr. Fairlie back to orthodox ways and ideas; but in vain. Mr. Fairlie still clings to his heresy, and, through the medium of his further correspondence, inferentially invites the parents of Glasgow to come to him and have one little pock put on, instead of four. Mr. Mozley, Vice-President of the Antivaccination Society; Mr. William Young, its secretary; and Mr. William White, antivaccination author, enter the discussion, in the hope of persuading Mr. Fairlie to go on in the good way he has chosen, till, with a more "open mind," he reaches the vaccination vanishing point. The discussion has been closed by an unaswerable letter, bristling with statistics, from the pen of Dr. J. C. McVail, of Kilmarnock. The whole correspondence has shown, if that were yet necessary, how undesirable it is to discuss medical questions like this in the columns of an ordinary newspaper. It is to be feared the public will imbibe more of Mr. Fairlie's information than of Dr. Russell's or Dr. McVail's; and that, probably, Mr. Fairlie realised.

THE PHILOSOPHICAL SOCIETY OF GLASGOW.

THIS Society held its thirteenth, and last ordinary meeting for the session, on May 12th; the President, Dr. Henry Muirhead, in the chair. Dr. David Newman showed a man, whose larynx he had excised, and whom he had fitted with a reed, for speaking purposes. In reference to the case, Professor McKendrick made some remarks on the physiology of voice, illustrating and corroborating them by means of the patient. Dr. J. Yule Mackay, Senior Demonstrator of Anatomy in the University, laid before the Society a series of very interesting communications, specially bearing on comparative anatomy and on development. They were on the Arteries of the Head and Neck, and the rete mirabile of the Porpoise (*Phocæna Communis*), on the Arterial System of the Chamæleon (*Chamæleo Vulgaris*), on Arrest of Development of the Genito-urinary System, and on Hermaphroditic Malformation of the External Genital Organs in the Female. The last communication was based on the dissection of a fœtus, which, with complete female organs of generation, had also a penis of considerable size, formed of corpus spongiosum, as well as of corpora cavernosa. Behind the penis, the opening of the vulva was represented by a slit. Dr. Mackay expressed the opinion that the varieties of hermaphroditism were simply due to different degrees of union of the vestibular bulbs. A series of papers, on the Homology of the Cervical Articular Pillars, on the Development of the Intestine, and on the Knee-joint, was also contributed by Dr. R. Bruce Young, Demonstrator of Anatomy at the University. All of these papers are to be published, in full, in the *Proceedings* of the Society. The Society adopted a congratulatory address, drawn up by the Council, to M. Chevreul, who attains his hundredth year in August next, and ordered the address to be forwarded to the distinguished chemist.

VACCINATION.—Mr. Richard Bryden, of Uffculme, has received a Government grant of £17 17s. for efficient vaccination. This is the third time that Mr. Bryden has received a grant.

IRELAND.

DR. PATTERSON, of Caledon, has been appointed Medical Examiner of Recruits for Line and Militia, in that district, *vice* Dr. Kidd, deceased.

DUBLIN SANITARY ASSOCIATION.

THE second of the series of popular lectures on sanitary subjects, given under the auspices of this Association, was delivered by Sir Charles Cameron, President of the Royal College of Surgeons in Ireland, on Monday last. The subject of the lecture was "The Philosophy of Food," and there was a very large attendance.

THE LADIES' SANITARY ASSOCIATION OF DUBLIN.

THE annual meeting of this useful Association was held in the Royal Dublin Society last Tuesday. Lord Brabazon occupied the chair, and delivered an interesting speech. Her Excellency the Countess of Aberdeen also addressed the meeting, and spoke of the value of the work done by it.

HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the March quarter, the births registered numbered 29,705, or 24.3 per 1,000; and the deaths 27,016, or 22.1; the birth-rate being 0.6 under the average, and the death-rate 0.8, as compared with the corresponding quarter of the five years 1881-85. The increase in the death-rate was principally due to the severe and variable weather, which caused a general prevalence of diseases of the respiratory system, especially amongst the aged and infirm. The zymotic death-rate was but little above the unusually low rate for the preceding quarter, although, owing in great measure to pulmonary complications, fatal cases of whooping-cough were largely in excess of the number for that period. There was one death registered from small-pox, 66 from measles, 206 from scarlet fever, 151 from typhus, and 70 from diphtheria. Whooping-cough caused 447 deaths, enteric fever 167, and diarrhœa 260.

DEATH OF MR. M. J. KILGARRIFF.

WE regret to announce the death of this gentleman on Monday last, at his residence in Dublin. He had suffered for some time from a very painful gastric affection, which lately was recognised as being of a malignant nature. Mr. Kilgarriff was Surgeon to the Mater Misericordiæ Hospital, previous to his appointment to which, he occupied a similar position for four years in Jervis Street Hospital.

CORK HOSPITAL FOR WOMEN AND CHILDREN.

THE Committee, in their eleventh annual report, state that a suitable building has at last been obtained for the work of the hospital, and was opened last August. During last year, 203 intern patients were treated, and, of these, 111 were received free of charge, and 92 paid sums varying from one shilling and sixpence to one guinea. The cost of the new building was £2,775; and, with the exception of about £400, this amount has been obtained, while Mr. Crawford has generously given £440 15s. 6d. towards the furnishing of the new hospital, which has enabled the Committee to fit up the wards in the most approved manner.

NEPHRO-LITHOTOMY.

ON May 6th, Mr. Kendal Franks performed nephro-lithotomy in the Adelaide Hospital, in the case of a man, aged 28, who had suffered for six years with pain in the left lumbar region, accompanied by a variable amount of pus in the urine. The stone occupied the whole pelvi of the kidney, and extended into the calices. It weighed 172.3 grains. The patient has progressed since the operation most satisfactorily. The lumbar wound healed immediately, with the exception of the angle where the drainage-tube was inserted. The highest temperature

recorded was 99.4°, and the urine, which has been secreted in normal quantity throughout, has become perfectly clear.

THE LORD-LIEUTENANT AND THE ACADEMY OF MEDICINE.

THE President of the Academy of Medicine, Dublin, Dr. Robert McDonnell, had the honour of entertaining at dinner on Wednesday, the 12th instant, at his residence, Merrion Square, His Excellency the Lord-Lieutenant, and His Serene Highness Prince Edward of Saxe-Weimar, Commander of the Forces in Ireland. The officers of the various Sections invited to meet His Excellency were, Dr. Banks, Past President: Dr. Cruise, President of the Medical Section; Sir Charles Cameron, of the Surgical Section; Dr. T. More Madden, of the Obstetrical Section; Dr. Little, of the Pathological Section; Dr. Duffey, Treasurer; and Dr. Thompson, Secretary. There were also invited the Provost of Trinity College; Sir Robert Hamilton, Assistant-Secretary; Sir Patrick Keenan, Commissioner of National Education; Colonel Turner, Private Secretary to the Lord-Lieutenant; Mr. Robinson, President of the Local Government Board; and Mr. McCausland; besides the Aides-de-Camp of the Lord-Lieutenant and the Commander of the Forces; the party, in all, numbering twenty.

THE CHOLERA.

ITALY.

(*From our Rome Correspondent.*)

IN the different parts of Italy in which cholera has, so far, shown itself, the number of cases during the week has been considerable. In the seven days terminating at noon on the 16th, there have been in Venice 48 cases and 36 deaths; in Bari, 124 cases and 52 deaths; and, in Ostuni, a smaller town of Apulia than Bari, 18 cases and 5 deaths. Brindisi seems to be nearly free from the epidemic, only 2 fresh cases, which proved fatal however, having been reported in the same period; but there are some other infected spots in the province, which quite justify the uneasiness with which the local outbreaks are regarded.

According to the cholera returns for the 24 hours ending May 19th, there were 10 cases and 8 deaths at Bari, and 7 cases and 2 deaths at Venice. Three cases and 4 deaths have occurred since May 17th, in the province of Brindisi.

The quarantine of seven days, for the protection of the islands against vessels from the Adriatic, has been extended so as to include arrivals from all parts of Italy, an arrangement which has been received with great favour by the newspapers of Palermo, and other towns, which had filled their columns, day by day, with loud invectives against the Government, for not granting the restriction sooner. It was pointed out, in a former letter, that this step was inevitable, as the Ministry, not having any firm decision of its sanitary advisers to trust to, was certain to yield to the pressure of any ignorant and clamorous mob. It must have been sorely against the grain, we might suppose, that it did so, as the elections for the Chamber of Deputies are fixed for May 23rd, and it cannot be expected that many of the electors for the Islands, living on the mainland at present, will be enthusiastic enough politicians to brave a seven days' quarantine for the purpose of recording their votes. The adversaries of the present Administration do not hesitate to insinuate that the decision to grant the restrictions demanded was really taken with the object of propitiating the Islanders, and thus gaining a vote or two for the Ministerial candidates. With a few honourable exceptions, however, the newspapers express no condemnation of the weakness of the Government, but show a complacent indifference, born of ignorance, as to the value or uselessness of all such measures.

MIDDLESEX HOSPITAL.—The Broderip Scholarship, of £30 per annum, tenable for two years, has been awarded to Mr. W. G. Nash, and that of £20 per annum, tenable for two years, to Mr. E. E. Lewis. The Governors' Prize, of the value of £21, has been awarded to Mr. W. B. Cockill; and the First-year Exhibition, in osteology, elementary anatomy, and physiology, value £10 10s., to Mr. J. K. Clarke.

THE UNIVERSITY OF VIENNA.—There has been a remarkable increase, during recent years, in the number of students attending the Faculty of Medicine in this University. In 1876, the number was 1,157; in 1877, it fell to 845; but, since 1878, there has been a steady annual increase of 200 to 250, so that the number in 1884-5 was 2,455; and in 1885-86, 2,673.

MUTUAL INSURANCE AGAINST SICKNESS, ACCIDENT, AND DEATH.

THE ordinary monthly meeting of the Honorary Executive Committee of the Medical Sickness, Annuity, and Life-Assurance Society was held on the 12th instant, at 38, Wimpole Street; there being present Mr. Ernest Hart, Mr. E. Noble Smith, Mr. S. W. Sibley, and Mr. Major Greenwood, junior.

Continued prosperity was reported. Eight new proposals had been received during April, making the total since the commencement (in 1884) 760, there being now a steady average increase of over 100 new members *per annum*. During the month, £119 11s. had been paid in satisfaction of sickness claims, this being £54 less than in the corresponding month of the previous year; while, of course, the present membership and area of risk were larger. The number of members debarred from practice by sickness during the month had been eighteen, and the total period paid for was thirty-six weeks and four days. The illnesses included blood-poisoning, pneumonia, bronchitis, tonsillitis, granular ophthalmia, ischio-rectal abscess, hæmoptysis, and three cases of accident (one from the fall of a horse). The death of one of the members was reported, and the amount of his life-assurance (£200) was ordered to be paid in full immediately on the proof of administration or probate being produced. A further investment was ordered. The reserves accumulated exceed £10,000, and are above the actuarial estimate.

Arrangements were discussed for a plan, to be proposed at the ensuing general meeting (to be held at Brighton in August), under which a proportion of the contributions paid for annuities shall be returnable to their representatives, on the deaths of members who do not reach the age at which the pensions commence. Of course, this plan involves a revision of the rates for those who desire to adopt it.

Full particulars of the Society, rates of payment, and copies of the last annual report, will be sent on application to the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, S.W.

EMPLOYMENT OF EPILEPTICS.

A SPECIAL meeting of the Council of the Charity Organisation Society was held on May 10th, to consider the question of providing employment for epileptics. A paper by Miss N. Paget started the discussion, in which Dr. Langdon Down, Dr. Buzzard, Dr. Rayner, Dr. Oliver, Miss F. Davenport Hill, and Miss Twining, took part; and letters were read from Dr. Seward, Dr. Cobbold, Dr. Joseph Rogers, Dr. Stanley Elliot, and Dr. Dunlop. There was a general agreement of opinion that employment was much wanted for this class, and was in itself, in some degree, a means of alleviating the disease. At Caterham, Dr. Elliot wrote, a large proportion of the epileptics were too imbecile or too demented to be able to render any assistance in industrial occupation; but 167 were usefully employed: 33 males and 83 females as helpers in wards; 13 women on needlework, and 11 in the laundry; and 27 men in various ways, "on the grounds," in tailoring, upholstering, etc. At St. Pancras, 160 female and 40 male epileptics came annually, on an average, under the care of the medical officer. There were no separate wards for their isolation; and Dr. Dunlop gave many reasons for supplying accommodation for them in a special establishment, where none but epileptics would be admitted. —Miss DAVENPORT HILL gave some account of a visit to the John Bost Asylums at La Force, where there was a separate home for epileptics. They were only capable of light occupation, but they took part in a large number of trades; for example, lockmaking, joinery, etc., which were found useful and beneficial, if there were close supervision and a constant alternation between indoor and outdoor occupations. The Director at La Force urged that, in order that they might the better get their living, epileptics should be taught such trades as they could carry on at home.—Miss TWINING said that, at Kensington, the Board of Guardians would probably have no wish to send away their epileptics. They were very usefully employed in the House and Infirmary. If they were ill, or became imbecile, they were sent to the Infirmary, or to Leavesden or Banstead. She could not imagine any better provision than that made for them at Leavesden, where they were classed in large wards, with birds and flowers around them, the most careful nursing, and the kindest of chaplains. At the Cambridge workhouse, they had been found as useful as at Kensington; if lunacy were developed, they were sent to the county asylum. After giving an account of the house taken by the parish of Liverpool for the care of epileptics, she said that she had, for sixteen years, received cases into a small house, which she established and supervised. There was great want of homes for governesses and others, who could earn a good deal, but whose friends could not afford to pay more than about 10s. a week. The workshops should, she thought, be attached

to the home.—Dr. BUZZARD, speaking from his experience at Queen Square, strongly advocated the proposal that some experiment should be made. In asylums and infirmary wards, no selection was possible; for purposes of employment in workshops, or in market-gardening, suitable cases could be easily selected. The disease, owing to increased medical knowledge, was a different thing from what it was twenty years ago; it could now be kept at bay in many instances; and often, too, precautions were easy, owing to the manifest premonitary symptoms of an attack.—Dr. LANGDON DOWN thought tailoring, for those who could learn it, and mat-making, for those who required some simpler craft, with constant occupation out of doors, would be the most suitable modes of employment. He also described a visit that he had paid to the John Bost Asylums, but criticised them on the ground that it would be better, if possible, to supply employment, as the writer of the paper had argued, on some self-supporting or remunerative basis. There seemed to be nothing better than the treatment of epileptics at Kensington, as described by Miss Twining. He showed, from cases, how the disease could now be kept in check. —Dr. RAYNER thought any trade could be utilised for epileptics, provided that they were carefully watched for a time before being entrusted with employment, and that there was close supervision. There was no question that outdoor relief was the best; the disease was comparatively unfrequent in country districts. The details of any scheme for employment could only be worked out by experiment; but there was no doubt that the institution should be established in the country. A letter from Dr. Cobbold confirmed this in almost every particular. He thought that a home or residence, with workshops and market-garden attached, appeared to offer promise of success. All payments should be by piece-work, or in accordance with work done, and not by time; and workers should sign an agreement whereby the officers of the charity should be constituted sole judges of the value of the work. Marriage should be absolutely forbidden to single workers.—Dr. OLIVER said that, in London, he had about thirty-two new cases a week. In Scotland, he had found them comparatively few.—After a few remarks from Dr. LUNN, the meeting closed by the adoption of the following resolution, moved by Mr. F. D. MOCATTA, and seconded by Miss N. PAGET: "That it is desirable that an inquiry should be made to ascertain the number of epileptics in London for whom assistance, by way of employment, would prove beneficial; the best methods of providing employment; and the best means of maintaining, especially in co-operation with boards of guardians, any institution or other organisation for this purpose."

COLLECTIVE INVESTIGATION COMMITTEE.

LIST OF RETURNS RECEIVED DURING THE MONTH OF APRIL, 1886.

East Anglian Branch: X, G. C. Edwards.
Lancashire and Cheshire Branch: Liverpool District: III, A. Creswell Rich, M.D. (3); G. W. Steeves, M.D., Hamamelis; A. C. Rich, M.B.; W. Macfie Campbell, M.D.
Manchester District: Hamam., D. J. Mackenzie, M.D. Bolton District: Hamam, Dr. De Vere Hunt; Terebene, R. F. Woodcock.
North of England Branch: X, J. M. Maclagan, M.D.
Reading Branch: X, H. V.
South-Eastern Branch: East Kent District: III, B. Roberts, M.D.; X, Herbert Smalley; Intemp., T. F. Raven (2); C. Cotton.
West Surrey District: Hamam., J. Morton, M.B., J. Lee Jardine.
South Wales Branch: Hamam., J. P. Drinkwater; III, G. Fisher.
Southern Branch: Isle of Wight District: III, H. M. Barker, M.B.; VII, H. M. Barker, M.B.; X, H. M. Barker, M.B.; W. E. Green; XIII, H. M. Barker, M.B.; Hamam., H. M. Barker, M.B.; J. G. Sinclair Coghill, M.D.
Thames Valley Branch: Terebene, F. P. Atkinson, M.D.
West Somerset Branch: Hamam., J. Bain Sincock.

The Committee beg also to acknowledge (May 17th) the receipt, since their last acknowledgment on April 28th, of the following replies to the International Inquiry into the geographical distribution of certain diseases.

Dorset and West Hants Branch, 1.
Glasgow Branch, 1.
Lancashire and Cheshire Branch: Manchester District, 35.
South-Eastern Branch: East Kent District, 1: West Kent District, 2: East Sussex District, 1.
Yorkshire Branch, 4.

The Secretary to the International Committee begs also to acknowledge (May 17th) the receipt, since his last acknowledgment on April 28th, of the following returns to the same inquiry from members of the profession, not being members of the Association:

Metropolitan Counties, 1.
England, Wales, and the Channel Islands, 7.

The Secretary to the Collective Investigation Committee will feel obliged if any contributors who do not find their returns included in this list will communicate with him at once.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.
ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, ACUTE RHEUMATISM,
OLD AGE, CANCER OF THE BREAST,
THE VALUE OF HAMAMELIS,
THE VALUE OF PURE TEREBENE.

Memoranda on the above, and forms for recording individual cases, may be had on application.

It is requested that returns on Acute Rheumatism be sent in at as early a date as possible, as the printing of the Tables is in progress.

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into THE THERAPEUTIC VALUE OF HAMAMELIS AND PURE TEREBENE have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms:" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 26th, 1886, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the secretary, not later than May 15th.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace, Spring Bank, Hull.

SOUTH MIDLAND BRANCH.—The annual meeting will be held at the Swan Hotel, Bedford, on Thursday, June 3rd, 1886, at 1.30 P.M. Dinner at 5 o'clock. Tickets 6s. 6d. each, exclusive of wine. Gentlemen wishing to be present at the dinner, or to bring forward communications at the meeting, are requested to intimate their intention, and to send the titles of their papers without delay, to the Honorary Secretary, C. J. EVANS.

MIDLAND BRANCH.—The annual meeting will be held at Lincoln on July 16th or 17th. Members desirous of reading papers, etc., are requested to communicate at once with the Secretary, W. A. CARLINE, M.D., Lincoln.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 27th. The president, Mr. J. T. Hartill, will take the chair, at 3 P.M. The following papers are promised: 1. Dr. McAldowie: Paralysis of the Arm from Lesions of the Nerve-Trunks. 2. Dr. W. G. Lowe: Two Cases of Diabetic Coma in Young Children; A Case of Death from Diabetes Insipidus. 3. Mr. Vincent Jackson: An Analysis of 100 Cases of Osteotomy.—VINCENT JACKSON, General Secretary.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above district will be held at Tunbridge Wells on Friday, May 28th. Mr. Abbott will preside. Meeting at 3.30 P.M. Dinner at 5.30 P.M.; charge, 6s., exclusive of wine. The following papers are promised: 1. Dr. J. Herbert Stowers: Rodent Ulcer, its Nature and Treatment (microscopical sections). Coloured Drawings and Microscopical Sections of several rare Skin-Diseases. 2. Mr. John Gorham: Reminiscences of Guy's Hospital relating to Ovarian Dropsy. 3. Mr. C. Lamiman: Thoracic Aneurysms. 4. Mr. G. S. Watson: A Case of Abscess of the Internal Ear. 5. Dr. T. Elliott: Ascaris Lumbricoides. It will be proposed that, in future, there should be three district meetings in the year, instead of four. This being the last meeting of the session, an Honorary Secretary will be elected for the ensuing year.—T. JENNER VERRALL, Honorary Secretary, 95, Western Road, Brighton.

METROPOLITAN COUNTIES BRANCH.—A special General Meeting of this Branch will be held at the Royal School of Mines, Jermyn Street, on Monday, May 31st, to consider the subject of degrees in medicine for London students. The President, Dr. Walter Dickson, will take the chair at 8 P.M. precisely. A resolution to the following effect will be submitted to the meeting: "That negotiations with the University of London not having led to the desired result, this meeting recommends that the Royal College of Physicians of London and the Royal College of Surgeons of England be requested to endeavour to obtain power to grant degrees in medicine." All registered medical practitioners residing in the Metropolitan District are invited to attend.—ALEXANDER HENRY, M.D.; W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Royal Forest Hotel, Chingford, on Thursday, June 3rd, at 6 P.M. *Business.*—Election of Secretary. At 6.15 P.M., sharp, the members and their friends will dine together. The President of the Branch, W. Dickson, M.D., R.N., will preside, and will be supported by Sir Guyer Hunter, K.C.M.G., M.P., J. S. Bristowe, M.D., F.R.S. (President-elect), C. J. Hare, M.D., T. Bridgwater, M.D., and C. Macnamara, Esq. (Past-Presidents), and other leaders of the profession. Tickets, 8s. each. Members intending to be present are requested to communicate with the Honorary Secretary as early as possible, but not later than Monday, May 31st.—JOSEPH W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston.

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, May 19th (instead of May 26th), at half-past seven o'clock, E. C. Board, Esq., President. The following communications are expected: A Case of Intussusception, C. Elliott, M.D. On Endometaitis, W. J. Tivy. The Localisation of a Cerebral Lesion, H. Waldo, M.D. The Removal of Tumours of the Bladder, with Cases, J. Greig Smith, C.M.—E. MARKHAM SKERRITT, R. J. H. SCOTT, Honorary Secretaries, Clifton, May, 1886.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.

A SPECIAL meeting was held in the County hospital, Guildford, on Thursday, May 6th; Mr. A. A. NAPPER, of Cranleigh, in the chair.

Secretary.—Dr. Frederick Pearse, of Haslemere and London, was re-elected Honorary Secretary for the ensuing year.

Collective Investigation.—Discussions took place on two of the subjects proposed by the Collective Investigation Committee.

1. Papers on the Period of Incubation and Duration of Infection of the Principal Zymotic Diseases were read by Mr. S. G. Sloman, junior, and Dr. F. Pearse; and were discussed by Mr. Napper, senior, the Chairman, and Mr. Fowler.

2. A paper on Prognosis in Heart-Valve Disease was read by Dr. Isambard Owen; and a discussion followed.

A vote of thanks to the Chairman and to the readers of papers concluded the meeting.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING of this District was held at the Greyhound Hotel, Croydon, on May 13th, Dr. Diver, of Kenley, in the chair.

Papers.—The following were read.

1. Dr. G. Harley, F.R.S.: The Crystalline Structure of Gallstones.

2. Mr. J. Tweedy: The Treatment of the various forms of Hardness of the Eyeball.

Cases and pathological specimens were exhibited by Mr. Noble Smith, Dr. Thudichum, Mr. Matthey, Dr. Oxley, and Dr. Rutherford Adams.

After a large and interesting meeting, twenty-nine members and visitors dined together.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE last meeting of the winter session was held at the Hackney Town Hall, on April 15th; Dr. DICKSON, President of the Branch, in the chair.

Specimens.—Dr. C. R. Walker showed photographs of cases of myxœdema and polymorphic erythema.

Rheumatism.—Dr. THOMAS BARLOW read a paper on the by-ways of rheumatism, commencing by briefly discussing the joint-affections common after scarlet fever, some of which, he held, were rheumatic, and some certainly septicæmic. In others, he considered, the affection was simply a manifestation of the scarlatinal poison in the joint-tissues. He insisted on the importance of considering exhaustion, fatigue, and nervous prostration as strong predisposing, if not exciting, causes of rheumatism, and also quoted cases in which acute rheumatism followed injuries. He discussed the connection of tonsillitis with rheumatism, and stated that it was often an antecedent of rheumatic fever, especially in the hyperpyrexial form. After having dwelt upon the differences between rheumatic fever in young persons and in adults, he referred to the fact of ankylosis and dislocation of joints occurring as sequelæ, together with affections of the sheaths of tendons, the bone-ends, and the fibrous and ligamentous tissues round joints. With regard to treatment, he acknowledged the great value of salicin and its compounds; but when it failed to effect an early cure, he deprecated its continuance. He did not consider it of much value in the subacute and chronic forms, nor in relapsing cases.—A discussion ensued, in which Drs. Gibbings, Gilbert, Greenwood, Hunt, and Henty took part. Dr. Barlow briefly replied, and after a most cordial vote of thanks, the meeting adjourned.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Delegates of Learned Societies at the Sorbonne: Medical Section.—Death following Enucleation of the Eye.—Anosmia, and Lingual Psoriasis.—The Jugular Veins in Chloro-anæmia.—Recent Observations on the Circulation of Invertebrates.—Proportion of Triple Births.—General News.

THE annual meeting of the delegates of the learned societies, at the Sorbonne, has recently taken place. In the Medical Section, many interesting papers were read. M. Castan, of Montpelier, defended the dual theory of scrofula and tuberculosis. He stated that scrofula was very prevalent in the South of France, and tuberculosis very rarely met with there. He considered that a scrofulous diathesis was favourable to the development of tuberculosis, but that they were two distinct diatheses. M. Cagny described the good results in the Duchy of Baden, from the practice of preventive inoculations of pigs against measles. The Government has organised gratis inoculations. M. Delthil recorded statistics obtained in his own practice, by treating diphtheria by vapour of tar and turpentine, and those obtained by his medical brethren. The comparison is in favour of M. Delthil's method.

At the recent Ophthalmological meeting, M. Dor stated that only 27 instances of death after enucleation have been published, the real number being higher, from the fact that medical men often hesitate to publish their failures. In all the cases published, death immediately resulted from meningitis; yet, in four of these, the brain-lesion was cured. M. Dor has had two cases of death after enucleation; in one instance, meningitis set in six weeks after enucleation. The patient was tuberculous; in the second, the patient was an old man with irido-cyclitis in one eye, and a cataract in the other. M. Dor enucleated one eye, before operating on the other for cataract. On the fifth day after enucleation, the patient was perfectly well; subsequently, he died in two days, either from embolism or from cerebral apoplexy, or possibly from absorbing a solution of bichloride of mercury, which M. Dor used for his dressings.

Dr. Neigel, professor in the Faculty of Medicine at Jassy, publishes the following case in the *Progrès Médical* of April 24th. A lady, 38 years of age, during the months of April and May of 1885, completely lost all sense of smell and taste. There were patches of psoriasis on the dorsal surface of the tongue. It was impossible to ascertain whether these patches preceded the anosmia. The sense of taste was entirely absent; it was not stimulated either by bitter, sweet, or salt flavours. The sense of smell was not acted on, either by assafœtida or

by ammonia. The lingual mucous membrane, and the pituitary membrane, preserved their tactile susceptibility. All the other sensory faculties were normal. The patient was nervous, but had never exhibited well defined symptoms of hysteria. Three years ago, and again last year, the patient suffered from weakness of the lower limbs, from time to time. She still suffered from rheumatic pains in different joints, and for some years had been subject to profuse perspiration, especially on the face, even in winter. The family were not tainted by hereditary diseases of any kind. The mother and two sisters were more or less hysterical. It would be interesting to determine if the anosmia were in any way connected with the presence of psoriasis. M. C. Paul published, in the *Bulletin et Mémoires de la Société de Thérapeutique*, No. 11, 1885, notes on a case of anosmia, in which he stated that this condition was preceded by arthritism. M. Féréol believed that anosmia might proceed from hysterical paralysis and lead-palsy. A lady whom he treated suffered from anosmia, and subsequently died from encephalitis, caused by lead-poisoning from using hair-dyes. M. Debove, in a work published in 1873, stated that, in lingual psoriasis, the sense of taste was rarely modified or weakened. When psoriasis was very pronounced, this might happen, but the sense of taste remained intact. In Dr. Neigel's patient, psoriasis was slight. Lingual psoriasis seldom attacked women ; in the present case, there was not any immediate cause. The patient neither smoked nor was syphilitic ; arthritism might be invoked as a general cause. The patient frequently rubbed her face with bichloride of mercury, to cure freckles. She was pregnant. The lingual psoriasis, in this case, might be supposed to result from the mercury absorbed by the skin, and eliminated by the saliva, which was previously secreted in abnormal abundance.

At a recent meeting of the Paris Academy of Medicine, Dr. Duroziez read a paper on the presystolic venous pulse in chloro-anæmia. Cardiac lesions was so often diagnosed where there was only chloro-anæmia, that every differential sign was of value. This sign was furnished by a careful examination of the jugular veins, which presented special movements. These movements might be called the chloro-anæmic dance of the jugular veins (*la danse chloro-anémique des jugulaires*). It has been said that these movements were physiological, but they were not observed in normal conditions. They were peculiar to chloro-anæmia, and were more evident in proportion to the severity of the conditions. Auscultation was not necessary. When the movements occurred, the *souffles* were always heard. The jugular veins should be carefully examined before auscultation. In chloro-anæmia, the jugular veins collapsed during the systole, and not during the presystole. The venous pulse was presystolic, and the more evident the venous motion, the louder was the *souffle*.

M. Vulpian, at a recent meeting of the Academy of Sciences, read a note by M. Vignal, of the Collège de France, in which it was stated that the author had studied the investing epithelium of the blood-vessels of two kinds of invertebrates, snails (mollusca), and cray-fish (crustacea). It was well known that the investing epithelium of blood-vessels in vertebrate animals consisted of contiguous polygonal cells, held together by a kind of cement. In the invertebrates, the cells had dentated edges, and fitted into each other. These structural details were made evident by the action of nitrate of silver, and demonstrated that the investing epithelium of vessels of invertebrates resembled that of lymphatics in vertebrates. M. Vignal concluded that, contrary to zoological teaching, what were believed to be blood-vessels in invertebrates were lymphatics—a belief further warranted by the fact that the vessels of the invertebrates opened into the connective tissue.

At a recent meeting of the Academy of Medicine, M. Charpentier reported on a memoir by M. Jenot, of Dercy, on triple births, which affirmed that they were not so uncommon as is generally supposed ; they were in the proportion of 1 to every 6,000 or 10,000 deliveries.

The Exhibition of Urban Hygiene was opened on May 6th. Lectures on Hygiene are given every day, at 2.30, and every evening at 8.30. They are free for the visitors to the Exhibition.

The Société des Sauveteurs de la Seine has decided to present this year's medal to M. Pasteur. M. de Lesseps, accompanied by other eminent men, visited M. Pasteur to ask him if he would accept it. He answered that he was grateful for the honour.

News comes from Algiers that the French troops returning from Tonkin are kept under sanitary observation at Sidi Ferruch, where very comfortable quarters have been organised.

M. Berthelot, the distinguished chemist, has written a book entitled *Science and Philosophy ;* it is published by Calmann Levy. *Hygiène et Soins Maternels pour le Premier Age*, by Ermance Dufauxt de la Jonchère, is an excellent little book, published by Garnier Frères. Dr. Douglas Hogg's little pamphlet, entitled *Premiers Secours aux Malades et aux Blessés*, supplies a real want. This excellent little manual is clearly written, and is enriched by twenty-seven plates. It is published by Masson, at the price of one franc. The General Councils of Gers, Jura, Maine et Loire, Meurthe, and Moselle, Nord, Somme, and Vosges, have all voted sums, varying from £20 to £40, for the fund of the Pasteur Institute. Mme. Jules Holtzer, of the steel works at Unient, has given £250. The professors and the professors-agrégés of the Faculty of Montpelier have subscribed £4 to the Pasteur Fund.

At the banquet given at Saigon, in honour of Professor Paul Bert, Governor-General of Tonkin, 300 piastres were collected for the benefit of the soldiers wounded at Tonkin.

The statistics of the depôt for stray dogs show that the police regulations concerning the canine species are thoroughly observed. From January 1st, to April 29th, 1886, 4,962 dogs were sent ; during the entire year, 1885, the number was 5,060 ; and in 1884, 4,348.

Dr. Henri Legrand du Saulle, the celebrated physician at the Salpêtrière Hospital, has died suddenly. He was the author of many works on medical jurisprudence and insanity. He was an officer of the Legion of Honour.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

Sunderland and Bishopwearmouth Infirmary.—Report of the Medical Officer of Health.—Sick Children's Hospital.

I HAVE just received the last report of the Sunderland and Bishopwearmouth Infirmary, and it shows that a very large amount of valuable work is being done by our profession there. The institution contains 150 beds, 50 being medical and 24 children's. About two years ago, a new wing was built, at a cost of nearly £11,000, and a similar extension is now contemplated, in order to keep pace with the increasing demand for admission. Admission to the hospital is free, no subscriber's letter of recommendation being needed ; and this system works well, as is shown by two tables in the report—one representing the number of patients treated, and the other the income since this was adopted in 1879. In that year, the number of patients treated was 618 ; in 1885, it was 1,438. In 1879, the total ordinary income was £4,000 ; in 1885, it was nearly £5,500. A feature in the income is the large amount given by working men, the income last year from this source alone being over £2,000.

For the last fourteen years, the hospital has been nursed by Sisters from the Deaconess Training Home, Tottenham, with complete satisfaction to the staff and committee.

The report of Mr. H. E. Armstrong, Medical Officer of Health for Newcastle-upon-Tyne, has just been published. In the first part, it deals with the mortality for the year ending 1885. Measles was the most prevalent and fatal zymotic disease, causing 359 deaths during the year, scarlet fever and typhoid coming next in order ; 1,727 cases of infectious disease were notified to the medical officers of health under the compulsory registration clause. Compulsory registration has been in force here for some time now ; and it speaks well for the admirable and genial way in which Mr. Armstrong performs his somewhat unpleasant duties, to say that it works smoothly, and without any ill-feeling or opposition from the practitioners in the town. The report deals *seriatim* with the mortality from each infectious disease, and quotes cases, showing the manner in which infection is spread ; the class of house in which these diseases most frequently occurred; and the difficulties of isolation. The report then deals with a house-to-house inspection, carried out by the sanitary authorities during the year, and then gives an account of the water-supply of the city. It is one which repays a careful perusal.

At its last meeting, the Council granted a site for the New Sick Children's Hospital, at Burdon Terrace. The site was not granted unanimously; but, having now passed the Council, nothing very important is likely to interfere with the project. The building of such a hospital as is proposed will fill a long-felt want, and will give opportunities for useful professional work in children's cases. A vacancy has occurred in the staff of physicians to the hospital. Dr. Limont, Dr. Coley, and Dr. Robertson are candidates for the post. The first is Physician at the Infirmary ; Dr. Coley has held the appointment of Assistant-Physician to the Hospital, and thoroughly understands the work of the appointment ; Dr. Robertson has only lately commenced practice in the town. Dr. Limont or Dr. Coley will be elected.

THE Huddersfield Town Council have, upon the motion of the Mayor, increased the salary of Mr. John Irving, police-surgeon, from £40 to £50 per annum.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE EARLY TREATMENT OF PROSTATIC RETENTION OF URINE.

Sir,—In a very clear summary of the early treatment of prostatic retention of urine, printed in the Journal of May 8th, Mr. Buckston Browne makes a statement which ought not to pass uncriticised. He remarks: "I may here say that, most unfortunately, the use of cucaine as a lessener of urethral shock during early catheterism is impracticable.....It cannot be introduced into the deep urethra without using an urethral instrument, so that *nothing* is gained by its use." (The italics are my own.) After seventeen months' constant use of cucaine in all branches of vesico-urethral practice, I venture to record my experience to be directly opposed to this statement. We do not possess a more effective or a more reliable agent than cucaine in warding off the untoward, sometimes disastrous, effects of reflex shock upon the heart and kidney, induced by the withdrawal of residual urine. Nay, more, we have no drug so completely under our control, or so easily applied to the vesico-urethral tract, as cucaine.

The entire spongy urethra can be rendered instantaneously anæsthetic by a 20 per cent. solution of cucaine and a simple medicine-dropper. The deeper urethra and the bladder can be similarly treated with the same solution, ejected from the mouth of a terminally perforated Guyon "sonde"—an instrument which obviously allows a jet of cucaine to precede it, and to render anæsthetic the urethra some distance in front of its advancing point.—I remain, sir, yours, etc.,

George Street, Hanover Square. E. Hurry Fenwick.

CONDUCTION OF PHYSICAL SIGNS.

Sir,—I have read Dr. Skerritt's paper on "Conducting of Physical Signs," in a late number of the Journal, with much interest; for I remember, years ago, Dr. Walshe showing the class, at University College Hospital, that physical signs heard on one side of the chest might be really produced in part, or wholly, at the other side. In his book, also (edition of 1871, p. 75), he says, in italics: "The percussion-sound of a given spot may depend, not on the condition of the parts directly beneath, but of those more or less distant in the fellow half of the thorax." He calls this "horizontal conduction." Whether Dr. Walshe was the first to describe this strange fact, I do not pretend to know; the class thought he was.—Yours, etc.,

An Old University College Man.

THE MEDICAL BILLS.

Sir,—In the interest of the profession, permit us to say, on behalf of the Medical Alliance Association, that the "clause" sent to you by Dr. Wiglesworth, of Liverpool, and which you published in the Journal of May 15th, does not restrict the practice of medicine or surgery by unqualified persons; nor does it prevent the assumption of medical or surgical titles by persons holding unrecognised medical qualifications.—We are, sir, faithfully yours,

Pridham, Piper and Co.,
Solicitors to the Medical Alliance Association.

SCIRRHUS OF THE BREAST: RECURRENCE LONG AFTER REMOVAL.

Sir,—In reply to Mr. Vincent Jackson's note, under the above title, I wish to ask the following questions.

1. Was the patient submitted to "a careful medical scrutiny" between the two years' interval, and the period when Mr. Jackson found the scirrhous nodule?

2. Supposing there to be no history of injury, was there any special occasion for mental depression—money troubles, illness or death of relatives, etc.—immediately preceding the second outbreak of disease?

In explanation of my first question, I believe that a recurrent cancerous nodule (especially when enveloped by cicatricial tissue) may exist long before its presence becomes obvious to the patient; and, in such a case, may grow very slowly indeed. In the second place, mental trouble is by far the most common immediate antecedent of scirrhus; and, as I pointed out in the note to which Mr. Jackson takes exception, excision of a cancer by no means guarantees future immunity from an attack *de novo*, if the patient be again exposed to one of the ordinary exciting causes of malignant disease. In this event (after a long interval of immunity) we are by no means entitled to regard the second outbreak as in any way connected with the first.—Yours, etc., Herbert Snow.

AN EXPERIMENT IN MICROBIOLOGY.

Sir,—I had a plant of *Anacharis elodea* (the Canadian water-weed brought into a ward of this hospital about three weeks ago; and, in common with some fresh-water algæ, it was placed in a covered bottle of pond-water, of which the stopper was frequently removed. In a few days, the water—as has invariably happened in like conditions with me—became turbid, from the presence of bacilli, bacteria, and cocci; the algæ, and, in fact, everything except some infusoria, which seemed to devour these fungi, and this plant of anacharis, died; the plant itself, however, turned pale, and looked unhealthy.

In about ten days more, the fungi had formed pellicles, which sank to the bottom with the mass of dead algæ; and the supernatant fluid became clear. The anacharis, meanwhile, resumed its natural appearance, and rapid growth.

In examining a leaf of the plant under the microscope, the protoplasm appeared full of granules, which, under a high power ($\frac{1}{50}$ oil-immersion), proved to be bacilli, bacteria, and cocci, mostly dead ones, while the circulation of the protoplasm was quite brisk. This plant has evidently recovered from a fever, produced by the bacteria, which have, however, killed the algæ in the same bottle.

I also found the protoplasm of a living mass of *Spirogyra porticalis* full of micrococci, which had, a few days previously, appeared in the surrounding water; many of these were alive, and the spirogyra soon died. The micrococci appeared very numerous, after staining the plant with methyl-violet, but the protoplasm exhibited movements just before staining.

The anacharis is a valuable plant in an aquarium, keeping the water pure and clear; but whether this is on account of the relation it bears to the life of schizomycetous fungi, I do not know. I have watched the process of ingestion and assimilation (or, at least, destruction) of the schizomycetous fungi, in its various stages, in several of the ciliated infusoria—for example, paramecia, stentors, rotifers, and also in leucocytes—with much interest, after reading Mr. Bland Sutton's late lectures; and have wondered whether the process may not only be a prevention of the harm done by germs to the individual, but even, in some cases, a nourishing process; for the stimulus given by the presence of food to simple organisms, may still remain as the incentive to devour, exhibited by leucocytes in the presence of germs.—I am, sir, yours, etc., Harold G. Dixon (M.A.Cambs.).

Guy's Hospital.

ROYAL MEDICAL BENEVOLENT COLLEGE.

Sir,—With reference to your remarks on this charity in Journal of May 15th, will you permit me to draw attention to what seems a much neglected source of income, namely, congregational collections?

By the rules of the College, the incumbent of a church in which a collection is made, and the preacher, are made governors. In York, this year, we have had such collections made in the Minster, and in another of the city churches. The collections amounted to £16 16s. 10d. at the Minster, which was, with one exception, larger than any amount collected there during 1885; and, at the other church, to £8. The publicity attaching to these services also produced special donations: for example, the Lord Mayor sent us five guineas.

Indirectly, too, good was done, for in the sermons preached by the Dean, and the Rev. S. H. Bennett (son of the late Dr. Bennett, of Harrogate), public attention was drawn to the claims of our profession on public sympathy; and at St. Mary's, Archdeacon Blunt, who has studied medicine at King's College, delivered a most remarkable discourse, characterised by logical and elocutionary force, which I never heard surpassed in the pulpit, on the function of a physician in the community. I wish that sermon could be published in a medical journal, or sent, in pamphlet form, to every member of the profession.

I commend these remarks to the consideration of medical men in every parish, and particularly to my fellow local secretaries, feeling certain that, by similar means, a considerable addition might be made to the income of the College.—Yours faithfully, H. E. Spencer.

23, Monkgate, York.

NAVAL AND MILITARY MEDICAL SERVICES.

THE INDIAN MEDICAL SERVICE.

SIR,—A few sessions ago, several candidates at Netley were on the point of throwing up all ideas of continuing their careers in the Indian Service. This intention on their part had been reached, consequent on well-established facts concerning the service that had arrived in England from officers already in that service. I have been recently informed, by a candidate who was at Netley at the time referred to, that, with a view to averting this exposure, Sir Joseph Fayrer was summoned in hot haste to Netley, to play the part of the *Deus ex machinâ*. On arriving at Netley, he assured the indignant candidates that all these tales were but idle tales, originated by discontented senior officers, and that though, as a matter of fact, certain changes had been instituted, yet these changes would confer the greatest benefit on the junior officers of the service, and on those about to enter.

Now, sir, this statement, though characteristic of a *Deus ex machinâ*, was not of a verity worthy of a *Deus*. To give the mildest criticism, Sir Joseph Fayrer, when he thus spoke to the students, showed himself utterly ignorant of the environment existing around the officers of the Indian Medical Service. And, even supposing this ignorance of Sir Joseph Fayrer to have really existed, it was not permanent, for I know that a copy of the published statement of the grievances was forwarded to him, but without effect; he has never stirred hand or foot, unless he be maligned, to help the service which made him.

To show to what an extent the changes in the service have benefited the junior officers, I may quote a few striking facts. The official memorandum, given to credulous and inquiring candidates, deliberately states, and has stated for a long series of years, that the pay for charge of a native regiment, under and up to five years' service, will be 450 rupees *per mensen*. This rate of pay, during my seven and a half years' service in India, has never yet once been given, with one exception—and that an exception proving the rule—to any junior officer of the Bengal Medical Service.

Secondly, at the time that the Crown took over the affairs of the East India Company, it was expressly laid down and guaranteed that all the divisional staff and Lock Hospital appointments were to remain with the officers of the East India Company. The first Lock Hospital in India was started, as a matter of fact, by a surgeon of my service. Nearly all these appointments, many of them bringing in from 100 to 200 rupees a month, are now in the hands of the sister service; I, myself, personally, have never met an officer of my service in charge of one of them.

Thirdly, the management of the gaol department, founded by our service, is fast lapsing from us. The Inspector-General of Gaols in the North-Western Provinces is a civilian; so is he of Burmah; and it was rumoured strongly that the lately vacant appointment in the Punjab was about to depart from us.

Fourthly, the Chairs and Professorships at the Medical School are never given away after due advertisement and selection. This elementary process, which is erroneously, we must suppose, followed in the United Kingdom and the Colonies, is not in favour in India. No one knows when an appointment is vacant, until it is seen that it has been filled up in the *Gazette*. And if, haply and by chance, it be seen that an appointment is vacant, an application for the same is treated with a courtesy that is, happily, non-existent elsewhere than in India.

Lastly, the civil appointments to the various stations entirely depend on the caprice of authority. Their bestowal is absolutely vested in the uncontrollable will of one man; and one-man power, I venture to state, is an anomaly in the province of medicine that requests instant upheaval and annihilation.

Let me earnestly advise any man, who is eager to do work in the medical profession, to avoid the Indian Medical Service. As a military surgeon, there is but one service for him to choose, the Medical Staff.

In conclusion, I may, perhaps, be permitted to remark that, if, instead of picturing the service at Netley as it is not, Sir Joseph Fayrer had taken the trouble to inquire what it really is; if, instead of oratorically periodising about the "iota causans" of cholera, without having first mastered the "alpha, beta, and gamma of the disease," Sir Joseph Fayrer had attempted to do something for the service that labours amidst cholera; if, instead of introducing a political pathology at the India Office, Sir Joseph Fayrer had introduced into that office a little *vis à tergo* for the remedying of the fallen state of the service which made him, he would have been held, out here, in greater esteem than is at present the case.—I am, sir, yours obediently, X.Z.

*** We take the deepest interest in the welfare of the public service, and especially in the younger members of it, and give careful consideration to the numerous letters confidentially forwarded to us.

The author of this letter, forwarded for publication, has, as we venture to think, somewhat imprudently appended his name to it. We have, in his own interest, thought it wise to omit publishing his name. At the same time, when he sees his letter in print, we shall be happy to append the name if he still wish it. Meanwhile, we think it right to offer an observation or two on this gentleman's letter by way of corrective. We have made some independent inquiry into the matter, and we believe that our correspondent is wrong in supposing that Sir Joseph Fayrer, or anyone else, is ever "summoned in hot haste to Netley" by the authorities for the purpose indicated; or, for that matter, for any other purpose. The speakers who address the surgeons on probation at the end of each term, are not selected either by the India or the War Office. They are selected by the Senate of the Army Medical School, and are not "inspired" by anyone in authority to mislead the gentlemen whom they address as to their future prospects.

The references to Sir Joseph Fayrer in other parts of the letter are equally unfair. It was not his service that "made" this eminent medical officer; he "made" the distinguished position he occupies, by his ability, industry, and devotion to duty and to the interests committed to his charge; and the honourable position he won in India, he has maintained at home. The lesson he wished to impress on his hearers was, that the path to distinction which he trod himself was open to them.

We are not in a position to say whether or not the Army Medical Staff obtain in India a larger share of the loaves and fishes than they have a fair right to claim; if it be so, we think the Local Government of India much to blame; but more evidence on this point is required than is given in the letter before us. If it be the case that the Government of India find it expedient to employ their medical officers in the work for which they are specially educated and trained, we do not think they are to be blamed for this. Medical men in this country are not, as a rule, appointed governors of prisons; and we can imagine, that in other branches of the service, Government often find men better suited for such work. Razors are not needed to cut blocks. Again, we do not think the Government of India, when they have to fill up a professorship in one of the colleges there, are bound to advertise for candidates. The selection has to be made from their own service: they have ample means of knowing the fittest, and we have never heard that nepotism or favouritism of any kind has prevailed in making the selection.

PAY OF BRITISH ARMY SURGEONS IN INDIA.

A FATHER writes to us, complaining of the inequality between the pay and allowances of his son, an army surgeon in India, and the pay and allowances of other officers of corresponding rank in that country. His son, having the relative rank of captain, gets, in England and the Colonies, the pay belonging to that rank; but directly he lands in India, while a captain gets 450 rupees a month, he only receives 417½ rupees a month—a difference of 32½ rupees, or £3 2s. 6d., a month. A veterinary surgeon, with the rank of a lieutenant, gets 400 rupees at first, and, after three years, 450 rupees a month. The subject of our correspondent's complaint has been a source of heartburning ever since the Royal Warrant of 1879 gave army surgeons the rank of captain at starting in their career; for, practically, the rank has never been acknowledged by the Indian branch of the Government, notwithstanding the terms of the Royal Warrant just referred to, as well as the terms of the "Royal Warrant relating to Pay and Promotion," and of the Queen's Regulations and Orders for the Army. It is a most unfortunate condition of things when two parts of Her Majesty's Government can employ officers holding the Queen's commission, and one of them ignore the express provisions and regulations made by the other part of the Government regarding those very same officers. It can be no matter of wonder, where such a state of things is suffered to exist, that discontent should be aroused, and that even hard things should be said, by those who suffer from the effects of such a want of mutual understanding and agreement between the different State departments.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

		From	To
Dep. Surg.-General	D. A. C. Fraser, M.D.	Bombay	Dover.
,,	W. M. Webb	Bengal	Edinburgh.
,,	E. M. Sinclair, M.D.	—	Belfast.
,,	S. Fuller	Aldershot	Cork.
Brigade-Surgeon	E. H. Roberts	Bengal	Chatham.
,,	B. C. Kerr, M.D.	Dublin	Enniskillen.
,,	J. H. Hunt	Madras	Aldershot.
,,	A. S. K. Prescott	Cork	Aldershot.
,,	W. Graves	Bengal	Portsmouth.
Surgeon-Major	R. P. Ferguson	Bombay	Madras.
,,	J. D. Gunning	Bengal	Shoeburyness.
,,	J. A. Campbell	Bermuda	York.
,,	W. J. Campbell	Bombay	Madras.
,,	C. E. Dwyer	Curragh	Dublin.
,,	W. B. Slaughter	Canterbury	Dover.
,,	T. J. Gallwey, M.D.	Shorncliffe	Brighton.
,,	G. B. Hickson	Gosport	Golden Hill Fort.
Surgeon	H. J. Robbins, M.D.	Dover	Shorncliffe.
,,	J. J. Morris, M.D.	Pembroke Dock	Barbadoes.
,,	A. W. Carleton, M.B.	Athlone	Mullingar.
,,	J. G. S. Lewis	—	Kingston-on-T.
,,	A. E. J. Croly	Fermoy	Dublin.
,,	R. H. Forman, M.B.	Bengal	York.
,,	J. D. Day, M.B.	Mullingar	Dublin.
,,	R. D. Donaldson, M.D.	Cork	Kilkenny.
,,	G. F. A. Smythe	Bengal	Dover.
,,	B. T. M'Creery, M.B.	Cork	Fermoy.
,,	J. M. Bolster	Dublin	Cork.
,,	D. Wardrop, M.B.	Portsmouth	Christchurch.
,,	F. M. Baker, M.B.	Dublin	Curragh.
,,	R. W. Barnes	Portsmouth	Sandown, I. W.
,,	J. O. G. Sandiford, M.D.	Bengal	Queenstown.
,,	R. L. Love, M.D.	Bengal	Guernsey.
,,	W. Heffernan	Weedon	Liverpool.
,,	D. Franklin	Bombay	Shorncliffe.
,,	R. Jennings, M.D.	Madras	Portsmouth.
,,	G. J. Coates, M.D.	Buttevant	Malta.
,,	W. G. Clements	Ceylon	Dover.
,,	N. M. Reid	Aldershot	Bermuda.
,,	C. H. Melville, M.B.	Edinburgh	Glasgow.
,,	B. L. Mills, M.B.	Ayr	Edinburgh.
,,	J. Rose	Cork	Kinsale.
,,	H. H. Brown, M.B.	York	Berwick.
,,	W. R. D. Crooke, M.D.	Cork	Fermoy.
,,	W. P. Squire	Devonport	Pembroke Dock

THE NAVY.

SURGEON ELI T. EEDE has been appointed to the *Triton*.

MEDICAL STAFF.

SURGEON-MAJOR S. K. COTTER, serving in Bengal, has received leave of absence for six months, on medical certificate.

Surgeon F. HOWARD, M.D., doing duty with the Hyderabad Subsidiary Force,

Madras command, is appointed Senior Medical Officer, South Station Hospital, Secunderabad.

Surgeon P. C. H. GORDON, on arrival from England, is to do general duty, Belgaum and Western districts, Madras.

Deputy Surgeon-General W. H. MUSCHAMP is granted retired pay, with the honorary rank of Surgeon-General. His commissions are dated, Assistant-Surgeon, January 23rd, 1855; Surgeon, November 9th, 1867; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, May 26th, 1880; and Deputy Surgeon-General, September 10th, 1884. Mr. Muschamp served in the Crimea from August 30th, 1855, including the siege and fall of Sebastopol, and attack of September 8th (medal with clasp, and Turkish medal). He was also engaged in the North-West Provinces in suppressing the mutiny of 1857-58, including the operations at Cawnpore under Windham, the defeat there of the Gwalior Contingent, the actions of Kalee Nuddee and Khankur, the capture of Bareilly, the relief of Shahjehanpore, and the affairs of Mahomdee, Shahabad, and Bunkagaon (medal).

Surgeon-Major WILLIAM ELGEE is likewise granted retired pay, with a step of honorary rank. He entered the service as Assistant-Surgeon, September 30th, 1863; became Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876; he retired on half-pay, February 6th, 1884. Mr. Elgee was engaged in the war in Zululand in 1879, and has the South African medal and clasp.

Surgeon-Major O. W. GEORGE, M.D., who formerly served with the 1st Life Guards, and retired with the rank of Brigade-Surgeon June 28th, 1880, has now commuted his retired pay.

The *London Gazette* of the 7th instant announces that the Queen has been pleased to give and grant unto Arthur James Wharry, Esq., Surgeon-Major in the Egyptian Army, Her Majesty's Royal licence and permission that he may accept and wear the insignia of the Fourth Class of the Order of the Medjidieh, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him, in recognition of his services while actually and entirely employed beyond Her Majesty's dominions with the Egyptian army.

Deputy Surgeon-General R. WOLSELEY, M.D., is appointed to the administrative medical charge of the Meerut Division, Bengal Command, *vice* Deputy Surgeon-General W. M. Webb, who has returned to England on the expiry of his tour of foreign service.

The undermentioned gentlemen are brought on the strength of Her Majesty's British forces in the Bombay command, with effect from the dates specified: Surgeon R. H. HODSON, April 11th; and Surgeons W. O. WOLSELEY, P. M. ELLIS, and A. HARDING, April 13th.

Surgeon Major T. R. LEWIS, M.B., died at Bywood, Woolston, on the 7th instant, aged 44. His commission as Assistant-Surgeon dated from March 31st, 1868; Surgeon, March 1st, 1873; and Surgeon-Major, March 31st, 1880.

Deputy Surgeon-General J. MADDEN, M.B., died in Dublin on March 8th. He entered the army as Assistant-Surgeon, October 2nd, 1846; became Surgeon, October 2nd, 1857; and Surgeon-Major, October 2nd, 1866; retiring on half-pay on December 9th, 1875, with the rank of Deputy Surgeon-General. He served in the Kaffir war in 1851-53 with the 43rd Light Infantry, and had the medal for that campaign.

Surgeon-Major T. W. ORWIN died on April 16th, in the 48th year of his age. He ranked as Assistant-Surgeon from March 31st, 1864; as Surgeon, from March 1st, 1873; and as Surgeon-Major, from April 28th, 1876. He does not appear to have had war experience.

Surgeons R. J. FAYLE and S. L. DEEBLE, serving in the Madras command, have passed the lower standard test in Hindustani.

The undermention Surgeons, on arrival from England, are directed to do duty as follows, all being in the Madras command:—C. H. SWAYNE, at the station hospital, Bellary; H. J. M'LAUGHLIN, M.B., at the station hospital, Bangalore; W. L. LANE, M.B., and S. A. CRICK, M.B., at the station hospital, Secunderabad; and T. B. A. TUCKEY, in the Burmah division.

The undermentioned Surgeons are placed on general duty in the circles specified, all in the Bombay command:—P. M. ELLIS, to the Presidency; P. D. HODSON, to Poona; and W. O. WOLSELEY and A. AARDING, to Mhow.

Surgeon J. ARMSTRONG and M. O'C. DRURY are brought in the strength of Her Majesty's forces in the Bombay command from April 18th, the date of their arrival from England.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON G. JOYNT, M.D., Bombay Establishment, on the expiration of his leave, is placed on general duty, Presidency Circle.

Surgeon C. P. LUKIS, Bengal Establishment, whose services have been placed at the disposal of the Government, is appointed to the Civil Medical Charge of the Jhansi district.

Surgeon J. K. KANGA, Madras Establishment, is directed to do general duty with the Nagpore Force.

Surgeon J. SMYTH, Madras Establishment, whose services have been replaced at the disposal of the Military Department, is ordered to do duty in the Eastern district.

Surgeon H. W. B. BOYD, Bombay Establishment, is directed to act as Presidency Surgeon, first district, and Ophthalmic Surgeon, during the absence of Surgeon-Major G. A. Maconachie, M.D.

Surgeon J. W. T. ANDERSON, Bombay Establishment, on being relieved of the duties of Civil Surgeon, Panch Mahals, is directed to act as a Civil Surgeon, Thana, during the absence of Surgeon K. R. Kirtikar.

Surgeon A. W. F. STREET, Bombay Establishment, is appointed to act, as a temporary arrangement, as Civil Surgeon, Sukkur, from the date of the departure on furlough of Surgeon-Major M. L. Bartholomeusz, M.B.

Surgeon J. C. H. PEACOCKE, Bombay Establishment, on his return to duty, is ordered to act as Deputy Sanitary Commissioner, Sind Registration District, during the absence of Surgeon J. Parker, M.D.

The undermentioned gentlemen have leave of absence for the periods specified:—Surgeon-Major E. LAWRIE, M.B., Bengal Establishment, privilege leave for three months; Surgeon-Major C. SIBTHORPE, Madras Establishment, Fort Surgeon and Professor of Anatomy, privilege leave for three months; Surgeon-Major B. T. SUFFREIN, Madras Establishment, for three months, in extension, on medical certificate; Surgeon-Major T. J. H. WILKINS, Madras Establishment, for three months, on medical certificate; Surgeon-Major J. P. MCDERMOTT, Madras Establishment, Medical Officer of the 15th Native Infantry, for one year, on medical certificate; Surgeon-Major P. N. MOOKERJEE, Madras Establishment, Medical Officer of the 32nd Native Infantry, for one year, on medical certificate; Surgeon J. PARKER, M.D., Bombay Establishment, Deputy Sanitary Commissioner, Sind Registration District, privilege leave for three months; Brigade-Surgeon A. GARDEN, M.D., Bengal Establishment, privilege leave for three months; Brigade-Surgeon G. D. RIDDELL, Madras Establishment, for one year on private affairs; Surgeon-Major R. REID, Bengal Establishment, for six months in extension on medical certificate.

Surgeon-Major W. GRAY, M.B., Bombay Establishment, has been permitted, by the Secretary of State for India, to return to duty.

Brigade-Surgeon R. E. PEARSE, Madras Establishment, Principal Medical Storekeeper, Madras, is granted privilege leave of absence for sixty days, from April 5th, or date of departure, Surgeon-Major H. J. Hazlett performing the duties of the appointment, on Brigade-Surgeon Pearse's responsibility.

Mr. J. W. MUDGE, M.D., Deputy Inspector-General of Hospitals, formerly of the Madras Establishment, died at Ringmers, Sussex, on May 3rd, in his 70th year.

Brigade-Surgeon C. JOYNT, M.D., Bombay Establishment, is placed on the retired list from April 25th, on a pension of £500 per annum. Dr. Joynt entered the service February 20th, 1856, and rose to the rank of Brigade-Surgeon, November 27th, 1879. He served in the war with Persia in 1857, and was at the bombardment of Mohumrah (medal with clasp); in the campaign in Okamundel and Kattywar, and at the siege of Dwarka, during the Indian mutiny; and with the expedition to Abyssinia in 1867-68 (medal).

The services of Surgeon A. MILNE, M.B., Bombay Establishment, are placed at the disposal of the Government in the Civil Department.

Brigade-Surgeon G. T. THOMAS, Madras Establishment, is transferred from Henzada to special duty in the Rangoon Central Gaol.

Surgeon E. R. DA COSTA, Madras Establishment, is appointed to the officiating medical charge of the 32nd Native Infantry.

Deputy Surgeon-General W. F. DE FABECK, M.D., Madras Establishment, is appointed to the administrative medical charge of the Nagpore Force and Central India Regiments, *vice* Deputy Surgeon-General W. H. Bean, who has vacated.

Surgeon J. B. EATON, M.B., Bombay Establishment, is directed to act as Assistant-Surgeon, David Sassoon Hospital, and Assistant Civil Surgeon, Poona, during the absence of Surgeon-Major G. A. Maconachie, M.D.

Surgeon A. F. SARGENT, Bombay Establishment, is appointed Acting Civil Surgeon, Dhoolia, during the absence of Surgeon H. W. B. Boyd.

Surgeon-Major W. A. C. ROE, Bengal Establishment, civil surgeon at Sealkote, is transferred to Murree, where he assumed charge of his duties on April 5th, relieving Surgeon-Major A. Brebner, M.D.

Surgeon-Major W. A. D. FASKEN, M.B., Bengal Establishment, has been appointed to the civil medical duties of Saharumpore during the absence on privilege leave of Brigade-Surgeon A. Garden.

Surgeon W. DEANE, Bengal Establishment, whose services have been temporarily replaced at the disposal of the Government of the North-West Provinces and Oude, has been appointed to the civil medical duties of the Mirzapore district.

Surgeon-Major B. C. KEELAN, Bombay Establishment, is permitted by the Secretary of State for India to return to duty.

The following extract, paragraphs 1 and 2 from a letter from the Secretary of State for India, is published for general information: "The undermentioned probationers for the Indian Medical Service, having completed a course of instruction at the Army Medical School, and being reported qualified, have been appointed Surgeons on the Bengal Establishment, their commissions as such bearing date October 1st, 1885: Messrs. H. R. WOOLBERT, G. H. BAKER, T. GRAINGER, M.D., J. R. ADIE, A. C. YOUNAN, A. W. ALCOCK, A. R. EDWARDS, and J. M. CADELL. They will be allowed to count as service for pensions the period of their residence at the Army Medical School, from October 1st, 1885, to February 1st, 1886, inclusive.

Surgeon C. G. W. LOWDELL, Bombay Establishment, Officiating Medical Officer 2nd Central India Horse, is appointed to the medical charge of the Western Malwa Political Agency, in addition to his other duties.

Surgeon F. C. CHATTERJEE, Bengal Establishment, Medical Officer, 30th Native Infantry, has passed the prescribed examination in Pashtu, Lower Standard.

Brigade-Surgeon W. F. DE FABECK, M.D., Madras Establishment, is appointed Deputy Surgeon-General, *vice* Deputy Surgeon-General Rean, who vacates. Dr. De Fabeck entered as Assistant-Surgeon, January 29th, 1857, and rose to the rank of Brigade-Surgeon, February 27th, 1885.

Surgeon J. HOEY, Madras Establishment, is appointed to the officiating medical charge of the 15th Native Infantry.

Surgeon J. A. BURTON, Madras Establishment, is appointed Officiating Medical Officer to the 22nd Native Infantry.

Mr. J. A. MACKENZIE, M.B., is appointed Acting Surgeon to the 4th Lancashire Volunteers.

Acting Surgeon H. M. CROOKSHANK, of the 24th Middlesex Volunteers, has resigned his commission, which was dated June 5th, 1878.

Acting Surgeon JOHN MACKAY, M.B., of the 2nd Perthshire (The Perthshire Highland) Volunteers, is appointed Surgeon; and Acting Surgeon PETER M'CALLUM, of the same corps, has resigned his appointment, which dates from December 8th, 1883.

Acting Surgeon P. W. G. NUNN is transferred from the 1st Hants Artillery, on its division into two corps, to the 1st Dorset Artillery Volunteers, the date of his commission remaining unaltered.

Surgeon R. V. SKINNER, Acting Surgeons H. COLGATE, M.D., and H. HABGOOD, M.D., are transferred from the 1st Sussex Artillery on its division into two corps, to the 2nd Sussex Artillery Volunteers, the dates of their commissions remaining without change.

Surgeon G. W. DANIELL, Dorset Yeomanry; Surgeon W. A. WALKER, 3rd Battalion Derbyshire Regiment (2nd Derby Militia); Surgeon J. W. TAYLOR, M.D., of the 2nd Volunteer Battalion of the Princess of Wales's Own Yorkshire Regiment (late the 2nd North Riding of Yorkshire Volunteers); and Surgeon J. FINEGAN, M.D., 18th Lancashire (Liverpool Irish) Volunteers, have been granted the honorary rank of Surgeon-Major.

Surgeon and Honorary Surgeon-Major W. R. H. BARKER, of the 1st Volunteer Battalion of the Princess Charlotte of Wales's Royal Berkshire Regiment (late the 1st Berkshire Volunteers), has resigned his commission, with permission to retain his rank and uniform.

PRESENTATION.—Mr. F. H. Oliver has been presented with a black marble timepiece, and an illuminated address, by the sergeants and constables of the Hoxton Subdivision of the G Division of the Metropolitan Police, upon retiring, after four years' service, as assistant-surgeon.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FIRST QUARTER OF 1886.

In the accompanying table will be found summarised the vital and mortal statistics of the thirty-nine sanitary districts of the metropolis, based upon the Registrar-General's returns for the first quarter of the current year. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of the deaths occurring in the institutions of London, among the various sanitary districts in which the patients had previously resided. By this means the precise number of deaths of persons actually belonging to the respective sanitary districts is known, as all deaths occurring in institutions, of persons who had previously resided in another sanitary district, have been excluded from the total deaths in the district in which the institution is situate, and credited to the districts from which they came. By this means alone can reliable data be secured, upon which to calculate trustworthy rates of mortality.

During the first quarter of this year, 35,467 births were recorded in London, equal to an annual rate of 34.3 per 1,000 of the population, estimated to be 4,149,533 persons in the middle of the year. In the corresponding periods of 1884 and 1885, the metropolitan birth-rate was 34.8 and 34.6 respectively. The birth-rates in the various sanitary districts differ greatly, owing to the wide variations in the sex and age-distribution of the population. In Kensington, St. George's (Hanover Square), St. James's (Westminster), and Hampstead, where the population contains a large proportion of unmarried females, chiefly domestic servants, the birth-rates are considerably below the average. On the other hand, in Fulham, St. Luke's, in most of the districts of East London, in Southwark, and Bermondsey, where the population consists largely of young married persons, the birth-rates show an excess.

The 25,427 deaths registered in London during the quarter under notice were equal to an annual rate of 24.6 per 1,000, which exceeded the rate recorded in the first quarter of any year since 1882, owing to the severity of the winter, which considerably affected the mortality, especially among elderly persons. Among the thirty-nine sanitary districts, the lowest death-rates last quarter were 15.2 in Hampstead, 18.7 in Kensington, 18.9 in Hackney, 20.0 in Plumstead, and 20.9 in Islington and Camberwell. In the other districts, the rates ranged upwards to 32.6 in Westminster, 34.2 in St. Luke's, 35.0 in St. George, Southwark, and in St. Martin-in-the-Fields, and 37.5 in St. George-in-the-East. During the quarter under notice, 2,719 deaths were referred to the principal zymotic diseases in London, equal to an annual rate of 2.6 per 1,000 persons living, against 2.1 in the corresponding quarter of 1885. The lowest zymotic death-rates in the thirty-nine sanitary districts were recorded in St. James, Westminster, London City, Kensington, Hampstead, Hackney, and Clerkenwell; the highest in Chelsea, St. Martin-in-the-Fields, Shoreditch, and Bermondsey. The 2,719 zymotic deaths included 1,551 from whooping-cough, 507 from measles, 213 from diphtheria, 198 from diarrhœa, 122 from enteric fever, 99 from scarlet fever, 18 from simple or undefined fever,

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after complete distribution of Deaths occurring in Public Institutions, during the First Quarter of 1886.

Sanitary Areas.	Estimated Population middle of 1886.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births.
				Births.	Deaths.	Principal Zymotic Diseases.											
LONDON	4,149,533	35,467	25,427	34.3	24.6	2.6	2,719	8	507	99	213	1,551	3	122	18	198	149
West Districts																	
Paddington	111,135	783	600	28.3	21.7	1.9	52	1	16	1	6	19	—	5	—	4	132
Kensington	186,584	1,091	872	23.5	18.7	1.5	71	—	21	4	5	34	—	2	1	4	139
Fulham	146,369	1,461	862	40.1	23.6	2.6	96	1	20	4	5	51	—	5	3	7	148
Chelsea	97,716	850	657	34.9	27.0	4.1	104	—	23	2	8	57	—	4	1	9	148
St. George, Hanover Square	88,176	477	532	21.7	24.2	1.8	40	—	8	2	4	17	—	4	1	4	182
Westminster	56,484	438	458	31.1	32.6	2.8	39	—	11	—	4	21	—	—	—	3	174
St. James, Westminster	28,174	150	173	21.4	24.6	0.9	6	—	1	1	—	4	—	—	—	—	167
North Districts																	
Marylebone	150,884	1,223	979	32.5	26.0	2.3	86	—	23	—	1	47	—	2	—	13	152
Hampstead	53,758	353	204	26.4	15.2	1.5	20	—	11	—	3	4	—	2	—	—	105
St. Pancras	241,557	2,000	1,496	33.2	24.9	1.9	114	—	49	2	18	35	—	3	—	7	141
Islington	321,824	2,561	1,675	31.9	20.9	2.3	183	3	9	4	22	124	1	7	—	13	143
Hackney	225,725	1,650	1,063	29.3	18.9	1.7	96	—	12	2		59	—	10	—	7	139
Central Districts																	
St. Giles	41,348	368	329	35.7	31.9	2.6	27	—	5	1	—	17	—	2	1	1	158
St. Martin-in-the-Fields	15,721	104	137	26.5	35.0	4.1	16	—	2	—	1	9	—	1	—	3	221
Strand	30,114	170	205	22.7	27.3	1.9	14	—	5	1	—	5	—	1	—	2	229
Holborn	31,625	268	258	34.0	32.7	2.2	17	—	4	1	1	9	—	—	—	2	157
Clerkenwell	69,172	655	433	38.0	25.1	1.7	30	1	2	1	1	20	—	1	1	3	107
St. Luke's	43,043	596	367	55.5	34.2	2.7	29	—	—	4	1	17	—	4	—	3	128
London City	41,655	205	296	19.7	28.5	1.4	15	—	—	2	3	7	1	1	—	1	141
East Districts																	
Shoreditch	125,508	1,315	981	42.0	31.4	4.2	132	—	8	7	5	95	—	8	—	9	174
Bethnal Green	129,895	1,360	935	42.0	28.9	3.8	123	—	7	1	4	106	—	2	—	3	163
Whitechapel	68,345	675	465	39.6	27.3	2.1	35	—	3	—	2	22	—	5	—	3	142
St. George-in-the-East	46,403	504	434	43.6	37.5	3.6	42	—	1	6	2	28	—	1	—	4	165
Stepney	58,630	569	449	38.9	30.7	3.8	56	—	—	7	4	34	—	4	—	7	146
Mile End Old Town	111,607	1,079	702	38.8	25.2	3.3	91	—	1	12	6	62	—	2	1	7	111
Poplar	178,343	1,667	1,006	37.5	22.6	2.3	103	—	—	13	8	68	—	6	—	8	145
South Districts																	
St. Saviour, Southwark	27,525	266	200	38.8	29.2	2.2	15	—	5	1	—	6	—	1	—	2	169
St. George, Southwark	59,329	587	517	39.7	35.0	3.3	49	—	12	—	5	28	—	1	1	2	177
Newington	117,870	1,078	819	36.7	27.9	3.1	90	—	20	9	4	48	—	1	2	6	170
St. Olave, Southwark	10,502	90	83	34.4	31.7	3.1	8	—	1	—	—	5	—	1	—	1	222
Bermondsey	88,770	967	628	43.7	28.4	4.3	94	—	23	1	3	52	—	4	1	10	145
Rotherhithe	40,958	372	252	36.5	24.7	2.5	25	—	1	1	—	18	—	2	—	3	140
Lambeth	278,731	2,400	1,694	34.5	24.4	2.7	191	—	50	4	17	98	—	5	1	16	141
Wandsworth	267,826	2,358	1,459	35.3	21.9	3.3	218	—	81	2	14	99	—	12	2	8	153
Camberwell	238,001	1,907	1,240	32.2	20.9	2.1	124	2	7	—	10	96	1	3	—	5	143
Greenwich	148,545	1,379	963	37.3	26.0	3.7	137	—	30	1	22	74	—	4	1	5	162
Lewisham	56,080	473	333	33.9	23.8	2.9	40	—	1	1	9	21	—	2	—	3	161
Woolwich	36,871	364	279	39.6	30.4	3.3	30	—	10	—	1	17	—	1	—	1	173
Plumstead	78,730	654	392	33.3	20.0	3.1	61	—	24	1	8	18	—	3	1	6	150

8 from small-pox, and 3 from typhus. Compared with the preceding quarter, the fatality of each of these zymotic diseases, except whooping-cough, showed a decline. The deaths from small-pox in the metropolis, which had declined in the three preceding quarters from 602 to 32, further fell to 8. These 8 fatal cases included 7 of London residents which were recorded in the Metropolitan Asylum Hospital-Ship *Atlas*, situated outside registration London, which have been credited to the districts in which the patients resided prior to their removal to the hospital. Three of the 8 cases belonged to Islington, and 2 to Camberwell. Whooping-cough was proportionately most fatal in Greenwich, Chelsea, Bermondsey, Shoreditch, and Bethnal Green; measles in Chelsea, Bermondsey, Plumstead, and Wandsworth; diphtheria in Greenwich and Lewisham; enteric fever in Shoreditch; and scarlet fever in Mile-End-Old-Town and Poplar.

Infant-mortality in London last quarter, measured by the proportion of deaths under one year of age to births registered, was equal to 149 per 1,000, against 135 and 133 in the corresponding periods of 1884 and 1885. Among the various sanitary districts, the rates of infant-mortality were lowest in Hampstead, Clerkenwell, and Mile-End-Old-Town; while they showed the greatest excess in St. Martin-in-the-Fields, St. Olave, Southwark, and Strand districts.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 5,273 births and 3,221 deaths were registered during the week ending Saturday, May 15th. The annual rate of mortality, which had been 20.2 and 20.6 per 1,000 in the two preceding weeks, declined again during the week under notice to 19.1. The rates in the several towns, ranged in order from the lowest, were as follow:—Huddersfield, 8.8; Birkenhead, 10.4; Derby, 14.2; Sunderland, 16.0; Nottingham, 16.1; Plymouth, 17.0; Bradford, 17.4; Cardiff, 17.6; London, 17.8; Brighton, 17.9; Sheffield, 18.8; Bristol, 18.9; Leeds, 19.1; Birmingham, 19.6; Portsmouth, 19.9; Salford, 20.3; Norwich, 20.4; Leicester, 20.6; Liverpool, 20.8; Wolverhampton, 20.9; Newcastle-upon-Tyne, 21.5; Oldham, 21.6; Halifax, 22.7; Bolton, 23.8; Blackburn, 24.1; Hull, 24.3; Preston, 27.8; and the highest rate during the week, 28.2 in Manchester. The death-rate in the twenty-seven provincial towns averaged 20.1 per 1,000, and exceeded by as much as 2.3 the rate recorded in London, which, as before stated, was only 17.8 per 1,000. The 3,321 deaths registered in the twenty-eight towns during the week under notice included 120 which were referred to whooping-cough, 90 to measles, 39 to diarrhœa, 30 to diphtheria, 23 to scarlet fever, 21 to "fever" (principally enteric), and 1 to small-pox; in all, 324 deaths resulted from these principal zymotic diseases, against 364 and 367 in the two preceding weeks. The zymotic death-rate was equal to 1.9 per 1,000. In London, the zymotic rate was 2.2, while it did not exceed 1.6 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 and 0.4 in Huddersfield and Sunderland, to 4.5 in Blackburn, 5.4 in Portsmouth, and 5.5 in Bolton. The fatal cases of whooping-cough, which had been 138 and 141 in the two preceding weeks, declined during the week under notice to 120, and caused the highest death-rates in Salford and Bolton. The deaths referred to measles, which in the two preceding weeks had been 104 and 114, declined to 90, a lower number than in any week since February last; this disease showed the largest proportional fatality in Preston, Portsmouth, and Bolton. The 39 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths referred to diphtheria, which had declined in the three previous weeks from 30 to 21, rose again during the week under notice to 30, and included 19 in London, 3 in Liverpool, and 2 in Portsmouth. The 23 fatal cases of scarlet fever exceeded by 5 the number in the preceding week. The deaths referred to different forms of fever, which had been 23 and 32 in the two previous weeks, declined during the week to 21, a lower number than in any preceding week on record. Small-pox caused 1 death in Blackburn, and not one in any other of the twenty-seven towns, although the deaths of 2 London residents from this disease were registered in the Metropolitan Asylum Hospital ship *Atlas*, situated outside registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had increased from 7 to 27 in the seven preceding weeks, further rose to 31 on Saturday, May 15th; 9 new cases were admitted to these hospitals during the week, against 6, 3, and 11 in the three preceding weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 3.7 per 1,000, and was below the average. The causes of 83, or 2.5 per cent., of the 3,321 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, May 15th, 905 births and 548 deaths were registered in eight of the principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had been 23.1 and 22.3 per 1,000, declined last week to 22.2. Among these Scotch towns, the rate was equal to 8.2 in Perth, 12.5 in Greenock, 16.7 in Aberdeen, 17.7 in Dundee, 20.8 in Edinburgh, 20.8 in Paisley, 23.7 in Leith, and 27.6 in Glasgow. The 548 deaths registered during the week under notice in these Scotch towns, included 55 which were referred to the principal zymotic diseases, against numbers increasing from 34 to 62 in the four preceding weeks; of these, 17 resulted from measles, 14 from whooping-cough, 13 from diarrhœa, 5 from "fever," 3 from diphtheria, 3 from scarlet fever, and not one from small-pox. These 55 deaths were equal to an annual rate of 2.2 per 1,000, which exceeded by 1.5 the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates during the week under notice were recorded in Edinburgh, Paisley, and Leith. The fatal cases of measles, which had steadily risen from 4 to 17 in the six preceding weeks, were again 17, and included 12 in Edinburgh and 4 in Leith. The deaths referred to whooping-cough, which had been 21 and 20 in the two previous weeks, further declined during the week to 14, of which 12 were recorded in Glasgow. The 13 fatal cases of diarrhœa showed a slight further increase upon recent weekly numbers, and included 6 in Glasgow, 4 in Paisley, and 3 in Dundee. The deaths referred to different forms of fever, which had been 2 in each of the two preceding weeks, rose to 5, of which 2 occurred in Edinburgh, and 2 in Leith. The fatal cases of scarlet fever showed a considerable decline from recent weekly numbers, and were all returned in Glasgow. The 3 deaths referred to diphtheria showed a slight increase upon the numbers in the two preceding weeks; 2 occurred in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 4.4 per 1,000, against 3.7 in London. The causes of 67, or 12.2 per cent., of the 548 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending April 3rd, 520 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 31.3 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 41.3; Belfast, 33.1; Cork, 31.8; Drogheda, 46.5; Dublin, 32.9; Dundalk, 30.6; Galway, 30.3; Kilkenny, 16.9; Limerick, 28.3; Lisburn, 14.5; Londonderry, 21.4; Lurgan, 41.0; Newry, 17.6; Sligo, 19.2; Waterford, 23.2; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in nine of the districts, to 10.3 in Lurgan; the 8 deaths from all causes registered in that district comprising 1 from measles, and 1 from scarlatina. Among the 141 deaths from all causes registered in Belfast were 1 from scarlatina, 1 from typhus, 3 from whooping-cough, 2 from simple continued and ill-defined fever, 1 from enteric fever, and 4 from diarrhœa; and the 21 deaths in Limerick comprised 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 233. Twenty deaths from zymotic diseases were registered in Dublin; they comprised 3 from scarlet fever, 1 from typhus, 6 from whooping-cough, 1 from cerebro-spinal fever, 4 from enteric fever, 1 from diarrhœa, etc. Fifty deaths from diseases of the respiratory system were registered; they comprised 28 from bronchitis, 11 from pneumonia, and 2 from croup. The deaths of 23 children under 5 years of age (including 15 infants under one year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 5 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 32 deaths, mesenteric disease 5, and cancer 10. Three accidental deaths were registered. In 39 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

During the week ending April 10th, 434 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 26.1 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 31.0; Belfast, 21.2; Cork, 20.1; Drogheda, 12.7; Dublin, 31.9; Dundalk, 4.4; Galway, 20.2; Kilkenny, 29.6; Limerick, 28.3; Lisburn, 9.7; Londonderry, 21.4; Lurgan, 15.4; Newry, 38.6; Sligo, 9.6; Waterford, 37.0; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.2 per 1,000, the rates varying from 0.0 in Londonderry, Waterford, Wexford, Dundalk, Sligo, and Lurgan, to 10.5 in Newry. Among the 90 deaths from all causes registered in Belfast, were 1 from typhus, 2 from whooping-cough, 2 from diphtheria, 1 from ill defined fever, and 1 from enteric fever; among the 31 deaths in Cork were 2 from scarlatina; and the 21 deaths in Limerick comprised 1 from each of the following diseases: typhus, whooping-cough, and diarrhœa. In the Dublin registration-district, the deaths registered during the week amounted to 223. Eighteen deaths from zymotic diseases were registered in Dublin; they comprised 2 from scarlet fever, 11 from whooping-cough, 3 from enteric fever, etc. Deaths from diseases of the respiratory system were in number 46, comprising 30 from bronchitis, 7 from pneumonia, and 2 from croup. The deaths of 15 children (including 10 infants under one year old) were ascribed to convulsions. Twelve deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 40 deaths, mesenteric disease 8, and cancer 5. No accidental deaths were registered. In 21 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending April 17th, 402 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 24.2 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 15.5; Belfast, 28.2; Cork, 14.9; Drogheda, 21.1; Dublin, 24.7; Dundalk, 4.4; Galway, 30.3; Kilkenny, 12.7; Limerick, 22.9; Lisburn, 14.5; Londonderry, 23.2; Lurgan, 20.5; Newry, 14.0; Sligo, 19.2; Waterford, 48.6; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in eleven of the districts to 4.6 in Waterford; the 21 deaths from all causes registered in that district comprising 2 from diarrhœa. Among the 120 deaths from all causes registered in Belfast were 5 from whooping-cough, 1 from enteric fever, and 2 from diarrhœa; and the 23 deaths in Cork comprised 2 from measles, 1 from scarlatina, and 1 from whooping-cough. In the Dublin Registration District the deaths registered during the week amounted to 169. Eighteen deaths from zymotic diseases were registered in Dublin; they comprised 2 from scarlet fever, 5 from whooping-cough, 3 from diphtheria, 3 from enteric fever, 2 from diarrhœa, 1 from dysentery, etc. From diseases of the respiratory system, the number of deaths registered during the week was 36, comprising 20 from bronchitis, and 8 from pneumonia. The deaths of 14 children under 5 years of age (including 11 infants under 1 year old) were ascribed to convulsions. Eleven deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis caused 29 deaths, mesenteric disease 3, and cancer 3. Two accidental deaths were registered. In 20 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending April 24th, the number of deaths registered in the sixteen principal town-districts of Ireland was 383. The average annual death-rate represented by the deaths registered was 23.1 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 21.9; Cork, 22.1; Drogheda, 12.7; Dublin, 26.0; Dundalk, 30.6; Galway, 16.8; Kilkenny, 8.5; Limerick, 28.3; Lisburn, 14.5; Londonderry, 19.6; Lurgan, 35.9; Newry, 14.0; Sligo, 9.6; Waterford, 25.5; Wexford, 8.6. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.2 per 1,000, the rates varying from 0.0 in ten of the districts to 8.5 in Drogheda; the 3 deaths from all causes registered in that district comprising 2 from diphtheria. Among

the 93 deaths from all causes registered in Belfast were 1 from scarlatina, 2 from whooping-cough, 1 from diphtheria, and 1 from enteric fever; and the 34 deaths in Cork comprised 1 from enteric fever, and 2 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 185. Seventeen deaths from zymotic diseases were registered in Dublin; they comprised 1 from relapsing fever, 4 from whooping-cough, 1 from cerebro-spinal fever, 2 from simple continued and ill-defined fever, 1 from enteric fever, 1 from dysentery, 3 from erysipelas, etc. Forty-nine deaths from diseases of the respiratory system were registered; they comprised 27 from bronchitis, 11 from pneumonia, and 2 from croup. The deaths of 10 children (including 7 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 2 by epilepsy, 7 by other diseases of the brain and nervous system (exclusive of convulsions), and 9 by diseases of the circulatory system. Phthisis caused 23 deaths, mesenteric disease 5, and cancer 4. Four accidental deaths and one case of homicide were registered. In 20 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears from statistics published in the Registrar-General's return for the week ending April 10th that the annual death-rate recently averaged 28.2 per 1,000 in the three principal Indian cities; it was 23.7 in Bombay, 24.4 in Calcutta, and 35.6 in Madras. According to the most recently received weekly returns, the annual death-rate averaged 31.0 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by no less than 10.0 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 37.5, and exceeded the rate in any recent week; the 667 deaths included 35 from measles, 24 from "fever," 19 from scarlet fever, and 78 from diarrhœa. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 26.7, and ranged from 23.4 in Christiania, to 29.1 in Stockholm; diphtheria and croup caused 8 deaths in Copenhagen, 5 in Christiania, and 3 in Stockholm. In Paris, the death-rate was equal to 28.3, and 8.4 above the rate that prevailed in London; the deaths included 30 from diphtheria and croup, 24 from measles, 8 from typhoid fever, and 4 from small-pox. The 268 deaths in Brussels, of which 13 were attributed to croup, and 1 to small-pox, gave a rate of 25.6. The rate in Geneva was 36.0, and 1 fatal case of diphtheria was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.1, the several rates ranging from 19.9 in the Hague, to 27.7 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 31.9, and ranged from 24.4 in Berlin and 30.7 in Dresden, to 41.4 in Buda-Pesth, and 43.2 in Prague. Small-pox caused 8 deaths in Prague, 9 in Vienna, and 13 in Buda-Pesth; diphtheria showed the greatest mortality in Hamburg and Dresden; and 11 deaths from "fever" were reported in Buda-Pesth. The mean death-rate in three of the principal Italian cities was 34.7, the individual rates being 28.1 in Turin, 39.7 in Venice, and 40.3 in Rome; small-pox caused 13 deaths in Rome, 4 in Venice, and 2 in Turin; measles showed fatal prevalence in Rome, and 13 deaths were referred to diphtheria and croup in Turin. The death-rate was equal to 34.5 in Alexandria, and to 44.0 in Cairo; typhoid fever caused 15 deaths in Cairo, and 4 in Alexandria; the deaths referred to diarrhœal diseases were 29 in Alexandria, and 97 in Cairo. In four of the largest American cities the mean recorded death-rate was 26.3, the rates ranging from 21.8 in Baltimore to 29.8 in New York. Diphtheria and croup caused considerable mortality in New York and in Brooklyn; typhoid fever caused 15 deaths in Philadelphia; and scarlet fever showed pre valence in each of these four American cities.

It appears from statistics published in the Registrar-General's return for the week ending April 17th, that the annual death-rate recently averaged 29.2 per 1,000 in the three principal Indian cities; it was 24.2 in Calcutta, 24.5 in Bombay, and 37.8 in Madras. Cholera caused 14 deaths in Calcutta, small-pox 2 in Bombay, and diarrhœal diseases 48 in Madras; the largest excess of "fever" mortality occurred in Madras. According to the most recently received weekly returns, the annual death-rate averaged 30.5 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by no less than 10.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 37.1, and was almost identical with the rate in the previous week; the 659 deaths included 100 from diarrhœal diseases, 35 from "fever," 34 from measles, and 26 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 27.8, and ranged from 17.8 in Christiania, to 32.4 in Stockholm; diphtheria and croup caused 6 deaths in Copenhagen; and of the 45 deaths in Christiania, 5 resulted from scarlet fever, and 4 from diphtheria. In Paris, the death-rate was equal to 29.3, and was 9.5 above the rate that prevailed in London; the deaths included 40 from diphtheria and croup, 24 from measles, 15 from typhoid fever, and 7 from small-pox. The 202 deaths in Brussels, of which seven resulted from diphtheria and croup and 3 from small-pox, gave a rate of 23.8. The rate in Geneva, where 1 death from typhoid fever was reported, was equal to 26.6. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.0, the several rates being 21.0 in the Hague, 27.5 in Amsterdam, and 29.8 in Rotterdam; measles caused 6 deaths in Amsterdam, and 3 in Rotterdam, and 2 deaths from "fever" were reported in Amsterdam The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 31.4, and ranged from 25.1 in Berlin and 29.0 in Munich, to 38.4 in Buda-Pesth, and 43.2 in Prague. Small-pox caused 13 deaths in Buda-Pesth, 7 in Vienna, and 4 in Prague; fever 8 in Buda-Pesth, and 5 in Prague; and diphtheria showed the greatest mortality in Buda-Pesth, Trieste, Dresden, and Berlin. The mean death-rate in three of the principal Italian cities was 32.7, the rates being 28.8 in Turin, 28.9 in Venice, and 37.9 in Rome; small-pox caused 10 deaths in Rome, 2 in Turin, and 2 in Venice; 6 deaths from diphtheria occurred in Rome, and 8 from diarrhœal diseases in Venice. The death-rate was equal to 35.9 in Alexandria and 47.7 in Cairo; typhoid fever caused 20 deaths in Cairo, and the deaths from diarrhœal diseases were 33 in Alexandria, and 91 in Cairo. In four of the largest American cities, the mean recorded death-rate was 25.9, and the rates ranged from 23.6 in Philadelphia, to 29.1 in New York. Diphtheria and croup caused considerable mortality in each of these American cities.

It appears from statistics published in the Registrar-General's return for the week ending April 24th, that the annual death-rate recently averaged 27.5 per 1,000 in the three principal Indian cities; it was 21.8 in Bombay, 25.7 in Calcutta, and 35.3 in Madras. Cholera caused 35 deaths in Calcutta, and diarrhœal diseases 50 in Madras, and 24 in Calcutta; the largest excess of "fever" mortality occurred in Calcutta. According to the most recently received weekly returns, the annual death-rate averaged 29.6 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no less than 9.8 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 39.7, and showed a further increase upon the high rates returned in recent weeks; the deaths included 28 from measles, 24 from "fever," and 23 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 25.5, and ranged from 17.5 in Christiania, to 31.7 in Stockholm; the 44 deaths in Christiania included 5 from diphtheria and croup, and 5 from scarlet fever. In Paris, the death-rate was equal to 27.1, and showed a decline from higher rates in previous weeks; the deaths included 18 from diphtheria and croup, 10 from typhoid fever, and 5 from small-pox. The 214 deaths in Brussels, of which 6 were attributed to croup, and 2 to "fever," gave a rate of 25.2. The rate in Geneva was but 18.7, but the 26 deaths included 2 from "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.7, the rates ranging from 23.6 in the Hague, to 29.2 in Rotterdam; the 190 deaths in Amsterdam included 6 from diphtheria, 6 from measles, and 2 from "fever." The Registrar-General's table includes eight German and Austrian cities (the usual return from Trieste not having come to hand), in which the death-rate averaged 29.7, and ranged from 24.9 in Berlin, and 26.1 in Dresden, to 33.0 in Buda-Pesth and 44.5 in Prague. Small-pox caused 12 deaths in Buda-Pesth, 5 in Vienna, and 2 in Prague; "fever" caused 8 deaths in Hamburg, and 6 in Buda-Pesth; and 19 fatal cases of measles were recorded in Prague. The mean death-rate in three of the principal Italian cities was 31.5, the several rates being 18.2 in Venice, 31.2 in Turin, and 37.7 in Rome; the deaths in Rome included 30 from measles, 7 from diphtheria, and 6 from small-pox; 8 deaths in Turin were referred to diphtheria and croup. The death-rate was equal to 31.1 in Alexandria, and 47.2 in Cairo; typhoid fever caused 20 deaths in Cairo. In four of the principal American cities, the mean recorded death-rate was 26.8, and the rates ranged from 23.0 in Brooklyn, to 30.5 in New York. Diphtheria and croup caused considerable mortality in each of these American cities; 6 deaths from typhoid fever were recorded in Philadelphia, and 21 from whooping-cough in New York.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

KENSINGTON.—Dr. Dudfield himself discounts, to a large extent, the interest of his annual reports by the excellent series of monthly reports which he presents, with unfailing regularity, to his vestry, and which summarise, in a very succinct and readable fashion, all the sanitary events of the day. We shall not be accused of any lack of appreciation of Dr. Dudfield's labours in this respect, for our columns are often indebted to his reports for information of general value and importance. Amongst other chapters in the Kensington report for 1884, is one on the housing of the working classes, in which Dr. Dudfield comments on the report of the Royal Commission. He complains of the blame cast on local authorities for not enforcing existing legislation, and observes that the difficulties of procedure have been underrated or overlooked. The epidemic of small-pox in 1884 induces some able remarks on the prevention of disease, the use and influence of hospitals for infectious diseases, and "compulsory notification." Constant efforts have been made to obtain information of the occurrence of infectious diseases, and Dr. Dudfield testifies to the utility of voluntary notification. In that part of the report dealing with the sanitary work of the parish, attention is called to the foul smell emanating from brick-yards. As it appears that the nuisance may be prevented by the adoption of a particular method of burning bricks in kilns, the public health demands that it should be brought under regulation. The returns of vital statistics are most satisfactory. The death-rates for 1883 to 1885 were respectively 15.5, 15.1 (the lowest on record), and 16.1 per 1,000. The mortality from zymotic diseases was below the average, small-pox excepted, though there was an epidemic of measles in 1885. One hundred and eighty-one cases of small-pox were recorded in 1885, against 177 in 1884, and 8 in 1883; and the deaths from this disease numbered 26 in 1884, and 25 in 1885. The report states that "the upper classes escaped personally to a remarkable degree, probably as the result of proper attention to vaccination." Each branch of sanitary work received its share of attention, the reports under each heading being accompanied by comments on work carried out, and by suggestions as to future operations.

RISHTON.—Mr. J. Barr has to record the exceptionally high death-rate of 27.1 per 1,000 in his report for 1884. This was mainly due to the prevalence of zymotic diseases, which alone produced a rate of 12.7 per 1,000. A severe and fatal epidemic of scarlet fever broke out in the district during the last quarter of the year; and, although measures were taken, both by the health-officer and by the school-teachers, to prevent the spread of the disease, it caused in the end 23 deaths. Measles also prevailed, and caused 8 deaths. At the beginning of August, there was a sudden and alarming outbreak of choleraic diarrhœa in the district, about 100 persons being affected with the disease. The outbreak, which, in Mr. Barr's opinion, was due to the intense heat of the weather, and to errors of diet, was of very short duration, and happily caused only 1 death. If we are not mistaken, this outbreak gave rise at the time to some absurd rumours abroad as to an "outbreak of cholera in England." Diarrhœa caused 11 deaths; and, with the exception of the case already mentioned, were all of children under one year. Improper feeding of infants is considered by Mr. Barr to be the main cause of this infantile diarrhœa.

HOSPITAL AND DISPENSARY MANAGEMENT.

KENT COUNTY LUNATIC ASYLUM, BARMING HEATH.

We search in vain, in the report of this asylum for 1884, for the usual report made by the Committee of Visitors.

The average number of patients resident in 1884 was 1,348, namely, 527 men and 821 women. For such a number, the asylum had need possess so able and energetic a head as Dr. Davies. Three hundred and sixty-seven cases were admitted; 159 were discharged recovered—that is, 38.6 per cent. of the admissions, excluding transfers from other asylums. Treatment is pursued with vigour. The death-rate was rather high, especially in the male division; the proportion of deaths, calculated on the average number of men resident, being 14.6 per cent. It is very creditable to the Medical Superintendent that, in every case of death, a complete *post mortem* examination was made.

Dr. Pritchard Davies refers to the unsanitary condition of certain parts of the asylum, especially a ward which had to be closed, on account of a serious outbreak of enteritis, from which disease six men and two women died. In his opinion, "there can be no reasonable doubt that it was only by the exercise of the greatest care, together with a certain amount of good luck, that the asylum escaped an outbreak of typhoid fever."

Neither restraint nor seclusion was, we are glad to say, resorted to during the year. With regard to structural changes, the two wings of the old building have been altered; and "much-needed infirmaries, and epileptic and suicidal dormitories, for either sex, now take the place of a lot of badly-constructed single rooms."

The Commissioners, in their report, call attention to the need for further painting and decorating in the wards; also, for a more liberal supply of books and papers. They say: "The works provided for the amusement of the patients partake too largely of a religious character. We observed in one ward, besides bibles, prayer-books, and hymn-books, no other works except one imperfect copy of *Lothair*, and two *Companions to the Altar*." We hope the chaplain has profited by the hint given him in this entry.

On January 1st, 1885, there were in this asylum sixteeen patients under fifteen years of age, including two less than ten years old. Four of the deaths were of patients under fifteen—namely, two from epilepsy, and two from phthisis. There were twenty-five deaths from general paralysis, and twenty-four from "atrophy of brain," whatever that may mean.

Among the statistical tables, we are glad to see Tables Ia and IIa, although the value of the latter, and of several other tables, is affected (especially as regards the estimation of percentages) by the fact that they cover only ten years, instead of the whole period the asylum has been open. We learn from Table III, that, since 1875, the rate of recoveries, on the total admissions, was 445.43 per cent. (*sic.*) The percentage of deaths, on the average numbers resident during the same period, was 104.06 (*sic*). It would be interesting to learn from the clerk who drew up this table, what were his views as to the inner significance of the figures which he has given us. No doubt, the figures supplied to the Commissioners, on which the tables in the Blue-book are based, are prepared with more care.

KILLARNEY DISTRICT LUNATIC ASYLUM.

One of the most noticeable points in the condition of this asylum during 1884, was the overcrowded condition of the female wards; and this is the more remarkable, since it would appear as if, by a little re-arrangement, the difficulty might have been obviated. The "limits of accommodation" are given as 230 and 126, for males and females respectively; the numbers in the Asylum on December 31st, 1884, were 205 men and 136 women. We cannot help wondering whether it was absolutely impossible, for structural or other reasons, to relieve the overcrowded female wards at the expense of the unnecessarily large male wards. The total death-rate for the whole period during which the asylum has been open, is not given in the statistical tables; we find, however, that the death-rate, calculated on the average numbers resident, was, for men, 7.4 per cent.; and, for women, no less than 11.2 per cent., a striking reversal of the usual condition of things, which one can hardly help associating with the overcrowded state of the female wards. Even though the overcrowding may not be directly responsible for the large number of deaths among the women, it probably tended to affect their general health, and to render them less able to resist any intercurrent disease.

During the year, 34 cases were discharged recovered; that is, 41 per cent. of the admissions. Dr. Woods does not approve of the discharge of patients to workhouses; he says "none but feeble-minded patients can be so transferred, as the more sensible would demand their discharge from the workhouse, and soon become a burden to society, and an enemy to themselves. Those who would remain in the workhouses would, I fear, fare badly there, there being no provision made for their comfort or care. The history of my former transfers does not encourage another trial."

During the summer of 1884, the asylum narrowly escaped a serious outbreak of enteric fever; three of the nurses contracted the disease; but, by very great care, it was prevented from spreading to the patients. A carelessly laid sewer was found blocked under the scullery floor; it was also discovered that the rain-water tank had become contaminated with sewage, which had burrowed from an old drain into the rain water-pipes. "The plan of the buildings and drains, showed that pipes ought to have been laid down years ago, but were not."

The statistical tables vary considerably, both in form and numerical order, from those of the Medico-Psychological Association; for the sake of uniformity, we should be glad to see the latter adopted. The details given with regard to ages in Table viii, differ considerably from those in Table iv, with which they ought to agree. If the statistical tables are to be of any practical value, this is to be regretted. During 1884 there was, in the asylum, no case of general paralysis of the insane. The average age of the patients admitted was only 35 years, and of those discharged recovered, 31.4 years. Does not Dr. Woods take a very sanguine view, when he regards 70 of the 341 patients in the asylum, that is, more than 20 per cent., as probably curable?

SUSSEX COUNTY HOSPITAL.

The report presented at the Annual General Court of Governors of the Sussex County Hospital, showed the number of patients admitted during the year to have been 1,331, which, with 131 remaining on the books in December, 1884, gave a total number treated of 1,464. The daily average was 134½. The average time each discharged patient was in the hospital was 37 days. The number of children discharged under ten years of age was 142; the number remaining in the house on December 31st was 18, making the total number treated 160. The number of out-patients treated, including 1,356 on the books on January 1st, was 7,477. These figures represent a decrease in the number of the in-patients, as compared with 1884, of 211; in the daily average number in the house, of 12½; in the number of children discharged under ten years of age, of 45; in the number of out-patients, of 323; but an increase in the length of time each discharged patient was in hospital, of two days. It was a matter of congratulation that there had been less sickness amongst the poor last year than usual. The progressive decrease in the number of accidents admitted, was stated to be deserving of special mention, and might partly be attributed to the more temperate habits of the poor. The receipts during the year, including legacies, were £12,019 6s. 10d., against £9,840 10s. last year, being an increase of £2,178 16s. 10d. The expenditure was £10,790 15s. 2d, against £10,713 13s. 1d., being an increase of £77 2s. 8d. The Convalescent Home, which had become part and parcel of the hospital, had been well supported by special contributions. Mr. T. J. Verrall had been elected third assistant surgeon, and Dr. Shadwell third assistant physician. The assistant surgeon, Mr. C. Kebbell had resigned, and Mr. F. J. Paley had been elected his successor. The officers who had resigned, carried with them the best wishes of the committee for their future welfare.

Attention was called to the alteration made in the mode of contesting elections, by the following resolution, which had been passed, and it would be moved that Statute 66 be altered accordingly: "That in all cases of contested elections, the votes shall be taken by a show of hands, the candidate having the least number of votes being eliminated each time until they be reduced to two, when these shall be balloted for, and the one having the larger number of votes be declared elected." The medical staff having unanimously reported to the committee that there was urgent need of additional accommodation, such as will admit of the isolation and treatment, apart from the other patients, of special cases, the committee have now under consideration the erection, as soon as possible, of a separate building for the purpose. The fund to which Lady Grant had given £1,000, in 1878, towards this object, had now increased to £1,478 3s. 8d.

Presentation.—Dr. Lionel Weatherly, on the occasion of his leaving Portishead for Bath, has received pleasing testimony of the regard in which he is held by a large circle of Portishead friends. Not only has he received a testimonial from the working-classes of that town, but has, within the last few days, been the happy recipient of an elegant epergne, together with a purse of 100 guineas, accompanied by an illuminated address.

MEDICO-LEGAL AND MEDICO-ETHICAL.

COMPULSORY VACCINATION IN WORKHOUSES.

At the Hammersmith Police Court, lately, Mr. Vassie, assistant-clerk of the Kensington Guardians, attended at the court, by direction of the magistrate, with reference to the compulsory vaccination of a little boy, who had been sent to the workhouse under remand for a week.—Mr. Bennett, addressing Mr. Vassie, said the rules might or might not authorise what had been done, because the boy did not go to the workhouse in the light of a pauper, he being remanded by the magistrate, who had power, under the Summary Jurisdiction Act, to send him there. Therefore it appeared to him that, in the interests of the mother, the medical officer, who had been publicly accused, and the authorities of Kensington Workhouse, it would be advisable to grant a summons for an assault, in order that the question might be tested.—A summons was accordingly granted against the medical officer for an assault.

MEDICAL ETIQUETTE.

Sir,—I was called in to see a recently married lady, and found her suffering from morning sickness. I prescribed, and explained to her that she must not expect to be well under a month at least. I was again sent for, and afterwards called once or twice. On the last occasion, I was understood to consider her so well that further visits would be unnecessary. Within a week or so, an exacerbation of the sickness occurring, another medical man (Beta) was called in, without saying anything to either of us. When I heard of this, I accused the husband of a gross breach of etiquette. This he disclaimed, justifying himself on the grounds that I had ceased to attend. I may mention that no fees have passed, even up to date. Was he so justified, or am I entitled to an apology?—Yours faithfully,

Alpha.

*** "Alpha" having, on his last professional visit, been given to understand that his lady-patient was "considered so well that further visits would be unnecessary," his attendance, *de facto*, then ceased; consequently, the husband would, strictly speaking, on the recurrence of an attack, be ethically justified in calling in another practitioner, and the latter would be alike justified in taking charge of the case. At the same time, on "Beta" becoming aware of "Alpha's" previous attendance on the lady, it would have been well and courteous on his part to have suggested a consultation with the latter. Such is our opinion; and if "Alpha" be dissatisfied therewith, differing, as it does, *in toto* from his own, he may consult with advantage the *Code of Medical Ethics*, published by Messrs. J. and A. Churchill, wherein the principle on which our decision is based will be found clearly laid down.

Sir,—I wish to know how I am to act in the following case.

I am resident in what has been an unopposed district, but lately a man has come and set up here, and has advertised in all the local papers. He has also called upon a lot of my patients, and agreed to take them at so much a head, besides distributing testimonials. To-day he called upon me, and left his card, but, I am happy to say, I was out. Ought I to return his call, or meet him in consultation if he ever wished me to? I do not know him at present, nor do I wish to. An answer in the Journal will much oblige.—Yours truly,

A Member.

*** Under ordinary circumstances, the professional visit of courtesy paid to our correspondent by the new-comer would, we need scarcely remark, necessarily entail a return call; but, under the exceptional incidents related in his note of inquiry as to what should be his line of action in the matter, we should not, we confess, be ethically disposed to regard the omission otherwise than as a just protest against the unethical introductory proceedings of the offending practitioner. Nevertheless, as it would, in all probability, give rise to unjust and injurious criticism, and imputations of professional jealousy (regardless of the true cause of the omission), we would advise "A Member" to return the call; in doing which, however, we think that he may not unfairly avail himself of any intimation of the absence from home of the unethically inclined practitioner in question, and arrange his visit accordingly.

In reference to a consultation with such a member of the faculty, we would simply observe that it would not be in accord with professional rule, excepting in cases of urgent emergency, fraught with peril to life, in which latter event, the feelings and promptings of our common humanity should supersede—temporarily, at least—all other considerations.

AN ETHICAL QUESTION.

Sir,—A. and B. (father and son) are in partnership in a small country town. This partnership has existed several years, A. having been in practice there upwards of forty years. Several appointments are held by A. and B. B. is about to retire from the said partnership, and, before placing his share in the hands of an agent, for sale, offers the same to C., who is a young practitioner in the same town. C. calls upon B., and asks all the usual questions with regard to practice, saying incidentally, "I presume all the appointments you and your father have held will be transferred to your successor and your father." To this B. replies that he imagines such will be the case, as he does not know who else there would be to apply for said appointments.

In a few days' time, B. receives a letter from C., saying that he does not think he will be able to buy the share of the practice offered. B. then arranges with another medical man to take his share, but resigns none of the appointments in his name until the sale is settled. In the mean time, he finds that C. has been calling upon the directors of a Board under which A. and B. held an important appointment, asking them to support his candidature for the same appointment.

The question I would ask you kindly to answer, is this: Did C. act honourably in this matter, seeing that he had been offered the first chance of buying B.'s share, and seeing, also, that A. was still continuing in practice with B.'s successor? I may add that C. did not obtain the appointment he applied for, as the men belonging to the club sent up a memorial, asking that A. and B.'s successor should be appointed.—Yours faithfully,

M.D.

*** If the preceding statement be a strictly accurate representation of the whole of the facts in the case submitted for our opinion (and, from circumstances within our knowledge, we have no reason to discredit it), the conduct of C. in the matter cannot be regarded as consistent with ethical rule; in relation to which we may further observe that the letter of "M.D." fairly reflects our own opinion on the course of procedure pursued by C., with a view to obtain the coveted appointment, etc.

CORONERS AND MEDICAL EVIDENCE.

M.B. writes: Would some of your correspondents enlighten me on some points of interest to medical men as to the powers of coroners, what discretion they have in holding inquests, and in returning verdicts, without the aid of a medical man. To put my meaning best, I narrate two cases.

Case I.—Mrs. M., aged 81, did not appear as usual in the morning. Neighbours entered the house, and found her lying on the floor in her bedroom on her face, a box of matches in her left hand, and only her nightdress and stockings on. I was called; life was extinct; death was evidently the result of apoplexy. I was asked for a certificate by the son, but refused to supply him, and sent him to inform the police, adding, that it would be necessary to hold an inquest. Imagine how foolish I felt, and how the son chuckled, when he came and told me that the coroner had given him a certificate, and had not thought it necessary to hold an inquest.

Case II.—Mr. R. did not come to bed at his accustomed time. Mrs. R. came downstairs to see if he was indoors, and found him in the washhouse, suspended by the neck from the roof. She called in assistance, and I was sent for. When I arrived he had been cut down, and I set about doing what was necessary, but with no success. His feet were not more than twelve inches from the ground; but, from inquiries I made, and from my examination, I concluded he had been dead quite one hour. The police were informed. An inquest was held the following day, and I was not called.

Thus, in three months, here are two cases happening in my district; in one I say an inquest is necessary, and it is not held; in the other, everyone looks for my evidence, and wonders why I was not called. Even now I do not complain, but give these facts, and await the opinion of your readers and correspondents. The verdict in the second case was suicide by strangulation during temporary insanity, induced by intemperance. They seem to have got at the word "strangulation," I believe, because I gave it to the policeman as my opinion that he had been strangulated.

*** If our correspondent will refer to the Journal of May 8th, page 910, he will there find our often expressed opinion, as to the necessity of medical evidence at inquests.

In the first case mentioned by M.B., he states that the death "evidently arose from apoplexy," and, probably, this opinion was reported to the coroner; and there being no suspicious circumstances, and the deceased being 81 years of age, no inquest was held, the coroner acting, doubtless, upon the authority of Jervis, who directs, "that, although it is the duty of the coroner to institute inquiries into all sudden deaths, he shall not obtrude himself into families for the purpose of holding inquests when the death has occurred from apoplexy, fever, or other visitation of God, unless there be a reasonable ground of suspicion that the party came to his death by violent or unnatural means, or has died a sudden death, of which the cause is unknown." The only certificate of burial the coroner can issue, is one after the holding of an inquest. The "certificate" mentioned by M.B., was, no doubt, a communication from the coroner to the registrar of deaths, in which he declined to hold an inquest, and the death would then be registered as "uncertified."

In the second case referred to, M.B. again appears to have given his opinion as to the cause of death, namely, that it arose from strangulation; and, the circumstances attendant upon the death being consistent with this—the deceased having been found hanging by the neck—medical evidence was dispensed with. Though we cannot approve of this sort of second-hand evidence being taken as direct evidence, we would draw the attention of our correspondent to the fact that he appears to have very freely expressed his opinion as to the cause of death in both cases; and, for the future, we would suggest, that he should reserve the same, until such time as he is legally called upon to give it. It would then be of real value, and would be paid for accordingly.

MEDICAL COURTESY.

Surgeon-Major writes: I am here enjoying a short holiday, and, having no connection with the place, have not called on any of the practitioners, but am asked to lecture on temperance, and, perhaps, on personal hygiene. Shall I comply? or, in doing so, shall I be guilty of any breach of etiquette?

*** Under the circumstances above mentioned, there cannot, we take it, be the least objection to our correspondent complying with the request to deliver a "lecture on temperance and on personal hygiene"; and, further, in so doing, he will not, in our opinion, "be guilty of any breach of etiquette." At the same time, we think that it would be a judicious act to call upon two, or three, or more, of the senior practitioners in the town, and courteously communicate to them the nature of the request which has been made to him, and his willingness to accede thereto.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, May 17th, 1886.

Medical Acts Amendment Bill.—In reply to Dr. FARQUHARSON, Sir L. PLAYFAIR said he did not propose to do more that night than to get the Bill into Committee, and immediately report progress.—Mr. F. POWELL suggested that, as the right hon. gentleman had several important amendments to propose, it might be well to commit the Bill *pro formâ*, in order that it might be reprinted with the amendments.—Sir L. PLAYFAIR said he did not think the character of the amendments rendered that course necessary; they referred mostly to matters of detail.

Tuesday, May 18th, 1886.

Small-Pox and Infected Rags.—Mr. LAWSON asked the secretary to the Local Government Board, whether, in view of the recent severe outbreak of small-pox in the parish of Wooburn, Bucks, due to the rags used in paper-making at the Wooburn Mills, he would take steps to secure the disinfecting of all rags so used, to prevent the possibility of contagion.—Mr. BORLASE: The Board have learnt, with much regret, of the outbreak of small-pox at Wooburn. They have no authority under which they can secure the disinfection of rags used in paper-making, so as to prevent contagion. They have, however, with the view of assisting the local authorities, and those concerned in paper-making, collected and disseminated the fullest information respecting the circumstances of disease-production by means of rags, and the best means of disinfecting efficiently without injury to the rags. They have also enjoined the adoption of vaccination and re-vaccination of persons engaged in paper-making and the rag trade, as the most available means of saving individuals from the infection of small-pox.

Medical Acts Amendment Bill.—The following notices of motion have been given in reference to this Bill. Dr. FOSTER will propose to reduce the number of Crown nominees in the Medical Council from six to four, two to be nominated for England; to increase the number of representatives of the medical profession in England from two to four; and to provide that each registered practitioner shall have the corresponding number of votes. Dr. Foster also proposes the following addition with reference to the revision of the constitution of the General Council. In case of any reduction of the members of the Council, by virtue of a report of the Privy Council, an additional member shall be given as a direct representative of the profession in that division of the United Kingdom in which the reduction has been made for every member taken from the constituent body or bodies. Also, to insert the following clause: *Registration of foreign degrees held by registered medical practitioners.*—On and after the appointed day, it shall be lawful for any registered medical practitioner, who being on the *Medical Register* by virtue of English, Scotch, or Irish qualifications, and in possession of a foreign degree in medicine, to cause a description of such foreign medical degree to be added to his name as an additional title in the *Medical Register*, provided he shall satisfy the General Council that he obtained such degree after proper examination, and prior to the passing of this Act.—Dr. FARQUHARSON will propose that the Universities of Aberdeen and of St. Andrew's shall each have a separate representative, instead of one collectively.

OBITUARY.

HENRY JACKSON, M.R.C.S., Barnstaple.

MANY old students of the Middlesex Hospital will hear, with great regret, of the death of this energetic practitioner, who has been cut off in the prime of life. Born at Torrington, the son of a private schoolmaster, he spent three years as pupil with Dr. Harper, of Barnstaple, and then entered as a student at the Middlesex Hospital. He distinguished himself in several of his classes, and devoted himself assiduously to the practical study of his profession. He obtained his double qualification as soon as the regulations admitted him, and became resident obstetric officer at the hospital. He then returned to Barnstaple, in 1873, and joined Dr. Harper in partnership; and threw himself, with over-abounding zeal and energy, into the duties of his profession. He became Surgeon to the North Devon Dispensary, and subsequently was elected on the staff of the North Devon Infirmary; and, for both these useful institutions, he did good and faithful work. He became Medical Officer of Health for the Urban and Rural Sanitary Authority, and, in that capacity, drew up several admirable reports, tracing with care the outbreak and progress of many serious epidemics, and giving many judicious hints for the prevention of these fatal diseases. The Town Council, by a special vote after his decease, recorded their appreciation of the mingled zeal and tact with which he discharged duties that, at times, were far from pleasant. He was also one of the medical officers of the Union, and, in that capacity, was much trusted and beloved by the poor. He was most unselfish in his devotion to his duties, and he had his reward in their esteem and affection. He was surgeon to the Oddfellows, the Rechabites, and other benevolent societies; and these all manifested their genuine grief at his death by sending large deputations to follow his remains to the grave. Indeed, his funeral was a striking proof of the opportunities which our profession affords a genuine, kind-hearted man of winning the good-will and respect of large numbers of his fellows; for, though only thirty-five years of age, he was followed to his grave, amid evident signs of sorrow, by a very large number of persons representative of all classes of the community and of very nearly all the institutions of the town. His cheery presence, ready sympathy, and unvarying patience, were as grateful as his advice; and, that his heart was in his work, was patent from the energy, time, and thought he gave to it.

In 1882, Mr. Jackson married the daughter of Mr. James Bilney, of Barnstaple, whom he leaves a widow with three children, for whom a wide-spread sympathy is felt. His three brothers are in the profession, one of whom (Dr. Mark Jackson) will succeed him in his practice. The cause of death was rheumatic fever, complicated by pleurisy. The deceased was attended by Dr. Harper and Dr. Budd, and every medical man in the town was present at his funeral.

ROBERT SCOTT ORR, M.D., Glasgow.

WE regret to announce that Dr. Scott Orr, of Glasgow, died suddenly on May 15th, whilst sitting in his house, reading. Dr. Scott Orr, who was 67 years of age, graduated M.D. of Edinburgh in 1840, and shortly afterwards went to Glasgow to assist Dr. Hutchieson, at the Royal Lunatic Asylum, Gartnavel. Later, he became superintendent of the Glasgow Royal Infirmary, which he left to engage in practice at Dunoon. After some years, he returned to Glasgow, and became one of its leading physicians. Only last year he resigned his position as visiting physician to the Royal Infirmary, a position he had occupied for a long term of years. A few years ago, he was elected President of the Faculty of Physicians and Surgeons, and for ten years he has represented that Corporation at the General Medical Council. He was also an Examiner in Medicine to the University of Glasgow. In the earlier part of his career, he was a contributor to the Glasgow and Edinburgh medical journals. A shrewd business man, thoughtful, kindly, and dignified in all his conduct of life, he will be much missed by a wide circle of friends.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, May 10th, 11th, 12th, and 13th, 1886, the undermentioned candidates were successful.

For the Licences to Practise Medicine and Midwifery. R. H. Abbott, M.D., Queen's University, Kingston, Canada; G. S. Lestrange, Banagher, King's County; J. W. Lonsdale, Manchester; B. C. Manly, Dublin; P. J. Sheridan, Duncormack, County Wexford; W. E. Waters, Carbury, County Kildare.

For the Licence to Practise Medicine only. A. Badcock, Bramley, Leeds; L. Birch, Manchester; D. McCann, Dublin; F. W. McCaulley, Rathmines, Dublin; E. F. S. McKay, Dublin; W. J. Reed, Smethwick, Birmingham; J. J. Savage, Clonmel, County Tipperary.

For the Licence to Practise Midwifery only. J. H. Griffin, Merrion, County Dublin; J. J. O'Brien, M.D., R.U.I., Upper Riverstown, County Cork.

The following candidate, having been duly examined, was granted the licence to practise as a midwife and nursetender.

M. H. Baxter.

The undermentioned licentiate in medicine of the College, having complied with the by-laws relating to membership pursuant to the provisions of the supplemental charter of December 12th, 1878, has been duly enrolled a member of the College.

M. J. Jordan, Castlebar, County Mayo.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine,

Surgery, and Midwifery, and received certificates to practise, on Thursday, May 13th, 1886.

Alexandrian, Nazareth, Scutari, Constantinople.
Atkinson, John Lancelot, 1, St. George's Square, S.W.
Barnes, Robert Newton, Ash House, Bishop's Waltham, Hants.
Bell, John Charles, Merlin, Ontario, Canada.
Englebach, Frederick George, Richmond, Surrey.
Jones, Josiah Herbert, Hoe Street, Walthamstow.

MEDICAL VACANCIES.

The following vacancies are announced.

AYSGARTH UNION.—Medical Officer. Salary, £40 per annum. Applications by May 22nd to W. E. M. Wynn, Askrigg, *via* Bedale.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £100 per annum. Applications to Mr. J. Ostell, 14, Bank Street, Carlisle.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Three Chemical Assistants. Applications to Secretary.

CHESTER GENERAL INFIRMARY.—Visiting Surgeon. Salary, £80 per annum. Applications by May 22nd to the Chairman of the Board.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Medical Officer. Salary, £100 per annum. Applications by June 8th.

CLIFDEN UNION.—Medical Officer, Roundstone Dispensary. Salary, £120 per annum and fees. Applications to Mr. J. J. O'Loughlin, Assistant Honorary Secretary. Election on May 28th.

EAST RIDING ASYLUM, Beverley.—Assistant Medical Officer. Salary, £100 per annum. Applications to Medical Superintendent by July 1st.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Two Clinical Assistants. Applications to Secretary.

HARTLEPOOL FRIENDLY SOCIETY'S ASSOCIATION.—Dispenser. Applications to T. Tweddell, Reed Street, West Hartlepool.

HUDDERSFIELD INFIRMARY.—Junior Resident Medical Officer. Salary, £40 per annum. Applications by June 5th to F. Eastwood, Infirmary, Huddersfield.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square.—Honorary Physician. Applications by May 26th.

LEEDS UNION.—Medical Officer. Salary, £120 per annum. Applications by May 24th to John King.

LEICESTER INFIRMARY AND FEVER HOUSE.—Honorary Full Physician. Applications by May 24th to the Secretary. 24, Friar Lane, Leicester.

LEICESTER INFIRMARY AND FEVER HOUSE.—Two Honorary Assistant Physicians. Applications by May 31st to the Secretary, 24, Friar Lane, Leicester.

LEICESTER INFIRMARY AND FEVER HOUSE.—Two Honorary Assistant Surgeons. Applications by May 31st to the Secretary, 24, Friar Lane, Leicester.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, E.—Surgeon. Applications by May 29th.

PARISH OF LOCHBROOM, Ross-shire.—Medical Officer. Salary, £80 per annum. Applications by June 2nd to John Munro, Inspector of Poor.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone Road, N.W.—Two Physicians to the Out-Patients. Applications by May 31st.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—Assistant-Surgeon. Applications by June 1st.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, Strand, W.C.—House Surgeon. Applications by June 2nd.

ST. GEORGE'S, HANOVER SQUARE, DISPENSARY.—Surgeon. Applications by June 1st to the Secretary.

WESTON-SUPER-MARE HOSPITAL AND PROVIDENT DISPENSARY.—Second Medical Officer. Salary, £50. Applications by May 24th to the Honorary Secretary.

MEDICAL APPOINTMENTS.

BAILEY, T. Ridley, M.B.Edin., re-appointed Medical Officer of Health, Bilston.

BARLING, Gilbert, B.S., F.R.C.S., appointed Assistant-Surgeon to the General Hospital, Birmingham, *vice* W. G. Archer, F.R.C.S., resigned.

BLACKWOOD, Arthur, M.D., M.Ch., appointed Assistant Medical Officer to the Liverpool Parish Infirmary, *vice* W. Piercy Fox, resigned.

BOND, C. K., M.R.C.S., L.R.C.P., appointed Medical Officer to the North London Hospital for Consumption, Hampstead, N.W., *vice* G. A. Shackel, M.R.C.S., L.R.C.P., resigned.

EVANS, Williams, M.R.C.S.Lond., L.K.Q.C.P.I., appointed House-Surgeon to the Royal Infirmary, Liverpool, *vice* S. Hughes, M.B., M.R.C.S.

FRASER, James Thomson, M.B., C.M., appointed Honorary Physician to the Hulme Dispensary, *vice* G. J. Haslam, M.D., M.R.C.S., resigned.

GEMMELL, John E., M.B., C.M.Edin., late House-Physician to the Royal Infirmary, Liverpool, appointed House-Surgeon, *vice* A. W. Collins, M.R.C.S., L.R.C.P.Lond.

HINDS, Frank, M.B., B.S., M.R.C.S., appointed Junior Resident Medical Officer to the Hospital for Sick Children, Great Ormond Street, *vice* E. J. Lewis, resigned.

LAKE, Richard, M.R.C.S., L.R.C.P., appointed House-Surgeon to the West London Hospital, *vice* C. H. Taylor, M.R.C.S., L.R.C.P., L.S.A., resigned.

LEWIS, E. J., appointed House-Physician to the Hospital for Sick Children, Great Ormond Street, *vice* John Thomson, M.B., resigned.

LISTER, Charles E., L.K.Q.C.P.I., House-Surgeon to the Royal Infirmary, Liverpool, *vice* A. E. Weightman, L.R.C.S., L.R.C.P.Edin.

LUCAS, S. A., L.R.C.P. and S.Ed., appointed Honorary District Medical Officer for No. 1 District of the Liverpool Ladies' Charity and Lying-in Hospital.

MOIR, John, L.R.C.P.Ed., re-appointed Medical Officer to the West Ham Local Board Cottage Hospital, Plaistow.

MORGAN, A. L., M.R.C.S., appointed House-Surgeon to the Kidderminster Infirmary, *vice* F. S. Barber, resigned.

OSWALD, Robert J. W., M.R.C.S.Eng., L.R.C.P.&S.Ed., appointed Medical Officer to the 7th District of the Lambeth Parish, *vice* Lionel Druitt, M.D., resigned.

PARRY-JONES, M., M.D., B.S., M.R.C.S., appointed Resident Surgeon to Pinxton Collieries, *vice* E. Penny, M.D., resigned.

PEDLEY, R. D., M.R.C.S., L.D.S., appointed Dental Surgeon to the Evelina Hospital for Children, *vice* Newland Pedley, M.R.C.S., L.D.S., resigned.

PRICE, J. A. P., M.B., B.A., M.R.C.S., appointed Assistant-Surgeon to the Royal Berks Hospital, *vice* F. W. Sutton, M.R.C.S., resigned.

RAKE, Herbert Vaughan, M.R.C.S.Eng. and L.S.A., appointed Medical Officer of Health for the Fordingbridge Union.

RICHARDSON, J. B., M.R.C.S.E., L.S.A., appointed Medical Officer and Public Vaccinator to the Castle Betham District, Bourn Union.

SPONG, C. S., B.Sc., M.R.C.S., appointed House Surgeon to the Seamen's Hospital, Greenwich, *vice* A. R. Hall, L.R.C.P., M.R.C.S., resigned.

TAYLOR, C. H., M.R.C.S., L.R.C.P., L.S.A., appointed House-Physician to the West London Hospital, *vice* A. Harper, M.B., M.R.C.S., resigned.

THOMAS, W. Thelwall, M.R.C.S.Lond., L.R.C.P.Edin., appointed House-Physician to the Royal Infirmary, Liverpool, *vice* John E. Gemmell, M.B., C.M.Edin.

UNDERWOOD, A. T., M.R.C.S., L.D.S.Eng., appointed Dental Surgeon to the Dental Hospital of London, *vice* Henry Moon, M.R.C.S., L.D.S.Eng., resigned.

WATSON, Thos. A., M.B., appointed Resident Medical Officer to the Rochdale Infirmary, *vice* S. H. A. Stephenson, M.B., resigned.

WILSON, Samuel, M.D., M.Ch., R.U.I., appointed House-Surgeon to the Monkwearmouth and Southwick Dispensary and Accident Home, *vice* V. E. R. Ardagh, L.R.C.S., L.R.C.P.Edin., resigned.

WILLIAMS, R. R., M.R.C.S., L.R.C.P., L.S.A., appointed Resident Assistant Medical Officer to the Parish of St. Leonard, Shoreditch, *vice* John Bostock, M.R.C.S., L.S.A., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

DEATHS.

OWEN.—On May 7th, at 60, Belvedere Road, Upper Norwood, Harvey Kimpton Owen, M.D., F.R.C.S., L.S.A.Lond., in his 71st year.

WILLETT.—On May 11th, 1886, at Ashley House, Ashley Road, Brixton, Matthew Willett, M.D., M.R.C.S.Eng., aged 72.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary meeting of the College was held on Thursday, May 20th ; Sir W. JENNER in the chair.

The gentlemen who were elected to the Fellowship at the last Comitia, and whose names have been already published in the BRITISH MEDICAL JOURNAL, were formally admitted.

A report was received from the Medical Bill Committee, upon which a discussion arose as to the desirability of the admission to the *Medical Register* of certificates in Sanitary Science, granted by Universities or Medical Corporations. This view was strongly advocated by Sir ANDREW CLARK and other speakers, and a hostile amendment was defeated by a large majority.

The Building Committee appointed by this College, along with the College of Surgeons, presented an *ad interim* Report, which referred to the successful ceremonia. at the laying of the foundation-stone of the new Examination Hall, and stated that the works are progressing rapidly, and will probably be completed before the 24th of March of next year. The Committee added that, in their opinion, it was desirable that the Colleges should consider what use ought to be made of the plot of ground adjoining the new Hall.

The report was received ; and, after some discussion with reference to the last clause, it was resolved to name a Committee to confer with a Committee from the College of Surgeons to consider this question.

The subject of the Croonian Trust was again discussed, and several amendments were brought forward, but, finally, the matter was again postponed.

SCIENTIFIC JOURNALS IN JAPAN.—A paragraph in *Nature* states that there are thirty-seven periodicals published in Japan, devoted to matters connected with education ; of this number, seven are medical papers, with a monthly circulation of 13,514. There are nine papers relating to sanitary matters, and two to pharmacy. There are also nine other papers, devoted to other branches of science ; and no fewer than twenty-nine papers, with a circulation of over 70,000, engaged in disseminating a knowledge of popular science.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.—The closing meeting of this Society for the present session was held on Tuesday, May 11th. Professor George Buchanan presided. Dr. Thomas Reid showed two cases of glioma of the retina, in which the choroid became early involved, and where the disease, after remaining for some time quiescent, suddenly burst through the tissue of the eyeball, and invaded the orbit. He described the pathological appearances, and showed some of the gliomatous tissue under the microscope. Dr. Newman showed a patient whose larynx he had excised, in February last, for malignant disease. The case has been fully reported in this JOURNAL, in the issues of May 1st and 8th of the present year, pp. 814 and 868. Dr. Newman insisted on the necessity for speedy removal of malignant disease, when limited to the inner parts of the larynx, and in such cases, for diagnostic purposes, attached the utmost importance to removal of a portion of the tumour, for examination, by the endo-laryngeal method. The patient could articulate distinctly and well with the aid of a reed fitted into the laryngeal tube in the ordinary way. Dr. Joseph Coats followed with an account of observations made on Dr. Newman's patient, with a view to determine the seat of origin of the vesicular murmur in respiration. Different conditions of the external opening of the trachea were produced, and the changes in auscultation observed. The results went to show that the seat of the vesicular murmur was in the pulmonary parenchyma. Dr. Knox showed an epithelioma of the hand, which he had successfully removed from a man, aged 55. The ulceration had its origin in the cicatrix of an extensive burn, which had occurred when the patient was a child. The disease appeared twelve months ago, spreading with great rapidity, and causing gangrene of all the fingers. The patient had been burnt on the face also, and epithelioma had appeared on the left temple, but was stationary. Sections of the ulcerated surface were shown under the microscope. Towards the close of the meeting, the following office-bearers were chosen for the session 1886-87. *President:* Dr. James Finlayson. *Vice-President:* Mr. Henry E. Clark. *Treasurer:* Dr. J. B. Russell. *Secretary:* Dr. David Newman. *Other Members of Council:* Dr. George Buchanan, Dr. Donald Macphail, Dr. Donald Fraser, and Dr. Eben. Duncan.

ST. JOHN AMBULANCE ASSOCIATION.—An ambulance-class, composed of officers and non-commissioned officers of the 45th Regimental District Head-quarters, was examined at Derby, on May 6th, by Dr. J.W. Martin, who reports in the highest terms of the manner in which all the pupils passed the examination. The Examiner lays great stress on the importance of this subject to all branches of the service, and strongly urges the formation of similar classes elsewhere. Amongst the successful candidates were Colonel J. North Crealock, C.B.; Captain N. J. Reech ; Lieutenant Henry James Bowman ; and thirteen non-commissioned officers.

THE GERMAN UNIVERSITIES.—The following were the number of students, during the past winter session, in the medical faculties of the Universities of the German Empire, and of those Universities where instruction is given in the German language: Berlin, 1,305 ; Bonn, 267 ; Breslau, 375 ; Erlangen, 247 ; Freiburg, 389 ; Giessen, 145 ; Göttingen, 206 ; Greifswald, 399 ; Halle, 280 ; Heidelberg, 205; Jena, 193 ; Kiel, 127 ; Königsberg, 241 ; Leipsic, 742 ; Marburg, 268 ; Munich, 1,225 ; Rostock, 106 ; Strasburg, 210 ; Tübingen, 197 ; Würzburg, 827 ; Vienna, 2,673 ; Gratz, 490 ; Innsbruck, 202; Basle, 121 ; Berne, 198 ; Zürich, 207 ; Dorpat, 840.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8 P.M. Mr. Lockwood: The Morbid Anatomy and Pathology of Encysted and Infantile Hernia. Dr. Fletcher Beach : A Case of Imbecility, with Choreoid Movements. Dr. Steavenson and Mr. Bruce Clarke: The Treatment of Stricture of the Urethra by Electrolysis.

WEDNESDAY.—British Gynæcological Society, 8.30 P.M. Specimens will be shown by Mr. Lawson Tait and others. Dr. Fancourt Barnes on a Case of Pyometra. Dr. Grigg on Pyosalpinx in the Puerpera. Council meeting at 8 P.M.

FRIDAY.—Clinical Society, 8.30 P.M.—Report of Urinary Tests Committee. Dr. Caton (Liverpool): Aneurysm of Hepatic Artery. Mr. R. W. Parker: On the Treatment of Nævus by Excision ; to which is appended a clinical analysis of 564 cases of nævus, together with the microscopic nature of this condition. Mr. Victor Horsley : A Case of Suppuration of the Mastoid Cells, complicated by Thrombosis of the Right Lateral Sinus, and Septic Embolism of the Heart and Left Lung, in which Recovery followed Trephining of the Mastoid Process ; with remarks on the Prevention of Septic Embolism in such cases. Dr. Hale White : On Simultaneous Inflammation of several Serous Membranes. Society of Medical Officers of Health, 7. 30 P.M. The minutes of the preceding meeting will be read. William Eassie, C.E., F.L.S., F.G.S. The Waters derived from the Bagshot Beds considered as Drinking-Supplies.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M. : Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free ; St. Mark's ; Central London Ophthalmic ; Royal Orthopædic ; and Hospital for Women.—2.30 P.M. : Chelsea Hospital for Women.

TUESDAY .....9 A.M. : St. Mary's (Ophthalmic Department).—10.30 A.M. : Royal London Ophthalmic.—1.30 P.M. : Guy's ; St. Bartholomew's (Ophthalmic Department) ; Royal Westminster Ophthalmic.—2 P.M. : Westminster ; St. Mark's; Central London Ophthalmic.—2.30 P.M. : West London ; Cancer Hospital, Brompton.—4 P.M. : St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M. : National Orthopædic.—10.30 A.M. : Royal London Ophthalmic.—1 P.M. : Middlesex.—1.30 P.M. : St. Bartholomew's ; St. Mary's ; St. Thomas's ; Royal Westminster Ophthalmic.—2 P.M. : London ; University College ; Westminster ; Great Northern Central ; Central London Ophthalmic.—2.30 P.M. : Samaritan Free Hospital for Women and Children ; St. Peter's.—3 to 4 P.M. : King's College.

THURSDAY ....10.30 A.M. : Royal London Ophthalmic.—1 P.M. : St. George's —1.30 P.M. : St. Bartholomew's (Ophthalmic Department) ; Guy's (Ophthalmic Department) ; Royal Westminster Ophthalmic.—2 P.M. : Charing Cross ; London ; Central London Ophthalmic ; Hospital for Diseases of the Throat ; Hospital for Women.—2.30 P.M. : North-west London ; Chelsea Hospital for Women.

FRIDAY .....9 A.M. : St. Mary's (Ophthalmic Department).—10.30 A.M. : Royal London Ophthalmic.—1.15 P.M. : St George's (Ophthalmic Department).—1.30 P.M. : Guy's ; Royal Westminster Ophthalmic.—2 P.M. : King's College ; St. Thomas's (Ophthalmic Department) ; Central London Ophthalmic ; Royal South London Ophthalmic ; East London Hospital for Children.—2.30 P.M. : West London.

SATURDAY ....9 A.M. : Royal Free.—10.30 A.M. : Royal London Ophthalmic.—1 P.M. : King's College.—1.30 P.M. : St. Bartholomew's ; St. Thomas's ; Royal Westminster Ophthalmic.—2 P.M. : Charing Cross ; London ; Middlesex ; Royal Free ; Central London Ophthalmic.—2.30 P.M. : Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1 ; Obstetric, Tu. F., 1.30 ; Skin, M. Th., 1.30 ; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30 ; Obstetric, M. Tu. F., 1.30 ; Eye, M. Tu. Th. F., 1.30 ; Ear, Tu. F., 12.30 ; Skin, Tu., 12.30 ; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2 ; Surgical, daily, 1.30 ; Obstetric, Tu. Th. S., 2 ; o.p., M. W. F., 12.30 ; Eye, M. Th., 1 ; Ophthalmic Department, W., 1 ; Ear, Th., 2 ; Skin, Th. ; Throat, Th., 3 ; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2 ; Surgical, daily, 1.30 and 2 ; Obstetric, M. Th., 1.30 ; o.p. W. S., 1.30 ; Eye, W. S., 9 ; Ear, S., 9.30 ; Skin, Th., 9 ; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1 ; Obstetric, Tu. F., 1.30 ; o.p., W. S., 1.30 ; Eye, W. S., 8.30 ; Ear and Throat, Tu., 9 ; Skin, F., 4 ; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30 ; Obstetric, Tu. Th. S., 2 ; o.p., W. S., 9 ; Eye, Tu. Th. S., 2.30 ; Ear, Tu. F., 2 ; Skin, F., 1.30 ; Larynx, F., 2.30 ; Orthopædic, M., 2.30 ; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1 ; Obstetric, Tu. S., 1 ; o.p., Th., 2 ; Eye, W. S., 2 ; Ear, Tu., 2 ; Skin, W., 2 ; Throat, Th., 2 : Orthopædic, W., 2 ; Dental, Tu. S., 9 ; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45 ; Obstetric, Tu. F., 9.30 ; o.p., M. Th., 9.30 : Eye, Tu. F., 9.30 ; Ear, W. S., 9.30 ; Throat, M. Th., 9.30 ; Skin, Tu. F., 9.30 ; Electrician, Tu. F., 9.30 ; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2 ; Obstetric, M. Th., 2 ; o.p., W., 1.30 ; Eye, M. Th., 2 ; o.p., daily, except Sat., 1.30 ; Ear, M., 12.30 ; Skin, W., 12.30 ; Throat, Tu. F., 1.30 ; Children, S., 12.30 ; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2 ; Obstetrics, M. Tu. Th., F., 1.30 ; Eye, M. Tu. Th. F., 2 ; Ear, S., 1.30 ; Skin, W., 1.45 ; S., 9.15 ; Throat, Th., 2.30 ; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30 ; Obstetric, Tu. F., 3 . Eye, M. Th., 2.30 ; Ear, Tu. F., 9 ; Skin, Th., 1 ; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London ; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED

QUERIES.

A Question for Diagnosis and Treatment.

"M.B." asks for an opinion on the nature and treatment of the following case. A young lady, aged 17, slight and tall, not apparently anæmic, was always fairly healthy until last November, except for headache. Last November she caught cold, and in a day or so had low typhoid symptoms with diarrhœa, but no fever. She recovered in a few days. About Christmas, she began to complain much of her head. The pain was violent and paroxysmal, but never entirely absent; it extended all over the head. She had photophobia, intolerance of noise, prostration, and impairment of memory; but there was no delirium, and the temperature never exceeded 99° Fahr. She got a fair amonnt of sleep; and when asleep, the thumbs were generally turned into the palms, and often she had strong twitchings and jerkings of the hands. The latter also occurred when she was awake; but, for the most part, she lay silent and apathetic, except when the pain was so violent that she would jump up, or strike her head with her hand, all the time being conscious. Firm pressure afforded some relief. There was a distinct connection between the pain and a dry harsh ringing cough, which "shook" her head much, but otherwise caused little annoyance. The bowels were sometimes costive, sometimes the reverse. The pupils were variable and contractile; the kidneys acted freely, the urine being natural in colour and quantity, and free from albumen. There was nothing abnormal in the lungs, except a little want of vigour in the respiratory movements, which was common to both sides. The menses had never appeared up to this; but about the eighth or ninth week of her illness, and when the violence of her symptoms had somewhat subsided, they occurred, lasted for six days, and recurred in a fortnight. Bromide of potassium is correcting this irregularity. The headache, which began to decline some weeks before the appearance of the catamenia, and gradually assumed a neuralgic character, involving the ophthalmic and superior maxillary divisions of the fifth nerve, finally almost disappeared.

A fortnight ago, she had a return of the pain, but less violently. She has now had a fresh relapse, and is suffering much from the head and the cough. The temperature is again 99°, the tongue flabby, with yellowish fur, pulse 120.

During the commencement of her illness, she was treated on ordinary principles for the typhoid symptoms, and recovered speedily from them. When the headache became intractable, tubercular meningitis was feared; nourishing food and expectant treatment were ordered. She appeared to improve for a few days, and then, as she again became worse, both mastoids were blistered, and bromides given with good effect for a time. The cough was relieved by doses of acetate of morphine and dilute hydrocyanic acid every three hours. Improvement was but temporary, and it being considered that her illness was anæmia, iron, cold douches to the head, and inhalations of nitrite of amyl were ordered. The iron only caused dyspepsia and *malaise*; the douches relieved for a few minutes each time, but the pain returned with the reaction of the circulation; drachm doses of bromidia had some effect in composing her and easing the pain. The attacks gradually diminished in violence; and when the pain became neuralgic, as above-mentioned, it was readily controlled by three-grain doses of croton-chloral every two hours, as required. She had no vomiting during her illness, except twice, when she was given opium, though morphine never disagreed with her. She had a good deal of clammy perspiration of the hands and head, which ceased after a few doses of extract of belladonna.

In her present attack, the pain is constant, not paroxysmal, though not so violent as at first. She has lately taken nitro-glycerine ($\frac{1}{100}$ of a minim), every three hours, without effect, saving that the first dose rather increased the pain; and she is now taking iodide and bicarbonate of potassium. At first, these latter gave some relief, but now, in common with all other remedies, they have lost their effect.

Cottage Hospitals.

Mr. Thomas Taylor (Bocking, Braintree) is anxious to obtain the rules of "cottage hospitals," and will feel much obliged by anyone sending them to him.

Hypodermic Needles.

R. W. C. asks if there are any ready means by which hypodermic needles may be rendered patent, that have become occluded by deposits from morphine or other solutions.

Flatulence in an Emphysematous Subject.

G. W. S. writes: A patient of mine, aged 69, with long standing emphysema and dilatation of the heart, is greatly distressed with flatulence. Night after night he is compelled to sit up in bed until he breaks wind. Can any of your readers suggest a remedy? The flatulence troubles him during the day, but is most distressing when he lies down at night.

Tubal Pregnancy (?).

Mr. J. A. Tapson (Clapham) writes: I should be glad to have the opinions of your readers, or those who have had special experience, on the following case.

I was consulted by a patient, aged 38, the mother of two children, the youngest five years old. She complained of swelling on the right side, and accompanied by severe paroxysmal pain; she had missed three or four menstrual periods. On examination, I found a well defined swelling, about the size of an orange. A specialist, whose opinion I sought and who examined the case a fortnight after, diagnosed ovarian tumour or tubal pregnancy. Eventually the case was operated on, but no tumour found. Within a week, the patient aborted a four months' fœtus. Is it possible, in a case of tubal pregnancy, that the fœtus should pass from the Fallopian tube into the uterine cavity?

A Foreign "M.D." Degree.

Associate asks how a respectable American or other foreign "M.D." degree can be obtained *in absentiâ* by fully qualified and registered medical practitioners, of many years' professional standing, and in good social position.

*** We hope and believe that there is no "respectable foreign M.D." obtainable *in absentiâ*. If it were so obtainable, it would cease to be respectable.

Diet for a Gouty Subject.

Spes asks for a suggestion as to the most wholesome diet for a professional brother who is a martyr to gout and has, unfortunately, a ravenous appetite, with a tendency to corpulency. He has tried "Banting" with an increase of the gout, and a vegetarian diet with an increase of the other evil.

ANSWERS.

Endemic Anæmia in Queensland.

Brigade-Surgeon E. Nicholson, writing in answer to Mr. Cutfield's inquiries in the Journal of May 8th, suggests that the disease affecting the orphanage is beri-beri. Every symptom he relates corresponds to that disease, except, perhaps, the diarrhœa, but that may be super-added from the youth of the sufferers. It is probable that the dietary and moral atmosphere of the orphanage is at fault. Beri-beri appears to be a disease of low feeding and mental depression in hot malarial climates, principally affecting immigrants, coolies, and other classes living in bad hygienic conditions. Mr. Nicholson's only question is that, if the disease be beri-beri, how has it not been recognised by your correspondent among the coolie population of Queensland? There is plenty of plantation labour there under depressing conditions.

M. B.—We see no objection.

NOTES, LETTERS, ETC.

Ergotin for Hypodermic Use.

Mr. F. J. Bailey (Liverpool) writes: If M. N. G. will refer to the British Medical Journal, vol. ii for 1880, p. 368, he will find several of his queries answered by myself and others. Since then, instead of Tanner's solution, I use "hypodermic solution of ergotine," prepared by Symes and Co., of Liverpool (strength, 1 in 4); and I believe it to be the best. It does not spoil with time. From 10 to 20 minims may be used; it does not require dilution; it causes no local irritation if injected into the muscles of the gluteal region, and may be used there for any form of hæmorrhage once or twice a day.

A few years ago, I had 20 minims injected into the buttock myself, to stop severe epistaxis. It was used a second time in about twelve hours. The only inconvenience was, after the second injection, cramp in the gluteal muscles, which soon passed off, and a feeling of soreness for a few days when sitting down, but not severe. I have noticed this sometimes in others. Once, after using it for hæmoptysis, in a few minutes my patient changed from a blanched condition to intense redness about the face and neck, with dilated veins, and complained of difficult breathing. This soon passed off. Sclerotic acid I have never used.

The Voice a Stringed Instrument.

Mr. Lennox Browne writes: Referring to Mr. Charles Lunn's note, allow me to say that not a single word quoted by him as statements of mine are to be found in my recent memoranda under the above heading. The question of vocal emission, or voice-training, has not been touched, and is not in the least degree germane to the subject.

Mr. E. J. Carver (Fulham) writes: It is to be feared that Dr. Meeres is falling into the same error as Mr. Stoker, that of forming a physiological inference on a pathological basis. No authority with which I am acquainted denies that the larynx "is but a part of a musical instrument," and his interesting case well illustrates the value of the supraclottic resonating structures in the formation of the co-vibrations necessary for sonorous voice, but it does not alter the fact that the vocal cords themselves are essential to the primary production of sound. This is seen in every tracheotomy case, when, unless the tracheal opening is closed, the patient, on attempting to speak, utters no sound, the air escaping through the tube; but the moment this is closed, the vocal cords vibrate, and the tone so produced being reinforced in the resonator can be shaped into sonorous and articulate speech.

Dr. C. R. Illingworth (Clayton-le-Moors) writes: I have read with considerable interest the articles which have lately appeared upon the above subject, because, for the last ten years, I have written a great deal about it.

I have three objections to Mr. Stoker's view. The first is the small size of the cords compared with any known stringed instrument. The second is the impossibility of producing a falsetto note from them, or from imitations of them. This was Müller's great failure; it was Wyllie's likewise. The third is the much greater resemblance of the organ of voice to another instrument, the trumpet. There are other objections, but these are sufficient at present.

I reviewed and refuted the modern views of vocal mechanism in 1879, and I am ready to do so again. The great difficulty appears to be the procuring of an opponent at home. Mr. Gordon Holmes contents himself with the *ex cathedrâ* statement that my views "are retrograde rather than progressive" (*Medical Press and Circular*, 1885). Other authorities, so far as I am aware, maintain silence.

My view of the vocal organ is, that it is a trumpet, with the lips of the player attached to the mouthpiece, and thus ready for vibration in the act of vocalisation; this is the chest voice. The falsetto, I argue, is produced by allowing the air to pass between the lax lips of the glottis, true cords, and to set in vibration the air in the cavity formed by the ventricles of Morgagni and the space between them, and bounded above by the false, and below by the true vocal cords. The false cords in this comparison form a prolongation when approximated in vocalisation, from the tube of the trumpet—the mouth and pharynx—into the mouthpiece formed by the ventricles of Morgagni and the space between them.

I shall be most happy to send anyone a pamphlet with my theory fully explained, and with my arguments against the usual theory of voice arranged in order.

Mr. George Stoker writes on the subject as follows. I regret I have misunderstood Mr. Browne's remarks. I made what I considered to be the only possible interpretation of them. It was not convenient to answer, in one memorandum, the various remarks and criticisms which my original note called forth; I will endeavour to do so now, and congratulate their authors on having, in Mr. Lennox Browne, such an able guardian of their interests. In his last memorandum, Mr. Lennox Browne almost entirely confines himself to quoting the names of a number of celebrated persons, from whom I have the misfortune to differ. This course seems to me to be more in consonance with compiling a biographical dictionary, than conducting a scientific discussion. Mr. Casson says: "With a double stringed instrument (as would be the case under Dr. Stoker's theory), it is impossible to sound two notes simultaneously." Most respectfully I beg to deny ever having made such a statement; nor did it ever occur to me that by the voice, or on a string, two notes can be sounded simultaneously. It is impossible. I did say that two strings tuned together, and simultaneously thrown into vibration, produced more sound than one string acting alone.

LIBRARY OF THE UNIVERSITY OF

Mr. Casson does not accept my statement about "portamento" notes. All I can say is that it is so stated in musical dictionaries, and that I am supported by such an eminent authority as Mr. Lennox Browne. I have advanced no theories on the subject of whistling.

Dr. Grant begins by saying that he will give reasons why he considers the statement, "the voice is a stringed instrument," made in the JOURNAL of April 3rd, to be incorrect. Truly, this concerns me not; I have never made such a statement. On this point Dr. Grant has fallen into the same error as did Mr. Casson and Mr. Lennox Browne.

Dr. Grant goes on to institute a comparison between the dead and the living larynx. To anyone who is unaccustomed to look at the living larynx, and sees it only *post mortem*, this would be intelligible, but how is it so with Dr. Grant, who is constantly looking at the vocal cords in motion? To one who never saw the eye in life, it would be impossible to convey even a remote idea of its varying expressions, if seen only when all is dull, and cold, and glazed by death. I am quite in accord with Dr. Grant, when he says that no instrument of man's devising approaches the voice with which nature has gifted us.

Dr. Meeres's case is most interesting, but I cannot agree with him in the conclusions he draws therefrom. The wound which divided the thyroid cartilage must have greatly interfered with the action of the crico-thyroid muscle, and thus prevented proper tension of the cords; or perhaps complete paralysis of the muscle ensued, if the external laryngeal nerve were divided; in addition to this, all the anatomical relations of the parts must have been disturbed.

The gentlemen from whom I differ, all seem to favour the "reed pipe" theory, which seems to me to be, for one good and sufficient reason, untenable. Sound in a reed pipe arises from two vibrating lips placed closely together; these lips are, in the opinion of these gentlemen, represented by the vocal cords; now, if one of these lips be absent, or useless (that is, cannot be placed close to the other), sound cannot be produced. In paralysis of one cord, voice, and, I contend, musical sounds (at all events, in a modified form) can be produced; could this be possible, if the vocal cords were the lips of a reed pipe?

*** This correspondence must now cease.—ED.

THE MEDICAL ACT AMENDMENT BILL.

A MEDICAL MAN, with British diplomas, writes: In reference to the Medical Act Amendment Bill, introduced by Mr. Morgan Howard and Sir Trevor Lawrence, I think that it is a great mistake, in face of the increased number of medical men who are yearly admitted on the *Register*, to propose that foreign diplomas shall be registered; it seems to me suicidal and unnecessary, especially considering how easily these foreign diplomas are obtained. I think that, in the background, there must be some motive for legalising these diplomas; it certainly cannot be for the good of the profession.

FOREIGN GRADUATES ASSOCIATION OF GREAT BRITAIN.—Gentlemen wishing to join the Association are requested to send their names, addresses, and qualifications to the Honorary Secretary, J. Johnson Bailey, M.D., Marple, Cheshire.

ERGOTINE FOR HYPODERMIC USE.

DR. W. MACFIE CAMPBELL (Liverpool) writes: In reply to "M. N. G," he will find himself well satisfied by using either the *British Pharmacopœia* solution, which is about 1 in 3, or Messrs. Clay and Abraham's (Liverpool) solution, 1 in 4. With all respect to Dr. Robertson, of Ventnor, no chloral is required if properly made, the keeping power being then perfect. I am at present using a solution made a year ago. I use it in hæmoptysis, hæmatemesis, epistaxis, and almost invariably after delivery. Two cautions are necessary; 1, in labour, not to inject till after the birth of the placenta, as the action is so immediate as to delay that stage; 2, to inject deeply into the gluteal muscle. I have never had any inflammation follow, and have used it in midwifery constantly for twelve years.

One word as to a note by "J. R. I." A solution of 18 grains to the ounce would be impossible to use. Does he mean 180 grains to the ounce, which is about the *British Pharmacopœia* strength?

ERRATUM.

IN the JOURNAL of May 8th, in the list of candidates who passed the first conjoint examination for L.R.C.P. and M.R.C.S., "Herbert E. Oldfield (private)" should have been "Herbert E. Oldfield (private tuition and Sussex County Hospital)."

OPHTHALMIC HOSPITAL AT CONSTANTINOPLE.

VISCOUNTESS STRANGFORD presents her compliments to the Editor of the BRITISH MEDICAL JOURNAL; and, while thanking him for the insertion of the paragraph concerning the Ophthalmic Hospital at Constantinople, she ventures to beg of him to mention in his next issue that donations would be most gratefully received by her at 3, Upper Brook Street, or could be sent by cheque to Dr. Van Millingen, Constantinople, or to the British Ambassadress, Lady Thornton; the object being not only to furnish a suitable building, but to provide a fund for the reception of cases requiring careful treatment among the very poor, who have no means of paying for themselves, and these are, at present, deplorably numerous.

It might be hoped that, among those who have visited Constantinople in former years, something might be contributed for the relief of her poor.

A POST-GRADUATE COURSE.

SURGEON R. N. writes: In your JOURNAL of March 6th appeared a letter on the subject of "A Post-graduate Course for Medical Men."

The establishment of an institution, such as your correspondent suggests, would be invaluable to none so much as the naval surgeons. We have been most ably—and, I regret to say, to a certain extent, truthfully—attacked for our incompetency, in a small book recently published. As a body of medical men, we are undoubtedly neither very scientific nor very learned. (This confession would not, I believe, be so readily made by most members of my profession.) I do not make it without feelings of great reluctance. Personally, I do not think we have reason to be ashamed that it is so. Those who are acquainted with life on board-ship, especially small ones, will, I am sure, agree with me that the very atmosphere is totally opposed to the idea of any advantageous study. For this reason, I think I am fairly safe in saying that most surgeons at sea never open a medical work, except, perhaps, to take the most desultory glances at some disease about which they are interested at the time.

The result of all this is, of course, a daily state of progressive ignorance, which, after three and a half or four years, must become well-nigh hopeless. What must it be after twenty years' service? To what class of medical men, then, would the suggestion of your correspondent be of greater advantage? In spite of all that has been said about the professional attainments of a class of men who have really only become the victims of a necessity, I feel certain that, should the opportunity of obtaining a short practical course of medicine and surgery present itself, many would only be too eager to avail themselves of it on their return to England.

I am sure that, should the authorities see an earnest desire on the part of the surgeons to improve their professional knowledge, they would not be inclined to place any impediment in the way. On the other hand, it would be encouraged, whether financially or not, I could not say. The fee suggested of twenty guineas would be rather too large an one for the average naval surgeon, who has a great many other calls on his not over full purse.

In conclusion, I must say that those who have read of and seen how splendidly our blue-jackets and marines have behaved in these recent campaigns, will agree with me that they have proved themselves to be, as of old, the very bulwarks of old England. Why should they not receive the best possible care and medical treatment?

A HEALTH-RESORT.

A MEMBER thanks "M.B." for the information given in the JOURNAL of April 24th in reference to a health-resort.

NATIONAL VACCINE ESTABLISHMENT AND LOCAL GOVERNMENT BOARD LYMPH.

CURA writes: I quite disagree with "J. B. G." and "Nemo." I have, on a number of occasions (quite twenty) applied to the National Vaccine Establishment, and, although not a public vaccinator, have always had a good supply by return of post, with which I have been always successful, the results always being typical "Jennerian vesicles." This is more than I can say of the lymph I have purchased through others. I have, on one or two occasions, had calf-lymph, but have always filled up the form sent therewith, and sent it off as quickly as possible. I must say that I have never known any improper difficulties put in the way of applicants for lymph.

MR. JOHN T. HARTHILL (Willenhall) writes: Since November, 1883, I have vaccinated twelve children from lymph sent in tubes from the Local Government Board Offices, each child in four places. Eight of these had four vesicles, three had three vesicles, and one failed altogether. The vesicles produced were, as a rule, good and plump.

DR. A. DUMVILLE ROE (Wandsworth) has used Local Government Board lymph about ten times in two years without a failure. He believes that too small a quantity of tube-lymph is used by some practitioners.

PUBLIC VACCINATOR writes that his experience of the Local Government Board lymph tallies with that of other correspondents who have recently referred to the subject. The proof of its worthlessness was afforded by the successful result which followed the use of lymph procured from private sources when the other failed. The subject was made a matter of complaint by him to the Local Government Board, but no notice was taken of it.

MR. C. E. HOBBES (Bidford) advises "Nemo" to obtain some calf-lymph from Whitehall and vaccinate, as a source of supply, one or two cases, the week previous to the commencement of his public vaccination. He has adopted this course since the Central Vaccination Authority has supplied calf-lymph, and with uniform success. Of course, it requires a little more care in vaccinating, but the results are very much more satisfactory.

PUBLIC VACCINATORS AND GRATUITOUS VACCINATION.

CURA writes: As one who for some time vaccinated all children who were brought to me gratis in self-defence, I have something to say on the matter.

The public vaccinator, when I came into the district, used his station as a means of advertising himself, and running me down, by sneering, and passing rude remarks to the assembled mothers. This, and the fact that, as surgeon to the neighbouring works and collieries, I had no end of trouble with the children who were vaccinated by the public vaccinator, through erysipelas, impetigo, eczema, etc., caused through his uncleanliness and neglect in performing the operation, caused me to vaccinate all who came to me, much to the public vaccinator's disgust and loss of money, and my loss of time.

DR. H. ROGERS-TILLSTONE writes: "Quærens" can only see two reasons for "men" vaccinating gratuitously, and, in his opinion, both are contemptible. What have the "men" to say with regard to his complaint, when he almost tells us that he is chagrined at not being able to grasp the "miserably small fee"? I never thought about the matter before, and I do not suppose my immediate neighbouring brothers in medicine have either.

Now, I am in general practice where a large number of my patients are poor, very poor, some of them too poor to pay me for any kind of attention which I ungrudgingly give them; among them all, I do a large amount of midwifery. Their confidence in me, I suppose, induces them to save up out of their scanty earnings, in order that I may bring their babies into the world; and, for the same reason, I am asked by them to vaccinate *my* children. In such cases, I do not make an extra charge. I can do very well without the pitiful fee which, to them, is, nevertheless, a large sum, sufficient for the family dinner, or to buy warm clothing, or other comforts. Other babies I do not vaccinate gratuitously.

Now, let us take a broader view of the matter. Vaccination is undoubtedly necessary, and is properly made compulsory; but it would be a very great evil inflicted on the poor if they had no choice as to by whom the operation shall be done, even though free of cost (pecuniary, that is to say).

Personally, I do not trouble much about my rights and immunities; but no doubt I might, if I looked into the matter, see that I am very badly dealt with, in spite of my being perfectly comfortable. I might, for instance, agitate against the existence of unjust customs and laws, or against the institution of public vaccination stations where particular general practitioners, to the exclusion of others (myself, notably, of course), are widely advertised to attend for gratuitous vaccination of all sorts and conditions of children; and, like all who complain on personal grounds, I might evince chagrin at losing some possible, although "miserably small fee," or some other trifle. Let every man honour himself with just respect.

Rupture of Uterus?

Mr. H. T. Batchelor (Queenstown, Cape Colony) writes: An elderly, spare woman, the mother of many children, came under my care during her confinement. Labour began, and all things went well, until about the time when the os was nearly dilated. Then there came a gush of blood, so great as to frighten her, and lead her to ask if she were flooding. I could not myself account for it, as I had not, in my examination, felt the placenta within the os. After a delay, labour proceeded with regularity, the bleeding having stopped, and was finished in due course. There was now a delay in the birth of the placenta; and, as I knew the patient was addicted to suffering from hour-glass contraction, I passed the left hand into the uterine cavity, steadying the uterus externally by the right hand. I came upon the contracted upper segment, and felt the portion of placenta passing into it. I dilated the contracture with my fingers, and removed the imprisoned portion of placenta. I then proceeded to examine with the index-finger in the upper segment, and make sure that the whole cavity was clear; when, to my surprise, there appeared to be nothing between my inside hand and outside hand but the abdominal wall, that is, between my left index-finger, and right hand resting on the belly. I withdrew my left hand, carrying the placenta with it. The uterus contracted firmly. There was no further difficulty of any kind, and the patient made an excellent recovery, and has since given birth to another child.

Did rupture of the uterus at the fundus occur towards the completion of dilatation of the os, at the time when the patient asked if she were flooding, and did my examining finger pass through the rupture when engaged in the removal of placenta from uterus? I believe I am right in answering yes.

Maternal Impressions.

Mr. G. Richmond Moore (Gorey) writes that he attended a confinement where the child was spotted on the face and trunk, with numerous round, shining nævi, of a bright red colour. The mother said she had experienced an intense longing to possess a bunch of mountain-ash, every time she passed a certain garden where it grows luxuriantly. These nævi are very like mountain-ash. In another case, where the mother had sprained her ankle on a doorstep, the ligaments of the child's ankle on the same side were very loose, and the foot fell outwards when turned over. In a third case (at Bristol), Mr. Moore was summoned to see a child just born. Both legs between the knee and ankle were constricted, raw, and bleeding, and looked as though an ineffectual attempt had been made to cut them off, by tying a rope tightly round each; there was half an inch of cicatrisation at the margin of the raw surface. There was also a large, partly raw, partly cicatrised surface, in the region of the right groin, about the size of a hand. And on the back of each hand was a red stain of the skin, like a bloody finger-mark. The mother stated that, six months previously, she was walking with a female friend, and they witnessed an accident. A young man was run over by a cart; the shaft ran into his right groin, and the wheels passed over both legs, fracturing them. When he was carried away, she distinctly saw a dab of blood on the back of each hand, probably left there by the person who lifted him. The child was a female, and had a very pretty face and a remarkably well formed head, and was otherwise sound and healthy.

Mr. James Rhodes (Glossop) writes: Mr. J. D., a schoolmaster of the old type, had to act as scribe and lawyer for those requiring his help. He had no phalanges on the left hand, and just a nodule of nail at the end of each metacarpal bone. He placed this hand on what he was then writing, and a woman, then in her third month, kept her attention on it. On delivery, her child had a similar hand. I know her well, and have the photograph of her hand. She also was the means of imparting this malformation to a female friend, who met her one day when in the third month, by putting her hand to her face. The child, on delivery, had the same malformation.

Mr. W. Hewitt (Prestwick) writes: A few days ago, I was in attendance on Mrs. A., an intelligent, middle-aged lady. She informed me that she had not slept overnight, and, in a casual manner, stated that, of course, the night was somewhat stormy. On my remarking that the night was not what one would call stormy, she informed me that even a slight storm of wind had always had greater terrors for her than the most severe thunderstorm could have. She had come to womanhood when her mother told her that she (Mrs. A.) was born during a severe storm of wind, and that, immediately preceding her birth, the roof of the cottage was entirely removed.

The Electro-Magnet in Surgery.

W. M. H. writes:—Magneto-electricity has achieved such good results in the extraction of metallic substances from the eye, that I would inquire if it have proved similarly useful elsewhere.

I have to record its utter failure in a case where, last Christmas, in scrubbing a floor, a needle ran into the palm of the hand, over the head of the third metacarpal bone, and broke off. There was no indication of its exact whereabouts, and no suppuration, etc. On March 2nd, Dr. South, R.N., very kindly took the patient on board H.M.S. *Vernon*, and, having cut down over the supposed site, applied so powerful an electro-magnet, that it suspended me from its armature. Yet the needle was not withdrawn, nor did it prick or otherwise cause sensations to the patient. On April 3rd, however, there being "soreness" on the back of the hand, I cut down (under Esmarch's bandage), and, after some probing, felt and removed a portion of a needle, seven-eighths of an inch long.

COMMUNICATIONS, LETTERS, etc., have been received from:

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ABSTRACT OF A

CLINICAL LECTURE

ON

CANCER OF THE BREAST.

Delivered at St. Mary's Hospital.

BY EDMUND OWEN, F.R.C.S.,

Surgeon to St. Mary's Hospital, and Surgeon to the Hospital for Sick Children, Great Ormond Street.

THOUGH, clinically and histologically, encephaloid and scirrhous disease are closely associated, the former so rarely affects the breast that, on the present occasion, it may be left out of consideration. The difference between hard and soft cancer is only one of degree. The hard grows slowly, and consolidates its tissue; the other is of rapid increase, abounding in watery element. Similarly, in the vegetable kingdom, the more slowly the plant grows, the harder is its tissue. Compare, thus, the yew, or the oak, with the willow; the pumpkin with the nut.

The hardness of mammary cancer is characterised in its name, σκιρ'ρος, a lump of stucco. The older surgeons called it stone-cancer. The more slowly it grows, the harder and heavier it is, and its greatest density is reached in the chronic cancer of old women. This is the least malignant variety; in the cicatricial contraction of its fibrous stroma, cells, lymphatics, and blood-vessels are compressed and obliterated. In younger women, the deposit grows apace, and quickly infects the lymphatics; hence, in them, prompt and vigorous surgical measures are specially demanded.

The hereditary influence of cancer has probably been much exaggerated. Sir James Paget expressed the matter to a friend of mine in this way: "If a woman died of cancer, and left ten children to grow up, I should not be surprised if one of them were eventually the subject of cancer; but I should be surprised if two were."

Forty to fifty years is the common age for the appearance of cancer of the breast. Then important changes are taking place; menstruation is ceasing, and the mammæ are undergoing physiological retrogression, so that perversion of nutrition readily disturbs the homology of the gland.

The chief symptom of the disease is this. There is a stony lump in the breast of a woman aged 40 or 50, less or more. This is almost enough for the diagnosis; and if the nipple be retracted against, or the skin be dimpled upon, the mass, the evidence of scirrhus is abundant. But retraction of nipple and dimpling of skin are not enough of themselves, for they may occur after mammary abscess, from shortening of certain fibres which extend from the breast to the integument. Nor is hardness by itself a sufficient sign, for sometimes a cystic growth or a chronic abscess is surprisingly hard.

Here are two schemes representing tumours of the breast. They are prepared by inclosing a fluid or a solid mass in a rounded bed of cotton-wool, and covering all with a napkin. Come after my lecture and diagnose the nature of each by palpation, and you shall experience the embarrassment which may attend even an experienced surgeon. (Each "tumour" consisted of a bladder of the size of an orange; one of them was half filled with water, so as to give unmistakable evidence of fluctuation; but the other was absolutely distended with water, and felt so hard in the wool that it was promptly diagnosed as a solid tumour, "probably scirrhus.")

Sooner or later, the axillary glands will be enlarged; but as, in chronic cancer, it may be years before such enlargement can be detected through the floor of the axilla, and as the glands may be enlarged in simple inflammatory disease of the breast, the enlargement is not a characteristic symptom of scirrhus. Moreover, if only the sternal part of the gland be affected, the lymphatic invasion will be in the anterior mediastinum, and out of reach of palpation. (The question of what patients should be submitted to operation was here considered.)

Before the operation, the urine should be carefully examined for sugar and albumen; for, though diabetes or Bright's disease does not necessarily contraindicate operation, still, it is well that the surgeon should have cognisance of the serious complication. The axilla should be cleared of hair, and, together with the pectoral region, should be thoroughly cleansed with an antiseptic solution.

For a chronic mammary abscess or cyst, the breast need not be amputated. Therefore, in a case where there is room for error of diagnosis, an incision should be made into the tumour before proceeding to amputate the breast.

Operation.—Two semi-elliptical incisions should be made, wide of suspicious skin, and, passing on each side of the nipple, should be directed along the lower border of the pectoralis major. If the horns of the incisions be made slightly to cross each other, the pointed ends of the piece of skin to be removed will need no further touches of the knife. It matters not which of these two incisions be made first, the upper or the lower. Whilst making them, the surgeon should give no thought to the subsequent approximation of the edges of the wound. His duty is to remove the skin abundantly. If the wound cannot be closed by suture, at least it can heal by granulation.

The fingers[1] are then hooked round the breast, and are made (with the occasional help of the knife) to draw out the mass. The entire breast should be taken away in every case, even if only a small part of it be implicated in the disease, as it should also when the nipple is removed for the intractable eczema to which reference has been made. Bleeding vessels having been promptly seized with the catch-forceps—a dozen pairs should be at hand—the incision is prolonged through the floor of the axilla, and the contents of the space are examined.

Axillary Glands.—So far as my experience serves, it used to be the practice, not very many years ago, to refuse to operate for cancer of the breast if glandular enlargement could be detected in the armpit. But in this respect, as in many others, surgery has of late undergone a great change. The clearing out of axillary glands is now recognised as a very necessary part of the operation for mammary cancer. Like many other surgeons, I make it now my practice to lay open the axilla, whether enlarged glands have previously been detected or not. Indeed, unless the glandular enlargement be considerable, it is impossible to be certain about it until the space is opened up and the fingers are introduced. The axillary fascia having been incised, the fingers and thumb are introduced; every gland that can be felt, whether enlarged or not, should then be torn out. No pains should be spared over this part of the operation; in carrying it out, the intercosto-humeral nerve is generally seen, and the fingers work along by the cords of the brachial plexus, and by the axillary vessels themselves. It is hardly necessary to say that the knife is not there employed, except in very severe cases, as where a mass of glands has effected important and firm connections. Apparently, this interference with the interior of the space does not retard convalescence. The arm being fixed to the side directly after the operation, the chasm is promptly effaced. The deep parts of the wound should not be disturbed by sponging: this interferes with the deposition of the film of coagulated lymph, which checks bleeding and is a barrier to absorption. The surface may be irrigated with a warm solution of mercuric chloride before the wound is closed. It is advisable that all bleeding should have ceased before the suture is applied. Provision is made for drainage, by a separate opening through the skin of the most dependent part of the chasm; that is, usually, not far in front of the angle of the scapula. The other end of the tube is brought through another special opening at the front of the chest. The long wound is then closed by a continuous suture of catgut, and dressed with wood-wool sewn in gauze bags. The hand is brought to the opposite shoulder, and the bent arm is firmly fixed across the chest, and over the dressings, by a soft towel, secured with safety-pins.

On the next day a much smaller tube is introduced; and, after this, the less that the part is interfered with the better. I venture to think that the wounds thus dealt with do as well as if they were treated with spray and gauze; at any rate, I know not how to pay them higher compliment than by instituting this comparison. Professor Roddick, of Montreal, first advised me to use the continuous suture in amputation of the breast, and I am extremely pleased with it. One or two of the stitches can be cut, if necessary, without the rest of the suture giving way. As soon after operation as possible, the patient should be got out of bed. I now make it the custom to have her sitting at the bedside in an easy chair on about the fourth day. No harm can come if the arm be secured against the chest in the way already explained.

As regards the site of the recurrence, my experience is that it is almost invariably in the scar, rarely in the axilla, and scarcely ever in a more distant part of the body. In several instances, I have found the hard deposit in that scar which marked the anterior incision for the drainage-tube, and which was an inch or more from the edge of the wound, and still further from the original situation of the diseased mass. Sometimes the recurrence is manifested by small hard

[1] Before the gospel of asepticism was preached by Sir Joseph Lister, many surgeons contented themselves with washing their hands *after* operating.

nodules in the neighbouring skin, the scar itself being apparently healthy.

It has been remarked by a thoughtful surgeon, that he who values his peace of mind will never operate for cancer of the breast. That same surgeon would, however, be the first to admit that the mental ease of the practitioner is not to count before the physical well-being of the patient. It is afterwards a great comfort to a patient to feel that she has had the privilege of operation, even though there be recurrence of the disease.

As time advances, it will probably be found that operative surgery can be of yet greater service in rendering cancer a strictly local disease. If so, the first advance will likely be made in dealing with the enlarged cervical—supraclavicular—glands, which are infected after invasion of the axillary lymphatics, through the apex of the axilla and beneath the clavicle. Although they can be pulled down by the fingers and forceps in the armpit, especially if, at the same time, pressure be made from above the clavicle, still, the better way will probably be to extract them by a direct incision at the root of the neck, after the clearance of the armpit.

After operation, the patient should present herself for inspection by the surgeon at regular intervals, say of six weeks or two months; so that, in case of recurrence of the disease, no time may be lost in operating again. Then, in case of suspicious fulness about the axilla, or of hardness about the scar, the cicatrix may be widely removed, and the armpit again examined, and, if necessary, cleared out. To have operated once should not suffice; time after time must the attack be renewed, whilst there is prospect of operating through uninfected tissue—of getting beyond the disease.

The value of this treatment is shown in the case of Mrs. M., whom you have just seen. She was sent to me on May 10th, 1876, in order that I might carry out the treatment by injection of acetic acid. The patient was in service as a lady's maid, and declined operation by the knife. She called herself 50, but she was really eight years older. For seventeen months a tumour had been growing in the sternal side of the right breast. It was very hard, and the skin was dimpled over, and adherent to it in several places. There were some enlarged axillary glands. For seven weeks the acetic acid treatment was carried out, but without any avail, and operation by the knife was then agreed upon. At the time of its performance, the enlarged glands were removed from the armpit. In the early part of 1877 there was a return in the pectoral region, and a former colleague swept away all the diseased tissue with a knife. In April, 1878, the patient was fairly well, but soon after there was fresh recurrence of the growth. I operated again; and I performed a fourth operation in the beginning of 1879. After this last operation, she secured a pension from the Putney Hospital for Incurables.

As you examined her with me just now, you found the extensive cicatrix perfectly soft and movable, and without tenderness. The armpit, moreover, is perfectly clear of enlarged glands, so far as one can determine by careful examination. It is now more than seven years since the last operation, and the woman seems to be absolutely cured of her disease.

The second case which you examined with me to-day is that of Mrs. W., who came in July, 1884, with cancer of the right breast. She was suckling at the time of her admission, and was but 38 years old. For some time she had noticed a small lump in the breast, and three months ago it had begun to grow very rapidly, and with much pain. There were enlarged glands in the armpit. The family history was interesting, in that both parents, and seventeen brothers and sisters, were alive and well. The breast was freely removed, and the axilla was cleared of cancerous glands. She left the hospital within the month, the wound being healed. In the following November she came in again, for the removal of indurated tissue from the scar; the axilla was again opened. She remained in hospital fourteen days. Three months later (February, 1885) she was readmitted; the brawny scar was again excised, and the armpit again attacked, some small kernels being extracted. This time she was in hospital twenty-three days. In July, 1885, she was admitted for the fourth time, for the removal of a hard nodule from the scar.

It is now but seven months from the last operation, and it is manifestly not advisable to give too favourable a prognosis. All that one can say is that the patient looks well, and that there is nothing suspicious about either the scar or the armpit. I specially refer to her case to-day, because she is known to many of you, and that I may thereby the better emphasise the advice which I have just given as regards operating for cancer of the breast, namely, that you operate promptly and thoroughly, taking away the whole breast and nipple in every case, and laying open the floor of the axilla, whether you have recognised enlarged glands there or not; that you tear out every gland that you can find, whether it be enlarged or not, for that is the only way of being sure that all the diseased glands are removed; that if scirrhous infiltration recur, you are to go through the entire programme again with as much vigour and hope as on the first occasion; and, lastly, that you are not to refuse to operate whilst there is a reasonable probability of your being able to get beyond the infiltration, no matter how often the disease has recurred, and your art, apparently, failed.

CLINICAL LECTURE
ON
CERTAIN CASES OF LUNG-DISEASE RESEMBLING ACUTE PHTHISIS.

Delivered at the Liverpool Royal Infirmary.

By A. T. H. WATERS, M.D., F.R.C.P.,
Physician to the Infirmary.

Gentlemen,—There are certain cases of acute inflammatory disease of the lungs which so closely resemble in their clinical features acute phthisis, that the differential diagnosis of them is often exceedingly difficult; and I wish to-day to speak to you of such cases, and to refer to some which have come under my own observation.

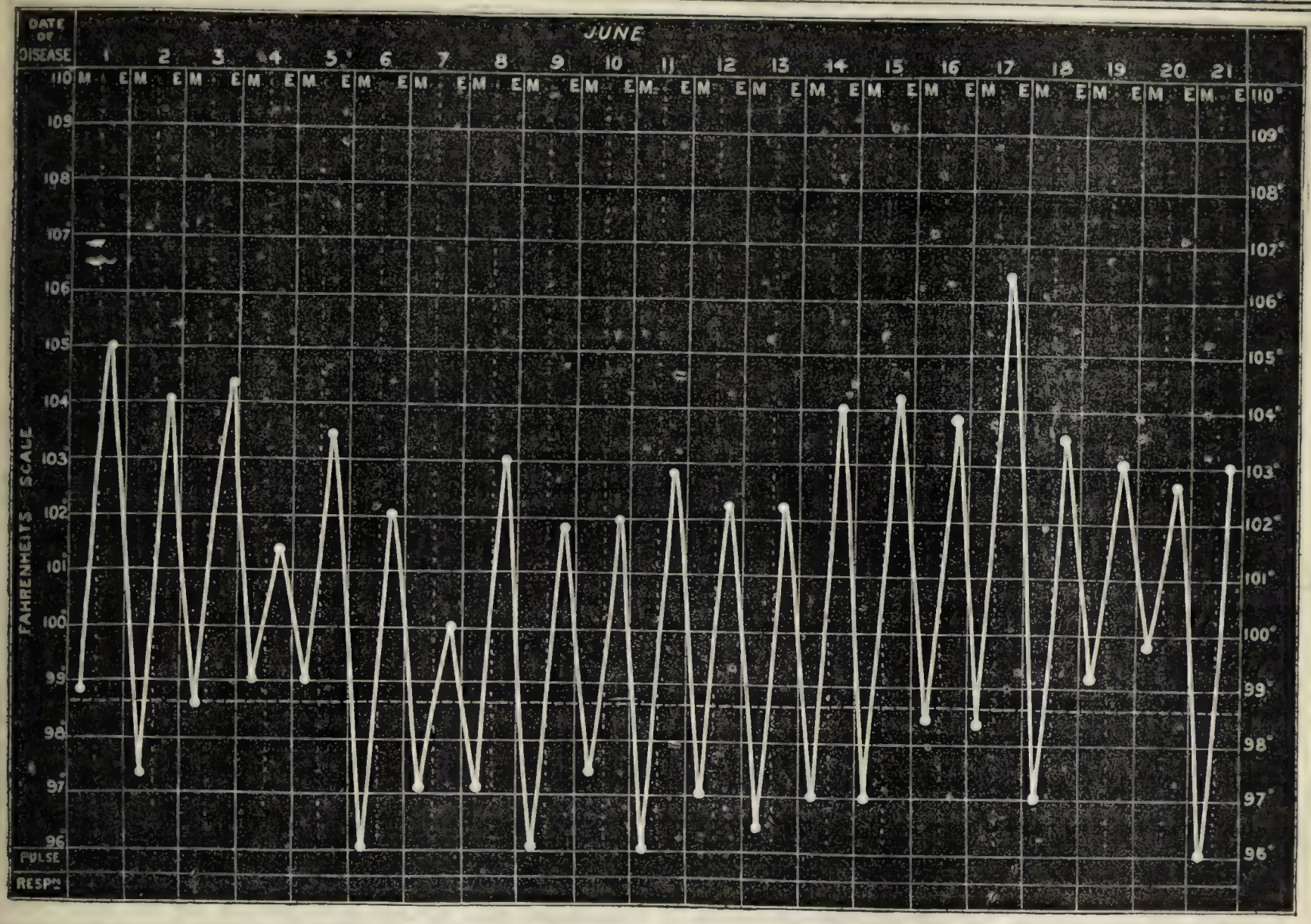
We are familiar with two forms of acute phthisis; and let me draw your attention briefly to their chief characteristics before I allude to the special subject of my lecture.

First, we have that form of acute phthisis which begins with symptoms resembling those of pneumonia, with crepitation at one apex soon extending to both apices, and followed by rapid extension, and consolidation and disintegration of the lung-tissue. Cavities soon form; there are copious expectoration, rapidly increasing weakness, profuse perspirations, quick pulse, and a temperature reaching a very high level in the evening, and sinking to the normal, or even sub-normal, in the morning. The debility is great, but there is not utter prostration, as in the second form. In these cases, death usually takes place at the end of a few weeks, probably within three months from the onset of the attack; and, after death, we find the lungs more or less solidified throughout, with numerous cavities, but few or no tubercles. Such cases are generally met with in somewhat young patients who come of a phthisical family. To this form of the disease, we give the name *acute pneumonic phthisis*. It is a form of scrofulous pneumonia.

The chart which I show you will indicate to you the character of the temperature in a well marked case of this kind; the temperature was taken between nine and ten in the morning, and between seven and nine in the evening. The patient, in this instance, was a young lady whom I attended some years ago. She did not live many weeks from the beginning of her symptoms. She came of a phthisical family, and, after her death, I attended her sister for a similar disease, which ended fatally.

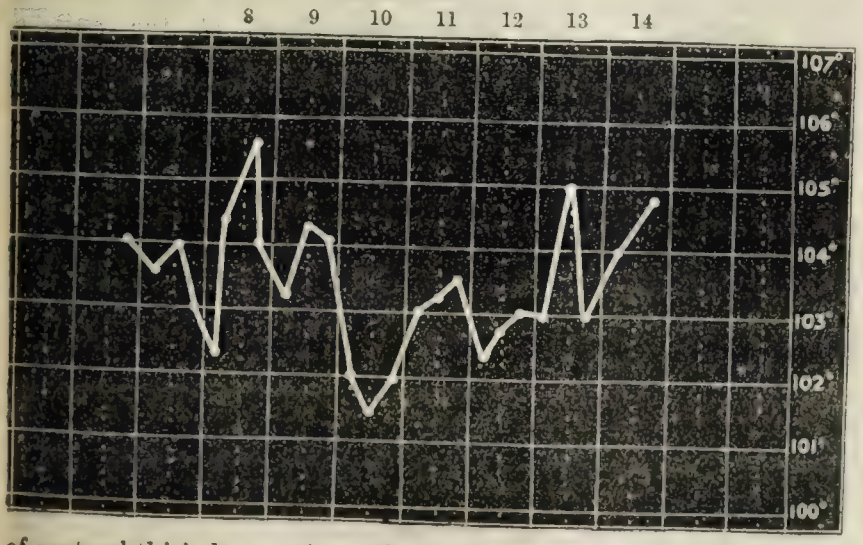
Then there is the second form of acute phthisis, in which the symptoms at the beginning resemble very much those of typhoid fever, in which there is but little cough at first, with but little expectoration, in which the pulse is very quick, and the prostration extreme. In these cases the temperature is high, but it does not present those variations which characterise the first form. It maintains a more even level, rising slightly in the evening, but not falling to the normal in the morning. The physical signs, at first doubtful, soon, however, show the nature of the case. We hear *râles* all over the chest, fine subcrepitant and crepitant—indications of the existence of a general capillary bronchitis, or pneumonia. These cases usually end fatally in a few weeks, and they are often characterised by the existence of head-symptoms. We know that, when the patient dies, we shall find the lungs riddled with tubercles, around which the lung-tissue has become inflamed. To this form of disease we give the name *acute tubercular phthisis*. The subjoined charts show the temperature-ranges in two such cases.

Now there may be, in such cases as those to which I have referred, little or no difficulty, except just at first, in forming a correct opinion as to their nature; but I have met with cases in which the clinical features so closely resembled those which I have described, that I have expressed a fear that they were really cases of acute phthisis, yet the patients have eventually recovered; and I have therefore



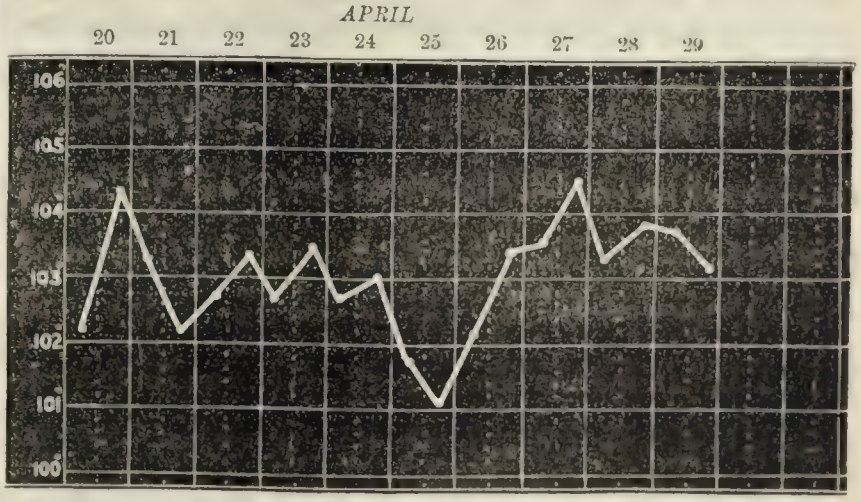
been compelled to ask myself whether I had not made a mistake in diagnosis. Is it possible that cases of acute phthisis can recover?

Whilst I should unhesitatingly say that, when once the second form

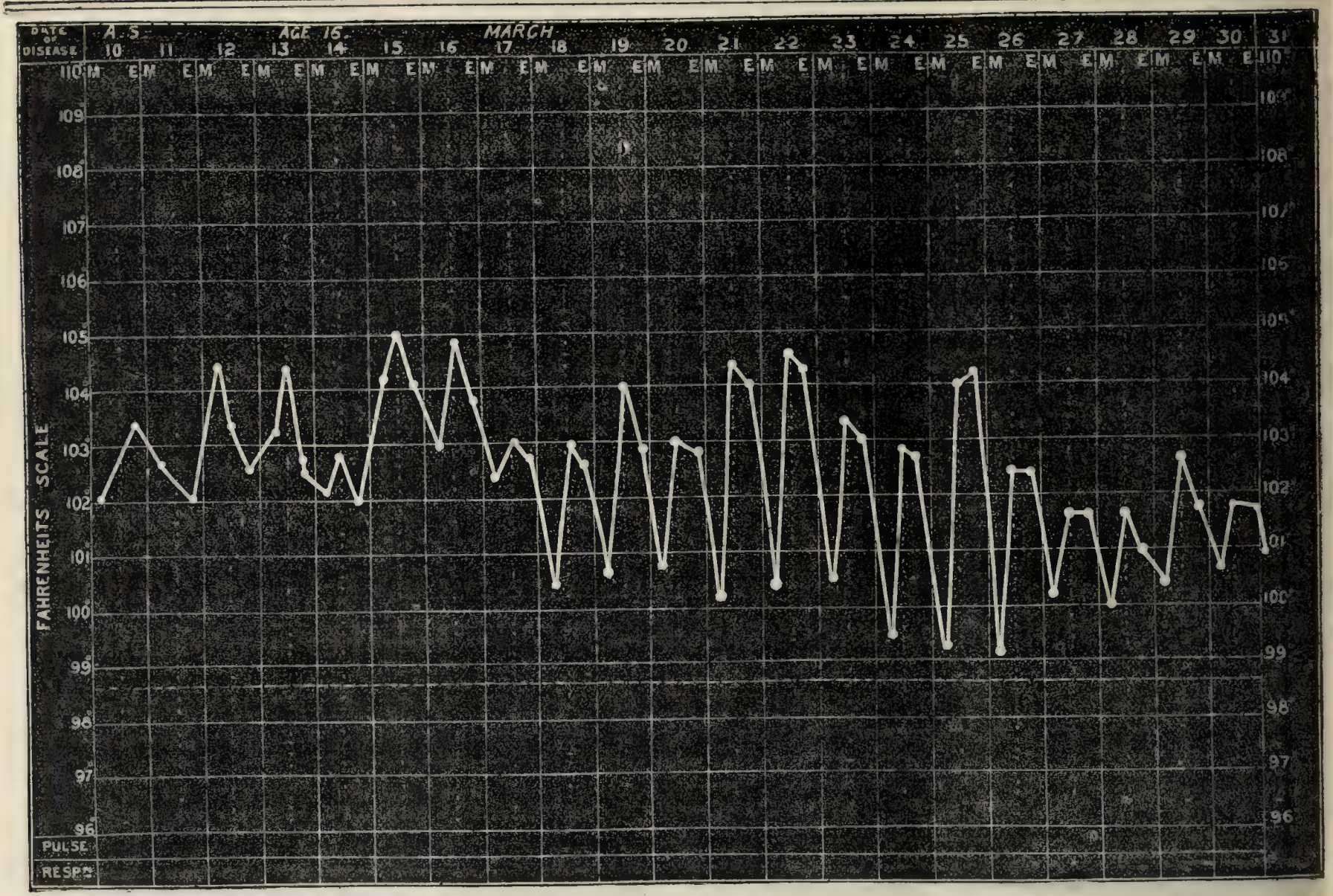


of acute phthisis has set in, and the lungs are studded with miliary tubercles, recovery is impossible, I think that, in the pneumonic form of the disease, recovery may take place. The affection is essentially a scrofulous pneumonia, and as such may be amenable to treatment. Again, just as we see that cases of subacute and chronic phthisis, especially those which begin in so-called catarrhal pneumonia—for I cannot, as the result of my clinical experience, admit that all cases of subacute or chronic phthisis begin with the deposition of tubercle—get well, so I think we may hope that cases of a more acute form, although tubercular, may also recover.

Now let me draw your attention to the notes of the following case. Amy S., aged 16, was admitted into No. 15 ward on February 21st, 1877. It appeared that, up to twelve months before admission, she had enjoyed very good health. At that time, some dropsical symptoms appeared. Her abdomen began to swell. Under medical treatment, the swelling subsided in about five weeks, and she remained well up to three weeks before entering the infirmary. On admission, she was suffering from ascites and œdema of the legs, unconnected, as far as could be ascertained, with any organic disease. Iodide of iron, and subsequently iodide of potassium, were administered, and the abdomen was painted with tincture of iodine. I considered the case as probably one of tubercular disease of the peritoneum, or else one of ordinary chronic peritonitis.



By February 27th, the œdema of the legs had disappeared, and the abdominal swelling was less, but a fresh symptom now set in. She caught cold, and a cough came on early in March; and, on the 10th, she began to expectorate somewhat rust-coloured sputa. She was then ordered carbonate of ammonia and cascarilla, with four ounces of port wine daily.



On March 12th, the following were the physical signs elicited by careful examination of the chest. There was loud breathing, with moist sounds, at the left apex. There was some dulness, with crepitation and bronchial breathing, under the right clavicle, with dulness, but no crepitation or friction-sound at the right base. The breathing was rapid, and there was severe cough, especially on exertion. The pulse was quick, and the temperature high. I shall refer to these signs later on.

On the 16th, in consequence of the dulness over the right base having extended, and as I feared there might be some fluid in the pleura, I punctured the chest, but no fluid was found.

During the following week, the symptoms increased in gravity. The dulness over the right apex extended downwards, the crepitation became coarser, and appeared to indicate the breaking up of the lung-tissue.

On March 29th, the fluid had almost entirely disappeared from the abdomen, and the general symptoms were somewhat less severe, but there was no improvement in the physical signs.

On April 7th, after the patient had been under treatment forty-five days, and about five weeks after the lung-symptoms had set in, there were dulness and cavernous (?) breathing under the right clavicle, with dulness and crepitation lower down, and coarse crepitation all over the back. Throughout the case, the mischief in the left lung was confined to the apex.

From about the middle of April, the patient began to improve, but it was not till near the end of June that she was able to be removed into the country.

Now, having referred to the physical signs—which were such as characterise acute pneumonic phthisis in its stage prior to the formation of numerous cavities—let me refer to the general symptoms. First of all, the pulse was very rapid; it varied from 140 to 120 in the earlier weeks, never falling below 110 till after the middle of April, namely, about seven weeks after the patient's admission.

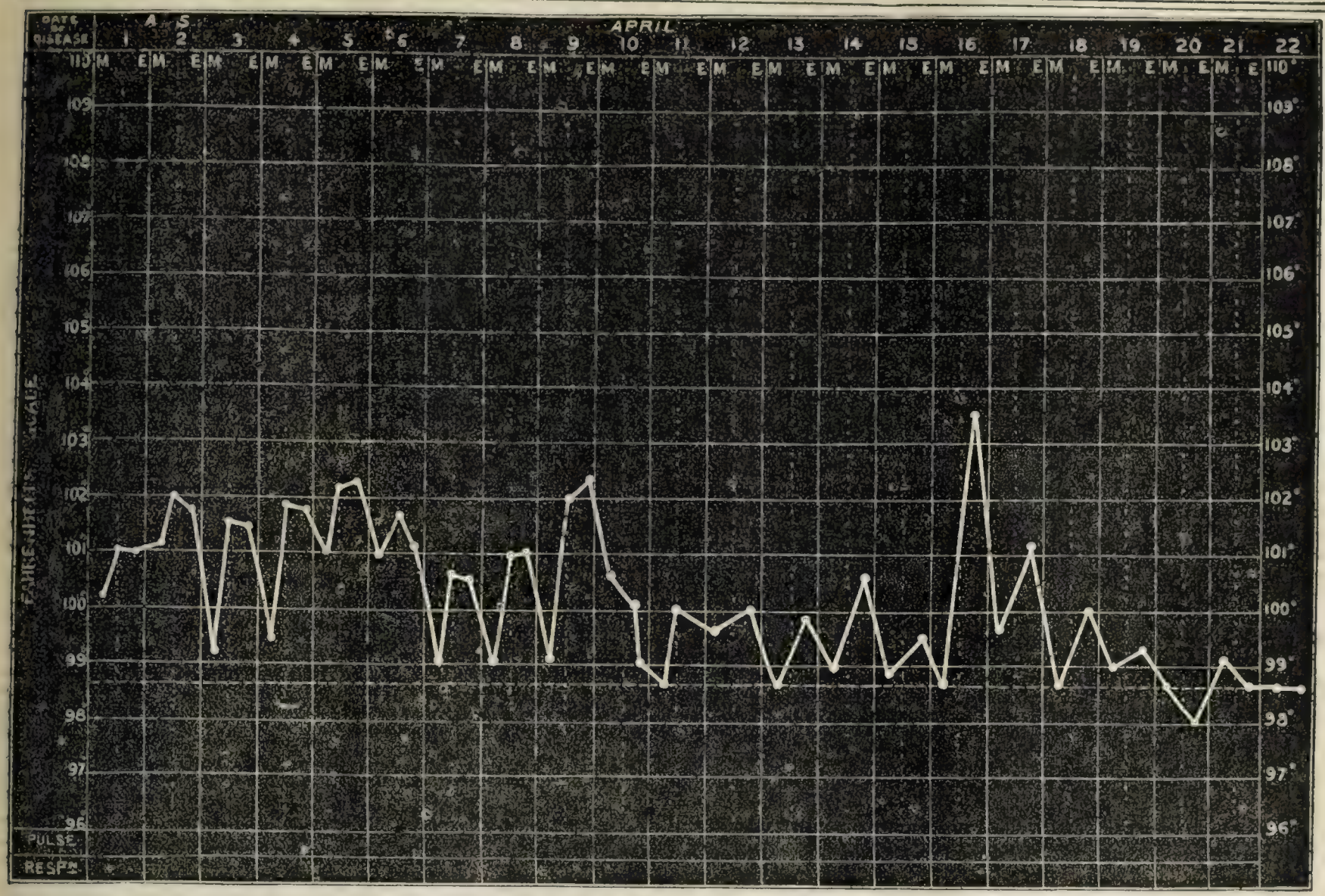
And now with regard to the temperature; I wish particularly to call your attention to this. The chart shows its variations. You see that it maintained a high level for some weeks, but it had marked oscillations, being very high in the evening, and low, nearly normal, in the morning. You will observe that it was taken three times a day, namely, at 9 A.M., 5 P.M., and 9 P.M., and that it was often found highest at 5 P.M. This, as you know, is a very frequent feature of the temperature in phthisis.

Thus we had in this case the characteristic high fever of acute phthisis; we had rapid consolidation of the apex of one lung, with indications of disease in the apex of the opposite lung; we had a steady extension of the disease, signs of the lung breaking up, and of the formation of a cavity, with great weakness of the patient. These symptoms lasted many weeks, and recovery was very slow.

On May 26th, the following physical signs were noted. There was still dulness over the right apex with blowing sound, as of a cavity; over the right back crepitation was still heard. The pulse was quiet, and the temperature normal. The patient was removed to the Convalescent Hospital at Woolton about June 20th, and the physical signs at that time were as follows. The respiration was almost natural at the base of the right lung; there was slight crepitation towards the middle of the lung. Breathing was somewhat bronchial at the upper part of the lung behind. In front, the breathing was loud and bronchial at the right apex, but less so at the left; otherwise, the sounds in the left lung were healthy. There was slight flattening at both apices, with deficient expansion.

The patient returned from the Convalescent Hospital on July 21st, greatly improved in health and general condition. Her physical signs were as follows. There was some flattening under the right clavicle, with deficient expansion; resonance was somewhat impaired; expiration was prolonged; the breath-sounds were harsh; there was fair resonance over the back of both lungs, and the respiratory sounds were fairly good.

Now let me refer to the treatment that was adopted. When the chest-symptoms began, the patient was put on carbonate of ammonia and cascarilla, and for the latter cinchona was substituted on March 17th. On March 23rd, three grains of quinine in mixture were ordered to be taken three times a day; and, on the 26th, fifteen



minims of tincture of digitalis were added to each dose. This treatment was continued until April 2nd, when iron and quinine were given. Subsequently, cod-liver oil was taken. From the date of her admission, and more especially when the lung-symptoms set in, nourishment was given very freely. It consisted of milk, beef-tea, and eggs, and solid food as soon as it could be borne; six ounces of port wine were also given daily from March 12th, and continued (except for three days from the 26th to the 29th, when four ounces of brandy were given) up to May 11th, when porter was ordered.

The case which I have thus presented to you is one of great interest. I think it belongs to the same class as that of which I showed you the temperature-chart at the beginning of the lecture; that it was truly a case of acute pneumonic phthisis, or scrofulous pneumonia. It is very important to note the kind of treatment under which recovery took place namely, free nutrition, and the administration of such remedies as tend to lower temperature and give strength.

I have had under my care a few other cases which have resembled acute phthisis, and which have recovered. I cannot give you to-day the details of all these, but I will refer briefly to one.

Margaret P., aged 33, a servant, was admitted into the infirmary under my care, on December 29th, 1880. She was suffering from symptoms resembling those of typhoid fever; but there was cough and extensive subcrepitant *râles* over both lungs. The pulse was very quick, and the temperature high. Her condition was such that I hesitated in giving a diagnosis; on the one hand I feared typhoid fever, and on the other acute tubercular phthisis. As the case progressed, the symptoms assumed more the character of the latter disease, and for some weeks the condition of the patient was very critical. We had evidence of extensive bronchitis, with some consolidation of the right lung. The pulse remained between 120 and 140. The temperature kept uniformly high, never, however, reaching a great height, and never falling to the normal. Its characteristics were those of the second form of acute phthisis, which I have referred to at the beginning of the lecture. The respirations were rapid, 40 to 52 in the minute, and the prostration was extreme. It was not till more than three weeks after her admission that the patient showed decided signs of improvement. From that date she steadily improved, and on April 17th she was sent to the Woolton Convalescent Hospital. I have not time to go into the details of her case, nor of one or two other similar cases which have been under my care. It must suffice to-day to say that in this case, and in the others, the treatment adopted was similar to that which was used in the case of A. S., namely—nourishment given freely, stimulants, and quinine. I hope to refer to the subject again in a future lecture.

PRESENTATION.—Mr. Charles A. Bradley, Medical Officer to the Druid's Society, Macclesfield, has been presented with the emblem of the Order, and the following illuminated address, in an ebony and gold frame. "The Order of Druids. To Charles A. Bradley, M.R.C.S., of England, signed on behalf of the society by P.D.G.M. Charles Dawson, Great Britain Lodge; P.D.G.M. Thomas Foden, Acorn and Union Lodge; P.N.G.A. James Birchenough, Imperial Lodge; D.D.G.M. William Davies, Hand and Friendship Lodge; P.N.G.A. George Adamson, Pride of Macclesfield Lodge; D.C.S. Frederick N. Barnshaw." The emblem is mounted in a similar manner, and signed by the officials of the lodge to which Mr. Bradley belongs.

AGARICIN.—Agaricin is obtained from the *Agaricus albus*, but is not a true alkaloid. It is fairly soluble in alcohol, very slightly in water, and not at all in ether; its chemical composition is somewhat uncertain, but it is not identical with muscarine. It has been used in the treatment of the night-sweats of phthisis, for which purpose, as it is insoluble, or nearly so, in water, it must be given (preferably by the mouth) either as a powder, or dissolved in a mixture of alcohol and glycerine. One-tenth of a grain is an average dose, and, as its action is slow, it should be given some hours beforehand.

UNIVERSITY OF BRUSSELS.—At the recent May examination, the following gentlemen, having satisfied the examiners, had the degree of Doctor of Medicine conferred upon them: John T. Davies, L.R.C.P.Ed., and L.M. and M.R.C.S.E., of Denbigh Infirmary; Donald A. Fraser, M.R.C.S.E. and L.S.A., of Weston-super-Mare; and Wm. Henry Walter, L.R.C.P.Ed. and L.M., M.R.C.S.E. and L.S.A., of South Petherton.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
Emeritus Professor of Surgery at the London Hospital.

(Concluded from page 638.)

II.—Microcephalus (Aztec Head), with Indications of Bilateral Cerebral Atrophy: Difficult Birth, and Severe Convulsions during the first week of Life.

A child, brought to me by Dr. Whitfield, on June 7th, 1885, offered a very interesting example of the bilateral cerebral paralysis of infants. It was three years old, the youngest of seven, all the rest of the family being healthy. The parents were both of them strong and robust. The history was that it had been delivered by forceps, and that there had been great difficulty in reviving it after birth. The surgeon who attended said he had never known a child, so nearly dead, recover. During the next few days, it suffered much from convulsions, and continued to be very ill. I take these facts from the mother's statement, not having seen the medical man who attended her. After this, the child's infancy presented nothing particular. But it was soon found that it could not grasp well with its hands; the fontanelles closed, as its mother believed, very early. The child was now, at the age of three, well grown, and healthy looking; good tempered, but, in some matters, distinctly self-willed. Although unable to speak, it was quite able to make its wishes understood. It had no defects of special senses, and no lamellar cataracts. The optic discs are normal. The child is stated to have good power over its sphincters, and to be very cleanly in its habits. Its parents believed that it understood all that was said to it; but it could only say one or two simple words, and these without any clearness of pronunciation. Its head was rather small, and especially contracted across the forehead—that is, there was an approach "to the Aztec type." The prominent defect was in its voluntary muscles; and, so far as I could judge, it appeared to affect them all pretty equally. The mother thought that the left limbs were weaker than the right. It rarely made any attempt to move its hands, although it could manage, as a sort of feat to which it had been trained, to grasp a large object, and to pretend to use it as a pen. It did not, however, hold the pen with the slightest power. It never made any attempt to use its lower extremities, or to stand. There was no special contractures, but the muscles yielded rather slowly to the hand. Its head lolled on to its chest, or was turned on to one or the other shoulder, but was scarcely ever held in the upright position; and it sat all of a heap, with the back bent. When placed on its back, it could, with a little help, just manage to raise itself. There were no defects of nutrition in the limbs, which were quite warm. Its muscles were moderately well developed. I had no opportunity of trying the effect of galvanism. A great many of its teeth, especially those in the upper jaw, had rotted away.

I give this case as a contribution to our clinical knowledge of a very interesting and rare form of paralysis, to which, amongst others, Dr. Hadden has recently given much attention. The first example of it which came under my own notice, and in which, let me say, I was indebted to Dr. Hughlings Jackson for the diagnosis, occurred in a child who was the subject also of very peculiar lesions of the skin. The case was published in the Pathological Society's *Transactions* ten years ago. Since then, I have seen several others. They vary much in degree. In some, there is little more than merely late development, "weak spine," and feeble muscles; whilst in others, the paralysis is general and severe. In most, there is the history of some almost fatal illness during the first week of life. The eyes, the teeth, and the skin may suffer.

III.—Red Hands and Feeble Circulation: Susceptibility of Skin of Head and Face: Urticaria from Exposure to Cold Air (a minimised form of Kaposi's Disease).

I could not mention a better example of the peculiar condition of feeble circulation which leads to red hands and flushed cheeks, than that of Miss B. This young lady was, when I saw her, 20 years of age, of fair complexion, and delicate skin. Under ordinary conditions, her hands were of an uniform deep red colour, and cold. Her cheeks and ears were also of the deepest possible tint. Susceptibility of her face and neck to the influence of cold was the most marked peculiarity of her case. She could not wash with cold water, or expose herself in the least to wind, without making the skin tingle and become covered with urticarious wheals. When so affected, the skin would burn and feel most uncomfortably tight. She had never known her urticaria to be produced by articles of diet, but she had found, during the last year or two, that she could not eat shell-fish or shrimps, on account of the indigestion which they produced. Her first nettle-rash had occurred after a cold bath in the sea, and for long she had been obliged to use hot water for washing, on account of the tingling and burning produced by cold. Miss B. had suffered, in earlier life, from chilblains, and so had one of her sisters, but not to any unusual extent. The flushing of her cheeks, when exposed to cold, was so great, that it might almost count as a kind of chilblain. It was, indeed, attended in parts by slight swelling and œdema. There had never been any definite chilblain on the ears or nose.

I have ventured, in the heading of this case, to use the expression, "a minimised form of Kaposi's disease." Now, Kaposi's disease presents certain features of very marked difference from those shown by Miss B. In it, several brothers and sisters are similarly affected, and they are liable, in childhood, to have the skin of the face, hands, arms, and legs inflame, ulcerate, become pigmented, and finally to fungate, and even become the seat of cancerous sores. The essence of the disease is, however, congenital susceptibility of the exposed parts to irritation from external influences. The skin of the face and hands, etc., does not wear well, but inflames on exposure. The same general statement is true of Miss B.'s case, and of many others. In some, the susceptibility results simply in congestions; in others, of changes in nutrition. Thus we may have red hands and cheeks, chilblains, eczema, urticaria, recurring erysipelas with œdema, lupus, or finally Kaposi's disease. In all, the original liability is congenital and inherited. Kaposi's disease is probably the result of the most intense form of inheritance.

IV.—"Hot Eye" in association with Gout: Remarkably Corroborative Family History.

The following item of evidence is, I think, valuable in reference to the connection of certain diseases of the eye with gout. A gentleman, named W., consulted me on account of attacks of irritability, first of one eye, and then of the other. The eye would become a little red, and feel as if he had sand in it. The attacks would usually last from two to four days, but they recurred very frequently, and were a source of much annoyance. He had made his own diagnosis before coming to me, and remarked, "I never knew what they meant until, a year ago, I had an attack of gout in the great toe." He was of dark complexion. He had, of late, been very careful in his habits, but he inherited gout strongly on both sides. Having noticed the identity of name, I asked him if he was a relative of a certain Dr. W., whose eyes I had treated for gouty iritis more than twenty years ago. "Yes," he said, "I am his first cousin, and there is the same inheritance in both of us." In the latter case, the patient, then a young man, lost one eye from recurrent attacks of iritis, and had much damage to the other. His case is given in the series which I have published, illustrating the peculiar form of destructive iritis which goes with hereditary gout. Thus the two cases support each other, and afford strong evidence: firstly, as to the connection, with inheritance of gout-tendencies, of the destructive form of iritis; and, secondly, with personal proclivity to gout of the "hot eye."

V.—An Example of Egg-Poisoning.

A very good example of egg-poisoning came under my observation in April, 1883. A young married lady, whom I was advising as to diet, remarked to me "eggs, in the very smallest quantities, are poisonous to me." She said that a sister of hers had precisely the same peculiarity, and that neither of them could take eggs, in any form, or any quantity, without experiencing inconvenience. The symptoms produced were exactly those which I have noted in other cases. About an hour after taking the egg, a feeling of heat and discomfort would begin at the epigastrium, which would gradually spread over the whole abdomen. Sometimes there would be a feeling of nausea, but never actual sickness. The discomfort, which was often extreme, would last from a few hours to the whole of the day. Both the sisters had been aware of the peculiarity from childhood. It did not exist in their parents; and there was no tradition as to its having occurred in former generations. A physician, under whose care Mrs. —— had formerly been, had advised her to overcome it, and to accustom herself to small quantities of egg taken in coffee, and the like. She had found it quite impossible to follow his advice, the wisdom of which I should very much doubt.

A liability to be made ill by eggs is a form of idiosyncrasy not at all uncommon, and which causes many mistakes in diagnosis. Its subjects often never find it out for themselves, but go on taking the article which causes the symptoms which they seek to cure by drugs. I have adverted to the subject in *The Pedigree of Disease*.

[*To be continued.*]

CASE OF PITYRIASIS RUBRA? RECOVERY.

By WALTER FELL, M.A., M.B.Oxon., Wellington, New Zealand.

H. D. B., a married man, aged 36, with four children, all healthy, was first seen on July 15th, 1884.

Previous History.—He had always been healthy. There was no rheumatism or skin disease in his family. He had been very hard worked lately; was a great smoker; by profession, he was a lawyer.

Present Illness.—Fourteen days ago, he noticed a bright red patch on the inner side of the left thigh, close up to the scrotum; it was irritable and painful. A few days later, a similar patch appeared on the corresponding spot on the other thigh; thence, a few days later, it ran down both legs to the knees. When he was first seen, the rash had been out a fortnight, and his condition then was the following. Where the rash first appeared there was a deep red, almost purple, mottling of the skin, covered with fine dry scales; the part recently attacked was of a bright scarlet, and where it was just invading a new district, the surface was covered with a raised measly eruption, with no scales at all. In no part was there any trace of moisture, or exudation, or sign of pustules. His general health was good, and he continued up and about for a long time. His appetite was particularly good; the urine was cloudy, with lithates and oxalates; specific gravity 1034; there was no albumen, but an excess of urea. The bowels were open naturally; temperature 99°.

On August 3rd, five weeks after he was first attacked, his condition was as follows. The whole of the trunk, back and front, and both legs, down to the feet, the backs of the hands and the forearms, were covered with a dense raised red mottling, varying somewhat in intensity in parts, according to the age of the rash. The skin was everywhere thickened, the natural folds obliterated, so that he felt as if he were encased in leather. The legs and feet pitted deeply, and the rash faded completely on pressure. So far, the only parts not affected were the upper arms and face. The appetite and general health continued good, but he could get no sleep owing to the discomfort, and burning and tingling. There was no actual pain or real itching; he never wished to scratch himself. His tongue was clean, bowels open, temperature 99.2°. His urine contained much lithates, no albumen, and no sugar; it was diminished in quantity.

August 5th. The face, arms, and every part of him were attacked; the œdema was everywhere increasing. The face was swollen to an unrecognisable mass; the eyelids would not open. He had intense burning and throbbing in the palms of the hands. He had no sleep, in spite of sedatives. He was still able to get up, and come downstairs in a dressing-gown. He had much thirst, and drank freely of lemonade and barley-water. The quantity of urine was only 30 to 40 ounces.

August 12th. He seemed a little better. Branny scales were coming off the whole cutaneous surface in an extraordinary manner; a panful could be brushed off him in a few moments.

August 15th. A thick gummy fluid began to exude from the arms and legs, and to drip from the nose; but still the œdema did not go down. He now seemed much weaker and more despondent; his temperature began to rise; the average was over 101°.

August 17th. At the flexures of the wrists and elbows, the skin was inclined to crack, and there was a slight oozing of a gummy yellow liquid in these places. Everywhere else the skin was dry, of a deep red colour, thickened and scaly. The mucous membrane of the mouth was healthy; the nails were not raised, furrowed, or altered in any way.

He continued much the same up to August 27th, the temperature varying from 99° to 100°. Meantime, the appearance of the man gradually changed; for, probably owing to oily applications, the scaling ceased, but the deep mahogany discoloration still continued, and also the œdema. Where the oozing took place before, there was now a thick yellow incrustation; so that the appearance in parts, as on the chin and at the joints, was more that of an ordinary acute eczema. He was now very seriously ill; the necessary movements for cleaning and anointing him in bed exhausted him terribly.

August 31st. The affection seemed to have attacked the mucous membrane of his mouth; for he complained very much of it.

September 2nd. A change took place for the better. His urine at last began to increase in quantity; the amount in the twenty-four hours ran up from 24 to 60 ounces.

September 4th. The œdema had almost gone, and he was much more comfortable and hopeful. The temperature was still 101°, and his general appearance most extraordinary and alarming. The universal deep red colour, with large patches of dry and blackened epidermis peeling off in great shreds; the eyelashes gone, or else matted together; the eyelids red and raw-looking; the face blackened and peeling—all combined to make him look as if his surface had been severely charred by a fierce flame.

September 8th. He had slight pneumonia and muco-purulent expectoration. There was roughness, probably pericardial, to the left of the sternum.

September 13th. There was slight increase of cardiac dulness; the apex was a little raised. Coarse crepitation was heard at the left base.

October 18th. The temperature was normal. The heart and lung-symptoms were gone. He was slowly gaining strength.

In November, he was able to leave his room; and, towards the end of December, he was able to get away for a change to the lakes, and, after a long holiday, he came back nearly well.

At the very commencement of his illness, when the rash was on his thighs only, his wife developed an identical rash on her own thigh, so that the idea that it was contagious was almost irresistible; nevertheless, I myself, and, later on, many other gentlemen, freely handled the patient—tried, in fact, to see if we could communicate it to ourselves; but we all failed. Mrs. B. suffered so much distress from the pain and tense feeling imparted to the skin, that it was necessary to keep her in bed. By the eighth day, her rash had spread to the trunk, back and front; attacked the breasts (she was then suckling an infant, four months old); and ran up the neck, and down the arms to the wrists; so that the face, hands, and feet were the only parts not attacked. Then it began to fade; only the parts most intensely affected, between the thighs, went through the stage of deep discoloration and scaling, the rest faded like an erythema. Mrs. B., without any treatment of importance, recovered in ten days. In Mr. B.'s case, the following line of treatment was adopted. The marked suppression of urine being believed to be a clear indication for treatment (arsenic, which was tried for the first few weeks, being given up as useless), hot-air and hot-water baths, with plenty of mild drinks, no alcohol, a fish and milk diet, and a mixture of nitrate of potash, scoparium, etc., were tried. The form of diuretic was repeatedly changed; iron and digitalis were tried for some time; also jaborandi, in large doses. The baths were soon given up, for they seemed to be doing no good, although he felt more comfortable after them. Locally, various soothing lotions were tried, first, the glycerole of subacetate of lead; then unguentum diachyli. At the time when he began to improve, he was taking a diuretic of nitrate of potash, squill, and scoparium, and was swathed all over in unguentum diachyli and oiled rags. Oil of cade and vaseline mixed, and tried on a small area, seemed to make him decidedly worse.

Remarks.—The name, pityriasis rubra, is given to this case subject to correction. When the disease had lasted several months, there is no doubt that it assumed very much the appearance of an acute eczema; but I do not think any one, who had watched it from the first as I did, could deny that it followed very closely the course of the disease described as pityriasis rubra by Mr. Hutchinson, in his work on *Rare Skin Diseases*. In fact, except for the nails being unaffected, I think his description applied with wonderful accuracy to the case; the complete universality of the rash; the extreme depression, almost terminating in death; the abundant desquamation; and the absence, for the first six weeks, of anything like vesicles, moisture, or exudation, all tend to negative the idea that it was eczema.

VISCERAL LESION OR DISORDER, AND MENTAL DISEASE.

By JAMES ADAM, M.D.,

Resident Physician, etc., West Malling Asylum; late Medical Superintendent of the Crichton Royal Institution.

Disease, or disordered function of internal organs, it is well known, go hand in hand with well pronounced mental disorder. Although it cannot be stated, with perfect certainty, that these stand to each other in the relation of cause and effect, this much may, at least, be affirmed, that bodily disease or disorder not unfrequently determines the character of delusion, or the form which mental disease assumes.

Thus, the childless wife, past her climacteric, finds, as the effect of an epitheliomatous uterus, the pains which she fondly brings herself to believe are the long-looked, and wished-for, pains of labour; whilst the maniac of persecution traces, in the agonies of pain which he actually undergoes from organic visceral disease, only the cruel influences and machinations of his enemy, or of the evil one, upon him.

An interesting case of delusion, stated to be the result of intestinal

accumulation, was reported in the BRITISH MEDICAL JOURNAL of April 10th; a similar case has since come under my own care, a brief report of which may also prove of interest to some of the readers of the JOURNAL.

My patient, a married lady, is also about 50 years of age. She has always been healthy, has had a family, and there is no trace of hereditary tendency to mental disease. The duration of mental unsoundness, when she came under my care, was said to be about three weeks. Its cause was stated to be anxiety in family matters. The mental symptoms had been great melancholy and depression; determined opposition when asked to do any ordinary or rational thing; obstinate refusal of all food; constant restlessness; tossing her hair about and tearing it; walking about in her night-clothes; violently refusing to be dressed. She was so violent that she could not be kept in any one position for a moment. She was absolutely incoherent in conversation; had not slept for many nights; and could not be controlled.

On examination, she was found to be violent and resistive; her hair was in great disorder; she was constantly restless, moved continuously, swaying backwards and forwards from one foot on to the other. Her breath was offensive, and had the odour peculiar to abstinence from food. She was profoundly taciturn, incomprehensive, lost, and bewildered; and absolutely refused all food, nourishment, or even water. It was found necessary, in order to support her strength, at once to administer liquid nourishment by means of the stomach-pump; and this was, of necessity, afterwards repeated three times daily. At the end of a week, all medicines and enemata given having failed to act satisfactorily upon the bowels, and it having been ascertained that the same condition of things had been in existence three or four weeks previously, examination *per rectum* was made, when a dense and hardened mass of scybala was found; it was broken up, and partially removed by means of spoon-handles; and this, followed by a renewed enema of several pints, thoroughly evacuated the lower bowel.

Up to this time, the mental symptoms had continued as they have already been described, notwithstanding also a very large amount of liquid nourishment and stimulant administered mechanically; the tongue had remained dry, coated, parched, and parchment-like; the lips and teeth were similarly coated, the former becoming dry and excoriated. But, very soon after the free evacuation of the bowels, all the worst symptoms began gradually to disappear. Consciousness and comprehension returned, and attempts were made to partake of food and nourishment naturally. These favourable symptoms have steadily gone on since; and now, the third week of treatment of what promised to be a formidable and prolonged attack of melancholia, with stupor, finds the patient calm, coherent, sensible, industrious—with, in short, convalescence perfectly established, and discharge from care imminent.

A CASE OF RHINOSCLEROMA.

BY SIDNEY DAVIES, M.A., M.B.(Oxon.), Cairo.

THE patient was a woman, named Sittayta Ahmed, aged 30, a native of Egypt, and living in Cairo. Her occupation is cooking and selling sheeps' heads and trotters. She has been married twelve years, and had six children, four of whom have since died.

History.—She did not remember having any previous illness, with the exception of an ulcer on her left wrist. About a year before her marriage, she first noticed a small swelling in the septum nasi, which had gradually increased and extended until the time I saw her. There had never been any discharge, and she had never noticed anything wrong in her throat.

Description.—She was first seen by me in the beginning of March, 1885, and then presented the following appearance. She had a healthy complexion, was well nourished, and pregnant; she had ulcerations of the corneæ. The appearance of her face was striking, and rather repulsive, owing chiefly to the great breadth of the nose. The internal canthi of the eyes were two inches apart, and the breadth between the alæ nasi also two inches. The nose appeared correspondingly flattened. The nostrils were filled up by a hard resisting growth, of the same colour as the lips; this growth extended from the lower border of the nostrils half way down the lips. This part of the growth was elevated about a quarter of an inch above the skin. The nostrils were represented by two pin-holes, through which a probe could be passed to the back of the pharynx. The septum and all the nasal cartilages were much thickened. The nasal bones seemed unaffected. The soft palate and fauces were abnormal; the uvula was not visible, and the mucous membrane of the soft palate appeared pale, infiltrated, contracted, and rigid. On passing the finger into the pharynx, a growth could be felt filling up the posterior nares, similar, but not so dense, as that in front. The postcervical glands were enlarged. There was a moderately enlarged thyroid body. The legs were normal.

Treatment.—The patient was treated for three weeks with iodide of potassium in large doses, and liquor hydrarygri perchloridi. No improvement took place, and she was anxious for an operation. Accordingly, on April 3rd, in the presence, and with the assistance of Drs. Vernoni, Sandwith, and Richer, I cut away the chief part of the growth in the left nostril, and then applied the benzine cautery, burning a passage through to the pharynx. The wound healed in a few days, and the patient found relief and comfort from the enlarged meatus. At her request, I operated in a similar way on the right nostril on April 14th, making a passage rather larger than on the first occasion. I saw her again in the middle of October. Her appearance was somewhat improved, owing to the partial destruction of the growth on her upper lip; but what she considered of higher importance, her facility of respiration and speech continued very greatly enhanced. The nasal meatus on each side had partially filled up, but to a smaller extent than I expected. They would admit a fair sized quill.

Microscopic Examination.—Part of the growth removed in the operation was kindly examined for me by Dr. Brugich, at the Khedivial Laboratory, by sections, staining, and cultivations; no bacteria were found. Sections showed a small celled infiltration of the papillæ and chorion of the skin, similar to the appearances described by Kaposi.

REMARKS.—Rhinoscleroma was first described, in 1870, by Hebra and Kaposi, and is still so rare a disease, that no excuse is needed for reporting a new case. When I first saw this case, I regarded it as an unusual manifestation of syphilis, the woman having a doubtful syphilitic history. While the patient was under treatment, I noticed the account in the BRITISH MEDICAL JOURNAL for March 7th, 1885, of the case described by Drs. Payne and Semon, by means of which I at once identified the present case as rhinoscleroma.

As far as I am aware, this is the first case observed in Egypt. It was shown by me to many of the leading members of the profession in Cairo, including Dr. Sonsino. None had seen a similar case before, excepting Dr. Urldt, who had seen one in Germany, and recognised the similarity of my case to the one he had seen. My case agrees in nearly all particulars with that of Drs. Payne and Semon. Notes of epidermic cells were not observed, however.

Dr. Morell Mackenzie has given a short summary of all that is known respecting this disease in his *Diseases of the Throat and Nose.* He remarks: "Of a total of about forty cases hitherto observed, all but three were met with in Vienna or its neighbourhood. Two of these occurred in Italy and one in France, but I am not aware of a single instance in which the disease has been noticed in any other country."

A CASE OF THYROIDECTOMY.

BY J. P. BRAMWELL, M.D., L.R.C.S.,
Visiting Surgeon to the Perth Infirmary.

TWELVE months ago, a young farmer, in the neighbourhood of Perth, consulted me regarding a swelling in his neck, which I found to be a goître. It was not of large proportions, but was situated directly over the trachea. There were no urgent symptoms, but, as I had shortly before seen a goîterous patient die of sudden asphyxia, in whom the growth was very large, I deemed it safest to ask my patient to have his thyroid gland removed before it became larger. To this proposal he consented, and was placed under my care in the Perth Infirmary. A free incision was made in the mesial line, and the whole gland dissected out. The hæmorrhage was very profuse and alarming, but was at last effectually arrested.

We had not, however, done with our troubles. High fever ensued, followed by an attack of erysipelas all over the anterior aspect of the neck, and then a free suppuration of the wound. All this, however, subsided shortly, and the wound closed apace. In two or three weeks afterwards, he returned home in good health.

REMARKS.—I have watched this case, from time to time, during all this period, by inquiring of his relatives, and by personal interviews with the patient himself; but there never has been any appreciable degeneration, either mental or physical—in fine, no cachexia strumipriva. With such a fact before us, it is tolerably clear that we have not as yet discovered the true function of the thyroid, and that the whole question is, as yet, *sub judice.* The thyroid has been credited with too many functions to be all correct; for example, a destroyer of ptomaines, a metaboliser of muceine, a regulator of the cerebral circulation; and a medical friend informs me that, after an operation

for removal of this gland, which proved fatal, he found a ligature firmly tied round one of the pneumogastric nerves (not by him). If this unfortunate had lived, we would have seen respiratory derangement enough, and thus a fourth duty would have been assigned to the thyroid—a co-ordinator of respiratory function. It is a begging of the whole question to say, as Koler has done, that, where cachexia strumipriva does not follow in such cases, the thyroid was only partially removed. Certainly, it was not so in my case. May the difference of results not be caused by some nerve-lesions having been inflicted during the operation in some cases, and not in others? Too much has certainly been made of the fact that cretins have diseased thyroids. The diseased condition of the thyroid is here not the cause of the other morbid conditions, mental and physical, but simply one of many which make up a pathological whole.

We must wait for more light on this vexed subject.

SURGICAL MEMORANDA.

DISLOCATIONS OF THE HUMERUS.

I THINK I may justly lay claim to priority in suggesting abduction as a means of reducing dislocations of the humerus. My method was described by Dr. Ryder in the JOURNAL of May 8th, and it was suggested in 1881; whereas, Dr. Macleod's dates only from January this year.

In the descriptions given of dislocations reduced by Dr. Macleod's method in the JOURNAL of May 22nd, both surgeons unwittingly steadied the scapula, Mr. Miall with one hand, and Mr. Beevor with one heel. I have suggested that that bone should be manipulated with the hand during abduction and extension; possibly it may be as successfully steadied with the foot, though the depressing power over it will thus be lost.

C. R. ILLINGWORTH, M.D.,
Clayton-le-Moors.

THERAPEUTIC MEMORANDA.

TEREBENE AS A GENERATOR OF OZONE.

IN the leading article in the JOURNAL of March 13th, on respiratory therapeutics, I was pleased to see that the treatment of lung-diseases by inhalation was considered to be beginning to be adopted by the profession at large. It has been for years my favourite method of treatment, in a district where, unhappily, pulmonary complaints are unusually abundant. In the BRITISH MEDICAL JOURNAL for 1881 (Vol. ii, page 666), I stated that, after four years' trial, I had adopted terebene in preference to other antiseptics, and had administered it both internally and by inhalation in over two hundred cases of phthisis, bronchiectasis, chronic bronchitis, and other pulmonary complaints characterised by profuse purulent expectoration. Further experience has strengthened this opinion. In connection with this subject, I wish to call attention to a point which appears to have been overlooked by recent writers on the subject; namely, the formation of ozone which attends the slow oxidation of the various members of the turpentine group. When I went to reside at the North Staffordshire Infirmary, ten years ago, I was struck with the remarkable success which attended the treatment of chronic lung-diseases; a fact which I at first attributed solely to the elevated site of the hospital. But I afterwards noticed that there was a high percentage of ozone in the atmosphere, especially when the wind was from the west, where there are extensive tracts of pine woods. It is well known that the air in pine-woods contains a large amount of ozone. Mr. W. Goss, a pottery manufacturer in Stoke, informed me that he had noticed that the men and girls employed as enamel painters, were exceptionally healthy compared with the other pottery workers, although the hygienic conditions were mostly unfavourable; the painting having to be done in hot close rooms. He attributed this entirely to the turpentine, which is used as a medium for mixing the colours. Spirit of turpentine is exposed in the room, in flat leaden vessels, where it speedily oxidises. Part of the oxygen liberated attacks the vessel, which becomes coated with oxide of lead: the rest escapes into the atmosphere in the form of ozone. Pursuing this subject still further, I have made inquiries at several small shops where paraffin is sold, and have found that the inmates are unusually healthy and fresh-looking, considering the bad hygienic construction of their dwellings. I have likewise found two cases where the vendors had previously suffered from chronic chest-disease (consumption they told me) and had taken to selling paraffin, in addition to their other articles, and the result had been permanent relief of their ailments. Bearing these facts in mind, I have, for some time past, treated chronic lung cases by exposing terebene and turpentine in the room, in flat shallow dishes. The results have been, as yet, satisfactory, but further trial is necessary before a definite conclusion can be drawn. I should be obliged if any member of the Association can inform me whether any statistics have been made as to the health and immunity from lung-diseases of residents in pine-woods, vendors of, and workers in, paraffin and other volatile hydrocarbons; and also whether any experiments have been made by exposing any of the above substances in wards for consumption, or other sick chambers. If a curative action can be proved, it would be useful in indicating a site for a sanatorium for chest-diseases.

ALEXANDER M. MCALDOWIE, M.D., Stoke-on-Trent.

CLINICAL MEMORANDA.

EXOPHTHALMIC GOÎTRE: FAMILY PREDISPOSITION.

THE following cases of exophthalmic goître recently came under my care, and show an apparent family predisposition.

Mrs. V., aged 35, married, had a well marked exophthalmos, and a goître of the size of an orange. Her pulse was rapid and variable, with enlarged heart, and a systolic mitral murmur; the disease was of three years' duration.

E. B, sister of Mrs. V., about 28, single, had very marked exophthalmos, and a moderate sized goître. The pulse was about 90 to 105, her heart normal. There were signs of incipient phthisis at the left apex. I was informed, by the medical man who attended the family for some years, that a third sister, presenting similar symptoms of Graves's disease, died of phthisis when under 30; and the mother of all three sisters died at 42, also from phthisis, and with distinct symptoms of exophthalmic goître.

ROBERT B. WILD, B.Sc., M.R.C.S.

GASTRIC NEURALGIA.

MR. E. C., a clerk, aged 21, anæmic, and weighing about 15 stone, consulted me in June last for dyspepsia, etc., with the following history and symptoms. He had had no previous illness, excepting those attending childhood. He had always lived temperately; his habits were sedentary; his meals were irregular, and at long intervals, generally hurried; he had bad teeth. In the last few years, he had had great mental anxiety. There was no history of gout, rheumatism, or syphilis. He was gaining weight rapidly. During the last three years, he had suffered with attacks of gastric pain lasting several weeks, recurring every few months; these had gradually increased in severity till the present time. He had been treated at different periods for dyspepsia, but with only temporary relief. When I first saw him, he appeared to be suffering acutely, and to be in great want of sleep. He complained of sharp shooting and griping pains, immediately below the ensiform cartilage, which came on about three hours after taking food, being particularly severe at night, interfering with rest. Upon eating, the pain ceased instantly, and relief lasted two to four hours. There was neither sickness, nausea, pyrosis, nor jaundice; and, excepting pain, insomnia, and constipation, he enjoyed good health.

The diagnosis, at first, somewhat puzzled me; but, by exclusion, I suspected some neurosis, since the pain was relieved by food, and occurred about the time when only the more insoluble and larger masses of food would remain in the stomach; these, acting as irritants, would easily cause the symptoms. There was evidently deficient proteolytic action, either due to want of hydrochloric acid, or of the so-called peptic ferment. Doubtless, insufficient mastication was answerable for a great deal.

He was ordered a mixture of tincture of nux vomica and hydrobromic acid, three times daily; also twenty minims of dilute hydrochloric acid, in a wine-glassful of warm water with each meal. He was also directed to take regular meals and light diet, without stimulants; to take judicious exercise, to have Turkish baths, and to wear flannel shirts; also to have a pill of nux vomica, belladonna, and socotrine aloes. In a few days, he was relieved, and, in three weeks, was free from pain. There has been no recurrence, and when I saw him last, he expressed himself as being "perfectly well."

I have also had three cases almost similar, which speedily gave way to a like treatment; and I venture to record the above, believing it to be a typical and instructive example of that somewhat obscure disease, gastric neuralgia.

V. H. WYATT WINGRAVE, M.R.C.S., L.S.A., Southampton Row.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

QUEEN'S HOSPITAL, BIRMINGHAM.

ANÆSTHESIA OF THE HAND.

(Under the care of DR. SUCKLING.)

H. A., a railway porter, aged 50, was admitted to the hospital, complaining of loss of power and sensation in the left hand. He had met with several accidents on different occasions; among others, he had his ribs broken, and his knee dislocated. On March 21st, 1885, he was lifting, with another porter, an 18-gallon can of milk; his assistant dropped the can, and the patient's left arm was badly strained. He continued his work for four days, but was unable to use his left arm; the arm had improved a little since, but remained very feeble. The pupils were unequal, the left being the larger; the response to light and accommodation was normal; clonic spasm of the iris was observed on both sides. There was tremor of the upper lip, when it was voluntarily elevated over the teeth. The patient had a peculiar furtive expression. There was complete anæsthesia of the left hand, tactile, thermal, and painful sensations being unperceived. The muscular sense was little affected; he could distinguish between $\frac{1}{4}$ oz. and $\frac{1}{2}$ oz. weights. The anæsthesia extended upwards to the wrist, passing round the wrist in a slightly irregular line, and ending abruptly. The limit of the anæsthesia, however, varied much when the patient was blindfolded,—a point at one time anæsthetic was the next moment normal, and this variation often extended for a distance of an inch. When the patient was found to vary in his statements as to the sensibility—if he knew from remarks made in his hearing that he had varied—he immediately complained of severe paroxysms of pain, which, he said, shot upwards from the fingers, and which he declared deadened the feeling. There was no alteration in the colour or temperature of the hand; no œdema or trophic change. The grasp was feeble, but there was not the slightest wasting. Faradism to the various nerve-trunks caused contraction of the muscles supplied by them, the nerves of the left limb being slightly more excitable than those of the right. The most powerful current obtainable with a two-celled Stoehrer's battery, caused him very little pain (electrical anæsthesia), but this was the case also on the right side. The knee-jerk was present on both sides.

REMARKS BY DR. SUCKLING.—Was this anæsthesia, which was complete, and altogether out of proportion to the paresis, due (1) to damage to the roots of the brachial plexus or nerves, or (2) was it functional? In favour of (1) we can only enumerate the following points. (*a*) The inequality of the pupils, the left being the larger. Ferrier has shown that the dilating fibres to the pupil pass from the cord by the first dorsal nerve; and, in destructive lesions of the brachial plexus, the pupil on the same side has been observed to be contracted, not dilating when the eye was shaded. Possibly, the slight dilation of the pupil on the left side may indicate irritation of these fibres, due to a slight injury. (*b*) The slight increase in the faradaic irritability of the nerves to the left arm. In favour of the functional nature of the illness, we have the following facts. (*a*) There were no trophic changes, no wasting, no bullæ, no œdema, no vaso-motor changes, although the anæsthesia was complete (*b*) There was marked disproportion between the anæsthesia and the paralysis. (*c*) The anæsthesia varied, its extent upwards varying, within a few seconds, an inch or more when the patient was blindfold, but not when he could see his hand. (*d*) The preservation of the faradaic irritability of the nerves; while this was quite compatible with injury, yet the injury could not have been severe enough to cause complete anæsthesia of the hand. (*e*) The length of time that had elapsed since the injury—ten months—the absence of all trophic changes, showed that the nerves were only slightly damaged; and, even if there had been a little numbness at the first, it ought to have passed off. The evidence, then, is greatly in favour of the view that the anæsthesia was functional. If so, was the man malingering, or was he hysterical or hypochondriacal? Motive is all-important in the diagnosis of malingering; it is, of course, never safe to make this diagnosis until it is a certainty. At the Birmingham Workhouse Infirmary, during the past three years, I have had upwards of 15,000 in-patients; among these, I have met with only one malingerer. Several cases, which greatly annoyed me by the persistence of symptoms quite unrelieved by my treatment, and without being accompanied by any objective signs, turned out to be hypochondriacal, the patients becoming melancholic, and finally being sent to the asylum. Hence, whenever I meet with a patient—a man far more commonly—who has some complaint which treatment does not affect, and whose symptoms are entirely subjective, I always suspect hypochondriasis. I incline to the diagnosis of hypochondriasis in this case.

The diagnosis of functional anæsthesia having been made, the patient's left arm was faradised daily with the brush, powerful currents being used. The anæsthesia at once began to be less in extent, and, after a few days faradisation, the fingers only were affected. The fact that the patient varied in describing the extent of the anæsthesia when blindfold, but not when looking at his hand, the area being marked off by nitrate of silver, and also that once, when blindfolded and asked if he could feel a pin prick in the middle of the palm, he said, "I cannot feel in the centre," would make us believe him to be a malingerer; still he looked ill and depressed; and it is more charitable to suppose him to be hypochondriacal.

OPHTHALMOPLEGIA EXTERNA.

(Under the care of Dr. SUCKLING.)

J. B., a man, aged 67, a Japan worker, was admitted on November 17th, 1885, with almost complete paralysis of the muscles supplied by the right third nerve, and the left third and sixth nerves. He could tell nothing of his family history of importance. He himself had always been healthy, and had never suffered from rheumatism, gout, or syphilis.

About five weeks before his admission, he was much exposed to the cold weather, after which he had conjunctivitis of the left eye, and dropping of the left eyelid; the right eyelid also gradually dropped a few days later, but not to such an extent as the left.

Dr. White sent the following report. "Vision in each eye = $\frac{5}{6}$. As the lenses were slightly hazy, this was considered normal. Both fundi quite healthy. Slight tortuosity of veins alone was noticed. Fields of vision normal." When admitted, there was nearly complete ptosis on the left side, and partial ptosis on the right. The right eye could be moved outwards, and downwards and outwards to the normal extent, but the upward, inward, and downward movements were much restricted. The pupil was in a medium degree of dilatation, and responded normally to light and accommodation. The left eye was much restricted in its movements, in all directions except downwards and outwards. The pupil on this side was a little larger than the right, but responded normally. The muscles supplied by the third nerve on the right, and by the third and sixth nerves on the left, were affected. The plantar reflexes were absent; the knee-jerk on both sides was normal. He complained of double vision, and slight vertigo occasionally, which caused him to stagger in his walk, and of frontal headache. The memory was defective. There was no albumen in the urine, no fever, and no change in either fundus oculi.

The patient was treated with iodide of potassium in increasing doses, with counter-irritation over both temples. He improved daily, and was discharged on December 7th, greatly improved, having no difficulty in keeping the eyelids open, and the movements of the eyeballs being almost normal. At the time of his discharge, he was taking thirty-six grains of iodide of potassium thrice daily.

REMARKS BY DR. SUCKLING.—As to the diagnosis in this case, the symmetry of the paralysis, the third nerve being affected on both sides, and the non-implication of the internal muscles of the eye, the iris responding normally with preservation of the conjunctival reflex, indicated a central lesion. Mr. Hutchinson reported seventeen cases of what he called "ophthalmoplegia externa," or "symmetrical immobility of the eyes with ptosis," in the *Medico-Chirurgical Transactions* (vol. lxii, 1879). Incompleteness in the degree of paralysis was a marked feature. Inherited or acquired syphilis was present in ten out of his seventeen cases, rheumatism in a few; ten of the patients were males, some quite old men. Usually the onset was gradual, but occasionally rapid. The recovery was not complete in any one case. One *post mortem* examination was made, and a degeneration of the nuclei of origin of the motor nerves to the eye, similar to that met with in the spinal cord in progressive muscular atrophy, was found. Dr. White pointed out, and I agreed with him, that the rapid onset, after exposure to cold, indicated in this case an inflammatory rather than a degenerative lesion. This was proved by his speedy improvement under iodide of potassium in large doses, and counter-irritation. Mr. Hutchinson advised iodide of potassium in large doses, and one patient of his took an ounce and a half in twenty-four hours with good results.

January 14th.—The patient had now completely recovered, the movements of both eyes being normal. He had taken half-drachm doses of the iodide thrice daily since he left the hospital.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 25TH, 1886.

GEORGE POLLOCK, F.R.C.S., President, in the Chair.

The Morbid Anatomy and Pathology of Encysted and Infantile Hernia. By C. B. LOCKWOOD, F.R.C.S.—After commenting upon the practical importance of the subject, and briefly referring to its history, the writings of Hey and Cooper and other authorities were quoted. It was shown that the origin of encysted hernia was usually attributed to the stretching of a cicatricial membrane which was supposed to obstruct the upper end of the patent processus vaginalis. This view was rejected because (1) such a septum had never been seen, and its existence was doubtful; (2) the specimens in the museums afforded no indication that cicatricial tissue had entered into their composition; (3) the sac of these herniæ was always composed of two layers of peritoneum; (4) an examination of the tunica vaginalis showed that it either communicated, in cases of encysted hernia, with the peritoneal cavity, or was simply closed by apposition and adhesion of the walls. Upon these and other grounds, it was concluded that the various herniæ called encysted belonged, in reality, to the infantile variety. In discussing the pathology of infantile herniæ, they were attributed to some event connected with the transition of the testicle, which was described. It was stated that the processus vaginalis preceded the testicle, and that it was drawn along by fibres of the gubernaculum which were inserted into it. The usual account of that muscle was mentioned, but additional bands of it were described attached to the external sphincter of the anus and tuber ischii; and others were mentioned ascending the back of the processus vaginalis, with the spermatic vessels, to the peritoneum. These fibres were identified in the spermatic cord as the "internal cremaster;" and, after describing the looseness of the peritoneum of the back of the abdomen, the way in which it accompanied the transition of the testicle was explained. A band of muscular fibres, which passed from the epididymis to the inner sac-wall of the infantile herniæ, was next described, and identified as the upward prolongation of the gubernaculum. These fibres were considered to have much to do with the origin of the hernial sac. The results of the inquiry were (A) that the London museums contained no specimens of encysted hernia, such as was usually described; (B) that the various specimens designated by that name belonged to the infantile variety; (C) that the latter owed their origin to the tractive power of the gubernaculum testis. Drawings of specimens from the museums of St. Bartholomew's, Guy's, St. Mary's, and St. Thomas's Hospitals, as well as various diagrams, were exhibited.—Mr. HOWARD MARSH congratulated Mr. Lockwood on his paper, but observed that its excellence made criticism difficult and scanty. He had himself found Hey's description of encysted hernia somewhat unsatisfactory, though it was clear enough; but Mr. Lockwood had, he thought, set them all right on this important and interesting subject.—Mr. LOCKWOOD had to thank the curators of the various museums which he had looked through for their kindness in allowing him to make some examination of the specimens. They had not turned out to be all what they were described to be; one, in fact, which was described as an infantile hernia, proved to be a fatty tumour.

A Case of Imbecility with Choreoid Movement. By FLETCHER BEACH, M.B., M.R.C.P., Medical Superintendent, Darenth Asylum.—The author recorded the case of an imbecile patient, of fairly high type, aged 17, who, as the result of epileptic fits, lost some power on the left side, and in whom, afterwards, continuous spasm of the left hand and arm was noticed. A description of the movements, which ceased shortly before death, was given. At the necropsy, the parietal regions of the brain were more resistent than normal, and the occipital convolutions were firm and hard; the white matter of the first temporo-sphenoidal convolution, of the inferior parietal lobule on both sides, and of the occipital convolutions, on a level with the middle part of the lateral ventricles, appeared fibrous. The chief changes noticed microscopically were: first, great increase in the number of vessels; secondly, distension of many of these vessels; thirdly, extensive infiltration of the tissue with leucocytes, especially in the circumvascular sheaths of the vessels. The case was regarded as one of the post-hemiplegic disorders of movement, allied to those described by Dr. Gowers (*Medical-Chirugical Transactions*, 1876). The difference between the symptoms noticed in athetosis, and in the disease under consideration, were contrasted; the essential difference being that, according to Dr. Gowers, in the mobile spasm seen in partially paralysed limbs, there was a fixed spasm superadded to the mobile spasm. The pathology of the affection was then discussed. Dr. Gowers had said: "The symptoms point clearly to damage to the grey matter of the brain, to local perverted nutrition of nerve-cells, in consequence of which they overact, either spontaneously, or on the stimulus of a volitional impulse, which is by their over-action perverted or irregularly distributed." In the case under notice, great congestion of the grey matter of the brain was present, and it was held by the author that the microscopic appearances present were pathological. The theory that the nerve-cells, in this case, had over-acted from perverted nutrition, due to excessive supply of blood, and hence the spasms, was brought forward. Mention was made of the fact that similar appearances had been noticed in the medulla from a case of hydrophobia, and, to a less degree, in the spinal cord from a case of tetanus.

The Treatment of Stricture of the Urethra by Electrolysis.—By W. E. STEAVENSON, M.D., M.R.C.P., and W. BRUCE CLARKE, M.A., F.R.C.S. The more extensive use made of electrolysis in surgery and gynæcology abroad, and especially its successful employment in the treatment of stricture of the urethra, had induced the authors to undertake a series of observations to test the accuracy of the reports which had reached this country. Their results bore out in every particular the results of success they had received from America. Electricity, on account of its power of splitting up compounds into their chemical elements, could be used as a substitute for ordinary caustics to the human body. It could be used with especial advantage to parts difficult of access, such as the male urethra and the uterine cervical canal, and it could also be applied to these and other regions where the application of other caustics was attended with a certain amount of danger. Its effects could be limited to the points touched by the electrode. The caustic effect could be arrested, or not commenced until the applicator, in the form of the electrode, was *in situ;* and the duration and extent of the caustic action were entirely under the control of the will of the operator. The treatment of stricture of the urethra by this method was the most simple, and, perhaps, the most striking in its results, and had, therefore, been selected as the first on which to collect and report observations. In this paper, the details were given of six cases of stricture of the urethra treated by electrolysis, the *modus operandi* was explained, the steps of the operation were given, and the advantages of this method of procedure were summed up. There was usually no bleeding. If hæmorrhage did occur, it was accidental, and usually showed that too strong a current had been used; no anæsthetic was required. If pain or discomfort were produced, it was trifling. The patient could, in the case of slight strictures, pursue his ordinary occupation during the period of treatment. No antiseptics were required, as the process itself was aseptic. In the majority of cases, there was no contraction or return of the stricture. Eschars produced by caustic alkalies were said to heal with less contraction than wounds produced in any other way, and electrolysis with the negative pole of a battery was a means of applying the same destructive action as was caused by the caustic alkalies to parts difficult of access in a way which was impossible by any other method. Probably, other chemical decompositions and combinations took place at the negative pole besides those characteristic of the caustic alkalies, but they had not, up to the present time, been thoroughly made out.—Mr. BERKELEY HILL was much interested by the paper, but was sorry to say that he could not find the conclusions of the authors quite satisfactory. The cases had been related, after the manner of the American writers on the subject, without enough detail as to the size, nature, and position of the stricture. One case had suffered from stricture, more or less, for twenty years; he had often been relieved for a time by ordinary dilatation, and then had slowly relapsed. The relief given by Dr. Steavenson and Mr. Bruce Clarke dated only from about eight months ago, and he expected that his discomforts would return; at any rate, at present, there was no proof of a cure. It was universally admitted that, by patient pressure, a larger catheter could be passed; but he thought the authors had hardly made due allowance for this in their account of the increased size of the electrical bougies passed, which might perhaps be due to patience as much as electricity. He had himself carefully considered the American cases that Dr. Newman had published, and had followed his plan in treating one case of his own. There was stricture, two inches and a half from the meatus, probably behind an old urethral abscess; he could see clearly with an endoscope, which he was sorry the authors had not used. He passed a needle, which formed one pole of the electric circuit, into the scar-tissue, and could see, with the endoscope, that nothing more happened

than the occasional liberation of a bubble. The patient felt no pain at all, except on making and breaking the current; he measured the current's strength by the patient's feelings. After fifteen minutes' application of the current, he found the stricture enlarged from 19 to 20 of the French scale. After further treatment, in the same manner, it gradually contracted from 20 to 16; and as cure seemed very unlikely by such a process, he resorted to other methods, and found no difficulty in widening it.—Mr. F. SWINFORD EDWARDS had treated a case, with the help of Dr. Steavenson. He had first seen the patient two and a half years ago, when he found three strictures, two penile and one subpubic, of size No. 12 (French); these he gradually dilated to No. 25. For two years, the patient was lost sight of, and then returned with three strictures, distant ½ inch, 4 inches, and 5½ inches from the meatus, admitting only No. 4 (French). Dr. Steavenson applied a No. 3 electrode and current of from 5 to 8 milliampères; this did not pass; but the flow of urine was improved, and, a few days later, a bougie, No. 10, could be passed; and, after a few weeks under electrical treatment, a bougie, No. 26 steel or No. 28 pewter, could be admitted. Whether it was to be called strictly a cure or not, it was certainly satisfactory in enabling the patient to get about and do his work; and his case was a bad one, which would otherwise have needed treatment with an Otis's dilating urethrotome. He hoped the treatment would be further investigated in hospital cases.—Mr. G. BUCKSTON BROWNE thoroughly agreed that it would be a very good thing if the practised hands of the seniors in the profession could be brought to try this method; for there was hardly any point in which more experience was needed than in estimating and accurately diagnosing stricture. He was inclined himself to attribute the results embodied in the paper to the dilatation, not to the electricity; else why was it found advisable to use gradually larger and larger electrodes? Even pressure, without passage of a catheter, often did much to facilitate the passage of urine. He had considered Dr. Newman's cases with some care, and could not help calling attention to one remarkable point in them, that they were, every one of them, successful.—Dr. STEAVENSON observed that very little of the reply fell to his share. He was not familiar with the endoscope which Mr. Berkeley Hill had shown. In Mr. Hill's cases, he understood there had been puncture, and he certainly was not surprised that contraction had followed. They had used bougies, of gradually increasing size, to keep in contact with the walls of the urethra.—Mr. BRUCE CLARKE said he had been quite prepared to meet the two chief objections that had been urged: that the cases were not really of organic stricture; and that they were not really cured. As to cure, he was bound to admit that the operations had been performed last August, and not treated since; they were under observation, and had not relapsed; only time could prove their ultimate cure. As to the point that they were spasmodic strictures, he could not admit it; in one of the cases, there had been extravasation of urine; at first, nothing could be introduced, but, after electrical treatment, he could pass No. 11 (English), and that was a success as great as any after a cutting operation.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 20TH, 1886.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Nerve-Stretching for Leprosy.—Dr. E. DOWNES read a paper on this subject, founded on a large experience in nerve-stretching, for leprosy and sciatica, in Kashmir. Of forty-two cases recorded, thirty-two were well-marked cases of leprosy, and, in all these, anæsthesia of the lower extremities was an early and well-marked symptom. It was sometimes absolute, and sometimes partial, being occasionally accompanied by absence of pigment, or by tubercles, the latter occurring more commonly on the face, and often with severe neuralgia of the deeper parts. Ulceration commonly occurred in course of time, and especially in the feet, possibly beginning, in some cases, as a result of direct injury to the anæsthetic tissues, and often extending to complete destruction of the parts. Some of the cases recorded had lasted from one to seven years, and longer in two instances. The operation was done through a three-inch incision at the back of the thigh, the finger being hooked round the nerve, and the limb being lifted from the table. All the cases were benefited by the operation, and, in some, the ulcers healed completely, and sensation was nearly restored to its normal state. The latter generally took place in the first few days. This success was fully appreciated by the patients, who repeatedly sent their friends, suffering from leprosy, to be similarly operated upon. The author observed that an exclusive diet of dried fish was not always an element in the production of the disease, many of his cases coming from districts where none was obtainable. He believed the ulceration to be due to peripheral neuritis, consequent upon some altered condition of the blood, for which the presence of bacilli might be answerable.—Dr. BUZZARD observed that these cases afforded direct proof of the relation of leprosy to affections of the peripheral nerves, and not to those of the spinal cord. The neuralgia, and the immediate results of stretching, were strong evidence in this direction. Although few of the English medical men had to deal with leprosy, he thought that a practical knowledge of the disease would lead to more thorough investigation of other forms of degeneration of nervous origin. Leprosy was, at one time, endemic in England, and he suggested that remnants and traces of it might still be existent in the form of localised atrophy, or leukoderma.—Dr. DOWNES, in reply to questions, stated that in one of his cases, sensation had continued good for two years; none others had been watched for so long. He had obtained uniformly good results in nerve-stretching, for neuralgia and sciatica.

The Albumens of the Urine.—Dr. ROBERT MAGUIRE read a paper on this subject, of which the following is an abstract. There might exist in the urine serum-albumen, paraglobulin, egg-albumen, hemialbumose, peptones, and mucin. Serum-albumen might show different physical properties, while its chemical constitution remained the same. The researches of previous observers were criticised, and it was shown that extreme discrepancies existed with respect to urinary albumens. The author had succeeded in separating globulin from serum albumen by the method of Hammarsten, the urine being neutralised and then saturated with magnesium sulphate, the globulin being precipitated thereby, the serum-albumen remaining in solution. He had thus been able to estimate the relative amounts of globulin and serum-albumen, and had found, in two cases of granular kidney, that the proportion was at 2½ of albumen to 1 of globulin, and as 4 to 1 respectively. In one case of anæmic albuminuria, it was as 1 to 2½, and, in four similar cases, the urinary albumen was composed entirely of globulin; three of these were cases of functional albuminuria, and the fourth one of puerperal albuminuria, in process of recovery. Egg-albumen did not occur pathologically in the urine, and he had found it extremely difficult to produce it experimentally, unless injected into the veins. He had himself swallowed the whites of twelve eggs without any results in the urine. The paper was concluded by reference to the occurrence of hemialbumose peptones and mucin in the urine.—Dr. BROADBENT, in acknowledging the great practical value of Dr. Maguire's observations, commented upon the clinical varieties of urinary albumen, sometimes associated with conditions of high arterial tension, and sometimes with the reverse. Patients, in the former condition, were rarely in vigorous health, as suggested by Dr. Maguire, but always more or less ailing, and tonics did no good; these cases were generally associated with overexertion or mental worry. The albuminous condition in early chronic renal disease was not always of the ordinary type.—Mr. SEDGWICK asked for information as to the relative amount of urea in the cases examined.—Dr. M. HANDFIELD-JONES commented on the prognostic value of Dr. Maguire's experiments in deciding upon treatment in cases of albuminuria in pregnancy.—Dr. MAGUIRE warned the Society that his experiments must not be accepted as absolutely proven facts, until they had been confirmed by further work. He had not estimated the quantity of urea.

CHESTER MEDICAL SOCIETY.

FRIDAY, APRIL 2ND, 1886.

JAMES TAYLOR, F.R.C.S., President, in the Chair.

Typhoid Fever.—A discussion took place upon a communication read by Dr. EDWARD WATERS, "On the Communicability of Typhoid Fever." In this, he opposed the teaching of the spontaneous generation of the virus of the disease, and consequently impugned the pythogenic theory advocated by the late Dr. Murchison. Dr. Waters maintained the existence of a specific *materies morbi*, by and through which the disease was generated and propagated, and denied that putrefying excreta, sewer-gas, noxious smells, *per se*, could create the disease, but held that the germ or fomites must also be present; which germ might be lodged in, and propagated by means of, fæcal matter, clothes, water, milk, and other media, as in the case of other contagious diseases. He narrated the particulars of a very striking instance of the spread of fever from the milk of one dairy, and another of the introduction and subsequent diffusion of fever in an isolated and previously exempt locality; and from these, in connection with other facts, he inferred that cases of typhoid fever must be included in the category of contagious diseases, and demanded similar restrictions in the use of public carriages for their removal. He brought the subject forward, owing to his having found the opinion not unfrequently held by members of the profession, that no risk of contamination was incurred by communication with persons afflicted with typhoid

fever. In support of the view that the disease was not due to sewer-gas and putrefying excreta, he adduced various instances of persistent exposure to such influences with impunity, which had sufficed to convince him. In conclusion, he referred to the present prevailing belief that typhus fever was a fearfully contagious disease, and maintained that such was not the case, and that it was an impression rather than a fact. In proof of this, he mentioned, *inter alia*, the rule that had existed in the Royal Infirmary of Edinburgh, in the time of the late Professor Alison, of mixing cases of typhus with other patients, in the proportion of four beds in a ward of sixteen, or, at the most, eighteen beds. No antiseptics were used; no precautions were taken in dealing with the disposal of the excreta; the only difference made was a slight increase in the space between the fever and the other beds. These patients went through their typhus, and, when convalescent, sat at the same fireside with the other patients; and yet such was the immunity from the spread of the disease through this intercourse, that Professor Alison enunciated the opinion that, if all cases of typhus could be thus judiciously distributed, the disease might possibly be got rid of.—Dr. DOBIE, in opening the discussion, said he agreed with Dr. Waters in believing that typhoid fever took its origin from a *contagium vivum*, which produced this fever, and no other. He considered that there was a gradually deepening belief, among the members of the medical profession, that decomposing excrement and sewer-emanations could not produce enteric fever, unless commingled with these organic germs. He believed that enteric fever, though properly ranked in the category of contagious diseases, was scarcely ever propagated by direct contagion, but nearly always indirectly, by eating, drinking, or inhaling the emanations of the stools, modified by some fermentation or decomposition outside the organism. He considered that the experience of the London Fever Hospital was quite conclusive as to the innocuous character of fresh typhoid evacuations. He believed that the cases on which Dr. Waters specially relied, as proving the spread of the disease by the "rubbing together process," could be quite well explained, without having recourse to the theory of direct contagion. Dr. Dobie's observations, during his two years' residence in the Edinburgh Infirmary (1852 and 1853), led him to the conclusion that typhus was a virulently and directly contagious disease. Neither he, nor any of his contemporary resident physicians, escaped the malady. He showed that the mixing of fever-patients, in the clinical wards, permitted for some years by Graham, Alison, and Christison, was, in 1849, followed by lamentable results; seven of the general patients and three of the clinical clerks were prostrated by typhus, and several died. Dr. Hughes Bennett, about the year 1855, again tried the experiment, but, in the words of Professor Gairdner, then physician to the infirmary, "the results were disastrous," and, from that time to the present, no mixing of typhus with ordinary cases has been permitted in the Edinburgh Infirmary. Dr. Dobie, though he believed that there was little danger to the attendants, or others, from direct contact with enteric cases, did not advocate any changes in the existing law, as to the transportation of typhoid cases in public conveyances.—Mr. KENYON thought typhoid fever was much spread by washerwomen taking in the soiled linen of patients. He considered that a subsoil, even if it contained much organic matter, was not a source of danger if well drained.—Dr. WEAVER, MR. HAMILTON, Mr. FRANGER, Mr. ARCHER, Surgeon-Major TOMLINSON, and Dr. ROBERTS, continued the discussion.—In reply, Dr. WATERS, at the succeeding meeting of the Society, on May 7th, supplemented his statements by referring to the experience of others, and especially to the work of a commission of the French Academy, in support of his belief that typhoid fever was contagious in a remarkable degree, spreading in the same way as small-pox and other exanthemata.

CENTENARIANS.—Mrs. Grosvenor, living at Penygloddfa, Newtown, Montgomeryshire, has just attained her 102nd year. She is the relict of the late Mr. John Grosvenor, of Caersws, and cousin of the late William Williams, of Wern, the eminent Welsh divine, and claims remote relationship with the house of Grosvenor. Her memory is good, she can read, thread a needle, and sew, without the aid of spectacles, and is able to walk without assistance; but her hearing is very ill.—The death is announced, at the age of 101, of Mrs. Occomore, of Redbridge, near Southampton, who, had she lived, would have completed her 102nd year on Saturday, May 1st. She never suffered any bodily illness, and retained her faculties up to the last, although her eyesight failed her since Christmas. She was well known in the district, having acted as nurse at a large number of houses. Her grandchildren, great-grand-children, and great-great-grand-children, number no fewer than 105.

REVIEWS AND NOTICES.

ON DISEASES OF THE LUNGS AND PLEURÆ, INCLUDING CONSUMPTION. By R. DOUGLAS POWELL, M.D.Lond., F.R.C.P., Physician to the Middlesex Hospital, and Joint Lecturer on Practical Medicine at the Medical School; Physician to the Hospital for Consumption and Diseases of the Chest. Third Edition, rewritten and enlarged, with Illustrations. London: Lewis. 1886.

THE third edition of Dr. DOUGLAS POWELL'S book may almost be described as a new book; the last decade has witnessed many important additions to our knowledge of the pathology and treatment of phthisis, and Dr. Powell gives his readers not only the new views on these subjects, but also the result of the increased experience which, with his unrivalled opportunities for studying diseases of the lungs, he has gathered since the publication of the first edition of his work. The present edition will take a high place in the estimation of practical physicians. Over and beyond the wide knowledge displayed, and the judicial temper with which disputed points are discussed, there remains a striking characteristic of the book, which may, perhaps, be best called its helpfulness; difficulties in practice are honestly stated, and sound practical advice is given, to the exclusion of vague generalisation, or hearsay recommendations of new nostrums.

Most readers will turn first to the chapter on the pathology of phthisis, to ascertain what view Dr. Powell holds with regard to the influence of the bacillus tuberculosis. On this point, he carefully avoids anything like dogmatism. While holding that it is neither the seed nor the fruit of the disease, he yet believes that the bacillus takes an important part in the extension and conveyance of tubercular lesions. Like most physicians who have had a large clinical experience of phthisis, he refuses to believe that it is a contagious disease. His views as to the position of the bacillus with regard to the phthisical process are coloured throughout by his well grounded objections to that theory, and he is thus led to attach perhaps somewhat less importance to the bacillus than is its just due. The analogy between the bacillus of jequirity infusion, which is innocuous, the real poison being a chemical principle, and the bacillus of tubercle, will not hold good. Dr. Koch seems to have incontestably proved, *pace* Dr. Creighton, that pure cultivations of the bacillus, uncontaminated with any chemical body, can produce tuberculosis; the only alternative is to suppose that the tubercular virus can produce the disease when present in a proportion so minute that it could only be compared to homœopathic dilution to the billionth. Though thus perhaps unnecessarily cautious in accepting the importance claimed for the bacillus, Dr. Powell is yet prepared to make use of its presence in the excreta or expectoration as a valuable criterion for diagnosis in obscure cases; that is to say, he holds that, whatever its etiological importance, the bacillus is intimately and exclusively associated with the lesions of the disease.

The various ways in which phthisis may first make its appearance, the course which the various types run, the accidents which may call for vigorous treatment, and the prognosis under these varying circumstances, are discussed with fulness of knowledge and experience, which leaves nothing to be desired. Dr. Powell modestly imagines it necessary to apologise for having referred, in his statements with regard to the climatic treatment of phthisis, only to those measures of the value of which he had been convinced by personal experience. This, however, so far from detracting, in reality adds very much to the value of his remarks on this head. Gross exaggerations, and sweeping statements founded on very slender knowledge, too often characterise medical writings on climate; Dr. Powell's caution, therefore, is well timed. He is not an ardent advocate of the so-called mountain-cure; he would limit the class of cases likely to be benefited by a prolonged residence at high altitudes to a very small group, including only the very early uncomplicated cases, and older chronic cases, where symptoms are quiescent, the reserve lung is not emphysematous, and the heart and great vessels are sound. The Riviera is recommended for a similar class of cases, especially where there is marked anæmia; but it is admitted that where the mountain-climates agree, and the patients are able to stay on for the summer, or even a second winter, the results are often more permanent. There will be very little dissent by Englishmen, at any rate, to the proposition that, if only three months can be spent abroad in a warm climate, it is far best to choose the three spring months, during which the English climate, even in the most favoured localities, is very treacherous.

The remarks on the treatment by drugs are thoroughly practical, and, as we have said, helpful. Salicylic acid is strongly recommended

as having a marked effect upon the temperature of phthisis, especially during the period of softening and formation of cavities. Dr. Powell recommends the use of dry inhalations only, both during this stage and the subsequent stage of ulcerating cavities. He thinks Dr. Hassall's proposal to have antiseptic inhalation-chambers impracticable and of doubtful advantage, as the patients might not improbably suffer more from the deficient supply of air than they would gain by the lung-medication. It must be remembered, however, that the ventilation of many hospitals is already, to a large extent, artificial, and that it would be quite possible, not only to warm, but to medicate, the air before it is admitted into certain wards.

Although so much space has been given to Dr. Powell's observations on phthisis, it must not be supposed that other diseases of the lungs have been inadequately treated by him. On the contrary, the chapters on diseases of the pleura are a most comprehensive essay on the subject, well worthy of study. A chapter is also devoted to the questions involved in the surgical treatment of pulmonary cavities; and the very small class of cases, in which operation appears likely to be attended with advantage, is carefully defined. Chapters on the physical examination of the chest, on diseases and deformities of the chest-walls, on pneumonia, bronchopneumonia, and bronchiectasis, on abscess and gangrene of the lung, on asthma, on mediastinal tumours, and on hydatid of the lung, complete the list of subjects treated, and render the book complete as a monograph on diseases of the lungs and pleuræ. Two coloured plates, from preparations made by Dr. Percy Kidd, are given, to illustrate the remarks on the bacillus. On all counts, Dr. Powell may be congratulated on having produced a most useful and complete book.

De l'Aphasie et de les Diverses Formes. Par le Dr. Bernard 8vo., pp. 270. Paris: Delahaye. 1885.

This volume contains a very readable and fairly complete account of the recent facts and views concerning aphasia, both motor and sensory, and will amply repay a careful perusal. It has evidently been written under the influence of Professor Charcot's teaching; and the author follows the physiological and psychological theories recently propounded by the celebrated professor in explanation of the cerebral mechanisms subservient to language, and of their mental equivalents. The historical part of the book is interesting, and pretty full; the chief defect in it is the scanty justice done to two English writers, Bastian (1869) and Broadbent (1872), in whose writings we find ample evidence that they clearly recognised the sensorial aphasia, the discovery of which has been generally ascribed to Werneck (1874). It is high time that justice should be done to their anterior claims, as Dr. De Watteville has shown in a recent number of *Brain* (July, 1885, p. 267), and we are glad of this opportunity of vindicating the originality of our countrymen on this important subject.

There is little to criticise in the chapters on verbal blindness and deafness, on agraphia, and on motor aphasia, which the author calls aphemia. One point, however, requires to be commented upon. It is the assumption involved in attributing the symptoms of agraphia and aphemia to a "motor amnesia," to a forgetting of the "motor images." The cortex contains the terminal stations of the afferent sensory tracts of fibres, which there end in those groups of cells known as sensorial centres. The exact localisations of these centres are still a matter of some dispute. The auditory centre is believed to be in the temporo-sphenoidal lobe, the visual in the parieto-occipital. The sense of touch and that of the position of the organs (muscular sense) are localised by Ferrier in the hippocampal region; the other view (Schiff, Munk) being that it occupies the anterior lobes, in other words, the motor region of the brain.

Now, clinical observations tend to support Ferrier's view in this respect. Sclerosis of the ascending convolutions lead, in man, to paralysis, not to anæsthesia or to loss of co-ordinative power, by which disturbances of the "muscular sense" are characterised. Hence lesions of Broca's centre, which essentially belongs to the motor sphere, may be assumed not to produce any sensory symptom, not to cause abolition of the feeling that accompanies movements of the organs of speech, nor to obliterate the "motor images" of articulation.

We are here arguing under the assumption that the so-called muscular or kinæsthetic sense is of a purely afferent nature. There are, indeed, some psychologists and physiologists who still believe in the existence of a sense of motor innervation, distinct from the feelings arising in the muscles, ligaments, joints, and skin of a moving or fixed limb. This sense, according to them, is the conscious accompaniment of motor discharges in the cortex. But the weight of the arguments that have been brought to bear against this doctrine appear to us to be overwhelming; and Dr. Bernard nowhere tells us that he accepts such a hypothesis. Hence, as we said at the commencement of this discussion, it is confusing, nay inaccurate, to speak of aphemia as of an "amnesia of motor images." The same remarks obviously apply to agraphia. Those who localise the "muscular sense" in the posterior lobes of the brain, must look upon aphemia and agraphia as the results of the destruction of acquired co-ordinative nervous mechanisms that are thrown into action (reflexly) by impulses originating in the sensorial sphere, which alone is represented in consciousness. Even granting a direct consciousness of the "ego" as the cause of its own movements, it would be more philosophical to look for its material substratum in these impulses than in the discharges of the motor cells.

Hence, however tempting it may appear at first sight to generalise, and define aphasia as the "amnesia of signs," it is, to say the least of it, premature to do so, even when we have to do with lesions involving the cortical cells in the motor regions. But this definition, adopted by Dr. Bernard, falls to the ground when we consider the nature of the so-called "commissural" aphasia. Here we have to do with destructions, not of central repositories of memories or images, but of the fibres that connect them with one another and with the bulbar nuclei. In such cases, we may have complete word-deafness, for example, or complete aphemia, simply because the commissures which connect a cortical centre with its corresponding inferior station is interrupted; to speak of such aphasias as "amnesic" is obviously erroneous. Cases in which the lesion is found near the claustrum, or island of Reil, are more difficult to define, but at any rate ought not to come under the same category as those of pure cortical lesions. The term "inco-ordinative" would perhaps be more applicable to them, if, as appears to be probable, the symptom of "paraphasia," which they often present, depends upon an interruption in the audito-motor commissure, that is, in the bundle of fibres connecting the auditory centre with that of Broca in the third frontal convolution.

These points are not merely questions of scientific interest. Discussions have frequently been raised as to the intellectual efficiency of aphasics, and their medico-legal status. Alexandre Dumas, in his *Monte Cristo*, describes with his usual graphic power and occasional exaggerations, the scene of a paralysed aphasic of the Broca type, making his will, and signifying his wishes by means of a dictionary and movements of the eyelids. As we have seen, commissural motor aphasia must, whatever view we take of the mental equivalents of the motor cerebral sphere, be considered as a non-amnesic form, hence without influence upon the intellectual powers of the patient. The same may be said of the cases where the audito-bulbar commissure is broken; such patients are simply word-deaf in their relations with other people. But when we come to instances of actual destruction of the auditory centre of language, the problem becomes more complex. How far is intelligence impaired when the power of thinking in words—so far as it depends upon the integrity of that centre—is gone? Some psychologists say that "thought" is "an inner language," and nothing more. The majority of writers further testify to the fact that this "inner language" consists chiefly, if not entirely, of revivifications of the acoustic "images" of words. For all such, therefore, a person word-deaf from softening of the first temporo-sphenoidal convolution, must be deprived of the faculty of thinking; hence not *compos mentis* before the law. For our own part, however, we cannot accept the view that language and thought are identical; we look upon thought as being primarily a series of states of consciousness, more or less concrete at times, abstract at others. The more abstract they are, the more they require the use of symbols to represent them. These symbols are chiefly words; and words again, from a subjective point of view, are states of consciousness compounded of visual and motor feelings upon an auditory basis. Now, though we recognise the impossibility of acquiring a high degree of intellectual development without an adequate system of signs, we do not see why comparatively active trains of thought cannot be carried on by an adult after the loss of his "inner language." Hence we do not join in the scepticism evinced by Trousseau and Kussmaul on the subject of the power which Professor Lordat tells us he still preserved, of thinking on abstract subjects whilst suffering from an attack of complete aphasia. It would lead us too far to pursue this subject any further; but the reader interested in the psychological aspects of cerebral pathology cannot fail to perceive what a fruitful field of inquiry he possesses in the study of the various forms of aphasia.

Major-General Jervoise has been appointed President of the Mineral-Water Hospital, Bath, for the ensuing year.

Mrs. W. T. Townend Hall has offered to give a Cottage Infirmary to the town of Faversham, as a memorial to her late husband, who died about a year ago.

PRACTICAL SURGERY. By J. E. MEARS, M.D. Philadelphia: Blakiston. 1885.

THE title of this work is misleading; for the range of subjects included is very limited, and only dressings, bandages, fractures and dislocations, ligature of arteries, amputations, and excisions, are included. These subjects are, no doubt, very important in practical surgery, but they do not justify the title of the work; and, as this is a second edition, and no mention is made of any further volume being contemplated, this can hardly be looked upon as part of a general work. The important subjects of hernia, plastic operations, operations for the removal of growths, lithotomy, operations affecting the viscera, the mouth, and different regions of the body, the nerves, the surgery of deformities, and such subjects, should surely be included under the head of practical surgery, if the term be retained for the title of the book.

Looking now at the treatment of the different subjects, it is certainly clear and practical, and the whole forms a trustworthy compendium of what is practised. The language is terse, and the author has availed himself of American and other authorities very fully, without adding much original work. The illustrations are very numerous, amounting to nearly five hundred; but they are wanting in one very important particular, in that they have no explanation attached, and the reader has to wade through the text until his eye catches the number of the figure. The usefulness of these illustrations is diminished by this want of ready explanation; but otherwise they are well chosen, and reflect well on American surgery. The chapters on fractures are very good and practical, and the account of bandages is also very clearly given; and the illustrations are new in many respects to us, as they are mostly American. The treatment of fractures by immediate fixation does not seem to be accepted; and, even with dislocations, we are surprised to find more space given to some of the older methods of reduction than that of manipulation. In the part devoted to ligature of the arteries, we find the anatomical figures not so clear as they should be; and, in the absence of colouring, it would be difficult for a person new to the subject to make sure which was artery and which was vein; the references are by numerals, instead of by abbreviations or initial letters, which at once would catch the eye.

But, looking at the work as a guide to students and practitioners in certain branches of practical surgery, it cannot fail to be a popular reference-book, and, in the main part of it, very acceptable to English readers, for the clearly put ideas of American treatment; and we can speak without hesitation of its thoroughness and reliability in this important respect.

DES PSEUDO-TABES. Par le Dr. LEVAL-PICQUECHEF. 1 vol., 8vo. pp. 154. Lille: Desclée and Co. 1885.

As might have been expected, the name of Progressive Locomotor Ataxy, given by Duchenne to a morbid type which has since become the object of exhaustive studies, has proved too narrow, and that of Tabes is being gradually substituted for it. Ataxy is, properly speaking, a symptom, and a symptom which may depend upon multifarious alterations of the nervous system, as we now know. The work of Dr. LEVAL-PICQUECHEF consists in a statement of the conditions other than the posterior sclerosis that characterises tabes, under which locomotor ataxy or inco-ordination, is developed. Hence the name "Pseudo-tabes," to which some might have preferred the term: "Non-tabetic ataxy."

To Dr. Dreschfeld belongs the chief merit of having brought out clearly the fact that alcoholism may give rise to conditions undistinguishable at first sight from true tabes. His observations will be found published in *Brain*, vols. vi and viii. Dr. Leval-Picquechef gives a very full account of this pseudo-tabes, which is, in reality, a form of multiple neuritis. Lead also appears to produce ataxic symptoms, along with absence of knee-jerk, shooting pains, sensory troubles, and pupillary disturbance.

Among the sequelæ of diphtheria, and some eruptive fevers, nervous symptoms are not rarely observed, which occasionally assume the form of ataxy, conbined with some of the other symptoms of true tabes. This is still more markedly the case with diabetes, in which conditions almost undistinguishable from the last disease are developed. The ordinary test for sugar is, then, the only means of discriminating the real nature of the case. The exact seat of the lesion, giving rise to the ataxy and its concomitants in these various diseases, has not yet been demonstrated, though the probabilities are in favour of a spinal localisation. When the pseudo-tabes is really a multiple neuritis, the diagnosis can generally be made by the occurrence in the latter of loss of power and tenderness along the nerve-trunks. Visceral troubles and arthropathies speak in favour of true tabes.

Dr. Leval-Picquechef relates some cases of functional pseudo-tabes connected with spinal irritation or neurasthenia. One of them, observed by Professor Kovalevski, is very remarkable. A Greek priest, of a neurotic temperament, saw his brother-in-law fall a prey to posterior spinal sclerosis, and go through the various phases of the fatal disease. He fell a prey to aberrations, the theme of which was that he was doomed to succumb to the same disease. Shooting pains, locomotor and urinary troubles, plantar anæsthesia, and girdle-feelings made their appearance. The knee-jerk remained normal. Twenty-three days in hospital sufficed to restore him to health.

There are other conditions which may give rise to tabetic symptoms, such as ergotism and pellagra. But the author considers the posterior sclerosis which is found in such cases to be of sufficient importance to raise them to the rank of true tabes. He also mentioned a few aberrant cases, such as those of Topinard and Ribail, where small tubercular masses, or patches of meningo-myelitic inflammation along the posterior columns, gave rise to tabetic symptoms. Dr. Leval-Picquechef does not appear to know the interesting case recorded by Dr. Hughes Bennett a year or two ago, and read by him at the Clinical Society; but otherwise his volume gives a very complete summary of what is actually known concerning pseudo-tabetic conditions, and commends itself to the attention not only of all those who take an interest in spinal diseases, but of those also who may at any time be called to pronounce upon the significance of ataxic symptoms.

SORE-THROAT: ITS NATURE, VARIETIES, AND TREATMENT; including the Connection between Affections of the Throat and other Diseases. By PROSSER JAMES, M.D., Physician to the Hospital for Diseases of the Throat and Chest; Lecturer on Materia Medica and Therapeutics at the London Hospital; etc. Fifth edition, illustrated with hand-coloured Plates, crown 8vo. London: J. and A. Churchill. 1886.

THE fifth edition of this well known work needs but short notice at our hands. The author has made several additions to the volume, not the least interesting among which is a brief account of Mr. Horsley's experiments on the function of the thyroid gland, described in the Brown lectures delivered in 1884 and in 1885.

The paragraphs on laryngoscopy and rhinoscopy are very similar to those in the author's *Laryngoscopy and Rhinoscopy* (fifth edition), and in some parts the text is word for word the same in the two books. The statement, on page 86, that the Eustachian openings look downwards and outwards, is probably a misprint, although it occurs in both works. Two pages further on, the author recognises the frequent presence of cysts in the region of the pharyngeal bursa, a subject to which some attention has been lately drawn by the careful studies of Tornauldt.

Though often written in a semi-popular style, and sometimes vague in its directions for treatment (see, for instance, the treatment of adenoid vegetations of the naso-pharynx, page 277), it contains many practical hints, the result of the author's long-extended experience in the specialty.

NOTES ON BOOKS.

Scientific Memoirs by Medical Officers of the Army of India. Edited by B. SIMPSON, Esq., M.D., Surgeon-General with the Government of India. Part I, 1884. 1. *On the Relation of Cholera to Schizomyceti Organisms*, by Surgeon-Major D. D. CUNNINGHAM, M.B., Special Assistant to the Sanitary Commissioner with the Government of India. 2. *On the Presence of Peculiar Parasitic Organisms in the Tissue of a Specimen of Delhi Boil*, by the same. (Calcutta: Printed by the Superintendent of Government Printing, India. 1885.)—The fierce controversy which raged over the comma-bacillus discovered by Koch, has degenerated into a guerilla warfare, in which the general medical public can take but little interest. Dr. Cunningham's paper may serve to revive declining interest; it appears to be a remarkably candid statement of the results of an investigation of the organisms which occur in cholera-stools. He has been led to the opinion that the only safe method of searching for comma-bacilli in alvine evacuations or in water is to make cultivations on plates, after the manner of Dr. Koch. In seventeen cases where plate-cultivations were made from the contents of the intestine evacuated during life, or removed after death, colonies of comma-bacilli developed in sixteen instances.

In this case, colonies of minute straight bacilli abounded, and Dr. Cunningham believes so strongly in the polymorphism of schizomycetes, that he maintains that these small straight bacilli might not impossibly have become developed into comma-bacilli, if a series of cultivations on a very favourable medium had been made. Dr. Cunningham has also something to say as to the occurrence of comma-bacilli in water; he has found that typical cultivations could be obtained from the slimy under-surface of the scum of Euglenæ, which floats on the Indian tanks; no connection, however, appears to be suggested between the euglenic scum and the comma-bacilli, which, it is supposed, merely find a suitable nidus in the man, of decaying vegetable matter, afforded by the rapidly growing and quickly dying Euglenæ. The second paper contains the results of the examination of an excised specimen of "Delhi boil" (Oriental sore). Peculiar circular, elliptical, or irregularly lobate bodies, which stained deeply with gentian violet, were found generally distributed throughout the entire extent of the morbid tissue. Dr. Cunningham expresses the opinion that these bodies are mycetozoic organisms; he considers that the appearances may be regarded as corresponding to various stages of the development of the zoocysts and sporocysts of some monadinic organism.

The Westminster Hospital Reports. Edited by H. B. DONKIN, M.B.Oxon., F.R.C.P., and C. MACNAMARA, F.R.C.S. Vol. 1.—The first volume of this new venture opens with a short historical account of the Westminster Hospital and its medical school. This account is illustrated by plans of the new school buildings, and is, in fact, an expansion of the address delivered by Mr. George Cowell at the opening ceremony last October. Dr. Fincham contributes a simple clinical lecture on Pallor of the Skin, in which he takes occasion to recommend arsenic (liq. arsen. ♏iii) in combination with the ammonio-citrate of iron (7 grains) in the treatment of chlorosis. Dr. Sturges records the success he has had in several cases of "tubercular" inflammation in children by the employment of hypophosphite of soda in doses of from ten to twenty grains. Mr. Macnamara has a paper on the Radical Cure of Hernia, in which, following the advice of Dr. K. Macleod, of Calcutta, he insists that nothing short of its extirpation by exposing and isolating the sac, ligaturing its neck, removing its fundus and bringing the sides of the canal together, affords a satisfactory ground of hope of actual remedy. Dr. Donkin contributes an interesting commentary on a hundred and five cases of Chorea. The most important comment which he makes, is to the effect that the cases tend to show that "choreic murmurs and other cardiac derangements, apart from rheumatism, are, in some way, part and parcel of the general disorder, and largely tend to disappear with it." Dr. Dupré tells once more the old story of the Lamson case. The volume also contains a number of short papers and reports of cases, as well as the statistical reports of the medical and surgical registrars of the hospital.

A Short Manual of Chemistry, with a Coloured Table of Spectra. By A. DUPRÉ, Ph.D., F.R.S., F.C.S., and H. W. HAKE, Ph.D., F.I.C., F.C.S., of the Westminster Hospital Medical School. Vol. 1. *Inorganic Chemistry.* London: C. Griffin and Co.—This little work is arranged upon sound educational principles, and the authors have the courage to retain the old method of introducing the elements to the student, rather in the order of their abundance in nature, than in that of their atomicities. About one-fifth of the book is devoted to chemical physics. Although this arrangement is entirely devoid of originality—indeed, the order adopted in introducing the elements reminds us very strongly of, at least, one well known chemical work of old standing, and still in high repute—it is, we are convinced, the best for educational purposes. The explanations of chemical and physical phenomena are lucid; and, for the benefit of medical students, the physiological action of the most important elements and compounds are described.

Elements of Materia Medica and Pharmacy. By ALFRED W. GERRARD, Examiner to the Pharmaceutical Society, Fellow of the Chemical Society, etc. London: H. K. Lewis. 1886.—In this work, the author, who, from his position as teacher of Pharmacy and demonstrator of Materia Medica at University College, ought to be acquainted with the needs of the student, has endeavoured to give that knowledge a practical form, by furnishing him with a carefully tabulated and condensed arrangement of the subject-matter, with a view of facilitating the assimilation of what is, at best, a dull and arid study. The author very properly insists on the necessity of a knowledge of the chemical principles which underlie pharmacy, and deals with this department first. Then follows materia medica, pure and simple. The space allotted to the therapeutic action of drugs is sternly curtailed; but, under the recent college regulations, will possibly be found sufficient for examination purposes. It has the merit of being arranged on a plan which renders the groups easy to commit to memory. The book is clearly printed, on good paper and will doubtless find a place in many a student's library.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

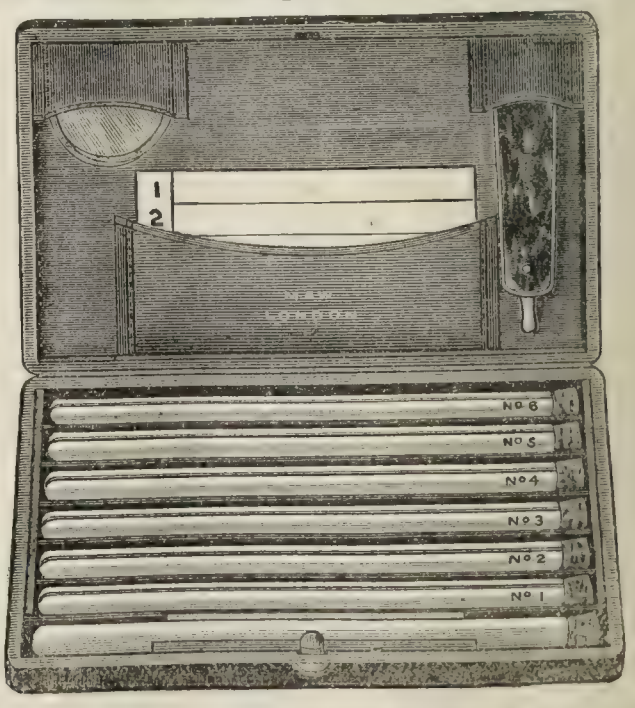
SANITARY COOKING AND OTHER UTENSILS.

VENTILATION, in its application to culinary art, has hitherto not received the attention which its importance demands and hygienic rules would suggest. The deterioration which many kinds of food suffer by being closely confined in vessels from which the vapours generated in the process of cooking cannot escape, is a fact with which we are well acquainted; and Mr. R. E. Keen, of St. Leonard's-on-Sea, has done good service in introducing to the public his series of ventilating covers specially adapted for cooking utensils, by the use of which a greater purity and excellence of our food is secured. The ventilating principle, which is applied to every cover or lid, consists of a circular opening of a size suited to the dimensions of the vessel. To hide this opening, which would otherwise be unsightly, a guard-plate, supported by uprights of the same material as the vessel, is provided, about half an inch above it, which effectually allows the steaming vapour to escape, whilst at the same time it prevents any down current into the vessel. This useful invention has also been applied to dish-covers, biscuit-boxes, butter-coolers, sardine-boxes, etc., by Messrs. Shaw and Fisher, of Sheffield, and Messrs. Harwood, Plante, and Co., of Birmingham; and in earthenware vessels, for bread, cheese, and other dry substances, by Messrs. Stiff and Sons, of Lambeth; to copper and wrought iron goods, by Messrs. Benham and Froud, of Chandos Street; to cast-iron cooking utensils, by Messrs. Kenrick, of West Bromwich; to tin vessels and nickel-plated dish-covers, by Messrs. Fearnecome and Co., of Wolverhampton.

IMPROVED VACCINATION-CASE.

THIS case is designed by Dr. W. R. Grove, of St. Ives, Hunts, with a view to keep separate the lymph taken from various sources, and, at the same time, readily indicate the date and source of the storage.

The case is 4¾ inches by 3 inches, strongly made, and contains six tubes, numbered, for holding charged capillary tubes. There is also room for a spare tube, to contain uncharged capillary tubes, or in which to place a Rose's vaccinator. In the lid are an ivory tablet, ruled in six lines, and numbered to correspond with the tubes, on which can be written, with a pencil, the names of the persons from whom the lymph is taken, and the date; a pocket for an ordinary bleeding-lancet; and another pocket for a disc of glass, on which the lymph can be blown before using.



The case, which has been constructed for the designer by Messrs. Maw and Son, is portable, fitting into the breast-pocket, and the tubes are enamelled by a new patent process.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 29th, 1886.

SCARLET FEVER FROM THE COW.

No more important report has been issued by the Local Government Board for many years, than that presented by Mr. W. H. Power on March 31st, and recently published. The conclusion at which he has arrived is of such far reaching importance, so unexpected, until within the last few months, in its nature, and so disquieting, that the reader is fain to hope that it must be incorrect. Mr. Power, however, leads us on from point to point, until the conviction is forced upon the unwilling reader that it has been proved, as clearly as circumstantial evidence can prove anything, that scarlet fever can be produced by the milk of cows suffering from a disease so slight in its local manifestation as almost to escape attention, and producing so little disturbance of the general health of the cows, that their appetite is not impaired, nor the quantity of milk which they yield diminished.

The first thread in the web of evidence which Mr. Power has woven so skilfully, was afforded by an observation made by Mr. Wynter Blyth, the medical officer of health for St. Marylebone. On December 18th, 1885, he reported to the Local Government Board that an extensive outbreak of scarlet fever in St. Marylebone, appeared to be associated with the distribution of milk by a certain retail milk-dealer, who obtained the greater part of his supply from a dairy-farm at Hendon. The next point which Mr. Power ascertained was, that milk from this dairy-farm was sent to three other retail dealers: one at St. John's Wood, another at Hendon, and a third who carried on business at Hampstead and St. Pancras. The epidemic began in St. Marylebone towards the end of November, and, at about the same time, outbreaks of the same disease had occurred among the customers of all the other milk-sellers, except those who dealt with the dairy in St. John's Wood. Moreover, it was ascertained that certain customers of the Marylebone milkman had received milk from Hendon unmixed with milk from any other farm. Suspicion pointed therefore strongly to the farm at Hendon; but here, for a time, the investigators were at fault, for a thorough examination of the farm and of the labourers employed there failed to reveal any unsanitary conditions; and Dr. Cameron, the medical officer of health, who associated himself with Mr. Power in this stage of the inquiry, was able to affirm positively that there had been no cases of scarlet fever, or any disease remotely resembling it, among the persons working or residing on the farm, and that the few cases which had occurred in the Hendon district during 1885 had been among families residing at a distance from the farm, and in no way connected with it.

At this stage of the inquiry, it became evident that, if the theory which had been started incriminating the Hendon farm was to be maintained, it would be necessary to establish that some new condition affecting the health of the cows had come into operation at, or soon after, the beginning of November. Inquiry elicited that three cows, which had newly calved, had been purchased at Derby market, and admitted to the farm on November 15th. These cows had been kept isolated from the others in a "quarantine shed" until about the end of November, but their milk had, after the first few days, been added to the supply, which eventually found its way to St. Marylebone, Hampstead, and St. Pancras. On December 4th, four other cows, purchased in Oxfordshire, arrived at the farm, and succeeded the Derbyshire cows in the quarantine-shed. The next important part is that after their period of quarantine, the Derbyshire cows were transferred to a shed called the "large shed," where were over forty other cows; the milk from this shed went to the Marylebone dealer, and scarlet fever began among his customers at the end of November, and continued until the supply of milk was stopped. The Oxfordshire cows were kept in quarantine until December 11th, and were then transferred—two to the "large shed," and two to another shed called the "middle shed." The milk from this shed was sent to the dealer who had shops in Hampstead and St. Pancras; the scarlet fever cases occurred among the customers of this dealer in two groups, one at the end of November (the milk from the cows in the quarantine shed had been mixed with this supply shortly before this time), and again, another larger group in the middle of December (that is, soon after the Derbyshire cows had been transferred to the "middle shed" from which the milk for this dealer came). There remained the fact of the entire immunity of the customers of the dealer in St. John's Wood; it turned out that all the milk for this dealer came exclusively from a third shed, called the "small shed," into which no new cows had been introduced. Now comes a most instructive fact, almost of the nature of an exact experiment. A small, limited, but intense outbreak of scarlet fever occurred among certain poor families residing at Child's Hill, and at other places close to the farm; the first case of this group occurred on December 20th. Now, on December 15th, the supply of milk to the St. Marylebone dealer was stopped, and the dairy-farmer gave directions that the whole of the milk from the large shed should be given to the pigs, or thrown into a pit dug for the purpose. Certain poor persons residing in the neighbourhood, hearing of this "waste" of milk, succeeded in obtaining, on December 16th and subsequently, a quantity of milk, surreptitiously, from the cowmen. It was among these people that the outbreak of scarlet fever above mentioned (Child's Hill) occurred on the following week.

The final stage of the inquiry revealed disease among the cows, but so slight that the animals had continued to feed well and to yield their usual quantity of milk; all that could be noticed were vesicles and small ulcers on the udders and teats. On December 31st and following days, a thorough inspection of all the cows was made by Mr. W. H. Power, Dr. Klein, F.R.S., and Dr. Cameron. On two of the Derbyshire cows (November 15th) scars were found on the udders and teats, of a kind that satisfied the observers that they had suffered from the malady; and one of the cowmen subsequently remembered that the first case of sore udder and teats, which he had noticed, was in one of these Derbyshire cows. Further, it was found that on December 31st, two of the Oxfordshire cows had the affection, and that the other cows in the "middle shed" with them had it in an earlier

stage ; nearly all the cows in the "large shed," where the Derbyshire cows had been stalled, had this vesicular disease of the udder and teats in different stages.

It will be remembered that, among the customers in St. John's Wood who drunk the milk from the "small shed," no cases of scarlet fever had occurred, and that no new cows had been introduced into that shed ; but at the inspection on December 31st, two early cases of the disease were detected among the cows in the "small shed ;" and corresponding "to a nicety with the appearance, for the first time, of the cow-disease among the animals of the smaller shed," came the report of cases of scarlet fever among the customers of the dealer in St. John's Wood. Finally, when the supply of milk was completely stopped, then the peculiar incidence of scarlet fever, on the persons who drank the milk from this farm, also ceased.

Though the disease appeared, at first sight, to be purely local in the cow, and though the general symptoms were, undoubtedly, very slight, yet Dr. Klein found reason for regarding it as a general or constitutional disease, and one that might not improbably be communicable from cow to cow. Upon these points, more knowledge is urgently needed, and it is satisfactory to learn that two of the affected cows have been purchased and placed under Dr. Klein's observation in the Brown Institution. His report on the clinical features and on the pathology of the disease will be awaited with impatience.

Disquieting as are the facts which Mr. Power's inquiry has disclosed, yet it is always better to know our enemy, and even in the facts already made out, there is much that is reassuring. The disease in the cow presents, at least, some very tangible and easily recognised signs ; and as soon as the pathology and pathological anatomy have been a little more worked out, veterinary surgeons may be trusted to learn how to make a correct diagnosis, and then prompt isolation may, probably, be trusted to prevent the spread of the disease.

THE DUTIES OF CONSULTANTS.

THE relations of consultants and general practitioners have been matter for discussion and criticism ever since the practice of calling in a second opinion has obtained, an epoch probably coeval with the existence of medicine as an art. The first efforts of the earliest corporate bodies, as they sprang into existence, were directed to the enaction of certain rules of etiquette in virtue of which the rights of the original medical attendant were preserved, and undue friction avoided. Successive generations of practitioners have contributed the results of their experience on the same subject, and it might be supposed that this question would, by this time, repose on a solid and reliable basis, as the fruit of so much careful deliberation in the past. It may, indeed, be assumed that if the rules of conduct which have been formulated were observed in their integrity, and conscientiously carried out by the parties concerned, no further need would exist for any remarks on the subject; but, unfortunately, this is far from being the case, and more especially in London, the general practitioner is apt to find the proximity of his more favoured colleague whom he has called in to give his opinion, result in injury to his dignity and curtailment of his income.

Not very long since, a very interesting case was brought before the courts, which turned upon the strict meaning of the word "consulting physician." A well known and esteemed practitioner had retired from general practice in favour of his successor, but had reserved the right to act as a consultant. This he construed to allow his seeing patients at his own home, but the gentleman who succeeded him claimed that a consultant was only entitled to see patients at the instance, and in company, of their ordinary medical attendant. It appeared from the evidence, that, although the latter view was undoubtedly the strict signification of the word, yet, as a matter of fact, it would be very difficult to find a consultant in London who understood it to bear any such meaning, or who would refuse to see, or even visit, patients when requested. Although the verdict was in favour of the plaintiff, there can be no doubt that, probably without exception, consultants are quite willing, and even eager, to "consult" with patients unaccompanied by their medical attendant.

It is on this account that the intervention of "a second opinion" becomes dangerous for the medical man in attendance. Instances are numerous where patients have promptly dismissed the latter in favour of the former, and any protestation on the part of the injured practitioner is met by a haughty expression of regret, and a declaration of the consultant's inability to draw a hard and fast line between the patients he has, and those he has not, seen. Others again—and it is, unhappily, not always with second-rate men that this occurs—are not satisfied with giving their opinion, and then leaving the case until further requested, but shew a pertinacity in continuing their attendance, which would meet with sharp censure, did they occupy a less exalted position in the profession. As it is, the aggrieved practitioner's only remedy is to vow to himself that he will abstain from calling in the transgressor for his opinion in the future.

The need has arisen for a class of men who will practise as consultants in the strictest acceptation of the term, who will see patients only by the intermediary of their ordinary medical attendant, and who, consequently, could never be the cause of the latter losing his patient. The evil has assumed enormous proportions since the habit of demanding further advice has become universal on the part of patients to whom money is no particular object; and the irritation and disappointment of the unfortunate practitioner, who sees himself ousted, lead to disagreeable scenes and undignified struggles, which, in the interest of all ranks of the profession, it is desirable should cease, and give place to genial relations, more in harmony with the dignity and honour of their calling.

This wholesome change will not be brought about by any fresh rules or regulations on the part of the governing bodies ; all that can be expected from these means has long since been attained, and it is only by the strict enforcement of the laws of etiquette, and prompt complaint when they are infringed, that the general practitioner can hope to secure his rights and privileges.

THE REFORM OF THE UNIVERSITY OF LONDON.

THE Convocation of the University of London was in an unusually business-like mood on Tuesday, May 25th ; the main features of the scheme drawn up by Mr. Magnus's Committee were accepted after a moderate amount of discussion. The chief reasons for this success seems to have been, in the first place, that the scheme was simple, easily comprehensible, and followed the lines along which the University has previously developed ; and, in the second place, that it was skilfully submitted, in a series of resolutions which were discussed and voted upon separately. The main points of interest, as the scheme affects the medical schools, are two-fold. The debate brought out very clearly the opinion of Convocation, that the University ought not to seek to be popular, and that the large majority of

medical students must look elsewhere, that is to say, to the combined action of the Royal Colleges of Physicians and Surgeons, for a degree in medicine. The degree, if Convocation had its way, would therefore remain a so-called "honours-degree," but the influence of the medical schools would be greatly increased.

It would be competent for any medical school, without in any way prejudicing its position with regard to any other scheme for granting degrees to students, to become a constituent College of the University, and to be represented on the Council of Education and in the Board of Studies for Medicine, which would elect its chairman to be a member of the Senate. In this way, the medical schools would be able to bring influence to bear directly on the Senate of the University, as well as indirectly, in the form of advice administered by the Board of Studies for Medicine, which, under this scheme, might consist chiefly of representatives of the medical schools.

The Committee of the Senate appointed to report on Lord Justice Fry's scheme, and on the whole question, has held a prolonged meeting, but we believe that no approach was made to a general understanding, much less to a decision of the main points at issue.

MR. N. C. MACNAMARA has been appointed one of the Examiners in Surgery to the University of Cambridge.

WE understand that the large first issue of the *British Pharmacopœia*, amounting to 20,000 copies, is nearly exhausted.

THE opening of the new wing of Queen Charlotte's Lying-in Hospital, by the Prince and Princess of Wales, has been fixed for Friday, June 25th, at 1 P.M.

DR. LEONARD WOOLDRIDGE, Arris and Gale Lecturer in the Royal College of Surgeons, will deliver three lectures "On the Physiology of the Blood," on Monday, Wednesday, and Friday next, in the Theatre of the College, at 4 P.M.

THE Vienna Faculty of Medicine has just lost one of its most distinguished members, in Professor Henry Auspitz, who held the Chair of Dermatology in the University, and was an eminent authority on diseases of the skin and syphilis. He died on May 24th, in his 51st year, of disease of the spinal cord, from which he had long suffered.

THE Paris correspondent of a daily paper telegraphs that the subscriptions to the Pasteur Fund have already amounted to 711,813 francs. This does not include the sum sent by Madame Boucicault, of the Bon Marché, or the donations of the Councils General.

THE annual general meeting of the Marine Biological Association will be held on Tuesday, June 8th, at 4.30 P.M., in the rooms of the Linnæan Society Burlington House. The meeting has to receive the report of the Council for the past year, to elect officers and Council for the ensuing year, and to consider two alterations in the by-laws of the Association proposed by the Council.

WE regret to hear that Dr. F. de Havilland Hall, Dean of the Westminster Hospital Medical School, has been very seriously indisposed for some days past. The hypothesis of typhoid fever may, happily, be dismissed; but a pleurisy, with effusion, has declared itself, and, of course, renders abstention from professional and hospital duties imperative. It is satisfactory to know that he is in no present danger, and may even be said to be progressing favourably.

A SPECIAL general meeting of the Metropolitan Counties Branch of the British Medical Association will be held at the Royal School of Mines, Jermyn Street, on Monday next, May 31st, for the purpose of discussing the subject of degrees for London medical students. The Chair will be taken by the President, Dr. Walter Dickson, at 8 P.M. precisely. It is expected that Sir Andrew Clark, Mr. Jonathan Hutchinson, and other leading members of the profession, will speak in support of the proposal that the Royal Colleges of Physicians and Surgeons should have power to grant degrees. Registered medical practitioners, although not members of the Branch, will be admitted on presentation of their cards.

SUDDEN DEATH FROM GRIEF AND FEAR.

A LADY, named Madame Dumas, on receiving the sad news, one day last week, that her husband's body, found in the Rhône, had been taken to the Morgue, at Lyons, went to identify the corpse. The sight of it produced such a profound impression, that she fainted, and died within a few minutes. There can be no doubt that the approximate cause of death was violent emotion, but it would have been interesting to know what visceral disease existed in the deceased.

HOSPITAL SATURDAY.

THE annual collection in workshops and factories, in aid of the medical charities of the town, took place in Birmingham, on Saturday, May 22nd, and resulted in a total of £5,415, or about £256 more than on the corresponding day last year. Several contributions have yet to arrive, and these will raise the total to more than £6,000. The success of the collection, in a time of bad trade, is attributed partly to improved organisation, and partly to the extended adoption of the weekly collection system in the larger factories.

MEDICAL JURISPRUDENCE AND BIOLOGY.

AT a recent meeting of the Paris Biological Society, M. Mégnin stated that zoological and botanical evidence enabled him to determine the length of time during which human bones had been buried at Villemouble. It will be remembered that Mllme. Menetiel was supposed to have been murdered and buried in her own garden in that place by Euphrasie Mercier. The presence of ants' nests and deteriorated liliaceous bulbs proved, according to M. Mégnin, that the bones had been buried there for at least two years.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on May 19th, at 4 P.M. In the absence of the President, Dr. Eames, the chair was taken by Dr. Rayner. The following papers were read: by Dr. Savage, on a Case of Insanity Cured by Removal of the Beard in a Woman; by Dr. Percy Smith, on a Case of Ovariotomy in an Insane Patient; and by Dr. Bower, on Suicide and the Lunacy Laws Agitation. It was announced that the annual meeting would be held on August 9th.

A PROFESSIONAL SINECURE.

IT is officially announced that Señor Rafael Alcalde y Buril has been appointed surgeon-dentist to the infant king of Spain, whose birth lately gave rise to so much rejoicing in the Spanish capital. The *Globo* inquires, very naturally, whether the young king was born with teeth. In any case, the post of this professor of the gentle dental art will, for some months to come, be as much a sinecure as that of the surgical instrument-maker, who was recently addressed by a country customer as "suspensory bandage-maker to Her Majesty."

THE BRITISH AND THE AMERICAN MEDICAL ASSOCIATIONS.

AT the thirty-seventh annual meeting of the American Medical Association, which was held at St. Louis, on May 4th and three following days, a committee was appointed to consider the advisability of establishing branches, after the manner of the British Medical Association.

The following gentlemen were appointed delegates to the next meeting of the British Medical Association at Brighton: Drs. N. S. Davis (Chicago), B. W. Dawson, D. McLean, E. Smith, W. Brodie, B. A. Watson, W. T. Briggs, W. H. Pancoast, J. V. Shoemaker, L. H. Montgomery, E. Cutter, G. C. Gordon, J. C. Cattell, and H. O. Walker.

PREVENTION OF RABIES.

SIR CHARLES WARREN, the Chief Commissioner of Police, has issued a new and wise order, to the effect that all dogs, not being muzzled or led, will be considered not under proper control, although such dog may be close to and following the owner; and the latter will be summoned "for allowing a dog to be at large and not under proper control, contrary to the order of the Commissioner of Police of the Metropolis, dated March 20th, 1886, made under the provisions of the Dogs Act, 1871, 34 and 35 Vict., chapter 6, section 3." Such wise regulations, however, will not be effectual in repressing the extension of rabies, unless simultaneously enforced through the kingdom, for the metropolitan area is constantly liable to reinfection from external districts.

MICRO-PARASITES IN DISEASE.

THE New Sydenham Society, which, some years ago, published Koch's researches on the infective process, is this week issuing to its members a large volume on similar topics. It consists of a selection of essays, on different subjects, relating to micro-parasites in disease, and has been edited by Mr. Watson Cheyne. In addition to the researches on tuberculosis of Koch and others, it comprises the various infectious fevers, erysipelas, leprosy, rabies, diphtheria, actinomycosis, and others. The volume is liberally illustrated, and will be very acceptable to the numerous workers on these subjects.

GUY'S HOSPITAL.

IT is announced that His Royal Highness the Duke of Cambridge will distribute the prizes to the successful students of the medical school of Guy's Hospital on the afternoon of Friday, July 2nd, at the Hospital; and that the biennial festival dinner of past and present students of the school will take place the same evening at the Holborn Restaurant, when Mr. Arthur E. Durham will preside. It is hoped that the Duke of Cambridge, who has for many years been a Governor of the Hospital, may be further induced to accept an invitation to the dinner.

THE GENERAL MEDICAL COUNCIL.

WHEN the General Medical Council meets on Tuesday next, more than one familiar face will be missed; Dr. Storrar, who represented the University of London, and Dr. Scott Orr, who represented the Faculty of Physicians and Surgeons of Glasgow, are dead; and Sir Henry Pitman, who represented the Royal College of Physicians, has resigned. Dr. Storrar has been succeeded by Sir William Gull, and Sir Henry Pitman by Sir Dyce Duckworth; but, owing to the recent date of Dr. Scott Orr's death, no representative has yet been nominated in his place. Unless the Council decide to discuss the Medical Act Amendment Bill, it will have very little business of general interest to transact, as we understand that the reports of the visitors of the universities, and the replies thereto, will probably be referred to a committee to report to a future meeting. The Executive Committee of the Council is summoned to meet on Monday next, May 31st.

PHARMACY STUDENTS IN FRANCE.

THE Superior School of Pharmacy, Paris, has been closed by a Ministerial decree, provoked by a manifestation from the students. M. Chaten, Professor and Director of the School, was prevented from giving his lectures; the students accused him of being tyrannical, and brought forward some serious charges against him. The school was then closed by a decision, taken in the Council of Professors, in order to give the Minister of Instruction time to investigate the question. Strict inquiry, such as the students claimed, was not made, and fresh disorders followed; 435 students have signed a protest, to be forwarded to the Minister; wherein they express their regret that they have no other means of making known the reasons of their discontent. The manifestation was hostile to M. Chaten only; the other professors were loudly cheered, both in the lecture-room and in the street on leaving the school; one professor in particular received almost an ovation. He felt so embarrassed by his popularity that he had to take refuge in a cab.

CREMATION.

THE Society for Cremation, in Copenhagen, has bought a site for a crematorium, for which it has given 22,000 crowns. Professor Dahlerup has drawn the plan of the building, and the erection will be hastened so as to be used this year. It was originally intended to build the furnace on Siemens' method; but, the cost being excessive, the Italian plan known as Gorini's has been substituted, the cost of which will be 9,600 crowns.

THE COLONIAL EXHIBITION HOSPITAL FUND.

THE first of the "Mechanical Beggars," invented by Dr. James H. Aveling, has been placed, as suggested by him, in the Colonial Exhibition, and is now busily begging for the London Hospitals. It has been inspected by Her Majesty the Queen, and their Royal Highnesses the Prince and Princess of Wales, the Duke and Duchess of Connaught, the Duchess of Albany, and the Princess Beatrice, who expressed themselves pleased with the working of the mechanism, and tested it by depositing coins in the donation box. It is to be hoped all visitors will follow the example thus set; for, if everyone who enters the Exhibition were to give but a penny, the amount realised would be about £10,000. The "Mechanical Beggar" was devised by Dr. Aveling to bring in funds for the Chelsea Hospital for Women, and many may have seen it working in the underground stations. A card, with "Thank you" on it, passes up and down behind a small window above the donation box, and the movement of the card attracts the attention of passengers loitering near. The Exhibition "Mechanical Beggar" is more complicated. It has two windows, through one of which may be seen a card in constant motion, with "Pray give" on it; and through the other, but only when a coin is deposited, a card with "Thank you" on it, which jumps up, and remains in view for a few seconds. The donations are collected by the cashier of the Royal Commission, and it has been proposed that the sum realised should be handed over to the Committee of the Hospital Sunday Fund for distribution.

BAGSHOT WATER-SUPPLY.

A PAPER was read at the rooms of the Society of Medical Officers of Health, Crane Court, E.C,, on the evening of May 21st, by Mr. W. Eassie, C.E., F.G.S., upon the quality of the waters which are derived from the three main beds of the Bagshot geological series. Whilst it was admitted many of the waters were sound in character, it was stated that there were various beds of a greenish tint, which interfered with the secretion of pure water, and examples were given where illness had followed the use of such water in which no filtering provision had been made. The lecturer considered that the acids, contained in many of the waters derived from the Bagshot beds, ought to be eliminated previously to making use of them as drinking supplies; and he showed that, by the use of a peculiar method of filtration, the whole of the acids, due to decomposed vegetable matter in solution, and always present in peaty waters, could be speedily removed, and that the water-yield from the Bagshot beds could be redeemed, as regarded purity, and made equal to any water derived from the purest primitive rocks. He urged the necessity, for everyone residing upon these tertiary beds, of filtering the water of their wells.

CHILDREN AND SWEETMEATS.

In the current number of a religious monthly, the Rev. J. W. Horsley, late chaplain of the recently abolished Clerkenwell Prison, calls attention to an unsuspected cause of infantile depravity. "The perverted taste for lollipops," he says, "caused chiefly (because not prevented) by mothers, is a large—very large—cause of juvenile crime; and, from a prison point of view, there is far more justification for an Anti-Lollipop League than for an anti-tobacco one." Without going into the question of the connection between the craving for sweetmeats and juvenile vice—a question upon which Mr. Horsley's experience gives some weight to his opinion—it may be pointed out that there is nothing immoral or unwholesome in the gratification, within reasonable limits, of the saccharine tastes of children and women. On the contrary, the appetite is a far more natural one than that for tobacco, bitter beer, and very dry wines, so characteristic of manhood, and is certainly not more injurious. Of course, excess in sweets—as in any article of food—is calculated to cripple the digestive functions, and debilitate the constitution; and it is an unquestionable fact that many children, especially among the poorer classes, are permitted to indulge to a disgusting extent in the ingenious messes of the confectioner. There can be little doubt, however, that much of this infantile debauchery is due rather to sheer hunger, than to any perversion of appetite. So long as there are parents who fail to realise the fact that a rapidly growing child requires to be as well and as wisely fed as an adult, whose bones and tissues merely need to be kept in repair, so long will children be found ready to spend their uttermost farthing in cakes and lollipops.

POISONOUS COD-FISH.

The Bordeaux Medical Journal contains a series of articles by Dr. E. Mauriac, on the subject of accidental poisoning by bad cod-fish, and the prohibition of the sale of that fish. He states that cases of poisoning are extremely rare, and can only arise from the fact of the fish being eaten when in a state bordering on putrefaction. The signs of a poisonous condition may always be detected by a putrid odour, and extreme friability of the flesh. When eaten under these circumstances, it produces symptoms of a choleraic nature. The red colour of some cod, due to a cryptogamic growth, alleged by some to be of a fungoid, and by others to be of an algoid character, is no proof of decay, and may be found equally in wholesome and in unwholesome fish. Salting appears to develop this growth. The red cod has formed for years a staple article of consumption amongst the working classes, and it would deal a blow at an important branch of commerce to interdict its sale. All danger may be avoided by ascertaining that the odour is natural, and the flesh firm, by well cleaning the fish, steeping it in water for twelve hours, and changing the water frequently, and finally cooking it thoroughly, as this process destroys all parasites or micro-organisms which may exist. The fisheries are extensively carried on on the coast of Iceland and Newfoundland, and afford a subsistence to 12,000 French fishermen. The revenue yielded by this branch of commerce amounts to from thirty to thirty-five million francs. The poisonous principle in cod capable of producing choleriform symptoms is a ptomaine or alkaloid of putrefaction.

THE NINTH INTERNATIONAL CONGRESS.

At the meeting of the American Medical Association at St. Louis, on May 4th, a report was presented by a Committee appointed to arrange the preliminary organisation of the Ninth International Medical Congress, to be held in 1887 in the United States. The regulations and nominations, which included Dr. N. S. Davis, of Chicago, as President, and Dr. J. B. Hamilton as Secretary-General, proposed by this Committee, were almost unanimously adopted. The President of the Association, Dr. William Brodie, spoke strongly in favour of this course; and another Committee appointed to report on his address urged the profession in America to co-operate cordially "to make the Congress attractive and instructive to the foreign members, sacrificing personal and private piques and disappointments to contribute to that success." Subsequently, it was determined to urge upon the Congress of the United States the "desirability of making an appropriation of money to assist in heartily receiving and entertaining the International Medical Congress in 1887." We transcribe these facts from the *New York Medical Record*, which says that they prove that, as regards the west and south-west, "that part of our great country is determined to hold an international congress which shall be truly representative."

UNVEILING OF THE STATUE OF JOHN HUNTER.

To-day, May 29th, the statue of John Hunter, presented by Her Majesty the Queen, will be unveiled in the University Museum, Cambridge. A short address on the character and work of John Hunter, with special relation to the effect of his labours on surgery and medicine, will be delivered by Sir James Paget, Bart., D.C.L., in the Lecture-room of the Museum. The statue will then be unveiled in its place in the Court, and presented to the University on behalf of Her Majesty by Her Royal Highness the Princess Christian. All members of the University in their academical dress, and persons introduced by them, will be admitted. Any graduate may be accompanied by one friend. The address will commence at 2.30 precisely, when the doors will be closed.

BACTERIOLOGY.

A meeting of the West London Medico-Chirurgical Society was held on Friday, May 21st, at the West London Hospital, when Mr. Ballance gave an instructive demonstration in bacteriology. The whole of the out-patient department was utilised for the occasion, and upwards of sixty microscopes were arranged upon the tables, for the purpose of showing the many varieties of micro-organisms which have, during recent years, been isolated and described. Some specimens of the bacillus anthracis were shown by Dr. Acland. Various implements and apparatus, employed in bacteriological research, were exhibited by Messrs. J. Allen and Son, of Marylebone Lane, and Messrs. F. G. Becker and Co. A large series of cultivation-specimens, which Mr. Ballance had specially prepared, were displayed at the meeting, and excited great interest. Before the members dispersed, a cordial vote of thanks to Mr. Ballance, proposed by the President (Mr. Hemming), and seconded by Dr. Thudichum, was carried unanimously. In replying, Mr. Ballance said that we were, probably, within a measurable distance of time when each medical school would possess a bacteriological laboratory.

IMPERIAL UNIVERSITY IN JAPAN.

A recently issued Imperial ordinance provides for the establishment, in Japan, of an Imperial University, consisting of an University Hall for the purpose of original investigation, and five affiliated colleges or faculties of law, medicine, engineering, literature, and science. The President of the University is appointed by the Minister of Education; and each college has a director and chief professor, elected by the Minister from among the professors, two also of whom are appointed as councillors. Each college is to have the power of granting certificates of graduation after examination, and the University will confer degrees on graduates of the Colleges, or on persons of sufficient standing, who shall have prosecuted original investigations in the University, and have passed the required examinations. The new institution differs from the Tokyo University, chiefly in the incorporation of the Engineering College and the addition of the University Hall. From the *Sei-i-Kwai Medical Journal*, we learn that in the year 669 a school of learning was established, which was organised a little more than thirty years later, and may be said to have come down, through various vicissitudes, to the present time. This ancient university contained a school of medicine, with professors of medicine, acupuncture, massage, and diseases of women, a teacher of materia medica, botanists, and a number of physicians. The course

of study lasted seven years, and comprised materia medica, anatomy, physiology, and the practice of medicine and surgery, including special study of the diseases of children, and of the eye, ear, mouth and teeth. The special subjects occupied the last three years. Anatomy appears to have been taught by means of plates and diagrams. The present college of medicine of the University can be traced back to 1858, when a society was formed with the object of establishing an institution for vaccination. The success of this led to the foundations of the Institute of Western Medicine, from which sprang the medical school and hospital, and ultimately the present College of Medicine. The main course of study is modelled on that of the German universities, and there are five German professors. The whole course of study occupies seven years, three of which are spent in the preparatory course. The College grants the degree of *I-gaku Shi*, or Master of Medicine.

THE LATE SIR ERASMUS WILSON.

THE ceremony of unveiling a statue of the late Sir Erasmus Wilson, which has been erected in the ground of the Royal Sea Bathing Infirmary at Margate, was on Monday, May 24th, performed by Sir James Paget. The memorial, which has been executed by Mr. T. Brock, A.R.A., is the gift of Lady Wilson. It is life-size, of bronze, and mounted upon a pedestal of Cornish granite. Sir James Paget was accompanied by a party of between eighty and ninety members of the medical profession and others. Among them were Mr. Swinburne, Mr. John Marshall, Sir Spencer Wells, Sir Trevor Lawrence, Sir William Mac Cormac, Sir Henry Pitman, Professor Stewart, Sir Risdon Bennett, the Hon. J. Russell Lowell, late American Minister, Mr. Reginald Stuart Pooley, Professor Flower, Dr. Hetley, Dr. Ricardo, Canon Tanner, Dr. Liveing, the Rev. Prebendary Whittington, Dr. Wadham, Dr. Hope, Dr. Robert Grey, Dr. Sieveking, Dr. David Price, Colonel King-Harman, M.P., Dr. Money, and Mr. Stephen Paget. In performing the ceremonial, Sir James Paget said it gave him rare pleasure to comply with the wishes of Lady Wilson that he should, on her behalf, present to the governors of the Royal Sea-Bathing Infirmary that splendid model of its most bountiful benefactor. There were many ways in which Lady Wilson might have testified her constant love and abiding affection for her late husband, but none could be more appropriate. The bounty of Sir Erasmus Wilson was so extensive that it might have been signallised in many places, but it was within a short distance of that spot that he spent the later years of his happy life. There he planned the greater portion of his many kind deeds, and there, at last, he died in peace and in fair renown among all men. Sir James Paget went on to pay a high tribute to the memory of the late eminent surgeon, and expressed the hope that that memorial would tempt men to study his life, which taught them many excellent lessons. Commencing life with a moderate income as a medical journalist, lecturer upon anatomy, and a surgeon in practice, Sir Erasmus Wilson worked steadily and successfully. He became rich, but made his income fairly, without extortion and without pretending to more knowledge than he honestly believed that he possessed.

EFFECTS OF THE SEVERE WINTER AT SALFORD.

MOST of the medical officers of health of large towns report a largely increased mortality during the first quarter of the year, owing to the exceptionally cold weather. No doubt, the Registrar-General will discuss the mortal effects of our late severe winter in his annual report, or quarterly returns. At Salford, Dr. Tatham reports that, as compared with the quinquennial average, the mortality of last quarter, at all ages, was in excess by 7.5 per cent., and that of old persons, by 20.9 per cent. This excess was mainly due to the abnormal fatality of respiratory diseases, especially amongst the aged, during the five weeks ending March 26th. In no previous corresponding period on record has the local depression of temperature been so continuous as in the first four weeks of the period referred to. The mean temperature, during the twenty-eight days ending March 20th, did not exceed 34.9° Fahr., which is lower by 7.2° than the average of the mean temperatures in the fifteen previous corresponding periods. The mildest day was the 20th, when the mean temperature reached 51.1°, and the coldest was the 7th, when the mean fell to 28.9°; the minimum temperature recorded on that day, in Salford, being only 20.0°. With the object of measuring the loss of life experienced in Salford during the recent inclement weather, Dr. Tatham prepared a table, in which the rate of mortality, in the fatal period referred to, is compared with that obtaining in the period of five weeks immediately preceding. In this table, the death-rates are given from all causes, and from acute lung-diseases in the five-week periods ending February 20th and March 20th respectively; and the difference in the mortality of the two periods is shown at three age-groups. This difference may be taken to represent the rate of death due to cold, and varies extremely at the several ages. Thus, whilst the rate at the age of 5—60 years did not exceed 3.0 per 1,000 living at that age, it was equal to 23.2 per 1,000 amongst young children, and to not less than 57.0 per 1,000 amongst old people.

MASSAGE AND ASSIMILATION.

THE effect of massage on the assimilation of nitrogen has recently been studied by Dr. Gopadze, of St. Petersburg. His experiments were conducted on four medical students, who for three weeks lived on a certain diet, and allowed all their dejections and urine to be subjected to analysis. The results showed that, during the second of the three weeks, when alone massage was practised, all the subjects consumed more food and assimilated more nitrogen than during either of the weeks in which massage was not practised. The author suggests that massage will probably be found useful in a considerable number of diseases, amongst which may be mentioned gastric catarrh, dilatation of the stomach, chronic constipation, and atony of the intestines. He advises, also, that instruction should be given in massage in medical schools, and in the training institutions for "feldshers." This latter class of practitioners supply the place filled by apothecaries and native doctors in India; but, as far as education and training are concerned, they may be more properly compared to hospital sergeants.

HEALTH AND IRRITABILITY.

ONE of the most troublesome features of life, under unhygienic conditions, is the irritable condition into which the denizen of busy cities is apt to drift. The dyspeptic troubles, consequent on the ingestion of unsuitable food taken at unsuitable hours; the substitution of worry for exercise, and of "pick-me-ups" for healthy stimuli—all tend to impair the equilibrium of his physical organisation, until incomplete assimilation and imperfect nutrition culminate in a jaded condition of body and mind, which betrays itself by a want of self-control, and consequent "pettishness" and ill-humour. The philosopher has said, "he who is himself ill at ease, can scarcely be expected to contribute to the ease of others;" but, unfortunately, the individual so affected exerts something more than a negative influence on the happiness of the persons with whom the details of every-day life bring him into contact. His servants learn to dread his "spleen," and the charm of domestic life is destroyed by his querulous discontent. Such a state, which is rarely the attribute of perfectly healthy bodies and well balanced minds, should be looked upon as an indication of undue friction in the mechanism, calling for the intervention of the physician. A careful inquiry will often elicit the fact that the hyperæsthetic temper is of adventitious, and possibly recent origin, and is attributable to excesses, either gastronomic, intellectual, or sensual. With this information in his possession, the medical attendant will not find it a difficult task to formulate such rules as shall conduce to a return to the normal. That the patient will always consent to purchase serenity of mind, at the price of self-control and abnegation, is too much to expect, as patients are at present; but, in

case of refusal, he will only have himself to thank, if he ultimately become possessed of serious doubts as to whether life be really worth living. The professional man himself will do well to make undue irritability, on his own part, the pretext for more careful distribution of work and play, or even for a holiday. It constitutes as sure and as reliable a sign of exhaustion, as do the failing appetite and the unrefreshing sleep; and, for his own sake, as well as for that of the people who are the involuntary victims of his infirmity, he should consider by what means he can regain the health which he has jeopardised. Town people are notoriously wanting in that calmness of temper to which rural happiness—such as it is—is largely due; nor can this ever be attained, so long as the exigencies of fashion involve habits as opposed to health as they are to happiness.

THE ASSOCIATION OF FELLOWS OF THE COLLEGE OF SURGEONS.

We are informed that this Association still favours the project of permitting Members of the College, of at least ten years' standing, to take part in the election of Members of Council, and intends to memorialise the Council thereon, notwithstanding previous discouragement. The Committee of the Association desire to treat with the Committee of the Members' Association on this question. We hear that steps are about to be taken to ascertain the opinion of the majority of Fellows on the questions of the tenure of the Presidency; the submitting of the resolutions of the Council to the general body of Fellows; and the right of Members to vote and to sit on Council, under certain conditions.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

The retiring members of the Council of the Royal College of Surgeons this year will be Mr. Lund, Mr. Allingham, and Mr. Berkeley Hill. Owing to the death of Mr. Cooper Forster, a fourth vacancy will be contested. Mr. Lund will leave an absolute vacancy. He intends, we are informed on the most trustworthy authority, to offer himself for re-election. Mr. Allingham and Mr. Berkeley Hill are what is termed substitute members, since they fill the places which would have been occupied till now by the late Sir Erasmus Wilson and Mr. Gay, had these members lived; and, therefore, must retire at the end of what would have been the full term of office of the deceased. We have not heard whether both these members intend to contest the vacancies. The fourth vacancy will bring in a substitute member, in the same way as Mr. Hill and Mr. Allingham found and filled vacancies two years ago. Of the four elected candidates next July, he who polls the fewest votes will fill Mr. Cooper Forster's place, and will have to retire at the date when the deceased would have completed his term of office. Notices respecting the election to the Council, were issued yesterday (Friday), to every Fellow in the United Kingdom, whose address is known to the Secretary; and the usual advertisement appeared on that date in the *London Gazette*, announcing that the Fellows desirous of becoming candidates must apply to the Secretary for the necessary papers, which must, when duly filled up, be deposited with him not later than Monday, June 7th next. The election will take place on Thursday, July 1st.

THE TREATMENT OF STRICTURE BY ELECTROLYSIS.

The treatment of urethral stricture by electrolysis is one of which there is, as yet, very little practical knowledge in England; and we confess we were very glad to see it so well brought forward as it was last Tuesday evening, by Dr. W. E. Steavenson and Mr. Bruce Clarke, at the Royal Medical and Chirurgical Society. Interest in the subject was first aroused by one of the daring attempts of American surgery, made by Dr. R. Newman, of New York, who published, about eighteen months ago, *Tabular Statistics of One Hundred Cases of Urethral Stricture treated by Electrolysis, without Relapse.* It would have appealed, perhaps, even more strongly to those who believe in the fallibility of human nature, if there had been one or two relapses. The fashion of operating admits of many small variations; but the essential points are, that one pole of the battery shall be of metal, and in contact with the surface of the stricture, and the other widely spread out by means of a pad over a considerable surface of the body, the back or elsewhere; and that between these poles a current of considerable strength should be passed. It is found most successful and least uncomfortable that the negative pole should be in contact with the urethra; the positive, with the body. A current may be passed which is strong enough to act upon the stricture without giving any discomfort, except, perhaps, at the moments of making and breaking. What the exact action of the current upon the cicatricial tissue may be, we are hardly in a position to say, though the actual watching of the process by means of an endoscope, as practised once by Mr. Berkeley Hill, may throw more light upon it. It is covered, at present, by the word "electrolysis," of which, when applied to fibrous tissues, we must admit that the limits are somewhat indistinct. At any rate, it is alleged that not only does the resistance of the stricture give way, but that more or less of the tissue which forms it is turned into a slimy mass of broken-down epithelium, and so disappears, without leaving a contracting cicatrix. The *à priori* impression is certainly strong that, where tissue has disappeared, there must be a cicatrix; and that, if there is a cicatrix, it must contract, sooner or later. Those who have practised electrolysis will gain a much more attentive hearing and a more zealous following when they can show a longer maintenance of good results than the eight months which have elapsed since Mr. Bruce Clarke's operations. When the malady is chronic, it naturally needs a long time to judge of the cure; but, at the same time, the habits of scars, due to different causes, are known to vary greatly in contraction, and it is possible enough that there may be less contraction after electrical action than any other, even than those from caustic alkalies. And, further, we are not yet experienced enough to assert how completely similar or dissimilar to an ordinary cicatrix this process of electrolysis may be. That it deserves trial from the older and most skilled hands, there would seem to us little doubt; and we can imagine it most convenient that the electrical necessaries should be managed by the younger students of that somewhat difficult class of instruments.

ANOTHER LUNACY TRIAL.

We regret to hear that we have not yet reached the end of the now long list of actions by which, during the last few years, members of the medical profession have been harassed. In a case now entered for trial in the Queen's Bench Division, the defendants, Dr. J. W. Langmore, of Oxford Terrace, and Mr. R. S. Armstrong, of Chippenham Road, St. Peter's Park, are charged with having maliciously and wrongfully conspired together to have the plaintiff, a lady named Hughes, confined in an asylum. We understand that in August, 1884, the plaintiff's conduct having been such as to cause her relations a good deal of uneasiness, her father called in Mr. Armstrong, who thought the case a proper one for inquiry. This being reported to Mr. Flowers, one of the magistrates of the Marylebone Police Court, an order for her examination by a medical man was made out. The plaintiff was accordingly visited, and examined by Dr. Langmore, who reported that she was then of unsound mind, and advised her removal to an asylum. She was then brought to Mr. Flowers, at the Police Court, and he, after the usual examination, signed an order for her removal to Banstead Asylum, where she remained for seven or eight weeks. It is maintained, on the part of the plaintiff, that she was suffering merely from hysteria. It happens, unfortunately for the defendants, that during the long interval which has elapsed, both the plaintiff's father, at whose instance the examination took place, and the magistrate who signed the order for her removal, are dead. We trust, however, that the loss of these important witnesses will not affect the issue of the case, and we feel sure the sympathy of the profession will be extended to the defendants in the anxiety and expense to which

they must necessarily be subjected. This case emphasises strongly the urgency for an amendment of the Lunacy Acts, such as is provided in the present Bill of the Lord Chancellor, and which will protect the medical man, acting *bonâ fide*, against such actions as this. The position of medical men called upon to certify in lunacy cases is, at present, one of intolerable anxiety and risk.

THE SENATE OF THE UNIVERSITY OF LONDON.

On June 29th, Convocation of the University of London will be called upon to choose three persons, whose names will be submitted to the Crown, and one of them appointed a Member of the Senate of the University. Precedent demands that the person thus nominated should have commanded the majority of the suffrages; and, at the present moment, considerable interest attaches to the election. It is the custom that the candidates should be drawn alternately from the faculties of Arts and Laws, and of Medicine and Science. On the last occasion, the Faculty of Arts and Laws chose Professor Carey Foster; and Mr. Magnus, who was one of the defeated candidates on that occasion, is now again in the field, on the strength of the possession of a degree in Science as well as in Arts. This unusual course will, undoubtedly, prejudice his claims, which would otherwise be weighty, on account of the great interest which he has exhibited in the reform of the University. Dr. Samuel Wilks, F.R.S., Consulting Physician to Guy's Hospital, has been nominated by a long list of over two hundred graduates; and it will be a matter for every medical graduate seriously to consider whether, at the present time, when matters of such momentous importance to the medical profession are being discussed, it would not be advisable to strengthen the medical representation in the Senate, which has been diminished by the deaths of Dr. Storrar and Dr. Carpenter. Dr. Wilks, who is a graduate of the University, and has been Examiner in Medicine, is understood to be opposed to a lowering of the standard, but to be strongly in favour of removing artificial obstructions. The third candidate, who must be nominated, will probably be Professor Thistleton Dyer, F.R.S.

SCOTLAND.

WESTERN DISPENSARY, EDINBURGH.

The managers of the Western Dispensary, Fountainbridge, Edinburgh, have just effected an important change and great improvement in the premises occupied by the dispensary. Large and convenient rooms have been obtained in the Chalmers Institute, Portree Street, Fountainbridge, Edinburgh, and the work of the dispensary was removed there a fortnight ago. The new premises will be much more satisfactory for the patients and for the staff, and the work of all the departments will be facilitated by the change which has been made. The new premises are not more than a hundred yards from the old ones, and are situated in one of the most densely populated and poorest parts of the city.

WHITE CROSS SOCIETY OF EDINBURGH UNIVERSITY.

The annual summer address to the members of the White Cross Society of Edinburgh University was delivered on Tuesday, May 25th, by Mr. G. S. Vidal, of Oxford. The chair was occupied by Professor Cossar Ewart, and among others present were Professors Simpson and Chiene. We could have wished that the members of the Society could have turned out in greater numbers, but the presence of the final examination and the proximity of the first and second professional examinations would probably account for the limited number who attended. The lecturer stated that the work of the Society ought to be based on some great general principle, and the work to be done was the great duty of trying to spread personal purity among their fellow-men. The lecture contained much valuable matter, and was well received; at its termination a vote of thanks to the lecturer, moved by Dr. G. Sims Woodhead, was cordially awarded. Letters of apology for absence were received from Principal Sir William Muir, Professors Flint, Maclagan, Crum Brown, and Sir William Turner, and from the Rev. Dr. Macgregor, etc.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

An extra meeting of this Society was held in the Faculty Hall on May 21st, under the presidency of Professor Macleod, for the purpose of considering certain proposals of the Council for changes in the working arrangements of the Society. The meeting was not large, but a very full discussion took place, and many valuable suggestions were made for the future conduct of the Society. The suggestions concerned the character of the papers, arrangements for bringing to the meeting illustrative cases in private as well as in hospital practice, and for microscopical and other demonstrations. It is hoped that the Council will carefully consider the suggestions; and that, by energetically carrying them out, the value and interest of the meetings, to the bulk of the members of the profession, will be greatly enhanced.

ORPHAN HOMES OF SCOTLAND.

On the afternoon of May 20th, a contingent of 117 children from Mr. Quarrier's orphan homes at Bridge of Weir sailed from the Clyde for Canada in the Allan Liner *Buenos Ayrean*. Of the party, 100 were girls and 17 were boys. At a farewell meeting, Mr. Quarrier explained that 117 boys who had been sent out last year were nearly all out in homes, and working successfully. Five hundred children still remained at Bridge of Weir. For the purposes of this scheme of rescuing destitute children, property to the value of £50,000 had already been built, £10,000 were at present being expended on buildings, and an additional £26,000 were wanted to complete the buildings.

GLASGOW AND THE BRITISH MEDICAL ASSOCIATION.

The Committee, formed to invite the British Medical Association to Glasgow in 1888, and to mature arrangements for the purpose of the meeting, met in the Faculty Hall on May 19th. Dr. Andrew Fergus occupied the chair, and the attendance was very large. Professor Macleod proposed that Professor W. T. Gairdner, M.D., be recommended to the Council of the Association as President-elect. The motion was seconded by Dr. Eben. Duncan, and unanimously agreed to. Professor Gairdner acknowledged the pleasure the unanimity of choice had given him, and was heartily applauded when he spoke of the whole profession in Glasgow and the West of Scotland setting aside all sectional differences, and uniting as one body to ensure the success of the prospective meeting. A large working committee was then appointed, with power to add to its number, to appoint subcommittees for special purposes, and to nominate the necessary officers.

GLASGOW ROYAL INFIRMARY.

The managers of the Glasgow Royal Infirmary have addressed a memorial to the Secretary and Lord Advocate for Scotland, urging that a clause should be introduced in the forthcoming Universities (Scotland) Bill to erect the Medical School of the Glasgow Royal Infirmary into a College of Glasgow University. The memorial points out that the Royal Infirmary is one of the largest hospitals in Great Britain, containing, as it does, 600 beds, and having over 5,000 patients annually. From its opening in 1794 till 1875, when the University, at that time in its immediate neighbourhood, was removed to the West End, out of reach of the students of the infirmary, it was largely attended by students. It is now almost deserted by students, at least, is attended only by extramural students, who do not intend to take a degree, the Western Infirmary having been erected next to the University for the benefit of those attending the University. The managers explain that, in 1875, they obtained a supplementary charter "to afford facilities and accommodation to individual teachers for instructing students in medicine, surgery, and the collateral sciences usually comprehended in a medical educa-

tion, in addition to encouraging the clinical instruction of students as hitherto in the said Infirmary," that a staff of lecturers was appointed, and class-rooms and laboratories were erected and suitably equipped for the purposes of the charter. In spite of this, the number of students is small, and not likely to increase. This the managers attribute to the conditions of university recognition and examination, the students deeming it "politic to attend the classes of the teachers, who are also examiners." They submit that it is admitted that high professional proficiency is maintained only in hospitals where students attend in considerable numbers; and that where hospitals are not centres of clinical teaching, they have no scientific reputation. According to the memorialists, there is only one course that, if taken, will prevent the interests of the Royal Infirmary continuing to suffer, and that is the breaking up of the monopoly of University privilege in Glasgow, and the erection of the Infirmary into a college of the University, thus following the precedents of Oxford and Cambridge, and of the Newcastle, Manchester, and Liverpool Schools of Medicine, affiliated with Durham and Victoria Universities.

IRELAND.

THE Cork Guardians have adopted a resolution, requesting the Local Government Board to sanction the plans recently adopted for increasing the accommodation of the female lunatic wards.

DR. O'REILLY has been appointed, by the Horse Guards, Medical Examiner of Recruits for Line and Militia for the Clones Recruiting District.

VACCINATION.

ACCORDING to the returns of vaccination received for the first quarter of the year, there were 16,634 persons successfully vaccinated in Ireland. In 4,318 cases, the operation was postponed; and 55 children were reported as insusceptible of the operation. The deaths of 1,862 unvaccinated children under three months old were registered during the quarter, making a total of 22,269 children with regard to whom particulars as to vaccination were ascertained. The registrars' notes show that the great disparity between this number and the number of births registered is caused by the difficulties in the way of vaccination, owing to the severe weather which prevailed during last quarter.

M. PASTEUR'S TREATMENT OF HYDROPHOBIA.

THE first case sent from Ireland to undergo M. Pasteur's inoculations for the prevention of hydrophobia was sent, on Monday last, by Dr. Conry, of Kilkelly. The person was bitten on the hand by a rabid dog on the 11th instant.

THE IRISH MEDICAL ASSOCIATION.

THE forty-seventh annual general meeting of this Association will be held at the Royal College of Surgeons in Ireland, on Monday, June 7th, at 12 o'clock. As usual, the annual breakfast and dinner will take place on the same day; the breakfast at the Shelbourne Hotel, and the dinner at the Royal College of Surgeons.

THE LABOURERS' ACT.

MR. ROBINSON, Local Government Board Inspector, held an inquiry, last week, at Balrothery Union Workhouse in reference to the necessity for agricultural labourers' cottages in the divisions of Lusk, Hollywood, and Holmpatrick. Evidence was given as to the details of the scheme, and as regarded the unsanitary condition of the present dwellings of the labourers, whose houses were described as being in a dilapidated and ruinous condition. Frequently there were no windows; they were destitute of sanitary accommodation, and, in one instance, the cottage had to be propped up to prevent its falling.

NEWRY BOARD OF GUARDIANS.

ABOUT a fortnight since, the guardians increased the salary of their medical officer of the workhouse, Dr. S. E. Martin, from £120 to £150 a year; and this, for some reason or other, caused considerable dissatisfaction to the Nationalist Guardians, who last week had a resolution to rescind the increase granted. On the morning of the day, about three hundred Nationalists assembled at the workhouse, probably with the intention of intimidating the Guardians; but they were wofully mistaken, as the motion to reduce Dr. Martin's salary was beaten by twenty-two votes against eleven. After the Board had broken up, the Guardians who had voted against the motion were groaned and hooted by the mob waiting outside.

THE IRISH COLLEGES AND THE MEDICAL BILL.

THE King and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland, have agreed to petition the Houses of Parliament in support of the Bill introduced by Sir Lyon Playfair, and to use their influence in its favour. As our readers know, several abortive efforts have been made to effect a combination for licensing and examination purposes between the Irish Colleges. The fact of there not being such an union places these colleges now at a disadvantage. While the College of Physicians might have no objection to combine with the College of Surgeons, on reasonable terms, it objects to the possibility of having, under Clause 5 of the Bill, the Apothecaries' Hall of Ireland brought into union and equality with it. Nevertheless, it approves of this clause, as proposed to be amended by Sir Lyon Playfair. Considering its status, and the value of its licence, the College of Physicians thinks that the Apothecaries' Hall should not be represented on the General Council, and it is of opinion that there should be only two Crown nominees for England, instead of four, as proposed in Clause 7. The College would also amend Clause 12, by subjecting the decision of the Registrar as to the credentials of candidates for registration as Colonial and foreign practitioners, to the control of the General Council. It is strongly in favour of the registration, by registered medical practitioners, of any diploma or certificate in sanitary science or State medicine, granted, after examination, by any University or Medical Corporation in the United Kingdom, should such diploma or certificate appear to the General Council to deserve recognition in the *Medical Register*. It is to be hoped that, even late in the day as it is now, some means will soon be arrived at for establishing a Conjoint Examining Board for Ireland, on the same principles as that now established in England, between the sister Colleges there.

THE ROYAL UNIVERSITY OF IRELAND.

THE degrees in medicine, surgery, and in obstetrics, obtained at the recent examinations of the University, were publicly conferred on Tuesday last. In connection with the medical examinations, we regret to state that two very unfortunate incidents have occurred. On May 21st, a meeting of medical graduates and students of the Royal University was held in the Queen's College, Belfast, to protest against the alleged exceptional treatment of students from the Belfast Queen's College, and to consider certain other matters in connection with the examinations. The meeting adopted a series of resolutions, and appointed a deputation to lay them before the Senate of the University. The Senate received the deputation last Tuesday, and heard from Dr. O'Neile a full and forcible statement of the serious complaints made by the Belfast Medical School.

Briefly stated, it was alleged (1) that, although about 40 per cent. of the candidates presenting themselves for the various examinations in medicine receive their education in the Belfast Medical School, it was inadequately represented on the examining boards, and that consequently students of that school were placed at a great disadvantage. 2. That the method of conducting some of the oral examinations is eminently unsatisfactory, especially the oral for the M.B. degree in Practical Physiology, in which sufficient time is not allowed to the candidates for the amount of work to be done; and that in the examinations in Medicine, Surgery, Midwifery, and Gynæcology, questions are asked and methods of treatment required which are not found in the standard text-books, or recognised by the leading medical schools of the United Kingdom; and not only so, but the methods

taught and advocated by the leading London physicians and surgeons are in some instances not accepted ; that, on the part of some of the examiners, there is a marked want of courtesy towards the candidates. 3. That, in a great many instances, the questions are unscientific and devoid of practical importance, and that the tendency of the questions in Medicine, Surgery, Midwifery, and Gynæcology has been of such a nature as to render it a matter of absolute necessity to spend some time in Dublin, at a considerable expense and inconvenience, under the charge or care of a "grinder," in order to be acquainted with the peculiarities and the special lines of treatment advocated by the several examiners, as in many cases these cannot be learned from the standard text-books. 4. That additions have been made to the courses of examination, without sufficient notice having been given.

Dr. O'NEILL spoke in detail upon each of these heads, and gave examples in support of his statements. He concluded by asking that a Commission might be appointed to inquire into the allegations made, and said that the students were prepared to abide by the result. The Senate have decided to refer the matter to a Special Committee, consisting of the Standing Committee and the medical members of the Senate, for consideration and report.

The other matter to which we have referred was a published statement made by a member of the Senate itself—Dr. Maguire, a Fellow and Professor of Trinity College, Dublin—and was brought under the notice of the Senate by the Vice-Chancellor. The statement was, that the examination-papers of the University had been for years systematically tapped. The Senate, having investigated the matter, came to the conclusion "that the charges, as preferred, were not sustained." We trust they are not true. Dr. Maguire says it is a fact ; and rumour, even in connection with the last examination, gives some support to the assertion.

THE BRITISH HYDROPHOBIA COMMISSION.

WE understand that the investigation which, as we announced last week, is being conducted under the direction of the British Hydrophobia Commission, has, so far as it has yet gone, afforded confirmation of the truth of certain points of great importance maintained by M. Pasteur. Little doubt now remains that the virus used by him in his experiments is the true virus of rabies.

UNIVERSITY OF LONDON.

AN extraordinary meeting of Convocation, convened by the Chairman in compliance with the terms of a requisition, was held on Tuesday last, May 25th, in the University building. The object of the meeting was to receive and consider the report of the Special Committee appointed at the meeting held on December 8th, 1885, for the consideration of the scheme for the constitution of the University proposed by the Special Committee of forty (Lord Justice Fry's Committee), appointed by Convocation on February 24th, 1885. Dr. F. J. Wood, Chairman of Convocation, presided.

Mr. P. MAGNUS presented the report of the Committee, and moved that it be received. He explained its provisions, and said that the scheme was not the scheme of any one individual graduate of the University, but it was the scheme of the Committee as a whole.

The proposition was seconded by Mr. J. ANSTIE, and was carried unanimously.

Mr. MAGNUS then moved the adoption of the following resolution, recommended on page 3 of the report of the Special Committee: "That Convocation approves of the admission of certain educational institutions having one, or more than one, faculty of university rank as Constituent Colleges of the University, and agrees with the proposals relating thereto, contained in Section iv of the Scheme." This, he said, had long been felt as a great desideratum in London, where there existed a large amount of excellent teaching, which only required to be properly organised in order that it might constitute by itself a teaching university. What he wanted was to redress the grievances of teachers, without revolutionising this University, and without taking away from Convocation the functions it had previously exercised.—Mr. ANSTIE seconded the resolution.—Mr. TYLER remarked that, whatever changes they made, should be by way of development, and not changes which would, as it were, turn the University topsy-turvy; and proclaim that the University, which had existed fifty years, had been a failure. This scheme, he thought, was of too speculative a character, and did not sufficiently regard the past history of the University. The University was to be changed, and reconstructed on lines which did not exist anywhere else, either in earth or heaven, as far as he knew.—Dr. MOXON thought the scheme might conduce to the interests of the University; but its provisions should be more clearly defined.—Mr. N. HANHART moved, as an amendment, that the word "admission" be struck out, in order to insert the words "affiliation to the University," which was seconded by Dr. J. CURNOW.—A discussion of some length ensued, in the course of which several members objected to making the University consist, not, as at present, of Graduates only, but of separate Corporations, with whom the connection might be very slight ; and it was also urged that the dilution of the directorate of the University would tend to lower the value of its degrees.—Dr. SANSOM said that many members of the University thought it would be wise and politic to establish another University, with a lower standard, for the benefit of those who could not reach the present standard, leaving the status of the existing University as it was. They believed that it would by no means impair the position of the University, but quite the reverse. It would always be open for a graduate of the Lower University to take the higher honour of a degree in the present University.—Dr. T. B. NAPIER strongly opposed the idea of establishing another University. He approved of the scheme before the House, and believed there was no danger that it would have the effect of depreciating the value of the degrees.—The discussion was continued by Dr. R. D. ROBERTS, Mr. J. E. COTTON, Dr. J. WHITE, and other speakers, more than one of whom expressed the opinion that enough had been heard of a scheme of a Teaching University, and that matters had better be allowed to remain as they were.—On a division, the amendment was lost by a large majority.

Mr. T. TYLER moved the following further amendment: "That Convocation approves of the revision of the list of Institutions in connection with this University, with a view to such Institutions being brought into closer relationship with such University."

Mr. W. T. LYNN seconded the amendment, which was rejected.

The original resolution was then agreed to, with only a few dissentients.

Mr. MAGNUS next moved the adoption of the following resolution, recommended in the report of the Special Committee: "That Convocation approves of the establishment of a Council of Education, as a part of the University, and of the proposals for giving effect thereto, contained in the scheme."—Mr. ANSTIE seconded the resolution, which was carried.

Mr. MAGNUS then moved the adoption of a third resolution recommended in the Report of the Special Committee: "That Convocation approves of the proposals for the constitution of the Senate of the University contained in the scheme." Mr. ANSTIE seconded the proposition. Mr. R. H. WILLCOCKS moved to add the words, "subject to the number of insititutions having power to appoint an ordinary member being increased to eight, by the addition of the Institution of Civil Engineers." The amendment was seconded by Mr. E. S. WEYMOUTH, and was lost by a large majority. The original proposition was carried.

Two other propositions recommended by the Special Committee were to have been brought forward, but at this point the debate was adjourned until June 29th.

BRITISH ASSOCIATION.

THE fifty-sixth annual meeting of the British Association for the advancement of Science will be held this year at Birmingham, under the presidency of Sir William Dawson, C.M.G., M.A., LL.D., F.R.S., F.G.S., Principal of McGill College, Montreal. The Vice-Presidents are the Right Hon. the Earl of Bradford, and Lords Leigh, D.C.L., Norton, K.C.M.G., Wrottesley ; the Right Rev. the Lord Bishop of Worcester, D.D. ; Thomas Martineau, Esq., the Mayor of Birmingham ; Professors G. G. Stokes, M.A., D.C.L., LL.D., Pres.R.S. ; and W. A. Tildens, D.Sc., F.R.S., F.C.S. ; the Rev. A. R. Vardy, M.A. ; and the Rev. H. W. Watson, D.Sc., F.R.S.

The meeting will commence on Wednesday, September 1st, when an address will be delivered by the President-elect, on his assuming the President's chair.

On Thursday, the 2nd, the first *soirée* will take place. The next evening, Friday, the 3rd, a lecture on the "Sense of Hearing" will be delivered by Professor Rutherford, M.D., F.R.S., of Edinburgh ; followed on Monday, the 6th, by another on "Soap-Bubbles," by W. A. Rücker, Esq., M.A., F.R.S. On Tuesday, the 7th, the second *soirée* will be held ; and on the afternoon of Wednesday, the 8th, the concluding general meeting will be held.

The work of the meeting will be conducted in eight sections, which will meet daily from 11 A.M. to 3 P.M.

Great exertions are being made by the inhabitants of Birmingham

and its neighbourhood to make the meeting in every respect a thoroughly successful one. On Saturday, the 4th, and Thursday, the 9th, excursions to places of interest in the neighbourhood have been arranged for.

The local arrangements are being made by an influential local committee, while the work of the meeting is being actively pressed forward by the organising committees of the various sections, which meet at the offices of the Association, 22, Albemarle Street.

Intending contributors of memoirs are advised to communicate with any of the Secretaries of the Section under which their intended paper may fall, as soon as possible, as, by so doing, they will materially assist the Organising Committees in making arrangements for the work of the different sections. The following is a list of the Sections, and the President, Vice-Presidents, and Secretaries of each, nominated by the Council of the Association, and forming the Organising Committee, for the purpose of obtaining information upon memoirs and reports likely to be submitted to the Sections, and of preparing reports thereon, and on the order in which it is desirable that they should be read.

A. MATHEMATICAL AND PHYSICAL SCIENCE.—*President*, Professor G. H. Darwin, M.A., LL.D., F.R.S., F.R.A.S. *Vice-Presidents*, Donald MacAlister, M.A., M.D., B.Sc.; Rev. H. W. Watson, D.Sc., F.R.S. *Secretaries*, R. E. Baynes, M.A. (*Recorder*); R. T. Glazebrook, M.A., F.R.S.; Professor J. H. Poynting, M.A.; W. N. Shaw, M.A.

B. CHEMICAL SCIENCE.—*President*, William Crookes, F.R.S., F.C.S. *Vice-Presidents*, Professor Carnelly, D.Sc.; W. H. Perkin, Ph.D., F.R.S., F.C.S. *Secretaries*, Professor P. Phillips Benson, D.Sc., F.C.S. (*Recorder*); H. B. Dixon, M.A., F.C.S.; H. Forster Morley, M.A., D.Sc., F.C.S.; W. W. J. Nicol, Ph.D.; C. J. Woodward, B.Sc.

C. GEOLOGY.—*President*, Professor T. G. Bonney, D.Sc., LL.D., F.R.S., F.S.A., F.G.S. *Vice-Presidents*, Professor C. Lapworth, F.G.S.; H. Woodward, LL.D., F.R.S., F.G.S. *Secretaries*, W. Jerome Harrison, F.G.S.; J. J. H. Teall, M.A., F.G.S.; W. Topley, F.G.S. (*Recorder*); W. W. Watts, B.A., F.G.S.

D. BIOLOGY.—*President*, William Carruthers, F.R.S., F.L.S., F.G.S. *Vice-Presidents*, Professor E. A. Schäfer, F.R.S., M.R.C.S.; P. L. Sclater, M.A., Ph.D., F.R.S., F.L.S., F.G.S., F.R.G.S., Sec. Z.S. *Secretaries*, Professor T. W. Bridge, M.A.; Walter Heape (*Recorder*); Professor W. Hillhouse, M.A.; W. L. Sclater, B.A., F.Z.S.; H. Marshall Ward, M.A.

E. GEOGRAPHY.—*President*, Major-General Sir F. J. Goldsmid, K.C.S.I., C.B., F.R.G.S. *Vice-Presidents*, Major-General Sir Lewis Pelly, K.C.B., K.C.S.I., M.P., F.R.G.S.; Captain W. J. L. Wharton, R.N., F.R.G.S. *Secretaries*, F. T. S. Houghton, M.A.; J. S. Keltie; J. S. O'Halloran, F.R.G.S.; E. G. Ravenstein, F.R.G.S. (*Recorder*).

F. ECONOMIC SCIENCE AND STATISTICS.—*President*, John Biddulph Martin, M.A., F.S.S., F.Z.S. *Vice-Presidents*, G. W. Hastings, M.P., F.S.S.; Sir R. Temple, Bart., G.C.S.I., C.I.E., D.C.L., LL.D., M.P., F.R.G.S., F.S.S. *Secretaries*, F. F. Barham; Rev. W. Cunningham, B.D., D.Sc. (*Recorder*); Professor Foxwell, M.A., F.S.S.; J. F. Moss, F.R.G.S.

G. MECHANICAL SCIENCE.—*President*, Sir James N. Douglass, M.Inst.C.E. *Vice-Presidents*, W. Anderson, M.Inst.C.E.; W. P. Marshall, M.Inst.C.E. *Secretaries*, Conrad W. Cook; J. Kenward, Assoc.Inst.C.E.; E. Rigg, M.A. (*Recorder*).

H. ANTHROPOLOGY.—*President*, Sir George Campbell, K.C.S.I., M.P., D.C.L., F.R.G.S. *Vice-Presidents*, Professor W. Boyd Dawkins, M.A., F.R.S., F.S.A., F.G.S.; Lieutenant-Colonel H. H. Godwin-Austen, F.R.S., F.R.G.S., F.Z.S. *Secretaries*, G. W. Bloxham, M.A., F.L.S. (*Recorder*); J. G. Garson, M.D., F.Z.S., M.A.I.; Walter Hurst, B.Sc.; R. Saundby, M.D.

This list of Sectional Officers will be completed, and will be submitted to the General Committee on Wednesday, September 1st.

A. T. ATCHISON, *Secretary*.

THE CHOLERA.

THE CHOLERA IN ITALY.

THE progress which the cholera makes in Italy, is not, as yet, very alarming. During the week ending at midday on May 23rd, the number of cases at Venice was 45, the deaths 23; at Barif 63, with 27 deaths; and at Ostuni, 3 cases and 4 deaths. In Brindisi, 1 case occurred, followed by death, but no fresh centres of contagion have been reported during the week. Judging, however, from past experience of the reluctance of local authorities to give prompt information of the appearance of the disease in their midst, it is quite possible that there may be new foci of infection, unknown, so far, to the public, whose attention is concentrated on the general elections. But it is a good sign that the present Prime Minister accepts a thorough revision of the samitary laws of the kingdom, as urgently called for, in the speech embodying a defence of his past policy, with his future programme, which he delivered in Rome last week. Considerable heat has set in all over Italy, and it remains to be seen what influence that will have in developing the epidemic.

THE CHOLERA IN SPAIN IN 1885.

La Gazeta publishes (April 7th to May 1st) the statistics of the epidemic which prevailed in Spain last year. In all, 335,986 cases are recorded; of these, 119,493 died. The provinces in which most cases occurred are in alphabetical order.

	Population.	Cases.	Deaths.
Albacete	130,921	8,236	3,244
Alicante	311,425	13,977	5,645
Almeria	242,213	9,660	2,566
Barcelona	541,211	6,302	2,915
Castellon	214,656	16,753	6,436
Cuenca	137,649	10,003	3,459
Granada	364,568	24,736	10,285
Madrid	477,712	8,584	3,559
Murcia	420,229	17,749	7,376
Navarra	161,626	12,895	3,161
Tarragona	196,448	8,740	2,536
Teruel	171,312	21,909	6,869
Toledo	170,857	10,308	3,972
Valencia	630,321	45,515	21,612
Velledolia	157,019	7,578	2,603
Zaragoza	348,361	54,943	12,788

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, CANCER OF THE BREAST,
OLD AGE, THE VALUE OF HAMAMELIS,
THE VALUE OF PURE TEREBENE.

Memoranda on the above, and forms for recording individual cases, may be had on application.

The inquiry on Acute Rheumatism is now closed, as the printing of the Tables is completed. *Any cases, of which Reports are sent by June 1st, will be added to the Tables.*

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into THE THERAPEUTIC VALUE OF HAMAMELIS AND PURE TEREBENE have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations,

with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. MAITLAND, M.B., Honorary Secretary, Madras.

SOUTH MIDLAND BRANCH.—The annual meeting will be held at the Swan Hotel, Bedford, on Thursday, June 3rd, 1886, at 1.30 P.M. Dinner at 5 o'clock. Tickets 6s. 6d. each, exclusive of wine. Gentlemen wishing to be present at the dinner, or to bring forward communications at the meeting, are requested to intimate their intention, and to send the title of their papers without delay, to the Honorary Secretary, C. J. EVANS, Northampton.

MIDLAND BRANCH.—The annual meeting will be held at the County Hospital, Lincoln, on Thursday, June 17th. Members desirous of reading papers, etc., are requested to communicate at once with the Secretary, W. A. CARLINE, M.D., Lincoln.

METROPOLITAN COUNTIES BRANCH.—A special General Meeting of this Branch will be held at the Royal School of Mines, Jermyn Street, on Monday, May 31st, to consider the subject of degrees in medicine for London students. The President, Dr. Walter Dickson, will take the chair at 8 P.M. precisely. A resolution to the following effect will be submitted to the meeting: "That negotiations with the University of London not having led to the desired result, this meeting recommends that the Royal College of Physicians of London and the Royal College of Surgeons of England be requested to endeavour to obtain power to grant degrees in medicine." All registered medical practitioners residing in the Metropolitan District are invited to attend.—ALEXANDER HENRY, M.D.; W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT. —The next meeting will be held at the Royal Forest Hotel, Chingford, on Thursday, June 3rd, at 6 P.M. *Business.*—Election of Secretary. At 6.15 P.M., sharp, the members and their friends will dine together. The President of the Branch, W. Dickson, M.D., R.N., will preside, and will be supported by Sir Guyer Hunter, K.C.M.G., M.P., J. S. Bristowe, M.D., F.R.S. (President-elect), C. J. Hare, M.D., T. Bridgwater, M.D., and C. Macnamara, Esq. (Past-Presidents), and other leaders of the profession. Tickets, 8s. each. Members intending to be present are requested to communicate with the Honorary Secretary as early as possible, but not later than Monday, May 31st.—JOSEPH W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in the Town Hall, Lancaster, the last week in June or first week in July. Members wishing to show cases or read short communications will oblige by writing to the Honorary Secretary, Dr. GLASCOTT, 23, St. John Street, Manchester. Dr. Stewart has promised a paper on Provident Dispensaries. Dr. Christopher Johnson has promised a paper on Sanitary Reform a Hundred Years Ago. Detailed arrangements will be published next week.

SOUTHERN BRANCH.—The thirteenth annual meeting will take place at Gosport on Wednesday, June 16th, 1886. The general meeting will be held at the India Arms Hotel, at half-past twelve. Luncheon will be provided by the President-elect between twelve and one o'clock. In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers or other communications are requested to forward at once the titles to the Honorary Secretary. No communications must exceed ten minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect (Dr. Kealy) at half-past 2 P.M. During the afternoon, the members are invited to visit the Royal Naval Hospital, Haslar, and to take a carriage-drive in the neighbourhood. The dinner will take place at the India Arms Hotel, at 6 P.M.; charge, 6s., exclusive of wine, etc. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Mr. Gregory Kealy Forton, Gosport, on or before Tuesday, June 15th. — J. WARD COUSINS, Honorary Secretary and Treasurer.

SOUTH-WALES AND MONMOUTHSHIRE BRANCH.— The annual meeting will be held at Cardiff at the end of June. Members wishing to read papers should send titles before June 14th. Gentlemen wishing to join the Branch or Association should send notice before June 7th.—A. SHEEN, M.D., D. A. DAVIES, M.B., Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE annual meeting of the above District was held at the Kent and Canterbury Hospital, on Thursday, May 20th; Mr. H. G. Sadler in the chair.

Secretary.—Dr. Tyson, of Folkestone, was re-elected Honorary Secretary for the ensuing year.

Paper.—Mr. Raven, of Broadstairs, read a paper on the Extreme Duration of Infectiousness in the following Infectious Diseases—Small-pox, Scarlatina, Measles, Mumps, and Diphtheria. Mr. James Reid, Dr. Gogarty, Dr. Robinson, Mr. Schön, and Dr. Isambard Owen took part in the subsequent discussion.

Dinner.—The members afterwards dined together at the Royal Fountain Hotel.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Forcible Dilatation compared to Internal Urethrotomy.—Tuberculosis of the Suprarenal Capsules.—Preventive Inoculation in Pleuropneumonia of Cattle.—Polymorphous Erythema treated with Iodide of Potassium.—General News.

AT a recent meeting of the Paris Surgical Society, M. le Dentu established a parallel between forcible dilatation and urethrotomy, and summarised the results of two series of twenty-four cases treated by these two different methods. Forcible dilatation was preferable to internal urethrotomy, especially in violent spasms of the canal; in constriction accompanied by urethritis; in elastic constriction; in rigid constriction, and in urinary fistulæ, with induration of the soft parts of the perinæum. M. le Fort said that he was quite opposed to urethrotomy, and never practised forcible dilatation. His method of dilatation had never been followed by death, and always answered in all cases. M. Marc Seé was a partisan of internal urethrotomy. In some cases the constriction could be dilated sufficiently to be able to pass a French bougie, No. 8 or 10, but further dilatation by bougies was impossible. In such cases, M. Seé practised internal urethrotomy, and always with success. M. Horteloup rarely practised internal urethrotomy. In constriction with perineal fistulæ, he performed external urethrotomy.

At a recent meeting of the Paris Anatomical Society, M. Graverry showed an example of tuberculosis of the suprarenal capsule. The patient was 20 years old. He was admitted into M. Desprès' wards on December 11th, 1885, to be treated for tubercular osteoarthritis of one of the joints of the left big toe. He had pulmonary disease, and, about February, his skin began to show a brown discolouration, which increased more and more. At the same time, he was attacked by subacute articular rheumatism, with endocarditis. The patient died with symptoms of meningitis. The meninges were found to be free from tubercular granulations, but were much congested. The lungs presented softening tubercles. On the cardiac mitral valve there were reddish granulations; but these were not examined. The suprarenal capsules were infiltrated by a caseous confluent mass. The other organs of the abdominal cavity were not examined.

At a recent meeting of the Société Centrale de la Médicine Vétérinaire, M. Laquerrière stated that epizootic pleuropneumonia was a contagious affection special to ruminants. Preventive inoculation was not made with attenuated, but with strong virus—namely, the fluid removed from the lungs of a animal subject to the disease. It was somewhat analogous to the practice of inoculating man with fluid from variolic pustules, and not with vaccine. Experience had demonstrated that, for the pneumonia of cattle, inoculation must be effected where the cellular tissue of the animal was very dense. Notwithstanding these precautions, there were some drawbacks to the practice of using strong virus; but they would only be overcome when it had been discovered how to attenuate the virus of the disease.

At a recent meeting of the Academy of Medicine, M. Villemin read a paper on polymorphous erythema and its treatment. The author considered that this affection resulted from a general morbid condition analogous to that of eruptive fevers. M. Villemin had observed that iodide of potassium had an extraordinary influence on the various manifestations of erythema. It might be considered as a specific against polymorphous erythema. In from twenty to forty-eight hours, it lessened both fever and pain; in three or four days, both pain and œdema disappeared.

M. Vidal, at a recent meeting of the Academy of Medicine, showed a horn twenty-four centimètres long, which would have measured twenty-five centimètres had the end not been twisted round and round. M. Dubrandy, of Hyères, had removed it from the scalp of a woman 51 years of age. It developed in the region of the posterior fontanelle At the base, its diameter measured from six to seven

centimètres. This production was separated from the scalp by a simple ligature. This operation, as appeared probable, was insufficient, and the horn had begun to grow again. In order to remove it permanently, the derma in which it took root required excision.

The note of Herr Vry, sent to the Academy of Medicine, concerning the impurity of the sulphate of quinine sold by French druggists, has induced the manufacturers of this product to write to the Academy of Medicine, and assert that their quinine is of good quality, answering to the requirements laid down by the *Codex*. They call upon Herr de Vry to explain the method which he adopts in making his analyses. The Academy has decided to send the letter to Herr Vry, praying him to forward further details.

MM. Duguet and Héricourt, who made a communication to the Academy of Medicine concerning the identity of the microsporon of pityriasis vesicolor with the bacillus of tuberculosis (see JOURNAL, May 14th), have written to say that further researches obliged them to withdraw the theories and opinions formulated in that communication.

M. Chevreul's one hundredth birthday was celebrated on May 17th, at the Academy of Sciences. Admiral Jurien de la Gravière made a long and eulogistic address, in which he assured the veteran scientist that his fellow-academicians were assembled to commemorate the worth of his life, rather than its length. His earnest search for truth, his upright career, and the services which his science had rendered to humanity, were noted by the speaker. A charming statue, by M. Dubois, entitled "Le Penseur Français," was then presented to M. Chevreul, who was much agitated, and expressed his thanks in a very few words. M. Chevreul's hundredth year is not completed until next August, but, as everyone is scattered in different parts of the world at that season, the anniversary has preceded the actual date by a few months.

The Municipal Council of Amiens, by the request of the Mayor, has voted £20 to the Pasteur Fund; Mme. Boucicault has given 10,000 francs; the Consul-General of Isère, £12. Mmes. Gendu and Fageol organised a child's fête for the benefit of the Pasteur Institute. M. Pasteur wrote a graceful letter of thanks; we quote the following passage: "If only the workers in the new establishment are instrumental in rescuing those bright happy creatures from the scourge of scarlet fever, diphtheria, measles, and typhoid fever, then everything is possible. It is my salutary belief that their labour inspires perseverance in research, the true source of success."

At a recent meeting of the Paris Academy of Medicine, M. Cazeneuve stated that several of the colouring substances of tar were barely poisonous. These substances, originally used for dyeing silks, etc., were afterwards used for colouring preserved foods, bonbons, vermicelli, etc. In 1878, fuchsine was used for colouring wine. The Comité Consultatif d'Hygiené investigated the subject; the fuchsine was found to be badly prepared, and to contain arsenic. The Committee prohibited its use. MM. Cazeneuve and Lépine have made a series of researches which demonstrated that these colouring substances were not dangerous. The accompanying sulphates of these different principles were specially inert, perfectly free from toxic properties. It had also been ascertained that factory-hands employed in their manufacture never presented any symptoms of poisoning. M. Cazeneuve proposed that, instead of proscribing all the colouring substances of tar, only those should be prohibited which were really toxic. M. Béchamp opposed Cazeneuve's proposition. He stated that those substances were frequently arsenical, and should be totally forbidden.

At a recent meeting of the Therapeutical Society, M. Limousin showed a specimen of pichü, or piché. It was a solanum to which the Chilians gave that name. It had recently been introduced into France. In its native country, it was believed to disintegrate urinary calculi. M. Limousin prepared a fluid-extract of pichü, of which four dessertspoonfuls represented thirty grammes of the plant, the dose generally administered in twenty-four hours. M. Limousin believed that piché acted specially on the mucin, which held together the different elements of calculi, and dissolved it, and lessened vesical catarrh. In consequence of the resin it contained, M. Dujardin-Beaumetz confirmed this statement.

CARBOLIC ACID AND CHLORAL.—When carbolic acid and chloral hydrate are mixed together, provided that the proportion of carbolic acid does not exceed 1.7 to 1 of chloral, a liquid is formed, as when chloral is triturated with camphor. This liquid is perfectly soluble in water. If more than the above proportion of carbolic acid be present, corresponding to three molecules of carbolic acid to one of chloral, the excess will separate on the addition of water. The substances separate in any case on the addition of heat.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

Death from Chloroform at the Infirmary.—Durham University Medical Society.—New Site for the College of Physical Science.—Physiciancy at the Sick Children's Hospital.

ANOTHER death under chloroform is reported from the Infirmary. Dr. Maynard, the house-surgeon, in his evidence before the Coroner, stated that the deceased, a man aged 48, was admitted into the Infirmary, suffering from fractured patella and bruises. Gangrene set in, spread over the injured joint, and was followed by septic absorption; it was decided to amputate, to save life. Embarrassed breathing came on shortly after the commencement of the operation, and, in spite of every effort to restore him, he died. At the *post mortem* examination, there was found to be old standing disease of the heart, and fatty degeneration of the heart, liver, and kidneys. The jury found that death occurred while under the influence of chloroform, properly administered, for the purpose of a surgical operation.

The University of Durham Medical Society gave an invitation ball a week ago. The Society has now existed seven or eight years, and, from a very small beginning, has attained considerable proportions. Its members are students of the College of Medicine, and it owes its origin, in a measure, to those students who came from other medical schools to obtain the Durham degree. At first, its meetings were held in a hired room, but the Council of the College subsequently gave their consent to the free use of the College library, and, since that time, its course has been one of increasing success. The Society had, annually, a *soirée;* but, this year, the committee decided to give a ball, and, from the manner in which everything passed off, they will, doubtless, make it an annual gathering in place of a *soirée*. Dr. Drummond, the president of the year, received the guests on their arrival, and the majority of the members of the College staff honoured the ball by their presence.

Considerable surprise has been expressed in the town at the action of the Physical Science College governors, in giving up the Singleton House site, which had been granted, after much debate in the City Council, as the site for the two colleges of Medicine and Science. This site is valued at £20,000, but was sold to the two institutions for £10,000. The governors of the Physical Science College have now separated, apparently, from the Council of the Medical College, and have purchased a new site for £16,000. It remains to be seen whether the College of Medicine will retain the Singleton House site, or whether they will be obliged to give it up. I do not think the College of Medicine would have much to regret in a separation, as eventually a new infirmary must be required; and it would be much to the advantage, at any rate, of the students, if these two buildings could be united in one block, having resident students' quarters, as at St. Bartholomew's Hospital. There would, I am sure, be no lack of money from public subscription to build such an institution.

The post of physician to the Children's Hospital was filled by the election of Dr. Coley. Dr. Coley has held the appointment of assistant-physician to the charity, and has performed all the duties of the office. He, I believe, obtained the appointment by a very narrow majority, and his friends may well be pleased at his success in beating such an opponent as Dr. Limont.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Professor Stirling's Address.—Victoria University.—New Drainage Scheme.

PROFESSOR STIRLING'S inaugural lecture at Owens College, a summary of which was given in the BRITISH MEDICAL JOURNAL of May 15th, was well received by his audience, which consisted of many of the medical profession of this neighbourhood, in addition to the professors and students. The students made themselves heard in the usual manner, and frequently interrupted the lecturer by rounds of applause; but, on the whole, there was not much to complain of, and the lecture went off much more quietly than some delivered a few years ago, the recollection of which must have been fresh in the memory of many present. Some time ago, the introductory lecture at the commencement of the winter session was abandoned, largely on account of the noisy demonstrations which took place.

The next medical examinations of Victoria University take place in the middle of July, and, as was to be expected, many more candidates are likely to present themselves this year than last, which was

the first year of the medical examinations. There are, however, not likely to be many candidates for the final M.B., inasmuch as too short a time has elapsed since the examinations commenced, but there is no lack, at least, from Owens College, for the "Preliminary in Science" or the "Intermediate M.B." I believe there will be over thirty candidates for the two examinations, exclusive of any who may be presenting themselves from the University College, Liverpool. There is a general feeling in existence here that, while the examinations should be thorough and practical, they should be within the reach of every hard-working average student. On this question, Professor Stirling's remarks, in his address, were very much to the point.

At a special meeting of the Rivers Committee of the Manchester City Council, held on Monday, a scheme for dealing with the whole sewage of the city was laid before them by the city surveyor. The scheme includes the construction of a main sewer from the centre of the city, of about two miles in length, to the river Irwell. A large tract of land is to be acquired near the river for the erection of precipitating tanks for dealing with the sewage before entering the river. The whole scheme is as yet incomplete; but enough of it has transpired to show that, what with the Thirlmere water-scheme, and the acquisition of land at Carrington Moss to be used as a tip for the street-accumulations and contents of the ash-closets, the Health Committee of the Corporation will have enough on their hands for many a long day to come.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE USE OF CUCAINE IN PROSTATIC CATHETERISM.

Sir,—Relative to the use of cucaine in early prostatic catheterism, Mr. Hurry Fenwick's statement is only his own way of expressing the fact I named. All I said in my paper was, *that in order to anæsthetise the prostatic urethra, the end of an instrument must first be placed there;* Guyon's being as good as any; and Mr. Fenwick simply says this over again. I have found cucaine so useful in my general practice, that I said, regretfully, that I consider its use "impracticable" in early prostatic catheterism. I maintain that, when a small soft catheter merely has to be passed into a man's bladder, it is impracticable in almost all cases, and obviously when dealing with the nervous and sensitive, who, above all others, are liable to urethral shock, to subject the spongy urethra to an injection of cucaine-solution; and, after waiting a few minutes (for its action is not "instantaneous," as stated by Mr. Fenwick), to pass an instrument six inches down the canal, in order to make a further application of cucaine to the deeper part, before practising catheterism. Surely the remedy is worse than the disease.—I am, sir, yours very faithfully,

Wimpole Street, W. G. Buckston Browne.

AMERICAN PUBLIC HEALTH ASSOCIATION.

Sir,—The fourteenth annual meeting of the American Public Health Association is to be held at Toronto during the first week in October, and I have been requested by Dr. C. W. Covernton, the First Vice-President, to bring the meeting to the notice of English sanitarians, in the hope that they may be willing to visit Canada on that occasion.

In addition to the reading and discussion of papers on various matters relating to Hygiene, set out in the circular I beg to enclose, it is desired to established an International Congress of Hygiene, and to get international protective laws passed, safeguarding Europe from the importation of yellow fever, and the continent of America from small-pox and cholera.

If a number of persons, amounting to fifty, elect to go to Canada, they would be conveyed from London to Toronto and back, first class, for twenty guineas a-head; while, for another twenty guineas, those who might desire to see more of the country, would be carried by the Canada Pacific Railway, along a most charming line of country, from Quebec, Montreal, or Toronto, to the terminus of the road, Vancouver, or to any part of British Columbia at which they might elect to stop on the line, and return to either of the above starting points.

I shall be happy to receive the names of anyone who would like to make up a party, and shall be pleased to give any more detailed information. As this invitation is doubtless meant as an international courtesy, I make no apology for trespassing on your space, but thank you, in anticipation, for affording me the means of bringing to the notice of English sanitarians the favourable opportunity which presents itself for spending a delightful autumn holiday among our colonial and American brethren.—I am, sir, your obedient servant,

C. E. Saunders, M.D., Honorary Secretary,
Society of Medical Officers of Health.

21, Lower Seymour Street, Portman Square, W.

PERITONEAL SURGERY.

Sir,—The delicate reproof which you offer to me, in your leading article in the Journal of May 15th, may be, for all I know, fully deserved; and, in any case, I shall endeavour to profit by it. I must, however, say, in self-defence, that those who know the facts of the struggles of abdominal surgery, during the last eight years, know quite well that whatever I may have said in the direction to which you object has not been without cause. I am fully prepared to withdraw and express my regret for anything which I have said which has been unjust to anyone; but I must ask you to allow me, in justice to others, to correct the impression which one sentence of your article will probably leave upon the minds of those who are not cognisant with the history of abdominal surgery. It is that in which you allude to Sir Spencer Wells's position as the chief establisher of ovariotomy.

I have exhaustively studied the history of this operation, since its first successful performance by Robert Houston in 1701. Its history may be divided, roughly speaking, into three phases. The first begins with Ephraim McDowel, and ends with Nathan Smith about the year 1824; and, during these years, the whole achievements of modern surgery were almost equalled in success, if not in extent. The principle of the intraperitoneal treatment of the pedicle with the short ligature was fully established; and the great regret, in the history of the operation, is that it ever was departed from. The second phase begins with Charles Clay, who first performed ovariotomy in England on September 27th, 1842; and, during the succeeding twenty-five years, he performed 390 ovariotomies, with a mortality of very nearly 25 per cent. This second phase ends with the close of the career of Mr. Baker Brown, in 1867. Dr. Charles Clay, unfortunately, departed from the principles of Nathan Smith, and used long ligatures. Baker Brown, on the other hand, adopted a complete intraperitoneal method; and between May, 1865, and September, 1867, he performed 40 consecutive operations upon this principle, with a mortality of only 10 per cent. The third phase in the history of ovariotomy begins with Mr. Spencer Wells, who, between 1857 and 1878, performed 1,000 ovariotomies, with a mortality of 25 per cent.; he having, most unfortunately, like his predecessor, Dr. Clay, departed from the successful method of Nathan Smith. This third phase ends with Dr. Thomas Keith, who again re-established Nathan Smith's principle; and from that, I venture to say, no one will ever again have the hardihood to make a deviation.

With this simple statement of the facts of the case, it is difficult to see upon what basis your claim for Sir Spencer Wells is founded. Dr. Clay fully established the operation years before Mr. Spencer Wells began to operate; and, as is admitted now by every writer upon the subject, the introduction of the clamp has been nothing but a misfortune for abdominal surgery. This has been said so often that I regret to have to repeat it; but I never can permit the names of Nathan Smith, Baker Brown, and Keith, who are the true establishers of ovariotomy, so far as the greatest of its principles is concerned, and that of Dr. Clay, who is the true establisher of ovariotomy so far as the fighting of its early battles can go, to be passed over in favour of anybody else.—I am, etc., Lawson Tait.

Birmingham.

Sir,—Mr. Lawson Tait is entitled to the hearty congratulations of the profession on the splendid results he has had in "139 consecutive ovariotomies performed between January 1st, 1884, and December 31st, 1885, without a death." Personally, I should like to have had further details given of the successive steps of the operation, and of the subsequent treatment, in Mr. Tait's paper in the Journal of May 15th, especially as, so far as they are given, they differ materially from what I believed to be the generally accepted teaching. I am delighted to hear that peritonitis is so certainly and speedily cured by giving "a rapidly acting purgative, it matters not what; the patient's bowels are moved, and the peritonitis disappears." Mr. Tait does not say that the same treatment will beat the peritonitis following anything else but ovariotomy, and I confess I still hesitate to forsake

my old sheet-anchor opium. The method of cleaning the peritoneum by filling the abdomen with blood-warm unfiltered water from the tap, and washing out the organ, and repeating this till the water comes off clear, reminds me too vividly of the *post mortem* table to be readily accepted. I trust that Sir Spencer Wells, and other pioneers in this branch of surgery, will give us their views on the difficult procedure advised in this paper; for, as the proof of the pudding is in the eating, so can Mr. Tait, by his splendid success, show cause why his treatment ought to be followed.—Yours, etc.,

Swansea. J. FARRANT FRY.

MASSAGE AS A THERAPEUTIC AGENT.

SIR,—If Dr. Murrell would take a journey one day to Bath, he might be astonished to find that massage is practised here according to the most scientific methods, and by well trained people. It is regarded as an essential part of our system of thermal bathing, and has been carried out very thoroughly for quite ten years. In a contribution to the (now deceased) *Medical Times and Gazette* for March, 1878, I described *effleurage*, *pétrissage*, and *tapôtement*, as they were then done in Bath, under medical sanction; and their more recent development is a matter of common notoriety. Dr. Murrell may feel comfort in knowing that there is hardly a Spa in England at which massage is not recognised by "skilled physicians and surgeons" as a really "scientific mode of treatment," and that Germany possesses no monopoly of knowledge.

Connected with this subject is one of the minor curiosities of literature. In 1854, Sir (then Mr.) Spencer Wells published a little book on *Gout and its Complications, and on the Treatment of Joints stiffened by Gouty Deposits.* He spoke of "percussion, vibration, and rotation," as having a powerful effect on the circulation, and as being very helpful in promoting absorption in gouty tissues. During my early days of practice, I followed Sir Spencer Wells's plans, and am glad of this opportunity of expressing my obligation to him.—I am, etc.,

Bath. JOHN KENT SPENDER, M.D.

A CASE OF LAPARO-NEPHROTOMY.

SIR,—The diagnosis of many abdominal tumours must be purely speculative until the abdomen is opened. If a tumour prove to be not renal, nothing can be done from a lumbar incision, whereas the median one is fairly good for all cases. In the absence of direct evidence of diseased kidney, I think Mr. Lucas should prefer the linea alba to the loin. Death from heart-clot, or from pulmonary embolism, is not uncommon after operations on the kidney, but does not depend upon opening the peritoneum.—Yours very truly,

West Bromwich. H. LANGLEY BROWNE.

UNSETTLED PROBLEMS ABOUT PNEUMONIA.

SIR,—With regard to a leading article in the JOURNAL of May 1st, I think the following cases go towards favouring not only the "specific fever" theory, but also the possibility of the "contagious" character of this disease.

As recently as April 12th, 1866, I was called to see a child, aged 4 years, who presented all the symptoms of acute sthenic pneumonia—the physical signs being well marked—and who was stated to have only lately recovered from an attack of measles. Consequently, in addition to medicinal stimulant treatment, I ordered poultices to the chest, and also gave directions that the temperature of the room should be well kept up.

The parents being poor, the three remaining children of the family spent their day in the same room as the patient, so as to more fully allow their being under the observation of their mother.

On April 16th, a crisis occurred in the patient referred to, and from that date she continued slowly to convalesce. On this same date, April 16th, a second child, aged 9 months, showed signs of a rash, evidently measles; and on April 17th had, as well, unmistakably developed pneumonia, to which it succumbed during the ensuing night. This child had never left the sick-chamber, not having as yet been weaned.

On April 18th, a third child, aged 2½ years, developed the measles-rash, pneumonia following on the same day; and, despite all one's efforts to save life, died on the evening of April 20th.

This latter patient, although it had all along passed the day in the sick-chamber, slept in another room at night up till April 17th, when, as it showed signs of commencing catarrh from the eyes and nose, I ordered it to be kept entirely in the sick-room, so that all risks of change of temperature might be avoided; taking care to ensure, at the same time, as good ventilation as possible.

On April 19th, a fourth child, aged 6 years, showing signs of commencing catarrh, was also ordered to be kept in the sick-chamber; and, on April 20th, he too had developed a well marked measles-rash, which in its turn was followed within a few hours by pneumonia.

This last patient, notwithstanding that he survived the eighth day of the disease, and that profuse perspiration rather pointed to an impending crisis, unhappily shared eventually the same melancholy fate with the preceding two, as violent vomiting now ensued, which seemed to point to diaphragmatic pleurisy as the immediate cause of death.

My object in bringing all four patients together into the same sick-chamber rested on two reasons; 1, that the mother could only by this means pay individual attention to each; and 2, that I regarded a raised and even temperature as one of the most important parts of the treatment.

The question now arises, would either of these three children have been saved, or possibly have entirely escaped the complication of pneumonia, had I insisted on their isolation, as opposed to bringing them all together under the same uniform temperature, and had I carried out as well a method of disinfection? I should state that, since attending these patients of my own, I have learnt, on good authority, that two other children died during the same week to which I am referring, of exactly the same condition, in the same house, and in the same village. Surely this question is all-important; as, if epidemic pneumonia should prove to be infectious, it would become just as expedient to remove other members of the family from the area or source of infection, as would be deemed necessary in cases of small-pox or scarlatina.

It is, perhaps, worth mentioning that all these children were attacked during the very warm weather which we have been lately experiencing, which would go far to prove that "exposure" could scarcely have been the *fons et origo mali* in the instances above mentioned.

Another point of interest is the fact that, in the cases now alluded to, curiously enough the herpetic eruption did not occur in any one of them, notwithstanding that the disease proved rapidly fatal. It would also seem that the virulence of the infection, if such there was, grew stronger proportionately to the number of those attacked, as the first patient, although a rickety and badly nourished subject, recovered, whilst those following her succumbed.

By inserting these remarks in your JOURNAL, you will greatly oblige, yours faithfully, EDMUND J. PENNY, M.R.C.S.E., etc.

Berkhamsted, Herts.

UNSATISFACTORY INQUESTS.

SIR,—One can hardly take up a single number of the BRITISH MEDICAL JOURNAL, without finding either a letter or some remarks upon inquests, the manner in which they are held, and the dread which coroners appear to have of the medical witnesses.

It occurred to me to apply for the returns for 1885; they are, I find, not yet published. Those for 1884 were, however, supplied to me, and will be found, I think, most interesting.

During the year 1884, the inquests held were 28,603; of these, 5,369 were on infants under one year. In 334 cases, the verdict was "Injuries, causes unknown." In 2,664 cases, "Found dead" was merely recorded; and the vast number of 10,901 are placed under the vague heading of "Other causes."

I do not think I shall be accused of misrepresentation, if I assume that these 10,901 verdicts were so loosely and vaguely worded, that even the Registrar-General found it impossible to specify the cause of death. These, then, make a huge total of 13,899, or nearly one-half the verdicts obtained in one year, which we may very well call "unsatisfactory." The remaining 14,704 are put down to "Murder," in 192 cases; to "Manslaughter, in 154 cases; to "Justifiable homicide," in 4 cases; to "Suicide," in 2,019 cases; and to "Accidental death," in 11,544 cases.

The average cost of each inquest is £3 4s. 3d.; therefore, 13,899 inquests having been held without any adequate result, I think we may say that the £44,650 10s. 9d. spent on them has been entirely wasted.—I am, sir, yours truly,

F. ERNEST LOVEGROVE, M.R.C.S.

56, Forest Road, W., Nottingham.

A PROPOSED MIDLAND UNIVERSITY.

SIR,—In the *Birmingham Medical Review* for April, I notice with pleasure that a movement is on foot for the formation of a Midland University in connection with the Queen's and Mason's Colleges, Birmingham. Some of the leading teachers of the school have the subject in hand, and it is to be hoped that their scheme will prove successful.

From time to time, letters have been written to the universities and to the medical journals, by medical men, non-graduates, entreating the former to make such arrangements, that they might obtain a degree without residence at an earlier age than 40, say 30, with the result that hitherto nothing has been done for them.

A great many students, after obtaining licences in medicine and surgery, find, when it is too late, that a degree in medicine would be of great advantage to them in practice; and the course that is open for them to pursue to obtain such is to wend their way to some Continental university, a little more generous and less conservative than our British ones.

Now that plans for a Midland University are being arranged, those members of the profession who are contemplating a flight to Brussels and such like places, will, before proceeding to do so, perhaps do well to apply to the originators of the scheme in question, to see if provisions are being made for would-be graduates, who are at present so very much left out in the cold by the existing universities. With such men as Furneaux Jordan, Pemberton, and May in surgery, Sir James Sawyer, Foster, and Carter in medicine, Priestley Smith, Vose Solomon, and Owen in ophthalmic diseases, Suckling in nervous affections, and in gynæcology, Lawson Tait, besides a host of others, a Midland University, if founded, will be a success, and an Alma Mater of which any man may be proud. Let us hope the Birmingham professors will remember the difficulties besetting the general practitioner, and give him an opportunity of obtaining a degree in medicine before the best part of his life is gone, and when he will have either made or missed his mark in the profession.—Yours sincerely,

SPES.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ALLEGED MEDICAL NEGLIGENCE.

AT the Leeds Assizes, in the Nisi Prius Court, last week, before Mr. Justice Cave, an action was brought by the father of Mabel Moss, a little girl, aged 8, against Dr. E. W. Symes, of Halifax, for alleged want of proper care in medical attendance. The child fell off a bed on January 1st, but the parents, observing little or no injury, did not send her to Dr. Symes till the 4th. He then diagnosed fracture of the left clavicle. He extended the child's left arm, and proceeded to apply from the tips of the fingers a spiral bandage, wrapping it round and round until he got some way up the upper arm. Then, after placing a pad in the axilla, he brought the arm across the chest, and attached a broad flannel bandage round the outside. The child complained that the bandage was very tight, and Dr. Symes thereupon loosened the band which went round the outside of the arm, remarking that it was necessary that the bandage should be tight. Dr. Symes was said to have given no directions whatever, except that he would see the child in about a week. The evidence proved, however, that he had given explicit directions.

On arriving at home, the child complained of great pain in the arm. The tips of the fingers appeared to be darkening, but her parents, placing implicit confidence in Dr. Symes, did nothing. So things went on until January 7th, when attention was drawn to the condition of the fingers, and the parents were told by a druggist that the arm could not be right, and that they had better see Dr. Symes again. She was accordingly taken to Dr. Symes, who appeared at once to recognise the condition of things, and said that the child must be at once taken to the infirmary. At the infirmary, she was attended to by Mr. Crowther, who took off the bandange, found the arm gangrenous, and amputated it on January 16th.

The father of the child stated, in evidence, that Dr. Symes had threatened him with legal proceedings for spreading reports about the case. The two house-surgeons to the Halifax Infirmary, Mr. Crowther and Mr. E. Edwards, both gave evidence as to the gangrenous state of the patient's arm when she came under their care, and expressed disapproval of bandaging the arm in such a case. The defendant declared that he had impressed upon Mr. Moss the nature and gravity of the case, and given him reasonable warning. Mr. Wheelhouse, Mr. Pridgin Teale, Mr. Jessop, Mr. A. F. McGill, and Dr. S. C. Smith, in their evidence, mostly objected to bandaging the arm in simple fracture of the clavicle; but Mr. Wheelhouse observed that, if the bandages had originally been tight enough to have caused the mischief, the child would have complained of the pain before she left the surgery. The description of the arm given by the girl's mother led him to the belief that the process of change had been slow and not sudden, as if it had resulted from strangulation. If the child had been taken to a competent person when the fingers were seen to become dark, no harm would have happened. The obstruction from the axillary pad might happen in any case. Although necessary in the treatment of a fractured clavicle, the pad was a thing of which any competent surgeon had a dread, and regarded it as a thing to be carefully watched. If there had been unduly tight bandaging, it would immediately have shown itself in the blueness of the tips of the fingers.

In these opinions, the other surgical witnesses concurred. The evidence of the druggist to whom the child was taken on January 7th, pointed to delay on the part of the parents of the child, when she had first begun to complain of pain; and, even when urged by the druggist, the mother nearly put off a visit to Dr. Symes for four days. The jury returned a verdict for the defendant, the foreman adding, "But the jury wish to give expression to an opinion that Dr. Symes should have given more explicit instructions to the parents of the child."

There can be no doubt that some patients, and especially parents of patients, are extremely careless, not only through ignorance, but on account of placing implicit confidence in the opinion and practice of a medical attendant, so that they believe that one consultation and one dressing must cure like magic. Such was evidently the case in Moss *v.* Symes.

The evidence, which was very long, corroborated this fact. Dr. Symes had warned the child's father, when putting up the fracture, using the words: "If the pain seems in any way great, you must let me know at once." Amongst other things, it transpired that the child was about to be taken to see Dr. Symes, when the nails were first observed to be growing dark; but the parents changed their mind, because a neighbour told them that her nails had turned black when her arm had been bandaged up for a sprain of the wrist, yet all had gone well. In the summing-up, the judge impressed these facts on the jury. According to the verdict, each party was to pay his own costs. Dr. Symes's counsel informed the judge that his client was much grieved at the accident to the child, and he desired to give up the costs to the parents of the child. The judge said that this was very proper on the part of Dr. Symes. The case has entailed great expense and intolerable annoyance to Dr. Symes; but, we understand that he will receive assistance from medical friends in Halifax and in the neighbouring towns.

CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

AT the recent Manchester Spring Assizes, in the Crown Court, before Mr. Justice Denman, John William Irvine, a medical assistant, was tried for having caused the death of Annie Darling, a married woman, at Manchester, on March 11th. On March 10th, the prisoner, who was assistant to Mr. Pitman, prescribed for Mrs. Darling, who was suffering from acute diarrhœa, and severe pains. A portion of the medicine having been taken, the deceased retired to rest with her husband. About half-past two the following morning, he was awakened by his wife's heavy breathing, and, on examining her, he found that she was unconscious. Medical assistance was summoned, and it was agreed that the woman was suffering from opium-poisoning. The usual remedies were resorted to, but Mrs. Darling died shortly after eight o'clock. The bottle containing the medicine was examined by the medical gentmen, and found to smell strongly of opium. On the return of Mr. Pitman to his surgery, he called his assistant's attention to the fact that no opium was mentioned in the prescription, to which he replied that, as there was no solution of morphine in the surgery at the time, he substituted two drachms of tincture of opium. This was a perfectly accurate statement. A *post mortem* examination was held, and the medical testimony was to the effect that death had been caused by opium-poisoning. The remaining portion of the medicine was examined by Mr. William Thompson, an analytical chemist, in whose opinion the minimum quantity of poison in the mixture must have been, at least, equal to 150 drops of laudanum. The suggestion of the prosecution was that, in the compounding of the mixture, the prisoner had been guilty of gross and culpable negligence. Mr. M'Keand, who did not dispute that Mrs. Darling had died from opium-poisoning, pleaded that there had been neither gross nor culpable negligence on the part of the prisoner. The prisoner was found guilty of manslaughter.

His lordship inflicted a fine of 10s. upon Mr. Smelt, the coroner before whom the inquest on Darling was held, for failing to send in the depositions.

WITH reference to this case, Dr. C. R. ILLINGWORTH, Clayton-le-Moors, has written to us as follows.

SIR,—The medicine given was produced in court. It was a pale yellow in colour, and indicated the addition of certainly not more than two drachms of laudanum or of a fluid smelling like it and similar in colour

There was no analysis of the laudanum-bottle given in evidence. So far as I am aware, no analysis was made. This is the weak point in the prosecution, because the surgery was occupied by Pitman, Irvine, and Lewis the dispenser, the last named being, as stated in evidence by cross-examination, in the habit of taking laudanum.

The mixture formed a sediment, and in this were found, by the analyst, crystals of pure morphia—the alkaloid. There were indications also of the presence of hydrochloric acid, it was stated. Irvine says that the presence of the morphine is "a mystery" to him. The presence of these crystals offer, I think, a solution of this mystery. They prove that the morphine could not have been added as the hydrochlorate; for those crystals are acicular in form, and this salt will not dissolve in cold solutions.

The *injectio morphiæ hypodermica*, however, will both mix with laudanum, and give a precipitate of the alkaloid morphine on addition of ammonia. I suspect, therefore, that the morphine found has been given as this preparation.

Of course, if Irvine knowingly added it, he would be guilty of wilful murder. But if it was in the bottle labelled "tinctura opii," and he was not aware of its presence, the case becomes one of pure accident. There can be, in my opinion, no question of "gross negligence," because no one could measure 3 ounces of laudanum, and put it into a bottle, without deliberation; and no one could negligently add morphine solutions, of the strength they are made, after or before adding a full-dosed quantity, such as 2 drachms of laudanum.

So much for the prosecution. The defence was a mere apology. Council for the prisoner got his brief only half an hour before the trial. Half of that time I was closetted with him and the solicitor, explaining the nature of opium, laudanum, and morphine; their preparations, and the different doses; giving my opinion as to the best line of defence, and suggesting explanations of the presence of 12 grains of morphine in a ten-ounce bottle. Of these matters counsel was totally ignorant, and expressed himself as much obliged for the help I had given him.

When I was put into the witness-box, I was questioned by counsel as to the character of Irvine only, not a word, to my surprise, as to the possible cause of the presence of the dangerous quantity of morphine, etc.

Counsel for the prisoner thus took upon himself, with his necessarily elementary knowledge of medicine and chemistry—for he forgot or omitted to use one quarter of what I told him—took upon himself the task of defending Irvine against an analyst and three medical men categorically questioned by counsel for the prosecution. Of course, a miserable failure resulted, and he was practically left with a wretched *argumentum ad hominem* in his address to the jury. No one but myself was called in defence of the prisoner. A new trial is, I think, urgently called for.

ATTENDANCE IN LABOUR ON WIVES OF MEDICAL MEN.

JUVENIS asks if it is customary for a medical man to attend his wife in confinement; and if not, what fee, (if any) one would be expected to pay a brother, and not too friendly, practitioner.

M.D.—Setting aside the divergent statements made by "Dr. —— and the trained nurse" in attendance, to visit, as "a matter of professional interest," a patient without previous communication with, or the sanction of, our correspondent, would be an unprofessional proceeding, subversive to the moral obligation of doing unto others as we would wish to be done by.

THE MORAL DUTY OF UNSOLICITED MEDICAL ADVICE.

A. W. asks: Is it considered the duty, or not, of a medical man who has attended a family for, say, fifteen or twenty years, to point out or call the attention of the family to a latent or unsuspected disease in one of its members, which could not well be detected except by the professional eye? Knowing the constitution of the sufferer, the physician might see, at a glance, the true nature of the disease, and his attention, in its earlier stages, might probably add to the duration of life.

*** The question submitted by "A. W.," as we view it, is one of direct moral obligation, and not a mere medico-ethical problem, to be solved as the case may be, and should, in our opinion, be regarded as a point of professional duty; and by way of further reply, and of practical illustration, what, we may ask, would be our correspondent's personal wish, if the case alluded to referred to a member of his own family, and the latent disease was more than suspected by an old medical friend? Let the reply of the inner man be his guide in the matter.

THE VICTORIA HOSPITAL FOR CHILDREN, QUEEN'S ROAD, CHELSEA.—At the twentieth annual meeting of the governors of this charity, held on Wednesday, May 19th, it was stated by Earl Cadogan, who presided, that the Prince of Wales had consented to open the new wing now completed. The annual report and statement of accounts were adopted. The number of in-patients admitted was last year 550, and total attendances of out-patients 30,898, and at the convalescent branch at Margate 146.

NAVAL AND MILITARY MEDICAL SERVICES.

TURNER MEMORIAL.—A memorial was started some time ago in memory of the late Surgeon C. P. Turner, Medical Staff of India. Any officers of the Army Medical Staff wishing to subscribe (£1) are requested to send cheques to Surgeon R. P. Bond, 2, Queen's Villas, Cheltenham, or to Sir Charles McGrigor, Bart., to "Turner Memorial Fund."

THE NAVY.

MR. F. W. S. WICKSTEED, M.B., M.R.C.S., has been appointed Surgeon to the Bristol Brigade of the Royal Naval Artillery Volunteers.

The following appointments have been made at the Admiralty during the past week: JOHN CASHIN, Surgeon, to Jamaica Hospital; ANTHONY KIDD, Surgeon, to the *Mistletoe*; J. J. WALSH, Surgeon, to the *Impregnable*, additional; A. R. JOYCE, Staff-Surgeon, to the *Cleopatra*; J. W. H. HAWTON, Staff-Surgeon, to the *Daring*.

MEDICAL STAFF.

BRIGADE-SURGEON G. S. DAVIE, M.D., has been granted retired pay with the honorary rank of Deputy Surgeon-General. He entered the army service as Assistant-Surgeon, November 1st, 1858; became Surgeon, March 1st, 1873; Surgeon-Major, September 6th, 1873; and Brigade-Surgeon, January 21st, 1885. Dr. Davie served as Acting Assistant-Surgeon with the Artillery of the Turkish Contingent from May, 1855, to June, 1856, in Turkey and at Kertch (Turkish medal); throughout the operations in Perak, Malay States, during 1875-76, as Senior Medical Officer (medal with clasp); with the Peshawur Valley Field Force in the Afghan war in 1878-79 (medal); and in the Egyptian war of 1882, during which he was at the battle of Tel-el-Kebir (mentioned in despatches, medal, 3rd Class of the Medjidie, and Khedive's Star).

Surgeon-Major C. J. WEIR, M.B., is also granted retired pay, with a step of honorary rank. His commission as Assistant-Surgeon dates from September 30th, 1863; of Surgeon, from March 1st, 1873; and of Surgeon-Major, from April 28th, 1876. He is not credited with any war-service in the Army Lists.

Brigade-Surgeon J. MACKENZIE, M.D., doing general duty in the Eastern District, Madras, is directed to do general duty in the Bangalore Division and Ceded Districts.

Surgeon-Major D. C. W. HEATHER, serving in the Madras command, has leave of absence for six months, on medical certificate.

Surgeon W. H. BURKE, serving in the Bombay Command, on general duty, Sind, is transferred to general duty, Poona Circle.

THE INDIAN MEDICAL SERVICE.

SURGEON T. E. L. BATE, Bengal Establishment, Civil Surgeon of Mooltan, is appointed Civil Surgeon of Delhi, from March 26th, *vice* Surgeon-Major G. C. Ross, proceeding on furlough.

Surgeon J. A. CUNNINGHAM, M.D., Civil Surgeon, is transferred from Goordaspore to Umritsur, where he relieved Brigade-Surgeon J. C. PENNY, M.D., on March 30th. The latter gentleman is transferred from Umritsur to Goordaspore.

Surgeon-Major H. ALLISON, M.D., Madras Establishment, Professor of Hygiene, is appointed to act as Professor of Anatomy at the Medical College, in addition to his own duties, during the absence of Surgeon-Major O. Sibthorpe, on leave, or till further orders.

The control of the Quetta District has been transferred to the Government of India from the 1st of April. The medical administration of the district devolves upon the Surgeon-General of Her Majesty's Forces in Bengal.

The services of Deputy Surgeon-General W. FARQUHAR, M.D., Bombay Establishment, are temporarily placed at the disposal of the Public Department.

Surgeon-Major H. GRIFFITH, Madras Establishment, is appointed Brigade-Surgeon, *vice* Brigade-Surgeon W. F. De Fabeck, promoted. Mr. Griffith entered as Assistant-Surgeon, July 27th, 1859.

The undermentioned gentlemen have leave of absence for the periods specified: Surgeon-Major J. B. THOMAS, Bombay Establishment, District and Sanitary Officer, Kistna, for one year and ninety-five days, on private affairs; Surgeon G. J. WARD, Bombay Establishment, in medical charge of the 5th Native Infantry, for 182 days, on medical certificate, with the necessary subsidiary leave; C. MONKS, Bombay Establishment, in medical charge of the 4th Native Infantry, and Acting Civil Surgeon at Aden, for six months, on medical certificate, with the necessary subsidiary leave; Surgeon-Major G. A. MACONACHIE, M.B., Bombay Establishment, for six months, on private affairs, with the necessary subsidiary leave.

The undermentioned gentlemen have been appointed Acting Surgeons to the corps specified: J. W. T. GILBERT, to the City of London Artillery Volunteers; MICHELL HUNTER, M.D., to the 3rd Durham (the Sunderland) Volunteers; and H. W. R. BENCRAFT, to the 2nd Volunteer Battalion of the Hampshire Regiment (formerly the 2nd Hampshire Volunteers).

Surgeon T. S. ELLIS, of the 1st Gloucester (the Western Counties) Engineer Volunteers, has been granted the honorary rank of Surgeon-Major.

Messrs. J. F. H. BOTTRELL and C. H. HARTT have been appointed Surgeons to the Woolwich Company; and Messrs. C. W. CATHCART, M.B., and DAVID HEPBURN, M.B., to the Edinburgh Company, of the Volunteer Medical Staff Corps.

Mr. THOMAS DAVIDSON, M.B., is appointed Acting Surgeon to the 1st Dumfries Volunteers.

Surgeon WILLIAM HOYLE, of the 4th Lancashire Volunteers, has resigned his commission, which bears date January 24th, 1872.

PAY OF BRITISH ARMY SURGEONS IN INDIA.

IN the paragraph bearing the above heading (JOURNAL, May 22nd, page 1000) the pay of a surgeon, ranking as captain, for the first six years of service in India, was erroneously given as 417½ rupees a month; it is only 317 rupees 8 annas.

PRESENTATION.—The nurses of the Bradford Infirmary have presented Mr. W. J. Spence, the house-surgeon, with a handsome walnut writing-cabinet, bearing a suitable inscription. Mr. Spence is leaving the infirmary.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

AN IRREGULAR AND ILLEGAL APPOINTMENT OF A POOR-LAW MEDICAL OFFICER.

A BOARD of Guardians, not far from the metropolis, recently received notice of the resignation of the medical officer of No. 1 district of their union, consisting of three parishes. It was decided to accept the same, and, at their next meeting (so stated in a local paper), to consider the appointment of a successor. At the next meeting, held in the following week, they not only decided to divide the district and form a new one, but, on the motion of an *ex officio* guardian, proceeded to appoint a medical officer, subject to the approval of the Local Government Board, although such intention to propose the division of the district, the salary to be given, and the conditions generally of the appointment, had not been duly advertised in one or other of the local journals, as required by the general orders of the Local Government Board.

The election having been challenged by two local medical gentlemen (partners), otherwise eligible for the office, it was alleged, on insufficient grounds, by the *ex officio* guardian, that one of the aforesaid gentlemen was unfit by reason of deafness, and that he had been informed (though he did not give his authority) that the other was about to leave the neighbourhood. Our correspondent having written to the Local Government Board, complaining of the irregularity of this board's procedure, the letter was, in due course, forwarded to the guardians, and an explanation requested. No justification was afforded; the guardians adhered to their decision, several of the board—notably those not present at the election—declining to vote.

We further learn that the gentleman so summarily appointed was brought into the neighbourhood some few years ago to practise homœopathy, at the instance of some ladies, the proprietors of a paper-mill, with which the *ex officio* guardian is said to be in some way connected.

Seeing that the formalities necessary on the appointment to office have not been complied with in this case, we would advise that our correspondent should get a question put in the House of Commons thereon, as it is simply intolerable that a practising homœopath should be forced on the poor of this locality in this apparently irregular fashion.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, May 22nd, 6,106 births and 3,254 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 20.6 and 19.1 per 1,000 in the two preceding weeks, further declined last week to 18.7. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 12.5; Brighton, 13.0; Bristol, 13.9; Hull, 16.1; Newcastle-upon-Tyne, 16.1; Sunderland, 16.8; Wolverhampton, 17.0; London, 17.3; Salford, 17.3; Sheffield, 18.3; Birkenhead, 18.6; Blackburn, 18.7; Birmingham, 18.9; Leicester, 19.1; Nottingham, 19.4; Bradford, 19.5; Norwich, 19.8; Plymouth, 19.8; Huddersfield, 20.0; Leeds, 20.2; Bolton, 21.3; Cardiff, 21.8; Oldham, 22.0; Liverpool, 22.4; Halifax, 22.7; Portsmouth, 24.1; Manchester 25.2; and the highest rate during the week, 34.0 in Preston. The death-rate in the twenty-seven provincial towns averaged 19.8 per 1,000, and exceeded by 2.5 the rate recorded in London, which, as before stated, did not exceed 17.3 per 1,000. The 3,254 deaths registered in the twenty-eight towns during the week under notice included 286 which were referred to the principal zymotic diseases, against 367 and 324 in the two preceding weeks; of these, 108 resulted from measles, 87 from whooping-cough, 27 from fever (principally enteric), 27 from diarrhœa, 21 from scarlet fever, 15 from diphtheria, and 1 from small-pox. These 286 deaths were equal to an annual rate of 1.6 per 1,000. The zymotic death-rate in London in the week under notice was equal to 1.6 per 1,000, and almost corresponded with the average rate during the same period in the twenty-seven provincial towns, among which the zymotic rates ranged from 0.0 in Birkenhead and in Huddersfield, to 3.2 in Blackburn, 4.6 in Portsmouth, and 9.8 in Preston. The deaths referred to measles, which had been 114 and 90 in the two preceding weeks, rose again during the week under notice to 108, and showed the largest proportional fatality in Blackburn, Bolton and Preston. The fatal cases of whooping-cough, which in the two previous weeks had been 141 and 120, further declined during the week to 87, and caused the highest death-rates in Salford, Manchester and Cardiff. The 27 deaths referred to diarrhœal diseases showed a marked further decline from recent weekly numbers, and were fewer than those recorded in any week this year. The fatal cases of fever, including typhus, enteric, and simple fevers, which had been 32 and 21 in the two preceding weeks, rose again during the week under notice to 27; this disease caused the highest rate in Portsmouth. The deaths from scarlet fever, which had been 29 and 18 in the two preceeding weeks, were 21 last week, of which 6 occurred in London and 4 in Liverpool. The fatal cases of diphtheria, which in the two previous weeks had been 21 and 30, declined to 15, and were fewer than in any week since August last; 9 were returned in London, 2 in Liverpool, and 2 in Leeds. The death from small-pox was recorded in Liverpool; no fatal case of this disease was registered last week in London, although the deaths from this disease of 2 London residents occurred in the Metropolitan Asylum Hospital ship *Atlas*, situated outside registration London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased in the eight preceding weeks from 7 to 31, had further risen to 35 on Saturday, May 22nd; 10 new cases were admitted to these hospitals during the week under notice, against 11 and 9 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London was equal to 3.5 per 1,000, and was below the average. The causes of 66, or 2.0 per cent., of the 3,254 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, having an estimated population of 1,283,977 persons, 834 births and 538 deaths were registered during the week ending Saturday, May 22nd. The annual rate of mortality, which had declined in the three preceding weeks from 23.1 to 22.1 per 1,000, further fell, during the week under notice, to 21.8, but exceeded by 3.1 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 13.7 in Dundee, 18.1 in Aberdeen, 20.7 in Leith, 21.0 in Edinburgh, 21.7 in Paisley, 22.2 in Greenock, 22.9 in Perth, and 25.4 in Glasgow. The 538 deaths registered during the week in these Scotch towns included 11 which were referred to whooping-cough, 10 to measles, 7 to diarrhœa, 6 to "fever," 5 to diphtheria, 5 to scarlet fever, and not one to small-pox; in all, 44 deaths resulted from these principal zymotic diseases, against 62 and 55 in the two preceding weeks. These 44 deaths were equal to an annual rate of 1.8 per 1,000, which slightly exceeded the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns were recorded in Glasgow and Edinburgh. The deaths from whooping-cough, which had declined from 21 to 14 in the three preceding weeks, further fell during the week to 11, and included 7 in Glasgow and 3 in Edinburgh. The fatal cases of measles, which had been 17 in each of the two previous weeks, declined to 10, of which 8 occurred in Edinburgh. The 7 deaths referred to diarrhœal diseases were lower than those recorded in any recent week. The 6 fatal cases of fever showed a slight further increase upon the number returned in the two preceding weeks, and included 2 in Glasgow, and 2 in Aberdeen. The deaths from diphtheria, which had been 2 and 3 in the two previous weeks, further increased to 5, of which 3 occurred in Edinburgh, and 2 in Glasgow. The 5 fatal cases of scarlet fever exceeded by 2 the number in the previous week, and were all returned in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 4.9 per 1,000, against 3.5 in London. The causes of 66, or 12.3 per cent., of the 538 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending May 1st, 425 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered, was 25.6 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 15.5; Belfast, 26.8; Cork, 29.2; Drogheda, 12.7; Dublin, 23.2; Dundalk, 34.9; Galway, 37.0; Kilkenny, 16.9; Limerick, 44.5; Lisburn, 24.2; Londonderry, 21.4; Lurgan, 20.5; Newry, 17.6; Sligo, 9.6; Waterford, 27.8; Wexford, 29.8. The deaths from the principal zymotic diseases in the sixteen districts, were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in nine of the districts, to 8.7 in Dundalk; the 8 deaths from all causes registered in that district comprising 1 from whooping-cough and 1 from diarrhœa. The 114 deaths from all causes registered in Belfast, comprised 1 from scarlatina, 1 from whooping-cough, 1 from enteric fever, and 3 from diarrhœa. Among the 45 deaths in Cork were 2 from enteric fever; and the 33 deaths from Limerick comprised 4 from whooping-cough and 2 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 165. Sixteen deaths from zymotic diseases were registered in Dublin; they comprised 1 from measles, 2 from scarlet fever, 5 from whooping-cough, 1 from diphtheria, 2 from simple continued and ill-defined fever, etc. Deaths from diseases of the respiratory system fell to 39, comprising 30 from bronchitis, and 4 from pneumonia. The deaths of 9 children under 5 years of age (including 7 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 4 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis caused 22 deaths, mesenteric disease 6, and cancer 3. Four accidental deaths were registered. In 19 instances the cause of death was "uncertified," there having been no medical attendant.

In the week ending May 8th, the number of deaths registered in the sixteen principal town districts of Ireland, was 426. The average annual death-rate represented by the deaths registered, was 25.7 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 15.5; Belfast, 25.9; Cork, 26.6; Drogheda, 21.1; Dublin, 27.2; Dundalk, 26.2; Galway, 20.2; Kilkenny, 29.6; Limerick, 20.2; Lisburn, 14.5; Londonderry, 33.9; Lurgan, 25.7; Newry, 3.5; Sligo, 4.8; Waterford, 37.0; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts, were equal to an annual rate of 1.6 per 1,000, the rates varying from 0.0 in ten of the districts, to 5.2 in Armagh; the 3 deaths from all causes registered in that district, comprising 1 from scarlatina. The 110 deaths from all causes, registered in Belfast, comprised 3 from scarlatina, 1 from whooping-cough, 1 from enteric fever, and 3 from diarrhœa; and the 41 deaths in Cork comprised 2 from measles. In the Dublin Registration District the deaths registered during the week amounted to 188. Fifteen deaths from zymotic diseases were registered in Dublin, and consisted of 7 from whooping-cough, 4 from diphtheria, 1 from enteric fever, 2 from diarrhœa, and 1 from cerebro-spinal fever. Thirty-four deaths from diseases of the respiratory system were registered; they comprised 22 from bronchitis, and 9 from pneumonia. The deaths of 9 children under 5 years of age (including 4 infants under 1 year old) were ascribed to convulsions. Fifteen deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis caused 38 deaths, mesenteric disease, 5; and cancer, 5. Five accidental deaths, one case of homicide, and one case of suicide, were registered. In twenty instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending May 15th, 386 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 23.2 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000:—Armagh, 25.8; Belfast, 25.6; Cork, 20.8; Drogheda, 21.1; Dublin, 22.7; Dundalk, 17.5; Galway, 23.5; Kilkenny, 21.1; Limerick, 24.3; Lisburn, 38.7; Londonderry, 17.8; Lurgan, 41.0; Newry, 7.0; Sligo, 4.8; Waterford, 25.5; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.4 per 1,000, the rates varying from 0.0 in twelve of the districts to 2.8 in Belfast; the 109 deaths from all causes registered in that

district comprising 2 from scarlatina, 1 from typhus, 1 from whooping-cough, 1 from diphtheria, 1 from ill-defined fever, 4 from enteric fever, and 2 from diarrhœa. Among the 32 deaths in Cork were 1 each from measles, typhus, and diarrhœa; and the 10 deaths in Londonderry comprised 1 from typhus. In the Dublin Registration District the deaths registered during the week amounted to 158. There were but 9 deaths from zymotic diseases registered in Dublin; they comprised 2 from scarlet fever, 2 from whooping-cough, and 3 from enteric fever. Thirty-four deaths from diseases of the respiratory system were registered; they comprised 16 from bronchitis, 9 from pneumonia, and 2 from pleurisy. The deaths of 15 children (including 14 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by epilepsy, 10 by other diseases of the brain and nervous system (exclusive of convulsions), and 12 by diseases of the circulatory system. Phthisis caused 28 deaths, mesenteric disease 6, and rheumatism 3. One accidental death was registered. In 21 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending May 1st, that the annual death-rate recently averaged 27.2 per 1,000 in the three principal Indian cities; it was 23.0 in Bombay, 24.8 in Calcutta, and 32.3 in Madras. Cholera caused 47 deaths in Calcutta, and measles 21 in Bombay; "fever" mortality in Bombay and Madras considerably exceeded that which prevailed in Calcutta. According to the most recently received weekly returns, the annual death-rate averaged 30.0 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no less than 9.8 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 41.5, and showed a further increase upon the high rates in previous weeks; the 738 deaths included 42 from "fever," and 57 from measles, and 18 from scarlet fever. In three other northern cities—Copenhagen, Stockholm and Christiania,—the death-rate averaged only 23.8, and ranged from 15.9 in Christiania, to 27.9 in Stockholm; diphtheria and croup caused 5 deaths in Christiania and 3 in Stockholm. In Paris, the death-rate was equal to 25.6, showing a decline from the rates in recent weeks, although exceeding the rate in London by 7.1; the deaths included 37 from diphtheria and croup, 29 from measles, and 5 from small-pox. The 178 deaths in Brussels, of which 6 resulted from croup, 3 from "fever," and 1 from small-pox, were equal to a death-rate of 21.8. The rate in Geneva was 25.9. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.3, the rates ranging from 22.1 in the Hague, to 24.8 in Amsterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 32.0, and ranged from 28.5 in Beslau, and 28.6 in Berlin, to 40.0 in Prague, and 42.6 in Buda-Pesth. Small-pox caused 18 deaths in Buda-Pesth, 2 in Vienna, and 3 in Prague; diphtheria showed the highest death-rates in Hamburg, Dresden, and Buda-Pesth. The mean death-rate in three of the principal Italian cities was 32.7, the several rates being 23.9 in Venice, 33.0 in Turin, and 36.2 in Rome; the deaths in Rome included 13 from small-pox and 15 from measles; and those in Turin, 9 from diphtheria and croup, and 6 from typhoid fever; while 2 deaths from Asiatic cholera were reported in Venice during the week ending April 10th. The death-rate was equal to 34.9 in Alexandria, and to 45.4 in Cairo; typhoid fever caused 24 deaths in Cairo, and 3 in Alexandria; and diarrhœal diseases, 39 in Alexandria, and 97 in Cairo. In four of the largest American cities, the mean recorded death-rate was 24.3, and the rates ranged from 20.9 in Brooklyn, to 27.9 in New York. Diphtheria and scarlet fever showed more or less fatal prevalence in most of these American cities; small-pox caused 4 deaths in New York, and typhoid fever 10 in Philadelphia.

It appears from the statistics published in the Registrar-General's return for the week ending May 8th, that the annual death-rate was recently equal to 23.1 in Bombay, and 33.0 in Madras; measles caused 17 deaths in Bombay, diarrhœal diseases 45 in Madras, and "fever" mortality showed the largest excess in Madras. According to the most recently received weekly returns, the annual death-rate averaged 29.8 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no less than 9.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 37.2, showing a decline from still higher rates in recent weeks; the 662 deaths included 103 from diarrhœal diseases, 44 from measles, and 15 from "fever." In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 26.4, and ranged from 24.4 in Copenhagen to 27.4 in Stockholm; diphtheria and croup caused 9 deaths in Christiania, 6 in Stockholm, and 2 in Copenhagen. In Paris, the death-rate was equal to 26.4, (which exceeded by 7.7 the rate that prevailed in London); the deaths included 43 from measles, 34 from diphtheria and croup, 15 from typhoid fever, and 8 from small-pox. The 202 deaths in Brussels, of which 5 resulted from croup and 2 from measles, gave a rate of 24.1. The rate in Geneva was 32.4, 6 of the 45 deaths resulting from whooping-cough. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.6, the several rates being 18.0 in the Hague, 24.7 in Amsterdam, and 28.9 in Rotterdam; the deaths in Amsterdam included 4 from diphtheria and croup, and 2 from "fever," and 4 fatal cases of measles were recorded in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 30.5, and ranged from 23.1 in Breslau and 25.4 in Berlin and Dresden, to 42.3 in Prague and 42.6 in Buda-Pesth. Small-pox caused 16 deaths in Buda-Pesth, 4 both in Vienna and in Prague; 7 deaths from "fever" were reported in Prague; and diphtheria caused the greatest mortality in Munich and Buda-Pesth. The mean death-rate in three of the principal Italian cities was 30.4, the rates being 28.4 in Turin, 30.0 in Venice, and 33.0 in Rome; the deaths in Rome included 10 from small-pox, and 18 from measles; diphtheria caused 8 deaths in Turin; and 10 fatal cases of cholera were reported in Venice. The death-rate was equal to 45.1 in Alexandria and to 42.6 in Cairo; diarrhœal diseases caused 94 deaths in Cairo, and 52 in Alexandria, and typhoid fever 15 in Cairo and 7 in Alexandria. In four of the largest American cities, the mean recorded death-rate was 24.2, and the rates ranged from 20.4 in Baltimore to 27.0 in New York. Diphtheria and croup caused considerable mortality in each of these four cities; scarlet fever showed prevalence in New York and Brooklyn; and 14 deaths from typhoid fever were recorded in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

CARLISLE.—A marked decline in the prevalence and death-rate from typhoid fever, principally due to meteorological causes, is an interesting feature of this report. Mr. William Brown draws attention to the relation between the total annual mortality from typhoid and from summer diarrhœa, in so far as, in those years when the typhoid mortality was high, the diarrhœal mortality was also high. In his opinion, the chief proximate causes which lead to summer diarrhœa in towns like Carlisle, where the water is pure, and where no special endemic influence is in operation, are the two conditions of tainted food and polluted air. "The meteorological phenomena which favour decomposition are precisely the states which are conducive to the propagation of typhoid poison." Only one death was registered from this disease, and ten from diarrhœa. The mortality from scarlet fever was low, but the disease was much more prevalent than during the previous year. Mr. Brown's experience as to the periodicity of scarlet fever leads him to anticipate an outbreak. Measles was very prevalent, though the mild type of the disease and favourable weather prevented a high mortality. The deaths from all causes numbered 769; the total representing a rate of 20.3 per 1,000. There were 66 deaths from zymotic diseases, including 22 from measles and 31 from whooping-cough. This was equal to a rate of 1.7 per 1,000.

BRISTOL.—We have always been accustomed to look for good reports from Mr. Davies, and that for 1885 proves no exception to the rule. The one regrettable feature in it is the announcement by Mr. Davies that it is the last he will present to the authority. One of the pioneers in the cause of hygiene, and an ardent reformer, Mr. Davies has attained for Bristol the proud distinction of being the healthiest of all the large towns of England. His retirement will be a great loss to the city, which owes much to his foresight and painstaking labour. The death-rate shows a slight increase, against that for 1884, from 18.7 to 19.6 per 1,000; and the zymotic proportion from 1.8 to 2.2. The difference is due to the prevalence of measles and whooping-cough during the early part of the year. Small-pox was more trying than for many years previously. In most instances, the source of infection was traced, and sixty-one cases were reported and investigated. There were several small outbreaks of diphtheria in different localities, causing twenty-five deaths. In no case was it possible to trace it to local conditions. With regard to diarrhœa, Mr. Davies is of opinion that, in Bristol, it ought not to be considered as one of the principal zymotics. The eighty-nine deaths attributable to this disease were nearly all of infants, and were due to neglect, artificial feeding, or ignorance. There was a single case of Asiatic cholera, imported from Marseilles, which proved fatal, and was the cause of much alarm and misrepresentation; but, fortunately, the disease did not spread. The extension of sanitary inspection to all houses was an important part of the year's work, while the institution of classes for the better education of tradesmen in sanitary matters promises excellent results. Mr. Davies appends a plan of what he considers necessary for the safety of every house.

ASHTON-IN-MAKERFIELD.—The presence of two epidemic diseases specially affecting children—namely, scarlet fever and measles—was an important factor in maintaining a high death-rate for this town. Mr. Hannah returns a total of 230 deaths during 1885, of which 24 were due to scarlet fever, and 9 to measles, giving a rate of 21.6 per 1,000. The general sickness throughout the year was below the average. Small-pox, enteric and typhus fevers, were conspicuous by their absence; and the mortality from diarrhœa was comparatively small. Mr. Hannah attributes these beneficial results to the extensive sanitary operations of the Local Board during the last five years.

WORSBROUGH.—A high death-rate characterises the health-records of this district for 1884, the mortality from all causes having been at the rate of 22.39 per 1,000, and from zymotic diseases, 5.56 per 1,000. Of the latter class of disorders, diarrhœa was the most prevalent and fatal, whilst 11 deaths from scarlet fever occurred during the latter part of the year. Both these diseases were severely prevalent during the year in the adjoining township of Barnsley. Measles caused 8 deaths. Enteric fever also was more prevalent than usual in the district, not in any particular group of houses, but scattered here and there, especially in Worsbrough Dale. Dr. Sadler could make out no definite common cause, but the occasional offensiveness of the sewers, which are ventilated by open gratings in the street, and are insufficiently flushed, are referred to by the health-officer as the "nearest approach" to such common course that he could find. The drainage of the district is said to be satisfactory, but Dr. Sadler recommends that the main sewers should be more frequently flushed, especially in dry weather. The water-supply is also well reported of. Some cases of scarlet fever at Worsbrough Common and Birdwell still remained at the close of the year, but otherwise "there was not much illness of an infectious nature."

IT has been decided to establish a Provident Dispensary in connection with the Weston-super-Mare General Hospital.

HOSPITAL AND DISPENSARY MANAGEMENT.

NOTTINGHAM BOROUGH ASYLUM.

THE accommodation provided in this asylum for the insane of the borough of Nottingham is so inadequate in extent, that, at the end of 1884, there were 32 patients boarded out at the County Asylum at Sneinton, and 30 more at the Macclesfield Asylum. The Borough Asylum contained, on December 31st, 1884, 279 patients; so that, out of the insane chargeable to the borough of Nottingham, more than one-sixth had to be sent to distant asylums, entailing (as the committee remark) "considerable hardship upon the patients, being so far separated from their friends, and much cost to their friends when they desire to visit them." In view of the fact that the Asylum was opened so recently as August, 1880, it would appear that the accommodation likely to be required must have been considerably underestimated.

There were, during 1884, 108 admissions, namely, 43 men and 65 women. Mr. Powell considers that the decrease in the number of male, and increase of female, admissions, which are very marked in the last two years, compared with the two immediately preceding, are to be attributed largely to the depression in trade. He says: "In the former two years (1881 and 1882), trade was fairly good, men earned more money, and, consequently, had more to spend in drink; whilst, in the past two years, trade has been bad, they have not earned as much money, and not only have they not had the money to get drink with themselves, but their wives and daughters have suffered poverty, and have been driven to the asylum by such causes as are produced by, or usually accompany, privation." In 1881 and 1882, intemperance was found to be the cause of insanity in 28 cases of men, while, in 1883 and 1884, this cause operated in 11 cases only.

Fourteen of the admissions, namely, 9 males and 5 females, were general paralytics; 20 males and 30 females were suicidally disposed. The recovery rate during the year was 39 per cent. of the admissions. The percentage of deaths on average number resident was 11.7, which is considerably above the average. Of the 34 deaths, 10 were due to general paralysis; 27 *post mortem* examinations were made. We are glad to note that the Committee have appointed an Assistant Medical Officer; such an appointment was obviously necessary in an asylum where the annual admissions average nearly 100. An Infectious Hospital was erected during the year.

The report of the Commissioners in Lunacy who visited the asylum is very satisfactory.

The statistical tables, we are glad to see, include Tables IA and IIA. We would call the Superintendent's attention to the considerable discrepancy between the figures in Table II, giving "the average numbers resident during the four years and a half," and the corresponding figures in Table III. The percentage death-rate for the whole period the asylum has been open is miscalculated; for example, the total percentage, which is given as 11.2, was considerably over 12, which is much above the average of English asylums.

NEWCASTLE-UPON-TYNE CITY LUNATIC ASYLUM.

IN 1884, it became necessary for the committee of this asylum to take steps for the provision of increased accommodation. The institution was built, in 1865, for 260 patients; in 1882, a slight addition was made, raising the available accommodation to 270. The daily average number of patients, during 1884, was 282, the number for some time being as high as 296. In consequence of this overcrowding, the Committee decided to build an additional wing in each division, to hold about 85 patients of each sex, and to enlarge the present chapel, dining-hall, kitchen, and laundry; also to add 35 acres of land to the asylum property.

With regard to the admissions, 87 in number, Mr. Wickham remarks that there was a large and apparently increasing number of cases suffering from cardiac disorder; 27 patients were discharged recovered, namely, about 31 per cent. of the admissions; the percentage of deaths on the average number resident was 10.99. Of the 31 deaths, 12 (9 males and 3 females) were due to general paralysis; the superintendent notes a gradual increase in the number of cases of general paralysis in females.

The experience of this asylum with regard to the removal of chronic harmless cases to workhouses, is not encouraging; for, while every effort was made to relieve the congestion of the wards in this way, it was found that "the number of entirely suitable cases was not large," and that "most of them come back suffering from a relapse." Seclusion appears to have been used rather frequently; it will, no doubt, be less often required when the overcrowding of the asylum is relieved.

Mr. Wickham states, as the result of his inquiries into the causation of insanity, that "intemperance in drink is not the cause of insanity unless there be some physical ailment or defect for it to work upon." He goes on to say, "My attention has occasionally been called to a case of the following nature. A man has practised this degrading vice for a number of years, and has been known to his acquaintances as a habitual drunkard. Then some one, with more influence than others over him, successfully awakens him to a sense of his shame, and points out to him how he is pauperising his family, and lowering them to the depths of misery and privation by his sensuality. He then becomes a total abstainer, and, in the course of time, he goes insane; and such cases of this kind as have come under my notice are generally incurable. Mentioning this matter to a friend, who has done much good in advocating total abstinence among the weaker brethren, he suggested that, if such a man had not given up drinking, he would probably have died; but this is assuming that the advantages of continuing to exist are indisputable."

We venture to hope that, for the future, the revised tables of the Medico-Psychological Association will replace the old forms used in the present report. The percentage of recoveries on admissions since the asylum was opened is 32.3; the percentage of deaths on the average number resident during the same period is 9.35. These figures would properly appear in Table III. The dietary includes no beer; but there is the unusual and commendable provision of half a pint of lemonade for each patient at dinner.

SURREY COUNTY LUNATIC ASYLUM, BROOKWOOD.

DURING 1884, the movement amongst the insane population of this asylum was very considerable, owing chiefly to the opening of the new asylum at Cane Hill. No fewer than 256 males and 329 females were admitted, more than half being transfers from other asylums; while 391 were transferred from Brookwood to Wandsworth and Cane Hill Asylums. At the end of the year, 983 patients were in the institution, of whom only 71 were deemed curable. Most of the cases admitted were very unfavourable; it is remarkable that, out of the 585 admissions, there were only fourteen cases of general paralysis. Dr. Barton notes that, as usual, "considerable trouble was encountered in arriving at the cause of the attack, the relieving officer's statement giving little or no assistance in the matter." Ninety-four cases recovered during the year, of whom 67 were resident less than nine months. Only two patients were discharged to workhouses. The number of deaths was 87; of *post mortem* examinations, 79. The death-rate, calculated on the average number resident, was 8.7 per cent. No patient was restrained during the year, and seclusion was only resorted to in the case of one female. "A male patient, considered to be convalescent, made a determined attempt at suicide, by cutting his throat with a knife while at work, with other patients, in the vegetable-room, an attendant being present at the time. This man made a good recovery, and was eventually discharged, but was readmitted during the year." Escapes were rather numerous; "twenty-two attempts were made, of which twelve were successful, but all were recaptured within the statutory period of fourteen days. A large amount of work was done during the year, in the way of renovation and improvement, especially in the laundry, in which department over £1,200 was expended, chiefly for additional machines.

It is to be regretted, in the interests of the asylum, that changes were so numerous among the female attendants that, at the end of the year, more than one-half had been less than twelve months in the service of the institution. It is the more difficult to account for this, inasmuch as the scale of wages appears to compare favourably with that in other asylums.

Coming to the statistical tables, we note with regret the absence of Tables IA and IIA; no doubt the preparation of the latter would be laborious in so large an asylum; but giving, as it does, the net recovery-rate, this table is one of the most valuable of the whole series. The number of transfers to and from the asylum are omitted from Tables I and II; and Tables VIII, IX and XI should, in order to be complete, give the figures relating to the patients remaining in the asylum at the end of the year. It is a little suprising to see the "condition as to marriage" entered as "unknown" in the case of 35 out of the 585 admissions.

The total death-rate and recovery-rate from the opening of the asylum are not given in Table III, as they should be; we find that about 30 per cent. of the total admissions recovered, while the death-rate on the average numbers resident during the seventeen years and a half was 10 per cent.

OBITUARY.

WILLIAM CUMMING, M.D., F.R.C.P.Ed., Edinburgh.

By the death of Dr. William Cumming, of Ainslie Place, on April 27th, the medical profession in Edinburgh has been deprived of one of its oldest and most respected members. Born in 1812, he, after a college career of more than ordinary fulness and success, graduated in Edinburgh, and soon afterwards settled in practice. Possessed of no advantage of wealth or connection, Dr. Cumming soon succeeded, by talent and diligence, in attaining success in practice, and, in a special degree, was fortunate in acquiring and retaining the respect and regard of his patients and friends.

In later years, when experience had ripened his knowledge into wisdom, and age had still more mellowed both his manner and disposition, this regard and respect of his patients was intensified; and among his own circle of special friends and connections, which was a large and influential one, his power was most remarkable.

Growing age, bereavements, and illness weakened him, but he never flagged; he went to see an old friend and patient, and, soon after his return from the visit, he died suddenly.

A highly cultured, widely read man, with an accurate and full classical education, Dr. Cumming was a good specimen of a learned physician, though his devotion to practice left him too little time to write much on even medical subjects. His professional brethren respected him; while those who had the privilege of his intimate friendship could not help loving him, though his retiring disposition and reticence concealed much of the warmth of a most tender heart. He was attended, in his last illness, by Dr. George W. Balfour, and by his only surviving son, Dr. A. S. Cumming, who had recently begun to assist him in his practice.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

EXAMINATIONS FOR THE DEGREE OF B.M.—Examinations for the degree of Bachelor of Medicine will commence in the Medical Department of the Museum, as follows. The second (or final) examination, Thursday, June 17th, at 10 A.M. The first (or scientific) examination, Saturday, July 3rd, at 10 A.M., in respect of chemistry and physics; and on Monday, July 5th, for anatomy and physiology. Candidates for either of these examinations are requested to send in their names, on or before June 3rd, to "the Regius Professor of Medicine, Medical Department, Museum, Oxford." Candidates for the Scientific Examination are to state whether they have passed the Preliminary Honour Examination in the School of Natural Science; and, if not, whether they desire to present themselves for Physics and Chemistry only at this examination, or for all the subjects thereof. Both examinations will be conducted this year under the conditions of the statute of 1860.

INDIA AND THE COLONIES.

INDIA.

Lying-in Hospitals in Bombay.—We understand, says the *Times of India*, that a movement is being made by Dr. Temuljee Bhikajee Nariman, and a few other Parsee medical practitioners, to construct two or three lying-in hospitals or asylums in different parts of the city of Bombay for the use of the females of the middle and lower classes of their community. Several well known Parsee gentlemen have promised large donations for the purpose.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners for the Fellowship on May 20th, and, when eligible, will be admitted to the pass-examination, namely:

Messrs. E. H. Hare, and H. B. Robinson, of St. Thomas's Hospital; A. S. Morton, of University College and King's College; J. B. Coumbe, of St. Mary's Hospital; A. W. Cadman, of Manchester; H. H. Taylor, of St. Georges's Hospital; W. J. Hadley, of London Hospital; R. W. Murray, of Guy's Hospital; F. F. White, of St. Mary's Hospital; W. H. Thompson, of Galway; G. Heaton, of St. Bartholomew's Hospital.

The following gentlemen passed on May 21st, 1886.

P. A. Lloyd, St. Mary's Hospital; C. R. M. Green, of London Hospital; F. G. Parson's, of St. Thomas's Hospital; F. E. Mathews, H. Williams and C. P. Crouch, of St. Bartholomew's Hospital; P. Ashworth, of Manchester; A. F. Routh, of Guy's Hospital; H. F. Waterhouse, Edinburgh University; C. R. Killick, of London Hospital; W. Thompson, of Leeds; B. W. Housman, of Birmingham.

The following gentlemen passed on May 24th.

A. T. Brown, G. H. Pennell, and H. E. Cuff, of Guy's Hospital; E. O. Ash, of London and Manchester; F. W. Robinson, of Aberdeen; R. W. Boyce, of University College; R. V. Solly, of St. Thomas's Hospital; J. P. Parkinson, University College.

The following gentlemen passed on May 25th.

E. R. White, and L. T. F. Bryett, of King's College; G. B. Smith, W. Fisher, and J. E. Moyse, of Guy's Hospital; J. Wilkie, J. H. White, and Robert Bird, of St. Bartholomew's Hospital; A. H. W. Hunt, of Westminster Hospital; A. H. Ward, of St. George's Hospital.

The following gentlemen passed on May 26th.

G. R. Anderson, of St. Thomas's Hospital; W. Powell, of Westminster Hospital; W. G. Williams, and H. Symonds, of St. Bartholomew's Hospital; J. E. Dyer, of University College; B. G. A. Moynihan, of Leeds.

Eighty-eight candidates presented themselves for this examination, of whom 47 passed and 41 were referred.

The following gentlemen having previously passed the required examinations were, at the last meeting of the Council, admitted Fellows, and received their diplomas.

Charles Wray, Long Marston (Membership, November 18th, 1881); Harry Littlewood, Hempstead (Membership, April 17th, 1883).

The following gentlemen were elected Fellows of the College, as Members of twenty years' standing (Section 5, Chapter 15 Victoria).

George Yeoman Heath, Newcastle-on-Tyne (Membership, May 17th, 1843); Henry Cayley, Calcutta (Membership, December 21st, 1855).

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, May 20th, 1886.

Hooper, Ebenezer, Kingston, Ontario.
Smith, Henry Craven, Cravensea, Cockington, Torquay.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Honorary Physician. Applications by June 4th, to E. J. Abbott.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Honorary Assistant-Surgeon. Applications by June 14th, to E. J. Abbott.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £100 per annum. Applications to Mr. J. Ostell, 14, Bank Street, Carlisle.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Three Clinical Assistants. Applications to Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Medical Officer. Salary, £100 per annum. Applications by June 8th.

EAST RIDING ASYLUM, Beverley.—Assistant Medical Officer. Salary, £100 per annum. Applications to Medical Superintendent by July 1st.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Two Clinical Assistants. Applications to Secretary.

HARTLEPOOL FRIENDLY SOCIETY'S ASSOCIATION.—Dispenser. Applications to T. Tweddell, Reed Street, West Hartlepool.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square, W.—Resident Medical Officer. Salary, £100 per annum, with board and rooms. Applications by June 15th to the Honorary Secretary.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, London.—Medical Registrar. Honorarium, 50 guineas. Applications by June 9th to A. Hope.

HUDDERSFIELD INFIRMARY.—Junior Resident Medical Officer. Salary, £40 per annum. Applications by June 5th to F. Eastwood, Infirmary, Huddersfield.

LEICESTER INFIRMARY AND FEVER HOUSE.—Two Honorary Assistant, Physicians. Applications by May 31st to the Secretary, 24, Friar Lane, Leicester.

LEICESTER INFIRMARY AND FEVER HOUSE.—Two Honorary Assistant Surgeons. Applications by May 31st to the Secretary, 24, Friar Lane, Leicester.

LONDON DENTAL HOSPITAL, Leicester Square.—Assistant Dental Surgeon. Applications by June 21st to the Honorary Secretary.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, E.—Surgeon. Applications by May 29th.

PARISH OF LOCHBROOM, Ross-shire.—Medical Officer. Salary, £80 per annum. Applications by June 2nd to John Munro, Inspector of Poor.

PARSONSTOWN UNION.—Medical Officer, Riverstown Dispensary. Salary, £130 per annum, and fees. Applications to Mr. George Hackett, Honorary Secretary. Election on June 4th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone Road, N.W.—Two Physicians to the Out-Patients. Applications by May 31st.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—Assistant-Surgeon. Applications by June 1st.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street Strand, W.C.—House Surgeon. Applications by June 2nd.

ST. GEORGE'S, HANOVER SQUARE, DISPENSARY.—Surgeon. Applications by June 1st to the Secretary.

MEDICAL APPOINTMENTS.

ALLOTT, J. H. L., M.B. and C.M.Edin., appointed Resident Medical Officer to the Township of Manchester, *vice* G. L. Barrett, resigned.

BEVAN, H. C., L.R.C.P., M.R.C.S.Eng., appointed Medical Officer of Health to the Nantyglo and Blaina District.

BOND, J. W., M.D., appointed Honorary Physician to the Hospital for Diseases of the Throat.

BROCKATT, A. A., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital.

BROWNE, Oswald A., M.A., M.B., M.R.C.P., appointed Physician to the Royal Hospital for Diseases of the Chest, City Road.

COLLIER, M. P. Mayo, M.S.Lond., F.R.C.S., appointed Senior Assistant-Surgeon in the Throat and Ear Department of the North-West London Hospital.

CROWDY, F. D., M.B. (Oxon.), M.R.C.S., L.S.A., appointed Resident House-Physician to St. Thomas's Hospital.

EVANS, C. S., M.R.C.S., L.S.A., appointed Assistant House-Physician to St. Thomas's Hospital.

FRASER, Alexander G., M.A.Aberd., M.B.Edin. and C.M., appointed Honorary Physician to the Hulme Dispensary, *vice* G. J. Haslam, M.D., M.R.C.S., resigned.

GODFREY, A. E., L.R.C.P., M.R.C.S., appointed Non-resident House-Physician to St. Thomas's Hospital.

GOODDY, E. S., M.R.C.S., L.S.A., appointed House-Surgeon to St. Thomas's Hospital.

GREY-EDWARDS, Henry, M.D., M.B., B.Ch., B.A., appointed Honorary Ophthalmic Surgeon to the Carnarvonshire and Anglesey Home Teaching Society for the Blind.

HEAD, P. T. J., appointed District Medical Officer to the Eastbourne Union, *vice* A. P. Sherwood, L.R.C.P., M.R.C.S., resigned.

HERN, W., M.R.C.S.Eng., appointed Assistant Dental Surgeon to the Middlesex Hospital, *vice* C. Rogers, M.R.C.S.Eng., resigned.

HUTTON, J. S., L.R.C.P., M.R.C.S., L.S.A., appointed Resident Accoucheur to St. Thomas's Hospital.

KIDD, H. Cameron, L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

MACDONALD, Greville, M.D., appointed Honorary Physician to the Hospital for Diseases of the Throat.

MONTAGUE, A. J. H., M.R.C.S., L.S.A., appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

NAIRN, R., M.R.C.S., appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

NICHOL, F. E., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

PARSONS, F. G., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

PHILPOTS, J. R., L.R.C.P. and S.Ed., appointed Rural Sanitary Medical Officer, Poole Union.

WHITE, W. Henry, M.A., M.D., M.R.C.P., appointed Physician to the Royal Hospital for Diseases of the Chest, City Road.

WOLFENDEN, R. Norris, M.D., appointed Honorary Physician to the Hospital for Diseases of the Throat.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGE.

PIGGOTT—LAWRENCE.—On the 20th instant, at St. Mary Abbot's, Kensington, by the Rev. F. W. Clarke, Vicar of St. Gabriel's, Poplar, assisted by the Hon. and Rev. E. Carr Glyn, Vicar of Kensington, and the Rev. Thomas Piggott, Vicar of Bishopstone, uncle of the bridegroom, Frederick Cecil Holman Piggott, B.A.Cantab., M.R.C.S., etc., of Richmond and Teignmouth, to Ada Maria, daughter of the late Henry and Ellen Lawrence, of Kensington.

DEATHS.

HUMBLE.—On April 9th, at Viedma, Patagones, Buenos Ayres, South America, Mary Louisa Letitia, the beloved daughter of Geo. A. Humble, M.D., M.R.C.P., of diphtheria, aged 16 years.

SCOTT.—At Musselburgh, N.B., on the 19th instant, aged 8 weeks, David James Dickson, younger son of Thomas R. Scott, M.B.Edin.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, 4 P.M. Dr. L. C. Wooldridge: Lecture on the Physiology of the Blood.

WEDNESDAY.—Royal College of Surgeons of England, 4 P.M. Dr. L. C. Wooldridge: Lecture on the Physiology of the Blood.—Obstetrical Society, 8 P.M. Specimens will be shown by Dr. John Phillips and others. Papers—Dr. Champneys: On the Artificial Production of the so-called Lymphatic Varix. Dr. Herman: Note on one of the Causes of Difficulty in Version, with Remarks on the Practice of Amputating the Procident Arm. Dr. John Phillips: Four Cases of Spurious Hermaphroditism in one Family.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. Dr. L. C. Wooldridge: Lecture on the Physiology of the Blood.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M. Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED

QUERIES.

A JUNIOR PRACTITIONER has an obstinate case of "dandriff," in which cleanliness and continued use of a saturated solution of borax seem of little benefit. He asks for hints as to some other treatment which has been found successful.

SCHOOL-BOARDS AND MEDICAL CERTIFICATES.

A YOUNG MEMBER asks: Could you, or any member, kindly inform me if there is any law by which a School-Board can compel parents to obtain a medical certificate when they have a child absent from school, owing to illness of the child? I am frequently asked to give these certificates, and the parents are threatened with the police-court unless they obtain one. As a rule, the patients from whom these certificates are required are not in a position to pay for one, and I fail to see why a medical man should waste his time to suit the caprice of a few men whose time is not of much value to them.

INDIA-RUBBER TYRES.

B. S. will be very grateful to any member who can give him any information with regard to india-rubber tyres; whether they are suitable for hansoms, their durability and cost, and also the name, or names, of the best and most economical makers of the same.

ANSWERS.

EXCESSIVE PERSPIRATION OF THE HANDS.

DR. REYNOLDS (Boxford, Suffolk) advises "A Member" to try belladonna locally for the above obstinate complaint, either in the form of the liniment or ointment. One of these preparations should be well rubbed into the affected parts three or four times daily.

DR. BERT.—The whole matter is having the careful consideration of the Colleges, who are not responsible for any merely verbal expressions in our columns.

THE BRUSSELS DEGREE.

PHYSICIAN AND SURGEON is extremely obliged to Dr. Gandevia, of Bournemouth, for the elaborate information concerning the examination for the M.D. Brussels.

HYPODERMIC NEEDLES.

L.R.C.P. writes: Morphine deposits may be driven out of hypodermic needles by heating them in a spirit-lamp flame, but it soon spoils the needles, which should always be kept clean.

DR. F. COOK, Cheltenham, finds that, by holding the centre of the needle in the flame of a spirit-lamp, the substance will volatilise, and pass out in a gaseous form.

NOTES, LETTERS, ETC.

ON ALCOHOL FOR THE MEDICAL STAFF.

DR. MICHAEL THOMAS SADLER (Physician to the Barnsley Hospital) writes: In your issue of Saturday, May 15th, Mr. George Sturge has singled out the Barnsley Hospital as a "discreditable" example of disproportionate expenditure on alcohol for the medical staff and attendants. It would have been more candid if he had mentioned that the total expenditure on alcoholic drinks for the staff in the year mentioned was considerably under five farthings per head per day. If he did not know this, it would have been easy to learn it. Is this a sample of "temperance" statistics?

REMOVAL OF FOREIGN BODIES FROM THE EAR.

MR. D. HOADLEY GABB (Hastings) writes: At the sea-side, we have plenty of experience as far as beach-stones are concerned. They are generally rammed into the child's ear by relations, friends, and druggists, before we see the cases. Syringing is most efficient for their removal, but I would suggest Higginson's syringe (which every one has in his midwifery-bag) as much more efficient in removing foreign bodies or an accumulation of cerumen than the ordinary brass one.

ERRATUM.—In the Pass-List for the Preliminary Examination in Arts, Society of Apothecaries (JOURNAL, May 15th), Mr. E. W. Northcott's surname was misspelt "Northcote."

THE MEDICAL ACT AMENDMENT BILL.

DR. A. TUCKER WISE (Curzon Street) writes: Replying to the letter of a "Medical Man with British Diplomas," who thinks it a great mistake that any foreign diplomas should be admitted to the *Register*, I should wish to point out to him that he is much in error if he lightly esteems all qualifications outside the British Isles.

As for one of the reasons he gives against the registration of foreign medical gentlemen—"especially considering how easily these foreign diplomas are obtained"—the best reply is, let him try Berlin, Brussels, or Paris; or, safer still, perhaps, attend as a spectator at any of the examinations; he will then perceive that these diplomas are no more *vin ordinaire* than his own.

Your correspondent writes as if this Bill were introduced for the "good of the profession." That has never been set forth as the object of the Bill, as anyone may learn by perusing the memorandum at the back of it.

Let your correspondent show sufficient reason why a French medical man should not be allowed to practise amongst the French population in London, or a German amongst his compatriots; then, more conviction will be carried to the minds of your readers, against the registration of foreign diplomas, than by the expression of a bare opinion, based on what appears to be imperfect information.

CASE OF DEATH OF FŒTUS THROUGH KNOT IN CORD?

MR. W. L'HEUREUX BLENKARNE (Leicester) writes: "Nemo" (in BRITISH MEDICAL JOURNAL, May 15th) is mistaken in thinking that a knot in the funis is necessarily the cause of death of the fœtus. I have notes of three cases that I attended in which the funis was tied in a distinct knot, but in each case the child was born alive, and showed every sign of a vigorous existence.

MATERNAL IMPRESSIONS.

MR. E. CRICKMAY (Laxfield) writes: In October last, a club-patient came to my surgery holding up his right arm, the hand of which had been obliquely severed by the knife of a chaff steam-cutter, leaving only a small portion of its thumb A woman, about two months advanced in pregnancy, had, next day, related to her the details of the mischief. She tells me that this did not produce on her much emotion, save that of sorrow for the man's misfortune, but that she subsequently experienced much distress at her own relation of them to some friends. In due course, this woman was delivered of a male child, whose left arm was *minus* a hand, and the stump of it bears the rudiment of a thumb. The cause and effect in this case appears to be almost capable of demonstration, and, for this reason, I have been induced to ask you to let it be printed in the JOURNAL.

LADY DOCTORS IN THE FIFTEENTH CENTURY.

DR. HOROWITZ, of Frankfort-on-the-Main, has (*The Jewish Chronicle*, May 14th, 1884) published a work, entitled, *Jüdische Aerzte in Frankfürt*, in which the learned author mentions the interesting fact that, as long as four hundred and fifty years ago, Jewesses practised medicine in that city; they especially devoted themselves to ophthalmia. The female oculist, Dr. Zerlin, whom we meet with in the volume as having practised in the year 1428, ventured to reside outside the Judengasse, and believed that she could claim exemption from the payment of taxes on account of her talent, and the general esteem in which she was held. The Municipal Council rejected her application, and, in 1489, they ordered that Jewish lady doctors should either quit the city, or pay taxes like other Jews. A Jewish doctress was, however, more fortunate in the year 1494; she was relieved from the payment of "sleeping money," a tax imposed on foreign Jews for every day that they stayed in Frankfort. With this exemption was coupled an official recognition of her profession which was of the utmost advantage to the lady.

COLONIAL PRACTICE.

DR. W. A. NORRY (Devonshire Square) writes on this subject, as follows.

I have read, with great interest, during the past fortnight, several letters from correspondents, together with your excellent article of September 5th last, on the subject of medical practice in our colonies.

Ill health compelled me, early last summer, to take a voyage, my destination being Sydney, New South Wales; and, during a stay of a few months in that colony, I was able to observe some of the aspects of this important subject. It was my good fortune, during my stay in Sydney, to make the acquaintance of several of the leading medical men, both in public life and in private practice, from whom I also learnt many particulars of the wants and evils now existing in that colony. Since the perusal of several of the letters before referred to, I have thought that many men now qualifying, and ultimately, on obtaining their qualifications, intending to start practice in this new world of the south, must be somewhat (I may say deeply) chagrined at the dismal picture presented by these disclosures; and it is with the intention of showing a brighter side to medical practice in Australia, that I venture to address you.

Your article of September 5th, is clearly descriptive of the colonial medical man's life; and the opportunities, with their disadvantages, are therein temperately discussed. It is my desire to add to the information in your leading article in the same spirit. With reference to the letters of your different correspondents, I think almost every one struck me as the letter of an unsuccessful man. In considering this subject, it does not seem to me that one can judge fairly of the position, until one hears both sides of the question; and, apparently, the successful men do not care to let us know their experiences. No one can deny that there are successful men now practising in Australia, or, to go still further, that there are men who are now living at home upon incomes derived from the pursuit of their profession in our colonies. I am, I think you will allow, unbiassed, as my object was not to practice there; so that success or non-success does not warp my ideas in considering the broad facts of the questions. Is there room for more medical men, and is there a prospect of a fair income to be made in return for a corresponding amount of industrious work? To both questions I should answer, yes.

In discussing the openings for practice, it is best to consider them under three heads: practice in the large towns; practice in the suburbs of those towns; and, lastly, practice in the heart of the country. No doubt, Sydney is as well provided with general practitioners as most of the towns of the same size in our own country; but men taking any especial branch of medicine or surgery, are few and far between. It may be said that these towns are not large enough to support men practising one special branch; but I would, in answer, say that our wealthy colonists are willing to, and do, travel hundreds of miles to get the best skilled advise on their especial case; and it is a very common thing for them to make a voyage to England to visit our London physicians and surgeons, to obtain an opinion from a well known authority. Surely, a man of known ability and of acknowledged authority amongst his colonial medical brethren, would have many patients from distant parts in the country, seeking his advice. This is not a matter of question, but a known fact. The large towns are, like our own, extended into the country, and these suburbs grow rapidly, and provide openings for medical men. At present, the supply does not exceed the demand. Living within, probably, half an hour's ride by train of a city so large as Sydney or Melbourne, a medical man can hardly say he is cut off from the advantage of association with his fellows, either socially or professionally, as the cities have their clubs and medical meetings for discussion, in favourable comparison to many of our large provincial towns.

I cannot of my own experience add any more information with reference to practice in country districts than is contained in your article, which, from hearsay evidence, I believe gives a clear description of the Bush medical man's life. I will not go into the question of want of legislation upon medical matters in New South Wales, a question which, I believe, will soon be under the consideration of the legislative assembly.

Any further information I shall be happy to give to any medical man purposing to make a beginning in this new country; and I will conclude with the warning that the life of a medical man at the Antipodes is one of work and worry, quite as much as ours at home; but that there is work to do, and fair remuneration obtained, is the opinion, not only of myself, but of men who have spent the greater part of their working days in the Australian colonies.

MECHANISM OF DEFÆCATION, MICTURITION, AND PARTURITION.

IN the BRITISH MEDICAL JOURNAL of May 15th, I am reported to have said, at the Obstetrical Society's last meeting, "that in defæcation, micturition, and parturition, there is a reflex tonic contraction kept up in the muscular fibres, especially in the sphincters."

As this is not what I said, and conveys a wrong impression of what I meant, I should be glad if you would insert this correction.

What I said was, that the sphincter ani (externus), and sphincter vesicæ

(Henle), and probably the cervix uteri (sphincter uteri), were ordinarily in a state of reflex tonic contraction; and that, during the acts of defæcation, micturition, and parturition, these three sphincters were respectively relaxed; not that the muscles actively dilated, but that they passively relaxed, so that the different expulsive muscles had less resistance to overcome than they would have if the reflex tonic contraction were kept up in the sphincters.

St. Thomas's Street, S.E. P. HORROCKS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following questions were submitted to the candidates at the final examination for the diploma of member on April 16th and 17th. *Surgical Anatomy, and the Principles and Practice of Surgery.* (Candidates were required to answer at least four, including one of the first two, of the six questions, and were strongly advised to answer all six questions.)—1. Describe the course and relations of the lingual artery. How would you apply a ligature to this vessel? 2. Describe the operations of tracheotomy and laryngotomy, giving the relations of the parts concerned. 3. Describe in detail the symptoms and treatment of hereditary syphilis in the infant. How would you recognise the subject of this disease at the age of puberty? 4. Give the symptoms of a case of concussion of the brain in its several stages, with the appropriate treatment of each stage. 5. What are the various conditions which favour the occurrence of bed-sores? Give their usual position. Mention the measures for their prevention and treatment. 6. Describe the symptoms, progress, and treatment of purulent ophthalmia of infants. What preventive measures should be adopted? *Midwifery and the Diseases of Women.* (Candidates were required to answer three of the four questions).—1. What are the difficulties peculiar to labour with the breech presenting? How would you treat them? 2. What are the signs and symptoms which would lead you to diagnose extra-uterine pregnancy before the end of the third month? 3. What are the causes of *post partum* hæmorrhage, and what measures would you take (1) to prevent it, (2) to arrest it? 4. What are the causes of retention of urine peculiar to women? How would you treat them? *Principles and Practice of Medicine.* (Candidates were required to answer three of the four questions, including question No. 4).—1. How do you explain the phenomenon usually termed "tendon-reflex"? Enumerate the diseases or conditions in which the patellar tendon-reflex is usually absent, and those in which it is usually found markedly increased. 2. To what different causes may hæmoptysis be due? How would you distinguish it from hæmatemesis? And how would you treat a patient suffering from it? 3. Give an account of the morbid anatomy, symptoms, and progress of Graves's disease, or exophthalmic goitre. 4. What are the actions, therapeutical uses, and doses of the following preparations? *a*, Liquor arsenici hydrochloricus; *b*, lithiæ citras; *c*, extractum opii liquidum; *d*, extractum cannabis Indicæ; *e*, tinctura nucis vomicæ; *f*, infusum ergotæ; *g*, tinctura lobeliæ ætherea; *h*, scammoniæ resina; *i*, pulvis kino compositus; *k*, potassii tartras acida.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

NOUS VERRONS writes: The Council forms a circle of well-intentioned men, kept together by linking arms. This circle revolves, otherwise it would collapse. Within and above this circle is the President, or Chief Wizard, on whom all eyes are fixed. He revolves slowly on his own axis, views and receives in turn from each component part an instillation from an outstretched hand; he has also an oscillation north and south of this equator to preserve gravity, according to the density of individual atoms. This circle, or body, as it may be called, has a motion of its own, but its orbit is not well known. By well-informed persons, it is believed to have reached its superior limit of eccentricity, and to be slowly receding; whether this be so or not, our glacial period has passed away, and we may confidently predict a genial era. The component parts of this body are individually good, but collectively bad. Each one that has climbed to the top has been nursed, fed, and kept on his way, by Members of the College. Arrived at the foot of the scaffolding, the final haul and elevation are effected by the lusty Fellows. To each class, eternal constancy and affection he vows on his upward journey; but, the platform reached, it is found that the long strain from upward gaze, combined with sudden liberation of heat by impact, has produced double convergent strabismus and spasmodic stiff-neck; he can never again look upon his benefactors. Apart from this, he has become part of a magic circle, his eyes are for ever fixed upon the gyrations of the central figure. From this cause comes about that strange forgetfulness of what he was in contemplation of the glory of what he may be. To obviate, therefore, the peculiar disadvantages incident to this elevation, two Associations have been formed to penetrate this circle, and apply surgical and medical relief to former friends. The Fellows have undertaken to correct the strabismus, which prevents each one from seeing his neighbour as he is seen; the Members (harder task) the reduction of the stiff neck. As treatment, applied separately, has not effected much, each Association has now called the other in for consultation.

The members of this circle, poor fellows, in their last appeal, earnestly hope for permanent relief, but naturally dislike the means of rectification; they wriggle and shuffle with great verbosity; and, in no very dignified manner, hope to escape the cautery they have so unsparingly applied. They affect great interest in the rights of the Fellows upon which they have trampled, and think now that, with a combined treatment, they will be enabled to submit themselves more contentedly to their nurses.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. F. F. Welsh, Clifton; Mr. J. J. O'Bryan, London; Mr. Arthur Wiglesworth, Liverpool; Mr. R. Atkinson, Ripponden; Messrs. Burroughs, Wellcome and Co., London; Dr. Magrath, Madeira; Mr. G. P. Best, Cheltenham; Dr. W. A. Carline, Lincoln; Dr. Duncan, London; The Honorary Secretary of the Harveian Society, London; Dr. Tyson, Folkestone; Dr. Maxwell, Woolwich; Dr. Leslie Phillips, Birmingham; Mr. J. Walter Wilson, Plymouth; Dr. C. J. Cullingworth, Manchester; Dr. Ralph Richardson, London; Mr. W. H. Dobie, Chester; Mr. A. Crosbee Dixey, Dover; Secretary, Office of the Sanitary Commissioner, Punjab; Justice; Dr. Prosser James, London; Dr. W. M. Whistler, London; Dr. E. Woakes, London; Mr. George Stoker, London; Dr. W. H. Fenton Jones, London; Mr. Simeon Snell, Sheffield; Dr. P. Horrocks, London; Dr. Matthew Coates, London; Mr. Charles Lunn, Edgbaston; Mr. A. H. Clemon, Liverpool; A Young Member; Mr. T. Williams, Preston; The Secretary of the Queen's College, Belfast; Dr. C. R. Illingworth, Clayton-le-Moors; Mr. G. Gresswell, Louth; Dr. E. Hooper May, Tottenham Sir William Mac Cormac, London; Dr. T. M. Lownds, Egham Hill; Our Cairo Correspondent; Dr. William Osler, Philadelphia; Dr. Lorimer, Buxton; Mr. B. L. Hiven, London; Mr. A. N. Turner, Anerley; Mr. R. Clement Lucas, London; Mr. H. Fuller, Croydon; Mr. J. M. Cotterill, Edinburgh; Mr. Reynolds, Boxford; Dr. Joseph Rogers, London; Dr. Lee Strathy, Harborne; Mr. G. Eastes, Londons; Mr. C. G. Wheelhouse, Leeds; Mr. T. W. Fogarty, Cork; Dr. J. Adam, West Malling; Mr. William Square, Plymouth; Mr. H. Edwards, Bangor; Mr. C. S. Chadwick, Birmingham; Dr. Mackey, Brighton; Mr. G. H. Dursaine, Coldstream; Dr. Ludwig Loewe, Berlin; Dr. D'Arcy Adams, London; Dr. D. H. Cullimore, London; Dr. H. Rayner, London; Mr. F. J. Hart, Much Wenlock; Mr. Alexander Waldie, Stonehaven; The Secretary of the Royal Hospital for Diseases of the Chest; Mr. W. J. Spence, Bradford; Mr. T. Ryan, London; Dr. T. Cook, Cheltenham; Mr. G. Buckston Browne, London; Mr. G. Rendle, London; Dr. R. Wade Savage, London; Mr. Alfred Chapman, London; Mr. G. F. Poynder, Gravesend; Mr. H. S. Reynolds, Cape Colony; Mr. E. Armitage, Hulme; Dr. C. S. Taylor, London; Messrs. Street Brothers, London; Mr. Thomas Partridge, Stroud; Dr. Austin Flint, New York; Dr. Hawthorne, Dromore, co. Down; Mr. W. M. Williams, Bettws-y-coed; Mr. Jonathan Hutchinson, London; Mr. K. R. Schramm, London; Mr. D. H. Gabb, Hastings; Dr. Ward Cousins, Southsea; Dr. Tatham, Salford; Dr. Clarke, London; Mr. B. F. Tobin, Dublin; Dr. R. T. A. O'Callaghan, Carlow; Dr. J. L. Nash, Dublin; Dr. Bailey, Marple; Mr. J. Ekens, Alresford; Mr. Wagstaffe, Sevenoaks; Messrs. Lee and Taylor, Leicester; Mr. G. Brown, London; Mr. J. Hurley, Queen Camel, Bath; Mr. C. Clark Burman, Belford; Mr. J. Crisp, London; Mr. F. W. Salzmann, Brighton; Mr. R. W. Stuart, Dunrossness, Shetland; Mr. S. W. North, York; Messrs. William Schacht and Co., London; Dr. A. Tucker Wise, London; Mr. R. P. Bond, Cheltenham; Mr. S. J. Noake, Halton, Leeds; Dr. Styrap, Shrewsbury; Mr. W. Colnett, London; Mr. E. W. Northcott, London; Dr. R. M. Fawcett, Cambridge; Mr. E. H. Fenwick, London; Dr. J. M. Bryan, Northampton; Mr. W. Eassie, London; Messrs. Smith, Son, and Gowland, London; Mr. C. B. Plowright, King's Lynn; Mr. J. Greig Smith, Clifton; A Junior Practitioner; Mr. Sidney Hall, Sheffield; Our Glasgow Correspondent; Our Dublin Correspondent; Our Liverpool Correspondent Dr. Lush, Weymouth; Mr. R. Owen, Liverpool; The Secretary of the Hospital for Diseases of the Throat, London; Dr. Sheen, Cardiff; Mr. J. Shaw, London; Mr. C. Roberts, London; Dr. C. E. Saunders, London; Mr. Gilbert Smith, Birmingham; The Secretary of the Great Northern Central Hospital; Our Rome Correspondent; Mr. Pugin Thornton, Canterbury; Mr. C. Osborn, London; Mr. E. Walsh, Mitchelstown, etc.

BOOKS, ETC., RECEIVED.

The Sale of Food and Drugs Act, 1875 and 1879. By W. J. Bell, B.A. London: Shaw and Sons. 1886.

On Cancer of the Mouth, Tongue, and Alimentary Tract. By F. B. Jessett, F.R.C.S. London: J. and A. Churchill. 1886.

Medical Missions, Their Place and Power. By John Lowe, F.R.C.S.E., with Introduction by Sir William Muir, K.C.S.I. London: T. Fisher Unwin. 1886.

Student's Manual of the Diseases of Menstruation. By J. N. Upshar. New York and London: G. P. Putnam's Sons. 1886.

A Guide to Carlsbad. Edited under the Authority of the Mayor and Town Council of Carlsbad. By W. Schacht and Co. London: A. Siegli, and Trübner and Co. 1886.

The Baths, Bathing, and Attractions of Aix.les-Bains (Savoy). By W. Wakefield, M.D. London: Sampson Low and Co. Aix-les-Bains: A. Bolliet. 1886.

The Voice, Musically and Medically Considered. By A. Semple, B.A., M.B.Cantab. London: Baillière, Tindall, and Cox. 1886.

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INGLEBY LECTURES
ON SOME FUNCTIONAL DISORDERS OF FEMALES.

Delivered at Queen's College, Birmingham.

By WILLOUGHBY FRANCIS WADE, F.R.C.P.,
Senior Physician to the General Hospital, Birmingham: and Vice-President of the British Medical Association.

The late Dr. Ingleby was highly reputed in Birmingham and district as a practitioner of the obstetric art. He was further known to the wider circle of professional students as a lucid and successful author.

His representatives, in 1876, resolved to devote a considerable sum of money to objects which might be serviceable to the poor whom he had so well served, and useful to the profession of which he had been so distinguished a member. And no doubt, in so doing, they desired that their acts might help to keep his memory green. In pursuance of this design they built a very useful nursing home in connection with the General Hospital. By the lever of a very large donation, they brought into independent existence that which had existed previously only in an embryonic state, the Birmingham Medical Institute, the inception of which was due to the foresight of another distinguished member of our profession, the late Dr. G. F. Evans. Not only was the delivery difficult, but the early years of its existence were from time to time endangered by infantile disorders, some of them of a highly inflammatory character, attended with a notable amount of convulsion. Even yet, perhaps, all risks of developmental difficulties have not passed away. But they are passing, and no reasonable doubt remains that the Birmingham Medical Institute will attain a robust, vigorous, and useful manhood.

Dr. Ingleby's representatives also endowed a lectureship for the delivery, annually, of lectures upon some subject connected with that branch of our art which he had loved and adorned. By the favour of the Council of the Queen's College, in whose hands the appointment is vested, I have the high honour of appearing before you to-day as the Ingleby Lecturer for the year 1885.

Lecture I.

The most unequivocal differences between the two sexes are, unquestionably, anatomical ones, the possession by each of organs of which the other is devoid. These organs are those which are directly concerned in the process of reproduction. This fact suggests that we have here the central point of the human race, that round which all revolves, from which all radiates. But, when we reflect, we perceive that, in this fundamental respect, we resemble not only all the animal, but also all the vegetable, world.

It is not, then, so much the centre which differentiates us from the rest of the organic world; the same *leitmotif* governs the conjugation of the humble algæ and the gorgeous ceremonies of imperial nuptials. That *motif* is the impregnation of the passive by the active particle in obedience to the imperious obligation of Nature, "so careful of the type, so careless of the single life." True, the radiations, the surroundings, the accidental accessories as distinguished from the essential elements, do place between us and the highest other grades an immense, and between us and the lowest an immeasurable, gulf. But throughout the whole web of organic Nature, one thread is never broken. Upon a common fabric, the artificer may broider rude patterns in coarse materials, or elaborate and complex designs in fine silk and gold thread, strung with pearls and studded with precious stones. The canvas back is the law of reproduction; the rude design and sordid worsted are the conditions under which, in the lower worlds, this law is operative; the costly and artistic surface represents the grades of civilisation, up to the highest yet reached, which cluster round the same law in the human race. The splendid and fatal Queen of Egypt was fain to confess herself—

> "No more, but e'en a woman; and commanded
> By such poor passion as the maid that milks,
> And does the meanest chares."

Without a just appreciation—much less common than it ought to be—without a minute analysis of the subtle phases of thought and feeling, whose effects pervade the whole female organism, it is impossible to comprehend many of the cases with which we ordinarily meet. Still more is it impossible to advise with wisdom in the rarer, but still not infrequent cases, where upon our judgment and discretion hang, perhaps, the lasting happiness or misery of two lives. Only an inane prudery then can refuse to enter into a free examination of the relations of this law to "those delicate vessels in which are borne onward through the ages the treasures of human affection."

The reproductive cycle can, and indeed, for the purpose of study must, be divided into stages. The time at our disposal would not suffice for even a superficial glance at each of these. I purpose, therefore, to confine myself to one, the first or preliminary stage, meaning thereby the transition of the girl into the nubile woman, and the nubile condition up to the time of marriage, which is the conclusion of the first stage. It must be borne in mind that classification is beset by difficulties from which there is no escape. Nature may be said to delight in curves; classification, on the contrary, rejoices in straight lines. "How can two walk together except they be agreed?" Nature refuses to agree to delimitation of territory, or to submit to a scientific frontier. It is as impossible to square the circle of nature, as it is that of the geometer. We shall, therefore, find that much which we have to consider does not exclusively appertain to this "preliminary stage." Though the circumstances and condition of the antenuptial period conduce in an eminent degree to the development of certain disorders, yet these are seated deep down in woman's nature and constitution, and therefore the tendency to them is never eradicated.

The mother, within certain limits the most subtle of observers, the nurse informed with maternal instinct, will often point out psychical differences between the male and the female infant: it may be that such are perceptible even to the duller vision of man.

In childhood, the yearning of the girl for her doll, and that of the boy for ruder diversion, presage still more clearly the subsequent divergence of the paths of each. The submission of the girl to the brother's will, her admiration and respect for his greater physical power, her general acknowledgment of his superiority, are not the outcome of an artificial state of society, but the mark of the differences of organisation, which nature has conferred, in order that each may hereafter be in accord with her reproductive laws.

With the advent of puberty, the psychical differences previously foreshadowed become clear and distinct, and there are also added physical differences, which it is unnecessary to specify. The establishment of puberty in the female is, as we know, often not unattended with derangements of the physiological equilibrium. Mothers too often are uneasy at what they consider undue retardation of the special feature of puberty, and this is a matter upon which, as you know, our advice is often sought. These cases may be usefully divided into four categories, namely:—

1. Well developed, strong, healthy girls.
2. Girls in other respects healthy and strong, but of backward development.
3. Well developed, but more or less unhealthy girls.
4. Ill developed, and more or less unhealthy girls.

Before referring more in detail to these cases, let me offer a few words on the menstrual function generally.

We know that much has been written on the differences between the catamenial secretion and blood. That the distinctions made are just from a clinical point of view, I am willing to admit. But I none the less firmly maintain that, from a clinical point of view, this discharge is a veritable hæmorrhage, and that this is a cardinal fact which can never, with safety, be overlooked in practice. That there are cases of menorrhagia which, no one would dispute, are to be regarded as hæmorrhages, I assume. And who, I would ask, is prepared to fix the boundary which separates these from ordinary, or even from what are reckoned as insufficient, catamenia? What, then, are the systemic effects of loss of blood? These depend upon the quantity lost, the frequency of repetition, the state of the individual at the time, and no doubt to some, possibly to a large, extent upon idiosyncrasy. The effect of repeated losses depends, further, on the activity of the blood-making organs, and their power to restore the hæmatic equilibrium. It is consistent with our knowledge of these effects, as derived from examples both of spontaneous and of artificial hæmorrhages, that the loss of a few ounces of blood should be a matter of indifference to a healthy person whose blood-producing apparatus was normally active. It is, therefore, quite comprehensible that an average catamenial evacuation, reckoned at about five ounces, should not produce any very sensible effect on healthy women.

On the other hand, in persons already the subjects of anæmia, whether that be due to spontaneous hæmorrhage, to artificial hæmorrhage, or to some more recondite cause, the effect of further loss of blood, in quantity even less than that of an average menstruation, is often seen to produce very distinct effects. Without going into details,

it may be said that the new hæmorrhage removes the symptoms which had resulted from previous hæmorrhages. This may happen time after time, but with a difference: the difference being, that each time the period of relief is of shorter duration; that is, the symptoms return sooner, and probably with an increased intensity. Ultimately, a time comes when the hæmorrhage ceases to be followed by any relief; or if by any, it is so slight and so transient as to be difficult of discernment.

Now I affirm, after very numerous inquiries, extending over many years, that the effect upon an anæmic girl of an ordinary catamenial loss is strictly analogous to that of other hæmorrhages upon similar subjects. There are two standards by which the amount of loss may be adjudged to be normal or abnormal. One is by comparing it with the average loss of women. The other, and the more important, is by comparing it with the usual loss of the individual herself. But I go further, and say that an evacuation subnormal in amount, by whichever standard it is measured, is capable, under certain circumstances, of not rare occurrence, of producing similar effects. This is the case even when, in addition to being subnormal in amount, the loss is subnormal in colour. The accuracy of these observations may readily be tested by each one of you for himself. But the critic must be familiar with the effects of repeated loss of blood, even in small quantities. He must, further, be prepared to make a minute and exact inquiry into the clinical history of his patient. And, lastly, he must enter into the investigation with an unbiassed mind, not prepossessed with the idea that, because the periods are apparently normal or even deficient in quantity or colour, it is impossible for them to produce the effects of a hæmorrhage.

But, it may be said, granting the accuracy of my observations, do they prove that the anæmia of girls is due to the repeated loss of blood by the catamenia? To this I would answer, in the first place, medical authorities are not agreed to offer us any other explanation, or rather they are agreed to offer us none, and to say that none is known. In the second place, I would ask you this question. If you met with a case of anæmia, in which there was habitual loss of blood by hæmorrhoids, by epistaxis, by hæmorrhage from any other mucous membrane, would you refuse, because the loss was comparatively small, to admit that it was the cause of anæmia, and to base your treatment upon that view? To carry, not my argument, but my statement, a little further, I may add that cases are not unfrequent in which the first period produces anæmia. And on this point let me mention a very frequent source of fallacy. A mother, when she brings her child to us under these circumstances, very often says that she does so because she has never been regular: whereas, in a considerable number of instances, minute inquiry will elicit the fact that there has been one, possibly that there have been two or three periods; and what the mother means, is that menstruation has not been "regularly established." Older females will often lead us astray by stating that they have not been regular for so many months, meaning, not that no period has occurred, but that it has been deficient in some respect; indeed, sometimes they will make the same statement when the loss has been, in their own opinion, excessive. Again, we meet with females of all ages who, disliking to be interrogated upon this subject, or upon the state of the bowels, or (perhaps even more frequently) upon the state of the urine, will deliberately try to put a stop to our inquiries, by telling us point blank that in those respects there is nothing whatever the matter with them. These and such like misstatements, prompted no doubt by a sense of delicacy, may, by misleading us, be most injurious to those who make them. To revert to the subject of anæmia, that term, and not chlorosis, has been used advisedly. That all cases of anæmia in young women are not to be correctly styled chlorosis, may be admitted. But does it necessarily follow that they differ in kind? It is held by some authorities that they do; and we are, by some, told that chlorosis is a neurotic disease. That is a term which, in this connection, does not convey to my mind any distinct meaning. To those who use it, it conveys only, so far as I can make out, the idea that the disorder depends primarily upon some as yet undiscovered aberration of some at present unknown nervous centre. Undoubtedly, attenuation of the blood may arise from other causes than direct loss of it. Amongst these may probably be included mental depression. I do not dispute the accuracy of—

> "She never told her love,
> But let concealment, like a worm i' the bud,
> Wither her damask cheek."

But it throws no light on the *modus operandi*.

As a matter of fact, disturbances of the physiological constituents of the blood-mass do in different persons produce different effects. If the general influences of the blood on the tissues be impaired or interfered with, some tissues or parts will suffer more than others. One general characteristic of neurotic persons is instability of some nerve-centre. This instability is reputed, and with justice, to be aggravated by innutrition of the unstable centre, due either to local or to general causes.

It is not, therefore, so very improbable that we have here the secret of the reputed dependence of chloranæmia upon nerve-disorder. A formidable objection to this theory will at once occur to many minds; cases of chloranæmia with amenorrhœa, in which a return of the period is followed by an amendment in other respects, which previous treatment had failed to procure.

I pass by the explanation that possibly the flow was the first expression of returning health. It must be kept in mind that the effects of loss of blood are of two classes: one, the depression of the system at the time; the other, the totally opposite condition of "hæmorrhagic reaction."

Probably in no disease would the use of venesection be more unanimously reprobated, be regarded as more inconsonant with modern views, than in long lingering subacute rheumatic fever. Many years ago, a physician, than whom no one was more profoundly acquainted with symptomatology and with the therapeutics of the old school, no one a more acute observer, the late Dr. Eccles, made to me an observation which seemed to me then, as it seems now, a most remarkable one. It was that, in several such cases, which had thwarted his best advised efforts, recovery, speedy and complete, had followed venesection.

Another consideration is by no means unimportant. While a disastrous disappointment may be concealed, so, on the other hand, may be the renovating buddings of hope; hope based oftentimes on circumstances so commonplace, or attentions so trivial, as to escape the observation of the most sympathising and watchful relative; hope sedulously concealed from the most intimate and trusted friend; hope almost unconsciously entertained by the patient herself. We are thus constantly left in ignorance of that indisputably most potent factor in the well-being of a girl—the "state of her heart."

It seems to me a truism, the formal statement of which almost requires an apology, that a repeated loss of blood must produce anæmia, unless the system be able in the interval to replace that which has been abstracted. Protracted clinical observation has made it appear to me just as true that, as a matter of fact, the system is in innumerable instances unable to effect this replacement; that, indeed, it is not unfrequently unable for a time to replace that which is lost by a first, even if small, menstruation.

The following quotation from one of the greatest clinicists of this century commands at least respectful consideration. "I may add," says Niemeyer, "that, according to my observation, obstinate chlorosis attacks all young girls without exception in whom the menses have appeared in the twelfth or thirteenth year, and before the development of the breasts and pubes:" that is to say, before the blood-forming apparatus is sufficiently active to do more than replace blood consumed in ordinary wear and tear.

It will be here convenient to remark that probably race and climate, and also, no doubt, other conditions, have something to do with the development of anæmia and the phases of chlorosis. During the first six or seven years of my medical life, I was familiar with the practice of the Derby Infirmary. A notable feature there was the number and severity of these cases. Nor did this circumstance seem to be entirely due to the fact that the patients were many of them employed in the large hot rooms of silk-mills.

When I came to Birmingham as house-physician to the General Hospital, I was struck by the comparative infrequency of severe cases. And although no doubt a good many minor cases applied for relief, these did not seem to me at all proportionate to the difference in the population, and in the number of patients.

It is interesting to observe that the opinion of American writers is very strongly in favour of the neurotic theory of chlorosis. Now, so far as I have had opportunity of forming an opinion, it is that among the inhabitants of the United States are to be found an eminent proportion of neurotic constitutions. There seems, at any rate, reason to think that here, as, elsewhere, the justness of our ultimate conclusions is likely to be proportionate to the breadth of our survey. Indeed, it seems to me to be antecedently probable that the secondary, or more remote effects, should be different in those whom we call neurotic subjects, from what they would be in persons whose nervous system is differently constituted.

It will be convenient here to offer a few remarks upon the meaning and objects of menstruation generally. A superficial glance at the respective phenomena discovers a resemblance, and so suggests a possible analogy, between the periods of the human, and the *œstus* of

lower mammalian, females. It requires but little further consideration to recognise differences as marked as the resemblance. And, upon this latter evidence, it has been concluded, in my judgment prematurely, that no analogy existed between these two physiological processes.

Evolution, though it may not prove to be the highest theory possible in the future, is one which has unravelled many of the mysteries of nature. And no inquiry of the kind now under our notice can claim to be exhaustive, which has not called in this theory to its assistance. In the lower mammalia, intromission is not permitted during the interæstual periods, and, therefore, it is only during the *æstus* that impregnation is effected. There is not, so far as I know, any direct evidence to show whether, if permitted, it might be, or could not be, effective.

In the human female, these conditions are practically reversed. It is during the intercatamenial period that congress is permitted, and there is reason to believe that impregnation may occur at any date between two periods. Such an antagonism is certainly formidable. Its force is enhanced by a statement recently made in an article on the Theory of Menstruation, by Dr. Mary Putnam Jacobi, who says: "Neither can any such rhythmic alternation of sexual instinct be demonstrated in women as could lead to the inference that the menstrual crisis was an expression of this," that is, of æstus.

This statement, in consequence, probably, of a pardonable euphemism, is somewhat obscure; but if it means what I take it to mean, I am obliged, in the most unqualified manner, to deny its accuracy. It seems to me to be generalised from insufficient data, that is, to be, more or less, a reasoning from the particular to the universal; or, if true in America, it would indicate that there is there a wider departure than in other countries from (what I am about to suggest is) the original type. It is a matter upon which, for obvious reasons, it is somewhat difficult to acquire numerous facts; but no doubt exists in my mind that it is far from exceptional to find that there is an extreme enhancement of concupiscence in the immediately precatamenial period. There is also, I believe, a general consensus of opinion that proximity to the period increases the likelihood of impregnation.

I am satisfied that evidence is obtainable that, in some instances, ardour is at its maximum during the actual period, and suspect that cases occur in which it is almost, if not entirely, limited to that time. All this points to the probability that we are dealing with a typical example of evolution; that the period is a partially, though far from a completely effete, æstus.

This aberration from the original type is coincident with, and probably correlative to, other changes in the intersexual relations; the continuous affection of the woman for her husband, as contrasted with the intermittent, but, when present, irrepressible attraction of the lower mammalian female to the male; the abiding love of the mother for her child, as contrasted with the ferocious defence of its young by the lower mother during the period of lactation, and the utter estrangement between them shortly afterwards and for ever.

This theory, speculation if you like to call it so, suggests why, in the interest of the perpetuation of the race, the æstual periods should recur at shorter intervals than in the lower animals, where the proclivity to congress, being purely instinctive, is more immediately imperative, and is not impeded or thwarted by the interference of higher psychical centres.

Why the period should be of a twenty-eight days type, instead of any other number of days, is a mystery. The only other twenty-eight days type that we know is that of the moon, and, secondarily, that of the tides. It is conceivable that the catamenial cycle may have originally coincided with the lunar phases, and that the existing noncoincidence is another evolutional departure from the primitive type.

The ovulation-theory has of late received a serious, perhaps fatal, blow from the fact that, in a number of cases, menstruation has continued after the removal of both ovaries. But we are not, at present, in a position to affix limits to the persistence of an acquired organic habit. It is, therefore, not quite certain that this continuance of the periods may not be an example of such persistence.

I have my doubts whether the ovulation-view is scientifically entitled to rank as a theory. The same remark applies to the salpingeal view. Even were it proved that the first overt act of menstruation is the grasping of the ovary by the Fallopian tube, this would seem to me to be, not a theory, but a fact, though a fact of the very highest significance and importance. I should claim it as strong corroboration of the æstual hypothesis, that the first overt act, and, if it were so, *primum mobile* of the period, should be one so eminently conducive, if not essential, to impregnation.

Any complete theory must explain not only the mechanism of the period, but its recurrence. Now, in the case of all periodical manifestations, the causes of which we have been able to fathom, we find the cause to be a continuous one. Day and night, the changes of the seasons, the ticking or striking of a clock, regularly recurring phenomena, are each due to a continuously acting force. The theory of Dr. Mary Putnam Jacobi has this claim to attention, that it is based upon systemic changes continuing during the intermenstrual period. One of these—the progressive increase of urea—has not yet, perhaps, been unimpeachably established. Another—the progressive increase of arterial tension—is of great significance. In other recurrent hæmorrhages, notably in epistaxis, we find with great uniformity an antecedent state of high arterial tension. The old prognostic of hæmorrhage—slow pulse—is really an example of antecedent high arterial tension, followed by outpouring of blood.

The immediate or, as it would formerly have been termed, proximate cause of the catamenial discharge, she holds to be an enlargement of the circumuterine plexuses, an enlargement in which the state of the arterioles must needs be a factor. This, commencing early in the menstrual interval, reaches its maximum at the following period. These views are, to me, extremely interesting. Clinical experience has, for a long time, pointed out to me the importance of using such drugs as the bromides and ergot systematically during the interval, when the object is to limit the amount of blood lost at the period. Such treatment appears to me of great advantage, inasmuch as in a large number of persons the amount lost is somewhat in excess of the reproductive capacity of the body. This theory, then, confirms the propriety of this therapeutic method, by explaining its *modus operandi*.

We appear to have wandered somewhat far from the topic immediately before us; but, in the first place, it is impossible to consider the subject of first menstruation, adequately, without a consideration of the subject as a whole. In the second place, it is not conducive to sound therapeutics to draw a too stringent line of demarcation between commencing puberty and the disordered effects of its establishment, or those which may subsequently attend its continuance.

In well-developed, strong, healthy girls, we ought certainly to abide events without interference. In such, we can only assume that the uterine system is less forward in its development, than the system at large. Statistics show that fifteen years is the age at which, as compared with any other years, a first menstruation is most common. But, on the other hand, there are a very large number of persons in whom it is delayed for two or three years, and in not a few even later.

With regard to girls who are healthy and strong, but of somewhat backward development, it is still more imperative not to interfere.

When we come to deal with the next class, that, namely, of well-developed but more or less unhealthy girls, there is room for more doubt. It is certainly a popular opinion, both within and without the profession, that there is no room for any doubt whatsoever. Menstruation, it is said, is a physiological process which ought to have come into operation, and it is our duty to establish it *vi et armis*. When there are repeated but ineffectual efforts, I think we are right in considering that nature is asking for assistance, and should have it. Or, if the disorders distinctly indicate a disturbed balance of the circulation, I think we should interfere; still more, if this disturbed balance manifest itself by hæmorrhages. If the blood is to be lost, it is better, probably, that it should be lost in the natural manner.

Some authorities, of admitted repute, refuse to recognise the existence of such a disorder as vicarious menstruation. It does not seem to me to make any exaggerated demand upon our credulity or imagination. If we admit an antecedent progressively increasing arterial tension before each period; if we admit the frequency of such an increased tension connected with other hæmorrhages; if we admit that the circulation in various parts of the body, and, consequently, the distribution of the blood, not only may be, but often is, affected by the menstrual nisus,—then, I think that it is not difficult to admit the possibility of vicarious menstruation.

No doubt, it is not correct to assume that in every case where hæmorrhage from some other part and amenorrhœa co-exist, we have an example of this disease. For example, it is easy to understand that a girl may have an ordinary loss of blood from a gastric ulcer, and subsequent amenorrhœa in consequence of that loss not having been compensated. That I would admit; but I should ask to have it admitted, on the other hand, that, in a girl with gastric ulcer, it might happen that the disturbance of the circulation, coincident with or due to a menstrual nisus, might determine a hæmatemesis, which otherwise would not have happened. Any careful attention to the prodromata of the period will show frequent instances of the cotemporaneous disturbance of the circulation in other parts.

Sir Charles Locock, not a mean authority, believed in the existence

of menstrual epilepsy. It is now a matter of ancient history, but perhaps worth while recalling, that it was for such cases he recommended the use of bromide of potassium. The use of that drug was subsequently extended to other cases of epilepsy, and we all know with what splendid results. Since then, its use has become widely spread to other cases, often wisely and seasonably, but, on the other hand, too often unwisely and unseasonably. The lungs often afford evidence of the effect of the nisus upon distant organs. I have seen cases of true menstrual asthma, that is, asthma coincident with the nisus, passing off with the establishment of the period, and absent in the interval. In persons suffering from a bronchitis, more or less chronic, interferences, if less conspicuous, are infinitely more common ; just, indeed, as bronchitis is an infinitely more common disease than asthma. If a bronchitic case, in whom the expectoration is easy and copious, and thick, be exposed to a chill, and the expectoration immediately become scanty and viscid and difficult, we readily accept the view that cold has been caught. We find no difficulty in associating the change of symptoms with a change in the circulation of the mucous membrane. What difficulty, then, is there in conceiving that the circulatory disturbance, attending the nisus, should disturb the already ill-balanced circulation of the bronchial mucous membrane, in a superior degree to that of other parts whose circulation is well-balanced. If the associated disorders be not very distinctly and directly connected with the state of the circulation, we should be more chary of direct interference ; that is to say, more reluctant to attempt to precipitate the advent of the menses.

What applies to the treatment of such cases, applies also to that of the irregularities of a later period, and the attendant anæmia or chlor-anæmia.

It is, doubtless, of advantage that we should be able to take a wide and comprehensive view of any case; that we should plant our therapeutics upon a broad basis, and so avoid trying to adapt our remedies to every little turn and phase. We thus may hope to avoid a tinkering and feeble treatment; to avoid grasping at the shadow, and missing the substance.

But, it is of equal importance that we should retain the power, and, on occasion, exercise it, of disintegrating a case into its compound parts. For it happens, from time to time, that what seems only a part may yet be greater than the whole.

It is especially necessary to bear this in mind, in the case of any disorder for which we have a reputed specific. In the anæmia of girls, both theory and experience combine to show that we have something approaching to a specific in the preparations of iron ; but they do not always succeed. It is very likely that these failures may appear, to a consultant, to be more numerous than they do to others. A considerable proportion of the cases which come under their notice are, what we may call, therapeutic misfits—cases in which the diagnosis of the disease, as a whole, has been correct, and the treatment in full accordance with established rules. In such cases it is that we ought to cease to regard the disease as a whole, and look at the details of its compound parts. Two recent examples occur to me; in one, the patient had failed to respond to a routine-treatment skilfully adjusted. On analysis of the symptoms, the most striking special feature was the rapidity of the heart's action, and the deficiency of arterial tension. Treatment, mainly by belladonna, regulated these, and general relief was procured. In another case, which, indeed, has been before me since the lecture was commenced, a well-marked chlorosis had not only not yielded to iron-treatment, but had, under it, become markedly worse. Analysis of this case seemed to show that its special feature was chronic gastric catarrh. Treatment founded on this view, and mainly by ipecacuanha, was followed by immediate and progressive improvement, which has proved permanent. There is nothing very mysterious in such cases. Assuming that anæmia and chlorosis are expressions of the fact that the blood lost at the periods has not been made up, they are very clear.

Without entering into any vexed question as to where new red corpuscles originate, we shall all most likely agree that the integrity of various parts is necessary to their completion. If so, it necessarily follows that imperfection in any one of these parts may be responsible for their insufficient reproduction. Overfeeding, underfeeding, over-exercise, under-exercise, insufficient air, undue exposure, late hours, or too much bed, too much brain-work, perhaps too little, too rapid growth, any one or more of these may prevent the restoration of the blood. They may also prevent that normal plethora of which the first period is the normal cure.

The brunt of any of these unhealthy influences may fall upon any one organ rather than on another. The practical inference from these considerations is that we should, at all events, delay interference in cases of afferently retarded menstruation, or of subsequently developed anæmia, till we have satisfied ourselves, by minute inquiry, that such causes have been removed ; and until we have, at least, made a vigorous effort to rectify any functional aberration of the viscera.

As regards the last class of cases, those in which the girl is not only backward in development, but also in an indifferent state of health, no doubt we do see instances of improvement following, and sometimes apparently due to, menstruation. In some such, it may be that its occurrence is an indication that the developmental forces have made a spring, of which the fresh result and sign is the period. In other cases, it may be that the sudden call upon the blood-forming organs has roused them to a response, a circumstance which, as we have seen reason to believe, may happen from the artificial removal of a portion of blood. But, if we free ourselves from a blind belief in menstruation as a sort of physiological fetish, we see other cases ; cases in which the patient is precipitated by a first menstruation, or by two or three repetitions, not into a better, but into a worse state of health, and often into phthisis. One such case of phthisis has come under my notice within the last few weeks. I am quite willing to admit that this is rather a question of interpretation than of fact. No doubt, many who would admit the existence of such a case as the last, and the sequence of events, would regard it from a different point of view. They would consider, not that the menstruation had killed the child, but that a case on which such a beneficial act had failed to act beneficially, was intrinsically hopeless and incurable.

Well, I ask you to study this subject for yourselves; you have plenty of opportunities. Study it dispassionately; lay aside the too common prepossession that a moderate discharge must necessarily be beneficial, and cannot possibly be injurious. Ascertain minutely, and consider, without prejudice, the primary and secondary effects of each such discharge upon the individual patient. Compare these with the well ascertained effects of artificial, or of other natural hæmorrhages, large and small. If you will do this, I think that some of you will come to the conclusion that, if I have now overstated the case on one side, you have in your own minds been accustomed to overstate it on the other.

CLINICAL LECTURES ON THE UTERINE NEUROSES.

Delivered at University College Hospital.

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Lecture I.

Gentlemen,—The subject with which it is proposed now to deal, is the "neuroses of the uterus."

As a preliminary, it is necessary to define the term "uterine neurosis."

It may be considered impossible, with the knowledge in our possession, to define, in a conclusive and accurate manner, what constitutes a uterine neurosis. This circumstance, however, is an argument for a discussion of the subject, and for the necessity of an endeavour to arrive at some satisfactory generalisation. At the outset, we are met with the difficulty of deciding how far certain symptoms have their origin in a morbid condition of (*a*) the nervous centres, (*b*) the uterus, or (*c*) the ovaries, or (*d*) of abnormal conditions of two or more of these elements in co-existence and combination. The facts which are adducible have led different observers to different conclusions, as to the primary or principal and dominant pathological factor. For some, the uterine neuroses are merely evidence of a constitutional or general disturbance. For others, the uterus is the organ affected. And in the estimation of a third set of opinions, the ovaries are the *fons et origo mali.*

There can be little doubt that the mistakes which have been made, and the difficulties which have been encountered in dealing with this really difficult subject, have arisen principally from a too exclusive attention to one or other of the elements, the general and the particular ; the general represented by those who regard the uterus and ovaries, as dominated by the other organs of the body ; and the particular by those who neglect the general, and explain everything by the local disorder of the generative organs (uterus or ovary).

Careful clinical study of cases leads to the conviction that most cases are of a very mixed kind, and that local alteration or disease is rarely witnessed, unless in conjunction with a more general one. Those diseases which may be included in the term "uterine neuroses," are, as can be shown by anatomising them, very forcible evidences of

the truth of this generalisation. A general feebleness is in many instances the basis, as well as the accompaniment of more strictly local pathological changes. The nervous affections of the uterus are, it may be said, in a fair way of becoming better understood, in consequence of the more exact attention which has recently been given by Dr. Weir Mitchell, Dr. Gowers, and other neuro-pathologists to the condition of the nutrition of the nervous centres in cases of nervous disease, a kind of investigation which bids fair to throw a flood of light on a previously obscure subject.

Seeing that, as above stated, the study of the neuroses of the uterus implies a careful study of the condition of the nervous centres, which constitute a part of the apparatus whose action is disturbed, it will be at once seen that the general "feebleness" or weakness, which precedes and mostly accompanies, and is an essential part of uterine neuroses, is likely, nay certain, to be only another term for defective nutrition of the nerve centres.

The so-called "functional" nervous diseases can be shown to be largely due to a tangible anatomical alteration of the nerve-centres, namely, impaired nutrition. This explanation offers a substantial confirmation of the accuracy of certain conclusions which clinical experience and observation had led me to adopt in speaking of the general interpretation of hysterical phenomena, and which will be found described in the fourth edition of my work on *Diseases of Women*, p. 559, in the chapters devoted to the consideration of the hystero-neuroses, as the following quotation will show. "It is extremely probable that the predisposing condition is always a state of defective nutrition of the nerve-centres, for the individuals affected, for the most part, present other strong evidence of general feebleness, weakness, and want of power. Moreover, there is usually a history of previous inappetency and such quantitative defects in the dietary as would be likely to give rise to a starved condition of the frame generally."

As regards the respective clinical importance of the pathological conditions of the uterus and the ovary, the numerous and brilliant results obtained by the surgical removal of the "uterine appendages," in relieving patients of certain troublesome symptoms, appear to threaten to have the effect of leading to an undervaluation of the importance of the uterine factor. That a neurosis, apparently uterine, is removed, or removable, by these mutilating (I use the word in no offensive sense) operations, does not, of course, prove that such operations are necessary for the cure of the neurosis. No doubt there are cases in which the neurosis is of uterine origin, but, from it stubbornness and misery-producing character, renders the operation in question justifiable. And I am not, of course, contesting the propriety of ovarian extirpation when the ovaries are themselves so diseased as to be useless for functional purposes.

The uterus is subordinate to the ovaries in the sense that it apparently derives its power of irritating the system from the ovaries. Functionally, the uterus comes to an end when the ovaries are destroyed or removed; but it is certain that the uterus is endowed with a high, and, in a sense, an independent organisation, and that various pathological conditions of the uterus have great disturbing capabilities, and that these disturbances may be present with a healthy condition of the ovaries.

The uterus is, in a state of health, but slightly sensitive to the touch, and cutting operations, such as repair of lacerations of the cervix, are even sometimes performed without the aid of anæsthesia. The lining of the uterus appears to be, however, somewhat sensitive in a state of health, and particularly at the fundus uteri, the touch of the point of the uterine sound usually occasions a certain degree of pain. It is stated by some authorities that the internal os uteri is very sensitive, but this is not my experience in cases where the uterus is in a healthy condition; but the uterus manifests great sensitiveness when in a state of acute congestion, a condition rarely witnessed, I believe, except in association with marked flexion, and, under such circumstances, the slightest touch occasions severe pain. The lining of the uterus seems to be the part which exhibits this undue sensitiveness more particularly, but it is usually more intense at one part than at another; the internal os uteri is often the most sensitive part in cases of congestion. Under these circumstances, it is not uncommon, also, to meet with considerable sensitiveness of the ostium vaginæ, due in part to the fact that the congestion affects the vessels at the ostium vaginæ, in part, possibly, to other causes. Undue sensitiveness of the uterus to the touch is also liable to be observed when the organ is in a state of chronic congestion, and these chronic changes in the walls of the uterus, or its lining, metritis or endo-metritis, or both, would be considered by many pathologists to be present. The blood-vessels of the uterus, including its lining, are, in such cases, filled with blood to an undue extent, and the pain is due to pressure on the nerves resulting from the engorgement, or from the exudation of fluid between the tissues, and, later on, when the congestion is chronic, resulting from proliferation of the connective tissue, whereby the bulk is increased, and the nerve-compression intensified.

Coupled usually, as I believe, with undue sensitiveness to touch, the uterus sometimes evinces extreme sensitiveness in a reflex way, the result being the appearance of reflex phenomena. To these reflex phenomena I wish to direct your particular attention. They are of the greatest possible interest, and their nature has excited, at all times, great discussion. These are the hystero-neuroses, concerning which, as already stated, diverse ideas are entertained, some believing they depend on ovarian, others on uterine, irritation. At first sight, the term hystero-neurosis would appear to imply a uterine origin of the phenomena in question; but the words hysteria or hysterical are also used by some, who have no idea of uterine origin at all, but consider the ovary as the source of irritation.

The word "hysteria," it may be here remarked, is one which has been very vaguely employed. Hysteria means for some an intentional simulation of disease, a sort of malingering; for others, it is a morbid emotionality. Some appear to regard it as a kind of repressed or excessive sexual manifestion; for others, it is presence of symptoms which do not indicate organic disease, but which may simulate such disease; while for many others, including M. Charcot, of Paris, it is a disease having very marked and characteristic signs and symptoms, and not by any means limited to the female sex.

There are, at all events, two principal series of cases to which, in my humble judgment, the term hystero-neurosis properly applies, and which clinical observation of actual cases has led me to set down as clearly hystero-neuroses—that is, nervous disturbances excited in a reflex way by the uterus; namely, *a*, nausea or vomiting associated with uterine disease; and *b*, liability to what are termed hysterical attacks of the more ordinary kind. There are some other instances of reflex symptoms which might be cited, but, at present, I wish to direct attention to the two sets of cases above mentioned.

The designation hystero-neurosis, which I propose to employ, is one suggested by Engelmann. Under it will be included such reflex phenomena as appear to be produced by means of an irritation originating in the uterus. The wider question, as to what is "hysteria," is a distinct question, and will be incidentally considered later on.

A. Nausea or Vomiting, of Uterine Origin.

It is well known that one of the common symptoms of the presence of pregnancy is nausea or vomiting, which symptoms are invariably ascribed to the changes produced by pregnancy in the uterus, although as to the precise manner in which the gravid uterus acts as the excitor of the sickness, there is no universally accepted explanation. It is generally believed, however, that the sickness is a reflex manifestation of irritation in the uterus.

Further, it is known that, in the non-gravid state, nausea and vomiting are occasionally witnessed in cases where the uterus is in a morbid condition; and the term "uterine sickness" is employed to designate it, implying the admission that the sickness is the result of an irritation in the uterus. Respecting this latter class of cases, however, there is less unanimity in regard to the uterine factor; some authorities entertaining the belief that the sickness depends, in such cases, on an irritation in the ovaries. Further, it is undoubted that an irritation in the ovary may give rise to sickness; and those who would argue for an ovarian source might, with some show of reason, adduce the familiar fact of a blow or injury of the testis producing sickness in the male, as an analogical argument for the presence of ovarian disease as a probable source of vomiting in the female sex. But, although it is doubtless true that marked sickness may be traced to the ovary, rather than to the uterus, in certain cases, experience strongly favours the view that the uterus is the primary irritating agent in most instances. The presence of sensitiveness to the touch, is one of the tests by which this question would be determined in a given case; for, assuming that this sickness was a reflex sickness, due either to the ovary or the uterus, the presence of tenderness in the ovary, and absence of tenderness in the uterus, would undoubtedly be an argument for the ovarian source of the reflex symptoms, and *vice versâ*. My own experience is, that the reflex symptom now under discussion is almost invariably associated with, and, I believe, dependent upon, abnormal conditions of the uterus, consisting of undue softness, congestion, and alteration of shape—all more or less associated. I have observed the conjunction of these factors, so very common in such cases, as to show, in my opinion, that there is a very decided causal relation between them and the reflex symptom, vomiting; while the evidence obtainable has been, so far as the ovary is concerned, to give a negative to the idea that the sickness was of ovarian origin.

The uterus is not always soft. It presents a condition varying in different cases. When the case is of recent origin, the uterus is commonly soft, and quite wanting in resistance. There is, in most cases, congestion, which is usually of a subacute or of a chronic character; there is sometimes enlargement, when the case has assumed a chronic character, this hypertrophy affecting often the whole organ. The flexion is generally well marked, and of the second or third degree. In some cases, the uterus has become unduly hard; the organ resists an attempt to straighten it, which resistance is due to the hypertrophic hardened state of the uterine walls. Moreover, the uterus, as a whole, is usually less movable than usual, and is altogether nearer the pelvic floor than it should be; indeed, in cases of retroflexion, and in certain cases of anteflexion, it may be found to be separated from the coccyx by hardly more than a quarter of an inch.

I have met with a few instances in which severe vomiting was evidently due to the presence of small fibroid growths in the uterine parietes, and this it is important to bear in mind in attempting any generalisation on the subject; but, in proportion to the other causes mentioned, this is a cause of severe vomiting which is comparatively rare.

Attentive observation of many of these cases led me to observe the great effect of movements of the body, of exertions, of physical efforts such as would be likely to produce a downward pressure on the uterus, and thus calculated to aggravate, or increase, or produce a physical pushing downwards of the uterine fundus; and when it was found that, almost invariably, the patient suffered from increase of sickness, in consequence of such exertions or movements, when it was found that increase of such movements did actually produce at one and the same time sickness and increased flexion or displacement of the uterus, it was reasonable to conclude that the increase in the degree of the flexion was an important factor in the production of the sickness.

The most conclusive argument adducible in regard to the action of displacement of the uterus in giving rise to vomiting, is the cessation of the sickness observed to follow the partial or complete restoration of the uterus to a more normal position. In severe cases, the patient would, under such circumstances, usually be made to rest in bed, at the same time that other measures were being taken to give relief by a mechanical treatment of the displaced uterus. Here, it might be fairly urged—and the argument has been freely used—that the rest in the recumbent position is the real healing agent. But there have been many instances which have fallen under my notice, in which the patient, suffering from troublesome nausea, due, as I believed, to a flexion and displacement, has been treated by a suitable pessary, and allowed to go about as usual, and in which, nevertheless, the sickness has forthwith ceased. In these latter cases, in fact, the only remedial measure was mechanical support to the uterus, with complete freedom of locomotion of the body generally, and there could be no other explanation of the result than the one which is here given.

I will now give two cases illustrative of some of the foregoing remarks. In the first case, the patient was treated in the hospital; the second case was treated as an out-patient. In the first case, the element "absolute rest," formed an important part of the treatment. In the second case, the patient was going about as usual, and the pessary was the only remedial agent. As a test of the therapeutic value of the means employed, the latter of these two cases seems to be a very complete one.

CASE I.—*Severe Nausea and Vomiting, Previous Hysterical Attacks.*—M. H., was admitted an in-patient on April 22nd, 1882. She was single; a dressmaker. The catamenia were at first regular, but became, at the age of 18, irregular, and had since been very painful. She passed, sometimes, clots of the size of a marble. She had had sick headache since the age of 18, she had had nausea, frequently followed by vomiting, for some time; worst at the periods. For four years she had been very "nervous," and until nine months ago had occasional hysterical fits, with laughing or crying, coming a day or two before periods; at which time she also had much headache. She never lost her senses or bit her tongue. Occasionally, after the periods, micturition was impossible. For two years she had been unable to follow her occupation. For four months she had been unable to take solid food. During the last year she had taken little food, and retained less, on account of constant vomiting.

On April 24th she was thin and wasted. Since admission, the use of a catheter had been necessary. The hypogastrium was very sensitive. On April 27th, under ether, an examination was made. The uterus was acutely anteflexed, and in the third degree of posterior rotation, so that the os looked directly upwards to the brim. By the sound the position was easily altered. A cradle pessary was introduced. Brand's essence of beef, and brandy were given. May 2nd. She had pain. There was retching this morning. The catheter was required. Albumen and pus were present in the urine. May 4th. There was no retching. Urine was passed naturally. Her weight was 6 st. 1½ lbs. May 8th. She had retching. The catheter was required yesterday. May 12th. There was no sickness. She took bread and milk for the first time yesterday. She had flatulence. May 15th. She was much improved altogether. There was no difficulty with the urine; no albumen. May 18th. Her weight was 6st. 5½ lbs. She was allowed to get up a little. May 20th. She felt very weak when upright. She had retching once yesterday. May 22nd. There was no nausea. May 24th. She had nausea. May 25th. She had much nausea this morning. Her weight was 6 st. 7½ lbs. There was no albumen, but a trace of sugar in the urine. May 27th. She had not felt sick since yesterday. May 30th. She was feeling sick to-day. Her period was expected. She had headache. June 5th. She felt better; headache was less. The period had not arrived yet. June 8th. Her weight was 6 st. 9 lbs. June 9th. The period arrived. June 10th. The catamenia were accompanied with much pain in the back. She had nausea, but no vomiting. June 14th. The period was over; it lasted four days. She had indigestion and flatulence. June 15th. Her weight was 6 st. 7 lbs (a loss of 2 lbs. in a week). Examination showed the uterus in a better position, but the posterior rotation was considerable; a different pessary was required. On June 19th and 21st she had nausea. June 22nd. She felt very sick. June 26th. A new pessary was introduced, which was intended to lessen the degree of posterior rotation—a combined Hodge and cradle pessary. July 6th. The patient was a good deal better. She had no vomiting, but nausea the first thing in the morning. July 10th. Menstruation began at the proper time. July 14th. The period had been much better. She had no sickness; she took her food well, and had had but little pains during the period. July 23rd. Last night she had to walk up-stairs, in order to make room for an emergency case. This was followed by abdominal pain and by nausea. She vomited once, and had nausea. July 24th. The pain was not gone; there was no nausea. July 25th. She had no pain. She was now going to the convalescent home.

CASE II. *Obstinate long continued Vomiting; Acute Anteflexion.*—S. B., aged 31, came under my care June 11th, 1883. Two years before (February 11th, 1881), Dr. H. Sutherland read a statement of her case before the Clinical Society of London, entitled, "a case of chronic vomiting in which no food was taken, except koumiss, for sixteen months." She had been under his care as a dispensary patient for five years, and, for one year and seven months, had suffered from vomiting, at first fortnightly, then much more frequently, always once, but sometimes five or six times a day. Every known remedy had been tried without effect. All attempts to cure the case by dieting had failed; the patient could keep nothing in the stomach as food but koumiss, which she took for sixteen months. There was no sign of disease of the stomach, and no cachexia or constitutional symptoms. She occasionally became much depressed, suicidal symptoms being at times developed.

The foregoing is an abstract of Dr. Sutherland's report. He also stated that his object in bringing the case forward, was to elicit suggestions as to the treatment. Having seen a report of the case, I wrote to Dr. Sutherland, requesting him to allow me to see the patient. The result of my offer was that, on June 11th, 1883, two years after the case was read at the Clinical Society, she came under my care. She stated that the sickness began to be troublesome after a very severe illness, consisting of a throat affection, but that she had had occasional sickness four years previously. Since the date of Dr. Sutherland's report, she had been much the same as regards sickness. She had still continued the koumiss, taking daily one or two pints, and also taking about two bottles of brandy in a week. The sickness always occurred in the early morning, and often the last thing at night. During the day it followed every attempt to eat. The vomiting was always worse at catamenial periods. She suffered a great deal of pain at the periods.

Her age now (June 11, 1883) was 31; she was a dressmaker. It appeared that she had never been in the habit of eating meat; even as a child she disliked it, and avoided taking it.

On examination, I found that the uterus was acutely anteflexed, and occupying a somewhat abnormal position, as if pushed away towards the back and right side of the pelvis. The sound could be fully introduced.

June 13th. The patient was more sick, after use of the sound. To-day a cradle-pessary was introduced, which acted in such a way as to raise the fundus to a certain extent, and prevent further descent of the fundus when the patient was in upright position.

June 15th. Sickness was less. The sound was used, and the uterus

straightened. The introduction of the sound was difficult, the canal being apparently tortuous.

June 19th. The catamenia began three days ago, and were still continuing. The sickness, this period, was much less than last time. She had only been sick once in the morning. The pains were also much less, and the quantity reduced. Her diet was still koumiss and brandy.

June 23rd. The period was just over. The quantity was less. She was sick twice on June 21st. She felt better. A metallic dilator was used. June 26th. She was better. She was ordered to try yolk of egg, lightly boiled. June 27th. There was no sickness after the egg. June 28th. She had sickness after an egg. June 29th. The dilator was again employed. The pessary remained. July 4th. She had taken an egg most days, also some juice of rump steak, also koumiss and brandy. She had sickness in the morning, only one day excepted, when she was sick twice.

July 17th. She had for the last ten days taken portions of beef steak, and bread and milk twice a day, without sickness, but was always sick after the first taking of food in the morning. The dilator was now employed twice a week.

October 16th. Since last report, she had occasional dilatation. She was still wearing the pessary. The sickness occurred only once a day in the early morning. She left off the koumiss two months ago. She took now beef (about a quarter of a pound daily), bread, biscuit, jam, etc. She felt stronger. The periods were much less painful than formerly, and lasted five days, instead of ten; and she had no more sickness now at the periods than at other times. November 20th. Last week there was recurrence of sickness, and she had pain in the back. The pessary was found to be pressing unduly; it was altered. December 4th. She was very much better during the last week.

December, 1885. Since the last report, now two years ago, the patient has visited me from time to time. About six months ago, the pessary was removed, but it was found that the sickness returned to such an extent that its use was shortly afterwards resumed. She has had occasional bronchitis, and is not very strong; but the principal symptom, the sickness, has been practically abolished. She is sick in the morning after the first meal, but takes ordinary food without difficulty during the rest of the day. For the last month, the pessary has been discontinued, and without bad effect, the sickness not having returned, as was the case after the first removal of the support.

The patient has had the advantage of Dr. Sutherland's treatment during the time she has been under my notice, and is still under our joint observation.

IS THERE ANY CONNECTION BETWEEN THE (SO-CALLED) ALBUMINURIA OF ADOLESCENCE AND A GOUTY INHERITANCE?

Read at a Meeting of the Border Counties Branch.

By STEWART LOCKIE, M.D.,
Physician to the Cumberland Infirmary.

I HAVE written this short communication, not for the purpose of giving a categorical answer to the question which forms its title, but more with the object of eliciting information, and in the hope that the experience of others may assist in coming to a definite conclusion. So far as my own cases go, they support strongly an affirmative answer; but they are perhaps too limited in number to render it safe to enunciate a generalisation on the subject.

I have been acquainted with this so-called functional or dynamic affection (for cases of organic disease are excluded from consideration) ever since Dr. Dukes published his paper on the subject in the BRITISH MEDICAL JOURNAL for November 30th, 1878. Dr. Moxon and Sir William Gull had previously drawn attention to the ailment, and since then it has been dealt with by others; notably, by Dr. Saundby, Mr. Carter, and Sir Andrew Clark. The great characteristic seems to me to be the rapidity with which the albumen disappears, when the patient is confined to bed and kept on a milk-diet, and the return of the albumen when he is allowed to rise and resume his ordinary diet. I have never observed any œdema, nor great diminution in the amount of urine. Headache is usually the principal symptom of which complaint is made. I narrate the following cases. They are not in chronological order.

CASE I.—G. H., now aged 15½ years. In 1881 and 1882, I had been repeatedly consulted about this lad, on account of headache, more or less persistent; and on one occasion attacks of epistaxis were reported. The tongue was usually clean, and, though repeatedly looked for, no albumen was found in the urine. On October 22nd, 1883, albumen[1] was for the first time detected, to the extent of one-eighth; the complaint was still of headache, and the appetite was impaired. He was put to bed, and had milk-diet. On the 25th, the albumen had disappeared, and also the headache. On November 1st, there were morning headache, and a trace of albumen; the next day, the albumen had disappeared, and remained absent on November 9th. This lad soon afterwards returned to a public school, and was not constantly under observation. I saw him, however, occasionally. It was found that whenever he returned to this school, where the work was hard, he failed in health, the albumen returning; and at last it was deemed advisable that he should remain at home, working less hard, and on a restricted diet. On June 28th, 1884, the urine contained one-sixth of albumen and a small quantity of sugar. By July 16th the albumen was reduced to a trace, but it continued present in small quantity every time the urine was examined until June 6th of the following year, when it was absent. On four occasions since, it has been examined, and the first three times was free from albumen; on the last, however, a small quantity was present, though the patient had been feeling quite well for some time. This lad's maternal grandmother has well marked chronic gout, and gouty eczema. His mother also has traces of a gouty constitution.

CASE II.—A. B., aged 22, an undergraduate at Cambridge, came under my care on March 24th, 1885, complaining of sore-throat. He had travelled from Cambridge to London, and thence to Carlisle, a few days before, and thought he had caught cold. He had not, however, been very well for some weeks before leaving Cambridge, feeling unable for much mental work. Since his return home, he had been languid, disinclined for exertion, excessively irritable, heavy looking, and apparently, at times, at a loss for words when speaking. On examination, there was very slight follicular sore-throat, and, a day or two afterwards, some enlargement of glands in the sterno-mastoid region. The temperature was normal; the pulse quiet; the complexion "muddy;" the appetite impaired; and the tongue furred. Under treatment, the sore-throat and enlarged glands soon became well, but, otherwise, the patient's condition was unaltered. In consequence, on April 1st, the urine was examined. It was found to be turbid from amorphous urates, of specific gravity 1040, containing one-sixth of albumen, but no sugar nor tube-casts. The amount passed was about two pints in twenty-four hours. He was ordered to remain in bed, and to have exclusive milk-diet. By April 6th, the albumen was reduced to a trace, and, by the 8th, had disappeared. On the 10th, the albumen still continuing absent, bread, rice, and chicken-broth were allowed, in addition to milk; and, in a few days more, white fish. On the 17th, the patient was allowed to leave his bed. Early in the morning of the 18th, he awoke with pain in the left wrist. When seen, the wrist was swollen, very tender and painful; there was no redness; the swelling extended over the metacarpus. The temperature was normal; the urine faintly acid, containing no albumen. A diagnosis of gout was arrived at, and treatment ordered accordingly. Exclusive milk-diet was resumed. On the 19th, the wrist was less painful; the pulse was quickened and very tense; the temperature remained normal; the urine contained a small quantity of albumen. On the 20th, the urine was still slightly albuminous, the pulse much less tense, and the wrist less painful; there was slight œdema over the metacarpus. On the 21st, the albumen had disappeared, and the symptoms of gout were rapidly subsiding. On the 22nd, there was no pain, and scarcely any swelling of the wrist. During the following three weeks, the urine was repeatedly examined, and again on October 19th, 20th, and 22nd; on each occasion, albumen was absent. It is almost needless, in this case, to inquire for a gouty family history, as the patient himself exhibited unmistakable symptoms of the disease. The history is, however, not wanting. The patient's maternal grandfather and grand-uncle suffered from gout; his paternal grandmother has nodose phalangeal joints, and, at present, at the age of 90, has eczema of the forearms, which, I doubt not, is of a gouty nature.

CASE III.—A. G., a girl aged 17, came under my notice in the end of August last, complaining of a slightly painful feeling of oppression in the occipital region. After a few days, a tonic having failed to relieve, the urine was examined, and found to contain two-sevenths of albumen; a single epithelial cast was seen, under the microscope. She was sent to bed, and an exclusive milk-diet given. The next day, the albumen had absolutely disappeared, and continued absent so long as she was under close observation. After the first few days, the patient was allowed to get up, the diet being, however, somewhat restricted. On October 11th, there was a return of albumen; she was again sent to bed, and the albumen again disappeared. The patient resides at a distance from me, but I have the urine sent to me from time to time. I find that albumen is generally present when the patient is up and moving about. This girl inherits a gouty predisposition through her

[1] I make no pretensions to have accurately estimated the amount of albumen, and merely speak of the proportion which the deposit bore to the whole column of urine in the test-tube.

mother, one of whose brothers has had repeated attacks of the disease, and a sister has also had slight gouty symptoms. Two other members of the mother's family have had liver-disease, and one of them glycosuria.

Case iv.—The last case I have to mention is one that came before me in 1879. Of this, I regret that I have few notes, excepting of the condition of the urine. It is that of a boy, aged 12, who was brought to me on May 12th, 1879, on account of symptoms which led me to examine the urine at once. There was found in it one-twelfth of albumen. He was put to bed on a milk-diet; and, as in Case iii, by the following day the albumen had disappeared. Two days afterwards, a trace was detected. On the 19th, 22nd, 23rd, and 31st, the urine was free from albumen; but, on each occasion, it contained a trace of sugar. On June 4th, there was neither albumen nor sugar.

The patient's family, some time afterwards, removed from this neighbourhood. For the purposes of this paper, I, the other day, wrote to the father to inquire whether there was any gout in the family. He replied that his father, the grandfather of the boy, had been for many years occasionally troubled with gout.

We have here, then, four cases of so-called albuminuria of adolescence, in all of which a gouty family history can be traced. The affection, so far as I am aware, seems to have been observed mainly amongst the more cultivated classes, and to be frequently associated with severe mental work, and, perhaps still more, with mental worry, conditions which are well known to be the frequent precursors, in older people, of undoubted attacks of gout. It is stated, in a leading article in the *Lancet*, I know not on what authority, that Sir Andrew Clark "has ascertained that 10 per cent. of the young men competing for places in the Indian Civil Service become subjects of albuminuria."

Since entertaining the idea of the possible connection of the albuminuria of adolescence with a gouty inheritance, I have looked through what of the literature on the subject I have had access to; and whilst finding nothing which gives absolutely direct support to the theory, I have found much which lends indirect support to it. Writers on gout, and its connection with disorders of the liver and kidneys, as well as writers on hepatic diseases generally, speak of temporary albuminuria, without renal disease, as of frequent occurrence in cases of gouty dyspepsia. In these cases, Parkes thought that "through some failure in preparation, either by the stomach or the liver, albumen enters the right side of the heart, still in a crude state, and in a condition similar to that introduced into the jugular vein in Bernard's experiment, in which crude albumen, injected into the jugular vein, produced temporary albuminuria." This opinion of Parkes on the pathology of albuminuria of indigestion is the one now generally adopted. I think that the cases of albuminuria of adolescence are strictly analogous, though it seems difficult to believe that the pathology of them is so simple as that just stated; the complete disappearance of albumen in a single day, after confinement to bed, though it had previously existed in large amount, seems to point to more complex conditions, possibly to an alteration of blood-pressure in the renal vessels.

According to Sir Andrew Clark, nervous excitement, as at a political meeting, is sufficient to induce temporary albuminuria in gouty subjects, whose kidneys are as yet structurally unaffected.

The facts above referred to, when taken in connection with my own cases, give considerable support to the idea that the occurrence of albuminuria in young subjects, with a gouty family history, is more than a mere coincidence.

A CASE OF GOUT.

Read before the Plymouth and Devonport Medical Society.

By WILLIAM H. PEARSE, M.D.,
Senior Physician to the Public Dispensary, Plymouth.

In the year 1871, I was consulted by a gentlemen, aged 35, who stated his case thus. He had become blind when about 25, from inflammation of the eyes of gouty type. He had suffered frequent attacks of gout in the joints, especially of the feet and knees. For over a dozen years he had been in the habit of passing uric acid calculi—often as many as thirty in a week; these calculi varied in size from that of small shot to a pea. He had suffered also during several years from daily diarrhœa. For about three years, he had used opium suppositories, always one each morning and evening, and often a third in the day. He had had attacks of purpura; that is, dark scorbutic-looking blotches, of one, two, or three inches in diameter, would appear on the legs, besides numerous smaller spots of the same type. His gums and teeth were sound. He was subject to violent retching almost every morning; an attempt to brush the teeth would excite it. The heart's action was regular, without *bruit*, but somewhat feeble. The lungs were sound, and without any œdematous crepitation at their bases. The urine was free from albumen, but always presented crystals of uric acid under the microscope.

He was a man of large frame, and stout, and was a hearty feeder. He had been pretty much interdicted from the use of vegetables and fruits, on account of the diarrhœa. He had been long under treatment, and had taken, over a series of years, large quantities of bicarbonate of potass, and bicarbonate of soda. He had been accustomed to take brandy and water daily, not in excess, but with dinner, and at night. He had, on more than one occasion, had his alcohol stopped by his physician, with the result, as the patient described it, of utter prostration, and necessitating the sudden change to a physician who freely restored the brandy, and which was as often followed by the comparative restoration of the patient.

The patient was engaged in the active duties of life, but the smallest muscular exertion was accompanied and followed by great prostration and shortness of breath.

Under all these circumstances, I ordered the continuance of his opium suppositories and brandy. I ordered the free use of vegetables and fruits. His favourite vegetable was cucumber, which I freely allowed; he took, also, the juice of a dozen or two of lemons every week. He was ordered to wear a flannel belt around the loins and abdomen. For the rest, I prescribed from two-thirds to one tumbler of Celestin Vichy water, to be sipped before breakfast, or at 11 a.m.; also, a pill of exsiccated sulphate of iron, quinine, nux vomica, and extract of gentian.

In a few weeks, a very marked improvement was apparent; the complexion was less sallow, the calculi lessened, and the vomiting less frequent; for a couple of years, the patient was continually expressing himself as feeling greatly improved.

Such was the good from the use of the Vichy water, which was taken at intervals—for instance, for a month, then discontinued for a few weeks, and then again resumed for a month—that, two years after I was first consulted, I sent the patient to Vichy, where, for five weeks, he drank, moderately, the water of the Grande-Grille thermal spring (105.8° Fahr.). The patient felt the heat of the weather a good deal, but returned safely; with the result that, for nearly two years, he was exceedingly better in health, in all respects; the calculi almost disappeared during the first year of his return. Such was the good which followed a month's use of the hot water at the spring, that, in spite of the dreaded heat, the patient voluntarily went to Vichy for a second time, in the third year after his return. This was again followed by a lessening of the stones, and a general improvement in health.

As general tonics, and as changes from Vichy water, the patient took, in different years, Spa and Perrière natural waters—the one ferruginous, the other arsenical. He occasionally took a month's course of lithia aërated water.

The following marked events occurred subsequently to this period. In two different years, there were severe developments of the scorbuto-purpuric blotches on the legs; another year, there was a very severe attack of gout in one knee, and, associated with it, for several days, a most intermittent pulse. On another occasion, the heart was intermittent and slow, for several days, but without other localisation of gout.

The patient having passed thousands of calculi, he was often able to trace their passage down the ureters, and recognised when they passed into the bladder. On one occasion, however, calculi of large size passed slowly down the two ureters at the same time. Starting nearly together from the kidneys, the two ureters were blocked two days, two nights, and part of the third day; then, first one, and afterwards the other stone, dropped into the bladder. During this entire suppression of urine, there were no bad brain-symptoms, or other symptoms of uræmic poisoning. Not the less, the patient's system seemed to have received a "shock." About one-tenth of albumen was ever after present in the urine, but no casts. The patient had frequent attacks of gout in one or other foot, occasional attacks of urticaria, a pulse generally somewhat intermittent; but he was able, generally, to be out of doors and in business several hours a day during several years.

He suffered a good deal of distress from dreams, and from a feeling of exaltation of consciousness, which would come on at night and prevent sleep. During the past few years of life, the pulse was slightly intermittent, but without *bruit*. Occasionally, I have seen his sweat leave, as it were, a dusting of urate of soda on his face, which, by a wipe of the finger, would form a visible ridge. A hypo-

static or œdematous small crepitation at the bases of both lungs was constant for some years.

In 1883, an unusually severe attack of great irregularity and tumultuous action of the heart, associated with an increased hypostatic œdema of both lungs, carried off the patient, when 47 years of age.

REMARKS.—I would ask attention to some aspects of this case: first, as to symptoms; secondly, as to treatment.

From 20 years of age to 47, the man was never free from one or another manifestation of what we vaguely term the gouty diathesis: eyes, joints, muscles, heart, skin, kidneys, showed obvious disease. What constitutes the gouty diathesis, whether mainly vito-chemical, or mainly central nerve-lesion, we are unable to state clearly; but we may be sure that, in such phenomena as that of the formation of excess of uric acid, or of sugar, neither a nerve-theory, nor a vito-chemical theory alone will afford approximative explanation; the nervous system cannot be separated from the general "energy" of vito-chemical changes, ever and everywhere happening in the system. Both our larger views of the living body, as a part of the great organic evolution, and our wider views of disease or the deviations of the normal rates and states, point us more and more to the wide correlations of disease: a hypothesis of the uric acid diathesis must embrace both vito-chemical and nerve-correlations. The nearer or more exact, but as yet unknown, correlations or conditions, which constitute the uric acid diathesis, existed in active process in this man for a period of thirty years, and, no doubt, were long prior "latent" in his system, and, one may say, affected with degeneration, many tissues of the body: more than the loss of sight, or the severe pain of passing stones, was the constant sense of prostration from small exertion, which arose mainly from the degenerated nervo-muscular power of the heart; and this was the eventual cause of death.

As to treatment, the man was a large feeder, and of large frame; he demanded a good supply of food. To have put the patient on a milk or other low diet, would have been to have, perhaps, lessened the number of calculi, but to have reduced the muscular power, increased the prostration, and hastened the degeneration of his tissues.

The use of brandy or whiskey has not been found to lead to the development of the uric acid or gouty diathesis, and the immense relief which they give to prostration, and the aid they often give to enable such a patient to eat a fair meal, make their administration, I believe, in many cases, a paramount duty of medical practice. As to vegetables, and lemons and fruits, I submit that there are often grave errors made in practice by debarring such articles. I have seen great seasonal prevalences of diarrhœa in warm climates, and great outbreaks of dysenteric-diarrhœa, successfully combated by lemons, tamarind, and fresh vegetables. The patient in question told me that, during thirteen years, he had never had any but liquid motions save when he faithfully took his dozen or two lemons weekly. Then only did his motions even approach a solid form.

I was the first of his medical advisers who ever prescribed a natural mineral water for him. The Celestin spring at Vichy contains about 80 grains of bicarbonate of soda in 35 ounces. The effect of that small amount of alkali on the formation of uric acid and on the recurrence of gout in the system, was incomparably greater than all the far larger doses of artificially prepared alkali, which he had previously taken.

How a natural mineral water should so powerfully affect the system, we are wholly unable to say. Science has not reached any general or precise laws applicable to the molecular states and energies of matter, when existent under vast pressure, and at great temperatures. It is under such conditions that the waters of Vichy are formed; still less can we offer any scientific explanation of the great power of such combinations of matter, and of such modes of energy on the living tissues. But no facts in therapeutics are better established than those of the great power on the system of natural mineral waters.

The hypotheses of the dynamic theory of heat, of the molecular condition of bodies, of the atomic constitution of bodies, and of the "specific" heat of elements, are all involved in the mere chemical study of a natural mineral water; and, *à fortiori*, such studies must be vastly more complicated when applied to organic living being. But you are aware that such natural mineral waters have a most complex composition, and this, even to our as yet early chemistry. One cannot but be struck with the correlation of the vast "specific" heat of lithium, and its great therapeutic power in the uric acid diathesis.

I have thought this case worthy of the attention of the Society, not only on account of its great practical interest, but further as suggestive of the very wide scientific correlations of the inorganic and organic, both in the normal or prevailing rates of health and in disease; and, further, as the case covered, in its varied symptoms, very much of the wide domain involved in the word "gout."

ON THE IDENTITY OF MEMBRANOUS CROUP AND DIPHTHERIA.

By LESLIE PHILLIPS, M.D., Birmingham.

If ever the debated point of the etiological identity of diphtheria and membranous croup be determined in the affirmative, as determined I believe it will be by future nosologists, there will still remain two very distinct clinical pictures of membranous laryngitis. One has the characters universally recognised as diphtheria, a highly infectious disease, having membrane on the throat and larynx, often with lymphatic glands much enlarged, albumen in the urine, and having paralytic sequelæ. In the other picture, we have a disease of childhood, in which the patient, going to bed in his usual health, is seized suddenly in the middle of the night with laryngeal breathing; in this case, no glands are inflamed, and the disease is not generally considered infectious. If membrane be present in the larynx, the disorder is called membranous croup. Is this "membranous croup" diphtheria, or is it a distinct disease? Jenner, Semple, and other observers have replied that it is diphtheria; others have maintained that it is a distinct disease.

As a contribution in support of the first view, I publish the following case which has recently occurred in my practice, and which, since it is more interesting than creditable, I sincerely hope is unique.

On February 14th, 1886, my neighbour, Mr. Richard Smith, was called to see a little girl, F. B., aged 5 years. The child went to bed on the 13th, in her usual health. In the middle of the night, she was attacked with what is generally, if not universally, called "croup," namely, noisy laryngeal dyspnœa, with cough and fever; this continued to increase in severity up to the time Mr. Smith saw her, at 10.30, on the morning of the 14th. He immediately recognised the serious nature of the obstruction, and requested me to see the case with him. At 11 o'clock, when we saw her together, there was no membrane on the pharynx or fauces; noisy breathing was present, with much cyanosis and thoracico-abdominal recession; these conditions, and the advancing apathy, indicated that the trachea should be opened without delay. This I did, with immediate great relief, the patient rapidly becoming comfortable. On the 16th, some small pieces of membrane were coughed up through the tube, and the child died in the evening of that day. Death appeared to be due to asthenia, and not the direct result of want of air. She died, as many others do in diphtheria, slowly, with marked pallor, and fœtor of the breath. At no time during her illness was there enlargement of the cervical glands. During the operation, some blood gravitated into the trachea; and Mr. H. North, of the Camp Hill Branch of the Birmingham Dispensary, who kindly assisted me, sucked up some of this by means of an india-rubber tube. He sustained no injury thereby. No other case of sore-throat appeared in the house, although there were several children and young persons resident therein, and notwithstanding no attempt at isolation was made.

On the afternoon of the 14th, I circumcised A., aged 18 months, for congenital phimosis, using the same instruments with which I had in the morning opened the windpipe of F. B. My usual custom is to pour boiling water on the instruments previously to doing any minor operation, not using carbolic acid, or any antiseptic. In the present instance, I remarked that the water did not boil, but, being pressed for time, I did not wait for this to take place; the water was hot, but not boiling. Four sutures secured the mucous membrane to the skin, and iodoform was freely sprinkled over the wound.

The case did well until the 18th, when a little membrane appeared over the incision in the prepuce; the sutures were removed. On the 19th, the membrane had extended over the glans, causing retention of urine; the penis was very œdematous. The membrane was peeled off, when the child immediately urinated. Iodoform was thickly and constantly applied.

On the 20th, much more membrane was peeled off. In the evening, the wound looked drier and better, but new membrane had formed in small quantity; this was again removed, and the wound brushed constantly with a solution of ten grains of perchloride of mercury in an ounce of glycerine.

On the morning of the 21st, retention of urine was again caused by extension of membrane over the meatus, and firm adhesion to the glans. This membrane was, therefore, again removed with forceps. It was noticed that the strong mercuric solution had not been nearly so effective in limiting the growth of membrane as the iodoform; this dressing was, therefore, again used. After this date, it was not found needful to again remove membrane.

Iodoform was constantly dusted on till the 23rd, when pellicle ceased to appear. During the attack, the constitutional symptoms were not severe, and the glands in the groins were not enlarged.

After I had incised the trachea, and before withdrawing the scalpel, I had passed a director into the tracheal wound as a guide, and in the afternoon I had used this same director in slitting up the mucous membrane in the circumcision. Although I had cleaned this director in the usual, and, as I then considered, careful manner, it is this instrument, with its curved edge, that I credit with carrying the infection.

I submit that this case presents a typical picture of the so-called "membranous croup;" that the diagnosis of any medical man who believed in the existence of that disease would be "membranous croup;" that the course of that disease was that of diphtheria; and, finally, that accidental inoculation on a wound produced diphtheria of that wound, with an incubative period of three and a half days. To call this a case of diphtheria, occurring suddenly in the night, is to give it the name, I believe, properly belonging to it. Why diphtheria should attack children in this sudden manner in the night, who were previously in good health, and why the disease, occurring in this way, appears to be less infectious than under other conditions, I do not pretend to say, nor is it pertinent to the present paper.

It is frequently stated that a point of importance in establishing a diagnosis of the zymotic nature of a sore-throat, is enlargement and tenderness of the cervical lymphatic glands. It is my constant experience that no diagnostic import is to be attached to this phenomenon, which has much to do with the individual, as well as with the disease. I have frequently seen undoubted diphtheria, and some fatal cases, in which no glandular enlargement was present; while it is an exceedingly common thing for the glands about the jaw and neck to be tender and moderately enlarged in simple sore-throats, such as superficial tonsillitis. In October, 1885, two cases of diphtheria occurred in an unsanitary house, one of them proving fatal after tracheotomy, which was performed by Mr. Jordan Lloyd; in neither of these cases was there a trace of tenderness in the lymphatic glands, nor could these be felt with the finger, yet there was no doubt about the nature of the disease.

CLINICAL MEMORANDA.

A CASE OF HYDATID OF THE LIVER, TREATED BY ASPIRATION, RESULTING IN CURE.

Mary S., a widow, aged 46, had, when I first saw her, been suffering for several years from a tumour of the right hypochondrium, accompanied by recurrent attacks of jaundice, which, after lasting a short time, nearly, but never quite, disappeared; and, while the attacks of jaundice lasted, there was intolerable itching of the skin. So great was the discomfort, that she was willing to submit to anything to get rid of her trouble.

On percussion, there was dulness down to a line two inches below the umbilicus; and the area of dulness extended across the abdomen to about three inches to the left of the umbilicus, shading off into stomach-resonance. The right lung did not seem to be encroached upon, the lung-resonance remaining normal in area behind, and being but slightly diminished in front. The abdominal wall bulged much over this area, but was quite smooth, and no unevenness of the surface of the liver could be felt. There was slight jaundice; the motions were pale, and the urine bile-stained; but there were no piles, large abdominal veins, ascites, or anasarca. Inconvenience, rather than pain, accompanied these symptoms. A thrill could be distinctly felt on palpation and percussion.

On August 12th, 1884, I aspirated, using antiseptic precautions, and drew off about six ounces of a pale straw-coloured liquid, of low specific gravity, after which no more would run through the needle, on account of some defect in the apparatus. An antiseptic pad was placed over the wound, and the abdomen firmly supported by a binder; and one grain of opium given every four hours.

The next day there was no rise of temperature, but slight pains were complained of in the right hypochondrium; but, on the whole, the patient was very comfortable. There was no oozing from the aspiration-puncture. There seemed very little difference in the size of the tumour. In a few days, the enlargement, with the concomitant jaundice and itching, began to disappear, the latter symptoms soon passing altogether away; and the case went on towards recovery without any bad symptoms.

She was kept in bed a week, and then got about, and in a month very little enlargement could be noticed; and now, nearly two years after the operation, the patient is quite free from her old trouble. On examining the fluid drawn off, it appeared to be quite characteristic of hydatid fluid, but I saw no hooklets.

Had the aspirator not failed, I intended to have drawn off much more of the fluid, and was afraid that I had not drawn off enough to cause the death of the parasite and its absorption; but the event showed that I was mistaken. The needle was inserted about the centre of the enlargement. Curiously enough, the patient was also the hostess of another parasite, tænia solium.

Wheelton Hind, M.D., B.S.Lond., M.R.C.S.

SURGICAL MEMORANDA.

REDUCTION OF DISLOCATION OF THE SHOULDER BY ABDUCTION.

It is, perhaps, because it is to no one's advantage to make himself the champion of those who have passed away, that methods of treatment practised generations ago are constantly being rediscovered, and attributed to the genius of modern thought. The subject of dislocations is one especially prone to this recurrent revelation. A deformity of a joint immediately resulting from an injury is just the kind of accident likely to attract the attention of early observers, and so we find dislocations very exactly described upwards of 2,000 years ago. When it is considered that the acutest surgical intellects have from this distant period been exercised in the direction of treatment, it is not difficult to understand how exceptional must be the kind of manipulation that has never yet been attempted. The commoner the injury, the greater is the chance for many to exercise their ingenuity upon it; and so we find the modes of reduction employed for dislocation of the shoulder more numerous than for any other joint. So numerous are they, that writers of text-books, being limited as to space, are compelled to select certain methods to the exclusion of others. But the moment a method is omitted, it is almost sure to be rediscovered. In the Journal of May 22nd, under the above heading, Mr. Miall and Surgeon Beevor relate cases reduced by "Dr. Neil Macleod's right angle traction-method." Now, Dr. Macleod's paper was published in January last, whereas the method alluded to has been practised for generations. In writing the article on Dislocations in the *Dictionary of Practical Surgery*, recently published, I attempted a classification of the different methods used for the shoulder, in order to condense as many as possible into a narrow space. If the article be referred to, it will be found that, under Lateral Extension, I have mentioned no less than six ways in which this may be affectually carried out, and, among them that advocated by Dr. Macleod, though, of course, previously to his advocacy.

R. Clement Lucas, B.S., F.R.C.S.,
Senior Assistant-Surgeon to Guy's Hospital.

THERAPEUTIC MEMORANDA.

QUININE FOR TRAUMATIC NEURALGIA.

The following brief notes may be read with some interest. That quinine cures neuralgia, especially of the æsthenic type, is a matter of ancient history, but it is not so generally recognised that it is useful in that following severe injuries.

Case i. This was a case of dislocation of shoulder, by direct violence, with great bruising. After reduction, agonising pain set in, following the course of the brachial plexus. It was compared by the patient to the "gnawing of a dog." Sleep was quite banished. Chloral and opium, in full doses, gave no relief. A five-grain dose of quinine, however, gave almost instant ease, with some hours' sleep; and, although the pain returned, it was always controlled in the most remarkable manner by the quinine. Only three or four doses of the remedy were required.

Case ii. In a severe wrench of the shoulder, with rupture of muscular fibres, attended with great pain, especially at night, relief was quickly obtained by four-grain doses of quinine, given every six hours. The patient described the effect of the medicine as most rapid and soothing.

Case iii was one of a fall from a ladder, producing fractured rib and contusions. There was great pain, "not one wink of sleep," in spite of chloral (gr. xxv) and opium (1 gr.). The patient was very violent and excitable. A fourth of a grain of morphine, hypodermically injected, calmed him somewhat; but the pain returned, and as I did not wish to push the opium, his kidneys being defective, I substituted two grains of quinine every four hours. After this, he got much better, and confessed that he could bear easily the little pain which remained. All these patients were full-grown men.

F. J. Hart, Much Wenlock.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LEEDS GENERAL INFIRMARY.

A CONSECUTIVE SERIES OF CASES IN WHICH THE ABDOMEN WAS OPENED FOR THE PURPOSE OF REMOVING THE OVARIES OR UTERINE APPENDAGES.

(By A. W. Mayo Robson, F.R.C.S.)

The following is a brief record of all the cases in which the abdomen was opened by Mr. Mayo Robson, in the Leeds General Infirmary, with the object of removing the ovaries or uterine appendages. Had ovariotomies in private practice been included, there would have been a record of nineteen recoveries; nor does it include cases of cholecystotomy, hysterectomy, abdominal nephrectomy, or laparotomy for other causes.

Case I.—M. R., aged 52, married, was admitted on April 29th, 1884, apparently sinking from asthenia. She gave a three years' history of abdominal enlargement. The operation was performed on May 1st, and a large solid tumour of the left ovary was removed, together with fifteen pints of ascitic fluid; there were numerous and firm adhesions to the omentum and large intestines. A glass drainage-tube was employed, but was removed on the second day. Recovery was slow; but the patient was discharged, cured, at the end of a month.

Case II.—E. M., aged 31, unmarried, was admitted, on October 6th, 1884, for retention of urine and difficulty in defæcation, due to an uterine fibroid firmly impacted in the pelvis, and incapable of being displaced even under ether; Jennison's sound could be passed for three inches and a half; but Simpson's sound would only pass the normal distance. Oöphorectomy was performed on October 24th, two diseased ovaries, of the size of small oranges, being removed. Recovery was uninterrupted, and she returned home within three weeks.

In October, 1885, one year after the operation, there had been no return of menstruation; the uterus was no larger than at the third month of pregnancy, and quite movable; the patient was feeling well.

Case III.—A. S., aged 31, married, was admitted during April, 1884, for pelvic pain, and frequent micturition, apparently depending on a tumour situated on the left of the uterus, which could be clearly felt bimanually. Her general health was unsatisfactory, and her temperature was raised every evening. Left pyosalpinx was diagnosed.

May 24th. Laparotomy was performed, and the great omentum separated from the pelvic brim, to which it was firmly fixed; the small intestines were then found to be closely matted together over the whole of the tumour, in such a manner as to render it impracticable to detach them, especially as the whole peritoneum was densely studded with miliary tubercle.

The wound healed by first intention, and the patient seemed rather better than worse for the operation. Twelve days after, three ounces of extremely fœtid pus were removed by aspiration through the vagina. She was so much relieved, both locally and generally, that she was able to return to her home on June 13th, within three weeks of the abdominal section. Six months afterwards, her medical attendant told me that she was suffering from tuberculous ulceration of the bowels.

Case IV.—A. B., aged 29, was admitted on March 20th, 1885, on account of severe pelvic pain, and rectal trouble. Although a tumour on the left of the uterus, diagnosed as a hydrosalpinx, was felt bimanually, it was thought that her symptoms might be dependent on the condition of the anus, which was fissured; but, although the sphincter was first stretched and then divided, her distress persisted. Abdominal section was consequently performed on April 10th. Hydrosalpinx of the left side, adherent to the omentum and small intestine, was removed; the right ovary was adherent, but had a healthy feel; hence it was not disturbed. Recovery was uninterrupted; the temperature was normal throughout, and she left the hospital within three weeks, much relieved. On October 30th, she walked three miles to report herself. She was looking much better; the "uterine" lameness had disappeared. Her chief trouble was excessive discharge at the monthly period, depending apparently on uterine catarrh. Had I removed both ovaries, menorrhagia would not have occurred, and the cure would have been more complete.

[*To be continued.*]

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

Friday, May 28th, 1886.

Sir Henry Thompson, F.R.C.S., Vice-President, in the Chair.

Tests for Albumen in Urine.—The "Albumen Test Committee" presented a report of the work accomplished by them, which, according to custom, was received without discussion. In it, the Committee briefly reviewed the various modes of testing for urinary albumen, etc., in common use, and compared in turn Dr. Oliver's test-papers, Dr. Johnson's picric acid method, the potassio-mercuric iodide and acid, Dr. Pavy's pellets, the acid brine method, picric acid and brine, the acetic acid, and the nitric acid methods. After careful consideration and experiment, the Committee arrived at the conclusion that the papers of Dr. Oliver possessed advantages in the way of portability and delicacy of reaction over the other similar preparations; but, apart from the question of easy carriage and compactness, they described nitric acid as being most reliable and delicate. All the methods, however, were said to be respectively useful for the determination of different proteids in the urine.

Aneurysm of the Hepatic Artery.—Dr. R. Caton (Liverpool) reported a case, and commented on the extreme rarity of the disease. Only ten cases were believed to be on record in European and American medical literature. J. C., aged 40, seaman, was admitted, under Dr. Caton's care, into the Liverpool Northern Hospital, on August 8th, 1885. The patient had enjoyed excellent health all his life until Christmas, 1884, when an attack of pain in the right hypochondrium occurred, accompanied by jaundice. After fourteen days' illness, he recovered, and returned to his ship. He continued quite well until August 3rd, when the same symptoms recurred with greater severity. On admission, his condition was as follows: The patient complained of intense cutting pain in the right hypochondrium; he was partially collapsed; the face and forehead were covered with cold perspiration; pulse 92, feeble; temperature 98.4°. Stimulants were administered; he was placed in a warm bed; morphine was injected subcutaneously. Under this treatment, he rallied from the prostration, and the pain diminished. On careful examination, it was found that the pain was chiefly referred to the right hypochondrium and epigastrium; pressure could scarcely be borne in either region. Hepatic dulness extended for three and a half inches in the mammary line; percussion was very painful. A rounded mass, tender on pressure (presumably the gall-bladder), was felt below the liver, a little to the left of the mammary line. The tongue was furred; the skin and conjunctivæ were jaundiced. The patient stated that the bowels acted copiously on the previous day, and that the evacuations were loose, and dark in colour. The abdominal walls were relaxed. The cardiac dulness was increased; the sounds were normal. The lungs were over-resonant on percussion; the respiratory sounds were normal. The pain entirely subsided on the evening of the day of admission. August 9th. The patient was in the same condition; free from pain; pulse 92; morning temperature, 99.4°; evening, 102.8°. August 10th. The pain returned, and also the tenderness on pressure over the liver. Vomiting occurred. Jaundice was more marked. Pulse 100; temperature, morning 101°, evening 101.2°. August 11th. He had slight vomiting. The bowels acted; the stools contained blood-clots. This was the first time evidence of the presence of blood had been seen in the stools; it was now understood that the dark-coloured evacuation, spoken of by the patient, had consisted of altered blood. The diagnosis hitherto had been that of obstructive jaundice, due to impacted gall-stones, but the occurrence of hæmorrhage cast doubts upon it. Two or three theories suggested themselves: namely, hæmorrhage from the bile-duct, but the amount of blood was too great for such a source; or hæmorrhage from the bowel, having no special connection with the liver-affection; this seemed more probable, but was not a satisfactory explanation. Hepatic aneurysm was not suggested. August 12th.—During the whole of the day, the pain was absent. Two stools were passed, both containing blood. The tongue was thickly furred. Temperature: morning, 99.4°; and at 8 P.M., 102°. At 11.15 P.M., the house-physician was hastily summoned to the ward, where the patient was found lying on the floor apparently dead. His face was pale and contracted, large drops of perspiration stood on his forehead, the pulse was scarcely perceptible, and he was, for a few minutes, only partially conscious. An ounce of brandy was administered, and half a grain of morphia was injected subcutaneously. He rallied for a time, and stated that sudden and intense pain had occurred in the right hypochondrium, and, in struggling, he had fallen out of bed. Considerable quantities of blood were vomited; he gradually sank, and died early in the morning. Necropsy on August

13th.—On examining the liver, an aneurysm about the size of a large marble was found in the hepatic artery; it had burst into the hepatic duct; the blood had passed back, injecting all the large bile-ducts in the substance of the liver; it had also entered the gall-bladder, which was full of clots, and a large quantity of blood was also found in the duodenum, stomach, and intestine generally. Nothing noteworthy was found in any other organ.—Dr. GLOVER asked if the stethoscope was used, and if a *bruit* was found to exist over the tumour. Was there any history of syphilis in the case?—Dr. GATON said no *bruit* existed, but a friction of the sac against the abdominal wall was heard. The notes did not record the result of any inquiry as to syphilis, but the man was in all other respects apparently quite healthy.

On the Treatment of Nævus by Excision: Clinical Analysis of 564 Cases of Nævus.—Mr. R. W. PARKER read notes of a case of suppurating nævus situated on the back of a child, aged 10 months. It was of the mixed variety, that is, partly cutaneous and partly subcutaneous. When first seen, it measured 2½ by 2¼ inches, and was considerably raised above the surface. The central (cutaneous) portion was bright red in colour; the subcutaneous (raised) portion extended several inches around this central portion. It was stated that it had rapidly increased in size within the last few weeks. The nævus was excised through an elliptical incision, the edges of which were subsequently brought together with catgut sutures, and then coated with iodoform collodion. The child made a rapid recovery, and left the hospital within three weeks. After removal, the nævus was cut into, and found to contain about one ounce of blood-stained pus. The interior of the sac was rough and corrugated, and divided into numerous loculi by strands of shreddy tissue running across the cavity. This case was selected as being unusual on account of the suppuration within the sac; and because, on account of the size, and of the largely subcutaneous nature of the nævus, it well illustrated the adaptability of excision as a means of treatment for this (mixed) variety of nævus. Mr. Parker divided nævi into three chief classes, the cutaneous, the subcutaneous, and the mixed variety, the last-mentioned being by far the most numerous. For cutaneous nævi, one of the simplest and most efficacious methods of treatment was the application of fuming nitric acid; for the subcutaneous variety, he advocated electrolysis or excision; for the mixed variety, excision was regarded as the surest and most speedy, as well as the most radical method. The paper concluded with an analysis of 564 cases, and a description of the histological characters of nævus, microscopic specimens of which were exhibited.—Mr. GOLDING-BIRD had found good results from the "barbarous practice" of ligature. He took exception to the sweeping statement that excision should be applied to all cases. Treatment must depend on the situation and characteristics of the tumour. Ligature was much preferable in cases which occurred in out-patient practice. A less scar ensued after ligature than after excision, and this latter method was inapplicable to nævi of the scalp. In nævi below the lower eyelid, and at the end of the nose, the galvanic cautery alone could be employed, and neither ligature nor excision could be, in this situation, adopted. Properly employed, the cautery left a minimum of scar, and the least amount of contraction. The vascular tissue was gradually supplanted by cicatricial tissue, the contraction of which cured the rest of the vascular tissue. In all such treatment, the cautery should invariably be applied circumferentially at first; then this outer part, cicatrising, nearly strangulated the central portion, which might be easily dealt with, at another sitting, by cautery ligature or excision. Mr. Golding-Bird had lately employed this practice very often.—Dr. WARD COUSINS asked if it was not possible that the specimen exhibited by Mr. Parker was undergoing spontaneous cure. The knife was the best treatment in some cases; but, in others, the worst. Some nævi disappeared under any treatment whatever. Nævi, affecting the lids and nose, etc., ought to be very slowly treated; he himself treated them piecemeal, by frequent and long-contined scarification, by a double-edged cataract-knife. He approved of the large use of the actual cautery, as for small nævi of the face, and now never employed nitric acid, and never used the ligature under any circumstances whatever.—Mr. PARKER had formerly much experience in the use of the actual cautery. For nævi about the nose and eyelid, he employed electrolytic needles, passed from the interior of the mouth or nostrils, where practicable, so as to avoid scars. He advocated excision, as being a radical cure, and because the after treatment was simple, especially when the edges could be brought well together; any ordinary mother could, after three or four days, attend to the dressing of the wound. The child, whose case he had related, had probably had some injury to the nævus, in consequence of which it was suppurating.

A Case of Suppuration in the Mastoid Cells, complicated by Thrombosis in the Right Lateral Sinus, and Septic Embolism of the Heart and Left Lung, in which Recovery followed Trephining of the Mastoid Process, etc., with Remarks on the Prevention of Septic Embolism in such cases.—Mr. VICTOR HORSLEY read notes on the case, in which a highly septic inflammation in the tympanum spread into the antrum and cells of the mastoid process, subsequently causing osteitis of the mastoid bone, and then thrombosis of the lateral sinus, from which followed a series of complications, which, however, the patient survived. Rachel H., aged 17, was admitted into University College Hospital, July 31st, 1885. The history of the present illness showed that she had suffered from chronic otitis media since an attack of measles at 3 years of age; this was aggravated by small-pox at 13 years of age. Fourteen days before admission, she "caught cold," and the parts around the right ear became acutely inflamed. The present state revealed total deafness in the right ear, and extensive cellulitis, extending in front over the parotid, and above as high as the parietal eminence; while, posteriorly, it covered the mastoid bone and extended on to the occipital. The patient was evidently very ill; temperature 101° Fahr. There was foul discharge from the ear affected. Immediately on admission, Dr. Penrose, the house-surgeon in charge, made a free opening over the mastoid process. A quantity of fœtid pus escaped, and the bone was found to be bare for some distance. On August 6th, the patient's condition had become more unfavourable, and at midday the temperature was 105°. Mr. Horsley, therefore, considerably extended the wound, and found that the skull was bare over the lower and posterior fourth of the parietal bone, the whole of the mastoid, and part of the occipital. He trephined into the mastoid antrum, opening up the cells freely afterwards with a gouge, etc. He then cut away all the posterior wall of the external auditory meatus, converting the whole of the middle ear, mastoid cavities, etc., into an open gutter. The mastoid was full of horribly fœtid pus. The whole wound was very thoroughly disinfected, and dressed with iodoform and iodoform wool. Next day, the patient was drowsy, and the temperature exhibited a typical pyæmic curve. On the 9th, that is, three days after the foregoing operation, the patient was seized at midnight with severe precordial pain, dyspnœa, etc., lasting about half an hour. These symptoms of cardiac embolism were soon changed for those of pulmonary embolism, for the patient soon complained of severe pain under the lower angle of the left shoulder-blade, and here the physical signs of such a condition soon became evident. The patient, who had been treated at first with antipyrin, which produced violent and exhausting after-effects, was now kept perfectly quiet, and given large doses of Warburg's tincture. From this time she slowly gained ground, and convalesced completely about the end of September. In December, the drainage-tube was left off. The suggestion was that thrombosis of the lateral sinus, if diagnosed (the symptoms were summed up in the original paper), could be successfully treated by very thorough clearing out of the temporal bone, etc. It became an open question whether, under these circumstances, it was not justifiable to ligature the internal jugular vein, since awkward complications arose from the very simple effect of detachment of portions of the septic clot.—Sir WILLIAM DALBY considered that a proceeding like ligature of the jugular vein required much consideration. It was important, however, to formulate rules for the opening of the mastoid cells. Many lives were sacrificed because this was too long delayed. These rules had been suggested by himself in former papers, read before the Royal Medical and Chirurgical Society. When deep tenderness existed, and profuse discharge was present through a ruptured tympanum, with œdema, and pain in the recumbent position, then, with elevated temperature and rigors, indications for opening the mastoid cells might be assumed to be present. In one case, symptoms of infantile paralysis suggested the operation, which was followed by good results. The cells could easily and safely be opened by a special drill devised for the purpose, which could not do injury to the lateral sinus. Often as he had perforated the cells, he was sure he had never done so too early; for, if no pus came the first day, it frequently came next day, if the patient made a violent expiratory effort, and closed the nostrils and mouth. On two occasions pneumonia supervened, and in another articular disease involving amputation, owing to delay in opening the cells.—Mr. HORSLEY agreed as to the advisability of early operation. He would have liked to discuss the opening of the tympanum in certain cases of otitis.

Simultaneous Inflammation of Several Serous Membranes.—Dr. HALE WHITE read a paper on this subject. The patient, a girl, aged 19, had never had rheumatic fever, but her father and mother had both died of heart-disease. On admission, she had some fever, abdominal pain, tenderness, constipation, impaired abdominal movement, a trace of albumen, and general pains about the body, especially the legs. The signs of peritonitis increased, but no cause for it could be

made out. Two days after admission, the heart, which was normal on her coming to the hospital, showed increased dulness, extending upwards to the lower part of the second rib; there was a basic systolic murmur. The next day she was much worse, passing everything under her, and was sick. The breathing was entirely thoracic. The cardiac dulness extended to the right of the sternum, and the pulsations of the heart were very visible over the whole area. Two days later, there was a pericardiac thrill present. In addition to the basic systolic, there was an apex-systolic murmur. There was some dulness at the base of the right lung. A few days later, some fluid was drawn off with a morphine-needle from the right base. The signs of pericarditis became definite, and a pleuritic rub appeared on the right side. From this time, the patient began slowly to improve; the cardiac dulness became normal; the dulness at the bases of the lungs disappeared, as did also the signs of peritonitis. During her convalescence, the basic systolic murmur remained, but the apex-systolic gave way to a presystolic, which persisted till her exit from the hospital, at which event, except for the presence of these murmurs, she was quite well. The examination of the sputum for tubercle-bacilli, and of the choroid for tubercles, gave negative results. During the severe part of her illness, she was treated with opium; during her convalescence, with iron and quinine. There could be no doubt that this patient had pericarditis, peritonitis, and pleurisy; and, in addition to this inflammation of three serous membranes, endocarditis, which led to a permanent presystolic murmur. The causes of inflammation of several serous membranes might be tubercle, Bright's disease, rheumatism, and pyæmia; or it might be that, in certain exceptional cases, the serous membranes had a tendency to inflame, apart from any of the above causes. With regard to tubercle, it was certainly a possible cause in this case, for a boy was some years ago admitted into Guy's Hospital with pericarditis, pleurisy, and peritonitis. He improved, and was discharged, and was readmitted shortly afterwards with meningitis, which proved fatal; and it was then discovered that the pleurisy, pericarditis, and peritonitis were tubercular; but, in the present case, such an explanation left unexplained the endocarditis; and a careful explanation of the sputum and choroid gave negative results. The slight albuminuria, present on admission, quickly disappeared, and the patient clearly had not Bright's disease; and certainly, also, she had not pyæmia; and then, again, pyæmia rarely if ever caused peritonitis, apart from a spreading from some local suppuration. The late Dr. Fagge used to teach at the bedside, and had also mentioned in his recently published book, that sometimes he met with cases in which the three serous membranes now under consideration were inflamed at the same time, apart from any cause that had been previously mentioned. The present might be an example of such a group of cases. Lastly, there was the rheumatic hypothesis. In favour of this, were the facts that the patient's parents died of heart-disease; that during the attack she developed endocarditis; and that the pains in the legs, which at the time were set down to her febrile condition, were severe, and might possibly have been rheumatic. The great objection to this view was, that many who had had large experience, denied the existence of rheumatic peritonitis, although, now that it had been shown that Bright's disease would cause peritonitis, one must allow the existence of general causes for it.

Living Specimens were exhibited: By Mr. WAINWRIGHT: Vertical fracture of the head of the radius, with fracture of the coronoid process of the ulna, treated by removal of the fractured portions.—By Mr. GODLEE: Myositis ossificans.—By Mr. BATTLE: Charcot's disease of knee-joint, in a woman, aged 47.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 12TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Membranous Dysmenorrhœa.—Dr. MANSELL MOULLIN showed, under the microscope, a preparation from a case of membranous dysmenorrhœa, illustrating very successfully the structure of such membranes. He had two cases under his care, in one of which the membrane had been discharged regularly since the first appearance of the catamenia; in the other, subsequently to marriage only. There was no obvious uterine disease in either. The treatment of this disease, he considered, was generally most unsatisfactory. No treatment could be rational unless it were based upon a knowledge of the cause of the disease, or upon some reasonable hypothesis as to the cause. Very little was known on the subject, and no theory that had as yet been suggested would bear examination. Inflammation was clearly out of the question in all those cases in which it commenced with the advent of menstruation, and conception might be excluded on the same grounds. It was almost invariably accompanied by sterility.—Dr. EDIS narrated the details of a case in which the cervix was dilated, and the uterine cavity swabbed out with nitric acid, and subsequently iodised phenol. Marked amelioration of the dysmenorrhœa ensued, and, within fifteen months, the patient, who had been married nine years and was sterile, became pregnant, and was delivered at full time. He thought dilatation or division of the cervix was frequently indicated in these cases, and seemed to be of service. Applications to the endometrium also proved of service in appropriate cases. No universal mode of treatment was applicable. Each case must be treated on its own merits.—Dr. BANTOCK referred to the only well marked case, as far as he could remember, of membranous dysmenorrhœa that had come under his notice. The case was that of a single lady nearly 40 years of age, about whose virginity there could be no question. The patient quite recovered under repeated depletion, by puncture of the cervix, with dilatation of the canal, and the application of strong carbolic acid.—Dr. HEYWOOD SMITH and the PRESIDENT took part in the discussion.

Removal of the Cervix Uteri.—Dr. EDIS exhibited the cervix uteri which he had removed from a patient, aged 39. The rim of the cervix was entire, but the os uteri was the seat of epitheliomatous disease. The cervix was removed in a conical form, by means of Paquelin's cautery, the apex of the cone corresponding to the internal os uteri. Little or no hæmorrhage occurred. The patient made a good recovery, and, so far as could be determined, all the diseased tissue had been removed.

Removal of the Fundus Uteri.—The PRESIDENT exhibited the fundus of a uterus which he had removed, under the following circumstances. The case was that of a young married woman, who had, some time previously, had the ovaries and Fallopian tubes removed. At the time of the operation, the whole of the contents of the pelvis were found matted together, and both tubes were occluded and distended with serum. The operation did not prove successful, for menstruation was not arrested, and, for about three years after the operation, the patient was, practically, not benefited by it at all. Twelve months after the operation, a small lump was found behind the uterus, which he regarded as an abscess, and tapped from the vagina, with temporary relief. It recurred, however, was incised, and drained by means of a tube passed into the *cul-de-sac*. This, again, gave only temporary relief. On the return of the patient for the fourth or fifth time, he advised that the abdomen should be reopened, and the cause of failure more exactly ascertained than was possible by other methods of examination. It was then found that the fundus of the uterus had grown extremely large, for, at the time of the original operation, it had become inflamed, and a small portion of the right Fallopian tube had developed into a large bloody cyst. Considering that the best method of dealing with the case was to remove as much of the uterus as possible, he did so as far down as the internal os. The patient had done remarkably well, and the further results would be narrated in detail after a sufficient time had elapsed.—Dr. EDIS had had this patient under his care before she consulted Mr. Lawson Tait. The uterus was displaced backwards, and was also much inflamed. A palliative method of treatment had been adopted, under which the symptoms improved, but the inability to stand or walk about not disappearing, an exploratory incision was advised.

Uterine Dilators.—Dr. S. SLOAN (Glasgow) showed his uterine dilators. They were graduated metallic rods, each instrument being composed of two dilators, the one acting as a handle to the other. They were numbered as in male bougies. The point of each dilator was of the same thickness as the dilator next below it, and gradually sloped to the dilating part.

Presumed Serous Perimetritis, or Peritonitis with Encysted Effusion.—Dr. EDIS related the particulars of a case. The patient, aged 28, was admitted into the Middlesex Hospital, complaining of a very tender swelling in the right iliac fossa. On March 2nd, she was suddenly taken ill, with a severe pain in her lower abdomen; she felt very faint, and turned as pale as death. This occurred two days after the cessation of the catamenia. She was obliged to keep her bed until the 25th, and then got up; but, on the 26th, had a relapse of the pain, and came to the hospital on the 29th. On examination a tense, fluctuating tumour was detected filling up Douglas's pouch, and almost presenting at the vulval outlet. On passing the finger beyond this, the cervix uteri was discovered high up behind the pubis, and fixed. On the 31st, the symptoms from pressure being troublesome, the tumour was aspirated, and about eight ounces of clear straw-coloured serum drawn off, much to the relief of the patient. A dense firm mass of deposit could then be felt blocking up the brim of the pelvis. The patient subsequently convalesced, and left the hospital on May 15th, some deposit being still detected on examination. During the time the

patient was under observation, the temperature only rose two degrees above normal on one or two occasions. There was a well marked history of syphilis contracted some years since.—Dr. ROUTH remarked there was one point of difference between serous peritonitis and hæmatocele. In the former, above the fluid in Douglas's pouch, was found, usually high up, a solid, somewhat irregular resisting mass, between it and the uterus, which remained, and was more evident after the tapping. In hæmatocele, any solid ingredients were placed at the bottom of the fluid, if present at all. He thought tapping with the aspirator was free from danger, and hastened absorption and recovery, just as tapping in pleuritis did. If it were pus, then, after the tapping, iodine should be injected, but not in the serous cases. He had always observed that a well marked and severe shivering fit occurred in serous cases. He believed that this was a means of distinguishing between hæmatocele and serous peritonitis, for, in the former, there was no shiver.—Dr. BANTOCK was not at all satisfied that Dr. Edis had furnished the true explanation of the interesting case he had related. He, however, was not prepared with a better, for he had not the necessary data. It was necessary for such a condition as that supposed by Dr. Edis, that there should have been a history of inflammatory action. To produce the glueing together of the intestines, uterus, and broad ligaments, the opposing structures at the brim of the pelvis, followed by a period of quiescence, and then a rapid effusion into Douglas's pouch, which we must suppose to have been left free. There was no history of any such process. A more minute investigation of the case might furnish these data, but, so far, they had not been stated. He thought the only way to arrive at a diagnosis was to ascertain the nature of the contents.—Dr. GRIGG had seen two cases; one occurred in the year 1865, in St. Mary's Hospital. He was present at the *post mortem* examination. The intestines were matted together, and a distinct cyst was formed in Douglas's pouch. The second occurred in Queen Charlotte's Hospital, in a patient who died of puerperal septicæmia. A cyst was formed by the agglutination of the intestines at the brim of the pelvis, and their juncture with the walls of the pelvis and uterus. The cyst contained about a pint of clear straw-coloured fluid. The adhesions showed clearly that they were of old standing.—Dr. BENINGTON remarked that the temperature in this case varied considerably from that of other cases which had been reported. He thought it would be of advantage if some distinct definition of the disease in question were laid down. The cases at present reported seemed to represent two classes, one in which peritonitis, another in which hæmatocele, was the primary condition.—The PRESIDENT agreed that Dr. Edis had not made out his case; in fact, he doubted very much the diagnosis of any such cases of so-called serous perimetritis. There were so many things, such as rotating parovarian cysts, allantoic cysts, and cysts of the broad ligament, in a condition of inflammation which would give precisely the same physical conditions, and could be for a time relieved in precisely the same way, whilst there was so much difficulty in imagining that serum could be locked in in the way that had been described in these cases of serous perimetritis, that he must express an *à priori* scepticism about the whole thing. There was, in addition, this practical argument, that, being in the custom of opening the abdomen in acute conditions, he had never seen any facts to justify him in the admission of this condition to the nosological table.

ACADEMY OF MEDICINE IN IRELAND:

PATHOLOGICAL SECTION.

FRIDAY, MAY 14TH, 1886.

T. EVELYN LITTLE, M.D., President, in the Chair.

Pyo-pneumothorax.—Dr. WALLACE BEATTY exhibited the lungs from a case of left pyo-pneumothorax secondary to phthisis. The patient, a young man, aged 20, had been in the Adelaide Hospital, last July, for a few days, with symptoms of pulmonary phthisis, and stethoscopic evidence of that disease in the upper lobes of both lungs. On October 24th, he was seized, when coughing, with a severe pain below the left clavicle, causing a sensation as though his left lung was breaking in two. He was admitted to hospital on October 27th. On admission, the characteristic signs of left pneumothorax were present; and, after a few weeks, fluid was effused into lower part of the pleural cavity, as was evidenced by percussion-dulness at the left base, and succussion-plash. There were physical signs of excavation in the upper lobe of the right lung. The patient lived six months after the occurrence of the pneumothorax. On *post mortem* examination, the left half of the diaphragm was found depressed, convex downwards, and extending one and a half inches below lower border of left costal arch. It had doubled the left lobe of the liver upon itself. The right half of the diaphragm was in its normal position. Gas escaped from the left pleural cavity on its being opened—the cavity contained about five pints of odourless pus. The pleura was much thickened. The left lung was carnified, very small, and pressed up against its root, except at the upper part anteriorly, where adhesions bound it to the chest-wall. At the inner surface, in its upper part, a circular opening or ulcer was found—in diameter about the size of a sixpence—shallow in its posterior half, where there was a minute pin-hole perforation; in its anterior half, it was about a quarter of an inch deep, and subdivided by bands of lung-tissue. The upper lobe of the right lung presented numerous cavities, the lung-tissue between the cavities being consolidated. The only healthy surface the patient had was that of the lower lobe of the right lung.—The PRESIDENT, Dr. FINNY, and Dr. HENRY KENNEDY took part in a discussion on the specimen; and Dr. BEATTY, in reply, said perhaps he had been wrong in not tapping the left side of the chest; but, when the patient first came to the hospital, there was no fluid in the pleural cavity. Afterwards, a small quantity of fluid was effused; and as there was marked evidence of the upper part of the right lung being diseased, he thought that, both lungs being diseased, tapping would hardly prolong the patient's life.

Displacement of the Heart.—Dr. C. J. NIXON communicated a case of displacement of the heart in aortic patency, and exhibited the specimen. It was the heart of a man, about 60 years of age, who was admitted into the Mater Misericordiæ Hospital with the physical signs of aortic patency. On examining his chest with the stethoscope, they found an extremely well marked hissing murmur, diastolic (or, rather, postdiastolic) in time, and having its maximal point of intensity at a line connecting the two fifth costal cartilages; in other words, a little above the base of the ensiform cartilage on the left side. That murmur was not audible at the apex of the heart. Travelling upwards towards the aortic area, the murmur ceased; and over that area, and above the systolic murmur, was heard a well pronounced aortic sound. There was found in the carotid arteries a loud, hoarse, systolic murmur, which was followed by a distinctly marked aortic second sound. A peculiarity in the physical signs was that they had a very well marked murmur of aortic regurgitation, having its maximal intensity at the base of the ensiform cartilage at the left side; and yet, over the area proper, there was a distinctly marked aortic second sound, and the aortic second sound was heard in the carotid arteries. He pointed out that it rarely happened that the aortic murmur of regurgitation was not a substitution-sound; that was, that it was only in exceptional cases that the murmur of regurgitation and the aortic second sound were both heard well marked. The difficulty in such cases was to determine whether the sound which was heard was an aortic or a pulmonic sound. They heard the aortic second sound most clearly pronounced in the carotid arteries. The murmur in the present case was clearly postdiastolic, and seemed to correspond with what was heard in the cases of aortic patency described by Dr. Gairdner, where the sternum acted as a sounding-board, and conveyed the murmur of aortic regurgitation downwards, so that it was best heard over the base of the ensiform cartilage. The impulse-beat of the heart was about an inch to the left side of the nipple, in the fifth intercostal space. The apex-beat of the heart, in place of being displaced downwards, was slightly upwards, but considerably to the left of the nipple-line. The course of the case was rather rapid, and the man, on making some slight exertion in bed, fell back and died. The heart was found to be considerably enlarged; the walls of the left ventricle were considerably hypertrophied, and its cavity dilated; the segments of the aortic valve did not appear to be very much altered by disease; they were smooth on the surface and fairly competent, but there was at certain points enormous thickening of the valvular attachments, and the thickening was almost cartilaginous in density. On applying the usual water-test, the valves were found to be incompetent, but not so to any marked extent. The right ventricle and the right side of the heart generally were considerably dilated, and the walls of the right ventricle were hypertrophied. The first point in connection with the case, was that the pathological appearances explained the physical signs. The aortic valve-flaps were in themselves texturally sound enough to produce, by their tension, a clear and well defined aortic second sound. That was the condition that existed in the case. The thickening of the attachments of the valve-flaps to the aortic zone produced a certain amount of contraction of the orifice, giving rise to the systolic murmur; and the slight amount of incompetency of the valves led to the murmur of regurgitation. The next point of interest was the position of the apex-beat of the heart. In the first stages of the disease, they had the usual displacement of the apex-beat, which followed the hypertrophied and dilated left ventricle—that was, a displacement of the apex of the heart downwards, and slightly to the left side. But, after that, an enormous distension of

the ventricle took place; and then there were certain influences produced by that condition of the ventricle on the circulation through the left auricle and through the right side of the heart. The final result would be a great distension of the right side of the heart: first, a dilatation of the auricle; and then a dilatation and subsequent hypertrophy of the left ventricle. The exact position of the left auricle in relation to the right lung must be borne in mind: the right auricle rested on the middle lobe of the right lung. The changes that occurred in aortic patency caused a very great distension of the right auricle; and, if that right auricle rested against a portion of the lung not likely to expand before it, or make way for it, the result was that, with the increasing distension of the heart, the right side of the heart would generally tend to assume a more horizontal position, and its apex would be displaced to the left side. This, he thought, was a better explanation of what occurred than that given by Sir D. J. Corrigan.—Dr. FINNY asked how Dr. Nixon explained the very sudden death of the patient where the regurgitation was of such a very slight character, according to his own showing. The valves were evidently of sufficient tone to produce a good second-sound. Sudden death, in cases of aortic patency, was a rare phenomenon. What proof was there, in this case, that the right side of the heart was at all affected, the mitral valve being competent? He could not see how Dr. Nixon's hypothesis explained the displacement.—Dr. HENRY KENNEDY asked what was the state of the pulse and of the visible pulsations. According to his observation, in these cases, the heart had the appearance of being shortened, and greatly increased in breadth.—Dr. DOYLE said that, at the left corner of the anterior flap of the valve, he observed bands which, he thought, might have conveyed the murmur along the anterior wall of the ventricle. The condition of the anterior curtain of the mitral valve would have allowed more or less regurgitation.—The PRESIDENT said he was disposed to think that Dr. Nixon did not give quite its full value to the fixity of the diaphragm, in his explanation of the phenomenon of the changing direction of the heart that he sought to illustrate. Certain points would lead them to believe that Sir Dominic Corrigan was right in attaching a great deal of importance, in cases of this kind, as well as of pericardial effusion, to the fixity of the diaphragm.—Dr. NIXON, in reply, said the explanation of the patient's sudden death was to be found altogether in the condition of the myocardium, which he had not time to examine, but he took it for granted that it was in a state of fatty change. He found the left ventricle full of matter like currant jelly; and, as regarded the sudden death, the case seemed one of paralysis of the heart in diastole.

Acute Pericarditis.—Dr. FINNY exhibited a specimen, two days old, of acute pericarditis. It was taken from a man, aged 52, addicted to alcoholism, which had caused him to lose a great many good positions. He came into hospital almost in a state of collapse, and was pulseless, cyanotic, without œdema of the legs. Neither of his heart-sounds could be felt, and scarcely heard; and it was only with great difficulty, and after free stimulation, that his pulse could be detected at the wrists. In that condition he remained for some days, and then died. The physical signs were dulness over the precordial region resembling closely, but not accurately, that in precordial distension, while the absence of sounds of the heart outside the precordial region, and absence of any precordial impulse made the case one of no little difficulty. The specimen was an example of well marked acute pericarditis, in which adhesions were forming from one surface to the other. Many of the bands were broken down, but some were not. The heart itself, when cut into, was fatty, and a large amount of fat was deposited on the auricular surfaces and also on the ventricular. He had not microscopically examined the interior of the heart. He looked on the case as one in which the inflammation not only occurred in the pericardium, but passed to some extent into the heart, producing the weak action of the heart which was found. The kidneys were in a state of commencing granular disease, while the liver afforded a good example of commencing cirrhosis; it was a cirrhotic liver in the contractile stage.—Dr. NIXON observed that a point in connection with this specimen was the frequency with which pericarditis, strictly localised to the posterior aspect of the right auricle and the right auricular appendix, was met with. That condition was invariably met with in cases of death from suppurative pneumonia, and the exudation always took the form of a pasty emission. In the present specimen, it would be seen that the evidences of pericarditis were intensely marked on the posterior aspect of the auricle and auricular appendix, and there was a greater amount of deposition of lymph in that than in any other part of the heart.

Horse-shoe Kidney.—Dr. NIXON exhibited a kidney from the patient in whose remains he had made the *post mortem* examination in the case of aortic patency. He found great difficulty in removing it, and then discovered it to be a good example of horse-shoe kidney. The lower ends of the two kidneys were connected by a band of renal substance passing between the vertebræ and the abdominal artery, and by means of which the kidneys were rendered perfectly continuous. The ureters passed down in front of the band, which was exceptional.—The PRESIDENT said he never saw a case in which so broad a band existed between the two organs as here. He understood the usual position of the ureters in such cases to be the reverse of that stated by Dr. Nixon, namely, in front of the band. He had never seen a case in which they passed behind it.

SURGICAL SECTION.

FRIDAY, MARCH 19TH, 1886.

WILLIAM COLLES, M.D., in the Chair.

Bone-Drainage in the Treatment of the Early Stages of Hip-Disease.—Mr. STOKES read a paper on bone-drainage in the treatment of hip-disease in its early stages. The author commenced by alluding to the fact that hip-excision was not maintaining the position in surgical estimation that other joint-resections occupied, which he believed to be due to a twofold cause: first, the rarity of the cases in which the disease was sufficiently limited to enable the disease to be completely removed; and, secondly, to the difficulty of maintaining fixation of the limb after the operation. He pointed out how very disheartening the statistics of the operation were, as shown by Dr. Yale and by many German operators of eminence. He also showed that the results of the cases treated by methodical expectation, especially where suppuration in the joint occurs, were hardly more encouraging, and quoted Hueter's opinion that suppuration in the hip-joint was a "nearly absolutely fatal process." The principles of treatment that, as a rule, were mainly relied on, were then discussed, and shown to be too frequently unsatisfactory. The author then discussed the views of Sir B. Brodie and others as to the pathology of the early changes in scrofulous hip-disease, and inclined to the opinion that those held by that distinguished surgeon were correct: namely, that, in the great majority of instances, the primary changes consisted in an inflammation in the cancellous tissue of the bone, the result usually of a traumatism. The views of other surgeons and pathologists were then mentioned, notably those of Mr. Cooper Forster, Mr. E. Owen, and Mr. Hilton. Assuming that Sir B. Brodie's views were correct, the author drew attention to the desirability of giving an early exit to the inflammatory exudates in the cancellated tissue of the bone, and thought that could be best done by the manner recommended originally by Mr. Kirkpatrick: namely, by perforating the bone, and freely applying potassa e. calcum along the tract of the wound, both of the soft and the osseous structures. In illustration of the advantages to be derived from this line of treatment, the author gave the details of three cases in which he employed it, and in which the results were very encouraging.

Some Points in the Treatment of Morbus Coxæ.—Dr. THORNLEY STOKER read a paper advocating the employment of bone-drainage by trephining the trochanter, as a treatment in cases of morbus coxæ of the femoral variety. He referred to the paper on this line of treatment read by Dr. Kirkpatrick before the British Medical Association in 1867, and to the later communication of Mr. Greig Smith in 1881. Dr. Stoker dissented from the use of caustic potash, as recommended by Dr. Kirkpatrick, and advocated the use of a small trephine, supplemented by a drill, if necessary. He gave details of two cases in which he had operated. In one, a well-marked case of femoral hip-disease in a girl, aged 11, which had advanced to the second stage, a complete and rapid recovery had taken place. The other, a more advanced case, in a child, aged 5, had been much benefited, but was still under treatment. Professor Stoker concluded his communication by putting forward these conclusions. 1. Tunnelling the trochanter and neck is a reasonable and good practice in cases of femoral coxalgia, and is calculated to afford drainage and remove the products of disease. 2. It is more in accord with surgical science, while adopting the essential principles of Dr. Kirkpatrick's plan, to avoid the employment of caustic, and rely upon the more precise use of instruments. 3. The extended application of the plan, so as to remove the diseased bone, or even to drain a joint containing pus, as proposed by Dr. Greig Smith, is a surgical proceeding worthy of every examination.—A discussion followed, in which the CHAIRMAN, Mr. CROLY, Mr. FRANKS, Dr. FOY, and Dr. TAIT, took part.

THE LATE MR. W. M. COATES.—A stained glass window and a monumental brass are to be placed in Salisbury Cathedral, in memory of this gentleman, at an estimated cost of £350, of which £230 has been already subscribed.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:

Pathological and Clinical Section.

Friday, May 7th, 1886.

H. R. Ker, F.R.C.S.Ed., in the Chair.

Penetrating Pistol-Bullet Wound of Cranium: Recovery.—Dr. C. C. Smith (Redditch) brought to the meeting a young man, aged 21, a junior naval officer, who had shot himself in the forehead with a small revolver pistol on May 7th, 1885. The act was done on a sudden impulse of disappointment, and the bullet, a small conical one, had traversed the cranial cavity, in which it was still retained. Dr. Smith found him, shortly afterwards, in a state of collapse, but conscious. There was a small clean perforation through the skull, a little to the right of the median line of the forehead, and an inch and a quarter above the supraorbital notch. An ordinary probe passed horizontally backwards for its whole length without encountering any resistance or causing any irritation. Dr. Smith concluded that the bullet had struck the back of the skull, and glanced off. There was complete paralysis of motion of the left side, but sensation was little, if at all, impaired. On recovering from the shock, he had great pain in the back of the head, and afterwards in the back of the neck. He showed complete lucidity of mind when addressed, and his powers of articulation and speech were not at all impaired. For two or three days afterwards, a considerable quantity of serous fluid trickled from the wound, and there was slight escape of brain-matter. Though reported delirious at times, he was always found rational by Dr. Smith. On the 12th, he was seen by Mr. Bennett May, who concurred in the propriety of non-intervention. The wound soon healed, and his general health improved; but, three months afterwards, there was still complete paralysis of the upper extremity, and a very trifling improvement in the lower, with rigidity and contractions in both. He then went into Queen's Hospital for three months, where he was treated with the continuous current, passive movements, and medical rubbing; the result being a slight further improvement in the lower extremity. During the last six months, there had been a gradual return of power in the leg, and he was now able to walk a mile or more with slight aid from a stick. The arm, too, had improved, so that he could raise his hand to his mouth. In other respects, he was very well, but more emotional than previously.—Mr. Bennett May had seen this patient, on the fourth day, in the condition described by Dr. Smith. The track of the bullet passed horizontally backwards from the point of entrance; and, though not followed quite to its termination, it appeared most probable that the back of the skull had been struck. The patient had complete motor paralysis of the left side, so that it appeared as if the motor tract leading from the large ganglion, or the large motor ganglion itself, had been cut through. He was lucid and conscious, and could converse; but was silent and reserved. Mr. May said that he abstained from any operative interference, then, mainly because he felt that much of the mischief, the ploughing up of the brain-substance, was of a kind which could not be undone or improved by it, even if successful. Moreover, he was impressed by the then almost unanimous declaration of opinion by military surgeons, that speculative trephining, in cases of the kind, had been most unsuccessful, and was not justifiable. He had been quite surprised at the patient's recovery, and at its extent and completeness, though the permanence of this, he was aware, must be somewhat uncertain. He did not think his present condition could possibly be better, even after a successful operation; but there was not security for the future. This had been shown very recently in a case reported from Charing Cross Hospital. Mr. May said that the interest in the case had been greatly strengthened by recent advances in cranial surgery, and he should certainly feel called upon, at the earliest symptom of irritation and inflammation, if such should ever arise, to make a systematic attempt at extraction in the manner adopted by Dr. Flührer.

Ligature of the Innominate Artery for Subclavian Aneurysm.—Mr. Bennett May showed the parts from a case in which this operation had been performed, illustrating the state of the vessel and the action of the ligature.

Chronic Ovaritis.—Mr. Lawson Tait exhibited the uterine appendages from a patient who had come over from the United States to consult him, and upon whom he had operated. The patient was 24 years of age. She had begun to menstruate at 15, had an attack of scarlet fever shortly afterwards, with a distinct history of pelvic trouble, and had suffered intensely ever since. Her periods were protracted, profuse, and intensely painful. She married about three years ago, and had never been pregnant. She had been under the care of a large number of physicians in the States, and also in this country, and been treated for what she called chronic inflammation of the uterus and ulceration. She had been cauterised, and worn pessaries; and the cervical canal had been divided and dilated. On examination, Mr. Tait found the uterus extremely small; the appendages could be felt large, and he was under the impression that nothing more than the condition of infantile uterus was present to explain her great sufferings. After a full discussion, he advised that the appendages should be removed; and, at the operation, it was found that the whole contents of the pelvis were matted entirely together, and the appendages were buried in adhesions. The appendages, exhibited floating in water, showed upon every part of their surface remains of dense bands of adhesions, which had been torn through.

Alveolar Sarcoma.—Dr. Saundby showed a microscopic section, on account of its excellence as a specimen of this rather rare tumour. The case was one of considerable clinical interest, the starting point of the illness having apparently been a papillomatous tumour of the skin of the back, which was removed by Dr. Savage. After this, nodular subcutaneous tumours, varying in size from a pea to half an orange, grew all over the body, and others could be felt in the abdominal cavity. Permission was only obtained to remove one of the tumours. This was convex on the upper surface, flattened below, and lay loosely adherent in the cellular tissue beneath the skin.

Trichorrhexis Nodosa.—Dr. Saundby showed, under the microscope, specimens of hairs presenting this condition. While he thought it probable that recent writers were correct in regarding it as of little or no pathological significance, it was noteworthy that the patient from whom these hairs were taken regarded it very seriously, and had undergone many weeks of anxiety and annoyance, under the belief that he was suffering from a parasitic disease.

Malignant Stricture of Œsophagus.—Dr. Saundby exhibited a cancerous stricture of the œsophagus, with a microscopic section. The case illustrated the important rule that strictures of the œsophagus, without history of injury or evidence of external pressure, were practically always malignant. Gastrostomy was useless under such circumstances, and should not be advised.

Imperfectly Developed Heart.—Dr. Foxwell exhibited a heart with an incomplete ventricular septum, and a patent foramen ovale. The orifice of the pulmonary artery was constricted, and occupied by a valve with only two segments; the walls of the artery beyond this being ulcerated, and its lumen filled with a septic thrombus which had penetrated into the right branch, and had set up septic pneumonia in the right lung.

Intussusception.—Dr. Foxwell showed an intussusception through the ileo-cæcal valve; the intussuscepted portion of the ileum was gangrenous, the gangrene also involving an inch and a half of the part adjacent to this, but outside the valve. It was taken from a boy, who was admitted on the tenth day after the accident, and who died from exhaustion whilst an attempt was being made to resect the gut. There was much offensive purulent peritonitis.

Tumour of the Bladder successfully Removed by Operations.—Mr. H. Ker read notes of this case, illustrating it by microscopic sections. The patient, a woman, aged 42, the mother of seven children, came under his care in August, 1882. She had then been suffering from hæmaturia for six months previously, and this had been ascribed by her medical attendant to a calculus. The urethra was dilated, and the bladder exposed. Large soft growths were found in the trigone, and another at the apex. These were removed with the *écraseur*, and the bladder subsequently washed out with a solution of perchloride of iron. Recovery was complete, and she soon returned to her household duties, as well as to her occupation of a nailer. Mr. Ker was again consulted in May, 1885, the symptoms having recurred six weeks previously. The growths were again removed, but more difficulty was experienced. Durham's retractor was used to scrape away considerable portions. The recovery was perfect, and up to the present time, the patient remained in good health, and able to attend to all her duties.

The late Dr. James Thompson.—At the meeting of Council of the Irish Medical Schools and Graduates' Association, held on May 19th, the following resolution was passed on the proposal of the Chairman of Council (Professor Gerald F. Yeo, M.D.), seconded by Dr. Macnaughton Jones (President), "That the Council of the Irish Medical Schools and Graduates' Association, having regard to the late Dr. Thompson's intimate connection with the Association, first, as its founder and Honorary Secretary, and, afterwards, as Honorary Treasurer, hereby desires to convey to Mrs. Thompson its deep sympathy with her in her bereavement, and to express its sense of the loss the Association has sustained by the death of one to whom it has been so much indebted." Brigade-Surgeon W. Alexander, M.D., has been appointed Honorary Treasurer, *vice* Dr. Thompson, deceased.

REVIEWS AND NOTICES.

MATERIA MEDICA AND THERAPEUTICS. By CHARLES D. F. PHILLIPS, M.D., M.R.C.P., etc.; late Lecturer on Materia Medica and Therapeutics at the Westminster Hospital Medical School. London: J. and A. Churchill. 1886.

THIS volume comprises remedies drawn from the vegetable and animal kingdoms, together with a class of bodies denominated "organic compounds;" although why alcohol, ether, chloroform, etc., should be so described, it is not quite easy to understand. Dr. PHILLIPS, who is well known as the author of a very excellent work on *The Vegetable Kingdom*, and its sequel on *Inorganic Substances*, has preferred to rewrite the former book, adding to it a description of such substances as carbolic acid, ether, etc., which were to have formed a third volume.

Under each drug are given its description, active properties, and its physiological effects, and therapeutical applications; the latter based upon the reports of the best authorities on each subject. In this way, the reader is presented with a synopsis of the views entertained as to the use of the particular drug, together with the results of its employment in various diseases. As might naturally be expected, a certain confusion occasionally arises; and here we should have liked to see Dr. Phillips intervene with a casting vote, instead of leaving the reader, as he sometimes does, to draw his own conclusions. With respect to the more important drugs, the information given will be of service in indicating, not only where the drug has been found of use, but also the maladies in the treatment of which it has been essayed, and found wanting; but an unnecessary amount of space has been taken up in detailing purely negative results. Dr. Phillips has devoted a great deal of attention to the non-officinal drugs; and finds something to say even of such mild remedies as the common or garden carrot, which is classed as officinal, although, we are happy to say, the delinquencies of the present edition of the *Pharmacopœia* do not extend thus far.

The descriptions of the more important drugs are very exhaustive, beginning with aconite, of which Dr. Phillips has made, to some extent, a special study. There is a general impression that aconite is a drug, the use of which is restricted to the production of apyrexia; but the perusal of the part devoted to its employment in medicine shows that it may be, or at any rate has been, employed for a number of complaints, and, to quote a phrase which recurs somewhat frequently, "has been found useful." The articles on opium, and its alkaloids and derivatives, quinine, belladonna, etc., are all equally full, and leave little to be added by way of additional information. The references are exceedingly copious, and indicate how conscientiously the subjects have been investigated. The question of the use and abuse of the tobacco plant is very fully gone into; but the inference which will be drawn will probably depend far more on the bias of the reader than on a judicious collation of the facts and arguments impartially arraigned. In the matter of alcohol, Dr. Phillips has shown himself more master of the situation, and, after the usual summary of conflicting evidence, he gives his own views on the subject. He is of opinion that alcohol may advantageously be administered in typhoid fever, and other diseases attended with adynamia; and even that the majority of such cases require it at some period or another. While he purposely avoids laying down any rule as to quantity, he is disposed to think that the doses given as a rule are too small, and not frequent enough, at any rate, in delirium tremens. Dr. Phillips' views on this vexed question will not meet with universal acceptance; the medicine of the future shows strong indications of being teetotal, or nearly so, and anything in the nature of routine-treatment by means of alcohol is rapidly falling into disfavour. It is interesting to know that a phthisical patient has been known to take half a pint of whisky daily for many weeks, "with the production of much comfort." It is to be hoped that this heroic treatment is reserved for special cases. The medicinal agents derived from the gastric and pancreatic juices are not as liberally treated as the rest of the book had led us to expect. No special instructions are given for testing these various products, although this is a very necessary precaution before using any or either of them, since they are not unfrequently quite inert. The same observation applies to extracts of malt, which, if properly prepared, are very active, but otherwise may be little better than so much syrup or small beer.

Great credit is due to Dr. Phillips for the pains he has taken to produce a book which shall embody, not so much his own opinions and observations, as those of other competent observers, both physiological and clinical.

The present volume is very clearly printed in large type, and overcrowding has been carefully avoided. An appendix is added of the alterations and changes imported by the last edition of the *Pharmacopœia*, which only appeared when the greater part of the work was already in type. At the end of the book, a list of drugs which may be used in each disease has been arranged, and may be found useful for reference.

MATERIA MEDICA AND THERAPEUTICS. By J. MITCHELL BRUCE, M.A., M.D., F.R.C.P., Physician and Lecturer on Materia Medica and Therapeutics, Charing Cross Hospital. Third edition. London: Cassell and Co. 1886.

THIS well-known little manual, of which a third addition has become necessary, in consequence of the issue of the new *Pharmacopœia*, has thus been brought up to date; and advantage has been taken of the opportunity to introduce sundry changes and additions, more particularly, we are told, in the direction of greater detail respecting the chemical and pharmaceutical relations of the individual drugs. These modifications are excellent, so far as they go; but that there is still room for further improvement, is evidenced by the fact no mention is made of the method of administering nitro-glycerine, in the form of a 1 per cent. watery solution; nor are instructions given for the better preservation of cocaine or eucaine in solution, although, from its liability to harbour fungous growths, attention has been called to the subject. These are unofficial details, it is true, but it is easy to see that the author aims at producing a work which shall be something more than a mere "cram-book." A very liberal selection from the new drugs, which have not as yet received official sanction, is given, and their uses and applications are fully explained. The book purports to be "an introduction to the rational treatment of disease," and the author has fulfilled his promise. The last part, which extends over upwards of a hundred and fifty pages, is devoted to the consideration of the principles and practice of general therapeutics. Commencing with the general rules of the treatment of disease, the author treats, as briefly as is consistent with completeness, of the principal classes of disease, and their points of physiological and therapeutical interest. He has been at a good deal of trouble to prepare schedules of the various classes of drugs, first according to their physical characteristics, and then according to their supposed physiological effects. It is rather difficult to see the exact utility of these lists, which will be found the less necessary as the examinations become more practical. The volume is one of a very popular series, and will, doubtless, secure its share of public favours.

OUTLINES OF INFECTIOUS DISEASES FOR CLINICAL STUDENTS. By JAMES W. ALLAN, M.B., Physician-Superintendent, Glasgow Fever Hospital. London: J. and A. Churchill. 1886.

THIS book is written, the author states in his preface, to furnish the students, attending his course of clinical lectures, with the salient points in the diagnosis and treatment of the diseases which are likely to come under their observation. A small volume, of little more than one hundred pages, cannot profess to do more than this, but the author has fully succeeded in the task he has set himself. The chief symptoms of each disease, as they commonly appear, are well described, and a few paragraphs are given to diagnosis, prognosis, and treatment. Dr. ALLAN is evidently thoroughly conversant with the subject of which he treats, and his writing has a practical value which could not attach to that of anyone with less experience, or whose information is chiefly derived from the writings of others. While there is much to praise, there is little to criticise; but we may refer to one or two points which may with advantage be amended in a second edition. We note that no account is given of the treatment of the very common and troublesome symptom of tympanites in enteric fever, and of the readiness with which it usually yields to the administration of opium. Again, the relation of albuminuria in cases of scarlet fever to previous overfeeding and constipation is not, we think, sufficiently indicated; these conditions are probably more often the cause of this complication than the more commonly accepted accident, exposure to cold. The view expressed, that "albuminuria, due to acute nephritis, is evidently part and parcel of the natural history, and not, as it were, an accidental thing," is doubtless correct; but, at the same time, it frequently occurs from conditions well understood. There is, too, we believe, sufficient reason for regarding the infection of milk, which, from time to time, gives rise to serious outbreaks of scarlet fever, enteric fever, and diphtheria, as possibly, if not probably, due to some unknown cow-condition; and it would be well that the minds of students should be directed to this state of medical knowledge. But, apart from these points, Dr. Allan's work

may be commended to learners as one that would practically supply them with all the information they will require at the beginning of their studies.

HANDBOOK ON THE DISEASES OF THE NERVOUS SYSTEM. By JAMES ROSS, M.D., LL.D., F.R.C.P., Senior Assistant-Physician to the Manchester Royal Infirmary. Pp. 708. London: J. and A. Churchill. 1885.

THE great work of Dr. Ross's, in two volumes, entitled *A Treatise on the Diseases of the Nervous System*, is rightly looked upon as the most complete standard book on the subject in the English language. Although of great value as a work of reference for the expert or advanced physician, it is somewhat too voluminous for the practitioner or the student. The present work, in a single volume, is an attempt to supply information for the latter in as short and yet complete a form as possible. Those who are acquainted with the larger treatise of Dr. Ross will appreciate the thorough and scientific manner in which he has treated the entire subject of neurology in all its departments. In the smaller handbook, which essentially consists of a condensation of his former work, readers may expect to find that, if this is a *multum in parvo*, it retains the accuracy and all the prominent and essential features of its predecessor. In this anticipation they will not be disappointed. A book of this kind it is impossible to review in the true sense of the term. It does not profess to be an original monograph, or to put forward new facts or debatable doctrines. Its object is simply to provide, in a brief yet sufficiently intelligible form, all that is known of the nervous system in its bearings to practical medicine, and to supply the profession with a succinct account of all the most recent advances in neurological science. This end, we consider, it admirably fulfils; and the student or practitioner who desires to obtain, at easy cost of time and application, a sound knowledge of the subject which it treats, cannot do better than peruse the volume under consideration.

NOTES ON BOOKS.

Medico-Pedagogitchesky Vestnik (The Medico-Pedagogic Herald). Edited and published by Dr. IVAN V. MALAREVSKY, St. Petersburg, 1886, Nos. 2 and 3. The February issue of the *Vestnik* opens with Pedagogic Excursions into the Region of Psychiatry, from the pen of the editor, in which paper some of the causes and premonitory symptoms of mental disease in children are briefly discussed. It contains also the continuation of Dr. Virenius's article on Anatomico-Physiological Bases of Sexual Life, and of Dr. K. Merejkovsky's paper on Problems and Methods of the Examination into the Physical Development of Children. The March number gives Mr. Kaëm's note on Children Grown Wild, written mainly about a recent interesting work of Professor Rauber (*Die Zustände der Verwilderten*, 1885. Leipsic). Dr. P. Sklotovsky considers the difficult question of the influence of Unpleasant Sensations on the Nutrition and Development of Children. Basing his statements on some observations of his own, he draws the attention of pedagogues to the fact that mental distress of any kind retards nutrition, growth, and development of the child, and even may lead to actual disease (anæmia, with sickness, giddiness, intermittency of the cardiac action, etc.). A paper on Children's Holiday Colonies in France, translated from the *Revue Pedagogique*, is also given. Dr. Malarevsky warmly recommends an extensive organisation of that highly useful matter. The Society of National Health has already made the first step, having established a colony of that kind in Staraia Russia in 1885.

Mind Your Eyes. By FRANCISQUE SARCEY. Translated by R. E. DUDGEON, M.D.—This little book, which is intended for the laity, is published under the auspices of the Society for the Prevention of Blindness. It professes to recount the experience of the author, who was highly myopic from early childhood, lost one eye from detachment of the retina, and was afterwards successfully operated upon for cataract in the other. It is written in a light and loose style, and commences with the following statements, which are not likely to commend the book to anyone acquainted with the subject. "I was born myopic, outrageously myopic. Many doctors assert (I don't know why) that people are not born myopic, but grow myopic;" and later, "I have read almost all that has been written about myopia." M. Sarcey has read to little purpose if he has failed to discover that the opinion that myopia is not congenital is based upon the simple fact that all recent observations have shown that it is not present in newborn infants; and he adduces no evidence of any kind in support of the statement that he was himself born myopic. The only part of the book which can have any real influence for good are the Chapters II and III, the first of which is devoted to exposing the popular fallacy that myopic eyes are strong eyes, and the second, to a consideration of the influence of school life, and especially bad lighting in schools, upon myopia; this, the most important chapter in the book, would have been much more impressive, had the writer recognised the fact that myopia is commonly produced during school-life, and that the injurious conditions referred to affect all the children, and not merely the small minority who are already myopic. The remainder of the book is devoted to a detailed account of the writer's sensations while his cataract was maturing, and of his reasons for entering a religious house to undergo operation. The first we have seen much better described elsewhere, and the latter are of no special interest.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE "HERON" MEDICATED BISCUITS.

MESSRS. HEARON, SQUIRE, AND FRANCIS, of 5, Coleman Street, E.C., have recently prepared, at the suggestion of Dr. W. D. Haslam, a variety of medicated biscuits, which promise to prove useful in a variety of obstinate complaints. They are made, at present, according to three different formulæ.

No. 1 contains in each ten grains of purified vegetable charcoal, and ten grains of subnitrate of bismuth. They are well adapted for the relief of flatulence, acidity, and allied conditions.

No. 2 consists of two grains, each of phosphate of lime and phosphate of iron. They are recommended for debility arising from overwork, anæmia, or excessive worry.

No. 3 contains two grains of oxalate of cerium only, and will be found useful in controlling the vomiting of pregnancy.

These biscuits are convenient in size, and attractive in appearance. They are quite free from grittiness, and are palatable. We have tried them in several cases, and have obtained excellent results. In the vomiting of pregnancy, the oxalate of cerium biscuits are most efficacious.

THE BEAUFORT LEG.

MR. SCHRAMM, 6, Princes Street, Cavendish Square, W., has, at the instance of Mr. Richard Barwell, Senior Surgeon to Charing Cross Hospital, manufactured a cheap form of artificial leg, known as the Beaufort Leg. It is somewhat surprising, as Mr. Barwell recently pointed out, that a form of artificial leg which has long been known and extensively used, both in Paris and in Rome, should not have been more extensively introduced and appreciated here. To the working man who has had the misfortune to lose a leg, the Beaufort artificial leg will come as a boon and a luxury unknown to the wearers of the bucket or pin-leg, or the bucket with the upright and strap.

The mode of manufacture undertaken by Mr. Schramm, after many consultations with Mr. Barwell, was fully described in our issue of January 10th, 1885. For simplicity, lightness, and cheapness, the Beaufort leg has advantages which cannot fail to commend it extensively for use where moderation of price is an important consideration. The price at which this artificial limb can be supplied is £3 3s. for amputation below, and £3 13s. for amputation above, the knee.

EXTRACTUM CINCHONÆ LIQUIDUM (DE VRY).

WE have received from Messrs. Fletcher, Fletcher, and Stevenson, successors to De Vry's Cinchona Company, a specimen of the extractum cinchonæ liquidum (De Vry). It is perfectly soluble in water, and 100 fluid grains contain five grains of the mixed alkaloids of red cinchona bark. We have already given a detailed notice of it, and all that it is necessary for us to say now is that it fully maintains its reputation.

FOREIGN GRADUATES.—A petition, in favour of admitting to the *Register* foreign degrees obtained by already registered practitioners after *bonâ fide* examinations, has been forwarded by the Foreign Graduates' Association to Dr. Balthazar Foster, M.P. for Chester, for presentation to the House of Commons. Communications have also passed between the same Association and Sir Lyon Playfair upon the same subject.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 5th, 1886.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

IN our last week's issue, we called the attention of our readers to the meeting of this Association, which is to be held at Birmingham in September next. Several of the sections under which the work of the Association is conducted, do not come under the scope of the medical profession ; and hence, perhaps, many members of our profession, busily engaged in practice, may entertain the feeling towards this Association that its proceedings concern them little.

The Biological and Anthropological Sections, however, are intimately connected with medicine ; and, consequently, may fairly be considered of interest to the profession. Under the former are included, not only vegetable morphology and zoology generally, but human morphology and physiology. Indeed, at the last meeting of the Association, held at Aberdeen, it was found necessary to split up the Biological Section into three subsections : namely, Botany, Zoology, and Human Anatomy and Physiology, and in this last subsection many interesting and instructive communications were made. Till two meetings ago, Anthropology was a subsection of Biology, but its growing importance caused the Council of the Association to sanction its being constituted into a section by itself. An idea has been erroneously entertained by many, regarding this section, that the papers communicated in it are confined to descriptions of the skulls and other osteological characters of the various races of mankind, manners and customs, and archæology. The range is, however, much more extensive, and includes subjects on which medical men are pre-eminently qualified to contribute. Anthropology embraces, essentially, seven branches of knowledge : namely, Human Anatomy, Physiology, Embryology, Psychology, Sociology, Pathology, and Teratology ; accessory only to these are Ethnography, Archæology, Language, and other kindred subjects which it also includes. It will be evident, therefore, that Anthropology proper can only be logically treated of by medical men and naturalists ; its accessory branches, on the other hand, do not require the same kind of knowledge, and are chiefly pursued by persons not in our profession.

Questions which are engrossing the attention of the Collective Investigation Committee of the British Medical Association form an important section of the essential subjects included under the term Anthropology. The work of the Investigation Committee of our Association has been chiefly confined to investigating the prevalence of certain diseases in different parts of the country, and to questions of infection, heredity, etc.

It is possible, and also probable, that race peculiarities may exercise a considerable influence in determining the prevalence of certain diseases in certain places. The various races forming the population of the British Isles, though originally distinct, have now become very much blended together, so that it is a difficult task to ascertain what influence race exerts on disease. Still, it may be possible to do something to elucidate this important point; as we know that, in certain parts of the country, certain races have been more especially located, and the labours of Dr. Beddoe show that, in these places, the people still retain many of the physical characteristics peculiar to the race to which they belong.

If we extend our field of observation on the race-character of disease to other parts of the British Empire, the investigation will probably show more apparently that race does exercises an influence over disease. Medical men who have had experience in practice amongst the natives of various races under British rule, may be able to bring forward evidence as to whether this is the case or not, and so furnish important information on a subject which has been comparatively little studied ; also the International Investigation Committee, appointed at the last meeting of the International Medical Congress, may be expected to take cognisance of, and materially extend our knowledge of, this aspect of disease.

As illustrative of the results of research in this department of Anthropology, we may incidentally refer to a paper, by Mr. Jacobs, published in the *Journal of the Anthropological Institute* last year, which contains many interesting observations on racial peculiarities of the Jews. In this paper, he points out that they do not enjoy immunity from certain diseases, notably phthisis and cholera, as is frequently stated, but, on the other hand, he found that there is some indication that they are more liable to diabetes, hæmorrhoids, insanity, blindness, and defects in special organs of sense.

The effects of consanguineous marriages in the production of diseases and teratological conditions, is another question on which medical men can, by recording their experience in practice, contribute greatly to the pathological and teratological aspects of anthropology.

It would be easy to mention many other subjects of medical anthropology upon which the Section would be glad to receive contributions from medical men, but we have already said enough to show how intimately this Section is connected with our own profession. The Secretaries of the Anthropological Section, Drs. Garson and Saundby, who are medical men well known to the profession, will be glad to give every information they can to those who contemplate making communications to the Section.

BIRTHDAY HONOURS TO MEDICAL MEN.

THE list of birthday promotions and dignities includes honours to more than one member of our profession ; and, although circumstances connected with the bestowal of these dignities and promotions are complicated by correlative considerations of a somewhat sadly qualifying character, yet it will be generally felt by the profession that the impulse which has led to this bestowal of honours on medical men in the civil and military services deserves grateful acknowledgment, and has been well directed.

Dr. Sieveking and Professor Douglas Maclagan are veterans of honourable position and considerable literary and scientific achievement in the profession, whose life-long services have secured to them universal consideration and esteem, which it is

gratifying to see recognised by the public bestowal of distinctions from the Crown; and both will receive the hearty congratulations of their friends, and have the satisfaction of knowing that the gracious act which confers honour upon them is ratified by the approval of their fellows.

Mr. John Tomes has, throughout his successful career, held an unique position of scientific attainments and administrative capacity. To no man is dentistry in this country more indebted for the elevation of its professional status, nor has anyone taken a more important and useful part in promoting educational and legislative reforms which have, of late years, established the dental profession on its present high platform. Mr. Tomes has, for some years, retired from practice. The honour now conferred upon him will dignify his retirement. It marks justly the great service which he has rendered.

Surgeon-General Longmore, C.B., has long been a leading figure in the military medical department. From his earliest pupilage at Guy's Hospital, he was marked out by his personal qualities, his high intelligence, his admirable judgment, his unfailing courtesy and goodness of heart, his assiduous devotion to duty, and his gifts of eloquence, for a career of eminence. His record in the Crimea and in India was one of continuous and admirable achievement. As Professor of Military Surgery, his reputation is European, and his works are standard. But, above all, he has rendered never-to-be-forgotten services in connection with military education and organisation. Parkes, Longmore, Maclean, and Aitken are names indissolubly connected with the reconstitution of the Army Medical Service, and with the progress of that great educational establishment at Netley, and its connected hospital service, which are among the most notable institutions of the country. In their hands, they have become models of excellence and of efficiency. There is no man more beloved and more honoured, both in civil and in military life. It is universally felt that a more graceful and suitable honour would have been promotion from the grade of C.B. to that of K.C.B. The grudging parsimony with which an arbitrary and illogical limitation is maintained of the number of K.C.B. ships, which can be distributed in the Army Medical Department, is put forward as the reason for not conferring a promotion which is, we trust, only deferred. At the dinner of the Army Medical Department, held this week, this view was emphasised by the most enthusiastic expression of opinion. While heartily congratulating Sir Thomas Longmore, C.B., on the honour of knighthood, we must express the hope that it is not intended to take the place of that promotion in the Order of the Bath to which he is eminently entitled. To the honour of Civil Commandership of the Bath, conferred on Dr. Orange, we refer elsewhere; but it is saddened by the reflection that it is given to him on his resignation, owing to a failure of health, arising from injuries received in the public service. We have to conclude with a reference to the sad calamity which is coincident with the knighthood of Mr. White Cooper. That accomplished and amiable surgeon has not lived to receive the honour of which his friends heard with so much pleasure.

COMPARATIVE OBSTETRICS.

In all sciences and arts there exists a corner open to the seeker after the curious, the uncommon, and the extraordinary. No subject or pursuit, arid or even repulsive though it be, but can afford the material for an interesting sketch or series of sketches, to him who possesses the peculiar turn of mind necessary to this kind of research. To detect romance in the study of obstetrics will seem, to many people, analogous to Samson's feat in resorting for honey to the decomposing carcass of a lion. This, nevertheless, is the task which an ingenious Frenchman has set himself, and which he has fulfilled in a very erudite little work on the various modes of conducting labour in different climes and races. It must be borne in mind that the ethnical part of obstetrics is, in reality, less a branch of medicine than a heterogeneous collection of customs and traditions, handed down from generation to generation, among nations uncontaminated by our civilisation, and, consequently, innocent of any rational knowledge of obstetrics as a science. Imitating, to some extent, the arrangement of the ordinary text-books, Dr. Verrier commences by a little comparative anatomy of the pelvis, which he classifies into three general shapes: the Caucasian, the Asiatic or round pelvis, and the Oceanic pelvis, the characteristic feature of the latter being an unusual conjugate diameter. He is disposed, though possibly on insufficient grounds, to contribute the comparative ease of delivery in the females of savage races, to the more primitive shape of the pelvis. Further data are required to elucidate this point, which, in any case, is probably the result of several coincident causes.

Dr. Verrier has illustrated his book with a series of little drawings for the purpose of aiding the comprehension of the *modus operandi* of the different races, more especially in the matter of posture. He divides postural devices into five classes, comprising the method of delivery in the erect position, or on the knees, inclined forwards or backwards, seated on the ground, or in the arms or on the knees of an assistant; on the orthodox obstetrical chair; and, lastly, the classical horizontal position, which may be dorsal, as in France, lateral, as in England, or abdominal, as in some parts of Africa. The sketches illustrating these different positions are exceedingly curious, as may be imagined. In one we are treated to the picture of the robust husband, on whose knees the parturient woman is sitting encircled by his arms, supplying a rude additional expulsive force by means of a bear-like hug. In another, the recalcitrant fœtus is urged to appear, by placing the female on the ground with the face downwards, and standing on her back. Various other manipulations are also resorted to, such as tossing the unhappy female in a blanket or other mode of the rough and tumble kind. Unfortunately, statistics are wanting as to the results of laborious confinements under these circumstances; but it is quite possible that, considering the favourable conditions of the environment, they might compare advantageously with the results in more civilised communities, where the benefit of enlightened treatment is not invariably to be obtained, and where the hygienic conditions are often adverse. On the whole, the most generally received is a crouching posture, similar to that adopted for the purpose of defæcation. The volume terminates by two chapters devoted to subjects not commonly treated of in works on obstetrics, namely, ethnical mutilations of infants and infanticide.

The subject is full of interest to the medical man in whom the exercise of a laborious profession has not stifled the capacity for enjoyment of what we may term technical curiosities. It will interest the physiologist by the information given on the question of the appearance of the menses under different climatic conditions, and the student of evolution from the author's remarks on the anomalies resulting from cross-breeding.

At the last meeting of the American Surgical Association, which was held in Washington on April 30th, Sir William MacCormac was elected an Honorary Fellow of the Society.

RESTORATION OF THE OXFORD MEDICAL SCHOOL.

On Tuesday, the statute by which, in future, students in natural science will be exempted from the first public examination in classics known as "moderations," was submitted to Congregation, and approved by a large majority—94 to 29—and will, no doubt, shortly receive the final sanction of the University.

By this measure, intending students of medicine will be able, after passing responsions, to devote the first year of their residence in Oxford to the study of the preliminary subjects in natural science, and, consequently, to begin the study of human anatomy and physiology two years after matriculation. The last barrier in the way of the establishment of a Medical School at Oxford will thus have disappeared.

The following announcement appears in this week's *Gazette:* "Owing to the increase in the number of undergraduates who are studying medicine in the University, it is found that a dissecting-room, which was provided by private subscription when the lecturer on human anatomy was appointed, is not sufficiently large for its purpose, and it is now proposed to put up a temporary building, which will accommodate, if necessary, as many as eighty students." A decree for this purpose will be submitted to Convocation on June 15th.

The new Faculty of Medicine has now been constituted, and held its first meeting on May 21st. We need not say with what pleasure we record so important a consummation. The notice of "The Lost Medical School" will now disappear from our columns, and that more speedily than we had ventured to anticipate when we entered on a campaign which appeared well-nigh hopeless, looking to the powerful forces of obstruction and masterly inactivity which were arrayed against the constitution of the Medical Faculty and the restoration of a Medical School at Oxford. The most promising sign of the new development, is that the most active enemies of a medical school at Oxford are now posing as its long-lost and much misunderstood allies and supporters. Nothing could be better than this; there is much joy over such repentance.

THE REGULATION OF DAIRIES.

We were able to announce, some weeks ago, that the Government had in contemplation the introduction of a measure which should transfer the supervision of dairies and cowsheds from veterinary authorities to the local urban and rural sanitary boards. We have urged this reform, in season and out of season, for the last eight years, ever since the ill-conceived Section 34 of the Contagious Diseases (Animals) Act of 1878 got upon the statute-book. If Mr. Dodson had been reasonably energetic in 1883, it might have been effected then; but, with many other innocents, the Dairies Bill of that year was sacrificed at the altar of political indifference. However, included in the new Contagious Diseases (Animals) Act of this session, introduced by Lord Spencer on the 28th May, are two important clauses, one conferring power on the Privy Council, to bring within their jurisdiction cases of dogs infected with rabies, and the other transferring from the Privy Council to the Local Government Board powers as to the regulation of dairies. The Lord President said the Government believed that the powers now existing with reference to this would be much better exercised by the Local Government Board. He had a return before him which showed that the local authorities had not put this part of the Act of 1878 very much into force, and it was thought that the officers of the Local Government Board would be better able to see that the provisions of the Act were carried into effect. In the present state of matters political, it is impossible to be sure of anything; but, as the Duke of Richmond promised to do "all in his power to assist the noble earl in passing this very useful Bill," we may at least indulge the hope that, if nothing else receive the Royal Assent, this Bill may.

The Library of the Royal College of Surgeons of England will be closed on Wednesday and Thursday, June 9th and 10th.

Cambridge is about to confer upon Dr. Oliver Wendell Holmes the honorary degree of Doctor of Letters. It is also stated that Dr. Holmes will shortly pay a visit to Oxford, as the guest of Professor Max Müller.

The *Sei-i-Kwai Medical Journal* states that the Japanese Government is about to send, with the consent of Lord Dufferin, three officers of the War Department to India. One of them is an army surgeon, Mr. Sudengya Hideji, a graduate of the medical department of the Tokio University. He has had considerable experience in bacteriology, and takes with him apparatus for the study of the state of the blood in beri-beri.

THE TREATMENT OF STRICTURE BY ELECTROLYSIS.

We understand that Dr. Steavenson's and Mr. Bruce Clarke's paper on this subject, read before the Royal Medical and Chirurgical Society, on May 25th, has excited considerable interest; and that the system is likely to be fairly tried, on a large scale, in several institutions. Amongst other items of news, on this method of treatment, we hear that a special department, for the treatment of stricture by electrolysis, is now being organised at St. Peter's Hospital for Urinary Diseases.

"ONE DOSE AT A TIME."

The "herbalists" have many friends in Parliament, whose attention might be directed to an inquest, held on May 22nd, at Oldham, on the body of a labourer named James Kelly. The deceased purchased half an ounce of lobelia seeds from a "medical botanist." Next day, he took two doses, mixed with warm water. He became worse, and was attended by two qualified practitioners. The following day he was removed to the infirmary, where he died on the same day. A *post mortem* examination was made, and the cause of death was ascribed to narcotic irritant poisoning; and the jury returned a verdict to the effect that the deceased died from an overdose of an emetic, whilst in a low condition of health, and mildly recommended that those who sold lobelia should sell only one dose at a time.

ARRIS AND GALE LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

The first of Dr. Wooldridge's lectures, on the Physiology of the Blood, was delivered at the Royal College of Surgeons, on Monday, May 31st. The lecturer described his method of isolating, in large quantity, the stromata of the red corpuscles. Chemically considered, the stromata were identical with a special form of fibrinogen contained in the blood-plasma, and in the fluid of lymphatic glands. The injection of a solution of stromata into the vascular system caused death, owing to widely spread intravascular coagulation. Dr. Wooldridge further pointed out that the blood-plasma was really fluid protoplasm. For, on the one hand, it could be shown that the plasma was irritable, in the same sense as muscle was irritable, so that it responded to mechanical stimulation by clotting; on the other hand, it was shown that, by simple physical means, such as cooling the plasma, a precipitate could be produced, consisting of definite rounded discs. These were absolutely indistinguishable in any way from "Blütplättchen." On the other hand, it had been demonstrated by other authors that the "Blütplättchen" were definite form-elements, both on account of the

actual properties of these bodies, and the analogy between the nucleated "Blütplättchen" of the lower vertebrates and those of mammalian blood. The conclusion of the lecturer was that the blood-plasma contains protoplasm in solution, which may separate in the form of rounded masses, and so form cells.

THE INTERNATIONAL MEDICAL CONGRESS, 1887.

THERE seems to be now no doubt that the International Medical Congress, to be held in the United States next year, will be so organised as to give, to foreign visitors, at least, a very pleasant holiday. The difficulty which arose, owing to the action of the American Medical Association, has not been adjusted, but it has been overcome; for the Association appears to have succeeded in getting its own way, though at the cost, according to the *New York Medical Record*, of "the resignation and withdrawal of the great majority of the American physicians best known abroad and at home.....Still, we say to foreign delegates, you will meet a large number of able and hospitable gentlemen at the Congress; you will be made warmly welcome by all Americans; and you will hear no quarrelling while you are in the States."

WHAT IS A MEDICAL CONSULTATION?

THIS question is suggested by some remarks made at an inquest in a Manchester suburb the other day, by a druggist, who complained that medical men refused to meet him in consultation, on account of some "unpleasantness," as he euphemistically termed it, arising out of one or more previous inquests. A medical consultation can only take place between medical men; a conference might conceivably be held with a druggist, to decide how best to conceal the taste of a nauseous remedy, or to settle some similar point of detail, but no medical man would think of holding a consultation about the medical aspects of a case with a druggist, any more than he would with the village parson or the undertaker, with both of whom he might, however, confer. In the case in question, the druggist was "in at the death" of a man from hæmophilia; and, instead of posing as a man with a grievance, because nobody will meet with him in consulation, he ought to think himself most fortunate that the inquest terminated only in a censure, and not a verdict of manslaughter, a verdict which the circumstances of the case would have fully warranted.

LITTER AND STRETCHER STATIONS IN THE METROPOLIS.

THE St. John Ambulance Association has added to the much good work it has been instrumental in effecting by aiding in the establishment of litter and stretcher stations in different parts of the metropolis. We have received a copy of a neatly printed card of convenient size, giving a plan of No. IX District, Metropolitan Centre (Kilburn and neighbourhood), showing eight litter and stretcher stations, each of which is designated on the plan by a red Geneva Cross. Surgeon-Major Platt, of the Volunteer Medical Staff Corps, has, with the co-operation of the president and committee of the district, been instrumental in purchasing the necessary materials, and in placing the litters and stretchers in position; and let us hope that this good work, which he has been enabled to do in this one district, may be carried into effect in other parts of the metropolis. Plans, showing the litter and stretcher stations, are to be distributed to all the medical men and police in the district; and larger cards are to be posted in the railway-stations, public-houses, and shop-windows.

DEGREES IN MEDICINE FOR LONDON STUDENTS.

ON Monday evening last, a well attended meeting of the Metropolitan Counties Branch and other members of the medical profession was held at the Royal School of Mines, Jermyn Street, to consider the above-named subject. Dr. Walter Dickson, President of the Branch, took the chair at 8 P.M., and explained the object of the meeting. Sir Andrew Clark then proposed the following resolution, which he defended in an able speech: "That, negotiations with the University of London not having led to the desired result, this meeting recommends that the Royal College of Physicians of London and the Royal College of Surgeons of England should continue their endeavours to obtain power to grant Degrees in Medicine." The resolution was seconded by Mr. Jonathan Hutchinson, and supported by Mr. C. Macnamara, Dr. Habershon, Dr. Moxon, Dr. Broadbent, and Dr. Sansom, and criticised by Dr. Pye-Smith and Dr. Collins. An amendment in favour of a teaching university was proposed and seconded, but found no support; and the original resolution, when put to the vote, was carried *nemine contradicente*. A more full report of the proceedings is deferred until next week.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society on Wednesday last, June 2nd, a large number of new Fellows were elected, and the President announced the names of a great many candidates for election. Dr. J. Phillips exhibited a specimen which illustrated a case of twin labour, complicated by the presence of a large fibroid tumour of the uterus. The patient was thirty-six years of age, and was in the seventh month of pregnancy. She suffered from severe dragging pain in the umbilical region, which no amount of morphine could relieve. A large outgrowth on the front of the tumour was taken for the head of a third fœtus. Labour was induced; the pelvis was found to be blocked anteriorly by another outgrowth; and, although there was no flooding, the patient died thirteen hours after delivery. The dragging pain appears to have been caused by an adhesion to the round ligament of the liver. Dr. Herman showed a fœtus, placenta, and fœtal extra-uterine cyst, which he had successfully removed entire from a patient. This gave rise to a discussion on the important question of the treatment of the placenta and cyst in extra-uterine pregnancy. Mr. Thornton exhibited an ovarian tumour, and a fibroid uterine growth, removed from the same patient; the uterine growth had been shelled out of its capsule with comparative ease. Three papers were read, and will be noticed in the full report of the meeting.

THE BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE sixty-fourth annual general meeting of the Birmingham Medical Benevolent Society was held on May 28th. Mr. C. A. Newnham, of Wolverhampton, was in the chair, and there was a good attendance of members. The annual report stated that the Directors could again point, with unalloyed satisfaction, to the continued activity, prosperity, and usefulness of the Society. The invested funds amounted, at the end of the year 1885, to upwards of £10,630. During the year, fifteen annuitants had received grants, varying in annual value from £10 to £40. The roll of benefit members contains two hundred and sixty-eight names; and that of honorary members, fourteen. The financial statement showed that the total receipts, during the year, were £633 19s. 8d., and comprised the following items: donations, £17 19s.; subscriptions, £113 8s.; interest on investments, £502 12s. 8d. Dr. James Johnston was appointed President for the ensuing year, and Mr. Alfred P. Evans, of West Bromwich, was chosen as President-elect. Mr. William Thomas, of Birmingham, and Dr. Wyer, of Leamington, were elected Vice-Presidents. Dr. Rickards, Mr. H. M. Morgan (Lichfield), and Mr. Priestley Smith, were added to the directorate. Mr. Bartleet and Sir James Sawyer were reappointed Treasurers; and Dr. Thomas Savage was re-elected Honorary Secretary. The members afterwards dined together at the Grand Hotel, under the chairmanship of the new President, Dr. Johnston.

A VALUABLE SOCIETY.

THE annual general meeting of the Society for the Relief of Widows and Orphans of Medical Men, was held in the rooms of the Society, 53, Berners Street, on Wednesday, May 19th. The President, Sir James Paget, was in the chair. The death of Dr. Harvey Kimpton Owen, a Vice-President, was announced, and a vote of condolence to the family passed. The Report of 1885 was read by the Secretary,

and it showed a decrease of three members on those of the year before, the total number of members being 363, out of a possible 4,000. The number of widows receiving grants had increased from 61 to 64, and one orphan had been added to the list. The grants during the year had amounted to £3,028, the largest sum ever given. The expenses of the year were £220. The receipts during the year had not sufficed to pay the grants and expenses, and the deposit account had been drawn upon to the extent of £103, to make up the deficit. A legacy of £100 had been received from Dr. Nathaniel Rogers. The legacy and £76 odd, life subscriptions, had been invested in accordance with the by-laws. A grant of £26 was made to a widow, under law 78. A vote of thanks to the editors of the medical journals, for their kind assistance in making public the objects of the Society, was carried unanimously. Sir William Bowman and Dr. Iliff were elected Vice-Presidents, to fill the vacancies in the list, and the following gentlemen Directors, Mr. T. H. Smith, Mr. Merriman, Mr. Vasey, Mr. Hutchinson, Dr. Godson, and Dr. Potter. The best means of extending the Society, and of inducing members to join, were discussed. The Secretary mentioned the case of a widow who had received for herself and children £2,272, her husband having only paid 18 guineas as subscriptions. A vote of thanks to the chairman brought the meeting to a close. Attention can scarcely be too often drawn to this old and excellently managed Society. So large are the benefits derivable from its funds, that any subscriber of £2 2s. may feel assured that, should he die in distressed circumstances, his widow and her orphans will certainly receive handsome annuities and provision for education of the children. Membership is limited to those subscribing while resident in London, but subsequent removal does not invalidate the claim.

DR. ORANGE, C.B.

THE resignation of his post as Superintendent of the Criminal Lunatic Asylum at Broadmoor by Dr. Orange, is an event which will call forth the deep regret of the general public, as well as of his professional brethren. Exactly four years ago, Dr. Orange was assaulted by an inmate, the Reverend H. J. Dodwell (found insane after firing at the late Master of the Rolls), who struck him a violent blow on the head with a stone wrapped in a handkerchief. From this injury he has never recovered, and for many months he has felt it a great strain to carry on his arduous duties; and at last he has been compelled, owing to the impairment of his health, to place his resignation in the hands of the Secretary of State. More than twenty-three years ago, Dr. Orange entered upon his duties as Deputy Superintendent of Broadmoor Asylum, and he was there to receive the first draft of patients admitted. In 1870, he was appointed to the office of Superintendent, vacant by the sad and unexpected death of Dr. Meyer. His eminently successful administration of this post has been testified to over and over again in our columns and elsewhere; and, when we recollect the dangerous and intractable character of the lunatics sent to Broadmoor, its Superintendent cannot be said to hold an office which is either a sinecure, or free from constant risks of all sorts. Dr. Orange's management of Broadmoor has been characterised by a judicious firmness, combined with a most kindly consideration for the interests of the unfortunate patients who came under his care. He will be greatly missed by them; while, as an evidence of the estimation in which he was held by the officers and staff of the establishment, he was, last Monday, presented by them with a handsome and substantial silver salver, and many expressions of regret at his departure and cordial good wishes for his future. When referred to, as he frequently was, in cases of capital offences where the mental condition of the offender came into question, his investigations were thorough, his decisions clear and sound; and his recommendations were, we believe, invariably carried out, and never failed to be satisfactory, not only to the authorities, but also to the general public, in whose estimation he deservedly stood high. For his public services, Her Majesty the Queen has been pleased to decorate him with the Order of the Bath; and we heartily congratulate him on the honour. We ourselves have often benefited by his opinion, as he was a member of the Parliamentary Bills Committee; and recently his counsels availed much in the discussion of the Lunacy Law Amendment Bill, when it was under consideration. While we cannot but sincerely regret that Dr. Orange has found it necessary to retire from active service, he carries with him many expressions of good will, and of a hope that, after a long rest from the strain that he has so long and so honourably borne, he may find his health very much benefited.

MR. WHITE COOPER.

ALMOST simultaneously with the announcement of the gracious intention of the Crown to confer the honour of knighthood upon Mr. White Cooper, comes the sad intelligence of his unexpected and sudden death. Mr. White Cooper had for many years held the appointment of Surgeon-Oculist-in-Ordinary to the Queen. He was ophthalmic surgeon to St. Mary's Hospital for nearly twenty years, and, on his retirement from that post, was elected consulting ophthalmic surgeon. A man of great gentleness and amiability of character, polished manners, and of great kindness of heart, he may be said to have been surrounded by friends, and never to have made an enemy. His contributions to ophthalmic literature were made chiefly before the introduction of the use of the ophthalmoscope; but he took great pains to familiarise himself with the discoveries of Helmholtz and of Liebreich, and was very successful in practice. He had for some time suffered from symptoms of failure of the heart's action, but no one could have anticipated the sudden and lamentable stroke which has cut short his career at a moment when a mark of honour, which he highly esteemed, promised to brighten a career still full of possibilities of usefulness and happiness. His family, who are thus bereaved of one of the most affectionate parents and husbands, will have the deep sympathy of a large circle of sorrowing friends. We understand that Mr. White Cooper had been in his ordinary health up to Friday evening, May 28th, when he became indisposed; symptoms of pneumonia subsequently developed, and proved fatal on the fourth day of the illness. Mr. White Cooper had passed safely through a prolonged illness, complicated by extensive phlebitis of the lower extremities, last year, and appeared to have entirely recovered his general health. In the *Court Circular*, dated June 3rd, the following paragraph appears:—"The Queen has received this morning with great regret, the news of the death of Mr. White Cooper, who attended her Majesty for upwards of thirty years as oculist, and for whom Her Majesty had a sincere regard."

INOCULATION FOR YELLOW FEVER.

THE modern expedient for settling knotty points in science is to appoint a Commission; success, it is true, has not uniformly attended this method, and the reports, if not polemical, are generally colourless. Yellow fever is the disease which is now to be investigated in this way. A few years ago, Dr. Domingos Freire announced that he had prepared a vaccine which preserved the vaccinated from yellow fever; his method of experimenting, however, did not commend itself to the bacteriologists; and M. Rebourgeon, who had been trained in M. Pasteur's laboratory, was sent out to Rio de Janeiro to guide Dr. Freire into the right way. The papers since published by these two experimenters confirmed the earlier claims, and M. Rebourgeon has returned to Paris to convince the sceptics; he informed the Société de Biologie at its meeting on May 22nd, that, during the recent epidemic, 6,000 persons had been inoculated, of whom not one suffered from the disease; and that, in seven cases where patients were inoculated while suffering from the disease, recovery took place in every instance. The Society appointed a Commission of five, including MM. Brown-Séquard and Cornil, to study the method. In the United States, moreover, the demand for a Commission has been backed by the American Medical Association.

THE NEW ASSISTANT-SECRETARY OF THE LOCAL GOVERNMENT BOARD.

It is in one sense unfortunate for Mr. Edmond H. Wodehouse, the new Assistant-Secretary of the Local Government Board, that he should be a relative of a member of the Cabinet. Mr. Wodehouse's selection is well justified by his record of long and efficient service. He has been for twenty-three years a general inspector in the service of the Local Government Board, and one of the ablest, and we are not at all sure that we ought not to commisserate very heartily with him for having to exchange the pleasant out-of-door work of inspection in the loveliest counties of England, for the drudgery of a junior assistant-secretary in a public office. He is now in his district a species of benignant autocrat in all matters concerning the poor-law and local government; and he is able to arrange his work so as, to a large degree, to fit it with his own views and inclinations, whilst his travelling expenses are considerately refunded by the State. For the future, he will be swathed in red tape, and overwhelmed with petty and exasperating detail. He will have perpetually to be untying knots made by ignorant or troublesome boards of guardians; and he will have to write his autograph as many times a day as a popular actor. Instead of being subjected to envious grumblings, Mr. Wodehouse really seems to us to be deserving of our sincerest sympathy.

ROYAL MEDICAL BENEVOLENT COLLEGE.

The annual report of the Council is very satisfactory. The result of the management of the College, under the new head-master, shows continuous progress, and the old boys have made a good mark at University examinations, at which they have competed. The finance of the College has been greatly aided by the presidency of Sir Andrew Clark, at the festival dinner. One donation, amounting to £2,000, from a grateful patient, was handed in by the chairman, and upwards of £4,000 were altogether added to the funds. It is satisfactory to find that the Governors have this year acceded to the conclusions which we have recently urged upon them, in the matter of decisively checking the costly and inefficient canvassing which had still been continued in defiance of the overwhelming expressions of opinion embodied in the resolutions, forbidding such canvassing, and leaving it to the committee of selection to weigh carefully the relative claims of applicants. At the last election, the three candidates for pensions, and the seven candidates for scholarships, whose claims had been announced to be most cogent, after examination by the Committee of Selection, were duly elected. We lay great stress upon this matter, because the great object of such a charity is that the most distressed should be benefitted, and that mere importunity, or the arts of successful canvassing, shall not avail against the painful necessities of the poorest and the most suffering. It is sad to find how small a proportion of those who are forced to claim the charity of the College, have, in the past, contributed to its funds. Surely such an institution as this deserves much more extended support than it receives. Moreover, moving, as medical men do, among the wealthy and the charitable classes, they would do well to have always in their possession the documents which explain the claims of this most useful charity, and to put them, at seasonable times, in the hands of their well-inclined patients.

JOHN HUNTER.

The unveiling at Oxford, by the Princess Christian, of the statue of John Hunter, presented by Her Majesty the Queen, took place on Saturday last, at the University Museum, amid a large gathering of science-professors and others. Among those present were the Vice-Chancellor, the Dean of Christ Church, Mr. Goldwin Smith, Sir H. Acland, etc. Sir James Paget gave a short and interesting address on the character and work of John Hunter, with special relation to the effect of his labours on surgery and medicine, of which we shall next week publish a special report. Sir H. Acland followed with an account of the development of scientific studies at Oxford, due greatly to the encouragement given by the Queen and the late Prince Consort. It was fitting that a daughter of these two, who had herself translated an important surgical work, should present Her Majesty's gift to the University. The statue of John Hunter was, he explained, the last of a series of five presented by the Queen in answer to the application that she would give one. Circumstances, and the death of Mr. Munro, the sculptor, had caused delay in completing the series. The company then adjourned to the Court of the Museum, where Her Royal Highness the Princess Christian performed the ceremony of unveiling the statue, which is a happy reproduction, with the necessary modifications, of the picture by Reynolds. The sculptor, Mr. Pincker, whose bust of the late Dr. Rolleston is also in the museum, was subsequently presented to Her Royal Highness, and the proceedings ended with a few words from the Vice-Chancellor.

THE DRAINAGE OF THE HOUSE OF COMMONS.

It used to be said that it would be necessary to kill a bishop or a railway-director in a collision before proper safety-appliances would be provided by railway companies. It would almost seem as if this well-worn remark were about to be dethroned in favour of one requiring the death of a Member of Parliament from typhoid fever as an essential preliminary to the commencement by the responsible authorities of the drainage and ventilation works required to make the House of Commons decently habitable. We have, on several different occasions, pointed out the importance of remedying the evil, which the House honoured by using as an occasion for earlier adjournment than usual on May 26th. Being thus, as it were, upon the minutes of the House, we trust—for our national credit as well as for the health of our legislators—that there will be no delay in the institution and carrying out of the necessary measures of reform. The Office of Works has now no excuse. It cannot shelter itself behind the conflicting reports of engineers and experts. It has a plain duty to perform, and we trust the medical members of the House will see that it does it, without the fuss and delay which are characteristic of Government departments. A Parliamentary paper has been published, containing the second report of the Select Committee on the ventilation of the House. The report, which is dated May 31st, contains the following summary of recommendations made by the Committee: A. Involving money votes for works.—1. That the drainage of the Palace be cut off entirely from that of the metropolitan system by pumping the sewage by means of Shone's pneumatic ejectors; and that the main sewer passing under the Houses of Parliament be reconstructed on the most approved modern principles. Approximate cost, £8,000. 2. That all soil pipes, closets, urinals, lavatories, waste-pipes, and sinks, be at once cut off from direct communication with the sewers, and properly trapped and ventilated. Approximate cost, £3,200. 3. That the middle auxiliary drain or sewer running from north to south, be entirely renewed, with such increased fall as can be given, and that, as far as possible, all closets, urinals, and sinks in the basement now draining into it, be removed. Approximate cost, £1,100. 4. That the east and west drains be examined and put into proper repair. Approximate cost, £500. 5. That the steam and hot water now allowed to enter the sewers be condensed and cooled. Approximate cost, £325. 6. That the ventilation of the kitchens be improved. Approximate cost, £140. 7. That improvements in means of obtaining fresh air in the House of Commons and in the Commons' lobby be made. Cost not ascertained. The system of ventilation should be effected by mechanical appliances, giving rise to a *plus* pressure, rather than by an exhaust giving a *minus* pressure. Making a total estimated expenditure of £13,265. B. Not involving money votes for works.—1. That a central authority be placed in charge of the various departments of the building which require sanitary inspection and control. 2. That an accurate plan of the basement of the building, showing position and level of every drain-pipe, etc., be prepared, and a duplicate copy placed with the public records. 3. That the Local Government Board be requested to call upon sanitary authorities to prevent nuisances caused by the imperfect combustion of refuse materials in

the neighbourhood of the Palace. 4. That no carriages or horses be allowed, under any circumstances, to remain or stand in either of the courts where the inlets of air are drawn from.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

A MEETING of this Society was held in the rooms of the Medical Society of London, last Tuesday; the President, Dr. Norman Kerr, in the chair. The first paper was "On the Sanitary Aspect of Inebriety," by Dr. T. D. Crothers, Hartford, Conn., U.S.A. The author pointed out the serious influence which inebriety exercised on the public health, by heightening the susceptibility to disease, and by lowering the recuperative power, as well as by causing a very large proportion of preventable premature deaths. In the United States, at the very lowest computation, 60,000 lives were prematurely ended every year by inebriety, though, probably, the real number was nearly double that figure. This meant a serious withdrawal of producing power from the community, and an alarming addition to the burden on the sober remainder. The proportion of crime caused by inebriety was calculated as 98 per cent. in Canada, 80 per cent. in New York City, and above 50 per cent. over America generally. Inebriety was a true disease, and must be treated as such. Professor Justus Radius (Leipsic), described his treatment of delirium tremens. He gave the excited patient a sitz-bath, at 91° Fahr., pouring a few buckets of water at 50° Fahr. over the upper part of the body, following all these measures up with friction with a coarse linen towel. Sound refreshing sleep was frequently the happy issue. A discussion ensued, in which Dr. F. H. Parsons (Worthing), Dr. H. W. Williams Dr. Paramore, Mr. Raper, and Dr. Joseph Smith, took part.

THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.

THE tenth annual meeting of the above Association was held on Friday, May 28th, in the rooms of the Medical Society of London, Chandos Street; Dr. Richardson, F.R.S., the President, in the chair. The Honorary Secretary, Dr. J. J. Ridge, read the annual report, which showed there are now 341 members (totally abstaining registered practitioners) and 56 associates (totally abstaining medical students), being a nett increase, during the year, of 32 members and 19 associates. The Scottish and Irish Branches are flourishing; Professor McKendrick being President, and Dr. P. A. Young Honorary Secretary of the former; and Deputy Surgeon-General Gunn, President, and Dr. McDowel Cosgrave, Honorary Secretary, of the latter. A new branch, to be called the North of Ireland Branch, is being formed, having its head-quarters at Belfast; Dr. MacKenzie is the Honorary Secretary. After the usual business, Dr. Ridge read a paper on the Aims and Claims of the Association, emphasising the duty of the medical profession to warn the public, both by example and by precept, against the habitual use of all narcotics, and especially against alcohol, the most commonly employed narcotic in this country. It was particularly in the province of medical men to do this, as alcohol, by its progressive paralysis of the judgment and power of self-control, was a material cause of moral evil. Drs. Norman Kerr, Morton, Lord, and others, joined in a subsequent discussion, and a vote of thanks was unanimously accorded to Dr. Ridge.

ROYAL SOUTH HANTS INFIRMARY.

AT a meeting held in Southampton, on May 17th, of the Governors of the Royal South Hants Infirmary, a discussion took place with regard to a rule, which provides that a candidate for the post of physician must have resided for three years in the town of Southampton. Dr. Lake proposed that, as Southampton had increased so greatly in extent as to have absorbed several neighbouring villages, the rule should be modified so as to make the area, within which a candidate might reside, coincide with the limits of the Parliamentary borough. An amendment was moved, dispensing with any residence within fixed boundaries before election, and throwing the appointments open to the whole of the United Kingdom. To this, it was objected, on behalf of the medical staff, that it was most important to have some personal knowledge of a candidate before electing him as a colleague. The amendment was lost by one vote, and Dr. Lake's resolution received the support of the majority of the governors present. A two-thirds majority was, however, required to legalise an alteration in the by-laws, and the majority for Dr. Lake's motion did not amount to this; in consequence, the very reasonable proposal made by the medical staff dropped, and the Governors of the infirmary are left with an obsolete restriction upon their freedom of choice. It is easy to understand the objection felt to the amendment—an objection founded, it is clear, not upon jealous exclusiveness, or a fear of fair competition, but on the very natural reluctance to run the chance of choosing, as a colleague, a man only known by testimonials. The choice of a physician is, to the other members of the medical staff, a very much more serious matter than the selection of a house-surgeon; the latter is a junior officer, whose services may, without prejudice to him, be dispensed with at the end of a limited term of office; while the former is a permanent colleague, who, under ordinary circumstances, will retain office for life, or until superannuated. The whole system of appointment by testimonials is open to so many abuses, that many men have come to disregard testimonials entirely, and to depend altogether on personal knowledge, or the private advice of an acquaintance, in making choice of a candidate to support for a vacant post. It is impossible to set up any standard by which to estimate the value of testimonials. To judge by the eloquent letters which candidates produce from them, some teachers must live in a continual state of astonishment at the brilliant abilities and enchanting social qualities of the large proportion of their pupils; while there are others who can hardly be moved, even by the most conspicuous merit, to more than a dry statement of facts that might be found almost as fully in the *Medical Directory*.

SCOTLAND.

GLASGOW UNIVERSITY.

THE final examinations for degrees in Medicine and Surgery began on June 1st. The number of candidates is 130. The clinical examinations, beginning on June 1st, last till the first week in July. The written examinations are to be held on July 12th, 13th, and 14th.

GEOLOGICAL SOCIETY OF GLASGOW.

THE last meeting of the present session of this Society was held on May 27th, Mr. William Jolly, F.G.S., in the chair. A paper on the Geology of Annandale, was read by Dr. J. R. S. Hunter, who discussed the historical, stratigraphical, and palæontological features of the district. Dr. Hunter illustrated his paper by a large number o specimens from his "Braidwood" collection.

GLASGOW SOUTHERN MEDICAL SOCIETY.

AN adjourned meeting of this Society was held on May 20th, for the purpose of discussing more fully various questions raised by Professor Macleod, in a paper on Some Practical Points in Surgery, read to the previous meeting. The more important "practical points" of Dr. Macleod's paper were the diagnostic value of comparison of similar parts, the treatment of gleet by the introduction of large-sized catheters, the treatment of retention of urine by suprapubic aspiration, and the symptomatology of scirrhus of the mamma. Some of the members of this Society have set themselves the task of endeavouring to find some solution for the problem of medical charities and their proper organisation. As the result of a paper on Medical Charities, read by Dr. James Erskine, Junior Surgeon to the Glasgow Ear Hospital, a committee was appointed to consider the question fully, and propose some practicable method of procedure. It is anticipated that, as a result, some really earnest attempt will be made to remedy the

abuses of medical charities, as seen in a large city like Glasgow; while, at the same time, making the charities of the utmost public usefulness.

KNIGHTHOOD FOR PROFESSOR DOUGLAS MACLAGAN.

AMID the din of political strife, and the perplexities which have caused the present turmoil, it is pleasant to be able to record an event, about which all parties will be agreed, and which will be a source of pleasure to all. Such an event is the intimation which has been made, that Her Gracious Majesty the Queen has been pleased to confer the honour of knighthood on Dr. A. Douglas Maclagan, Professor of Medical Jurisprudence and of Public Health, and Emeritus Professor of Clinical Medicine in the University of Edinburgh, President of the Royal College of Physicians, Edinburgh, etc. It is not necessary, in this paragraph, to recapitulate the many services Sir Douglas Maclagan has rendered to the public and to the profession, and these have been fittingly acknowledged by his having held so many positions of honour and of trust. At present he stands in the unique position of being President of the Royal College of Physicians, after having been, some years ago, President of the Royal College of Surgeons, Edinburgh; and it is worthy of notice that his father, before him, had occupied the same positions. Apart from all other labours, his initiation of the teaching of public health, and his unwearied efforts to advance the subject, and give it its proper place in a great medical school, would warrant the distinction of knighthood. But, to the many thousands who have met Sir Douglas Maclagan, as students, clerks, or colleagues, there will be even a warmer feeling than that created by mere recognition of worth, for to them is especially known his personal worth, his manly advocacy of everything that is noble and good, and the heartiness with which he enters into every scheme which is for the benefit of the students. There will be but one wish among them all, and that is that he may long be spared to enjoy those honours which in his green old age so well befit him.

IRELAND.

THE Royal Medical Benevolent Fund Society will hold its annual meeting on Monday next, June 7th, at four o'clock, at the Royal College of Physicians, Kildare Street, Dublin.

THE MATER MISERICORDIÆ HOSPITAL.

MR. J. LENTAIGNE and Mr. Arthur Chance, Surgeons to Jervis Street Hospital, have both been appointed Surgeons to the above hospital.

STIMULANTS AT THE BOARD WORKHOUSE.

THE guardians having recently drawn the attention of the Local Government Board to the large increase in the quantity of whiskey consumed in the hospital, have been informed that it was a matter upon which the guardians might ask the medical officers of the workhouse for an explanation.

DUNGARVAN WORKHOUSE.

DR. O'FARRELL, Local Government Board Inspector, has recommended increased hospital accommodation, in consequence of the overcrowding which at present exists. The matter had, on a previous occasion, been before the guardians, who adopted plans for an addition to the institution, and which were approved of by the Local Government Board; but, since then, nothing has been done. The matter, however, will be under consideration next week.

PROPOSED CONVALESCENT HOSPITAL FOR DROGHEDA UNION.

THE late chairman of the Board of Guardians, Mr. Donagh, left some time since a bequest of £500 for the purpose of providing an hospital for convalescents belonging to the workhouse, but no steps have been taken in reference to the matter. Last week, however, the subject was discussed by the Board; and, finally, a committee, including the medical officer of the house, was appointed, to consider the best means of giving effect to the bequest.

ST. VINCENT'S HOSPITAL.

MR. R. F. TOBIN, who, on his recent retirement from the Army Medical Department, was appointed assistant-surgeon to this hospital, has been promoted to the surgeoncy, *vice* Dr. Edward Dillon Mapother, who has been appointed Consulting Surgeon to the hospital.

PROFESSIONAL NONAGENARIANS.

THE deaths of two venerable members of the medical profession in Ireland have recently occurred. On Wednesday last, Dr. James Apjohn, lately Professor of Chemistry in the University of Dublin, and for many years representative of that University in the General Medical Council, died at the age of 91; and last week Dr. Richard Grattan, senior Fellow of the King and Queen's College of Physicians in Ireland, died in his ninety-eighth year. Obituary notices of both will appear in an early number of the JOURNAL.

REPORTED CHOLERA CASES AT COURTOWN HARBOUR.

THE cases of cholera, which were reported to have occurred at this place, have, it is satisfactory to learn on the authority of Dr. Weldon, the medical officer of Gorey district, turned out to have been cases of dysentery. Up to the present, but two deaths have taken place, the first case being that of a soldier who had recently returned from Egypt.

THE LABOURERS' ACT.

AT Cavan Union, last week, a letter was received from the Loca Government Board in reference to the proposed payment of £25 to Dr. Lyndon, and £8 8s. to Dr. Jackson, for inspecting labourers' cottages, being at the rate of one guinea in each case. The Board informed the guardians that 5s. or 10s. was what was paid elsewhere, and, after some discussion, the guardians passed a resolution that the amount asked for should be paid, there being no remedy for it; but requested the Local Government Board not to allow more than 5s. or 10s. a house for all future cases.

BELFAST MEDICAL SCHOOL AND THE ROYAL UNIVERSITY OF IRELAND.

ON May 26th, a meeting was held in the Queen's College, Belfast, to receive the report of the deputation appointed at a meeting of the students, on May 21st, to wait on the Senate of the Royal University, in respect to certain grievances under which Belfast students laboured. Dr. O'Neill presided, and detailed what had occurred, stating that he had placed before the Senate the grievances which the students suffered when presenting themselves for examination, and referred to the indignities and abuses which they had undergone from time to time. From the sympathetic manner in which their statements had been received by the Senate, Dr. O'Neill had no doubt that they would give the matter the careful attention it deserved. A vote of thanks was accorded to the deputation, headed by Dr. O'Neill, for their services in placing the case of the students so lucidly and successfully before the Senate of the Royal University; after which the proceedings terminated.

BELFAST HOSPITAL SATURDAY.

BELFAST Hospital Saturday was held on May 29th, and, whatever the cause may have been, the result is most discouraging. The total amount obtained by a large body of collectors, male and female, who used the utmost zeal and energy for a good cause, only came to £320. This, when compared with last year's return, shows a falling off of nearly £100, or about 20 per cent. decrease, and £240, or nearly 50 per cent. less than the year previous. The weather was all that could be desired; the collectors were anxious—perhaps, some might say, too

anxious—to get all they could; but the result of their exertions proves unmistakably that Hospital Saturday in Belfast is not regarded with popularity by the citizens of that town. The £320 obtained is, however, a welcome addition to the funds of the Belfast Royal Hospital, although the committee of that institution expected a much larger sum.

BIRTHDAY HONOURS.

THE Queen has been graciously pleased, on the occasion of the celebration of Her Majesty's birthday, to give orders for the following promotions in, and appointments to, the Most Honourable Order of the Bath.

To be Ordinary Members of the Military Division of the Third Class, or Companions of the said Most Honourable Order, Deputy Surgeon-General John B. C. Reade, Medical Staff; Brigade-Surgeon George Farrell, Bengal Medical Establishment.

To be an Ordinary Member of the Civil Division of the Third Class, or Companions of the said Most Honourable Order, William Orange, M.D., Superintendent of Broadmoor Criminal Lunatic Asylum.

The Queen has been graciously pleased to nominate and appoint to be Companions of the Order of the Indian Empire, Surgeon-General Michael C. Furnell, M.D., Indian Medical Department, Madras, Surgeon-General with the Government of Madras; Deputy Surgeon-General Alexander M. Dallas, Indian Medical Department, Bengal, Inspector-General of Civil Hospitals, Punjab.

The Queen has been graciously pleased to approve of the honour of Knight Bachelor being conferred on the following gentlemen—Surgeon-General T. Longmore, Professor of Military Surgery, at Netley; Dr. E. H. Sieveking, Mr. W. White Cooper, Dr. Douglas Maclagan, Professor of Medical Jurisprudence in the University of Edinburgh, and Mr. John Tomes, F.R.S.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual general meeting of the Fellows of this College, for the reception of the report of the outgoing Council, takes place this (Saturday) afternoon. There is nothing of any interest in this, the forty-third annual report, on which to comment. It is a bald statement of different resolutions, considered and adopted by the Council, and the action of that body upon the different matters brought before it. As to some of the latter, it would, we think, have been well to have afforded the Fellows fuller information. In the year, 11 candidates were admitted to the Fellowship; 98 candidates received the Letters Testimonial; 5 licentiates received the Diploma in Midwifery; and 11 practising dentists received the Dental Diploma. One lady student had been in attendance on the courses in the school during the current session.

In the report from the lately appointed curator of the Museum, Mr. Alexander McKee, reference is made to the very valuable donation of Mr. Butcher, consisting of a series of casts made by himself, amounting to as many as 562 specimens, and of a number of dry preparations, illustrative of various diseases and fractures of bones. By the generosity of Mr. O'Reilly Deese, a handsome and well-lit museum has been provided for their reception. The erection of a work-room and macerating-room, in proximity to the curator's apartments, form also a valuable addition to the museum. The report of the Parliamentary Committee of the College, upon the Medical Acts Amendment Bill, is given, and the action taken thereon by the Council stated.

On Monday, the election of a President, Vice-President, Council, and officers for the ensuing year, will take place. Mr. William Stokes, Professor of Surgery in the College School, and now Vice-President, succeeds Sir Charles Cameron as President. For the Vice-Presidency, there will be a contest between Mr. Anthony H. Corley, M.D., and D.Sc. (*honoris causâ*), Queen's University, Ireland, and Mr. William Frazer. The Fellows, on this occasion, may vote *in absentiâ*. Both candidates are well known and highly respected; Mr. Frazer as a practitioner and archæologist, and Dr. Corley as a surgeon of high repute and professional distinction. Mr. Frazer, who, although Dr. Corley's senior in years, is considerably his junior in collegiate standing, is the author of a work on the *Treatment of Diseases of the Skin*, and of another on the *Elements of Materia Medica*. He was for some years a lecturer on the latter subject in the Carmichael School of Medicine, and an examiner in it for the College of Surgeons. He has not, we believe, ever held a hospital appointment, or been a member of the Council of the College. Dr. Corley is a surgeon to one of the largest Dublin hospitals, a lecturer on surgery in one of its leading schools, an examiner in surgery in the Royal University, and has been for many years a member of the Council of his College. He also is the author of numerous papers on surgical subjects. The fact that the late President—to whom indeed, a considerable debt of gratitude is due for the admirable way in which he discharged the duties and hospitalities of his office—was a pure scientist, and that the chair has several times been filled by Fellows who did not practise surgery, shows, however, that the College does not consider it necessary that its chief officer should be a representative of surgery, or one who has done anything for the advancement of that art. For the Council, in addition to the outgoing councillors who seek re-election—with the exception of Mr. Wharton, who does not seek re-election, and Dr. Corley—there are five candidates, namely, Sir Charles Cameron, ex-President; Mr. H. G. Croly; Mr. Kendal Franks; Dr. Purefoy; and Dr. Ward.

THE CHOLERA.

ITALY.

THE somewhat sudden and considerable rise of temperature which set in last week has continued, and we are now having the usual weather of the early summer in this country. As a consequence, apparently, there has been a decided increase in the number of cholera cases at Venice, which amounted, in the week ending at midday on the 30th, to 169, with 85 deaths. At Bari, on the other hand, there are fewer cases, the number in the same period having been 27, and the deaths 12; but it must be recollected that Bari has a population not quite one half that of Venice; and, proportionately, the disease has attacked a larger number, and been more fatal there, than in any other district of Apulia.

At Venice, the local hygienic conditions are very bad; the odours from the canals, into which the drains open, being often insupportable in summer, as the stagnant salt-water is not even a sufficient deodoriser. It has had a better aqueduct-supply introduced within the last year or two, but that is probably not the only drinking-water in use; and much remains to be done to improve the sanitary defects, which, to say the least, are quite as numerous there as in other Continental cities. As usual, when the epidemic has secured any footing, the panic is great, and vents itself in an abuse of the authorities, which may be deserved, but is highly illogical, as coming from men, who, wise only after the event, had taken no previous steps to set their houses in order. It is known that other places have been infected from Venice directly, as Udine, for instance, in the Venetian Province, where a fresh arrival from Venice was the first victim.

It would be ludicrous, were it not painful, in connection with such a disease, to see how willing many are to be deceived, and to accept any other explanation than the true one, when the epidemic breaks out suddenly. At Cuneo, in Piedmont, a number of men belonging to the third category of the army—a kind of territorial militia, who had been assembled for the annual fortnight's drill and instruction—were just about to be dismissed to their homes, when a number of them were attacked with most violent symptoms of cholera, and several succumbed very rapidly. Probably there was some difficulty in tracing any source of infection, as the first published information attributed the cases, quite seriously, to the imperfect tinning of the copper vessels used in the barrack-kitchens; but the members of the Sanitary Council of the Province, who were called in, at once declared that the disease was sporadic cholera. The military authorities have ordered a rigorous inquiry; but the result is not yet known, though it is maintained that no great number of fresh cases have been brought into hospital.

In Apulia, the disease has disappeared from Brindisi, but one or two smaller towns and villages have been attacked.

The early appearance of the cholera this year in so many scattered and distant parts of Italy is of bad omen, and a rapid and extensive diffusion of the epidemic with the increasing summer heat is almost inevitable.

HOSPITAL FOR DISEASES OF THE SKIN.—The annual general meeting of subscribers to this institution was held at the hospital, Stamford Street, Blackfriars, on Wednesday, May 19th. The report stated that the number of patients under treatment during the past year was 6,087, their attendances numbering 21,284. The total number of patients treated since the establishment of the hospital, in 1841, has now reached 300,000. The income for the year 1885 was £1,268, of which £416 was received in donations and subscriptions, £680 from paying patients, £89 from invested funds, and £82 from the Metropolitan Hospital Funds.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION

SESSION 1886.

Tuesday, June 1st, 1886.

SIR H. W. ACLAND, President, took the Chair at 2 P.M.

Resignation of Sir H. Pitman.—A letter was read from Sir Henry Pitman, resigning his appointment on the Council, in consequence of increased years rendering it necessary that he should lighten his work.

New Members of Council.—Official notifications were read of the appointments of Sir William Withey Gull, Bart., M.D., as representative of the University of London, from March 31st to October 28th, 1886; and of Sir Dyce Duckworth, M.D., as representative of the Royal College of Physicians of London, for five years, from May 6th, 1886.

President's Address.—The PRESIDENT delivered an address, in which, after describing the principal provisions of the new Medical Bill, he said: The constitution of the Council, and even the individual members of the Council, remain the same, with the addition only of such fresh blood as the practitioners of the three divisions of the Kingdom may, in their discretion, see fit to add to your body. Thus your educational work now in continuous progress need receive no check, but will obtain rather assistance from the cessation of a weary period of uncertainty. You can steadily proceed with that which is in hand without the fear, hitherto always impending, that your labour might be thrown away. For this result, the medical profession and the public have reason to be grateful to the Government. With the minor details of the Bill I need not at present detain you. I proceed, therefore, to say briefly what is the work before the Council in this session. Primarily, it is still educational. Time was, in years gone by, when it was hoped that some final resolutions would be arrived at, and that a royal road could be found for laying down rules for general, for scientific, and for professional education and examination. This road, after much exploration, is not yet discovered. But, assuredly, for the present, we have data enough, without further reports and inquiries. Do not students, not to say teachers and examiners, want rest rather than change? Do they not all need the assurance that their work, faithfully done, with the simple aim of making good practitioners, will be accepted without the endeavour to draw "hard and fast lines" which will be frequently changed? Can it be that such details as the modes of marking the duration of time for written papers, and even the modes of distributing the papers, adopted by great examining bodies, are to be any longer subjects of detailed and costly investigation? It is not alleged that any body now wilfully makes default in examining; though it may be still possible that among large numbers of candidates some good are rejected, and also that, through the skill of "crammers"—or, to be more truthful, through the want of power to make examinations an unerring test of practical knowledge which cannot be evaded—some bad occasionally succeed. It is, therefore, proposed to refer the whole subject once again to a committee, which shall, at the next meeting of the Council, report on the whole subject of examinations. No one can reasonably doubt that each licensing body in the kingdom will accept recommendations deliberately made by the Council, and all the more if these recommendations be not often changed, and be not drawn out in too minute detail. The Government Bill seems somewhat unnecessarily to dwell on the importance of appointing inspectors. The Branch Council of England judiciously lays before you a brief but careful account of the course which visitations have taken in the last twenty years; it draws attention to the great increase of expense which has taken place in conducting them; and, chiefly for this reason, it recommends a complete revision of the regulations concerning them. In cordially agreeing to this proposal, I would not wish to be understood to express a doubt as to the expediency of the steps hitherto taken, nor as to the work of the visitors, whose zeal and success is appreciated by all. These steps have necessarily brought us, by successive stages, from a condition of educational chaos, to one of more and more complete information. But I venture to repeat that, if there be any body which needs constant and minute inspection, from whatever cause, it is quite unfit to be entrusted with the function of licensing. Within the last quarter of a century, the examination-conditions have been greatly altered. The broad principles of medical education are now universally understood. If there be any bodies which do not, or cannot, adopt them, they are not entitled to public confidence. Personally, I do not believe that any such bodies now exist. These important subjects, then—the condition of education and examination revealed by the recent inspection, and the cost and mode of future visitations—will be brought once more under your serious consideration.

Executive Committee.—Dr. Haldane, Dr. Quain, Mr. Marshall, Dr. A. Smith, Mr. Simon, and Dr. Humphry were appointed to constitute the Executive Committee.

Treasurer.—On the motion of Mr. SIMON, seconded by DR. QUAIN, Sir Dyce Duckworth was chosen as one of the Treasurers, in place of Sir Henry Pitman.

Mr. Marshall was elected Chairman of the Business Committee, and Dr. Humphry a member of the Dental Committee, in place of Sir Henry Pitman.

Alleged Defalcations.—Strangers were then directed to withdraw while the President brought before the Council, on behalf of the English Branch Council, the facts which had come to the knowledge of the Branch Council in regard to the discovery of the defalcations of a late clerk.

Statistical Returns.—Tables relating to professional examinations in 1885, and to the results of preliminary education in 1885, were received, and ordered to be entered on the minutes, as were also the returns for the Army Medical Department.

Reports of Visitors of Examinations.—Mr. MARSHALL moved:

"That a Committee be appointed, consisting of five members, including one from each Branch Council, to prepare a summary of the reports of the visitors to the examinations of the universities, and of the remarks by the bodies visited, now presented to the Council; and that this summary be submitted to the Council at its next meeting, together with such comments as the Committee may think it desirable to make."

Dr. QUAIN seconded the motion.

Mr. MACNAMARA thought it would be a waste of time to send the question to a committee. Visitors had been sent out, and reports and answers from the bodies received; and it was the duty of the Council itself to consider them, and not delegate the task to a committee. In some of the reports, there were remarks that were anything but complimentary to some of the bodies that had been visited, and it would not be just to those bodies to keep them for twelve months longer under these comments.

Rev. Dr. HAUGHTON strongly objected to the proposed delay. He wanted to be tried at once. He moved as an amendment, that the summary be submitted to the Council at the present meeting.

This was seconded by Dr. PETTIGREW.

Dr. QUAIN said he was quite sure that no committee could do the reports justice in a few days.

The amendment was carried by 9 to 8, and the following were appointed members of the committee: Sir Dyce Duckworth, Mr. Teale, Mr. Marshall, Dr. Lyons, Dr. Haldane.

Wednesday, June 2nd.

Sir HENRY ACLAND, President, took the Chair at 2 P.M.

Visitation of Examinations.—On the motion of Mr. MARSHALL, reports from the English, Scotch, and Irish Branch Councils, with reference to the visitations of examinations, and their cost, were received, and ordered to be entered on the minutes. Several resolutions, founded on the reports, were proposed by Dr. STRUTHERS, but were postponed, in order that they might be considered in connection with the report of the Committee on Visitations, appointed yesterday.

Examination in Elementary Mechanics.—The Council resolved itself into committee, for the consideration of reports by the English, Scotch, and Irish Branch Councils, in regard to the subject of elementary mechanics. It was recommended by the English and Scotch Branches, that the subject should be passed (in accordance with the regulation of the Council) before registration. The opinion of the Irish Branch was that, owing to the want of proper appliances in the schools and colleges, it would be undesirable and incompatible to enforce the regulation.

Dr. HUMPHRY moved: "That in accordance with the report of the English Branch Council, elementary mechanics of solids should form one of the subjects of preliminary examination. He said he had ascertained from the Science and Art Department, at South Kensington, that, at the examination in theoretical mechanics, in May, there were 2,375 candidates. At the last local examinations at Oxford, 186 candidates took mechanics; and at Cambridge, 783 boys under sixteen took that subject. That certainly showed a desire that elementary mechanics should form one of the subjects of preliminary education. A different state of things prevailed with reference to hydrostatics, and there were hardly any good elementary books on the subject.

Dr. HAUGHTON wished to remind the Council that Galbraith and Haughton's was a good book.

Dr. HUMPHRY said that, much as he might desire that students should have a knowledge of hydrostatics before entering on professional study, it did not at present appear that that object could be attained. The Irish Branch Council had not made the distinction which he had drawn. In England, the expression elementary mechanics was commonly understood as applying only to solids.

Dr. HAUGHTON dissented from this definition.

Dr. HERON WATSON said he could not consent to the exclusion of hydrostatics. There was no real difficulty in Scotland in carrying out the examination in its entirety; and, if a change were now made, great confusion would arise among the students. If the Council insisted upon its requirement, the supply of instruction would soon meet the demand. He would move, as an amendment:

"That an examination in the subject of elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics, should be required as an essential part of the preliminary examination, and should be passed before registration on the *Students' Register*."

Dr. PETTIGREW expressed his concurrence in the views of Dr. Heron Watson.

Mr. SIMON objected to a continual reaffirmation of the Council's recommendation, which, he said, reminded him of the labours of Sisyphus. It was not a question of enforcing, but simply of recommending, the subject as far as practicable; and no good would arise from disturbing the existing arrangement. It was more important that the student should be taught hydrostatics, than that he should be taught solids and statics.

Mr. MACNAMARA, in seconding Dr. Humphry's motion, said he considered the recommendation compulsory, and the Irish registrar would not register any student who had not complied with it.

Dr. HUMPHRY said that, at the universities, there were higher classical and mathematical examinations than those required by the Council; but hydrostatics was not included, because it did not form a sufficient subject of school-education in England. There might be a change in a few years; but, meanwhile, he suggested a compromise. The Council's regulations should be of such a nature as that all the great educational bodies could comply with them.

Removal of Names from Register.—The debate was then suspended, in order that the Council might consider (in private) the cases of Wm. Turnbull, convicted of manslaughter in an attempt at abortion, and sentenced to ten years' penal servitude; and of Robert Thorburn, convicted of theft, and sentenced to six months' imprisonment. Both names were ordered to be erased from the *Register*.

Mr. FARRER (the Solicitor) read the opinion of Mr. Muir Mackenzie with reference to the removal of qualifications from the *Medical Register*, on the withdrawal of such qualifications by the bodies granting them. The opinion was to the effect, that the removal from the *Register* could not be ordered by the Council, until it had satisfied itself that the withdrawal by the licensing bodies had not been in consequence of the adoption of any particular theory of medicine or surgery.

Dr. A. SMITH said it would be remembered that, at the last meeting of the Council, a letter was received from the College of Physicians of Ireland, announcing that the name of Robert Locke Evans, as Licentiate in Medicine and Surgery, had been erased from their roll, and he then proposed that the qualifications should be removed from the *Medical Register*; but the Council supported an amendment to the effect that Counsel's opinion should be taken as to their power to demand what was the nature of the offence for which the name had been removed. The College of Physicians of Ireland, on his return, unanimously approved of his refusal to state the reasons, and, on January 1st, authorised the President of the College to give him (Dr. Smith) a certificate (in conformity with Section 28 of the Medical Act), that the name was not removed for adopting, or refraining from adopting, the practice of any particular theory in medicine or surgery. He now produced that certificate, and moved "That the qualifications of Licentiate in Medicine and Licentiate in Midwifery of the King and Queen's College of Physicians in Ireland, appended to the name of Robert Locke Evans in the *Medical Register*, be removed by the Registrar."

The motion was seconded by Dr. BANKS, and agreed to.

Erasure from the Dentists' Register.—The name of Henry Francis Partridge, Licentiate in Dental Surgery of the Royal College of Surgeons in Ireland, was ordered to be erased from the *Dentists' Register*; the reason given by the College for withdrawing his diploma being, "because of his having, in violation of his undertaking given to the College, resorted to advertising in connection with the Ladies' Dental Institution, South Kensington."

On the motion of Mr. MARSHALL, seconded by Mr. SIMON, Mr. Muir Mackenzie's opinions were referred to the Executive Committee, for the purpose of their bringing up a standing order to guide the procedure in similar cases in future.

Examination in Elementary Mechanics.—The Council again resolved itself into Committee, and continued the discussion on the subject of elementary mechanics.

Dr. CHAMBERS considered it very unlikely that the University of Oxford would be able to comply with the regulation that hydrostatics should be a subject for the preliminary examination. The schools could not introduce it into their curricula, so as to have it properly taught. It was found that the higher physical sciences were not adapted for improving the mental faculties of boys. Botany, general natural history, and chemistry, which involved the doctrines of classification, might be introduced; but hydrostatics could not be insisted upon as a compulsory subject.

Dr. HAUGHTON thought that the effect of the regulation would be to prevent the most highly educated students from registering. Such a state of things no one on the Council desired to bring about, and it would be better to return to the rule that elementary mechanics might be passed either before registration or before the end of the first professional year.

Mr. MACNAMARA said it was clearly impossible to give education in these subjects in Ireland, at present, and it was unfair to tax the parents of students with the expenses of an additional year, because their sons could not do the impossible.

Dr. HERON WATSON hoped the Council would insist on maintaining their regulation; if they did so, the various schools would soon find it necessary to provide the proper teaching.

Dr. PETTIGREW said that, in Scotland, the first year's study in anatomy and chemistry was very heavy, and would be seriously interfered with if mechanics were not passed at the preliminary examination.

Dr. STRUTHERS considered that, if Oxford and Cambridge insisted on the subject being passed at the entrance examinations, the schools would soon conform to the regulation.

The debate was then adjourned.

Thursday, June 3rd.

THE Council resumed the discussion on elementary mechanics, and finally adopted the proposal of Dr. Heron Watson, with the following proviso: "but in Universities with a prolonged curriculum, where the examination in mechanics required for a degree is taken at a more advanced period of study than before commencing medical education, the registration may be effected on having passed the examination in mechanics; and it shall be the duty of the registrar to antedate the entry to the period at which the preliminary was passed."

The rest of the afternoon's sitting was occupied in the discussion of a motion by Dr. HAUGHTON: "That, in the opinion of the Council, it is highly important to visit and report upon the methods of teaching required by the Licensing Bodies." The majority of the speakers strongly approved of the object of the resolution.

INDIA AND THE COLONIES.

INDIA.

A MOVEMENT is on foot to provide lying-in hospitals for Parsee women in Bombay.

ENTERIC FEVER.—The Allahabad paper regrets to hear of the great prevalence of enteric fever among the European troops at several stations in the North-Western Provinces, especially at Lucknow, where there are, the paper believes, over forty cases in hospital, including an officer. It was to be expected that the young soldiers of the last drafts would suffer more severely than their acclimatised comrades, but the occurrence of so great a number of cases of enteric fever is much to be deplored, as—setting aside the mortality, which it is stated has not been excessive—all the men attacked must be unfit for duty for some months. The early recurrence of enteric fever among young soldiers in India, it observes, demands a searching investigation at the hands of Government; and, whatever recommendations the medical authorities make should, at all events, have a fair trial.

MEDICAL MAGISTRATES.—Dr. Matthew Hinchliffe has been placed on the Commission of the Peace for the Borough of Dewsbury, and Dr. John Horne for the Borough of Scarborough.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, CANCER OF THE BREAST,
OLD AGE, THE VALUE OF HAMAMELIS,
THE VALUE OF PURE TEREBENE.

Memoranda on the above, and forms for recording individual cases, may be had on application.

The inquiry on Acute Rheumatism is now closed, as the printing of the Tables is completed. *Any cases, of which Reports are sent by June 1st, will be added to the Tables.*

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into THE THERAPEUTIC VALUE OF HAMAMELIS AND PURE TEREBENE have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary.—J. MAITLAND, M.B., Honorary Secretary, Madras.

MIDLAND BRANCH.—The annual meeting will be held at the County Hospital, Lincoln, on Thursday, June 17th. Members desirous of reading papers, etc., are requested to communicate at once with the Secretary, W. A. CARLINE, M.D., Lincoln.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in the Town Hall, Lancaster, the last week in June or first week in July. Members wishing to show cases or read short communications will oblige by writing to the Honorary Secretary, Dr. GLASCOTT, 23, St. John Street, Manchester. Dr. Stewart has promised a paper on Provident Dispensaries. Dr. Christopher Johnson has promised a paper on Sanitary Reform a Hundred Years Ago. Detailed arrangements will be published next week.

SOUTHERN BRANCH.—The thirteenth annual meeting will take place at Gosport on Wednesday, June 16th, 1886. The general meeting will be held at the India Arms Hotel, at half-past twelve. Luncheon will be provided by the President-elect between twelve and one o'clock. In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers or other communications are requested to forward at once the titles to the Honorary Secretary. No communications must exceed ten minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect (Dr. Kealy) at half-past 2 P.M. During the afternoon, the members are invited to visit the Royal Naval Hospital, Haslar, and to take a carriage-drive in the neighbourhood. The dinner will take place at the India Arms Hotel, at 6 P.M.; charge, 6s., exclusive of wine, etc. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Mr. Gregory Kealy Forton, Gosport, on or before Tuesday, June 15th.—J. WARD COUSINS, Honorary Secretary and Treasurer.

METROPOLITAN COUNTIES BRANCH.—The Annual Meeting of this Branch will be held at the Holborn Restaurant, on Tuesday, June 29th, at 5.30 P.M. President: Walter Dickson, M.D.; President-elect: John S. Bristowe, M.D., F.R.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine.—ALEXANDER HENRY, M.D.; W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

SOUTH-WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at the Infirmary, Cardiff, on Thursday, July 8th. Members wishing to read papers should send titles before June 20th. Gentlemen wishing to join the Branch or Association should send notice before July 7th.—A. SHEEN, M.D., D. A. DAVIES, M.B., Honorary Secretaries.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The Annual General Meeting of this Branch will be held on Tuesday, June 29th next, in the Medical Institute, Birmingham. An address will be delivered by the President, S. H. Agar, Esq. The annual dinner will take place at the Grand Hotel, Colmore Row, at 6 P.M.; dinner tickets, exclusive of wine, 5s. each.—ALFRED H. CARTER, M.D., 21, Temple Row, Birmingham; ROBERT SAUNDBY, M.D., 83, Edmund Street, Birmingham, Honorary Secretaries.

NORTH WALES BRANCH.—The annual meeting will be held at Festiniog, in the first or second week in July. Members having cases to communicate, or papers to read, or who wish to propose new members, should advise the Secretary on or before the 21st instant.—W. JONES-MORRIS, Portmadoc, Honorary Secretary.

SOUTH-EASTERN BRANCH.—The forty-second annual meeting of this Branch will be held at the Town Hall, Worthing, on Tuesday, June 8th, at two o'clock precisely. The President-elect invites members and their friends to luncheon at 26, Marine Parade, from 1 P.M. to 2 P.M. After the meeting, a visit will be paid to the Town Water-works and the new Infirmary. Carriages will be provided by the local committee for an excursion into the country, and, weather permitting, a sail out to sea is proposed. The pier will be open to members on presentation of address-card. Dinner will be served at 5.30 P.M., at the Steyne Hotel; tickets (exclusive of wine), 7s. each.—CHARLES PARSONS, M.D., Honorary Secretary.

SOUTH-EASTERN BRANCH.—A meeting of the Executive Council of this Branch will be held at the Town Hall, Worthing, on Tuesday, June 8th inst., at 1.30 P.M.—CHARLES PARSONS, M.D., Honorary Secretary, 2, St. James's Street, Dover.

BORDER COUNTIES BRANCH.—The nineteenth annual meeting of this Branch will be held at Whitehaven, on Friday, June 25th, under the presidency of Mr. C. S. Hall, Carlisle. The President-elect, Dr. Eaton, Cleator Moor, will deliver his inaugural address, and the usual election of office-bearers for the year will take place. The Secretary will be glad to receive notices of papers for reading, and patients or specimens for exhibition, without delay. Further particulars will be given next week.—H. A. LEDIARD, 41, Lowther Street, Carlisle, Honorary Secretary.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING.

THE fifty-fourth Annual Meeting of the British Medical Association will be held at Brighton, on August 10th, 11th, 12th, and 13th, 1886.

President: W. T. Edwards, M.D., F.R.C.S., Physician to the Glamorgan and Monmouth Infirmary, Cardiff.

President-elect: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President of the Council: Balthazar Foster, M.P., M.D., F.R.C.P., Professor of Medicine in Queen's College and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by Surgeon-General John S. Billings, M.D., Director-General United States Army Medical Department, Washington.

An Address in Surgery will be delivered by Frederick Abell Humphry, F.R.C.S., Surgeon to the Sussex County Hospital.

An Address in Public Medicine will be given by E. D. Mapother, M.D., Consulting Medical Officer to the City of Dublin.

The scientific business of the meeting will be conducted in nine Sections, as follows, namely:

MEDICINE.—*President*, W. H. Broadbent, M.D. *Vice-Presidents*, Frederick Bagshawe, M.D., Hastings; Joseph Ewart, M.D., Brighton. *Honorary Secretaries*, Francis Warner, M.D., 24, Harley Street, London; Henry Seymour Branfoot, M.B., 42, Norfolk Square, Brighton.

SURGERY.—*President*, John Eric Erichsen, F.R.C.S., F.R.S., London. *Vice-Presidents*, Frederick William Jowers, M.R.C.S., Brighton; John Ward Cousins, F.R.C.S., Southsea. *Honorary Secretaries*, William Johnson Walsham, F.R.C.S., 27, Weymouth Street, London; Willoughby Furner, F.R.C.S., 2, Brunswick Place, Brighton.

OBSTETRIC MEDICINE.—*President*, Alfred Meadows, M.D., London. *Vice-Presidents*, Constantine Holman, M.D., Reigate; Frederick W. Salzmann, M.R.C.S., Brighton. *Honorary Secretaries*, Charles J. Wright, M.R.C.S., Lynton Villa, Virginia Road, Leeds; Alban Doran, F.R.C.S., 9, Granville Place, W.

PUBLIC MEDICINE.—*President*, Richard Patrick B. Taaffe, M.D., Brighton. *Vice-Presidents*, Sir Charles Alexander Cameron, M.K.Q.C.P., Dublin; Charles Kelly, M.D., Worthing. *Honorary Secretaries*, W. Brown, M.R.C.P.Edin., Carlisle; William Joseph Tyson, M.D., Folkestone.

PSYCHOLOGY.—*President*, Thomas Smith Clouston, M.D., Edinburgh. *Vice-Presidents*, Charles A. Lockhart Robertson, M.D., Brighton; Joseph Raymond Gasquet, M.B., Brighton. *Honorary Secretaries*, Charles Spencer Waller Cobbold, M.D., Earlswood Asylum, Redhill; James M. Moody, M.R.C.S., Surrey County Asylum, Canehill, Purley.

PATHOLOGY.—*President*, Julius Dreschfeld, M.D., Manchester. *Vice-Presidents*, James Frederick Goodhart, M.D., London; Heneage Gibbes, M.D., London. *Honorary Secretaries*, John E. Ranking, M.D., Mount Ephraim Road, Tunbridge Wells; John Caldwell Uhthoff, M.D., 9, Brunswick Place, Brighton.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Thomas Lauder Brunton, M.D., F.R.S., London. *Vice-Presidents*, John Mitchell Bruce, M.D., London; Edward Mackey, M.D., Brighton. *Honorary Secretaries*, Cornelius William Suckling, M.D., 108, Newhall Street, Birmingham; John Theodore Cash, M.D., Drumearn, Earlsfield Road, Wandsworth Common, S.W.

OPHTHALMOLOGY.—*President*, Chas. Oldham, F.R.C.S., Brighton. *Vice-Presidents*, Louis Tosswill, M.B., Exeter; George Anderson Critchett, F.R.C.S.Edin., London. *Honorary Secretaries*, Frank Henry Hodges, F.R.C.S.Edin., 17, Horse Fair Street, Leicester; Arthur Nicholson, M.D., 98, Montpellier Road, Brighton.

OTOLOGY.—*President*, G. F. Hodgson, M.R.C.S., Brighton. *Vice-Presidents*, Alphonso Elkin Cumberbatch, F.R.C.S., London; Edward Cresswell Baber, M.B., Brighton. *Honorary Secretaries*, Henry Albert Reeves, F.R.C.S.Edin., 6, Grosvenor Street, W., London; Patrick William Maxwell, M.D.Edin., 10, Lower Mount Street, Dublin.

Honorary Local Secretaries: Thomas Jenner Verrall, M.R.C.S., 95, Western Road, Brighton; Alfred Scott, L.R.C.P., German Place, Brighton.

TUESDAY, AUGUST 10TH, 1886.

2 P.M.—Meeting of 1885-6 Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 11TH, 1886.

9.30 A.M.—Meeting of 1886-87 Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione*.

THURSDAY, AUGUST 12TH, 1886.

9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Surgery.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 13TH, 1886.

10 A.M.—Address in Public Medicine.
11 A.M.—Sectional Meetings.
4 P.M.—Concluding General Meeting.
8 P.M.—Reception.

SATURDAY, AUGUST 14TH, 1886.

Excursions.

The following discussions and papers are promised up to the present time. Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

SECTION A.—MEDICINE.

The following subjects have been chosen for special discussion.

1. Cases in which Disease of the Valves of the Heart has been known to exist for upwards of five years, without causing Serious Symptoms. Introduced by Sir Andrew Clark, M.D., F.R.C.P., F.R.S., London. The following gentlemen have promised to take part in the discussion: Drs. Gairdner, Clifford Allbutt, B. Foster, M.P., Douglas Powell, Sir Dyce Duckworth, M. Bruce, Burney Yeo, Skerritt, Byrom Bramwell, and Saundby.

2. On the Effects produced by Gall-stones, with particular reference to some Rarer Points in their Symptomatology. Introduced by W. Ord, M.D., F.R.C.P., London. The following gentlemen have promised to take part in the discussion: Drs. Byrom Bramwell, Clifford Allbutt, B. Foster, M.P., Pavy, Shingleton Smith, Saundby, and Ralfe.

The President of the Section will deliver his Address on August 12th.

The following papers are promised.

COUTTS, J. A., M.B. Latter Effects of Rickets.
EYLANDT, J. E., M.D. (Pisa). Treatment of Diphtheria.
GAMGEE, A., M.D. On Compressed and Rarefied Air.
MOXON, W., M.D. Effects of Turpentine, Ergot, and Water, on Albuminuria.
RALFE, C. H., M.D. Functional Albuminuria.
SAVAGE, George H., M.D. Mental Symptoms with Locomotor Ataxy.
EARDLEY WILMOT, R., M.B. A Case of Gall-stones.

SECTION B.—SURGERY.

Sir Henry Thompson will open a discussion on Suprapubic Lithotomy. The following gentlemen will take part in the discussion: Messrs. W. Cadge, Reginald Harrison, Professor Humphry, Berkeley Hill, T. R. Jessop, Greig Smith, W. Pye, and Bruce Clarke.

The following papers are promised.

HARLEY, George, M.D., F.R.S. Hepatic Phlebotomy and Puncture in Hypertrophic Congestions of the Liver.
TAIT, Lawson, Esq., and THORNTON, J. K., Esq. Surgical Treatment of Diseases of the Liver.
WILLETT, A., Esq., and MEREDITH, W. A., Esq. Cholecystotomy.

Messrs. Macnamara, Morris, Bellamy, Jessop, and Professor Gastin, of Georgia, will take part in the discussion.

HORSLEY, Victor, M.B. A paper, illustrated by Photographs illuminated by the Lime-light, in connection with the Advances in the Surgery of the Central Nervous System.

Mr. E. Bellamy and Dr. Hughes Bennett will join in the discussion.

ADAMS, W., Esq. On the Treatment of Congenital Displacement, the so-called Congenital Dislocation of the Hip-Joint, by long-continued Recumbency and Extension.
BENTON, S., Esq. Fistula in Ano of the Horse-Shoe Shape.
CLARKE, Bruce, Esq., and STEAVENSON, W. E., M.D. The Employment of Electricity in the Treatment of Diseases of the Urinary Organs.
FITCH, Simeon, M.D. (Nova Scotia). The Dome-Trocar and associated Instruments in Paracentesis, Aspiration, Transfusion, Ovariotomy, and Tunnelling the Prostate.
KEETLEY, C. B., Esq. Further Remarks on the Radical Cure of Hernia by Injections into the Inguinal Canal.
PYE, W., Esq. A Case of Multiple Papilloma of the Bladder, removed by the Suprapubic Operation.
WHITEHEAD, Walter, Esq. Three Hundred Consecutive Cases of Hæmorrhoids cured by Excision.

SECTION C.—OBSTETRIC MEDICINE.

The following two special discussions will take place.

1. The Alternatives to Craniotomy. This discussion will be introduced by Dr. Robert Barnes; and Professor Porro, Dr. Halliday Croom, Dr. E. T. Davies (Liverpool), Mr. Greig Smith (Clifton), and others, will be among the speakers.

2. On Removal of the Uterine Appendages. Papers will be read by Dr. Savage, of Birmingham; Dr. More Madden, of Dublin; and others; and Dr. Bantock; Dr. E. T. Davies, and Dr. Imlach, of Liverpool; Mr. Lawson Tait, of Birmingham; and others, will take part in the discussion.

The following papers are promised.

AVELING, J. H., M.D. A Case of Extra-uterine Fœtation arrested by Electricity.
BARNES, Fancourt, M.D. On Perinæorrhaphy.
BRAITHWAITE, J., M.D. On a Mode of Treating certain Cases of Amenorrhœa.
EDIS, A. W., M.D. Cases illustrating the Difficulties of Diagnosis in Gynæcological Practice.
GRIGG, W. C., M.D. On the Antiseptic Use of Bichloride of Mercury in Obstetric Practice.
HANDFIELD-JONES, M., M.B. Scanty Secretion of Liquor Amnii in the Early Months of Pregnancy, and its Bearing on Diagnosis.
HEWITT, W. M. Graily, M.D. The Early History and Etiology of Uterine Flexions and Displacements.
LUSK, W. T., M.D. (New York). The Proper Moment for the Performance o Gastrotomy in Abdominal Pregnancy.
ROUTH, C. H. F., M.D. On some Points of Difficulty as affecting Medical Men in Cases of Hysteria with Erotic Symptoms.

Section D.—Public Medicine.

The general subjects for discussion are the following.

1. Scarlet Fever; its Causation, and the best Sanitary Measures for Dealing with the Disease as it exists among Urban Populations. Dr. Ewart, of Brighton, will open this discussion.

2. On the Duration of Infectiousness in the following Infectious Diseases: Scarlatina, Small-pox, Measles, Mumps, and Diphtheria. Dr. A. Ransome, of Manchester, will open this discussion.

3. Diphtheria in Rural Districts: (*a*) Causation; (*b*) Influence of Soil upon the Disease. Dr. C. Kelly will open this discussion.

4. Reports of Water Analyses: the best Method of Stating these so as to secure one Uniform Plan. Dr. Whitelegge will open this discussion.

The following papers are promised.

Ashby, H., M.D. On the Duration of Infectiveness in Scarlet Fever.
Carpenter, A., M.D. The Causation of, and on the Quarantine which is necessary to be observed in, Scarlatina.
Kerr, Norman, M.D. On Hydrophobia, and its Prevention.
Paget, C. E., Esq. The Influence of Acute, supposed Simple, Sore-Throat in the Spread of Diphtheria.
Seaton, E., M.D. A paper on Scarlet Fever.
Tatham, J., M.D. Scarlet Fever, and the best Means for its Prevention amongst Urban Populations.
Vacher, F., Esq. Duration of Infectiousness in the Ercanthanata and Allied Diseases.
Whitelegge, B. A., M.D. Reports of Water Analyses.

Section E.—Psychology.

The President, Dr. T. S. Clouston, will deliver an address on the Relationship of Bodily and Psychical Pain.

The following papers are promised.

Savage, G. H., M.D. On Alternations of Neuroses.
Shuttleworth, G. E., M.D. The Relation of Marriages of Consanguinity to Mental Unsoundness.
Stanley, A. Gill, Esq., B.A. The Use and Abuse of Seclusion.
Thomson, D. G., M.D. On the Separate Care and Medical Treatment of Recent Cases of Insanity, either in Existing Asylums, or in Lunatic Hospitals to be Established for that Special Purpose.
Tuke, D. Hack, M.D. On the Alleged Increase of Insanity.

The President will introduce a discussion as to How the Medical Spirit can best be kept up in Asylums for the Insane.

Discussions will also be invited upon Degradation of Habits and Feelings in Relationship to Mental Disease, and other subjects. The Secretaries will be glad to receive communications from members willing to read papers or to take part in the discussion.

Section F.—Pathology.

The following subjects have been chosen for special discussion.

1. Peripheral Neuritis. Opened by papers by Dr. Ross (Manchester), and Dr. Buzzard (London). Mr. Watson Cheyne, Professor Charcot, and Dr. Whittle, will take part in the discussion.

2. Aneurysm. Introductory paper by Timothy Holmes, F.R.C.S. Messrs. Bryant, Savory, H. Morris, C. J. Symonds, Watson Cheyne, and E. Lund, will take part in the discussion.

3. The Etiology and Pathology of Pneumonia. Introductory papers by Dr. Octavius Sturges and Dr. R. Douglas Powell. Dr. Churton and Dr. Hollis will take part in the discussion.

The following papers are promised.

Cheyne, Watson, M.B. On Cholera.
Churton, T., M.D. The Pathology of the Adrenals.
Hollis, W. A., M.D. Pulmonary Tuberculosis, associated with Heart-Disease.
Rake, B. N., M.D., (Government Medical Officer, Trinidad). 1. An Inquiry into the Distribution of the Leprosy Bacillus. 2. Experiments on the Communicability of Leprosy to Animals.

Section G.—Therapeutics and Pharmacology.

An Introductory Presidential Address will be given by Dr. T. Lauder Brunton, F.R.S.

The following subjects have been selected for special discussions.

1. Antipyretics; to be opened by Dr. Carter, of Liverpool.
2. Analgesics; to be opened by Dr. Spender, of Bath.
3. Action of Drugs in Albuminuria; to be opened by Dr. Saundby, of Birmingham.

The following gentlemen have promised papers: Messrs. Mitchell Bruce, J. M. Jessop, and Stone.

Section H.—Ophthalmology.

Mr. Jonathan Hutchinson will open a discussion on the Different Forms of Choroiditis, in relation to their several Causes.

Mr. Anderson Critchett will open a discussion on Episcleritis.

An improved Electric Refraction Ophthalmoscope will be shown by Mr. Henry Juler.

The following papers are promised.

Abbott, G., Esq. The Use of Styles in the Treatment of Epiphora.
Critchett, G. Anderson, Esq. On Dislocation of the Lens.
Frost, W. Adams, Esq. What is the best Method of Dealing with a Lost Eye?
Glascott, C. E., M.D. On Sarcoma of the Choroid, followed by Amblyopic Symptoms in the Sound Eye.
Hewetson, H. B., Esq. The Treatment of Interstitial Keratitis by Operation, without Constitutional Remedies.
Higgens, Charles, Esq.
Johnson, L. L., Esq. Paper, and Demonstration of several new Ophthalmic Instruments.

Members desirous of reading papers are particularly requested to communicate without delay, with the Secretaries of Sections, that the arrangements may be as complete as possible prior to the meeting.

Annual Museum.

The twentieth annual museum will, by permission of the Town Council, be located in the Corn Exchange, a large hall, communicating with the Dome, and having a separate entrance in Church Road.

It will be open to the profession from August 9th to August 15th, and will be classified in three sections.

Section A.—Foods, drugs, hygienic and sanitary appliances. A specialty will be made of all kinds of prepared, peptonised, and other compound nutrients. (Honorary Secretary, Dr. Mackey, 1, Brunswick Road, Hove, Brighton.)

Section B.—New books, instruments, and appliances—medical and surgical; galvanic and other batteries and apparatus. (Honorary Secretary, Dr. Whittle, 65, Dyke Road, Brighton.)

Section C.—Anatomical and pathological specimens, diagrams, casts, or models; microscopes and microscopical preparations. (Honorary Secretary, D. W. Giffard, Esq., 5, Pavilion Parade, Old Steine, Brighton.)

A name and description, printed, if possible, must be attached to each exhibit, which should be sent to the Corn Exchange, Brighton (to the care of the Secretaries of the respective sections), between Monday, August 2nd, and Saturday, August 7th. Ample counter space will be provided, and, so far as possible, equal facilities will be given to every exhibitor.

A description, for insertion in the Museum Catalogue, should be forwarded to the private address of the respective Secretaries, at least one month before the meeting, that is, by July 10th.

Catalogue.—The catalogue will be provided gratis, but advertisements will be charged at the usual rate, namely, one page, £1; half-page, 12s. 6d.; quarter-page, 7s. 6d.

To Exhibitors.—The expenses of carriage and of removal to be borne by the exhibitor. The Committee will exercise every reasonable care as to objects entrusted to them, but will not be responsible for risk or accident.

Notices of Motion.

Dr. Ward Cousins hereby gives notice that he will move the following addition to, and alteration of, the By-laws; namely,

Page 17, By-laws. Addition to "d," second line, after the word "member," add "of a Branch within the limits of the United Kingdom of Great Britain and Ireland."

Addition to "d."—"No person shall be eligible as a representative member of a Colonial or Indian Branch unless, at the time of his election, he shall be a recognised member of the Branch, and shall have resided within the area of the Branch for at least twelve months prior to his election. The election of Crown, Colonial, and Indian members of the Council shall be annual, and shall be subject to the same by-laws as the election of other representative members."

May 6th, 1886. Francis Fowke, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[from our own correspondent.]

Radial Paralysis from Compression.—A Case of Suppression of Reflex Action of the Patella.—The Effect of Thermo-Stimulation of the Brain.—On the Respiratory Centres of the Spinal Cord.

MM. Déjerine and Vulpian have studied radial paralysis from compression; and, at a recent meeting of the Paris Biological Society, they stated that this form of paralysis generally lasted for five or six months. The excitability of the nerve varied in different parts. Below the compressed point, its excitability was not lessened, but was more readily affected by an electric current. Above the compressed point, the current did not increase its excitability. Muscular nutrition was little affected, but the long supinator muscle became atrophied, and did not contract under the influence of a galvanic or faradaic current. There was an evident tendency to nerve-degenera-

tion, perhaps resulting from the superficial position of the radial branch innervating the muscle, which was thus more susceptible to compression. Patients suffering from paralysis from compression exhibited disturbed subjective sensibility. If the radial nerve were stimulated above the part compressed, the patient did not, as was usual, feel painful sensations at the periphery. These notes were taken from five cases of radial paralysis from compression, one occurring during an attack of epilepsy, four from compression during sleep, and one from an injury to the arm. M. Déjerine believed that the lesions of radial paralysis were not so limited as was supposed. He tried to produce the same condition in animals. He isolated the sciatic nerve, and compressed it with pincers, but the results were unsatisfactory. The compression was either too intense or not sufficient; therefore, the symptoms were either those of peripheral paralysis, atrophy, degeneration, or absence of results. M. Brown-Séquard was present at the meeting when this paper was read, and he said that he did not believe that radial paralysis presented any lesions but that which was due to peripheral stimulation, which had an inhibitory influence on the spinal cord. It was possible that nothing could be learned from necropsies, it being a question of purely dynamic phenomena; nevertheless, after a certain time, inhibition produced visible changes. M. Déjerine would have done better to produce radial paralysis, keeping the nerve in its normal surroundings, and not exposed.

It is well known that in a normal condition absence of reflex action in the patella rarely happens, but is important as an early symptom of sclerosis of the posterior columns. Nevertheless, it may be met with independently of any alterations of the spinal cord and the posterior roots. M. Déjerine has observed the following case. The patient was tuberculous, reflex action in the patella was absent in both knees; during the two months which he spent in M. Déjerine's wards it was never detected, and there was no motor, nor sensory disturbance. At the necropsy, lesions characteristic of pulmonary tuberculosis were very evident. The spinal cord and its membranes, the anterior and posterior roots, appeared normal to the naked eye. Microscopic examination of the posterior roots in the lumbar region proved them to be normal.

Dr. Eugéne Dupuy, in a paper recently read before the Paris Biological Society on the effect of thermo-stimulation of the brain, stated that, ten years ago, M. Brown-Séquard showed to the Paris Biological Society a dog whose frontal and parietal convolutions had been destroyed by the actual cautery. The animal exhibited, besides interesting vaso-motor symptoms, very pronounced paraplegia, suggesting meningeal myelitis rather than a cerebral lesion which really existed. Dr. Ferrier, some years ago showed, at a London medical society, a monkey, in which the convolutions, believed by Dr. Ferrier to contain the psycho-motor centres of one side of the body, had been removed. This monkey had contraction of the right fore-limb of the opposite side. At the necropsy, some months later, it was observed that there was degeneration of the pyramidal fibres, on the side corresponding to the cortical lesion. This degeneration began at the decussation of the pyramids, and invaded the two lateral columns of the spinal cord; but, on the left side, that corresponding to the cortical lesion, the degeneration did not descend lower than the cervical region.

M. Babinsky has recently published notes of a case observed at the Salpêtrière Hospital, in which degeneration, resulting from an area of softened brain-tissue in the centrum ovale minus, invaded the right and left sides of the spinal cord. There was muscular atrophy, but no lesion of the medullary cells nor of the nerve-roots. M. Dupuy stated that where, by red-hot irons, he had destroyed the part of the cortex reputed to contain the psycho-motor and psycho-sensory centres in three dogs, using the cautery for the purpose, these animals died later on, after exhibiting symptoms which he had never observed as a result of any other means of destroying convolutions. The animals were thrown into a prostrate condition; from the onset of the operation, they could not retain the smallest quantity of milk. At the necropsy, the cerebral substance in the two hemispheres comprised between the lesion, and the decussation of the pyramids, appeared normal to the naked eye; but the cord below the pyramids was completely disorganised, as though there had been extensive capillary hæmorrhage, which had reduced the cord to pulp.

BEQUESTS AND DONATIONS.—Mr. John Vere bequeathed £1,000, free of duty, to the Grimsby District Hospital.—Mr. Thomas Charle Morris bequeathed £500 to the Carmarthenshire Infirmary.—Mis Francis Caroline Churchill, of Dorchester, bequeathed £200 to th Dorset County Hospital.—The Children's Hospital, Birmingham, ha received £500 "in memoriam."—The Grantham Hospital has received £100, under the will of Mr. John Rudd.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

BRITISH MEDICAL BENEVOLENT FUND.

SIR,—For many years, you have allowed me at Christmas to bring the claims of the British Medical Benevolent Fund to the notice of the profession, always with good results. This year is the fiftieth of its existence, and, as a jubilee celebration was contemplated, my appeal (with which the President of the Fund, Sir George Burrows, desires to be associated) was postponed until it could be made in connection with that event. I have now to announce that Sir James Paget will preside at a jubilee banquet, to be given at the Holborn Restaurant on July 8th. We are already assured of success, a donation of an altogether unexpected amount having been sent to Sir James Paget, and other important donations having been received, while we have reason to expect that Sir James will be supported by a most distinguished gathering of medical men from all parts of the country.

It is true, that the jubilee of the fund falls at a period of great and general financial depression; but, while this impairs the power to give, it increases the number of those who are in sore need of help; so that we dare not postpone our appeal, even if we could put off the celebration till better times. If all who can afford it would give even a little, relief would be carried to a large proportion of the poverty-stricken homes and families of medical men which are brought to the notice of the committee.

The objects and mode of operation of the fund are not even yet fully known. It has two departments: an annuity department, which supports at present fifty-five annuitants, who must be over sixty years of age when elected; and a donation department, which distributes nearly £2,000 yearly, in sums of from £5 to £20, to meet urgent necessities of broken-down medical men, relieve widows, help struggling daughters, and educate children. This last department is peculiar to the fund.

No canvassing is required in order to obtain its benefits, with the heart-breaking delay, demoralising exposure, and wearying labour attending this process. Twice a year, the list of all applicants, over the age of sixty, whose cases have come before the committee, is carefully gone over; and the oldest and most necessitous are selected to fill any vacancies which may have arisen. Urgent necessities are still more promptly met; the committee sitting once a week for the purpose of allocating donations.

Another feature of the fund is, that there are no salaries, all the work being done by medical men without fee or reward.

In commending the fund once more to the favourable attention of the profession, I have only to add that the Honorary Secretaries, Mr. George Field, 13, Wimpole Street, and Mr. Edward East, 18, Clifton Gardens, Maida Vale, will be glad to receive the names of all who desire to help us and to take part in the jubilee dinner.—I remain, your obedient servant,

W. H. BROADBENT, M.D., Treasurer.

34, Seymour Street.

THE USE OF CUCAINE IN PROSTATIC CATHETERISM.

SIR,—I gather from Mr. Buckston Browne's letter, in the JOURNAL for May 29th, that he disagrees with me on two very trifling and easily settled points. He maintains "that, in order to anæsthetise the prostatic urethra, the end of an instrument must first be placed there. I contend that the entire bladder and prostatic urethra may be cucainised without being entered by an instrument. Again, he asserts that a 20 per cent. solution of cucaine does not render the urethra instantaneously anæsthetic. I contend it does. Both, however, are practical points, which can be verified by anyone.

Mr. Browne opines that "the remedy," that is, the method I advocate for warding off cardiac and renal shock in the evacuation of residual urine, "is worse than the disease." I am confident that Mr. Browne would change his opinion if he were to allow himself to try and criticise that method in an unbiassed manner.—I am, sir, yours, etc.,

E. HURRY FENWICK.

George Street, Hanover Square.

MASSAGE AS A THERAPEUTIC AGENT.

SIR,—I am much obliged to Dr. Kent Spender for calling attention to the fact that massage has been employed at Bath for "quite ten years." The treatment is somewhat older than that, however, and was fully described in the Chinese manuscript, *Kong Fau*, the date of which is 3,000 B.C.—I am, sir, your obedient servant.

Weymouth Street, W. WILLIAM MURRELL.

A NEW INCOME-TAX DODGE.

SIR,—I am going to ask permission to expose, in your columns, the way now adopted by surveyors of taxes to "choke off" medical men from applying for relief against over-assessment. A client of mine writes to say that, on May 22nd, he received notice from the surveyor that he was to appear in person on May 27th, at a place eighteen miles distant. Now, a medical man's time is not his own, and, even if not urgently engaged that day, two drives of eighteen miles each, with the attendant expenses of himself and horse, have rather a deterrent effect, when there is only an off-chance of getting back his own. Previously, the place of appeal was three miles off. I fail to see why a claimant who sends in accounts in certain form should not be allowed to sign an affidavit or declaration, instead of having to appear in person. Affidavits and declarations are admitted in much more important cases than in the recovery of a paltry sum of money.—I am, sir, your obedient servant, ALFRED CHAPMAN.

16, Artesian Road, W.

CLIMATE CHART FOR JUNE.

SIR,—I shall be obliged if you will allow me to invite further co-operation in observing the blossoming of the following trees and shrubs in various parts of the country for the purpose of constructing a phenological chart for June. They are, like the former list, taken from Dr. H. Hoffmann's scheme, but the dates of flowering and the temperature equivalents refer to England.

Snowberry and wild raspberry (June 1st, 784.8°); dog rose (common wild rose, June 14th, 826.8°); dog wood (*cornus sanguinea*, June 11th, 919.4°); privet (June 20th, 1054°); lime tree (July 9th, 1375.4°). The observations required are the dates of the first opening of the blossoms on several trees. If the dates are sent to me on post-cards, I will send a copy of the resulting chart to each contributor, provided sufficient data are received to afford trustworthy results.—Your obedient servant, C. ROBERTS.

2, Bolton Row, Mayfair, London, W.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, May 31st, 1886.

MEDICAL ACTS AMENDMENT BILL.

[Specially reported for the BRITISH MEDICAL JOURNAL.]

THE House, at one o'clock, went into Committee on this Bill.

Clauses 1 and 2 were agreed to.

On clause 3, which relates to qualifying examinations,

Sir LYON PLAYFAIR moved that subsection (*a*) should read as follows: "Any university in the United Kingdom, or any medical corporation, legally qualified at the passing of this Act, to grant such diploma or diplomas in respect of medicine and surgery," instead of "any university in the United Kingdom for the time being capable of granting any such diploma or diplomas."

Sir H. HOLLAND accepted the amendment, as it was practically an enlargement of the one he had put on the paper.

The amendment was agreed to.

Subsection (*b*) provides that a qualifying examination shall be an examination held by "any combination of two or more medical corporations in the same part of the United Kingdom who may agree to hold a joint examination"; and to this was added, upon the motion of Sir Lyon Playfair, "in medicine, surgery, and midwifery, and of whom one, at least, is capable of granting such diploma as aforesaid in respect of medicine, and one, at least, is capable of granting such diploma in respect of surgery."

The clause was agreed to.

On clause 4 (withdrawal from medical authorities of right to hold qualifying examinations),

Sir LYON PLAYFAIR proposed to omit the words "and the Privy Council, upon the representation of the General Council, or of their own motion," and to insert in lieu thereof, "and Her Majesty, with the advice of Her Privy Council, if upon further representation of the General Council or otherwise, it seems to be expedient so to do," the words which follow being "shall have power at any time to revoke any such order."

Sir H. HOLLAND had put an amendment upon the paper with the object of preventing the Privy Council from revoking an order upon "their own motion." If Sir Lyon Playfair would omit the words "or otherwise," he should be prepared to accept the amendment.

Sir LYON PLAYFAIR said he could not do that, because, if he did, there would be no appeal.

Sir H. HOLLAND asked if there would be any objection to adopt the words "or upon appeal"?

Sir LYON PLAYFAIR promised to consider the suggestion in the Report, and the amendment was carried.

The clause was agreed to.

Clause 5 (qualifying examinations held by medical corporations, with assistant examiners) having been amended,

Dr. O'DOHERTY moved its omission, on the ground that it did not meet the requirements of the case. It would not, he said, prevent one or other of the colleges from refusing to join and take part in the examinations.

Dr. KENNY also objected to the clause. Under this clause, it was quite possible for a powerful corporation to defeat the purpose of the Bill, which he understood to be the development of medical science.

Sir LYON PLAYFAIR was sure even the honourable members who raised objection to the clause would be very disappointed if it did not pass. He thought the wisest course would be to allow the clause to pass, and to move on report, or at the end of the Committee, some words which would strengthen the compulsory powers which the clause gave, but which he would resist.

Dr. KENNY said the right hon. gentleman declared that he intended to oppose the new clause, which was to be brought forward later on; and that, therefore, was sufficient reason for pressing on the present proposal. Considering the lateness of the hour and the importance of the clause, he moved to report progress.

Sir LYON PLAYFAIR hoped that the hon. member would not press his motion to report progress. All the corporations and universities in the kingdom wished to see the Bill passed; and, considering the present critical times, what chance was there of the Bill being carried to a successful conclusion if unnecessary delays now took place? Since 1870, there had been no fewer than twenty-two Bills on this subject, every one of which had been strongly opposed. The present measure was not opposed to any extent. All the medical corporations and all the universities had written to him suggesting alterations, many of which he had been pleased to adopt. He hoped the motion to report progress would not be persisted in.

Dr. FOSTER trusted the motion to report progress would be withdrawn. Though the members of the medical profession looked upon the measure as only a small one, still it contained some principles which were dear to them, and hoped to see it become law.

Dr. KENNY said the right hon. gentleman had stated that no opposition to the Bill had come from the medical corporations. That was quite true. He believed those bodies generally looked on the measure as preserving their rights and privileges, but he entertained very serious objections to the Bill. It did not treat the profession at large with fairness at all. The provision for giving representation on the Medical Council was utterly insufficient. He could not yield to hon. members who had just suggested that he should withdraw his motion for reporting progress. If he received any assurance from Sir Lyon Playfair that, later on, a better representation to the profession at large would be provided for in the Bill, he would withdraw the motion; but, from what he had heard, and from what had already taken place, he feared there was no prospect of any such assurance being given.

Mr. DILLON appealed to Dr. Kenny to withdraw his motion. As far as he could understand it, though the Bill did not go far enough, it seemed to meet the crying grievances which had existed in the profession for years. Dr. Kenny should withdraw his motion, and press on his recommendations affecting the general body of the medical profession at a later period.

Dr. KENNY withdrew his motion.

Dr. O'DOHERTY did not press his motion for the omission of Clause 5, and the Clause was consequently agreed to.

Clause 6 was agreed to.

On Clause 7, relating to the number of members of the Medical Council nominated by the Crown—a motion by Sir LYON PLAYFAIR to strike out "six"—the intention subsequently being to substitute "five"—was agreed to.

Dr. FOSTER moved to insert "four." The six nominees of the Crown were originally placed on the Council, in default of any repre-

sentation being given to the medical profession. The argument used at the time was, that representation could not be given, as there was no register upon which representatives could be elected. The time had now come when the profession could obtain substantial representation, and even thought their members would be in a minority, the corporations having the majority; he thought steps should be taken to prevent the continuance of the great disparity between the representatives of the profession and the nominees of the Crown.

Sir LYON PLAYFAIR said that every one would admit that the Crown nominees were most distinguished men, and represented the medical profession even more than the corporations, and had adorned the Council to which they had been sent. He was so much struck by an observation of an honourable friend on the second reading, to the effect that England should have another representative on the Council, that he had consented to sacrifice one of the Crown nominees, in order to give that additional representative to England. In this way no increase would be put upon the expenses of the Council, whose funds were only small, and who could not afford to bear great expense.

Mr. DILLON would be more jealous of the representatives of the corporations than the nominees of the Crown. He thought Sir Lyon Playfair was justified in saying that the nominees of the Crown represented more fully the medical profession than the nominees of the corporations.

Dr. KENNY would be much more disposed, later on, in reference to this matter, to move an increase in the representation of the profession at large, than to move to diminish the Crown representatives. No doubt, if they could not give a better representation to the profession at large, he should agree with the amendment, because an increase must come from somewhere; but it seemed to him that the course to pursue was, whilst they were grouping medical bodies in the country, for purposes of examinations, to do it also for purposes of representation. Let them leave the nominees of the Crown as they were, and give the profession a much larger representation.

Mr. J. H. A. MACDONALD thought it would be preferable to accept the amendment, and that they should only have on the Council four members nominated by the Privy Council. Sir Lyon Playfair, in the argument he brought forward in favour of having five Crown nominees—the argument being that the gentlemen so nominated had always been the most distinguished members of the profession—ignored what all members of the House would expect, namely, that, when the medical practitioners of the three countries had the opportunity of selecting gentlemen to represent them, it would be a most extraordinary thing if they did not select the most distinguished men in the profession.

The amendment was negatived without a division, and the number "five" was agreed to.

Sir H. ROSCOE moved an amendment, to give separate representation to the Victoria University and the University of Durham, instead of one member between the two. These Universities were of different characters. The Victoria University had a well equipped and numerously attended medical school, where the scientific education was of the highest kind. It consisted of the Victoria University of Manchester and the University College of Liverpool; and it was hoped that, in time, the Leeds Medical School, connected with the Yorkshire College, would be affiliated. They had five hundred students, of whom a great number practised medicine and surgery; and they very justly thought that they should have a representative on the Medical Council. Durham University was entirely removed from the centre of the Victoria University, and the education it gave was decidedly inferior.

Lord FREDERICK HAMILTON said he could corroborate the hon. gentleman as to the opinion of Manchester that the Victoria University, on account of its importance, was entitled to nominate a member to the Council. It was entitled to this privilege from its importance—not merely because of the work done by it, but also from the fact that it was now the educational centre of the whole of the county of Lancaster and of the West Riding of Yorkshire. The education obtainable there was different from that obtainable at the Durham University; the classes from which the students were drawn were different. Beyond the fact that, in the case of both, the students were drawn from the North; and even the geographical argument was not a strong one, for Durham was no nearer Manchester than Oxford; the two Universities had nothing in common. No one could contend that the addition of one member to the Medical Council could be a matter of material importance; and, looking at the growing importance of the Victoria University, he thought the amendment should be assented to.

Mr. F. POWELL supported the amendment. He hoped those who knew what was going on in connection with the educational institutions of Manchester, Liverpool, and Leeds would bear testimony to the desirability of giving a representative to the Victoria University on the Medical Council. The Manchester Medical School had long been celebrated for its skill and knowledge, as also had those of Liverpool and Leeds; and he was sure the University would grow year by year, and become more powerful. Year by year the number of those who belonged to it would go on rapidly increasing. The University of Durham was not a sister university to Cambridge, Oxford, or Victoria, and he did not think that science would be advanced by its being joined to the Victoria University. Moreover, he did not see how two universities could choose a member to the Council collectively. There seemed to be a great technical difficulty in the matter.

Mr. RATHBONE confirmed what had been said as to the importance of the three large medical schools in Manchester, Liverpool, and Leeds, and held that the representation asked for in their behalf should be conceded.

Dr. FOSTER opposed the amendment on principle, because it would give greater power than the Bill proposed to give to the universities. He thought that five members on the council of twenty-eight was quite sufficient for the universities. The Victoria University was growing. Well, when it was grown would be time enough to give it individual representation on the Medical Council. No doubt it had a great future before it, but let it wait until it had, to some extent, developed.

Dr. FARQUHARSON thought a very good claim had been made out for the representation of the Victoria University. It was doing good work as representing the medical profession of the north of England.

Mr. WHITLEY submitted that the Liverpool University College Medical School was now one of the best known in the kingdom, and was doing remarkably good work.

Sir L. PLAYFAIR opposed the amendment, though he recognised the fact that the general expression of opinion was in favour of it. The Victoria University was an admirable institution, but it was only in its infancy. It had medical students who had done excellently well, but it had very few graduates. Under Clause 10 of the Bill, the General Medical Council was empowered to give a separate representation to every university when it had established its claim to it, therefore, he should not feel himself justified in voting for the amendment if it went to a division. However, in consequence of the general feeling which had been exhibited in favour of the proposal, he should not make his a joint opposition to it.

Mr. JACKSON supported the amendment. So far as the medical profession of Leeds was concerned, they spoke with united voice entirely in the direction of the amendment. Sir Lyon Playfair's own constituents would be unanimously in favour of the proposal.

Sir JOHN LUBBOCK wished to know what was the number of the constituency for whom this representation was demanded.

Dr. FOSTER replied that he believed the Victoria graduates numbered fifty, certainly not a hundred. It would be unfair to give this university one representative, seeing that the London University, with a constituency of 1,500 or 1,600, had no more.

Sir H. ROSCOE concluded that the Victoria University was a representative body—thoroughly representing the medical profession of the north of England.

Mr. T. P. O'CONNOR thought that objection to the amendment came with a very bad grace from Sir John Lubbock. The constituency he represented (the University of London) was coupled with Durham by Mr. Disraeli in his Reform Bill, and that arrangement had been objected to on the very grounds alleged against the coupling of the Victoria University with the Durham University.

Sir JOHN LUBBOCK had made no objection to the proposal, but had inquired as to the number of the constituency which asked to be represented. He asked how many medical undergraduates there were in Durham. He should say not more than twenty or thirty. Other institutions had 15,000 or 16,000. The Victoria University was said to be a growing university, but it was only in the sense in which a body could be said to be growing.

Mr. GIBSON supported the proposal. The principle on which they ought to go was that the interests of the medical profession in the north of England all converged round the Victoria University. The medical men of Yorkshire and Lancashire were entitled to have a medical centre of their own, and that medical centre was the Victoria University.

Dr. TANNER submitted that the licensing bodies, in the past, had had too much power in their hands; and, if he understood the general tenour of the Bill aright, it was to take the power in a great degree out of the hands of these bodies, and place it in the hands of a well selected General Council. If they commenced, at this early period of the discussion in Committee, putting on the Medical Council repre-

sentatives of new universities, what was there to prevent other honourable gentlemen from standing up for their own universities and small medical schools in other portions of the kingdom? This amendment was against the principle of the Bill, and he hoped it would be withdrawn.

Sir T. LAWRENCE said the objection he entertained to the proposal was, that the Medical Council was too large already. There would be upon it, if this amendment passed, too many people to talk. It would be quite as reasonable for one of the great hospitals—St. Bartholomew's, for instance—to ask for direct representation, as it was for the universities to demand it.

The Committee divided, with the following result.

For the amendment	119
Against	42
Majority for	77

The amendment was, therefore, agreed to.

Dr. FARQUHARSON proposed that representation on the Medical Council be given to the University of Aberdeen, and the University of St. Andrew's. He asked for the old University of Aberdeen a little of that affection exhibited towards the young Victoria University. The University of Aberdeen represented the medical education and feeling of the North of Scotland. It was growing very rapidly. It had 400 medical students at the present moment, and the number was increasing every year. The claim of the University of Aberdeen was fully equal to that of the University of Cambridge, and even to that of the University of London. As to the University of St. Andrew's, it was very small; but it was quite possible for it to develop, and, in time, become affiliated with Dundee.

Dr. FOSTER opposed the amendment. For years the Universities and Corporations had had representation on the Medical Council, whilst the medical profession had had none. The Committee has taken away one of the Government nominees, in order to give a representative to the Victoria University. On the part of the medical profession, he protested against the giving increased representation to the Universities. He would endeavour, on the Report stage, to alter the system, believing it to be wrong.

Sir LYON PLAYFAIR said he had voted with the "Noes" in the last division, but he believed that, in proportion to the other representations, Scotland was not sufficiently well represented. In the present state of feeling in the House, he thought it would be useless to oppose the amendment. Certainly the University of Aberdeen had a much better claim to representation than the Victoria University had. It passed 73 doctors and bachelors of medicine annually, and it had a very large constituency. Cambridge had now an important medical school, and no one would dream of refusing representation to it, but it only passed 27 medical men a year. Having given representation to the Victoria University, he did not see how they could refuse it to Aberdeen.

Mr. DILLON asked the right honourable gentleman whether he would increase the representation of the profession to two from Ireland, two from Scotland, and four from England? The promoters of the Bill did not seem to recognise the fact that it was the great majority of the medical corporations which were in the habit of obstructing medical measures in Parliament.

Mr. J. A. CAMPBELL remarked that it could not be said that the Scottish universities had stood in the way of medical reforms. He would put before the House the inconvenience of associating the Universities of Aberdeen and St. Andrew's for collective representation on the Medical Council. The two universities were not similar in the matter of medical faculties. The University of Aberdeen was a medical school; St. Andrew's was an examining body in regard to medical studies. It had a large number of medical graduates, and it fulfilled a distinct and special function in this matter. He trusted that the Committee would not hesitate to grant a separate representation to each university.

Sir J. LUBBOCK thought that the number of members on the Council was already sufficiently large; therefore, if they went to a division, he was afraid he should not be able to support the amendment.

Mr. J. H. A. MACDONALD, as the representative of the University of St. Andrew's, supported the amendment. It was quite plain, upon the face of it, that, if separate representation were to be given according to the importance of the Universities, St. Andrew's would unquestionably have it. St. Andrew's was the most ancient University in Scotland, and was certainly as much entitled to separate representation as the Victoria University or the University of Durham. Moreover, St. Andrew's had great prospects before it. In a very short time it would be within half an hour's journey of Dundee, in which there was a flourishing University College established. The number of medical undergraduates in St. Andrew's was not at present very large, but there was every prospect of a great increase.

Dr. FOSTER said St. Andrew's had no actual working medical school, and it only made ten practitioners doctors of medicine annually. Scotland, with a medical population under 8,000, would have eight members on the General Medical Council; while England, with a medical population of 16,000, would only have seven representatives.

Mr. J. H. A. MACDONALD asked how many of the medical men in England came from the Scotch Universities.

Dr. TANNER thought all his medical friends shared with him the opinion that the more they cut down the Corporations, the greater benefit they would confer on the public. Victoria University had already been admitted, and now it was proposed to bring in the Universities of Aberdeen and St. Andrew's. Where was this to stop? If the latter Universities were admitted to representation, he should certainly, on the part of the Irish medical body, ask for representation for the Catholic University, and for the Magee College in Belfast.

Mr. LACAITA supported the amendment.

Mr. JOHNS remarked that if the medical gentlemen would not get on a little quicker with the business, he must ask the Chairman to report progress.

The committee divided:

For the amendment	55
Against	72
Majority	17

Progress was then reported.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

SIR,—In the BRITISH MEDICAL JOURNAL of May 29th, at the end of the report of the trial of John William Irvine, a surgeon, for manslaughter, you add: "His lordship inflicted a fine of 10s. upon Mr. Smelt, the coroner before whom the inquest on Darling was held, for failing to send in the depositions." I was not present at the trial, and first heard that I had been fined on reading the report in the newspapers of the following day; and, upon then explaining to his lordship that there was no committal by the coroner's jury in Darling's case, and that it was not part of my duty to send depositions, except in cases where there had been a committal, he at once apologised, and remitted the fine. This took place in open Court, and was reported prominently in all the Manchester papers. I must ask you, therefore, to contradict the statement in your next publication.

In a letter referring to the same case, Dr. C. R. Illingworth states that no analysis of the laudanum-bottle was made or given in evidence. This is not correct, and I am sorry to find that Dr. Illingworth has been misled. A sample was obtained from Mr. Pitman, and brought away by the sergeant when Irvine was in the surgery. This was analysed by Mr. Thompson, and was found to be normal in strength, and the evidence relating to it was given at the adjourned inquest, in the presence of Dr. Pitman, Irvine, and O'Hea, a friend. Further than this, at the inquest I suggested the theory now advocated by Dr. Illingworth, and it was ridiculed by both Pitman and Irvine, and it was for that reason that I obtained a sample of the stock laudanum from Messrs. Pitman and Irvine. I regret very much that I could not be present at the trial to assist counsel for the prisoner, and I quite agree with your correspondent that counsel was badly treated in getting his brief only half an hour before the trial.—Yours faithfully,

SIDNEY SMELT.

MEDICAL ETIQUETTE.

SIR,—About a year ago, I attended a Mrs. A. in her confinement, for Mr. B., as B. was not at home when sent for. Of course, as soon as it was over, I informed B., and he took charge of Mrs. A., and I never saw her afterwards. This morning, a lady came to my house, and asked me to attend her in an approaching confinement; and, until I asked her name and address, I did not recognise her to be Mrs. A., whom I had attended last year. I at once told her to ask Mr. B. to attend her, but Mrs. A. replied that she did not wish to have Mr. B.; and that, if I would not attend her, she should not engage B., but would get some one else.

Under these circumstances, was I not justified in agreeing to attend Mrs. A.? Is it necessary for me to inform B. that she has engaged me? or how should I act in the matter?—Yours faithfully,

AUDAX JUSTUM PERFICERE.

*** Under the circumstances stated, our correspondent would be ethically justified in acceding to Mrs. A.'s request. At the same time, we ever view with regret such professional, though unavoidable, incidents; inasmuch as they tend, more or less, to estrange the superseded from the superseding practitioner, and to mar the genial relations which might otherwise subsist between them. We

would, therefore, advise our correspondent to call upon the practitioner in question, and tender a full explanation of the facts of the case, as a simple and essential act of courtesy, and with the view, moreover, to avert, as far as may be, the not unnatural tendency of the professional mind to take umbrage at being superseded.

OBITUARY.

HENRY MAC CORMAC, M.D., Belfast.

One of the oldest medical practitioners in Belfast, if not the oldest, has passed away, namely, Dr. Henry Mac Cormac, who died after a short illness, at his residence, Fisherwick Place, on May 26th, at an advanced age. The subject of this notice graduated at Edinburgh in 1824, and afterwards visited Africa and North America. He then commenced the practice of his profession in Belfast, and was appointed visiting physician to the Royal Hospital, formerly the Belfast Fever Hospital. In 1832, Asiatic cholera prevailed in Belfast, and Dr. Mac Cormac was appointed to the Cholera Hospital, and, for his exertions, received a very handsome testimonial, and the thanks of the citizens. He afterwards was elected visiting physician to the Belfast Lunatic Asylum, and lecturer on Practice of Medicine in the Royal Belfast Institution. About fifteen or twenty years since, he retired from the practice of his profession, and concentrated his attention to the production of various works on sanitary and scientific subjects. These include: a "Treatise on Stammering;" "The Philosophy of Human Nature;" "*Methodus Medendi*, or the Practice of Medicine;" translation of "Antoninus Epictetus;" "Aspirations from the Inner—the Spiritual Life;" "Metanoia: a Plea for the Insane;" "The Nature and Treatment of Asiatic Cholera;" "Proposal for the Painless Extinction of Life in Animals Designed for Human Food;" "Consumption, as Engendered by Prebreathed Air," etc.. It is stated that, at the time of his death, he had in course of preparation, manuscripts on "Philology" and "Insanity." It may be added that the deceased gentleman was the father of Sir William Mac Cormac, of London, the well-known surgeon.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

JUSTICE FROM THE LOCAL GOVERNMENT BOARD.

Dr. J. Hurley (Medical Officer Wincanton Union) writes: It is so rarely that the Local Government Board support a medical officer in dispute with a board of guardians, that the following case may be useful as a precedent.

Having received an order from an overseer to attend a woman in her confinement, I did so, and reported the case at the next meeting of the Wincanton Board of Guardians, observing that the order was granted by the parish overseer. At the end of the quarter, I included this case with others in my account for extra fees; but the guardians refused to pay, on the ground that the overseer had not reported the case to them, and they added that he would pay me out of the parish accounts. Instead of applying to him, I laid the case before the Local Government Board; and, a few weeks afterwards, I received an intimation from the clerk of the guardians that they had reconsidered their decision in this case, and that the fee would be paid if I included it in my next quarterly account.

FEES FOR AN OPERATION.

In reply to "L.R.C.P.," we hold that it would be his duty, under the circumstances, either to divide the fee, or, at the least, to give the guinea he suggests. The guardians are not at liberty to pay any fee at all, unless a certificate be presented from the medical officer who assisted that it was a case for an operation, which certificate must be preserved and presented by the clerk to the auditor, as a voucher for the legality of the payment.

PAUPER LUNATICS.

M.B., M.A.—A relieving officer seldom, if ever, takes the initiative in deciding as to who shall be called in to decide as to the lunacy, or otherwise, of a pauper in his district. He generally, if wise, acts on the instructions he receives either from the board of guardians, a stipendiary magistrate, or the justices of the peace acting within the district to which he, the relieving officer, is appointed. By one or other of these three courses only he has been moved to act. It is most unfortunate that district and workhouse medical officers take such little trouble in these matters. As regards the latter, if the present Lunacy Law Amendment Bill become law, they will be debarred by statute from certifying in any case occurring in a workhouse, and it will not be long before the district medical officer will be treated in a similar manner.

HEALTH OF FOREIGN CITIES.

It appears from statistics published in the Registrar-General's return for the week ending May 15th, that the annual death-rate recently averaged 27.4 per 1,000 in the three principal Indian cities; it was 18.9 in Calcutta, 24.2 in Bombay, and 33.0 in Madras. Cholera caused 17 deaths in Calcutta, and 1 in Bombay; and diarrhœal diseases 34 in Madras; "fever" mortality showed about equal excess in each of these three cities. According to the most recently received weekly returns, the annual death-rate averaged 28.7 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no fewer than 9.6 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 43.0, and showed an increase upon the high rates in recent weeks; the 764 deaths included 90 from diarrhœal diseases, 42 from measles, 30 from "fever," and 28 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 21.4, and ranged from 18.7 in Christiania to 22.6 in Copenhagen; diphtheria and croup caused 5 deaths in Copenhagen, 4 in Christiania, and 3 in Stockholm. In Paris the death-rate was equal to 26.5, and exceeded the rate in London by no fewer than 8.7; the deaths included 36 from diphtheria and croup, 30 from measles, 10 from typhoid fever, and 4 from small-pox. The 192 deaths in Brussels, of which 9 resulted from diphtheria and croup, gave a rate of 22.9. In Geneva, the rate was 20.5, and the deaths included 2 fatal cases of whooping-cough. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 23.6, the rates ranging from 21.0 in the Hague, to 24.7 in Amsterdam; the deaths in Amsterdam included 4 from whooping-cough, and 2 from diphtheria. The Registrar-General's table includes eight German and Austrian cities, in which the death-rates averaged 30.0, and ranged from 23.6 and 25.6 in Berlin and Dresden, to 36.9 in Prague and 40.4 in Buda-Pesth. Small-pox caused 17 deaths in Buda-Pesth, 6 in Prague, and 3 in Vienna; diphtheria showed the greatest mortality in Hamburg, and "fever" caused 10 deaths in Prague. The mean death-rate in three of the principal Italian cities was 29.1, the rate being 27.9 in Rome, 28.2 in Turin, and 33.6 in Venice; small-pox caused 6 deaths in Rome, and 3 in Turin, and 19 deaths from cholera were reported in Venice. The death-rate was equal to 43.1 in Alexandria, and 51.2 in Cairo; typhoid fever showed fatal prevalence in both these cities, and diarrhœal diseases caused 47 deaths in Alexandria, and 82 in Cairo. In four of the largest American cities, the mean recorded death-rate was 22.7, the rates ranging from 19.3 in Brooklyn to 26.8 in New York; diphtheria showed the greatest mortality in New York, where 14 deaths were also referred to scarlet fever.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty:—Charles Morton, Fleet-Surgeon, to the *Trincomalee;* T. S. Burnett, Fleet-Surgeon, to the Portsmouth Division of the Royal Marines.

Fleet-Surgeon L. J. Monteith died at Surbiton Hill on June 2nd, aged 68. Mr. Monteith's commissions bore date—Surgeon, April 30th, 1843; Staff-Surgeon, May 5th, 1854; and Fleet-Surgeon, February 4th, 1869. He retired April 24th, 1879.

MEDICAL STAFF.

Brigade-Surgeon E. H. Roberts is promoted to be Deputy Surgeon-General, *vice* W. H. Corbett, M.D., deceased. He entered the service as Assistant-Surgeon, June 23rd, 1854; became Surgeon, August 7th, 1866; Surgeon-Major, March 1st, 1873; and Brigade-Surgeon, November 13th, 1881. Mr. Roberts served with the 72nd Highlanders in the Crimea, from June 13th, 1855, including the expedition of Kertch, the siege and fall of Sebastopol, and the attacks of June 18th and September 8th (medal with clasp, and Turkish medal). He was also with the 79th Highlanders in the Indian campaign of 1857-58, including the siege and capture of Lucknow, the attack on the Fort of Rooyah, the action of Allygunge, and the capture of Bareilly (medal with clasp).

Brigade-Surgeon W. Collis is also promoted to be Deputy Surgeon-General, in the place of W. H. Muschamp, granted retired pay. His previous commissions are dated: Assistant-Surgeon, September 14th, 1855; Surgeon, April 5th, 1871; Surgeon-Major, March 1st, 1873; and Brigade-Surgeon, February 21st, 1882. Mr. Collis served with the 98th Regiment in the Peshawur Expeditionary Force, on the Eusofzee Frontier, under Sir Sidney Cotton, in April and May, 1858, and at the affair with the Hindostanee fanatics on the heights of Sittana on May 4th (medal with clasp). He was also engaged during the operations in the Malay States, under Brigadier-General Ross, as Principal Medical Officer, from November 24th, 1875, to January 31st, 1876 (medal).

Surgeon-Major S. E. Maunsell is appointed Brigade-Surgeon, *vice* E. H. Roberts. His commission as Assistant-Surgeon bears date January 19th, 1860; Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1875. He does not appear to have seen war-experience.

Surgeon-Major W. C. Robinson is also promoted to be Brigade-Surgeon, *vice* W. Collis. His commissions are contemporaneous with those of Surgeon-Major Maunsell. He, also, has no war-record.

Surgeon-Major T. P. B. O'Brien has been granted retired pay, with the honorary rank of Brigade-Surgeon. He entered as Assistant-Surgeon, September 29th, 1855; became Surgeon, August 4th, 1870; and Surgeon-Major, March 1st, 1873. He had medical charge of the force sent against the hostile Indians of Yucatan, in 1858, and was with the troops engaged in suppressing the disturbances throughout the northern districts of British Honduras in that year.

Surgeon-Major B. J. Jazdowski, M.B., has also been granted retired pay, with a step of honorary rank. He ranks as Assistant-Surgeon from October 1st, 1860; as Surgeon, from March 1st, 1873; and as Surgeon-Major, September 16th, 1875. Mr. Jazdowski served in the campaign on the North-West Frontier of India in 1863-64, and was present at the forcing of the Umbeyla Pass (medal with clasp). He served, also, in the war in Egypt in 1882 (medal, and Egyptian bronze star).

The honour of Knight Bachelor has been conferred on Surgeon-General T. Longmore, Professor of Military Surgery at Netley Hospital. Mr. Longmore (*Hart's Army List* informs us) served in the Light Division of the Eastern Army from its first taking the field, throughout the campaign of 1854-55, until the termination of the siege of Sebastopol, without being absent from duty a single day; he was present at the affair of Bulganak, the battles of the Alma and Inkerman, the capture of Balaklava, the sortie of October 26th, and the assaults of the Redan on June 18th and September 8th (medal with three clasps, Turkish medal, and Knight of the Legion of Honour). He was nominated a Companion of the Bath in 1867.

Deputy Surgeon-General J. B. C. Reade has been nominated a Companion of the Bath. He served with the 2nd Battalion of the Rifle Brigade, throughout the Eastern campaign of 1854-55, including the battles of Alma and Inkerman, and the siege of Sebastopol—was wounded on November 14th, 1855, at the explosion of the French siege train (medal with three clasps, and Turkish medal). He was with the Battalion during the whole of its service in suppression of the Indian

mutiny, including the actions at Cawnpore, capture of Lucknow, and numerous affairs during the Oude campaign (medal with clasp). He was also engaged in the war in Afghanistan, in 1878-80 (medal).

THE INDIAN MEDICAL SERVICE.

Surgeon-Major C. E. M'Vittie, Madras Establishment, Medical Officer 3rd Cavalry Hyderabad Contingent, is appointed to officiate as Residency Surgeon at Hyderabad, during the absence on privilege leave of Surgeon-Major E. Lawrie, M.B.

Deputy Surgeon-General W. H. Rean, M.D., Madras Establishment, has retired from the service, which he entered as Assistant-Surgeon May 14th, 1853, attaining to the rank of Deputy Surgeon-General March 28th, 1881. Dr. Rean served in the Indian Mutiny Campaign in 1857, including the operations in Bengal and Oude, the advance on and occupation of Allahabad, the repulse of the rebels from the Oude bank of the Ganges before Cawnpore, and the defence of Cawnpore (medal).

The undermentioned Surgeons have been granted the honorary rank of Surgeon-Major:—E. F. Nelson, M.D., 5th Battalion of the Royal Irish Rifles (otherwise the South Down Militia); T. C. Beatty, 2nd Durham (Seaham) Artillery Volunteers; R. Davy, 3rd Middlesex Artillery Volunteers; and H. R. Smith, 3rd Volunteer Battalion of the Hampshire Regiment (late the 3rd Hampshire Volunteers).

Mr. C. H. Hough has been appointed Surgeon to the Derbyshire Yeomanry.

Acting-Surgeon J. A. Macdougall, 1st Cumberland Artillery Volunteers, is promoted to be Surgeon.

Mr. E. W. Skinner, M.B., is appointed Acting-Surgeon to the 1st Cinque Ports Volunteers; and Mr. C. R. Whitty, M.D., to the same position in the 3rd Volunteer Battalion of the Norfolk Regiment (late the 3rd Norfolk Volunteers).

Acting-Surgeon E. W. Barton, M.D., of the 1st Volunteer Battalion of the Lincolnshire Regiment (the 1st Lincoln Volunteers), has resigned his appointment, which bore date May 1st, 1880.

MEDICAL NEWS.

Society of Apothecaries of London.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, May 27th, 1886.

Cross, Robert George, M.R.C.S., Petersfield.
Mitchell, Albert Waldegrave, Slane House, Wandsworth Common.
Smith, Robert Bramwell, 29, Pin Mill Brow, Ardwick, Manchester.
Williams, Lionel Henry, M.R.C.S., 4, Beaconsfield Road, Bristol.

University of Dublin.—At the Previous Summer Commencements of Trinity Term, held in the Examination Hall of Trinity College, on Wednesday, May 12th, 1886, the following Degrees in Medicine were conferred by the University Caput, in the presence of the Senate.

Bachelor in Medicine.—P. C. Pounden.
Doctor in Medicine.—J. A. Powell.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Honorary Assistant-Surgeon. Applications by June 14th, to E. J. Abbott.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £100 per annum. Applications to Mr. J. Ostell, 14, Bank Street, Carlisle.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Three Clinical Assistants. Applications to Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Medical Officer. Salary, £100 per annum. Applications by June 8th.

EAST RIDING ASYLUM, Beverley.—Assistant Medical Officer. Salary, £100 per annum. Applications to Medical Superintendent by July 1st.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Two Clinical Assistants. Applications to Secretary.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square, W.—Resident Medical Officer. Salary, £100 per annum, with board and rooms. Applications by June 15th to the Honorary Secretary.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, London.—Medical Registrar. Honorarium, 50 guineas. Applications by June 9th to A. Hope.

HUDDERSFIELD INFIRMARY.—Junior Resident Medical Officer. Salary, £40 per annum. Applications by June 5th to F. Eastwood, Infirmary, Huddersfield.

INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £80 per annum, with bed, board, and washing. Applications by June 17th, to Dr. Aitken, Medical Superintendent.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £50 per annum. Applications by June 18th, to the Secretary

LONDON DENTAL HOSPITAL, Leicester Square.—Assistant Dental Surgeon. Applications by June 21st to the Honorary Secretary.

RIPON DISPENSARY.—Resident House-Surgeon and Dispenser. Salary, £100 per annum. Applications by July 1st to the Honorary Secretary.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street. Strand, W.C.—House Surgeon. Applications by June 2nd.

ST. GEORGE'S, HANOVER SQUARE, DISPENSARY.—Surgeon. Applications by June 1st to the Secretary.

SUSSEX COUNTY HOSPITAL, Brighton.—House-Surgeon. Salary, £80 per annum, and £10 per annum for each resident pupil. Applications by June 23rd to the Secretary.

MEDICAL APPOINTMENTS.

Cox, A. H. Lissants, L.S.A., appointed House-Physician to King's College Hospital, *vice* P. G. Lewis, resigned.

East, Charles E., M.R.C.S., L.S.A., appointed House-Surgeon to King's College Hospital, *vice* E. A. Hughes, resigned.

Ewens, G. F. W., M.B.Dublin, M.R.C.S., L.R.C.P., appointed Assistant House-Physician to King's College Hospital, *vice* A. H. L. Cox, resigned.

Hubbard, D. L., M.R.C.S., L.S.A., appointed House-Surgeon to King's College Hospital, *vice* E. H. Smith, resigned.

Hughes, Edgar A., M.R.C.S., L.R.C.P., L.S.A., appointed Ophthalmic Clinical Assistant to King's College Hospital, *vice* J. F. Harries, resigned.

Jacomb-Hood, Charles J., M.R.C.S., L.S.A., appointed Physician-Accoucheur's Assistant to King's College Hospital, *vice* Frank Penny, resigned.

Pringle, John J., M.B., M.R.C.P., appointed Physician to the Royal Hospital for Diseases of the Chest, City Road.

Ramsden, W. H. F., M.R.C.S.Lond., appointed Medical Officer of Health to the Uppermill Local Board, Saddleworth, *vice* W. Blackburn, M.R.C.S.Eng., resigned.

Shaw, John, M.D.Lond., M.R.C.P., appointed Senior Assistant-Physician in the Gynæcological Department of the North-West London Hospital.

Walford, E., M.D., S.Sc.C.Camb., reappointed Medical Officer of Health for the Urban Sanitary District of Ramsgate.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

Gabb.—May 28th, at Copthorne, Guildford, the wife of J. Percy A. Gabb, M.D. Lond., of a son.

Lunn.—On May 30th, the wife of John R. Lunn, F.R.C.S.Ed., Medical Superintendent of the St. Marylebone Infirmary, Notting Hill, prematurely, of a son, who survived his birth only a few hours.

MARRIAGES.

Baker—Glasspool.—On May 27th, at All Saints' Church, Southampton, by the Rev. E. T. Glasspool, M.A., brother of the bride, Thomas Baker, M.R.C.S., L.S.A., of Waterlooville, Cosham, Hants, to Laurie Hannah, daughter of J. T. Glasspool, Southampton.

Farrer—Jobson.—On June 1st, at St. Hilda's, Hartlepool, by the Rev. E. Ormsby, M.A., Robert T. Farrer, M.R.C.S.Eng., etc., Brighouse, third son of Robert Farrer, Esq., Esplanade Gardens, to Henrietta Sophie (Hetty), only daughter of the late E. S. Jobson, Esq., of Hartlepool, J.P. co. Durham.

DEATH.

Jones.—On May 22nd, at Heublas, Bala, Merionethshire, Richard Owen Jones, Esq., M.R.C.S.Eng., L.S.A.Lond., in his forty-ninth year.

A Chemist Censured.—An inquest was held this week, before the deputy coroner for Manchester, on the body of James Wood, of Harpurhey, who died a few days ago from loss of blood. He had been attended in the early part of his illness by Mr. J. Jackson, medical and dispensing chemist, who had no surgical or medical qualification. Dr. J. B. Wilkinson said that the deceased suffered from hæmorrhagic diathesis; and if he had been properly treated in the first instance, he would probably still have been alive. The jury found that the deceased died from natural causes, but recommended that Mr. Jackson should be censured for not advising the deceased's relatives of his danger at an earlier stage. Mr. Smelt said the chemist had been grossly negligent, and censured him severely.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Odontological Society of Great Britain, 8 P.M. Communications from Messrs. S. J. Hutchinson. W. St. George Elliott, A. Morton Smale. Mr. J. W. Groves: Practical Microscopy in application to Odontology.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Chavasse: On a Case of Multiple Neuromata. Dr. Angel Money: Some Statistics of Pneumonia, with especial reference to the relations of Delirium and Temperature. Dr. Gervis: A Case of Extra-uterine Gestation.

WEDNESDAY.—Epidemiological Society, 8 P.M. The Office-bearers for the ensuing session will be balloted for. The Treasurer and Secretaries will present their Annual Report. Dr. Thorne Thorne: The International Sanitary Conference of Rome, 1885. Mr. Bolton G. Corney: The Recent Prevalence of Cerebro-spinal Fever among Polynesian Immigrants.—British Gynæcological Society, 8.30 P.M. Specimens will be shown. Dr. Grigg: Pyosalpinx in the Puerpera.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Living and Card Specimens at 8 P.M. S. Snell: 1. Embolism of Central Artery of Retina occurring in a case of Puerperal Septicæmia; 2. Cholesterine in a case of Detached Retina. R. Brudenell Carter: 1. Case of Foreign Body imbedded innocuously in the Retina; 2. On some Points in Cataract-Extraction. W. O. Maher: 1. A rare case of Exophthalmic Goître; 2. Case of Retinal Detachment. Stephen Mackenzie (for Dr. Davidson): Fatal Meningitis after Enucleation. J. B. Lawford: New Tissue-formation in Choroid and Retina.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M. Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

PRIMARY OSTEOMA OF BRAIN.

MR. J. CRISP (Guy's Hospital) asks where he can find, fully reported, any cases in which a tumour composed of true bone has been found, as a primary growth, in the brain-substance.

MR. J. MULLIGAN (The Hawthorns, Abersychan) asks for information on the cost of the erection of an "infectious diseases hospital," and its maintenance.

SPARTEIN.

H. S. cannot find any mention of the dose of spartein sulphate in cases of anasarca. One of his patients is suffering from dilated heart and anasarca of the lower extremities, and he would like to try the drug. He asks if any of our readers could give him information.

EMULSIFICATION OF COD-LIVER OIL BY MALT.

F. T. B. writes: Referring to the note on this subject in the BRITISH MEDICAL JOURNAL of May 22nd, and to another which appeared a few weeks ago, the writer of this would be glad to know whether the emulsifying powers of maltine are confined to cod-liver oil, or apply also to other oils; how the result is obtained; and where any information on the matter can be procured.

BOURNEMOUTH.

M.D. asks if there is any medical man at the above place who receives any member of the profession to reside with him, not so much for medical advice as for a home where he could have domestic comforts, with pleasant society.

TREATMENT OF WRY-NECK.

M.D., F.R.C.S., asks where the India-rubber bag apparatus for the cure of wry-neck is to be obtained.

THE ANTISEPTIC TREATMENT IN WAR.

R. H. F. asks for information as to what works to consult on the success and availability of the antiseptic method of treatment, as applied to the wounded in actual war; also as to the results obtained up to date by the use of corrosive sublimate as an antiseptic.

UNILATERAL NASAL CATARRH.

QUALIFIED ASSISTANT asks for a suggestion of a remedy in a case of obstinate nasal catarrh, affecting the left nostril only. The ordinary remedies have failed to overcome the obstruction, which still persists in the left nostril. He also asks if it is possibly connected with the gouty diathesis.

TASMANIA AND AUSTRALIA.

TASMANIA asks for a reply to the following queries. 1. How does the Tasmanian climate compare with that of the Southern Australian colonies as to temperature, humidity, changeableness, sunshine, rainfall, etc.? 2. How does the Tasmanian climate compare with that of the south of England as to the same conditions, especially during the winter months? 3. Is there fog or dampness in winter? 4. What is the registered rainfall, humidity, sunshine, etc.? 5. Is there more scope for practice than in England? 6. What is the cost of living, as compared with England? 7. Is the climate adapted to persons subject to chest delicacy?

*** The most recent work on the subject is Bonwick's *Climate and Health in Australia*, section "Tasmania," price 1s. (Street and Co., Cornhill).

SYPHILITIC INFECTION OF FINGER.

ASSISTANT writes: About two days ago, a young man came to the surgery with a Hunterian chancre. I examined it, and could detect the hard base with little difficulty. About five minutes after I had examined it, I found I had a pretty deep cut on the finger with which I had examined it, and know for a fact that some of the secretion from the sore had entered it. On discovering this, I immediately washed it well with a five per cent. solution of carbolic acid. Is there any danger of me becoming infected with syphilis; or do you think the acid would destroy the syphilitic virus?

I might mention that, half an hour before the man came to the surgery, I had washed my hands in a solution of hydrargr. perchlor. (1 in 1,000).

*** Our correspondent certainly runs risk of infection. He did the wisest thing possible under the circumstances, and the chances are that he will not be infected. The part might be washed, once, with a strong solution of the perchloride of mercury, about half a drachm to the ounce of distilled water.

ANSWERS.

PRELIMINARY EXAMINATIONS.

A MEMBER.—The list given at page 475 of the BRITISH MEDICAL JOURNAL for September 12th, 1885, comprises the preliminary examinations recognised by the General Medical Council. Our correspondent will see that there is no special provision for holding such examinations in the medical schools. He should send his son to any one of the examinations which he may prefer, and which may be accessible. Particulars may be obtained from the authorities of the examining body. Having passed the examination, his son may enter as a student at any of the schools. There is no change in the subjects enumerated as necessary.

SUBSTANCE EXPELLED FROM NOSE.

F. M. R.—The body expelled from the nose in the case described consisted chiefly of fats; a large number of crystals, soluble in ether, and melting at a low temperature, were mixed with a granular detritus; no traces of any structures resembling parts of a sebaceous cyst were seen. It was, most probably, a foreign body coated with decomposing mucus. A scrap of food may be easily driven into the nasal passages through the posterior nares; it gives rise to frequent efforts at hawking and swallowing, and causes an amount of discomfort which some people would call pain; pain referred, as a rule, to the inner part of the orbit, may be present.

HYPODERMIC NEEDLES.

DR. W. WILLIAMS (Llanfair, Abergele) writes: "R. W. C." should allow his occluded hypodermic needles to soak in hot water, slightly acidulated with hydrochloric acid, for a few minutes.

A Foreign M.D. Degree.

A Yankee M.D. writes: All candidates for the degree in the United States must have attended two full courses of lectures of the ordinary seven branches, the last course at the College in which he wishes to graduate—the course to be at least of twenty weeks' duration. Most of the schools, I believe, would allow "Associate," being registered in this country, to go up for the examination only. Our correspondent would be happy to give any further information he might wish.

Dr. W. H. Walter (South Petherton).—See British Medical Journal, May 29th, page 1017.

Sir Charles Scudamore.

Mr. Pugin Thornton (Canterbury) writes: Through the kindness of Mrs. Scudamore, living in this neighbourhood, I am able to inform your correspondent, Dr. J. A. Hunter (190, Canal Street, New Orleans, Louisiana), that there is an oil painting, and also a very beautiful miniature, of Sir Charles Scudamore, of either of which your correspondent could probably secure copies, if he applied to the Rev. J. G. Scudamore, Ditchingham Rectory, Bungay

Obstinate Epistaxis.

A Member suggests the use of dry tannic acid as a snuff frequently during the day. It can be easily carried about the person, and, if necessary, may even be scented. He prefers it to gallic acid, as he finds it less irritating, and he fancies more effective. In addition, occasional douching with a cold solution of boracic acid (five grains to the ounce), should be employed.

Excessive Perspiration of Hands.

G. W. writes that washing with a saturated solution of boracic acid is extremely effective in many cases.

NOTES, LETTERS, ETC.

Bromidrosis Pedum treated by Subnitrate of Bismuth.

Excessive perspiration of the feet, which, in some persons, by its decomposition and consequent offensiveness, amounts to a positive infirmity, is easily cured by rubbing the offending members with subnitrate of bismuth in an impalpable powder. The action of the powder appears to be quite local, but it has a decided effect on the integument, rendering it more supple and less liable to excoriation. Even where the application does not arrest the excessive perspiration, it deprives it of any offensive attributes, and thus relieves it of its most distressing feature.

Alcohol for the Medical Staff.

Mr. G. Sturge (Sydenham Hill Road) writes: In the Journal of May 29th, Dr. M. T. Sadler complains of the Barnsley Hospital being singled out for its excessive use of alcohol. I believe there are several other hospitals which are still greater offenders; and that it is a great abuse for the hospitals to spend charity money in alcoholic luxury for the medical staff. In my table, it appears, in 1884, 3s. 4d. per patient was spent on alcohol. The medical officer was offended, and wrote a public letter saying only 1s. 7d. was spent per patient. I therefore concluded 1s. 9d. was spent on the medical staff.

Formation of Dental Tartar and Calculi.

Mr. R. Crosier (Newcastle-on-Tyne) writes: Your Paris correspondent reports, in the Journal of March 20th, on a communication regarding the formation of dental tartar and calculi, of M. Galippe to the Biological Society. M. Galippe believes these formations to be the result of the agency of micro-organisms. I have observed that bacteria do sometimes engage in the formation of hard, apparently calcareous, masses. Just before Christmas, I noticed, in a flask (plugged with cotton-wool, and containing blood coagulated by heat), which had been set aside nine months before, on the surface of the culture-ground, a round, grey bead. This was very hard, and with difficulty crushed. Microscopic examination of a fragment revealed innumerable quiescent bacteria. The rest of the culture-ground contained many bacteria, actively mobile.

A few days ago, I examined some flasks which had been prepared seven months previously. These flasks had been originally intended for some experiments, but had, for various reasons, been rejected as useless. Only three had been perfectly sterilised. Two only, out of more than a dozen flasks, presented appearances at all similar to those already observed. In one flask, the surface of the coagulated blood was covered with many little white, irregularly rounded elevations. Many of these felt like little pieces of necrosed bone; others were soft. In the other flask, containing coagulated yelk of egg, were several round, yellow nodules, of the same consistency as those in the first flask. Both concretions had the same microscopic appearance; innumerable quiescent bacteria, granular matter, and needle-shaped crystals. Both flasks had many active bacteria. The blood was not blackened, but had a faint, not disagreeable odour; the yelk had the smell of cheese. The "concretions" were insoluble in alcohol, chloroform, and ammonium hydrate, soluble in hydrochloric acid. Their base was calcium, at least in part.

Iodide of Sodium versus Iodide of Potassium.

Dr. E. Bucknill (Rawtenstall) writes:—In reading your leading article of April 17th on the above subject, I think the following remarks with regard to iodide of sodium, made by Dr. Ubaldo Daveri, physician of the hospital of St. Orsola, in Bologna, and published in the *Chemist*, from the *Corrispondenza Scientifica di Roma*, No. xxxii, 1852, may be read with some interest.

1. Soda being a common ingredient in our organisation, the iodide of its base seems best suited to the human system.
2. The taste of the iodide of sodium is less disagreeable than that of iodide of potassium.
3. It is less likely to occasion iodism.
4. It is better borne than the potassium-salt, and, in consequence, its dose can be almost daily increased; it thus becomes a more efficient remedy.
5. It has sometimes succeeded where iodide of potassium has failed.
6. We may commence by giving daily, in three equal doses, a scruple of this salt, dissolved in three ounces of distilled water, increasing the strength of the solution every two or three days by six grains. Some patients have in this way been able to take two drachms a day, without suffering the slightest inconvenience.
7. The iodide of sodium is admirably adapted to cases in which the corresponding salt of potassium is indicated.
8. The iodide of sodium is the best substitute for mercury.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Henry Savage, London; Dr. G. J. Robertson, Oldham; An Occasional Correspondent, Philadelphia; Mr. J. Lewis, Birmingham; Mr. W. Donovan, Birmingham; Dr. F. Troup, Edinburgh; Mr. F. W. Lowndes, Liverpool; Professor Aitken, Woolston; Dr. Beaven Rake, Trinidad; Dr. Ashby, Manchester; Dr. A. H. Benson, Dublin; The Secretary of the Manchester Medico-Ethical Association; Mr. George Sturge, London; Surgeon-General Moore, Bombay; Qualified Assistant; Mr. J. Alcock, Burslem; Dr. A. Sheen, Cardiff; Messrs. Verey and Co., London; M.D., F.R.C.S.; Mr. T. Duke, Rugby; R. H. F.; Mr. Dennis, Mistley, Essex; Surgeon-Major MacCormack, London; Dr. George Elder, Nottingham; Mr. J. E. Nicholson, Gibraltar; Messrs. Plon and Co., Paris; Sir Edmund Lechmere, London; Mr. V. A. Latham, Manchester; Messrs. Burroughs and Wellcome, London; Professor J. Hirschberg, Berlin; Mr. O. R. P. Owen, Bala; Dr. M. Howard, Oldham; H. S.; Dr. W. H. Walter, South Petherton; Mr. J. Laird, Sligo; Dr. J. A. Ross, London; Dr. Fisher, London; A Member, York; Dr. Kerr, London; Dr. Savage, Birmingham; Mr. W. Roger Williams, London; Mr. T. F. Pink, London; Mr. E. Hurry Fenwick, London; Mr. J. Warnock, Paris; Dr. Hack Tuke, London; Dr. J. W. Moore, Dublin; Dr. Saundby, Birmingham; Mr. William Grant, London; Mr. A. E. Barker, London; Mr. James Gairdner, Crieff, N.B.; Mr. J. T. James, Corris; Dr. Maxwell, Woolwich; Dr. A. M. Edge, Manchester; Mr. H. Atteurs, Graz, Styria; Dr. Mulligan, Abersychan; Miss B. A. Smith, Scarborough; Mr. J. A. Johnson, Leicester; Mr. E. Pilkington, Sunderland; Dr. Glascott, Manchester; Messrs. Gibson and Co., London; Mr. E. P. Hardey, Hull; Dr. C. J. Cullingworth, Manchester; Mr. J. Chester, London; Dr. Myrtle, Harrogate; Mr. W. E. Sacker, London; Messrs. Street and Co., London; Dr. G. Lorimer, Buxton; Mr. G. Cowen, Malmesbury; Dr. Bond, Gloucester; Mr. J. Vesey Fitzgerald, London; Mr. W. Williams, Llanfair-Talhaiarn, Abergele; Dr. J. Murphy, Sunderland; Mr. Sykes, Mexborough; Dr. Brown, West Smethwick, near Birmingham; Dr. Mackey, Brighton; Mr. R. P. Bond, Cheltenham; Miss Mary Topham, Stoke-on-Trent; Dr. C. S. Taylor, London; Dr. Hayes, Dublin; Assistant; Dr. C. Haig Brown, Godalming; Mrs. Gillespie, Dublin; Dr. O'Neill, Belfast; Mr. A. D. Macgregor, Kirkcaldy; Mr. E. M. C. Hooker, Retford; Dr. Broadbent, London; Mr. A. Thomas, Wellingborough; Dr. Markham Skerritt, Bristol; Mr. Thomas Aitken, Inverness; Dr. Steavenson, London; Surgeon-Major Platt, London; Mr. C. Clay, Fovant; Mr. J. Muir Howel, Liverpool Dr. Bernays, Birmingham; Mr. Walters, Reigate; Mr. Vincent Jackson, Wolverhampton; Miss Thomas, London; Dr. J. J. Ridge, Enfield; Dr. Curnow, London; Our Paris Correspondent; Mr. A. Walter Thomas, Bangor; Dr. McAldowie, Stoke-on-Trent; Mr. Barlow, Colwyn Bay; Dr. A. H. Carter, Birmingham; Dr. Nicolson, Broadmoor; Mr. A. Stookes, Liverpool; Dr. Aitken, Rome; Dr. J. W. Moore, Dublin; Mr. St. Vincent Mercier, London; Dr. W. J. Tyson, Folkestone; Dr. Tatham, Salford; Mr. S. Smelt, Manchester; Mr. H. A. Latimer, Swansea; Dr. Bolt, London, etc.

BOOKS, ETC., RECEIVED.

Conference on Temperance Legislation. London: Longmans, Green, and Co. 1886.

Transactions of the National Association for the Promotion of Social Science. London: Longmans, Green, and Co. 1886.

John Leech's Pictures of Life and Character, from the collection of Mr. Punch. London: Bradbury, Agnew, and Co. 1886.

The Medical Annual, 1885-6. London: H. Kimpton. 1886.

Microparasites in Disease. Select Essays by Watson Cheyne, M.B., F.R.C.S. London: New Sydenham Society. 1886.

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AN ADDRESS

ON

THE UNVEILING OF THE STATUE OF JOHN HUNTER BY PRINCESS CHRISTIAN.

Delivered in the University Museum, Oxford, on Saturday, May 29th.

By SIR JAMES PAGET, F.R.C.S., D.C.L., LL.D., F.R.S.

May it please your Royal Highness, Mr. Vice-Chancellor, ladies and gentlemen: There are very few subjects on which I could be induced to speak in the University of Oxford, especially on an occasion such as this, in which Her Majesty has been pleased to express her approval of the teaching of the natural sciences in this University, and, by the gift of the statue of John Hunter, has especially given her approval to the teaching of the biological sciences. But when, in the invitation with which I was honoured, I was told that the subject should be John Hunter and his relation to medicine and surgery, I felt that I might resist the temptation to decline it; for so much of my time has been spent in the study and arrangement of museums, and, for so many years I was occupied many hours a day in writing a part of the catalogues of the Hunterian Museum, and, at the same time, in the careful study of many manuscripts of Hunter, and of the illustrations left of his work, that I could not but feel that, even if I had not knowledge wherewith to speak of his influence in science, I had at least such a strong conviction that he stands highest amongst those that have practised medicine or surgery, that with my conviction, if not with my knowledge, I might impress upon you the value of his life. And there was another reason: that this year, in which, as if it were with a happy insight into the fitness of the occasion, Her Majesty has given that which may last for ever as a memorial of John Hunter, is the centenary of the opening of that Hunterian Museum, which was the nucleus of the great biological collection which is now in the College of Surgeons of England, and has been a source of knowledge to all men pursuing biology from that time to this.

It was in the year 1786, one hundred years ago, that John Hunter, after years and years of laborious toil, finished and arranged the museum which he planted in Leicester Square, and then, for the first time, opened it to the public and his scientific friends; himself the curator, himself the demonstrator, himself the promoter of all the good work to which it could lead.

I have been almost tempted to make this a discourse upon museums, especially as it was the formation of a museum which seems to have been the first motive of Hunter, and certainly throughout his life was one of the chief motives of his study of biology. He was an idle, uncultivated, Scotch lad, with no appearance of purpose in his life till he came to his brother William in London, who was then practising as a considerable physician, and, as the expression is, was collecting everything; and he caught the fascination from his brother, and himself began at once to collect everything—not anatomical specimens alone, nor things relating to medicine or surgery, but barbarian weapons, and works in bronze and ivory, and pictures—everything that was rare and curious. But he gave himself chiefly to the collection of such things as were interesting in regard to living creatures, and his love of collecting seems to have led him to the pursuit of knowledge, and a readiness to work which was hitherto completely unobserved by himself or any other. Becoming an insatiable collector, he at the same time became insatiable in the pursuit of knowledge. And everything that he collected he studied profoundly, till, to be brief, he ended in the completest study of everything living, or that had ever lived, and of all things living in health, or in disease. No man covered a wider range of ground than he did; no man studied with more care. I doubt whether, amongst all, could be found one who studied with more insight into facts, with more ingenuity and experiment, with more capacity of interpreting all he saw, with more caution, with more earnest desire to arrive at the truth, whatever it might be. I doubt whether there be any other, except John Hunter, who might be safely matched, in all these things, with Darwin. With him he was equal; with him, I doubt whether any others could be found comparable.

Let me read you a letter which will tell you something of the kind of pursuits he had all through his life, and which will tell, besides, something of the defects of his mind and something of his personal character. It is one of a set of letters which he wrote to Jenner, his old pupil, which I was fortunate enough to be able to buy some time ago. It is this: "Dear Jenner,—You must think me very fond of Fish, when you even send me cheese as much fishifyed as possible. However, it is an excelent cheese, and every country has laid claim to its birth." Then follows what will tell of his pursuits. "I have but one order to send you, which is, send everything you can get, whether animal vegetable or mineral, and the compound of the two; namely, either animal or vegetable mineralised." That was John Hunter's first thought—of fossils. And there are in his manuscripts, and in what Professor Owen has unearthed from them, the most marvellous forecasts of the palæontology of the then future that could be found in any writings of his time. Then come a very practical sentence, very roughly expressed: "I would have you do nothing with the boy but dress him superficially, these fungus's will die, and be damn'd to them, and drop off." Then he goes on: "Have you any large trees of differ't kinds that you can make free with? If you have, I will put you upon a set of expt's with regard to the heat of vegetables," a subject which at that time, I believe, had been scarcely ever investigated, and of which precise knowledge has not even now been obtained—the self-productive power of heat in vegetables; but even this was within the range of his studies.

"Have you any caves where batts go to at night? If you have, I will put you upon a set of exp'ts concerning the heat of them at diff. seasons." I am not sure whether anyone before Hunter had ever suspected the great facts that he unravelled concerning the different heats of creatures in different degrees of activity in their lives; but this may show the way in which he pursued his work, with all the width and directness of purpose, and with the constant outlooking for things that he might investigate in regions yet unknown.

He goes on: "I should have been extremely happy to have had the honour of a visit to Lord Barkley.—Ever your's, John Hunter. Anny sends her comp'ts, and thank you for all favours;" and then comes a practical ending, "write down the case."

I might apologise for speaking thus of museums and their influence if I were not speaking in this place where the museum, begun after the fashion of Hunter's, was, I believe, the starting point of the early study of biological sciences in this University. A great deal of the progress that has been made you owe to Sir Henry Acland; and he is an example, I think, that might be quoted of the unbounded advantages of museums. It has often been observed of librarians that the librarian is considerably more learned than the collector of books—obtaining from them very much more of knowledge, and spreading it more widely. The same may often be said of museums. The curator often knows very much more than the collector. But that does not apply to Hunter. Hunter was at once a collector and a curator, and every portion of his museum that he had time to investigate was made the subject of profound study; but Owen, Flower, and others, have found, in his museum, treasures which he had put by for inquiry, as if in the vain hope that his life might last very far beyond the ordinary life of man.

But I will now pass from museums that I may speak chiefly of the influence of John Hunter upon medicine and surgery. He has been called the founder of scientific surgery, and this expression concerning him is rather more true than most of the brief, unconditional statements which are made concerning a man. It would be folly to say that no science existed in surgery before the time of Hunter, or that no man had ever studied surgery with the help of such light of science as he could gather at the time then passing; but it is quite true that Hunter was by far the chief promoter of scientific surgery. And, as we may call a man a discoverer, though we could not prove that there had never been a suspicion of the truth which he had discovered, so Hunter may be regarded as the founder of scientific surgery. It would be impossible to find anyone who has communicated so large a mass of mere fact as he has, anyone who has searched so deeply and gathered facts so well together, who added so much as he did to the mere bulk of the material by which surgery can be studied. It would be impossible, I think, to point out anyone who introduced into surgery so many general rules of practice, so many means by which its study might be continually promoted and made more clear. There would not be nearly time to speak even of the chief examples of this; but what, I think, may be told more briefly, and seen more commonly, is that we owe to Hunter the habitual introduction of science into the study of surgery, and into its practice. Before his time, it was thought a decoration, an ornament, for a man if he knew some science; since the time of Hunter, it has been a necessary study for every man who is

deemed even competent for practice. Since the time of Hunter, I think one might say the very language of science in relation to surgery has been, for the first time, adopted. For years and years afterwards, though now, in the passage of time, it has become nearly obsolete, Hunter's language was that in which the scientific truths of surgery could always best be expressed. And if I speak of surgery, I may venture to say that, as medicine sometimes includes surgery, so sometimes surgery may be deemed to include medicine. In regard to both, Hunter's language prevailed, and the temper which he showed still prevails; that is, the care and constant inquiry for the accumulation and exact record of facts, the care for comparison, for very slow induction, and for the attainment, at last, of only feelings of probability, not of dead final certainty. I know no one whose writings might be more studied for an example how, in the best scientific inquiry, the expressions of certainty are rare. His customary expressions are "I think there is reason to believe," "I am disposed to believe," "There is some evidence for holding" this or that; never such statements as "I am sure," "I have finally settled this." Hunter showed clearly that element of the scientific mind, the element of doubt—doubt repeated and prolonged, doubt justifying continual revision and fresh thought, doubt which, within the proper range of a man's own scientific study, it is better to hold and easier to maintain than complete belief.

I have been obliged, in speaking of this, to use words which I do not like to use in contrast. We often hear the expression, "the science and practice of medicine," or "of surgery." Now, the two things should not be held as if they were different. There is a view in which they may be different. One man may be scientific, without being practical; another may be practical, without being scientific; and each of these characters might be studied from its type here or there. But that which Hunter began to prove, and which is now evident, is that there should be no such contrast between the science and practice of medicine. Science only changes its ground when it takes to practice; there may be the same pursuit of science still, and there is as much material for an accurate scientific investigation in many parts of the practice of medicine, as there is in any scientific question. Truly, the one is to be pursued in the laboratory, and the other is to be pursued by the bedside; but the same temper, the same method, the same caution, the same final careful settlement, may be observed in both; and, I repeat, if we owe the evidence of this to anyone more than another, we owe it to John Hunter.

But I have produced this letter that I might show that he was one of the best examples that can be cited, of the possibility there is for the practical and the scientific tempers to be combined in one man. I have read volumes of his manuscripts—his manuscript case-books especially—and, as I read page after page, I could say to myself, "Had this man the smallest insight into scientific things at all?" There were the plain simple facts before him, most carefully recorded; and, every now and then, there was such natural sagacity for seeing what he could not understand, though holding it to be true, as might have been the boast of the most practical man living. Scientific men, then, do wrongly when they speak as if the science of medicine cannot be pursued in its practice. The practice of medicine and of surgery since Hunter's time can be, in every day's, in every hour's work, as thoroughly a scientific study as is the work of any chemist or any mechanician. Let me say, however, on the other hand, that some practical men, as they call themselves, make far too light of the value of scientific studies; they are doing it now, but I believe that this University will be amongst the leading forces for the expelling of the absurdity. What in the world, it is asked, has this or that scientific fact to do with the cure of this or that man who lies there in distress? Is it not true that scientific facts are continually changing, shifting their ground, and that that which was learned as a scientific fact forty years ago, is now put by as altogether fallacious? I should admit it in some degree, but not as being fallacious. I might speak of a fact as being embryonic or on its way to something better; but it is no more a fallacy than is an embryo. And the changes of facts in their evolution do not diminish the value of scientific education, of whatever kind, in making a man competent for the study of medicine.

May I, for one moment, refer to my own experience on this point? In my boyhood, I studied botany. It was the beginning of my intimacy with museums—the study of botany after the old Linnæan fashion, with no natural system at that time prevalent—collecting everything, arranging it, naming it, putting it by, studying it as deeply as I then well could. In later years, I have often looked back to see whether in the whole of that course of study I had learned a really useful fact, a thing that I could apply to everyday life; and I have never been able to discern one. If I am to speak of the present utility of the knowledge then obtained, I should say the time was simply wasted. But for the discipline, the exercise of the mind, the education in observing, in arranging, in discerning differences, I should have still to say that the value of that study was beyond all estimate.

I have spoken of "science," as if there were but one. There are many, and my last illustration may be my apology, if I do not speak of other branches of science which are now as potent in education for medicine as that of which I have just now been speaking. These—chemistry and physics (in their relation to biology), electric science, and the rest—were, in Hunter's time, comparatively unknown and useless. Now, they have their full utility. I cannot measure them; I can only measure, and that in a feeble degree, the influence of Hunter's own study upon the science which it has been my happiness to pursue. Only this I will venture to say: Hunter studied biology with a constant regard towards its application to the study of medicine and surgery; and I venture to say that that is still a wise rule to be followed, even in a University such as this, where the biological and other sciences are to have, at least for one of their designs, the education to fitness for medicine. I think the nearer the scientific facts which we can study come within the range of that which is to be the object of after-life, the better; and that the larger the number of facts which we can gain for later application, the better also. So, even for a museum of biology, I venture to hold that the nearer its plan is to the Hunterian type the better it will be for the student of medicine. There may be in this some prejudice in favour of my old work in Hunter's museum, but I think that it will be found true.

Of one thing more I must venture to speak. What, it will be asked, in a university like this, is to be the relation of medicine or of surgery to literature? One cannot be here without, in thought, comparing Radcliffe with Hunter. There are very few of us who could venture to say what are the relative advantages of literature and the study of the records of the past on the one hand, and that of a biological museum on the other. My friend Sir Henry Acland, at once the librarian of the Radcliffe Library and the chief founder of the Museum, could tell far better than I can; but if I may refer to Hunter again, I will refer to him, not in praise of the absence of literary knowledge, but in regret that he was without it. Hunter was entered at this University, and he resided for two terms in St. Mary Hall. He left it, I should think with regret, finding himself absolutely unable to study classics. It is recorded that he left it with undisguised contempt; but if he did so, it was an expression of his ignorance, for in all his after-life, one can see that his great defect in all his work was want of literary knowledge. I have read many of his letters, and have read many of his manuscripts, and I think there is not one of them in which either construction or orthography would obtain high marks in an ordinary board-school of the present day. I believe he never could publish one of his works without literary assistance, that they might be orderly, grammatical, and well spelt. But what was much more important was that defect of language, which was amongst the greatest hindrances to his power of communicating knowledge.

He was an unimpressive, uninstructive lecturer; and the Hunterian School was not formed by those who heard him, so much as by those who studied the writings which he left behind; and one can see, in many of his writings, the grave defects of the mutual errors into which thoughts and words are apt to lead one another. I have often felt that he illustrates how thoughts and words are like mutually reflecting mirrors; if either of them, when an object is placed between them, give an erroneous reflection of that object, the other cannot but in the same way reflect it in error. Hunter's gravest defect was in his want of literary power. If I refer to it, let it be with the desire that the literature of the University may be made as useful towards medical science as are the biological subjects. But, the two may be for men of different kinds. Hunter could never have been a great *litterateur:* there are great *litterateurs* who cannot be made scientific. Each must be fitted for his own proper work; each hold the other in all due respect. From the controversy of these things, good will come. In the struggle for existence, which there is in intellectual pursuits as well as in the mere maintenance of life, the fittest will survive; and the fittest will find his own fit place, here or there, the more widely all studies are pursued, and the more thoroughly the University fulfils that purpose which its name seems to indicate, that all knowledge shall be pursued within it—each part adjusted to those most fitted to take it, all directed towards the good of man.

If I have but satisfied your Royal Highness, in reference to the work which you are about to do in graciously unveiling the statue of John Hunter, and the additional honour which is given to the ceremony by your presence, and that of his Royal Highness the Prince, let me only assure you that, if time were to be had, it could be proved a

hundredfold that even Her Majesty's honours were never better bestowed than they are now upon John Hunter; and, if I may, in conclusion, be allowed to tell how great the honour is, I will do so in words, not of my own, but in those of an eloquence which this University has often heard—in the words of Mr. Ruskin. He says, in writing of the design of having the statues in the museum: "There is no man of worth or heart who would not feel it a high and priceless reward that his statue should be placed where it might remind the youth of England of what had been exemplary in his life, or useful in his labours, and might be regarded with no empty reverence, no fruitless pensiveness, but with the emulative, eager, unstinted passionateness of honour, which youth pays to the dead leaders of the cause it loves, or discoverers of the light by which it lives. To be buried under weight of marble, or with splendour of ceremonial, is still no more than burial; but to be remembered daily, with profitable tenderness, by the activest intelligences of the nation we have served, and to have power granted even to the shadows of the poor features, sunk into dust, still to warn, to animate, to command, as the father's brow rules and exalts the toil of his children: this is not burial, but immortality."

INGLEBY LECTURES

ON SOME FUNCTIONAL DISORDERS OF FEMALES.

Delivered at Queen's College, Birmingham.

By WILLOUGHBY FRANCIS WADE, F.R.C.P.,
Senior Physician to the General Hospital, Birmingham: and Vice-President of the British Medical Association.

Lecture II.

The preliminary stage of the reproductive cycle includes, as I have said, the whole life of a woman antecedent to marriage. The hope of marriage, or if not the hope, the idea of its possibility, is never quite extinguished in the female breast. And it must be confessed that events occur from time to time which afford sufficient justification for this tenacity. Disappointment in the realisation of these hopes produces different effects upon different mental constitutions. In some cases, it produces a hardening and deleterious effect upon the character; in others, it ripens and intensifies all the most beautiful and charming qualities of the woman. We may say that, if it takes a good woman to make a good wife, it takes a still better to make a good "old maid." And yet it is but simple justice to say that examples of both classes abound, fortunately for it, in the world. The appearance of the most striking evidence of puberty, the catamenia, is rather the beginning than the end of those changes of body and mind, which result in the production of the woman. We may be permitted to imagine the body divided into that which is nervous system and that which is not. Of these two parts, it is the former which chiefly, that is essentially, distinguishes the woman from the man; which most clearly justifies the statement that the key to the difference between the two sexes is only to be found in the different part which each has to play in the business of continuing the species. The quickness of perception, the rapidity, and within limits, the accuracy of interpretation, the ready responsiveness, the too often fatal, but always interesting credulity—all these are necessary to the successful transaction of the instinctive business of her life, the attraction and retention of an admirer, the detection and annihilation of a rival. Nor is there any incongruity between the higher qualities of the mind and the lower or quasi-instinctive ones.

Any adequate discussion of this subject would absorb more time than we have to spare. If they interest you, study them for yourselves in the book of Nature. For yourselves, but not by yourselves, take for your guides and teachers the great masters and mistresses of fiction.

I need not enumerate those whose genius has enabled them to penetrate and pourtray the innermost workings of the heart. All afford materials which may assist you in your research for "the truest tales are not those which really happen." All, even the most antipodal, as, amongst living authors, the American Howells and the French Zola, can tell something of the workings of the human mind, as affected by the conditions under which it operates. Thus we may learn that the passions, like bacilli, can be malignantly intensified, or usefully attenuated, according to the medium in which they are developed. If the attenuation be carried to the point of uninfectiveness, the form may remain the same, but the vital characteristics are abolished.

We are told in a pungent modern satire, acidulated, no doubt, by the unhappy personal experiences of the author, that, in "The coming race," women will claim the privilege now "usurped by men, of proclaiming their love, and urging their suit; in other words, of being the wooing party rather than the wooed."

This gibe is not altogether gratuitous; but, nevertheless, we should all sympathise with, and, according to our opportunities, further the intellectual elevation of, the other sex; if on no other, on selfish grounds, and for the purpose of perpetuating the ascendancy of our own sex; for we know how often, and in how large a degree, great men are indebted for their superior powers to their mothers. It is not art, but Nature providing for the continuation of the species, that has framed the minds and bodies of the race; that has implanted in each sex those peculiarities which are responsible for things as they are, and, for the most part, must continue to be. But, it must be repeated, this is no justification for artificially intensifying these differences; nor is it any reason why the higher powers of the female mind should not be educated, with the view of fortifying them by cultivation.

No sensible person would assert that all men are superior, either physically or mentally, to all women. On the other hand, few would deny that, in both these respects, the average of man is higher than the average of woman, or that the highest man is higher than the highest woman.

I have already referred to those qualities which are, by common consent, accepted as being peculiarly characteristic of the female mind; these are acuteness of perception, and rapidity of interpretation. The woman sees many things which pass before a man's eyes unperceived; or, if perceived by both, the woman's conclusions are drawn instantaneously. The man revolves the circumstances in his brain, comes to a conclusion more slowly, and often less correctly. We have here, as it seems to me, the key to many of the functional disorders of women. The same peculiarity characterises the structure of the whole nervous system, from that of the highest centres of the brain to that of the lowest ganglia of the sympathetic system. This difference in structure is not discoverable by anatomy, however minute. It is by its fruits that we know it. Sensitiveness to impressions, or excitability; facility of transmission of these impressions from one centre to another; this we may be permitted to call "permeability." A clinical phenomenon which has not received due attention, and which I venture to call "the radiation of pain," may be cited in illustration of this permeability.

The following cases, which I quote as examples of radiation of pain, are worthy of consideration, even by those who may not be prepared to accept my theoretical explanation of them. Some years ago, my opinion was requested in regard to a lady, aged about 32. She had been for a good many months under medical care for general, and somewhat indefinite, ill-health. For some weeks previous to my visit, pains about each subclavicular region and a dry cough had raised fears in the minds of her medical attendants, that she might be becoming consumptive.

My examination confirmed the opinion previously entertained, that no physical sign of lung-disease was to be discovered. We all know that many patients are extremely loath to let us get away from the consideration of an existent pain to that of any other symptom. She was one of this class. It required, therefore, much insistance to elicit the following facts. Before the pain attacked the subclavicular region, there had been a zone of pain round the middle of the chest; previously to that, a similar zone round the lower part of the chest and the upper part of the abdomen. That, in its turn, had been preceded by pain occupying the middle third of the abdomen; and then we found that the original seat of the pain had been the two hypogastric and the pubic regions. It came out that, though her attention had been engrossed by each new development of pain, those previously existent had never entirely subsided. This history suggested that perhaps, after all, the disorder had an uterine origin; and so it turned out.

On examination, we found that the os uteri was extremely tender, and also, as it was then termed (for it was a good many years ago), ulcerated. This condition was, in a short time, relieved by local treatment, and, coincidently, all her pains and the cough disappeared, and she was restored to health.

It may not be disadvantageous to diverge here for a moment from our immediate subject, and interpolate a few words upon a very important topic. This is the relation of such a lesion as that just mentioned to the symptoms described, and more especially to the earlier symptoms.

A very large number of female cases may be resolved into three groups or categories. The first comprises local lesions, such as the one above mentioned, and flexions, versions, and fibroids accompanied by pains and irritations in or near the lesion. In the second group, we find the same lesions, but unaccompanied by any symptom whatever. In the third we put cases with similar symptoms, but without any discoverable local lesion. Experience has taught me that, by treatment, not a few cases may be removed from the first class into the second; that is to say, that the symptoms complained of may be removed, though the anatomical changes remain precisely what they were. In one case, the treatment required may be, as in the one quoted, local; in another, it may be directed to the part or parts secondarily affected; whilst, in a third, it may be of a purely general character, aiming, for example, at the correction of some disturbance of the blood-forming or blood-purifying organs; or, which may or may not be the same thing, of those complex conditions which we term gout or rheumatism. It seems to me equally true that cases may, by influences sometimes traceable, at other times mysterious, be removed from the second class into the first. In other words, the anatomical lesion may, in any one case, be at time latent, and may at other times manifest itself by symptoms, and such alternations may recur with indefinite frequency. In saying this, we are admitting that the symptoms are epiphenomena, caused by or arising out of the gross lesion; and this I believe to be in some instances true. But on the other hand if we admit, as I contend we should, the existence of similar symptoms without any gross lesion, then probably in some cases the concomitance of symptoms with such lesions is purely accidental. These opinions are of far-reaching importance to practice in many ways, some of which I need not point out. But there is a widely spread feeling in the profession that many women have been subjected to unnecessarily protracted courses of local treatment depleting their pockets, impairing their delicacy, and even attenuating their morality. If such things are, it may be that a frank recognition of these views would safeguard patients from such meddlesomeness.

One other very important question awaits an answer. What is the pathological explanation of these symptoms? If we say that they are partly neuralgic and partly circulatory, the relation of the two being obscure, perhaps it is the best answer we can at present give, indefinite or insufficient though it may be. It is certain that some of these cases are relieved, and that very speedily, by a combination of ergot with some of the bromides. Other cases seem rather connected with disturbance, especially with insufficiency and concentration of the secretion of the kidneys. It has long appeared to me that such renal disorders are more resented by the female than by the male system; and that, in the former, this resentment more often finds expression in the state of the generative organs. I would, at all events, ask you, whether you accept or reject the speculative opinions with which I have associated them, to receive these therapeutical hints as at least worthy of being tested in practice. There is one other suggestion to be made in reference to this subject. It is that some, possibly many, of the cases in which no substantial disease can be detected, may nevertheless be outside the category of what we style "functional disorders." It may be that they are really cases of slight and more or less transient inflammation of the uterine appendages, including in this term the adjacent peritoneum. An adequate discussion of this most important question would be outside the scope of my lecture. But it is essential to remember that peritonitis is not necessarily attended by rise of temperature.

To return now to our more immediate topic; the circumstances of a second example of the radiation of pain were as follows.

A young lady, aged about 18, was represented to me, both by her experienced medical attendant and by herself, as suffering from excruciating pain in her forehead and temples; nor did her aspect belie this representation. A course of inquiry, similar to that pursued in the former case, elicited a similar sequence of events. The frontal pain had been preceded by pain, occupying the vertex and the head on each side of it. That again had been preceded by pain towards the back part of the head, which had succeeded to pain in the extreme back of the head and upper part of the neck. The original seat of pain having thus been arrived at, its cause was soon ascertained. It appeared that, some months before, the patient had occasion to "duck" in order to pass under a transverse beam; coming up too soon, she struck the top of her head with sufficient violence to render her, for a short time, insensible. It was not for two or three weeks that the pain began in the neck and occiput; and it was not till three or four months afterwards that I saw her. She was suffering from caries of the cervical vertebræ; at all events, under treatment based upon this view, she ultimately recovered. But the question of diagnosis is of no particular moment as regards my present object. In this, as in the former case, although the attention of the patient was concentrated on each new zone of pain, the previous pains remained; very much as a new baby causes the previous one to sink into comparative oblivion, although it does not efface it.

In another somewhat analogous case of occipital headache, it required a good deal of perseverance to arrive at the truth. This was, that the patient was suffering from fissure of the anus; this being cured, the headache ceased.

The two cases above narrated are, no doubted, exceptional in regard to their intensity and completeness; but these apart, I cannot admit that they are at all exceptional. On the contrary, I think that the same kind of thing is of very ordinary occurrence; and that many incomprehensible pains may, under the guidance of this theory, be traced to their source, and so successfully dealt with.

On talking over such cases with medical friends, I have not unfrequently been told that they would call such cases "Hysteria." Possibly some of you might do the same. In a certain non-natural sense (to borrow a term from another science), I might perhaps do so myself.

You will have foreseen that the introduction of the word "hysteria" was, sooner or later, inevitable, and, perhaps, may give me some credit for having abstained from it so long. Some persons object to the word on account of its derivation. This, no doubt, embodies an idea, now—and with perfect justice—discarded. No one, probably, at the present moment, conserves the notion that hysterical disorders necessarily originate in that anatomical entity known as the uterus. But let us regard the uterus not merely as an anatomical entity, but as a symbol, representing, not simply itself and its appendages, but the sum-total of the peculiarities of the female organisation. The name hysteria, of which, by the way, we cannot rid ourselves, will then serve our purpose without offence. It will embody, not the obsolete conception of a ruder epoch, but one which is in accordance with a wider generalisation from deeper knowledge of the secrets of nature. It will help to keep present in our minds, as names ought to do, the existence of an extensive series of phenomena, the correlation of these one with another, and their harmony with the reproductive obligations of the female sex. It will suggest, also, what many insufficiently realise, that when we qualify a disorder or a symptom as "hysterical," we have got not to the end, but rather to the beginning, of our clinical investigation. For it is only a first step, though often a very difficult one, to say, "this is one of those nervous disorders which are peculiar to women." It still remains for us to discover, if we can, in what particular portion of that immense and complex system the mischief lies; whether it is intrinsic in, or extrinsic to, that portion; whether it is due to local or to general causes; whether it is to be met by dietetic, hygienic, moral, or medicinal treatment; if by a combination of these, by which, and in what measure of each. Above all, let us remember that these disorders may make life valueless, though they rarely destroy it; and further that, though difficult to cure, they are rarely incurable, if due diligence and sound judgment be brought to bear on them.

(To be concluded.)

SHOP HOURS REGULATION BILL.—A Parliamentary paper was published on Saturday, May 22nd, containing the report of the Select Committee of the House of Commons on the Shop Hours Regulation Bill, together with the proceedings. The report of the Committee, of which Sir John Lubbock was chairman, ends as follows: "Your Committee, being satisfied that the hours of shop assistants range in many places as high as from eighty-four to eighty-five per week, being convinced that such long hours must be generally injurious, and often ruinous to health, and that the same amount of business might be compressed into a shorter space of time, recommend this Bill to the favourable consideration of the House."

THE Halifax Rural Sanitary Authority, and several Urban Sanitary Authorities, with three exceptions, recently reappointed Dr. Britton, Medical Officer of Health, for a further term of five years; but the Local Government Board, being convinced of the satisfactory nature of the arrangement which has been hitherto obtained, have been obliged to consider the expediency of issuing an order, under Section 286 of the Public Health Act, 1875, to take effect from Lady-Day, 1887; they have so informed the various authorities, and suggested that such of them as are desirous of retaining Dr. Britton's services, should make separate appointments, at the salary hitherto paid, to expire at Lady-Day, 1887. Some of the authorities have already acted upon the suggestion, and reappointed for one year only, instead of five, and the others will, no doubt, do so forthwith.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
Emeritus Professor of Surgery at the London Hospital.

[*Continued from Page 1018.*]

VI.—Brachioplegia after Injury to the Head, with Fracture of Skull.

In the case of a little boy, whom I saw at the Poplar Hospital, and who was a patient of Mr. Corner's, the symptom of brachioplegia was of much interest. He was an intelligent little fellow, 7 years old. Riding behind a carriage, his head had become engaged in the spokes of the wheel, and much battered. When taken into the hospital, he was quite sensible. There were bleeding from his right ear, and considerable bruising of the scalp, especially on the right side, where there seemed to be some irregularity of bone. He complained that he could not use his arms well, especially the right. During the next few days, large ecchymoses appeared on the conjunctiva of each eyeball, and the weakness of the arms increased. The accident occurred on October 16th. A fortnight after it, Mr. Archibald Andrews, the house-surgeon in charge, in writing to ask me to come and see the patient, stated that both arms were quite helpless, lying in a semiflexed condition. The action of the biceps, he added, was perfect. It was more than three weeks after the accident, and a week after Mr. Andrew's note, when I saw the boy. He had been carefully kept in bed the whole time, and not allowed to try to stand. There had never been any retention, or incontinence of urine, and it was recorded that his pupils had always acted well. It was believed that he had perfect use of his lower extremities from the first; but, it is to be observed, he had never been allowed to try to stand. There had not been, from first to last, any mental symptoms whatever. At the time of my visit, he was intelligent and clear in his answers. His left arm had, when I saw him, considerably recovered. He could move it in all directions, and could grasp with the fingers, though not with natural power. The fingers of the right hand he could only move very feebly, and he could not grasp with them at all. By means of the biceps, he could bend the arm at the elbow, but, once bent, he had not the slightest power of extending it again. He appeared to have scarcely any power in any muscle excepting the biceps, and perhaps the brachialis anticus. We made him stand up in bed; he did not manage his legs well, but it was difficult to say whether this was more than might be expected after three weeks' absolute rest. When lying on his back in bed, he could kick freely. His pupils acted well, and no irregularity could be detected in the spines of his cervical vertebræ.

I came to the conclusion that the paralysis must be cerebral. There did not appear to be any defect of sensation in either of the arms, nor had any disturbance of nutrition resulted. Muscular weakness and wasting was the one symptom, and this was unaccompanied by any indications of injury to the spinal cord. There was an irregularity down the right side of the skull, just over the ear, which clearly denoted fracture. It is very remarkable that there should have been no head-symptoms in the first instance, especially as both arms were involved. It must not be assumed as certain that the lower extremities had wholly escaped, since it is difficult, in so young a child, to estimate degrees of power without setting him to walk. It is quite certain that there was not, even at the first, any defect of the sphincters.

I heard, two or three weeks later, that the boy was up, and could walk well, and was regaining the use of his arms.

VII.—Simulation by Muscular Action of Dupuytren's Contraction of Palmar Fascia.

I saw, in the morning of July 11th, a curious example, in its early stage, of a tendency to contraction of the ring and little fingers into the palm; the contraction being due, not to bands of fascia, but clearly to the small muscles. The patient was a gentleman (Dr. S.), of a somewhat gouty family, but who had never himself had gout. His age was 62; and, excepting the trouble named, he was in good health. In the afternoon of the same day, it was my good fortune to see, in consultation with Mr. Freeman, of Onslow Gardens, a lady in whom the same condition had become much further developed. She was between 60 and 70 years of age, like Dr. S., of gouty family, but, like him, having never herself suffered a definite attack. She had been long liable to indigestion, eczema, and chronic glaucoma. When I first saw her hands (Miss A. T.), I thought that she was the subject of rheumatic gout, with great nodosities; but, on examination of the hand, I found that these appearances were simply due to partial dislocation of the joints, especially those of the knuckles. All the fingers were bent down into the palm, and carried over to the ulnar side. That there was no material contraction of fascia, was proved by the fact that they could be pressed back almost into the straight position. The hands were extremely emaciated, and the right hand was affected to a far greater degree than the left. Miss A. T. was crippled in her lower limbs by rheumatic gout, and always walked with a stick. I had no opportunity of examining as to their precise condition. She told me that the deflection of her fingers had commenced with her little and ring digits, and subsequently involved the others.

I will now return to Dr. S.'s case. He is a very healthy-looking man, and has lived temperately, always, however, drinking a little beer. One of his sisters is, he says, much crippled by rheumatic gout, and has had true gout. He himself has never had any arthritic affection; but, some years ago, I cured one of his sons of an eczema, which had long been chronic. On cursory inspection, there is nothing whatever to be noticed amiss with Dr. S.'s hands. He can, by effort, straighten his fingers perfectly, but there is a very decided tendency in the right hand, especially for the ring and little fingers, to be bent down into the palm. It is about a year since he first noticed this. At first, it was chiefly observable in the morning, after sleep, when the ring-finger would be so much contracted, that he was obliged to use the other hand to straighten it. There is, perhaps, a very slight contraction of the palmar fascia; but that this is not the chief cause of the deformity is proved by the fact that he can place the palm of his hand upon the table, and, by bearing weight on it, almostly completely straighten the fingers. His chief inconvenience is in using his tooth-brush, and in carving; in these acts, the deflection is sometimes painful, otherwise it has not caused him discomfort.

It would take me too far to attempt to discuss here the precise shares taken by the different muscles in the production of these deflections of the digits. The reader will find much information on the subject in Dr. Vivian Poore's edition of Duchenne's works published by the New Sydenham Society, and in the writings of Charcot and others on paralysis. My object in recording these cases here is to draw attention to the fact that the displacement began in the ulnar digits, and closely simulated, on the one hand, Dupuytren's disease, and, on the other, the common distortions of rheumatic gout. It is important to note that, in the latter malady, we not unfrequently meet with distortions which are of muscular rather than of joint origin. It is sometimes, indeed, difficult to say whether the conditions are due to arthritis or paralysis. I saw recently, in consultation with Dr. Hughlings Jackson, a case of this kind which was very puzzling. In these, the employment of galvanism for diagnosis is of much importance.

VIII.—Contraction of the Little Fingers in a Young Lady, with Repeated Attacks of Sclerotitis: Inheritance of Gout.

Mary P., aged 20, a governess, is of fair complexion. Her history of rheumatism is that, six years ago, she had an attack of rheumatism in her left knee, and for three months was carried about, not being allowed to walk. She had a little pain, but not much, in the other knee. There had been no injury or sprain. She quite recovered, and can now walk easily. She has never had rheumatism in her wrists, elbows, ankles, shoulders, etc. Her two little fingers are both contracted at the first phalangeal joint, the bones being at right angles. The last phalanx is not contracted, and can be straightened easily. It is doubtful whether the contraction is due to fascia, or to muscle.

In the right eye, she has had several attacks of "rheumatism." The last has been the most severe attack. It began on November 2nd, and she came to me on the 24th. There was then no evidence of iritis. She had at first much pain.

Her parents are both living. Her father has had a single bad attack of gout in the great toe, about two years ago. Two paternal uncles have also had gout, and her paternal grandfather. One of her sisters has had rheumatism in one knee. She is very susceptible to the influence of east wind, as her hands become painful. She is myopic —16, possibly astigmatic. The vision of the right eye is not so good as the left. The patient is the fifth child; nine are living; none have had rheumatic fever. Her mother has not had rheumatism, but one of her sisters has "rheumatic gout." Her parents were first cousins.

The above notes are copied from some made many years ago.

[*To be continued.*]

Mr. William Anderson, of St. Thomas's Hospital, has been elected a honorary member of the Sei-I-Kwai (the medical society of Tokio), in recognition of his many and arduous labours on behalf of Japan.

A REMARKABLE LESION OF THE NERVE-CENTRES IN LEUCOCYTHÆMIA.

By BYROM BRAMWELL, M.D., F.R.C.P.Edin.,

Assistant Physician and late Pathologist to the Edinburgh Royal Infirmary; Lecturer on the Principles and Practice of Medicine, and on Practical Medicine and Medical Diagnosis in the Extra-academical School of Medicine, Edinburgh; Additional Examiner in Clinical Medicine in the University of Edinburgh, etc.

Physicians have long been familiar with the fact that hæmorrhage into the substance, or on to the surface, of the brain, may occur in the course of splenic leucocythæmia; and pathologists have shown that in that disease the capillary blood-vessels of the viscera (liver, kidneys, etc.), are often enormously dilated and distended with white blood-corpuscles; but, so far as I have been able to ascertain, no case has hitherto been reported in which such a remarkable lesion of the nerve-centres, as was present in this case, has been demonstrated. My old master, the late Professor Hughes Bennett, did, it is true, in his original account of the disease, describe and figure a dilated and distended condition of the blood-vessels and capillaries of the pia mater. (*Leucocythæmia or White-celled Blood.* By John Hughes Bennett, page 11). But, so far as I know, he did not investigate the condition of the nerve-centres themselves. Dr. Donald Mac Alister, who has been kind enough to look into the matter, tells me that he knows of no case in which such an alteration as I am about to describe has been found.

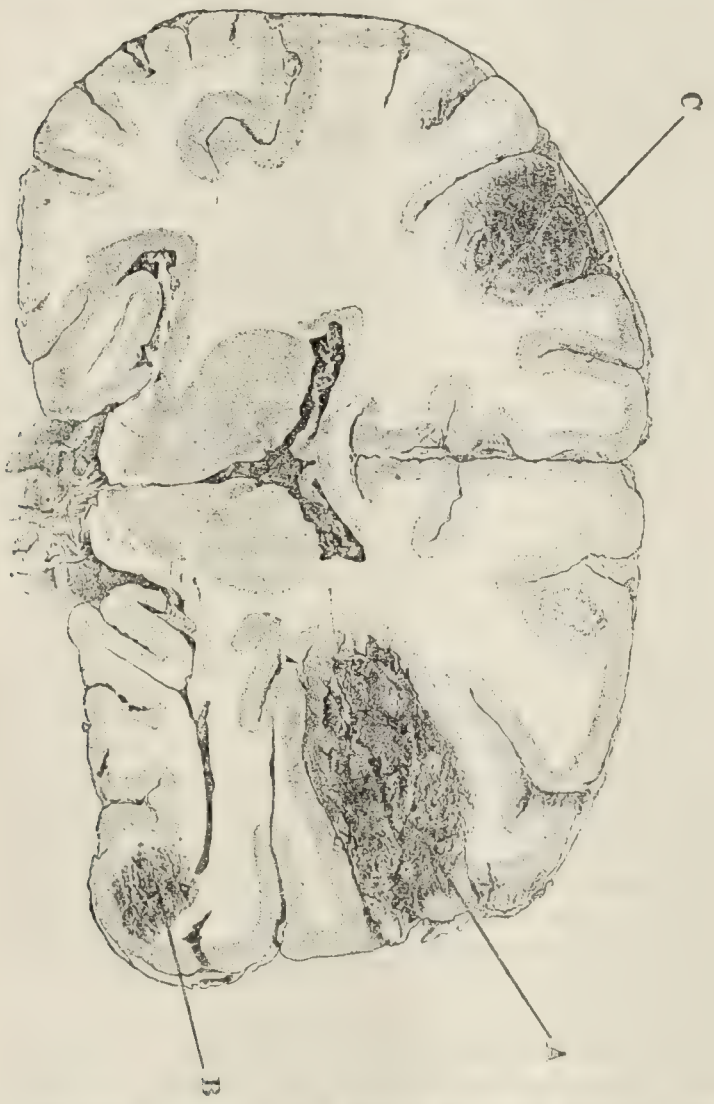


Fig. 1.—Vertical transverse section through the brain in a case of leucocythæmia, showing three large hæmorrhages (A, B, C). (Copied and reduced from a photograph.

The case came under my observation while I was pathologist to the Edinburgh Royal Infirmary. The patient, a shoemaker, aged 40, died on May 18th, and was examined on May 19th, 1884. He had suffered for some time from the usual symptoms of leucocythæmia, but, shortly before death, had complained of headache, and had become maniacal.

It is unnecessary to detail the exact condition of every organ. Suffice it to say, that the case was, in every way, a typical one. The blood throughout the body was thick, and of a brick-red colour, exactly resembling thick anchovy sauce. On microscopic examination, the white corpuscles were seen to be quite as numerous as—indeed, in some slides, much more numerous than—the red blood discs; many of them were of large size, and very granular.



Fig. 2.—Camera lucida drawing of a microscopical section through two convolutions of the brain in a case of leucocythæmia, showing a large hæmorrhage, enormous dilatation of the blood-vessels in the white matter, and numerous minute (microscopical) hæmorrhages. Stained with picrocarmine, cleared with alcohol and oil of cloves, and mounted in xylol balsam, × Hartnack, oc. 2, obj. 1, and drawing reduced from 8 to 4¼ inches. A, B, dilated blood-vessels in the white matter of the convolutions; C, a portion of the subjacent white matter, in which there are numerous dilated vessels and microscopical hæmorrhages; D, a large hæmorrhage, the two sides of which have been torn asunder in the process of mounting; E, a dilated vessel filled with leucocytes, in a superficial sulcus; F, a dilated vessel, filled with leucocytes at the bottom of a deep sulcus; G, G, microscopic hæmorrhages in the white matter.

The spleen weighed 4 lbs. 8 ozs.; the liver, 10 lbs. 8 ozs.; the kidneys, 14 and 13½ ozs. respectively; the pericardium was in a condition of early inflammation, and there were numerous punctiform ecchymoses in the inflamed membrane, under the endocardium, in the pleura, and in the other parts of the body; the bone-marrow was of the same brick red colour, and thick consistence, as the blood.

The brain weighed 3 lbs. 1 oz., and presented a very remarkable appearance externally; the vessels on the surface, being enormously distended with the thick, brick-red coloured blood, looked like masses of huge worms ramifying over the surface of the hemispheres. On making vertical sections through the whole brain, innumerable extravasations of blood were found in the brain-substance. Some of them were of large size, the largest being fully of the size of a hen's egg. Others were just visible to the naked eye; and, on microscopic examination, the whole brain-tissue (more especially the white matter) was riddled with capillary hæmorrhages. The blood-vessels and capillaries throughout the brain were enormously dilated and distended with white corpuscles, multitudes of which had escaped into the lymphatic sheaths surrounding the larger vessels. The vessels of the brain, even the large trunks, were almost entirely destitute of red blood-corpuscles. Collections of red discs were present in the large (naked eye) extravasations, but the large hæmorrhages were for the most part, and the small (microscopic) hæmorrhages were entirely, composed of white corpuscles.



Fig. 3.

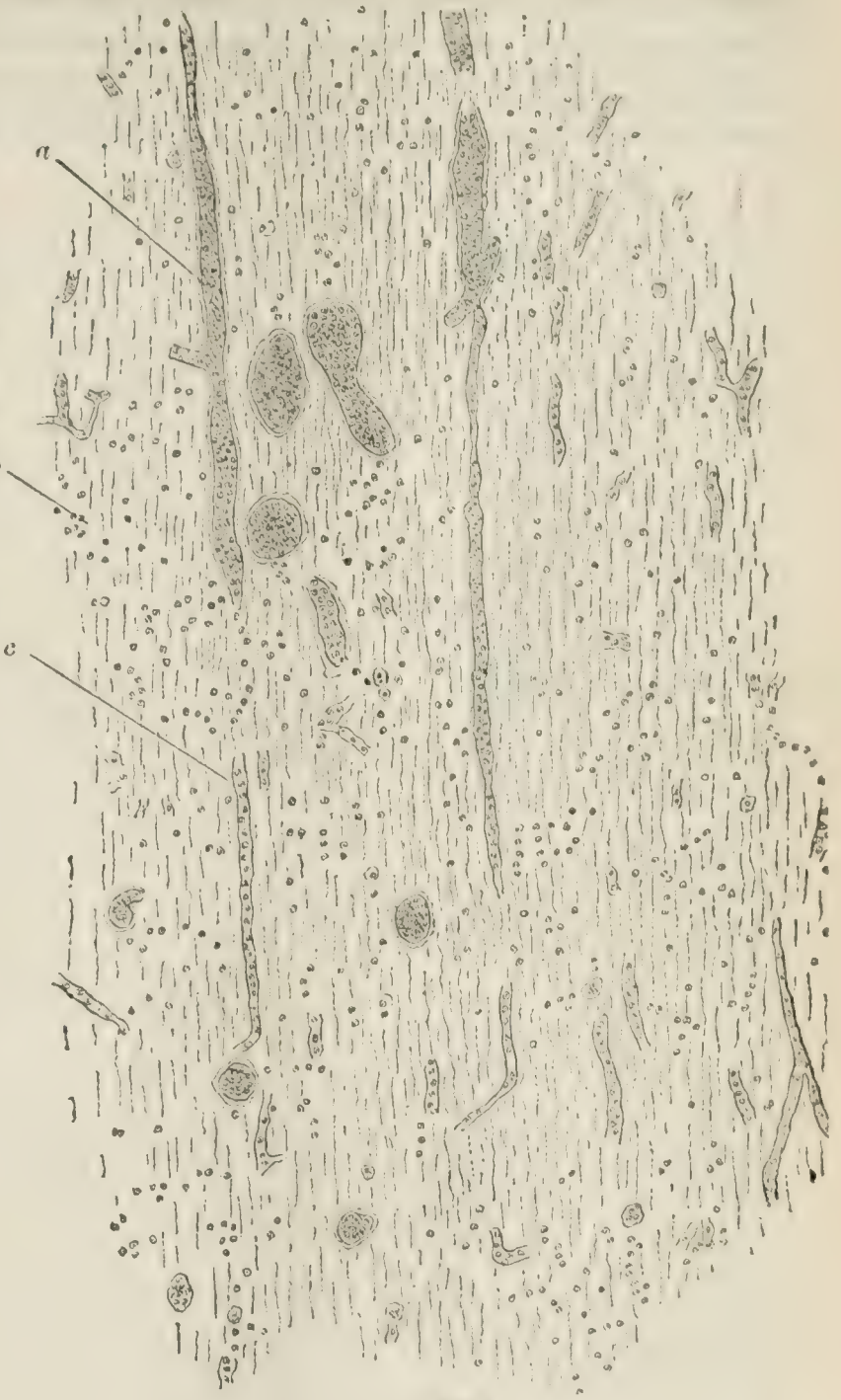


Fig. 4.



Fig. 10.

The vessels of the spinal cord were dilated in the same way as the vessels of the brain, and were stuffed with white blood-corpuscles. Several hæmorrhages were seen with the naked eye in the retina; the optic papillæ were much swollen, and, on microscopic examination,



Fig. 5.—Camera lucida drawing of a section through the white matter of the brain in leucocythæmia, showing the enlarged and dilated capillaries stuffed with leucocytes. Stained with picrocarmine, cleared with alcohol and oil of cloves, and mounted in xylol balsam. × Hartnack, oc. 3; obj. 8; tube out; and drawing reduced from 11 to 6½ inches. A, B, a minute vessel presenting enormous varicose dilatations, stuffed with leucocytes; C, D, capillaries in transverse and longitudinal section respectively; E, corpuscles in the surrounding white matter.

large numbers of white blood-corpuscles were found scattered between the fibres of the optic discs, and between the bundles of the optic nerves behind the lamina cribrosa.[1]

The accompanying figures, which have been drawn with very great care, show the appearances exceedingly well, and render any further description unnecessary.

[1] The lesion in the retina has been described by several previous observers.

A careful search was made in the brain for micro-organisms, for I have long believed and taught that some forms of leucocythæmia and pernicious anæmia in all probability depend upon the introduction into the body of infective organisms. In this case, no organisms



Fig. 6.—Camera lucida drawing of a section through the cortical grey matter in leucocythæmia, showing a blood-vessel enormously dilated and distended with leucocytes, and an extravasation of leucocytes into its lymphatic sheath. Stained with picrocarmine, cleared with alcohol and oil of cloves, and mounted in xylol balsam. × Hartnack, oc. 3; obj. 8; tube out; and drawing reduced from 9 to 4 inches. A, mass of red blood-corpuscles; the other parts of the vessel shown in the drawing are distended with white corpuscles; B, a small branch arising from the large vessel, also distended with leucocytes; E, extravasation of leucocytes into the lymphatic sheath; C, D, capillary vessels in longitudinal and transverse section respectively, the former containing white corpuscles, the latter empty. Numerous nerve-cells are seen in the grey matter surrounding the large vessel.

were found in the brain, but sections of the superior cervical ganglion of the sympathetic were infiltrated throughout with fine, highly re

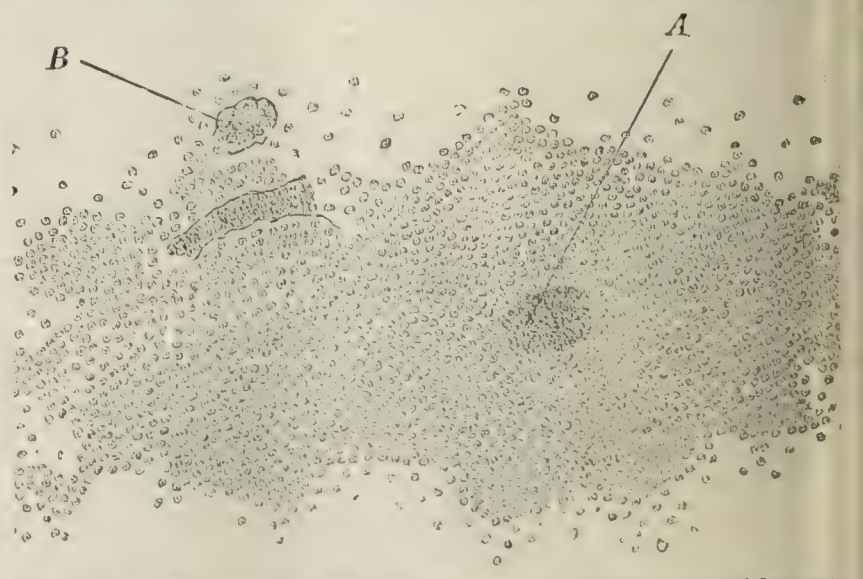


Fig. 8.—Section through the white matter of the brain in a case of leucocythæmia, showing a microscopical extravasation of white corpuscles. × Hartnack, oc. 3; obj. 8; tube drawn out. A, B, vessels stuffed with leucocytes.

fractile, granular particles of uniform size, which exactly resembled unstained micrococci, but which did not take on any of the ordinary dyes (gentian-violet, methyl-violet). Before examination, the sympathetic ganglia had been kept for a considerable time in a solution of gum, sugar, and carbolic acid; whether this solution prevents the staining of micro-organisms, I do not know, but I have on several previous occasions suspected that such was the case. That the fine



Fig. 7.—Camera lucida drawing of a section through the cortical grey matter of the brain in leucocythæmia, showing a blood-vessel (A) enormously distended with leucocytes, and dilated capillaries filled with leucocytes in the surrounding brain-tissue. × Hartnack, oc. 3; obj. 8; tube out; and drawing reduced from 9 to 6 inches.

granular particles, which looked like micrococci, were not due to the gum and sugar solution I feel quite certain; for, in the course of a research on the normal and pathological condition of the sympathetic ganglia of the neck and abdomen, which has extended over three years, I have examined a very large number of ganglia which had been kept in the same solution, and in no case, except in this one, was this peculiar granular micrococci-like appearance seen. Whether any importance is to be attached to the condition, I feel unable to decide.

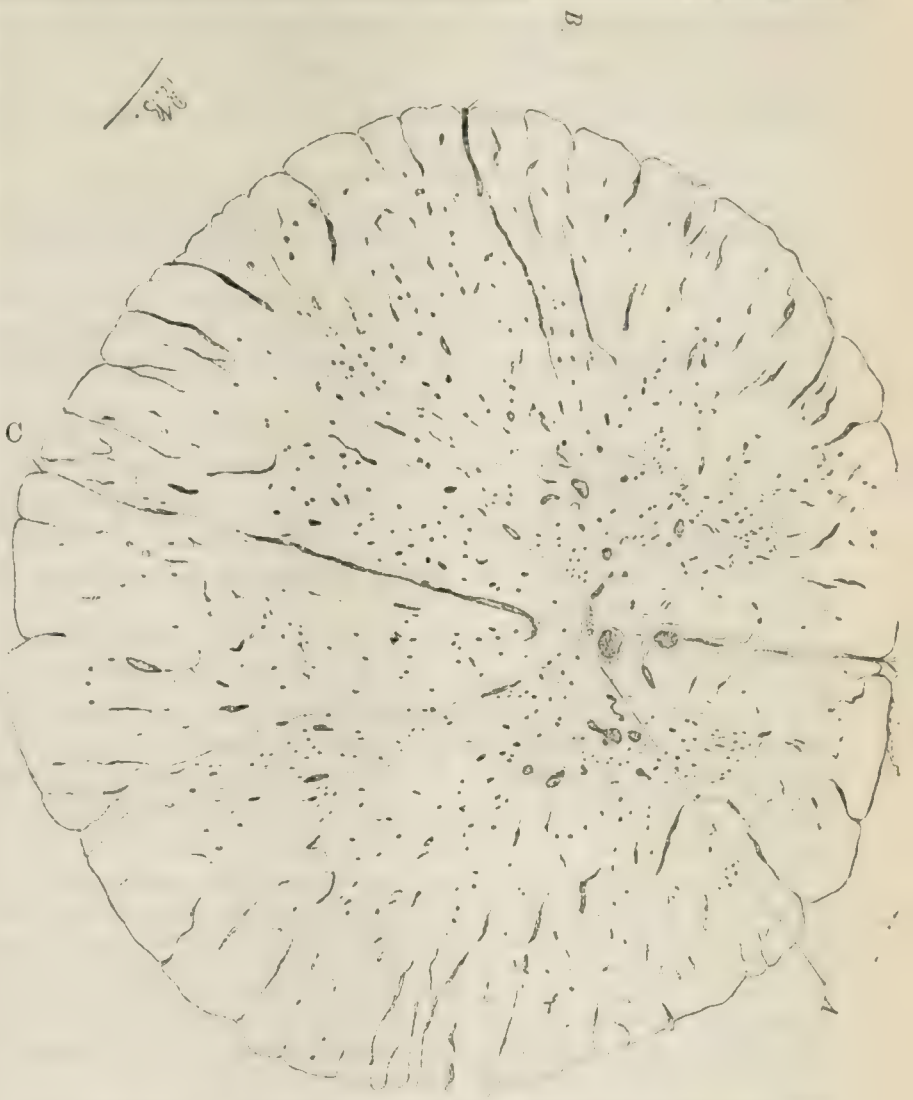


Fig. 9.—Transverse section through the lower dorsal region of the spinal cord in leucocythæmia, showing enormous dilatation of the blood-vessels; under a high power, they are seen to be stuffed with leucocytes. A, an empty space, from which a large vessel has become displaced; B, a large vessel passing into the cord; C, posterior median fissure.

Fig. 3.—Camera lucida drawing of a section through a superficial sulcus of the brain, and the two adjacent portions of convolution, showing the blood-vessels enormously dilated and distended with white blood-corpuscles. Stained with picrocarmine, cleared with alcohol and oil of cloves, and mounted in xylol balsam. × Hartnack, oc. 3; obj. 7; tube in; and drawing reduced from 11 to 6½ inches. A, B, the free surfaces of the convolution on each side of the superficial sulcus; C, artery at the top of the sulcus, enormously dilated, and distended with leucocytes—the vessel has been ruptured, and some of the leucocytes have escaped during the process of preparation; D, E, vessels in the sulcus, seen in longitudinal and transverse section; F, large, transversely divided vessel in the brain-substance, distended with leucocytes; G, G, capillary vessels containing leucocytes: H, nerve-cells, each of which has been accurately drawn in its proper position by the aid of the camera.

Fig. 4.—Camera lucida drawing of a longitudinal section through the white matter of the brain in a case of leucocythæmia, showing the minute vessels and capillaries (A, C) distended with leucocytes, and numerous corpuscles infiltrated through the brain-tissue. Stained with picrocarmine, half cleared with alcohol and oil of cloves, and mounted in xylol balsam. × Hartnack, oc. 3; obj. 8; tube out; and drawing reduced from 8½ to 5½ inches.

Fig. 10.—Longitudinal section through the optic nerve and a portion of the optic papilla in a case of leucocythæmia, showing extravasation of leucocytes between the nerve-bundles and nerve-fibres. A, summit of the optic papilla, the expansions of the retina having become detached in the process of preparation; there are numerous leucocytes between the nerve-fibres. B, central artery; C, choroid; D, sclerotic; E, E, collections of leucocytes between the bundles of the optic nerve-fibres.

THE WOLVERHAMPTON EYE INFIRMARY.—Mr. J. A. Briscoe, the Chairman of the Wolverhampton Eye Infirmary, has issued a circular, stating that a friend, who takes a lively interest in the charity, has offered to erect an infirmary for in-patients at a cost of £4,000, provided another building in connection with it is constructed for out-patients, with consulting-room, waiting-room, dispensary, and other requirements, indispensable for the investigation and treatment of diseases of the eye; and provided, also, that £2,500 be raised for a foundation-endowment. To carry out this plan, £8,000 will be required, and the committee appeal for assistance to enable them to avail themselves of this generous offer.

ULCER OF THE STOMACH, OPENING INTO THE LEFT VENTRICLE OF THE HEART.

Read before the Pathological Section of the Academy of Medicine in Ireland 1886.

By J. MAGEE FINNY, M.D.Dub., F.K.Q.C.P.I.,

Vice-President King and Queen's College of Physicians in Ireland; King's Professor of Practice of Medicine, and Clinical Physician to Sir Patrick Dun's Hospital.

THE specimen which I exhibit is one illustrating a disease of very great rarity, no similar case having been recorded in the United Kingdom, and demonstrating features, in the clinical and pathological history of gastric ulcer, of unusual interest.

It is a specimen of an oval ulcer of the stomach (1¼ + ¾-inch), situated on the anterior wall, two and a half inches from the cardiac orifice, which perforated the gastric wall and the diaphragm, opened into the left ventricle of the heart, and caused death by hæmorrhage directly from the heart into the stomach.

The clinical history of the patient from whom the specimen was removed is as follows.

A farm-labourer, aged 19, was admitted, under my care, into Sir Patrick Dun's Hospital, at the end of October, 1885, suffering from articular rheumatism, of a subacute type, of a month's duration. He was well nourished, though somewhat pale; the knees were painful and swollen, and a pericardial friction-sound, limited to the sternum, was discovered. In a few days, the rheumatic symptoms disappeared, and the pericardial inflammation abated. The friction-sound was not followed by evidences of serous effusion, nor accompanied by endocardial valvulitis.

It was thought, therefore, that the pericardial inflammation had ended in resolution or adhesion. The febrile disturbance (99° to 101°) which existed at the time of admission diminished, but never disappeared, during the five weeks of the patient's life in hospital. He felt, however, so well, the first fortnight after admission, that, at his urgent request, he was allowed to sit up for a day or two; and his diet was sufficiently liberal, including eggs, bread and butter, and puddings—meat was not allowed, though asked for.

There were no symptoms pointing to disease of the stomach, with, perhaps, one exception. There was no pain in the epigastrium or back, either before or after food, nor any sickness of stomach; and there was a complete absence of any history of his ever having vomited or passed blood, or of ever having had any gastric distress. The only symptom which might have awakened a suspicion of what was going on in the stomach was a pain, which he referred to a small area, corresponding to the cartilage of the sixth rib on the left side, and also to the region near the coracoid process, under the clavicle, on the right side. This pain, he stated, he had suffered from during the last five years, at varying intervals; at times, it was so severe as to necessitate his giving up his work, and lying down. Strong pressure with the folded arms always relieved it. It was seemingly in no way connected with the introduction of food, and was not accompanied or followed by vomiting.

While he was under observation in hospital, he had three or four attacks of severe pain, such as I have described, and on two occasions they were relieved by morphine, but during the week preceding death he had much less pain than before, and seemed to be comfortable. The fever, however, was much higher, and assumed a hectic type, so that it was thought that probably some latent tuberculosis was its cause, and to this idea confirmation seemed to be lent by some imperfect respiration and slight crepitus audible near the root of the left lung. Albumen for the first time appeared in the urine during this pyrexial period.

During the night of December 8th, the patient had but little sleep; and in the morning of the 9th, about 8 A.M., he went to the night-chair, complained of feeling very weak, and fainted when he was put back to bed. The dejecta consisted of liquid blood. The patient became greatly blanched, and, in spite of immediate assistance, died in half an hour. There was no vomiting.

At the necropsy, there was marked anæmia of the body generally, and of the viscera. There was a considerable amount of adipose tissue. The left pleural cavity contained some serous fluid, and the layers of the pleura over the diaphragm were adherent. The bronchial glands were enlarged, and one close to the bifurcation of the trachea was caseous and calcified. The pericardial sac was obliterated; the adhesions over the anterior surface of the heart were vascular, recent, and could be separated by the finger; but those over the posterior surface, and around the apex, were old and dense, and could not be broken down. The valves and muscular structure of the heart were healthy, and nothing abnormal could be seen on examining the cavity of the left ventricle.

The stomach and intestines, down to the anus, were full of liquid blood, the former alone containing about two quarts. The anterior surface of the stomach was adherent to the diaphragm for an area of two inches; the adhesions were not of a dense nature, and were readily separable. On examining the inside of the stomach, when emptied of its contents, it was seen free from disease, except where it was adhered to the diaphragm; and here, situated on the anterior wall, two and a half inches from the cardiac orifice, and two from the lesser curvature there was an ulcer (1¼ inches by ¾) which had perforated all the coats of the viscus, the tendinous portion of the diaphragm, and the obliterated pericardial sac. The floor of the ulcer was rough and granular, and was found to be the muscular structure of the under surface of the left ventricle of the heart not far from the apex.

No sac or abscess existed between the stomach and heart; the communication was direct, and the size of the exposed part of the heart was very little smaller than the gastric aspect of the ulcer. The cause of the fatal bleeding was not evident at first; but, on passing a probe, it was seen that a channel, of the size of a No. 5 catheter, existed in the ventricular wall, passing upwards and backwards, and opening into the left ventricle behind, hidden by a musculus papillaris attached to the posterior curtain of the mitral valve.

The muscular structure of the heart was perfectly healthy, and free from fatty degeneration, except at the seat of the ulcer; and here the fibres were granular, rough, and friable, with several interstices, through one of which the probe passed. Microscopically, the fibres were converted into granular matter, devoid of fatty globules, striation, or outline.

A careful review of the life-history and pathological conditions suggests the following as the probable order of events. (*a*) Simple ulcer of the stomach, of unknown duration with periods of quiescence and activity, situated where but little exposed to gastric digestion, or the irritation of ingesta. (*b*) Rheumatic pericarditis. Old adhesions of former attacks obliterated the posterior and under part of the sac, and recent adhesive inflammation attacked the anterior surface. (*c*) Activity of the gastric ulcer within a fortnight of patient's death; perforation of the gastric walls; adhesive peritonitis around it, preventing extension of the gastric contents into the peritoneal sac; perforation of the diaphragm, perforation of the pericardium, and exposure of the muscular structure of the heart to the action of the gastric juice; softening of the exposed muscles; and, finally, through the interstices, and especially through the larger canal, the cavity of the left ventricle was tapped.

The last act of this sad drama occurred during the night preceding death. If the course of events be as I have supposed, it is a curious coincidence that adhesive pericarditis should have preceded the perforation of the stomach. At first, I was disposed to attribute the pericarditis to the gastric ulcer, but the following considerations influenced me to alter my opinion in the direction indicated.

1. The adhesions over the posterior and under surface of the heart was evidently of old standing, as they were thick, dense, and fibrous, and the layers of the pericardium could not be separated.

2. The adhesions between the diaphragm and stomach were recent, soft, and readily broken down.

It is, moreover, more than probable that, had the gastric perforating ulcer penetrated the tendinous portion of the diaphragm, pneumo-pericarditis, and not adhesive pericarditis, would have been set up, and the left ventricle would not have been opened. Such an occurrence happened in a case published by P. Gutmann (*Berl. Klin. Wochenschr.*, April, 1880). As such cases are very rare, and, as in my case, there was no appreciable symptom to point to the presence of a round ulcer of the stomach, which, however, as Gutmann remarks, must have existed for a long time, I refer briefly to it.

A young man, aged 26, was under treatment for a right pleurisy for about a week, when suddenly a metallic sound, synchronous with the movements of the heart, was audible at a distance of some feet from the patient's bed, while great displacement of the lungs, cyanosis, and a pulse of 130, caused no doubt by pneumo-pericarditis having occurred. The patient died on the third day. The necropsy revealed a pericardium, dilated to a great extent with air, and containing a few ounces of non-putrid pus. On the posterior (? anterior) wall of the stomach, and the lesser curvature near the cardiac orifice, an oval opening existed, and, at the lowest part, a perforation led into the pericardium.

A. Mathieu (the reviewer in the *Archives Générales de Méd.*, 1880, vol. 2, p. 224) stated that he was aware of but two other similar cases

eported (those by Sœninger and Rosenstein), but he unfortunately ave no references by which they can be traced.

Reference to a recent article, by Moizard, entitled "Observations on neumo-pericarditis, consequent on gastric ulcer," has come under my otice. It is published in *Bull. et Mém. de la Soc. Med. des Hôp. de Paris*, 1885, 3, s. ii, 180-183, but, to my regret, and presumably loss f valuable information, our Dublin libraries do not possess it.

Graves records a case of pneumatosis of the pericardium, in which he air, though derived from the stomach, was due to an abscess of he liver, which opened into both the stomach and the pericardium. *Dub. Jour. of Med. Science*, Jan., 1869.)

The pericardium is liable to perforation from the œsophagus, by foreign odies, as in Parkes' (*Path. Trans. Lond.*, vol. ii., p. 40) famous case f the juggler, who, while attempting, once too often, to swallow a word, passed it into the pericardium, instead of the stomach, and set p a fatal pericarditis; and, as in the case of a set of artificial teeth being swallowed, and, lodging above the cardiac orifice of the stomach, lcerated through into the pericardium. (*Medical Times*, May, 1858.)

I have, however, been able to find references to but two instances of where the pericardium was opened, and pneumo-pericarditis set up by an ulcer of the œsophagus. (Dr. Trotter, *Trans. Path. Soc. Lond.*, vol. iii., p. 316; and Dr. Forsyth Meigs, *Amer. Journ. Med. Sciences*, 1875.)

Dr. G. F. Duffey presented the Museum of the Royal College of Surgeons in Ireland with a rare specimen of ulcer of the stomach, perforating the diaphragm, and opening into the left lung, not far from the pericardial surface, and causing gangrenous abscess of the lung.

Perforation, therefore, of the pericardium from the stomach, would, I imagine, be followed rather by pneumo-pericarditis than by adhesive pericarditis.

Instances of ulcer of the stomach perforating the pericardium must be extremely rare, as there seems to be no recorded instance of it in the medical literature of the United Kingdom, and inasmuch as no more than a bare allusion to such a possibility is found in any of the standard works on the heart or stomach; for example, Ziemssen's *Cyclopædia of Medicine; The French Dictionary of Medicine;* or Pepper's or Fagge's recent works; or B. Bramwell's *Disease of the Heart, etc.* Brinton, *On Disease of the Stomach*, p. 175, writes, "the pericardium is very rarely opened;" but he gives no instance of such an occurrence—an omission excusable only on the grounds of his knowing of none. Dr. Habershon, whose attention, more than that of others, has been for many years directed specially to gastric disorders, informs me, in kind reply to my inquiry, that he has never met with such a case, nor is he aware of any recorded instance. Our pathological museums here contain no such specimens; and Mr. C. Stewart, the curator of the Museum of the Royal College of Surgeons of England, tells me of a similar absence there. Professor Turner courteously informs me that the only specimen in the Anatomical Museum of the University of Edinburgh, which at all bears upon the subject, is "one (No. 932), of a cancerous ulceration of the œsophagus and cardiac end of the stomach, and from the centre of the cancerous mass a small channel led into the pericardium, the entire serous layers of which were covered with recent lymph; no history is attached."

When I came across my case, I thought it was unique; but, thanks to my friend Dr. G. F. Duffey, I have discovered that three similar cases of perforation of the heart, from gastric ulcer, are recorded; each observer, like myself, thought his case the first reported.

Owing to the interest attaching to the subject, and the advisability of collating all such cases, I subjoin the following abstracted reports.

CASE I.—The first case is one presented by Professor Chiari[1] in May, 1880, to the Vienna Medical Society. The patient, a woman, aged 71, had died shortly after her admission to hospital, with the symptoms of gastric ulcer; namely, hæmatemesis and passage of blood from the intestines. At the necropsy a round hole, two centimètres in diameter, was found in the lesser curvature of the stomach. The opening led into a sac as large as a walnut, formed by cicatricial tissue; the sac extended through the diaphragm, pericardium, and wall of the left ventricle of the heart, and presented at its apex an ulcerated opening large enough to admit an ordinary probe into the left ventricle. The heart was closely adherent to the pericardium, over a space eight centimètres square; the muscular tissue of the heart was pale and friable, and had undergone moderate fatty degeneration; the endocardium was thickened for a distance of one centimètre around the perforation. The stomach and intestines contained a large quantity of fresh blood. The body generally was very anæmic. In the walls of the sac, close to the opening into the stomach, a hard brittle mass, two millimètres long and about one millimètre thick, was found—probably a piece of glass that had been accidentally swallowed at some time. Dr. Chiari attributed no special importance to this foreign body, as he thought that it had merely found a lodgment in the sac, subsequent to the formation of the latter. He stated that he had been unable to find in medical literature any analogous case of the opening of a round ulcer of the stomach into the cavity of the heart.

The other two cases are reviewed in the *American Journal of Medical Science*, vol. lxxxiii, 1882, p. 560, and the authors were not aware of Chiari's case.

CASE II.—The first is published by Brenner,[2] and is that of a woman, aged 55, who was subject for years to attacks of cardiac pain, occasionally accompanied by vomiting. Six months before death, she had an attack of pleurisy with violent pains radiating to the epigastrium. A few days before death, she vomited blood, had severe cardiac distress, and passed black tarry stools. The necropsy revealed a circular perforation in the lesser curvature of the stomach, which communicated with an opening in the wall of the left ventricle.

CASE III.—The other (*Wiener Med. Blätter*, No. 52, 1881) is by Oser, where the necropsy of the patient, a woman aged 71, revealed a round ulcer of the stomach, which had opened into the left ventricle The communication was established between the two organs by a long narrow canal. No air was found in the heart or in the arteries. The perforation had occurred three days before death, and was indicated by vomiting of bright blood, and by tarry stools.

My case may be considered as a supplement to these, and in some respects differing from them, for all the three cases to which I have referred occurred in aged females. My case was in a youth, aged 19. Vomiting and hæmatemesis were absent from my case, while invariably present, and a marked symptom, in the others. Brenner's case and mine resemble each other closely in their pathology, as in Oser's there was a long narrow canal through which the communication between the stomach and heart was maintained; and Chiari's, in like manner, had an intervening abscess or sac, and was due, in my opinion, to the irritation of the impacted glass.

It needs no great insight to recognise the reasons why such an occurrence as a communication being set up between the stomach and heart or pericardium must be one of the rarest pathological conditions met with.

Independently of the fact that, in 80 per cent. of all cases of gastric ulcer, it is situated on the posterior wall and near the pylorus, there are three important physiological and anatomical facts which go to explain this great rarity: (1) the very small part of the stomach which can possibly be in contiguity with that portion of the diaphragm upon which the heart rests; (2) the greater movement, during the processes of digestion and the acts of respiration, of the anterior surface of the stomach, so that, were an ulcer situated in this locality, adhesion between the stomach and diaphragm would be prevented; and (3)—and perhaps the most cogent—the intervention of the left lobe of the liver between the stomach and diaphragm.

This last point is one of no little interest, as it is one upon which there seems to be some diversity of opinion among the most distinguished anatomists—a diversity dependent, I believe, upon anatomical differences in the topography of the abdominal viscera presented by different bodies which have been the subjects of examination.

Quain (*Anatomy*, 7th edition, p. 867), writing of the relations of the stomach and liver, says: "when the stomach is quite empty, the left part of the under surface of the liver may overlap the cardiac end of that viscus;" and though he refers to the stomach, when inflated, being in contact with the diaphragm, it is plainly not with that part which lies near to or under the heart.

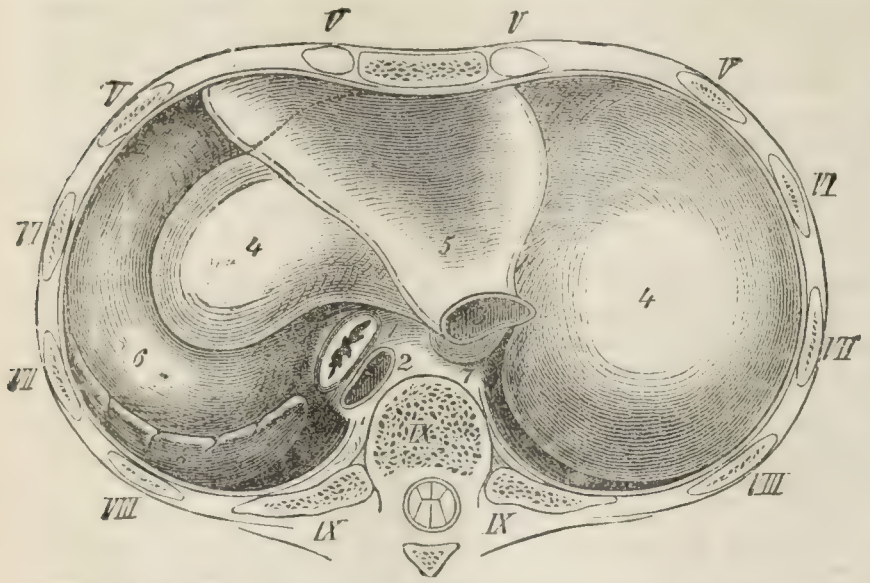
In the majority of subjects opened for dissection, which I have examined, the liver, by its left lobe, largely fills the left vault of the diaphragm, and entirely separates the tendinous portion from the stomach; and this is portrayed—and by all accounts true to life—in the beautiful models of the viscera in their relationship one to the other, prepared by His, a pupil of Braune.

Professor Cunningham, to whose kindness I am indebted for my information on this subject, and who enabled me to investigate it in the anatomical rooms of the School of Physic, Trinity College, Dublin, is in favour of the teaching of Braune, and sets forth, in his manual of *Dissections*, that the stomach does come into contact with the anterior portion of the left vault of the diaphragm just inside the left mammary line, and below the apex of the heart. Thanks to Professor Cunningham, I reproduce, in the adjoining topographical dia-

[1] Chiari H.: Fall von Perforation eines runden Magengeschwüres in den linken Herz-ventrikel, und Demonstrirung des bezüglichen Präparates. (*Anzeigen derk. Gesellsch. der Aerzte in Wien*, 1880, pp. 161-163. Abstracted from *Allg. Med. Cent. Zeit.* into the *New York Medical Record*, September 4th, 1880, p. 262.)

[2] Brenner, F.: Perforation eines runden Magengeschwüres in den linken Herzventrikel. (*Wien. Med. Wochenschrift*, 1881, No. xxxi.)

gram, the identical plate of Braune's taken from his frozen sections;



1. Œsophagus. 2. Aorta. 4. Liver, right and left lobes. 5. Pericardial layer of diaphragm. 6. Stomach. [Section at the level of the fifth rib in front. Braune.]

and it will be seen that the only part of the diaphragm upon which the heart rests (5) which can come into contact with the stomach, is the small triangular portion marked off by dotted lines. This corresponds in its thoracic aspect to the under surface of the left ventricle, and on its abdominal to the anterior wall of the stomach, two inches and a half from the cardiac orifice, and two from the lesser curvature —points which strikingly correspond with the situation of the two pathological conditions which exist in the case I have recorded.

I had an opportunity of verifying this anatomical relation in one recent subject. A pin passed through the chest-wall, in the left fifth intercostal space inside the nipple, and directed downwards, traversed the pericardial aspect of the diaphragm, and impinged on the anterior wall of the stomach in the situation pointed out.

It would, therefore, appear as an anatomical condition to permit a perforation of the pericardium and heart from the stomach, that the left lobe of the liver should be smaller and narrower than it is known to be in the majority—or any way in a very large number—of instances.

CENTENARIANS: MISS HASTINGS, WHO DIED AGED 104.

By G. M. HUMPHRY, M.D., F.R.S.,
Professor of Surgery in the University of Cambridge.

I THINK it worth while to send the particulars of the case of Miss Joanna Hastings, forasmuch as, irrespectively of her being the sister of the founder of our Association, they present many points of interest.

The particulars were furnished by Dr. Pike, of Malvern, her medical attendant, and were supplemented by myself on a visit to her, last September.

Her age is authenticated by the entry, which I saw, in the family Bible; that her father and mother were married at Chipping-Norton, February 21st, 1781, and that Joanna was born March 14th, 1782, and baptised at Sutton-Coldfield.

She had always been in comfortable circumstances, had led an active life, busying herself in works of benevolence and attendance upon the sick, and taking a good deal of out-of-door exercise, in walking and, in her youth, riding.

In September last, that is, when at the age of 103 years and 6 months, she was in good condition, rather fat, and tolerably strong, but not able to walk. She thought she could walk, but had been advised not to try to do so since her confinement to bed by bronchitis during the winter. She had a clear full voice, and, though deaf and obliged to resort to an ear-trumpet, she was remarkably happy, fond of conversation and hearing the news, taking an interest in the things of life, and in everything that passed; she amused herself with crochet, and had the newspaper read to her daily. She never talked, her niece told me, about dying, and on taking leave of her friends, never observed "I shall not see you again," but usually said, "I hope when you visit Malvern again you will come and see me." This happy feature, I may observe, is not uncommon in very old people, particularly those who retain their health, and are not much troubled by the weaknesses and annoyances attendant upon failing strength.

She was about 5 feet 6 inches in height, and her figure was rather bent. She required glasses only during the last six years, but her sight was failing, cataract having developed in one eye and commencing in the other. Six teeth remained, all in the lower jaw; namely, two incisors, two canines, and two bicuspids. She had never used artificial teeth. Pulse 84 (it was under 70 when I counted it at 6.30 P.M.), regular, large and compressible. The radial artery was visible, but no unevenness or knottiness was discoverable in its coats. Respiration 24, and regular. Little arcus senilis. Micturition was natural. There was no apparent failure in any organ, and the sounds of the heart were natural. The chest-girth was 37 inches during inspiration, and 36½ in expiration; that is, and this is usual in old people, there was little movement of the thoracic wall in respiration. Elasticity of the costal cartilages could not be distinctly made out. I should say, that she was habitually, during the last eighteen months at least, a sufferer more or less from bronchitis; but, on the day on which I saw her, she appeared to be free from it; and she had none of the aching pains which sometimes trouble old people. Her feet often swelled a little, especially in warm weather, if they were hung down. She usually slept well for about eight hours, went to bed at 9.30, and awoke about 7. She enjoyed good appetite and good digestion, but was a moderate eater, taking three ounces of meat daily, with a cup of beef-tea and a table-spoonful and a half of brandy, and a cup of tea morning and evening, with the addition sometimes of corn-flour. The bowels acted usually on alternate days, with the assistance of a little aperient about twice in a week. Her intellectual powers are said to have been high, her memory good for recent as well as for long past events, and her disposition energetic, though of late years placid, "nothing appearing to ruffle her."

She had lived at Martley Rectory, in Worcestershire, at Worcester, and lately at Malvern. She was the first child of a family of fifteen. In earlier life, she was a spare person, but robust, with good health, good digestion, regular daily action of bowels, a good sleeper, rising at about seven, with good appetite, but a small eater, taking a glass of beer or cider for dinner, but no wine or spirit; meat at one meal, and tea, latterly coffee, for breakfast. She had acute and severe bronchitis at the end of 1877, again for two months in March, 1881; erysipelas of the head and pneumonia in September, 1881. She became subject to cough about sixty years ago, and had it for many winters. She dislocated her shoulder forty years ago, and injured her hip by a fall thirteen years ago, since which she had been lame. She told me that she had understood she was a remarkably small baby.

Her father died at the age of 100 years and 6 months; her mother at 84, of cancer or ulceration of the stomach; her brothers (1) aged 13, of water on the brain; (2) aged 39, in India (of fever?); (3) aged 87; (4) aged 64, of paralysis; (5) Sir Charles Hastings, the founder of the British Medical Association, aged 72, of cancer of the stomach; (6) aged 74; (7) aged 78, of heart-disease; her sisters (2 and 3) of brain-fever; (4 and 5) of consumption after measles; (6) of lung-disease after measles. It is probable, therefore, that these all died early, with suspicion of tubercular disease, which also arises in the case of the eldest brother; whereas she herself, the first-born of the family, outlived all the others, and reached the age of 104.

Her father was aged 26 at her birth, and her mother 22. There was no blood-relationship between them. The members of the family are said to have been gifted above the average; but her father for many years suffered under mental depression, supposed to have been induced by many and various troubles.

In October, 1885, a month after my visit to her, I heard from her niece that the cataract in the "well eye" was advancing, and that, in connection apparently with her failing sight, another symptom appeared. "She sees 'sights,' as she calls them—wide plains, fields, trees, houses, children. The sights are almost always pleasant; only twice have they been at all disagreeable. Once, some weeks ago, she saw women at the window making faces at her; and last night she saw horrid-looking men. She talks about them, and wishes much to know the cause." I may mention, in relation to this symptom, that, not long ago, I was attending a gentleman, aged 78, who, in connection with severe photophobia, induced by overstraining his eyes, was terribly afflicted with these "sights," often of the most ugly and disagreeable nature. I am glad to say that he quite recovered, though the convalescence was slow.

Dr. Pike writes to me, that Miss Hastings died on March 12th, "from exhaustion, the cold weather, I think, considerably hastening her death. About six weeks previously, she got an attack, serious, of pneumonia of the bases of both lungs. This passed through its ordinary course, and she threw off the disease wonderfully, the lung clearing

up well, leaving only the state of chronic bronchitis, from which she had latterly suffered. Of course, her strength was much lowered by the attack, and she never thoroughly regained it. Some three weeks before death, her brain began to show evidence of her exhaustion, by its failing power, drowsiness, etc., although her mind, up to this time, had remained remarkably clear. Five days before her death she had a convulsive seizure; and, although this passed off, she gradually became less and less clear, taking less nourishment, and finally, as it were, slept away. Her marvellous power of vitality was shown by her so thoroughly throwing off such a severe pneumonia, which would have killed many a far younger woman."

Miss Hastings was a typical instance of an aged person: of long-lived family, of strong constitution, all the organs being strong and well balanced; with good appetite and digestion, but a moderate or small eater, taking little alcohol, and not much meat; with regular action of bowels; of spare frame, robust, energetic, and of benevolent, happy disposition; of good ability, with usually good health; taking a fair amount of out-of-door exercise; having no illness till near the close of her life; and, at a very advanced age, showing remarkable power of recovering from severe attacks—bronchitis, erysipelas, pneumonia,—thus resisting the savage onslaughts of disease, and yielding at last to the slow, steady, orderly advancing developmental processes by which the natural termination of life is brought about. (See remarks on this, in my address on Old Age, in this JOURNAL, May 9th, 1885.)

P.S.—A table of the reports I have received respecting centenarians is preparing for publication in the JOURNAL; indeed, it is in the press. I shall be glad, however, still to send forms to any members of the profession who can fill them up from centenarians with whom they are acquainted, and shall be able to add them to the table if they are returned to me quickly.

NOTES UPON LANOLIN.

BY WALTER G. SMITH, M.D.,
Physician to Sir Patrick Dun's Hospital; King's Professor of Materia Medica, School of Physic, Trinity College, Dublin.

THIS substance, for the introduction of which into therapeutics we are indebted to the distinguished Professor of Pharmacology in the University of Berlin,[1] is a valuable addition to our resources, and doubtless will come into general use. It is a very interesting body from more than one point of view.

1. It is a neutral fatty salt of cholesterin; that is, cholesterin (a monatomic alcohol) takes the place of glycerin, which is the radical of ordinary fats.

2. Liebreich has demonstrated the wide diffusion of this cholesterin-fat throughout the animal kingdom.

3. It is not a secretion arising from sebaceous or other glands, but is a product of retrograde metamorphosis of keratin or keratin-yielding tissues.

Liebreich suggested, but was not prepared to prove, that cholesterin-fat was present in the keratin-cells, or in the granular layer of the epidermis from which the keratin-cells are derived; but Lewin (*Berl. klin. Woch.*, 1886) has since shown that its presence can be demonstrated micro-chemically in the granular layer of the skin by Liebermann's test (acetic anhydride and sulphuric acid).

4. Lanolin commends itself, pharmaceutically, as a basis for ointments.

Shortly after reading Liebreich's paper, I obtained some lanolin from Mr. Martindale, and began to prescribe it. Within the last two and a half months, I have employed it frequently (over seventy times), and feel assured that it possesses properties which deserve attention from all practitioners. These properties are the following.

a. It is capable of absorbing and intimately blending with large amounts of water, standing thus in marked contrast to popular notions of the mutual relations of water and fats. The lanolin of commerce is a combination of neutral cholesterin-fat with about 30 per cent. of water.

b. It is neutral to test-paper, is not liable to rancidity, and is not easily saponified by alkalies.

c. It is miscible with glycerin, unlike other fats.

d. It rapidly, and in a remarkable degree, possesses the power of penetrating the epidermis.

e. Hence lanolin greatly facilitates the absorption through the skin of drugs mixed with it. So marked is this, that, with poisonous drugs, such as the toxic alkaloids, less (about half) than the usual proportion should be prescribed in ointments. The vaselins and paraffins hinder, rather than favour, the passage of drugs into the skin.

I will now briefly mention two or three cases in illustration of the uses of lanolin.

Eczema.—Captain —, a patient of Dr. Gilbert Lynch, consulted me while on a visit in Dublin. He was a corpulent man, with varicose veins in both legs, and was much troubled by an angry outbreak of eczema rubrum on the legs, on and off for two years. For this he had had the best advice in London, but without very satisfactory results. When I saw him the leg was weeping, fiery red, and intolerably itchy. The following ointment was prescribed. Lanolini ʒxij; adipis benz. ʒj; liq. plumbi subacet. fort. ♏xv; acidi carbol. ʒss; olei lavand. ♏v.

Speedy improvement ensued; the itching was calmed; he was able to walk about in comfort, and in about three weeks was practically cured. Ethereal solution of nitrate of silver (20 grains to 1 oz.) was twice applied.

Psoriasis.—Miss G., aged 25, was sent up to me from Doneraile, County Cork. For fifteen years she had been subject to psoriasis, here and there; and in January, 1886, the disease suddenly developed into an extensive eruption over the face, chest, back and limbs; in fact, no part of the body was spared. She was covered from head to foot with small circular scaly patches.

I first prescribed a lotion of soft soap, spirit, and carbolic acid, which smarted her. A few days afterwards, this lotion was applied to one limb, and ointment to the opposite limb (lanolin and lard, including pyrogallic acid 40 grains, and salicylic acid 20 grains, respectively, to the ounce). This ointment caused no irritation, and exercised a more favourable influence on the eruption. Progress, however, being rather slow, I substituted for the above ointment a lanolin and chrysarobin ointment (20 grains to 1 ounce). This produced speedy and marked improvement. In a week there was a striking change for the better, and in a fortnight all infiltration and scaliness had vanished, and no trace of the eruption remained, except some brown pigmentary stains. White precipitate ointment was used on the face, and with good effect. Arsenic was given internally.

Rheumatic Exudation.—Miss F. was attacked, four years ago, with stiffness and pain in the back of the neck. This gradually became worse, and, for some months, she suffered acute pain in the neck, especially upon movement. The head drooped down on the chest, she could not sit at table with comfort, and her life was becoming miserable. On each side of the cervical spine, especially the left, there was an indurated ridge of thickening, apparently in and between the muscles, and very tender to touch. She was given iodide of potassium and chloride of calcium internally, and was directed to rub in gently, but thoroughly, an ointment of lanolin and lard, containing fifteen grains of iodide of potassium, twenty grains of iodoform, and three grains of hydrochlorate of morphine to the ounce. Improvement was soon apparent, and steadily continued; and, in about three weeks, she could elevate and rotate the head freely, and with little pain, and the hard infiltration at the nape had greatly diminished. The degree of pliancy conferred on the skin was remarkable, and the effect of the ointment in alleviating the local discomfort was unquestionable. Hitherto, I had found little reason for faith in the efficacy of iodide of potassium applied externally.

I have also used lanolin in acne, and in some other affections; and, speaking generally, can confirm the statement of Professor Liebreich and Dr. Lassar (based on over 400 cases), that it does not cause irritation of the skin. It is true that some cases of eczema were none the better, perhaps even aggravated, after the use of a lanolin-ointment; but similar experience is not uncommon with divers modes of treatment in obstinate cases of this fickle disease, and lanolin is no cutaneous panacea. In ringworm of the head, I have not had sufficient time to judge fairly of its effects.

With chapped hands, its effects are extremely satisfactory, and several bad cases occurring among my friends during the recent severe weather were cured by a single inunction of lanolin. For this purpose, perhaps, simple lanolin is the best to use, as it is rapidly incorporated into the skin. For general use, its stickiness should be counteracted by admixture with one-eighth or one-fourth of another fat (lard, castor-oil, etc.). A few minims of oil of lavender, or oil of eucalyptus, will communicate an agreeable odour to the ointment.

[1] The original paper was published in *Berl. klin. Woch.*, No. 47, 1885, and in the BRITISH MEDICAL JOURNAL, January 16th, 1886; and some further "Observations" in the JOURNAL, February 13th, 1886, give a number of useful formulæ

CENTRAL LONDON THROAT AND EAR HOSPITAL.—The Committee gratefully acknowledge the receipt of a donation of £20 in aid of the Llewelyn Thomas Memorial Fund from Dr. Henry Foster Burnes, a former clinical assistant of the Institution.

INDIRECT BULLET-FRACTURES.

By GILBERT KIRKER, M.D., Surgeon R.N.

Communicated by the Director-General of the Medical Department of the Navy.

In the BRITISH MEDICAL JOURNAL of January 23rd, there is an interesting paper on The Surgery of the Suakim Expedition, which was read by Mr. Tobin, before the Surgical Section of the Academy of Medicine in Ireland. In this paper, Mr. Tobin describes a case of unusual bone-injury by a bullet; namely, complete transverse fracture of the femur, two inches below the point struck by the bullet; and, since, he has also mentioned that similar bone-injuries are described in the medical and surgical history of the war of the Rebellion, and that, in the museum of Haslar hospital, there is a specimen of a like nature.

I have thought a complete account of this specimen worthy of publication; for, if I interpret its characters aright, it is most instructive as to the way in which these injuries are produced; and, while Mr. Tobin's and the American specimens represent conoidal bullet-injuries, this one descends from the round-bullet age. The following is the history of the specimen.

"J. B., aged 46, gunner's mate, was received on board the temporary hospital ship in Rangoon River, on March 12th, 1825, from Doahne, at the storming of which he was wounded, on March 7th, by receiving a musket-bullet on the outer part of the left thigh, about half way down. The ball entered in an oblique direction, downwards and inwards, and lodged. Some tension and pain of the thigh followed, with slight symptomatic fever, but no fracture could be discovered. He was treated on general principles; the limb was kept in the semi-bent position, and hot cataplasms were applied to the wound. Towards the end of the month, the discharge became sanious, and fœtid and (pieces) of duck trousers, and small spiculæ of bamboo were observed to come away with the dressings. On April 8th, the internal wound was enlarged upwards and downwards; to give free exit to a very copious discharge of fœtid and ill-conditioned matter, and the probe readily came into contact with bone, which appeared to be denuded of its periosteum. About the middle of April, the discharge still increased, and seemed to be confined in sinuses near or around the os femoris, and between the sheaths of the muscles. The general health became considerably impaired, and continued to decline from this period. Hectic fever supervened, and he died in the first week of May. The femur was then removed, and examined, when a fissure was discovered extending from the inner condyle upwards, to within three inches of the trochanter minor. Accompanying the bone is the musket ball, which was cleft in two, and found lodged in sacs close to the bone."

The specimen is a left femur, exactly in the outer border of which, almost midway between the extremities, there is a small oval area of white smooth bone, surrounded by a groove of a worm-eaten appearance. This piece of necrosed and partially separated bone, which of course marks the spot where the bullet struck, measures three-fourths of an inch from above downwards, and three-eighths from before backwards.

About the middle of the outer surface, one inch above the place of impact, a fissure starts, which runs upwards, curving gently forwards for two inches, passes through the outer border, and across the anterior surface, until it touches the inner border. It then turns downwards, almost at a right angle, inclines backwards through the inner border, and then runs down close behind it, until it reaches the part where the bone begins to expand into its lower extremity. There the fissure turns backwards, and ends in the inner condylar division of the linea aspera, about five inches below the place of impact.

These are the more evident characters of the specimen, but, on closer examination, other interesting ones are seen. Thus part of the fissure has been closed in with new osseous matter, and part of it remains open; and these conditions are observed, respectively, when the fissure runs in the long and in the short axis of the bone. Again, from the upper end of the area of impact, a very minute fissure, which can scarcely be seen without a magnifying glass, runs upwards and inwards, in a somewhat zigzag manner, towards the large fissure, where that crosses the front of the bone. The minute fissure is most distinct where it crosses the bony texture, but is in places, when running parallel with it, invisible. The presence of this fissure I only discovered a few days ago. It is not described in the original history of the specimen, and, perhaps, only became apparent after long drying of the bone. It is, however, as I shall afterwards point out, a most instructive characteristic.

The two pieces of the bullet, which accompanied the specimen, are of unequal sizes, one wighing 167, and the other 59, grains. They are both circular in outline, but, while the smaller is flat on both sides, the larger is flat on one side, and convex on the other. The bullet was, therefore, doubtless a small round one. It was divided on striking the outer border of the bone, and was probably fired at short range.

That the main fissure in this specimen is connected with the bullet-injury, and is not an example of that extremely rare fracture—simple fissure of a long bone from ordinary violence, is proved by the following considerations.

In the first place, there is no mention in the history of the patient of his having received any accident besides the bullet-wound; and the specimen has, from the first, been described in the catalogue of the museum as a "Fractured and Fissured Femur from Gunshot."

In the next place, the presence of the minute fissure, running from the place of impact of the bullet towards the large fissure, all but demonstrates the connection of the latter with the direct injury.

Now, the specimens to which I have referred, and that which I have just described, show that in the bones of the thigh and leg, when struck by bullets, there sometimes occur fractures, between which, and the injury produced by the direct impact of the missile, there is no visible connection, or only one or two fissures of little seeming importance; while, in the histories of the cases from which the specimens came, there is no record of accident besides the bullet-wound.

Of the existence then of these fractures, which, from their nature, are appropriately termed indirect bullet-fractures, there is no doubt; and, therefore, the manner of their production becomes an interesting and not unimportant question.

In the *Medical and Surgical History of the War of the Rebellion* (Surgical Vol., part third, p. 722), it is stated that "fractures of this nature are principally found in the long bones of the lower extremities, and are, probably, the result of the direct impact of a missile, at a high velocity, upon the bones, somewhat firmly fixed by the weight of the body." As far as is known, this is a correct statement of the conditions under which all these fractures have occurred, for it applies to Mr. Tobin's specimen, and, apparently, to the Haslar specimen also.

At any rate, under such conditions, it is evident how this bone-injury could arise. Thus, there being a strain on the bone at the time it suffers disruption of its integrity, by the violent stroke of the bullet, it yields at the place where the strain is sufficient to widen and extend some breach of structure which has been produced.

In most of the specimens of indirect bullet-fracture, fissures are seen to connect the direct with the indirect injury, but in some, this connection is not evident. I am fully persuaded, however, that visible or invisible, connecting fissures always exist; and the Haslar specimen is most valuable, as it exhibits an intermediate and very suggestive condition. I think it is also likely that, if the specimens in which the connecting fissures have not been observed were carefully examined, after having dried thoroughly, such fissures would be discovered. Yet, on the other hand, it is possible that bone, like iron, may, by violent vibration, have its power of resisting strains reduced, without at the same time exhibiting visible fracture.

I wish to add, further, in connection with the specimen in this museum which I have described, that it seems to show that fissures in long bones, which run in the long axis, have a greater tendency to heal than those which run in the short axis.

The knowledge of this difference in the proneness to heal between these two varieties of fissures, if it exists generally—and, for evident reasons, that is probable,—is important, in connection with the nature of rifle bullet-fractures, and, in the practice of military surgery, should strengthen endeavours to treat these injuries conservatively.

THE LATE DR. DIO LEWIS.—Telegrams from New York announce the death of Dr. Dio Lewis, a well known physician. Deceased was born at Auburn in 1823, was educated at Harvard Medical School, and began practice at Buffalo. He deprecated the use of drugs, and advocated the introduction of physical exercise as a part of public education. In 1863, Dr. Lewis settled in Boston, where he founded an institution for training teachers in his new system of physical education. He likewise established in Lexington a school for young women, in which all rules of government were abandoned. The buildings were, however, destroyed by fire in 1868, and, a year later, the whole project was abandoned. Dr. Lewis afterwards devoted himself to the advocacy of hygienic questions and temperance reform. He was the author, among other works, of *New Gymnastics*, 1862; *Weak Lungs, and how to make them Strong*, 1863; *Our Girls*, 1871; and *Chats with Young Women*, 1874.

CONGENITAL MALFORMATION OF THE HANDS AND FEET TRANSMITTED THROUGH FOUR GENERATIONS.

By WILLIAM ANDERSON, F.R.C.S.,
Assistant-Surgeon to St. Thomas's Hospital.

THE subjoined cases of congenital malformation bear great resemblance to the series reported by Mr. H. A. Fotherby, in the JOURNAL of May 22nd, and will serve as a further illustration of the possibility of a repetition, generation after generation, of abnormalities of development that were probably, in a certain sense, accidental in their origin.

The history of the defect commences, in 1798, with J. G., an only child, of healthy parentage, who was born at full term, with a peculiar pincer-like conformation of the hands and feet, which is said to correspond exactly in appearance with that figured below, from his grandson, E. G. He was well developed in all other respects, and no previous example of deformity of any kind is known to have existed in the family of his mother or father. The strange aspect of the affected members was attributed by the mother to an alarm in the early period of her pregnancy, caused by the sight of a parcel of living lobsters.

J. G. married early, and had fourteen children. Of these, eleven were malformed in the hands and feet, like their father, one in the feet only, and two were perfect. All except three of the number died before the age of puberty, and no further information can be obtained with regard to them. The survivors were the following.

1. J. H. G., the eldest son; hands and feet deformed as in Figs. 1 and 2. He became the father of twelve children (see below).

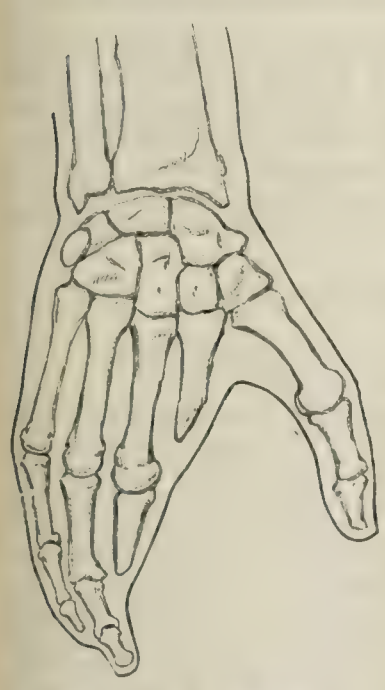


Fig. 1.—E. G., Left Hand.

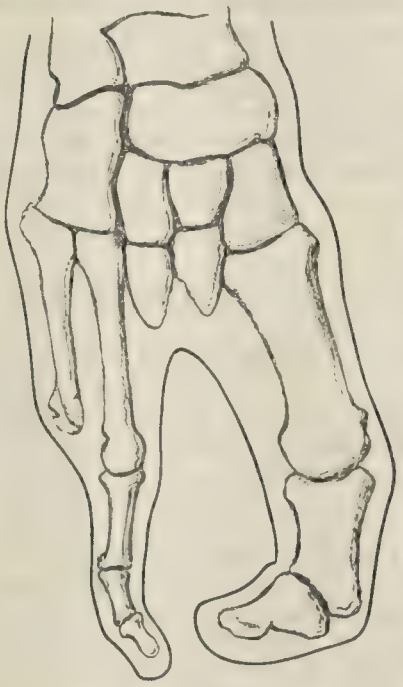


Fig. 2.—E. G., Right Foot.

2. H. B., a daughter; defective in the feet only. She married, and had one child, who reverted to the type of the grandfather, and was deformed in all four members.

3. F. G., son; normally developed. He has had three (?) children, all free from deformity.

J. G. died in 1871, at the age of 73.

The third generation is represented by the twelve children of J. H. G.; the son of H. B.; and the three children of F. G. No further details have been obtained as to the two latter families; but the information as to the issue of J. H. G. is fairly complete, and the more essential facts have been tabulated in the following list.

1. Son (J. F. W. G.); normally developed. Has two children, both free from defect.
2. Son; deformed in hands and feet; died in childhood.
3. Daughter; deformed in hands and feet; died in childhood.
4. Son; deformed in hands and feet; died in childhood.
5. Daughter; deformed in hands and feet; died in childhood.
6. Son; normally developed; no issue.
7. Daughter (M. H.); deformed; feet pincer-shaped, like those of E. G., fifth digit with its metatarsal bone hypertrophied (Fig. 4)

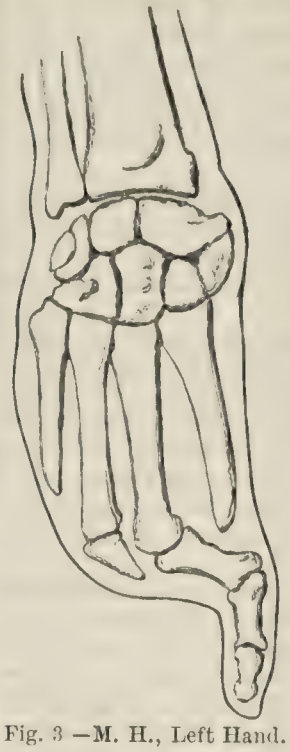


Fig. 3.—M. H., Left Hand.

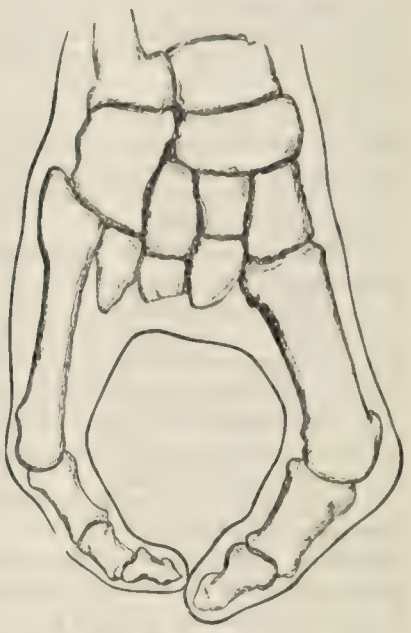


Fig. 4.—M. H., Right Foot.

Hands present each but one finger, the fourth, which is distorted, and buried as far as the second joint in the metacarpal integument (Fig. 3). She is married, and has three children (see on).

8. Son; normally developed; died in childhood.
9. Daughter; deformed in hands and feet; died in childhood.
10. Son; normally developed; died in childhood.
11. Son (E. G.); deformed; hands and feet pincer-like (Figs. 1 and 2). Married, and has one child (see below).
12. Son (I. G.); deformed; feet pincer-shaped, like those of E. G.; deformity of hands of a more advanced type than in any previous case—thumb, index-finger, and middle finger wanting, metacarpal bone of thumb and distal portion of second metacarpal bone undeveloped, ring and little fingers united by a web of integument.

The fourth generation includes the families of J. F. W. G. (1), M. H. (7), and E. G. (11).

(A) J. F. W. G. (normally developed) has had two children, both perfect.

(B) M. H. (deformed) has had three children.

1. Son; deformed; mutilation more extensive than in foregoing examples; feet represented each by the tarsus and little toe (Fig. 6);

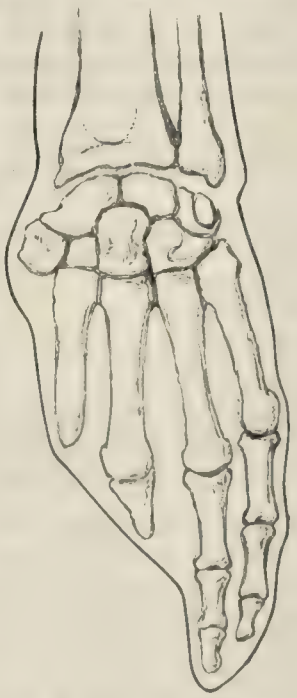


Fig. 5.—I. G., Right Hand



Fig. 6.—W. H., Right Foot.



Fig. 7.—H. W. G., Left Hand.

the right hand presents only a single digit, the fifth; in the left hand, the fourth digit also is preserved, but is united with the fifth by a web of integument.

2. Daughter; normally developed; died in infancy.

3. Daughter; deformed; feet pincer-shaped; right hand defective in a relatively small degree, all the degits being present, but the index is distorted, and the middle and ring fingers are webbed; the left hand lacks the thumb and the last two phalanges of the forefinger; the middle finger shows on its radial side, opposite the first phalangeal joint, a cartilaginous nodule resembling a rudimentary digit.

(c) E. G. (deformed) has one child, a boy, who is defective in hands and feet; hands present each only one digit, the fifth (Fig. 7); the right foot in a similar condition; the left foot pincer-shaped.

The main points for observation in this curious series may be summed up as follows.

1. The malformations, apparently commencing *de novo* in the great grandfather, have descended through four generations, affecting twenty-four out of thirty-six members of the family, and showing a tendency to increase in degree in the later scions. The condition was in no instance associated with other defects, physical or mental, nor was any excessive length of arm observed, as in Mr. Fotherby's case.

2. The children of the undeformed subjects were all normally developed, but a reversion of type appeared in the case of the child of the surviving daughter of J. G.

3. The typical deformity was the pincer-like shape of the hands and feet represented in figs. 1 and 2. This predominated throughout the first three generations, except in the last member of the third, the youngest son of J. H. G., who appears to have been the first to lose the thumb; aud in the fourth generation, the great toe also disappeared in two cases. The hands were normally formed in only one instance amongst the affected members of the family. The error of development was always limited to the digits and metacarpal bones, except, perhaps, in the fourth generation, where there were indications that some elements of the distal row of carpal or tarsal bones were imperfectly formed. The lesion was usually symmetrical.

4. The morbid features were not confined to a mere suppression of parts. Syndactyly (as in Fig. 5), compensatory hypertrophy (as in the little toe in Fig. 4), distortion of articulations (as in Fig. 2), and multiplication of parts (as in the third child of M. H.) were also present. The latter peculiarity was better marked in Mr. Fotherby's series. The manipulative power retained in the deformed parts was surprising, considering the degree and nature of the mutilation.

5. The selection of the subjects for attack or exemption seemed to be quite capricious; neither sex nor order of seniority appeared to influence the manifestation; males and females were affected alike, and the defect was handed down as readily by the latter as by the former.

It is to be hoped that further observations will cast some light upon the origin of these and allied faults of evolution. The probabilities are strongly adverse to the efficiency of maternal impressions in producing such conditions as these now described; but the case in support of this possible factor has been more damaged by the absurd examples adduced in its support, than by any arguments that have yet been offered against it. It is at least certain that, until our knowledge is more advanced, we cannot afford to neglect the evidence, imaginative as it often is, that mothers frequently volunteer in explanation of the defects of their children.

The figures illustrating this paper were drawn in outline from life, and the osteological details were filled in after careful examination of the parts by palpation.

CLINICAL MEMORANDA.

SPECIFIC DISEASE OF THE BRAIN AND SPINAL CORD: SYMPTOMS OF LOCOMOTOR ATAXY.

Mr. Hutchinson's lectures on syphilis, recently published in The British Medical Journal, together with the doubt that has been expressed as to the occurrence of ataxy, having syphilis for a cause, may render the following case interesting.

G. W., an officer in the army, aged 46, of temperate habits and nervous disposition, began to complain of debility early in 1885. Twenty years previously, he contracted a sore, which was cured in a fortnight, and, as far as he could remember, was not followed by secondary symptoms. In April, 1885, he complained of weakness in the legs, exhaustion after slight exercise, loss of appetite, and feverishness. This weakness of the legs increased, and he was sent to the hills. About the middle of June, he came under my observation. He complained of lightning pains in his lower limbs, and tingling sensations, "as of pins and needles," in both arms. Both his arms and legs were slightly paretic; and, when he stood up, there was some trembling of the legs and thighs. His gait was typically ataxic, and he described the sensation of contact of the soles of his feet with the ground as being "distant," and as though they were covered with felt. He had external strabismus on the right side, with dilatation of the pupil, and absence of power of accommodation. There was paralysis of the soft palate, causing regurgitation of food into the posterior nares; and each tonsil was the seat of a circular depressed ulcer, with a ragged edge and yellowish base. The patellar and ankle reflexes were absent, and he could not stand with his feet together and his eyes closed. Both eyes were examined with the ophthalmoscope, but nothing abnormal was discovered. On the skin of the forehead was a coppery papular eruption. The inguinal glands were enlarged, but there were no scars on the penis. The paralytic symptoms became rapidly worse; in three weeks, he had completely lost motor power in his lower limbs, and much difficulty in moving his arms. The muscles of the limbs wasted rapidly, but retained their electric excitability. He had cough, with muco-purulent expectoration, and there were slight dulness and harsh breathing at the left apex. The daily temperature was normal, and there was no albumen in the urine. Iodide of potassium, in ten-grain doses four times a day, with drachm doses of the solution of perchloride of mercury, were first given towards the end of July, and was persevered with for over two months. The patient gradually improved, regaining the power of motion in his lower limbs, and losing the strabismus. During the third week in August, he became extremely irritable, and, on one occasion, violent; the twitchings and startings of his legs also caused him trouble; and the dose of iodide of potassium was increased to 15 grains. The eruption on his face gradually diminished. The improvement in the paralysis gradually increased; and, by the end of September, the patient was able to move about his room, and to take short walks, with assistance. The medicines were stopped during the first week in October, but had to be resumed, as psoriasis of the palm of his right hand (with which he used his walking-stick) appeared. The improvement in his case, up to the time of his leaving India (November, 1885), was permanent.

Whether the ataxic symptoms depended upon the syphilitic poison, or whether they were merely coincident, is open to discussion; but the fact remains unaltered that, as the paralytic symptoms disappeared, the peculiar gait, the swaying to-and-fro when the eyes were closed, and loss of the reflexes, were no longer observable.

Albert Leahy, F.R.C.S.Eng., Surgeon, Indian Medical Service; Medical Officer, Kashmir, Sialkote, Punjab, India.

OBSTETRIC MEMORANDA.

HOUR-GLASS CONTRACTION OF UTERUS, WITH PARTIALLY ADHERENT PLACENTA.

Mrs. Y., aged 32, has six children living; one was born dead. The placenta was always retained a long time. The patient is a strong, healthy woman. Labour commenced on April 27th, on going to bed at 9 P.M., and continued the whole night. The child was born about 8.30 on the morning of the 28th, the village midwife being present. I saw the patient two hours after the birth of the child. On examination, I found that I could pass my fingers into the cavity of the uterus, and could trace the funis higher up, without finding the placenta. On introducing my hand, I found the uterus divided into two parts, as if a string were tied round it, and I could feel the placenta in the cavity above; but, as I could not dilate the constricted part, I administered chloroform, and made the midwife keep the patient under its influence; and, with patience, I succeeded in getting in my fingers, and at last my hand, and peeled off the placenta, which was only partially attached, and removed it as a whole. The patient convalesced without a bad symptom, and was up and about on the fifth day.

I questioned the patient as to whether the midwife had pulled at the cord, but she said she had not. Though Dr. Playfair says in his *Midwifery* that these cases would rarely, if ever, be met with, if the expulsion of the placenta were brought about by a *vis a tergo*, instead of by a *vis a fronte*, I certainly could not trace it to that in this case.

Challoner Clay.

INTERESTING CASE OF TWINS: VERSION.

On May 10th I was called to attend Mrs. R., multipara, aged 36, in labour. On examination, I found a head presenting, the child (male) after a time, being delivered in the normal way. The pains now entirely ceased; but the uterus, from abdominal examination, was still found to be enlarged; and, on vaginal examination, another head was felt, presenting anteriorly, and a foot posteriorly.

Two hours having intervened from the birth of the first child, and no pains having come on, although ergot was freely used, as the patient was becoming exhausted, after a consultation with my partner, Dr. Charles Hoar, I ruptured the membranes, and performed podic version, delivering her of a second living child, also male. The uterus being compressed by Dr. Hoar, the two placentæ were expelled together, no hæmorrhage following, notwithstanding the large bleeding surface exposed by the separation of the two placentæ and the previous inertia of the uterus.

It is interesting to note the family history. Her husband's mother had twins, his sister had twins, and her own mother had twins, and she herself had twins at her two previous labours.

The points to be noticed in this case are: 1, the family history pointing to the fact of twin births being hereditary; 2, the value of compressing the uterus externally where *post partum* hæmorrhage may reasonably be expected; 3, the abnormal presentation of the second child. The mother and children both did remarkably well, her temperature never being above normal.

12, Castle Street, Dover. A. Crosbee Dixey, M.R.C.P.Ed.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

THE STANLEY HOSPITAL, LIVERPOOL.

CASE OF SARCOMA OF THE KIDNEY: PROFUSE HÆMATURIA.

(Under the care of Mr. Arthur Wilson, Assistant-Surgeon.)

William W., foreman labourer, a tall, spare, anæmic-looking man, was admitted into hospital on March 24th, complaining of occasional profuse loss of blood with the urine. Six or seven months ago, while at work, he suddenly felt a "cutting pain" at the end of the penis, and a desire to pass urine. On doing so, he noticed it was of a "dark brown" colour, and suspected it was blood. The pain at once left, and, next time he passed his urine, it was quite clear. He remained well for three or four weeks, when the same chain of symptoms was repeated, but the discharge of blood was rather more profuse. He continued at his work, and had no pain, although every three or four weeks he had a similar attack, the loss of blood growing larger each time. On the night of March 20th, when in bed, he had a sudden and exhausting hæmorrhage, and passed some large clots of blood, the straining causing a feeling of "weight and uneasiness" in the suprapubic region. On the 21st, he was seen by Dr. Percy Marsh, and advised to enter a hospital. The family-history was good; his father died at 83, of old age, and his mother at 56, of bronchitis. He had had twelve brothers and sisters, eight still living, the other four having died from cholera. His previous history contained only an attack of rheumatic fever, six years ago, which, probably, accounted for a systolic murmur. On admission, on the 24th, the bladder was sounded; it at once contracted firmly upon the instrument, but, after injection, a careful examination was easy. Nothing was detected, except the rugosity of the walls, very marked on the right side. The sounding was repeated on subsequent dates, and no hæmorrhage ever followed. He was ordered complete rest, and gallic acid. The urine, frequently examined, was of normal quantity, clear, acid, of specific gravity 1020; no albumen, and no blood, pus, casts, cancer-cells, fragments of growth, or sediment of any kind. There were no signs of any abdominal tumour, or tenderness on pressure. Both flanks were resonant. Rectal examination gave negative results. Temperature and pulse were normal. On April 10th, he insisted upon going home, walked about two miles, and, in the evening, at nine o'clock, the old symptoms reappeared, with clots, the bleeding lasting, at intervals, all the next day. On the 12th, he was readmitted to hospital, and placed on six minims of spirits of turpentine every four hours. On April 13th, a copious hæmorrhage taking place, with pain in expelling clots, it was decided to remove the clots, and make a digital examination of the bladder. A median cystotomy was performed, and the finger at once impinged upon a ball of soft clot. This was broken up, and the fragments washed away with water coloured with tincture of iodine. No growth was detected, and the mucous membrane felt healthy. A tube was placed in, but removed on the second day. By excluding the bladder, this operation practically established the diagnosis of malignant disease of the kidney, and, at the same time, relieved his pain. He had no more hæmorrhage; but, on April 23rd, expelled some old clots from the perineal wound. His urine was still normal in all respects. His cachexia became marked, and he gradually sank, dying of anæmia and exhaustion on May 4th.

Post Mortem Report.—From unavoidable causes, only the abdomen could be examined. The cystotomy wound was healthy. The bladder firmly contracted, containing no urine or blood-clot. The mucous membrane was hypertrophied; injected over the trigone. The right ureter was normal. The right kidney was pale, a little enlarged, but healthy, with the capsule stripping easily. On tracing up the left ureter about three inches, enlarged glands were found adherent to it, extending up to a mass in the left flank. The left kidney was removed with much difficulty, the upper half being free, but the lower tightly bound down by adhesions. The growth surrounded the hilum of the kidney, and an arm from it passed in front of the vertebræ, in intimate relation with the great blood-vessels. The general form of the kidney was preserved; the upper half was pale and anæmic; there was no distinction between cortex and medulla; the capsule was firmly adherent all over. The lower half was distended to twice the normal size, with dark shining mulberry-like projections on the surface, one of which had burst through the capsule, and was connected with a lump about the size of a hen's egg; over another, a small collection of pus (about one drachm) was found. Section showed it to be a dark red, highly vascular growth, of soft substance, projecting up between the firm fibrous trabeculæ, which carried it in all directions. Isolated patches extended almost to the upper third of the organ. The mucous membrane of the pelvis seemed healthy, but several of the mulberry deposits elevated it in places. No other deposits were found in the abdomen.

Microscopic Report (for this I am indebted to Mr. F. T. Paul).—"The growth consists entirely of vascular spaces, from a small size up to one-twentieth of an inch, or more, in diameter; they are lined with a single layer of thick endothelial cells; and the intervening trabeculæ, which are mostly delicate, consist of young nucleated connective tissue cells. It is what is usually called an angeio-sarcoma, but malignant angeioma would perhaps more correctly indicate its structure."

Remarks.—To those watching the case, it has been one of so much interest that I have ventured to record these brief notes. In the first place, it is a case of malignant disease of the kidney, running its course with literally only one symptom, namely, profuse intermittent hæmaturia. That many of the negative bladder-signs helped to point out the kidney as the organ affected, is true; but nothing with certainty excluded the bladder until the examination with the finger. Would it not have been wiser to have made this exploration earlier? The answer would seem to be in the affirmative. The operation is not one involving much risk, and sets at rest the minds of the friends and of the surgeon by establishing the diagnosis. In the above case, it was necessary finally, in order to relieve the pain of the accumulating blood-clots; but, had we found any growth capable of removal, it is doubtful, in the patient's weak condition, whether he could have withstood the shock and hæmorrhage. Had any abdominal tumour been detected, the idea might at least have been entertained of performing nephrectomy—an operation which, the notes of the *post mortem* examination show, must have been incomplete, and, probably, attended by speedy disaster from hæmorrhage.

LEEDS GENERAL INFIRMARY.

A CONSECUTIVE SERIES OF CASES IN WHICH THE ABDOMEN WAS OPENED FOR THE PURPOSE OF REMOVING THE OVARIES OR UTERINE APPENDAGES.

(By A. W. Mayo Robson, F.R.C.S.)

(Concluded from page 1063.)

Case v.—M. B., aged 36, was admitted on April 22, 1885, five weeks after confinement, with signs of ovarian tumour, rapidly enlarging. At the operation, on May 19th, an unilocular ovarian cyst, of the size of a football, was removed; the adhesions to the parietal peritoneum and omentum were easily separated. Recovery was uninterrupted; she left the hospital on the seventeenth day after the operation.

Case vi.—M. P., aged 22, was admitted on April 24th, 1885, three weeks after confinement at the fifth month, complaining of severe pelvic pain on the left side, which was first noticed on the tenth day, that is, the day after getting up. A tumour was felt on bimanual examination, close to, and apparently connected with, the uterus.

On May 2nd, a cyst, of the size of a large orange, was removed from the left broad ligament, along with the inflamed tube and cystic ovary of that side, to both of which it was adherent; it was, also, closely adherent to the uterus, and the small intestine was firmly fixed to its

upper part; these adhesions were separated by the fingers, the bleeding being arrested by sponge-pressure. Much trouble was experienced on account of the ligature being applied close to the uterus, and cutting through the uterine structure on being drawn tight; the actual cautery failed to arrest the hæmorrhage, which was only controlled by passing deep sutures, and bringing together the cut uterine surfaces. Beyond a stitch-abscess, nothing occurred to impede recovery, and she was discharged, cured, within the month.

CASE VII.—H. P., aged 37, a chronic uterine invalid, who had been suffering from pelvic pain and distress for several years, during two of which she had been treated as an out-patient at the infirmary, by means of pessaries, was admitted on June 12th,1885. On examination, under ether, a distinct tumour was found to the left of the uterus, and diagnosed as a pyosalpinx. The uterine appendages of the left side were removed; the Fallopian tube contained about two drachms of pus, and the fimbriæ were dilated into clear cysts, like a bunch of grapes. Numerous adhesions to the bowel, and to the uterus, had to be separated before the parts could be got away. The right ovary and tube, being apparently healthy, were not disturbed. Recovery was uninterrupted, but slow; the temperature never rose above 99°; she was sent to Cookridge Convalescent Home within a month.

[*To be continued.*]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 8TH, 1886.

GEORGE POLLOCK, Esq., F.R.C.S., President, in the Chair.

On a Case of Multiple Neuromata. By T. F. CHAVASSE, F.R.C.S.—An apparently healthy woman, aged 30, who had been treated at intervals for four years for supposed enlargement of the glands on the right side of the neck, submitted to removal of the mass on July 24th, 1885. On dissection, the tumour was found to be intimately connected with the cords of the brachial plexus, and, during manipulation, the pedicle attaching it to the spinal column was torn across. Death took place from spinal meningitis, on the seventh day after the operation. At the *post mortem* examination, general neuromata were revealed. These enlargements were mostly fusiform, firm, semi-translucent on section, and microscopically were fibromata. The phrenic, the pneumogastric, and the sympathetic nerves were all affected. The tumour removed was connected with the sixth cervical nerve, the trunk of which formed the pedicle. Microscopically, numerous various shaped nuclei were seen, but the fibrous tissue-development was not excessive. From forty-one cases of multiple neuromata already published, deductions were made regarding the age, sex, nerves affected, clinical history, tolerance of operation, and the malignancy of such tumours. The tumour removed, microscopic sections of the same, and of the other neuromata were exhibited; also a life-sized photograph of the spinal cord and its nerves attached.—Mr. HOWARD MARSH asked whether the hæmorrhage, which was described as occurring during the removal of the tumour, was from the interior of the spinal cord.—Dr. BUZZARD inquired if the condition of the reflexes had been examined. The nerve-fibres, as shown in the microscopic specimens, were not fully developed, and deficiency of the reflexes would not be anomalous; but if they were found persistent, it might throw some light on their causation.—Mr. GANT observed that the absence of clinical material for discussion was an interesting point to him. From the excellent photographs of the conditions of the nerves, he should certainly have expected some anomalies in the fractions of the brachial and sympathetic plexus.—Mr. CHAVASSE had brought forward the case, hoping to gain more information about it, for it was the only case of the kind he had seen, and the literature of the subject was very scanty. Hæmorrhage had occurred from the separation of the tumour from the cord. The reflexes had not been tested, as the patient was referred to him as suffering from enlarged glands in the neck, and that had been his diagnosis when he began the operation. The woman had noticed the tumour in her neck for four years; it had slowly grown to the size of a duck's-egg, and there were no further symptoms than pain running down the arm, such as might have been produced by pressure of a gland on a nerve.

Statistics of Pneumonia, with Especial Reference to the Relations of Delirium and Temperature. By ANGEL MONEY, M.D., M.R.C.P.—The paper had been drawn up from the records of the past twelve years of the cases of pneumonia occurring in University College Hospital. Table I showed the age and sex of all the 199 available cases:—139 were males, 60 females; 27 per cent. occurred under the age of ten years, 20 under the age of twenty, 23 under thirty, 13 under forty, 10 under fifty, 4 under sixty, and 1 under seventy. Table II gave the lung affected, with the sex. The right alone was affected in 96 cases, or a percentage of about 48; Bleuler's percentage for the right lung was 52. The left alone was affected 70 times, or 35 per cent.; Bleuler gave 32 per cent. There was double pneumonia 33 times, or 16 per cent., which agreed with Bleuler. Table III showed the number of cases, according to age, sex, and site of pneumonia. All the cases were of lobar pneumonia, the majority of simple lobar pneumonia. Seventeen were complicated with some other lesion; 8 of these had delirium. In 182 cases of primary pneumonia, delirium was present 56 times, or a percentage of 30. Heinze arrived at the conclusion that mere pyrexia had little to do in the production of delirium. The author's investigations pointed in the same direction; but prolonged pyrexia and high transitory fever must exercise some direct and indirect deteriorating influence on the grey matter of the brain and spinal cord, and must, therefore, predispose to delirium and other signs of exhaustion of nervous matter. Of 17 available cases, sometimes (4) the delirium coincided with the greatest rise in temperature, rarely (2) it preceded the acme of fever, and most frequently (11) the delirium came on with the fall of temperature. Heinze drew attention to the much greater frequency of delirium or marked mental change in pneumonia of the upper lobe. Taking additional precautions by employing only those cases in which the pneumonia was limited to the upper lobes, Dr. Money's observations confirmed this statement; and he suggested that the influence of a local inflammation on the cervical sympathetic, which controlled the calibre of the cephalic and cerebral vessels, might possibly have something to say in the matter. Whether the cause of pneumonia had special deliriant properties, should probably be answered in the negative; the suggestion that an alkaloid having a deliriant action was developed during the pneumonic process in some cases must remain as a mere notion. Tables IV and V gave the number of cases with further delirium at different temperatures. A comparison of these tables appeared to show that the number of cases with delirium was largest in those in which the highest temperature recorded was 104° and 105°. This contrast was rendered more apparent by the next table, which contrasted nearly equal numbers of cases with and without delirium. The death-rate in the 199 cases was 20 per cent. From an examination of other tables, it seemed clear that the presence or absence of delirium exerted no influence on the mortality. Another table showed the age, highest temperature, and number of cases of delirium. From this it appeared that the third decade of life, when the temperature went beyond 104°, seemed to be the most fertile in the production of delirium; but it was pointed out that this age and this degree of fever yielded the largest number of cases of pneumonia.—Dr. WILSON FOX attached much value to Dr. Money's paper, as filling up a gap in the estimate of the relation of delirium to pyrexia. Liebermeister had taught that delirium was due to temperature, and had founded his treatment by cold water on this hypothesis. Jürgensen had followed him in theory and practice. Heinze had tried to show that delirium and pyrexia did not go together; but his statistics were weakened by his giving the temperature of his delirious cases only, and not of all that he had observed. The great majority of cases of pneumonia reached a temperature of 104°, or thereabouts. In a collection of 504 cases which he had made for other purposes, he found 40 per cent. touched a point between 104° and 105°; 23 per cent. reached a point above 105°; 23 per cent. got to some point between 103° and 104°; so that 86 per cent. of all cases exceeded 103°. Dr. Money's tables showed a rather larger percentage of delirium in cases of a temperature over 103° than in those under 103°; still, the frequency of delirium in cases with low temperature was more than might be expected, at any rate, if delirium was supposed to arise from pyrexia. It might be considered, however, a symptom of weakness, from its frequent occurrence during resolution. It could not be denied that some people had peculiarities of the nervous system, which predisposed to both delirium and pyrexia; there was a sensitiveness of the heat centres, joined with emotional, that rested on idiosyncrasy. In Dr. Money's tables, the death-rate of the whole number was 20 per cent.; of the cases in which there was delirium, only 17 per cent. That would seem to show that the cases in which there was no delirium were the less dangerous; but that could not be admitted, and it must be acknowledged that this was a detail showing the fallacy of statistics, or rather the need of a very large number for sound conclusions. He did not wish to open a discussion of the cold-water treatment of Liebermeister; but he thought it obviously inappropriate to delirium, as delirium often occurred in falling temperature.—Dr. OCTAVIUS STURGES could not agree with Dr. Wilson Fox that the temperature of

pneumonia was so uniform. To gain any accurate idea of the temperature, it must be taken, at least, every four hours, and, in some cases more often, even every hour; less frequent observation, in his experience, gave worthless results. Further, it would not be possible, from looking at temperature charts, to tell which cases had delirium; for that did not go with temperature—nor, indeed, did mortality, at all accurately. Delirium depended on the character of the individual; it was very marked in alcoholic cases, in which temperature was sometimes high, sometimes low; and, again, in cases accompanying, and perhaps caused by, overwork or worry. He thought Dr. Money laid too much stress on the differences of the characters of apex-pneumonia; it was common in children, but the symptoms in such cases were not markedly different from those in which the pneumonia was basic. There had been much advance in the knowledge of the pathology and treatment of pneumonia, but very little more was known than formerly as to its prognosis. The past spring had shown an unusual and unexplained mortality.—Dr. NORMAN MOORE considered that no elaborate hypothesis was necessary to explain the cases of death in pneumonia; there was generally enough definite anatomical cause. In the last twenty-one cases he had examined after death, there was pneumonia of both lungs in four cases, pleurisy of the non-pneumonic lung in two others; two were immediately after parturition, and probably septicæmic; in three, there was interstitial, and, in two others, parenchymatous, nephritis; and, in eight others, extensive emphysema of the so-called unaffected lung. This emphysema, he thought, was not, as a rule, sufficiently attended to, yet he thought its effects were even worse than those of renal disease. He considered it best to estimate it by weighing the unaffected lung, or, if there were too much œdema, then by inflating it, and looking at it when dry. And another point of importance was the amount of exudation in the lung affected. For the right lung, if affected in half its extent by pneumonia, 45 ounces was a common weight; but if it rose to as much as 67 or even 77 ounces, as he observed lately, it was exceedingly serious. Some estimate could often be made of this during life by careful measurements of the chest, for a lung very full of exudation produced an effect on the outline of the chest like that of pleural effusion.—Dr. MOXON regarded delirium as the sign of many conditions, antecedent and coincident, but not always prognostic. Too much manipulation and measurement during life was apt to lead to the chance of measurement after death. The causes of death depended mainly upon conditions of vital power, and he could not agree with Dr. Moore's proposition of the influence of emphysema, for the manner of death in pneumonia was hardly ever like that from emphysema; pneumonia, too, dealt lightly with age, but not so emphysema. The loss of vital power which led up to death, could only be indistinctly measured by the condition of the pulse, the capillary circulation, the nervous stability, the restlessness, and the hurried, shallow breathing. The factors in prognosis were often more physiological than anatomical, and their estimate required much experience, for one might point one way, and another another; the pulse, for example, to recovery; the breathing, to death; but he thought if both pulse and respiration were good, the prognostic value of delirium might be neglected.—Dr. J. E. SQUIRE asked if Dr. Money could furnish any further information as to the length of time that the high temperature which he tabulated had lasted.—Dr. MONEY admitted that the death-rate in his total was greater by 3 per cent. than in the cases with delirium, but considered such a difference trifling in such a short series. In answer to Dr. Sturges, he was glad to say that the practice at University College Hospital, in the cases he had cited, had been to take the temperature every four hours. In cases of apex-pneumonia in children, he had observed more nervous symptoms, such as convulsions, coma, and apathy, than in basic cases. Children were unable to show signs of one common form of delirium, in the adult which manifested itself in words and hallucinations. He had merely suggested the influence on the cerebral circulation, by means of the cervical sympathetic, as a predisposing cause to delirium, and he admitted that any complete investigation of the ultimate causes of delirium would be exceedingly difficult, and involve an elaborate history of the patient, and even of his family. The most important of all factors in prognosis was, in his opinion, the relation of the pulse to the respiration.

ACADEMY OF MEDICINE IN IRELAND:

SUBSECTION OF STATE MEDICINE.

WEDNESDAY, APRIL 21ST, 1886.

A. H. JACOB, M.D., in the Chair.

Sanitary and Judicial Aspects of Cremation.—Dr. H. C. TWEEDY read a paper on the sanitary and judicial aspects of cremation. Having alluded to the condition of graveyards, which gave rise to the Southwood Smith Commission in 1849, he proceeded to show that the dangers arising from the present mode of sepulture were to be explained partly by the contamination of air and water by the gases of decomposition and other putrefactive matters, and partly by the fact that the germs of several forms of zymotic disease not only retained their vitality in graves, but were capable of indefinite propagation under favouring conditions of heat and moisture; and, becoming liberated on the disturbance of graves, gave rise to the several diseases of which each was the specific ferment. The process of cremation obviated all these dangers, anticipating putrescence by the rapid reduction of the body to its elements, and by the total destruction of all organic germs by the high temperature necessary for the process. A description was given of the Gorini Crematory, now in use at Woking. Allusion was made to certain medico-legal objections which might be raised in opposition to the practice of cremation. The first of these was the possibility of cremation during a trance; the second, the danger that cremation might destroy traces of violence or poisoning, and thus defeat the ends of justice. With regard to the first objection, Sir Henry Thompson had said: "With cremation, no such catastrophe as burial during a trance could ever occur, and the completeness of a properly conducted process would render death instantaneous and painless, if, by any unhappy chance, an individual so circumstanced were submitted to it. But the guarantee against this danger would be doubled, since inspection of the entire body must precede the act of cremation, no such inspection being possible under the present system." Several answers might be given to the second objection. 1. A medical examination of the body previously to cremation would, in the case of a large number of poisons, raise a strong suspicion that death had been compassed by foul means. Death from injury, or from concealed wounds, would, in like manner, be discovered. 2. As far as mineral poisons were concerned, direct experiments had proved that the salts of arsenic, and all other metallic poisons except mercury, which was completely volatilised, could be detected in the ashes after cremation. 3. In cases in which there was the least doubt as to the cause of death, it would be possible to remove the stomach and a portion of the viscera, and to preserve them for future examination, should the necessity for such examination arise. A recent decision of Mr. Justice Stephen declared that the cremation of a dead body, if effected without nuisance to others, was a legal proceeding; but further protection to the public was requisite, to meet which it had been proposed "(*a*). That places used as crematoria should be licensed, and that it should be a crime to dispose of a body by burning in any place not so licensed. (*b*). That it should be unlawful to cremate any body without a special official permit, to be issued only on receipt of a medical certificate (founded either on personal attendance during life, or on a *post mortem* examination) that death undoubtedly resulted from natural causes, that the cause was so-and-so, and that there was no reason whatever to believe that death was caused or accelerated by foul play.'—An interesting discussion ensued, in which the Registrar-General for Ireland (Dr. GRIMSHAW), Dr. ATTHILL, Dr. HENRY KENNEDY, Dr. J. W. MOORE, and the Chairman (Dr. A. H. JACOB) took part. The balance of opinion appeared to be largely in favour of cremation; as contrasted with burial, as a means of disposing of the dead.—Dr. H. C. TWEEDY replied. The medico-legal point was the only one upon which real objection could be urged against cremation, and there was no doubt that the evidence of one class of injuries would be destroyed by cremation, which would remain with interment, namely that of fractures. Thus, an injury to the skull would be discovered upon exhumation after many years, whereas, if reduced to powder, discovery was out of the question. But, by the appointment of a public officer to hold a mitigated form of coroner's inquest in every case of death, the danger either of premature burial, or of the burial of a body without discovering of what the particular person died, would be removed, provided the officer was a reliable man, and had no interest in the matter. In addition to the ordinary certificates, there ought to be a third from a perfectly independent man. He had not discussed the question of expense, as not being within the domain of State Medicine, but he estimated the cost at a little over five shillings, when cremation was adopted on a large scale; for instance, the Secretary of the Cremation Society had reduced 124 pounds of flesh and bones, forming the hinder part of a horse, to four pounds in an hour, at a cost of 5s. 8d.

The Climate of Dublin.—Dr. J. W. MOORE read a paper on the climate of Dublin, based on twenty years' meteorological observations (1865-84 inclusive). The climate of Dublin was, in the fullest sense, an insular one, free from extremes of heat and cold—except on very rare occasions—and characterised by a moderate rainfall (about 28 inches) annually, which was distributed, however, over a large number of days (about 195 in each year). Clouded skies, a high degree of humidity,

and a prevalence of brisk winds—chiefly from westerly points of the compass—made up the climatology of the Irish capital. In common with the rest of the British Islands, Dublin owed its mild equable climate to the proximity of the North Atlantic Ocean and its surface-current of warm water—usually, but erroneously, called "the Gulf-Stream." But local natural advantages as regards situation exercised a further beneficial effect on the climate of Dublin. A few miles south of the city lay a range of mountains, with summits varying in height from 1,000 to more than 2,500 feet. This mountain-chain intercepted the vapour-laden winds at all points between S.S.E. and S.W., and so the rainfall was diminished and the sky was comparatively cleared during the continuance of the southerly and south-westerly winds, which frequently prevailed. The absence of any very high ground to the northward of the city—with the exception of the Hill of Howth, which rose only to 563 feet—also prevented excessive precipitation with S.W. winds. With easterly winds, the precipitation (often in the form of hail, and in winter of sleet or snow) in and about Dublin exceeded that which occurred at such a time inland or on the Atlantic coasts. Were it not for this "lee-shore" condensation, the Dublin rainfall would be considerably smaller. The second local feature which ameliorated the climate of the capital, was the proximity of the sea to the eastward of the city. The keen, dry, searching easterly winds of winter and spring were much softened in their passage across the Irish Sea, so that, during their prevalence, the thermometer occasionally stood 5° or upwards higher in Dublin than at Holyhead, although this latter place was actually on the sea. The converse held good during westerly and north-westerly winds, when severe frost sometimes occurred in winter in Dublin, while the thermometer remained decidedly above the freezing point at Holyhead. Yet these latter winds were never so piercingly cold and parching as those from easterly points. Nor was it in winter merely that the Irish Sea conferred a benefit upon Dublin. In calm clear weather in summer time, no sooner had the sun mounted high in the heavens than a cool refreshing sea-breeze set in towards the land, so that, consequently, extreme or oppressive heat was rarely experienced. Indeed, an oppressive atmosphere happened only when a damp warm south-west wind was blowing, with a more or less clouded sky. Temperatures above 80° in the screen in Dublin nearly always coincided with winds off the land, from some point between S. and W., and a clear or only slightly clouded sky. Among climatic epiphenomena, the unfrequency of thunderstorms, and the relative frequency of hail-showers in Dublin, were worthy of note. In winter, fog and frost often prevailed in the city, when a northerly breeze was blowing along the coast, accompanied with a higher temperature and perhaps showers of rain. Lastly, in summer, with a westerly wind, heavy planetary showers fell at times in the valley of the Liffey, while the neighbouring higher lands enjoyed dry weather.—A discussion followed, in which Dr. H. C. TWEEDY, Dr. ATTHILL, Dr. HENRY KENNEDY, and the Chairman joined; and Dr. J. W. MOORE replied.

REVIEWS AND NOTICES.

DICTIONARY OF PRACTICAL SURGERY, BY VARIOUS BRITISH HOSPITAL SURGEONS. Edited by CHRISTOPHER HEATH, F.R.C.S., Holme Professor of Clinical Surgery in University College, London; Surgeon to University College Hospital, etc. London. Smith, Elder and Co. 1886.

FIRST NOTICE.

THIS much-anticipated dictionary is a pendant to the great *Dictionary of Medicine*, edited by Dr. Quain, and is, probably, destined to like popularity, and a sphere of equally extensive usefulness. Subjects are alphabetically arranged, as one would expect in a dictionary, and cross references are supplied, when it has been found more convenient to group together a series of diseases of one organ. But, besides this, there is a very full general index, which greatly enhances the value of the work, and this index occupies fifty pages of double column, at the end of the second volume. The work is printed in double column page; and, inasmuch as there are no illustrations to take up space, the more than eighteen hundred pages contain an immense amount of material. The aim of the editor has been to "supply a want in the library of the busy practitioner, who necessarily often meets with cases of surgical disease or injury, in which he desires to have immediate information as to diagnosis and treatment," and to make it a compendium of British surgery of the present day; and it may be honestly conceded that he has been successful.

The editor has selected a large number of surgeons whose articles constitute the dictionary, and it will be allowed that his selection has been most judicious, both for the general and for the special subjects. British surgeons in the three divisions of the kingdom share the honours of authorship with those in the Colonies and India. Most are metropolitan hospital surgeons, and most are men of modern ideas; and we are glad to see that the articles they have written are an expression of their own experience and opinions, rather than a digest of the opinions of others. This makes the articles, individually, of more value, inasmuch as they are signed by the respective authors. But it would be of use to those who wish to gain further information upon any class of cases into which they are inquiring, if a list of available or valuable references were given at the end of each article; the number of such references need not be very great, or the space occupied very large, but the gain to many readers would be considerable.

The general plan is that each subject is treated, as far as it is practicable, in the following order: (1) Cause, (2) Pathology, (3) Symptoms and Diagnosis, (4) Treatment, (5) Prognosis; and the editor's supervision has been only a general one, but it has been a very effective one, for the articles are treated very similarly. To the editor, and sub-editor (Mr. Johnson Smith), the unity of the work must be accredited, and each of these surgeons has contributed some valuable articles to the dictionary as well. Mr. Tweedy has supervised the articles on diseases of the eye, and Dr. Liveing those on the skin, besides contributing to those subjects.

The editor calls attention in his preface to the articles on surgical diagnosis, as inserted with a view to being specially useful to the practitioner; and these, we find on reference to the general index, are arranged according to the region affected, so that many authors take part in them, and they alone would form a valuable work of reference for the practitioner, and will no doubt be consulted frequently. Cross references are given to the general articles on the diseases and injuries occurring in those regions.

The names of the contributors are a guarantee for the excellence of the papers. Sir James Paget writes the article upon Old Age in its relation to Surgery, and all will recognise the value of this contribution from so classical a writer and so scientific a surgeon. Mr. Cadge takes the subject of Lithotomy and Lithotrity, Mr. Crosse Urinary Calculi and Stone in the Urethra, Sir Henry Thompson Tumours of the Bladder, and Mr. Berkeley Hill Stricture of the Urethra, Extravasation, Diseases and Operations upon the Urethra, while Mr. Jonathan Hutchinson discusses the subjects which are included under the head of syphilis. There are many other subjects related to these which are written upon by younger surgeons—Mr. Johnson Smith, Mr. Victor Horsley, Mr. Rivington, Mr. Buckston Browne, Mr. Fenwick, and Dr. Cruise. This enumeration of authors who have been selected to write articles on an allied set of subjects will show, perhaps, more clearly than any other method, the wide range of authorship from which any one consulting the work will have the advantage of gaining his information; there will certainly be no lack of authority.

Among other well known names, we find Mr. John Wood taking Ectopia Vesicæ and Radical Cure of Hernia. The larger number of articles on Hernia, and matters related to it, are by Mr. Treves and Mr. Langton, while Abdominal Surgery is in the judicious care of Mr. Heath and Mr. Barker especially. Sir William Mac Cormac takes a subject upon which he is a recognised authority—Gunshot Wounds, and Sabre and Bayonet Wounds; Mr. Watson Cheyne, Inflammation, Antiseptic Surgery, and Antiseptics; and Mr. Sampson Gamgee, Wounds, and other special articles upon the treatment of Wounds. The more usually recognised specialities are taken by equally well known surgeons. Diseases of the eye are treated by Mr. Power, Mr. Lawson, Mr. Tweedy, Mr. Carter, Mr. Swanzy, Mr. Gunn, Dr. Brailey, and Mr. Berry; and this subject has been supervised by Mr. Tweedy. Dr. Liveing has, in the same way, supervised the articles upon the Skin which have been written by himself and others, including Mr. Malcolm Morris, Dr. Sangster, and Dr. Cavafy. Mr. Knowsley Thornton and Mr. Alban Doran take the chief articles on Diseases of the Female Organs of Generation, on which they are responsible authorities; Dr. Felix Semon the Throat; Mr. Cumberbatch and Dr. Laidlaw Purves the Ear; Mr. Tomes the Teeth. Children's Diseases are chiefly considered by Mr. R. W. Parker, but we find Mr. Owen and Mr. Marsh also taking some of the diseases which commonly appear in childhood.

It will be impossible to mention the names of even the chief contributors in the more general subjects of surgery, but we may notice that Fractures are mainly considered by Mr. Marsh, and Dislocations by Mr. Clement Lucas. Amputations are treated by the different authors who take the injuries and diseases of the special parts; but a general paper on amputations is given by Professor Stokes, of Dublin.

Tumours, in the same way, appear under the heading of the regions affected; but there are more pathological and general articles by Mr. Morrant Baker and Mr. Bowlby, and by Mr. Willett; and Diseases of the Breast are undertaken by Mr. Marcus Beck. Mr. Clutton gives the articles upon Diseases of Bone; and Mr. Heath appears appropriately as author of those upon Diseases of and Operations upon the Jaws, beside other papers. A number of articles on general subjects in surgery are by Mr. McCarthy, Mr. Davies-Colley. Mr. Pearce Gould, Mr. Jacobson, Mr. Anderson, and others; and Dr. McLeod, of Calcutta, gives the papers on Delhi Boil and Scrotal Elephantiasis; while Mr. Fitzgerald, of the Melbourne Hospital, discusses hydatids. There are several authors, apparently not connected with any of the general or other hospitals, who take subjects with which they are identified, and, among these, are notably Mr. Wharton Hood, for Bone-setting; Mr. Roth, for Massage and Medical Gymnastics. Mr. Howse has given a number of excellent articles upon Injuries and Diseases of the Chest, besides others on Femoral Aneurysm and Gastrostomy; Mr. Bond on Railway Injuries, and Mr. Page on Injuries of the Back and Spine.

We have been at pains to enumerate some of the most important general subjects treated by different authors, in order to show the general scope and character of the work. It will be seen that the majority of the articles have been undertaken by surgeons whose names have long been associated with their subjects, and therefore their opinions are the result of special experience; in this way the work is made specially valuable. It is too often the case, in the modern *cacoethes scribendi*, that the book makes the author's reputation, and not that the author ensures the reputation of the book. In the present instance, however, the editor has so judiciously chosen his contributors, that they will guarantee the thoroughness and reliability of the book as a standard work of reference. It is so many years since any such dictionary of surgery appeared, that probably most younger surgeons have never examined its predecessor, Samuel Cooper's *Dictionary*, which, in its time, was highly esteemed; but the present *Dictionary* has the immense advantage of a large field of authorship.

Altogether, the work is a credit to the energy of authors, editor, and publisher, and will rank highly wherever British surgery is consulted, and wherever the English language is understood. All its contributors are to be congratulated upon its appearance. The two volumes are well printed on good paper, and are well bound; they form a handsome and very servicable addition to the library.

NOTES ON BOOKS.

Manual of Pathological Histology. By CORNIL and RANVIER. Second edition, re-edited and enlarged. Translated, with the approval of the authors, by A. M. HART. Vol. ii, Part ii. (London: Smith, Elder, and Co. 1886.)—The second and final part of the second volume of the manual of pathological histology of Cornil and Ranvier is this week issued. This completes the publication of this standard manual of pathology. This final part includes an unrivalled monograph on the pathology of the skin, and the whole work stands in the first rank of European medical literature. The book has been greatly condensed and re-arranged by the translator, and it is, perhaps, none the less interesting; but this is, we imagine, the first heavy piece of literary work by a medical educated lady in this country. The translator was trained in the Collège de France, under Professor Ranvier, and has accomplished this heavy piece of work as a labour of love, and out of regard and respect of the eminent professor to whom she owed much. The book has all the characteristics of French clearness and descriptive power, with German thoroughness and exactness of research. Cornil and Ranvier's *Manual of Pathological Histology* enjoys, in its original form, perennial popularity among French students; and we venture to say that it has rather gained than lost by the carefully studied translation, in which methodical condensation has been, to some extent, applied with conscientious care. As a whole, this manual cannot fail to take a foremost place in high medical education, and will necessarily become a companion of English pathologists in their studious and working hours. To students and practitioners it conveys an amount of information hardly to be got elsewhere.

A Manual of Medical Jurisprudence. By ALFRED SWAINE TAYLOR, M.D., F.R.S. Eleventh edition, edited by Thomas Stevenson, M.D., London. (London: J. and A. Churchill. 1886.)—If anything could add to the value of Taylor's famous manual, it would be that this edition is thoroughly revised and re-edited by his successor, Dr. Stevenson, of Guy's Hospital, than whom there is no more careful, learned, and judicious medical jurist in the ranks of the profession.

MESSRS. BRADBURY, AGNEW AND Co. are republishing John Leach's *Pictures of Life and Character*, from the collection of *Mr. Punch*, comprising, altogether, nearly 4,000 sketches, illustrating every section of social life, and extending in date over a period from 1842 to 1864. This edition of John Leach's pictures promises to be inclusive of all his best and most representative works. It is printed in large size, and is being issued in shilling parts. The first part includes 119 engravings. There is no reason why medical men should not enjoy a hearty laugh over the social and very human characteristics of our social life during the last century, even though the laugh is sometimes against themselves. Never was caricature more amusing, satire more harmless, humour more healthy, than in the sketches of John Leach. This marvellously cheap reproduction is a veritable treasure of harmless fun, pleasant caricature, and wise wit; and the shilling will be thought not ill-bestowed which brings to the library table the storehouse of illustrations for an idle half-hour, and the unfailing stimulus of healthy laughter for the weary and jaded spirit.

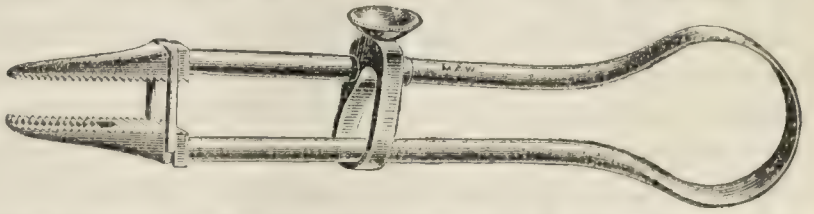
The Naturalist's Diary: a Day-book of Meteorology, Phenology, and Rural Biology. Arranged and Edited by CHARLES ROBERTS, F.R.C.S. (London: Swan, Sonnenschein, and Co. 1886.)—This is a work of reference on questions of climate and vegetation, natural biology, and rural biology; and, at the same time, it is a diary or journal, with side headings, full of suggestions as to temperature, vegetation, biological facts in which to record new facts, and observations of meteorologists, medical men, and sanitarians. Such a diary and day-book puts it in the power of every man to make observations and record data, of constantly increasing interest for himself, and of value as permanent data.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW PRESSURE AND TORSION-FORCEPS.

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and the Portsmouth and South Hants Eye and Ear Infirmary.

THE instrument is equally serviceable for four distinct surgical purposes. 1. It can be used as a temporary clamp to arrest hæmorrhage. 2. It forms a very efficient torsion-instrument. 3. It serves for the



application of a ligature to a divided vessel. 4. It can be used, also, as a needle-holder, and it is adapted for the introduction of every kind of needle. The special novelty consists in the mechanical contrivance by which the opening and fixing movements are performed. The points are controlled by the rotation of an oval-shaped collar. In the long axis of this collar, the blades are separated by their own recoil; but, as soon as they are both turned into its narrow segment, they are securely fixed, and the points are placed in close contact with each other. One of the blades is loosely fixed by a ring to the end of the collar, which thus forms the centre of rotation, and imparts to the collar a sliding motion, so that the blades can be closed at any point as far down as the spring. This sliding movement of the collar greatly facilitates manipulation of the forceps, and also gives a gradation of pressure and grip at the points. For needle-holding, it will be found convenient to work the thumb-lever near the shoulder; but, for fixing a mass of bleeding tissue, the forceps can be readily closed just above the handle. When employed as a clamp for spouting vessels during an operation, the sliding collar can be rotated with great ease and rapidity, and this device will certainly be preferred by many operators to the ordinary sliding and spring catches, and also to the serrated teeth fixed on the ring-handled forceps of Tait and Péan. The instrument is very neatly made by Messrs. Maw, Son and Thompson.

SCOPOLEINE.—Dr. Pierd'houy, oculist at Milan, considers that scopoleine has properties similar to those of atropine, but is preferable, because it produces neither redness nor irritation.

BRITISH MEDICAL ASSOCIATION
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 12th, 1886.

CONSULTANTS AND GENERAL PRACTITIONERS.

WE have received a circular, and numerous communications, which have arisen out of a leader which was published in the BRITISH MEDICAL JOURNAL of May 29th, on the very important subject of the relations of consultants and general practitioners. We referred there to the numerous complaints which we have received, and of which we have published only a very small proportion, as to difficulties arising between general practitioners and consultants in reference to patients common to the two. It is rare that any disagreeable circumstances arise under such conditions, and when they occur, they are of altogether another order. Our correspondents complain—and the complaint, of course, is not at all a new one, although it is assuming increasing proportions—that patients at least do not habitually recognise that distinction between consultants and general practitioners which, in the profession, is assumed to exist, and on the strength of which many privilegesare claimed by and conceded to the class professionally known as consultants, such as, especially, the monopoly of hospital appointments and of governing positions in the colleges. The advantages of professional position thus conceded to the class of consultant physicians and surgeons tend, our correspondents observe, to give great prominence to the consultant class in practice, to yield them a higher platform and a larger sphere in the public view, and a public position and precedence, which have a material as well as a social value. On the other hand, they complain that, while readily availing themselves of this platform, and jealously claiming this exclusive precedence and governing power, the consulting class do not hesitate to drop habitually into general practice, and to avail themselves of its material profits; thus encroaching upon the province of the general practitioner, from which they elsewhere avowedly separate themselves, and rendering the position of the general practitioner often insecure in relation to his patients.

Discouraging, as we desire to do, personalities of any kind, and aiming at a general cultivation of professional concord and mutual respect, we have recently, on more than one occasion, declined to publish correspondence between individual practitioners and consultants in which questions of the kind have been somewhat acrimonously discussed. It is, however, impossible not to feel that reticence of this kind is apt to breed injustice, and, carried too far, may fail to produce goodwill. Grievances of this kind cannot be cured by repressing debate; but it seems very desirable that, as far as possible, such discussions should be carried on upon general principles, and with an endeavour to avoid the ill-will arising out of the public discussion of individual quarrels. We referred to the subject in our recent article in a very general way; but the communications which we have received sufficiently indicate that there exists a feeling of grievance in this, which is, rightly or wrongly, pretty generally felt, and that the causes lie deeply. The circular letter which we have received, and which is now being issued in London, and of which, as requested, we publish a copy elsewhere, aims in the first instance at a clear definition of the relative position of consultants and general practitioners. It remarks that, "in the legal profession, the consultant who is a barrister invariably requires that he should be approached through a solicitor, and not directly by the client;" and the new association of general practitioners, which appears to be in course of formation, lays down the opinion—which is, of course, not at all a new one as a speculative opinion—that the consultant should be applied to for advice by the practitioner, and not by the patient, and that the advice should be given for the instruction of the practitioner in the management of the case, and not for the instruction of the patient, "who, having no technical knowledge, can profit little by it." Should such a principle be adopted in the medical profession, it would, no doubt, lead to somewhat extensive, and, on the whole, probably salutary reform.

If a limited number of the heads of the profession should decide sharply to define their position as consultants, and no longer to accept family practice or direct applications from the public, they would enter upon a course which would obviously contribute to the definition of their position, and which would entitle them more strictly to the title of consultant than the mixed practice which is now common.

There are obvious difficulties in such a course; and among those which are most likely to prove weighty are humanitarian difficulties arising out of the increased fee which the consultant would then, in every case, feel called upon to demand. There is a theory that the physician pays of right a toll to humanity in accepting, as his clients directly, a large and mixed class of applicants of very various circumstances; that his toll is not sufficiently paid by his gratuitous attendance at hospitals, but must extend to his private practice; and that any limitation which would exclude a large number of persons desiring to have what they consider "the highest advice," but without paying more than the statutory guinea, or sometimes less, or nothing at all, would be contrary to the Hippocratic oath. Against this it has, of course, been urged that the large amount of gratuitous service given at hospitals and other public institutions is, in itself, a sufficient recognition of these humanitarian claims; that skilled advice is always to be obtained by the poor at a nominal payment, or without payment; and that, in cases where persons of a higher class were under the treatment of the general practitioner, and required more highly skilled consultation, it would still be open to the consultant to modify his fees at the request of the intervening practitioner, as he does now without such request; that to create a class really consultant, and respect the division between consulting and family practice, would tend to define relations which are now often confused, and to introduce an element of certainty into those relations, which would remove the undercurrent of hostility which frequently exists, and is injurious alike to the patient, to the practitioner, and to the consultant.

Consultants, it is said, would be more frequently named, if there were not the latent fear that the introduction might lead, sooner or later, to the loss of the patient. Nothing begets misunderstanding more easily than the conflict of material interest; nothing is more de-

structive of confidence than the fear of being supplanted. Such a fear does not arise from the suspicion of intentional malpractice, or of intentional self-substitution by the consultant, but from the fact that, seeing that the majority of consultants, if not all, are in the habit of seeing patients without the intervention of a general practitioner, it may at any time happen, and does frequently happen, that the patient to whom a consultant is called in may, at a later date, himself prefer, or his friends and connections may prefer, in future, to be treated directly by the consultant, to whom he has become attached. There are few men in consulting practice to whom incidents of the sort have not happened, and who have not felt called upon to resist this tendency; but it is alleged that it exists very widely, and that the practice of a considerable number of so-called consultants is largely fed at the expense of their clients—the general practitioners—not directly or immediately, but indirectly and at various periods of time. Whether the evil is one which is capable of correction, and, if so, by what means, remains to be seen. It is likely that much debate and many serious counsels will be necessary before any change can be made, or it may be that none will be made; but those practitioners who feel that some approach is desirable in the medical profession to the rules, in this respect, to those which have so long been successfully upheld at the bar, cannot be blamed for endeavouring to solve the question in their own way.

Let us hope that an association which has been formed, as this has been spontaneously formed, and which bases itself upon the few observations we recently made on this subject, will proceed with due consideration of all facts, and will take counsel with the leading members, both of its own and of the consulting orders, in the profession. Ostracism is the worst of all weapons in social reform, and should be resorted to only in the last extremity.

On the other hand, if this association should find even modified support, as it not improbably may, from leading members of the consulting class, who must themselves have felt some of the disagreeables of the existing confusion, it would be able to go forward with good hope of an useful result. We hope to see the question discussed with the best feeling, and by representative members of all classes of the profession.

There is another point of view which our correspondents are likely enough to leave out of consideration, but which, nevertheless, must probably be the dominant element in the discussion. The public have, from time immemorial, in this, and, so far as we know, in all other countries, been accustomed to have direct access to their medical advisers of every degree, and it would require much persuasion to make them accept limitations in this respect. The precedent would be one, we apprehend, altogether new in medicine, not only for this country, but for any other. Moreover, in the law itself, the strict tradition which excludes the client from access to the barrister, and which prohibits the solicitor from practising at the bar, or the barrister from taking the ordinary legal business of the solicitor, has not commended itself to new countries, where they have been at liberty to establish rules unshackled by tradition, and based upon the general convenience. In America, and in our colonies generally, and in many foreign countries, the distinctions which are so rigidly observed here are not observed with like strictness, and solicitors and barristers undertake common functions. All this does not prove that there would not be some convenience in establishing a class of consultants proper in medicine if it can be arranged by common consent; but it must be remembered that the title of consultants is not one which physicians and surgeons, even in what is called pure practice, are in the habit either of assuming or of employing, but rather one which has been conventionally thrust upon them, and which has ill defined limits or meaning.

It is no doubt proper to say, on the one hand, that there are no pure consultants at the present day to be found in the class even of the most eminent physicians and surgeons, though consultations are largely accepted by certain eminent physicians and surgeons; again, it is true that consultations are also accepted by certain general practitioners, especially in the provinces, and to some extent also in London, whose experience and reputation have distinguished them as persons whom their colleagues wish to meet in consultation. Whether or not it is desirable to establish a class of pure consultants, is a matter well open to discussion; most certainly those who are in the habit of calling hospital physicians and surgeons into consultation, have a right to express their opinion as to the convenience of being able to refer to a class who would be bound by rigid rules, and would in no case interfere with the practice and privileges of those who call them. This, however, is a very different thing from endeavouring to establish a law of ostracism, or to do by negative means that which would probably be more easily effected by an affirmative understanding. It is a subject on which it is not easy to dogmatise, and as to which any violent proceedings would probably defeat themselves.

THE NOMENCLATURE OF MEDICINE.

THE defects in our present system of medical nomenclature are numerous and notorious. It abounds in terms that are fanciful and inexact; in others that involve a false or doubtful hypothesis; and in not a few that are so inaccurate as to pervert, instead of promote, knowledge. The spirit of antiquity made up for lack of definite and exact knowledge by a liberal indulgence in the flights of the poetical imagination. Hence sprang those dragons, bears, and ships which adorn our astronomical maps, but are conspicuously absent from the nightly heavens; and to a similar origin may be traced a considerable proportion of the earliest medical expressions. Thus the tumour of malignant disease, with its red markings, was thought to resemble a crab with extended claws, and hence was called "cancer;" a term that, in spite of its curious origin, seems likely to be indefinitely perpetuated. The free secretion, from inflamed mucous surfaces, attracted the attention of the earliest observers, and they labelled the affection "catarrh," literally the flowing down of a river. Carbuncle "a little coal," furuncle "a little thief," and lupus "a wolf," show the same poetic imagination at work with curious effect.

More objectionable are those expressions that involve a false or doubtful hypothesis. Hydrophobia is inextricably connected in the lay mind with the idea of dread of water, although we know that this is an unessential and trivial symptom of rabies. The etymology of cholera is fortunately forgotten, and we can afford to go on calling this mysterious scourge merely "a bilious disease," until we can get a term for it that will possess the finality of certain knowledge. "Typhoid" is an unlucky expression, as implying the very erroneous theory that this fever has a close analogy to typhus; and the displacement of this term by the word "enteric," is a step towards that greater definiteness and exactitude which is so much to be desired. "Eczema," meaning a boiling over of fluid, suits some varieties of the affection fairly well; but when we talk of "dry" eczema, we are guilty of a logical inconsistency. Many medical term express

some marked symptom or physical feature of a disease, and ignore its less obvious, but, usually, more important characters. "Diabetes" means merely a passing through, and, etymologically, is almost a synonym of diarrhœa. "Pemphigus" is from the Greek word for a "bubble of air;" "pityriasis" is from the Greek for "bran."

Of all the medical terms that have long tended to the confusion of ideas, few are worse offenders than the familiar words "crepitus" and "crepitation." These words are commonly used with a latitude and indistinctness of meaning that are usually hopelessly confusing to the beginner, and embarrassing to all. If we look to etymology, we find that the cognate Latin verb from which they are ultimately derived is used by the classical writers in a great variety of significations. It is employed to denote the rattle of a chain, the creaking of a door, the sound of the snapping of the fingers, and the crash of an oar giving way. It is obvious that these terms have nothing in common with the sound produced by air bubbling through fluid in the bronchial tubes. The term "bubbling" is used by some eminent authorities, to the entire exclusion of "crepitus" and "crepitation;" and undoubtedly it is an intelligible expression, conveying a clear, and, in the main, an accurate idea.

The imperfection of our medical vocabulary is not a matter for surprise. It is the measure and gauge of the imperfection of our medical knowledge, and only perfect knowledge admits of a perfect nomenclature; but it is regrettable that at present our naming of disease lags behind our knowledge of disease, and that in our scientific phraseology we still preserve remnants of ancient and long forgotten error. An useful reform would be initiated if we would sedulously discourage the use of terms which are admittedly false and misleading, and endeavour to replace them by expressions which would bring our language up to the level of our knowledge.

Two conditions at least are necessary for a perfect appellation of disease. It should suggest the affected organ or tissue, and also the nature of the morbid process. We have types of tolerably perfect terms in such words as "tonsillitis," "pleuritis," "gastritis," etc., where the former part of the word suggests the affected organ, and the latter part is taken to signify inflammatory action. These are specimens of a style of medical nomenclature which deserves increased encouragement and adoption. It would not be impossible, we think, to invent a series of terminations, like those of chemistry, to indicate not merely inflammation, but hypertrophy, atrophy, gangrene, or any other morbid process; and these might be linked on to the names of organs, the two conditions of a logical nomenclature being thus fulfilled.

A type of expression which is open also to much question is that easy but inexpressive mode of identifying some morbid process or condition with the name of the observer who first described it. The laudable desire to do honour to a distinguished man, no doubt, originated the practice; but devotion to scientific accuracy, as well as regard for coming generations, might lead us to offer resistance to it. Already the list of such terms is becoming considerable. Bright's disease, Graves's disease, Hodgkins's disease, Addison's disease, Charcot's disease, Paget's abscess, Jacksonian epilepsy, are but a few out of many. The great men whose names are thus utilised can afford to dispense with this tribute to their labours for science, inasmuch as such naming of disease tends to confuse our ideas of our present knowledge, and to be a bar to further progress. But such terms cannot yet be safely discarded. We cannot name a thing accurately until we know it thoroughly; and so long as there is imperfect knowledge, there will be a need for provisional appellations. Such personal expressions may serve us in good stead in this difficulty; but their use should always be regarded as temporary, and as an implicit confession that our knowledge still lacks finality and completeness. If so limited and guarded, this type of nomenclature may be accorded a place in medical language which it might otherwise be difficult to fill.

Medical nomenclature presents difficulties which do not beset the language of the biological and physical sciences. These sciences admit a high degree of accuracy of description, and, in many departments, have attained to absolute finality. Medicine is still largely empirical and tentative. All we can demand is, as we have said, that language shall not lag behind knowledge; and that, as we learn to know things better, we shall also take due pains to name them more perfectly.

THE TEACHING OF THE PRELIMINARY SCIENCES.

Last week, we had to record the success of the movement which had for its object the reconstitution of the Oxford Medical School, a reform persistently advocated in these columns. This week, we have to announce that an important step has been taken towards the accomplishment of another improvement in medical education, and taken sooner and with more unanimity than could have been anticipated. The imperfections of the instruction now given in preliminary scientific subjects, and the unwisdom of multiplying small schools, each attempting to provide classes in all the subjects in which a medical student requires instruction after leaving school, and before entering on purely medical subjects, has often been pointed out, and has been admitted by the best friends of the smaller schools. The growth of this opinion led to the formation, about eight months ago, of a joint committee by four of the smaller medical schools. The object of this committee was to consider what steps might be taken in order to bring about some co-operation between these schools, in providing preliminary instruction for their students.

Various schemes were discussed, and it may now be formally announced that arrangements have been made by the medical schools attached to Charing Cross, Middlesex, St. George's, and Westminster Hospitals, for students desirous of undergoing a course of instruction in science, such as that required for the Preliminary Scientific (M.B.) Examination of the University of London, to attend the lectures, and practical instruction in biology, and a portion of the ordinary courses in physics and chemistry, at the Normal School of Science, South Kensington. Such students will go through a course of biology, and a modified course in chemistry and physics in one school session, lasting from October 1st to the end of June. The syllabus of the course will be drawn up by the Registrar of the Normal School of Science, and the scheme will be tested by a few years' work. Possibly, at the end of that time, some new plan may be worked out; but more than one point of great practical importance will have been gained. In the first place, it will be impossible to revert to the present unsatisfactory arrangements; the principle, that co-operation is desirable, being once admitted, it cannot be again set aside, but rather we may hope that it will be further extended, so as to include other schools. Students will not be slow to appreciate the advantages held out to them by the plan now about to be tested; for a fee, slightly in excess of that paid to the schools mentioned for the ordinary curriculum, they will have

the privilege of attending science classes directed by professors of the most distinguished standing each in his own department; while they will, at the same time, retain the unquestioned advantage which a school, where the hospital is large relatively to the number of students, can afford for gaining a clinical acquaintance with medicine and with surgery.

To University College and to King's College the new arrangement will be distasteful and probably somewhat injurious; the advantage which they have long held over most of the other schools in London by reason of the attraction which their well-equipped science departments held out to students seeking an university degree will be swept away. Regret may well be felt that the course of events has driven the other medical schools more and more into a position of antagonism to these two great centres of education, but, with the general rise in the standard of education within the profession, this was inevitable. Individual interests must be subordinated to the general good, and these two colleges will have to rely more than ever upon the excellence of their teaching, and the facilities of all kinds which they may be able to offer to students; competition will be keener, but the number of students anxious to obtain sound instruction in the preliminary sciences may be expected to increase. If the scheme of the Royal Colleges of Physicians and Surgeons be carried out, and a conjoint degree in medicine granted, the demand for instruction of the kind indicated will almost certainly grow; and, independently of this, a larger number of students may be expected to seek the degrees of the University of London.

THE GENERAL MEDICAL COUNCIL.

A SESSION of the General Medical Council commenced on Tuesday, June 1st.

At the beginning of the first day's proceedings a letter was read from Sir Henry Pitman, resigning his appointment on the Council. Official notices were received of the appointment of Sir William W. Gull as representative of the University of London in the room of the late Dr. Storrar, and of Sir Dyce Duckworth as representative of the Royal College of Physicians of London, in place of Sir Henry Pitman. On a subsequent day, notice of the appointment, by the Faculty of Physicians and Surgeons of Glasgow, of Dr. D. C. McVail as successor to the late Dr. Scott Orr, was received. The newly-elected members were formally admitted, and took their seats.

The retirement of Sir Henry Patman caused three vacancies in the offices at the disposal of the Council. One, that of treasurer, was filled by the appointment of Sir Dyce Duckworth; Mr. Marshall was chosen Chairman of the Business Committee; and Dr. Humphry was elected a member of the Dental Committee.

A series of reports by the visitors of the examinations of the universities was presented; and a Committee of five members, consisting of Sir Dyce Duckworth, Mr. Teale, Mr. Marshall, Dr. Lyons, and Dr. Haldane, was appointed to summarise them, and report to the Council during the present sitting. In those visitations, which have been held in pursuance of a resolution passed by the Council last year, the examinations of the Universities have been visited by gentlemen specially appointed by the Executive Committee for that purpose; among them being professors and examiners of various universities, who were charged with the duty of visiting and reporting on the proceedings of other universities than their own. In this way, a good deal of mutual criticism has been produced, although, as has been already pointed out, at a considerable expense. It is to be hoped, however, that the reports of the visitors, the remarks made on them by the bodies visited, and the free discussion on them which for several days occupied the Council in Committee of the whole body, may be productive of good results, and may lead to the removal of defects which can scarcely be brought to light otherwise than by a system of mutual and impartial criticism. We may return to a more detailed examination of the visitors' reports in a future number; in the meantime, our readers will find in the JOURNALS of this and last week abstracts of the discussions on them.

Another subject which the Council has had under consideration was the examination in elementary mechanics. This matter had been referred to the English, Scotch, and Irish Branch Councils, for consideration and report. The English and Scotch Branch Councils recommended that the examination should be passed before registration as a student; while the Irish Branch Council regarded it undesirable to enforce such a regulation, in consequence of the want of proper teaching appliances in the schools and colleges of Ireland. After a discussion, it was decided that elementary mechanics should form an essential part of the preliminary examination, a modification of the regulation being allowed in the case of the universities with a prolonged curriculum, where the examination in mechanics required for a degree is taken at a more advanced period of study than the commencement of medical education.

A motion, in favour of visitation of Medical Schools, was brought before the Council by the Rev. Dr. Haughton, and was agreed to. It was also decided that visitors should be appointed to visit the medical schools (with their permission) in each division of the kingdom, and to report on their methods of teaching, and on the appliances possessed by them for that purpose. A committee, consisting of the Rev. Dr. Haughton, Dr. Humphry, Dr. King Chambers, Dr. Struthers, and Mr. Marshall, was appointed to consider and report on the best system by which the examination of schools could be carried out.

A proposal by Mr. Rawdon Macnamara, that the invested funds of the Branch Councils should be consolidated into one fund, was discussed, but was ultimately rejected by a majority of ten against nine.

The Pharmacopœia Committee presented a Report, in which it was stated that, of the 20,000 copies of the new edition that had been printed, nearly 18,500 had already been disposed of, and, therefore, it would be necessary to provide for a fresh issue of the work. It was suggested that the corrections which had been printed on a slip, and others which have been found necessary, should be incorporated in it. It was announced that the receipts from the sale of the *Pharmacopœia* were £381 in excess of the amount expended on its publication. The report was adopted, and Sir Dyce Duckworth was added to the Pharmacopœia Committee.

The report of the Finance Committee showed that the income for 1885 had been £11,113 8s. 9d., and the expenditure £12,083 16s. 4d. The latter sum, however, included the expense of the *Pharmacopœia*, which was in course of being recouped, and the cost of the visitations of the universities, amounting to £2,207 14s. 4d.

The Council ordered the removal from the *Register* of the names of William Turnbull, convicted of manslaughter in an attempt at abortion, and sentenced to penal servitude; and of Robert Thorburn, convicted of theft, and sentenced to six months' imprisonment. The qualifications of the King and Queen's College of Physicians in Ire-

land were ordered to be erased from the name of Robert L. Evans; and the name of H. F. Partridge was, at the instance of the Royal College of Surgeons in Ireland, ordered to be removed from the *Dentists' Register*. An opinion was received from Mr. Muir Mackenzie, to the effect that the removal of qualifications from the *Medical Register* could not be effected by the Council, unless it were satisfied that the body withdrawing the qualification had not done so in consequence of the adoption of any particular theory of medicine or surgery. The opinion was referred to the Executive Committee, with a view to the preparation of a standing order in accordance therewith.

THE Library of the Royal Medical and Chirurgical Society will be closed on Whit-Monday (June 14th).

THE Very Reverend the Dean of Gloucester, Dr. Butler, has consented to preside at the distribution of prizes at St. Mary's Hospital on Monday, June 28th, at 3 o'clock.

THE Sanitary Institute have resolved to issue a selection of the works of Mr. John Simon at a subscription price of twenty-four shillings.

SIR WILLIAM GULL has been slightly indisposed during the past few days, but we are glad to learn that it is believed that he will be well enough to resume his professional duties next week.

IN the course of some excavations on the site of John Hunter's house at Earl's Court, recently demolished, the workmen discovered several human skulls, and a considerable number of bones of the extremities, sawn across, as though from limbs which had been amputated by the illustrious surgeon.

AT the annual election of Fellows which took place at the Royal Society, Burlington House, on Friday, June 4th, Professor Victor Horsley, F.R.C.S., and Dr. P. H. Pye-Smith were elected into the Society by ballot. Fifteen candidates in all were elected.

THE death of Surgeon-Major Timothy Lewis, after his nomination by the Council of the Royal Society for election as Fellow, having made a vacancy on the list of fifteen persons recommended, the President and Council have nominated Mr. Adam Sedgwick, M.A., Fellow and Lecturer of Trinity College, who is well known for his researches in embryology.

THE annual dinner of the St. Andrew's Graduates' Association was held this week, Dr. B. W. Richardson in the chair. Professor Pettigrew being the guest of the evening. The dinner was well attended, the speaking was good, and a very agreeable evening was passed.

MR. HENRY DOULTON has handed to the Treasurer of St. Thomas's Hospital a sum of £109 16s. contributed to the funds of the hospital by the employees of the South-Western Railway at Vauxhall and Nine Elms. This sum was brought to Mr. Doulton in coins of all kinds, and was thrown into the treasury by the people working on the South-Western Railway, in acknowledgment of their kind treatment at St. Thomas's Hospital. The contribution is not the first of the kind. It shows a good spirit in the contributors, and is a recognition of the kindly work done at St. Thomas's, of which the staff may well be proud.

CHINESE REMEDY FOR HYDROPHOBIA.

IN the report of the Presbyterian Mission Hospital at Ung-Kang-Phu, it is stated that the Chinese have the firmest reliance on a native remedy for preventing the development of hydrophobia in a person bitten by a rabid dog. The patient takes a pill consisting of nux vomica and pounded beetles; the beetle has much the same properties as Spanish-fly, and the dose is repeated until the urine becomes bloody. All danger is then considered to have passed. It is hardly necessary to add that no statistics are forthcoming as to the success of the treatment.

THE LATE MR. WHITE COOPER.

THE funeral of Mr. W. White Cooper took place at Highgate Cemetery on Saturday, June 5th, the Rev. C. J. Martyn, M.A., rector of Melford, officiating. Lieutenant-General Sir Michael Biddulph attended as representative of the Queen, and Lieutenant-Colonel Arthur Collins on behalf of the Princess Louise.

LORD JUSTICE FRY'S COMMITTEE.

A MEETING of the Committee of the Senate of the University of London, appointed to consider the proposed reforms in the constitution of the University, held a prolonged sitting on Wednesday last. We believe that the Committee will probably report not unfavourably to the main provisions of Lord Justice Fry's scheme, but that there is a strong feeling that the University ought not to contract its borders by limiting itself to London Colleges only.

JAPANESE ART AND MEDICINE.

MORE medical men are collectors of Japanese art than we had any idea of; and the incidental notices of Mr. Ernest Hart's recent lectures at the Society of Arts, and of the classified catalogue of the signed works of historic artists of Japan in the collection which he lent for exhibition at the Society, have brought us a rather heavy contingent of letters and queries of every kinds as to the *inros* or medicine-boxes and physicians' swords and other objects, of some medical as well as artistic interest, to which we refer as included in that collection. Instead of replying in detail to the queries—the answers to which have only a very incidental interest in a professional journal—we must ask our correspondents to content themselves for the present with the reply that the lectures will shortly be printed *verbatim* in the Journal of the Society of Arts, from which they will be republished. In the meantime, the Secretary of the Society will forward a copy of the catalogue of the collection to any of our correspondents who may wish to possess it. The list of signatures of the principal Japanese artists, in Japanese character, will be appended to the catalogue, and prefixed to the lectures.

KING THEEBAW'S "ROYAL" SACRED HAIRY FAMILY.

AMONGST the many sights from distant countries to be seen in London at present, there is one of eccentric interest, especially to the ethnologist and the medical man; we refer to the hairy family from Burmah, which is now exhibited at the Egyptian Hall. It is alleged that Mr. Barnum had endeavoured to induce the family to leave Burmah for exhibition some time since without success. This has been accomplished by the course of recent events in the kingdom of King Theebaw. In Mr. Crawford's *Embassy to the Court of Ava*, he mentions that he saw, at the Burmese Court, a man, thirty years old, with his whole body, except the hands and feet, covered with straight silky hair, which, on the spine, was five inches in length; at birth, the ears alone were covered. It is stated that, at birth, hair, several inches in length, was found to be growing from the tympanum of each ear of this man's daughter. There are two individuals, the mother, Mahphoon, daughter of Shway-Moung, the *homo hirsutus* described and depicted in Crawford's narrative, which Colonel Yule quoted in his work on the *Court of Ava*, and Mahphoon's son, Moung Phoset; the latter is accompanied by his wife, a Burmese woman, of good-humoured appearance, who appears, as the exhibitor states, to take a pride in her extraordinary husband. The mother of the latter, who is now blind, is in charge of a young Burmese attendant. Notwithstanding the strange appearance of both mother and son,

there is nothing savage or wild in their manners. Each member of the family, it seems, had peculiar privileges at that Court for three generations. The absence of molar teeth in Moung Phoset engages attention, as well as the extraordinary development of hair, especially on the face, including the nose, forehead, and ears; adding another example of the observation of Darwin, on the occurrence of abnormal dermal covering being connected with an abnormal development of the teeth. There appears to be no record of any supposed first influence having been an agent in the appearance of this remarkable family's peculiarity.

COUNCIL SEATS IN THE COLLEGE.

We announced last week that there will be four vacancies on the Council of the College this year. The election will be held on Thursday, July 1st. Mr. Allingham does not seek re-election, but Mr. Lund and Mr. Berkeley Hill will offer themselves again. The other candidates will be: Mr. Septimus W. Sibley, of 7, Harley Street (date of Fellowship 1857, of Membership 1852); Mr. John Couper, of 80, Grosvenor Street (date of Fellowship 1861, of Membership 1859); Mr. Alfred Willett, of 36, Wimpole Street (date of Fellowship 1862, of Membership 1859); Mr. James Rouse, of 2, Wilton Street (date of Fellowship 1863, of Membership 1851); Mr. R. Brudenell Carter, of 27, Queen Anne Street (date of Fellowship 1864, of Membership 1851); and Mr. Reginald Harrison, of 38, Rodney Street, Liverpool (date of Fellowship 1866, of Membership 1859). All the candidates are well-known surgeons. Mr. Harrison is a highly esteemed representative of provincial surgery, and has special claims to welcome in the Council. Liverpool has never yet, we believe, been represented there. Mr. Sibley is a typical general practitioner of known ability, high character, and universal popularity. His election would be a graceful and just recognition of the claims of a body of men who constitute the "backbone of the profession."

DEATH OF MR. FRANCIS MASON.

We deeply regret to have to record the death of Mr. Francis Mason, Surgeon to St. Thomas's Hospital, which took place on Saturday last, at his residence in Brook Street, after an illness which lasted little more than forty-eight hours. On Thursday morning, Mr. Mason complained of a painful swelling in the neck, with redness of the right tonsil and of the integuments below the right side of the jaw. Dr. Ord visited him, and found him in a condition of marked mental perturbation. By the evening his condition had become much worse; there was Cheyne-Stokes respiration, with great œdema of the epiglottis, and infiltration of the cellular tissue on both sides of the neck; the vocal cords were unaffected. Dr. Semon scarified the epiglottis, and the patient's condition became better. Mr. Bernard Pitts watched him on Thursday night. At three o'clock on Friday morning, Mr. Mason was seized with a very sudden attack of dyspnœa, and Mr. Pitts was compelled to perform tracheotomy without any assistant. An epileptiform convulsion followed; but the patient rallied, and lived through Friday. He was, indeed, well enough to settle his affairs, and to read the paper. In the evening, however, he became delirious. Marked albuminuria, with hyaline, and granular casts, and glycosuria was discovered. On Saturday his condition became hopeless, and he died in the presence of Drs. Ord, Buzzard, and Semon at about two o'clock in the afternoon. An account of the life and labour of Mr. Mason will be found in the obituary column of the Journal.

ECONOMY WITH EFFICIENCY (?)

It is stated by the Indian papers that the Government of India has decided that considerable reductions in the expenditure of the Medical Departments of the three presidencies can, and ought to, be effected. The Government admits that the large increase of British troops in India forbids any lessening of the number of the officers of the Medical Departments, but consider that the general establishment of station hospitals will, at any rate, obviate any need for an increase thereof. These hospitals are to be thoroughly scrutinised, to ascertain whether reduction of expense cannot be effected therein without loss of efficiency, and to see that no further disbursements are caused by the increase of British troops. To this end, medical officers are asked to economise in every possible way. Care is also enjoined that no unnecessary expenditure be caused by undue accumulations of stores. The surgeons-general have been called upon to state their opinion as to the economies that may, in their opinion, safely be effected. Their reports are to be forwarded to the several local governments, through the Controller of Military Accounts. The cutting down of hospital expenditure may have some temporary effect in saving small sums of money, but it is likely, in the end, to prove a very costly policy. We believe that the money value of each trained European soldier in India is estimated at a thousand pounds. It is well known that not only is invaliding to Europe most destructive of efficiency, but the actual cost of transmission of each soldier in an army-transport is equivalent to the cost of a first-class passage in the Peninsular and Oriental steamers. The health and life of the European soldier have, therefore, a very high money value; and to economise in the apparatus for maintaining the soldier in health and cutting short illness is a very sorry and short-sighted mode of saving.

THE RIGHT TO REST.

By good luck, rather than by good management, Western London possesses, in Hyde Park and Kensington Gardens, and Regent's Park, two magnificent open spaces. Every year, the teeming population which surges about these islets of green appears to understand better their great value as health-giving and health-restoring agencies. On summer afternoons, convoys of small children may be seen wending their way, under the charge of elder sisters or brothers, from the crowded streets, to amuse themselves for hours in the open air, often prolonging the holiday hours by discussing a simple meal on the grass. To convalescents, to delicate women, and to overworked men, the parks afford a refuge where something of the summer may be felt in the air. It may be seriously asked, therefore, whether the authorities charged with the management of these parks have recognised the importance of their duties as guardians of the public health. Setting aside the matter of imperfect drainage, whereby parts of these parks are often swampy, exhaling mists which contribute to make the "pea-soup" fogs for which London is infamous, there are not a few smaller details in which the comfort of the humbler frequenters are too little considered. Regent's Park is sadly deficient in shade, except along the roads; and everywhere the number of seats is absurdly insufficient. In Hyde Park and Kensington Gardens the number of fixed seats, always in the most inconvenient, dusty, and noisy situations, is reduced to a minimum, with the object, apparently, of making the business of letting out chairs more profitable. The right to let chairs in Kensington Gardens is farmed out to a contractor, who, of course, makes the best of his bargain. The result is that the poorer frequenters of the gardens and park, finding so few free seats, have to sit or lie on the grass, which, even in "the leafy month of June," is, in these imperfectly drained grounds especially, a practice most dangerous to health. The free seats in Regent's Park, Hyde Park, Kensington Gardens, and the Green Park, ought to be trebled, and placed in every convenient situation, not merely along the walks and roads.

NEW ANTISEPTIC METHODS.

The application of the term "antiseptic" to the system of treating wounds, introduced by Professor Lister, was unfortunate, in that it tended to confound a principle with a particular application of that principle. "Asepsis" was to be attained by the use of certain antiseptics, in a particular manner; carbolic acid was the antiseptic first used; consequently, to many persons who can retain a concrete better than an abstract notion, the Listerian system meant carbolic acid gauze, and the carbolic acid spray. The originator of the system, however, has always shown himself superior to the foible of supposing

that his first method represented finality. We understand that, at the present time, he is making extensive trial of various non-volatile antiseptics, double chlorides, and double cyanides of mercury chiefly, and with results which appear to be most satisfactory. In addressing his class, after operations, Sir Joseph Lister is able to speak with all his former confidence as to the healing of wounds under the simpler methods at present employed, which do not now include the troublesome spray or impervious waterproof dressings, which were thought to be necessary, as perhaps they were, when the method was first introduced.

A TROUBLESOME PATIENT.

An incident in professional life is reported from Vienna, in which a tailor, on being told by his physician, whom he had called to consult as to a disease from which he was suffering, that recovery was impossible, forthwith shot the physician in two places, and then turned his arm—or rather arms, for there were several—against himself, with a fatal result so far as he was concerned. Nine shots in all were fired; and the number may, perhaps, be accounted for by the fact of this recalcitrant patient being a tailor; but it is to be hoped that a needless complication will not be introduced into professional life by such a practice becoming general. Medical men have already a good deal to put up with from patients; and, if further difficulties be introduced, the relations of doctor and patient may become strained. In any case, the medical man, if he must needs take lead, would probably prefer it in the shape of false coins to the more conical form of revolver-bullets. We are glad to state that the physician was not much hurt, and will shortly be able to resume what may be considered an eventful career.

CONVALESCENT AID.

A meeting on behalf of the convalescent work of the Charity Organisation Society was held at Lord and Lady Brabazon's last week. Letters of regret at their inability to take part in the meeting were read from Sir R. H. Collins on behalf of H.R.H. the Duchess of Albany, Lord Wolmer, Lord Cranbrook, the Bishop of Bedford, and others. Sir Orfeur Cavanagh, who was in the chair, sketched the development of the work year by year since 1880, when a special committee of the Society first drew attention to the large number of convalescent homes, and the possibility of making a much greater use of the accommodation provided in them. The progress of the work had been very remarkable. There were now as many as 110 homes working in co-operation with the Society; in the past year, 2,116 cases had been dealt with; in the past month, 260. Dr. Longstaff said that, by the introduction of the plan suggested and set on foot by Mr. Scarth, of purchasing accommodation at the homes, a new system of admission had been created. The accommodation was utilised to the utmost. There was a large choice of homes, so that one could usually be chosen at which the air and the accommodation would best suit the case; and the admission could be obtained with a promptitude which was before quite impossible. The average cost of a bed for a year, *plus* 10 per cent. for working expenses, was £28 10s.; of a "summer" bed, £15. The plan had commended itself to the homes. It had been tried, and its value proved; and it must, he thought, from its simplicity and thoroughly practical character, meet with general approval. Funds were much wanted for the summer's work, and he hoped that liberal support would be forthcoming. The Hon. Dudley F. Fortescue quoted some amusing cases, showing how much money a little discrimination in charity would save for unquestionably good objects, such as this. Miss Bramston, of the Clacton Home, described the way in which she had been helped by the Convalescent Committee of the Society. A resolution in support of the work was passed; and, after a few words from Lord Brabazon, who threw out the suggestion that convalescents might in summer be accommodated in tents in open ground, the meeting closed with the usual vote of thanks.

THE OXFORD MEDICAL SCHOOL.

Under the new Medical Statute, students who desire to obtain the degree in medicine and surgery of the University of Oxford must, before presenting themselves for any medical examination, be graduates in Arts and have passed preliminary examinations in physics, chemistry and biology. The subjects of the first professional examination are human anatomy, physiology, and organic chemistry in its applications to medicine. In all these departments of study the arrangements for teaching are now complete, notwithstanding that the new Faculty of Medicine has only just come into existence. The new department of Human Anatomy is in full operation, though cramped for room. It is under the direction of Mr. Arthur Thomson, a consummate anatomist and gifted teacher, well known to past Edinburgh students as (until a year ago) Senior Demonstrator to Sir William Turner. Professor Odling has organised a practical course of organic chemistry with the efficient assistance of Mr. Wyndham Dunstan, of the Pharmaceutical Society, in which those parts of the subject which specially concern medicine are taught by practical work in the laboratory with a completeness and simplicity which has not hitherto been attempted, while in physiology practical instruction is being given by Mr. Dixey, with daily lectures either by himself or the professor. Long before next October the new lecture-room and dissecting-room will be ready for Mr. Thomson, so that it may be confidently anticipated that the student will in future find at the Radcliffe Infirmary or at the Museum the means of training himself thoroughly in all the subjects of the first two years of medical study.

ANTHRACÆMIA.

We regret to have to report another death from what is popularly called "wool-sorters' disease." The victim was a wool-sorter named Swaine Muff, aged 38, who died at Bradford on June 3rd. He had been sorting Cape mohair, which appears to have been dusty, though not very much so. No "fallen fleeces" appear to have been observed in any of the bales sorted by the deceased; nor was there much smell noticed to arise from the hair. According to the evidence of Dr. Hime, the medical officer of health for the borough, the room in which deceased worked was large, airy, and exceptionally clean. Two points were, however, spoken to by the witnesses, namely, that there was no fan, or extracting shaft of any kind, for getting rid of the dust; and that the sorters were in the habit of hanging up their clothes, the pockets often containing the next meal of their owners, in the sorting-room where they worked. The case is still under investigation, and we make no commentary on the evidence. But there can be no doubt that the death occurred from anthracæmia, when the medical evidence is examined.

THREE-PENNYWORTH OF MORPHINE.

A death which recently occurred in Lincoln from an overdose of morphine is an example of the extraordinary carelessness with which poisonous drugs are sometimes handled. The victim was a picture-frame-maker, aged 56, who went to Boot's Drug Stores in High Street, Lincoln, and asked for "three-pennyworth of morphia;" the druggist gave him seven grains, and the man died the same night. An inquest was held, and the jury returned a verdict to the effect that the deceased took the poison inadvertently, and requested that the druggist should be called in, and asked to be more careful in future. The coroner, in administering the caution, told the druggist that he was morally, though not legally, liable; for, though he had warned the man that the drug was poisonous, yet he had not told him that the quantity sold was enough to cause death. As is well known, the regulations with regard to the sale of poisons require that the package in which the poison is retailed should be labelled with the name of the poison, the word "poison," and the name and address of the seller. Further precautions are directed to be taken in the case of certain poisons; the date of sale, the name and address of the purchaser, the name and quantity of the article, and

the purpose for which it is wanted, must be entered in a book when the article sold is one of a certain list of poisons, among which are enumerated "all poisonous vegetable alkaloids and their salts," and such articles may only be sold to some person known to, or introduced by some person known to, the seller. At first sight, it would seem that morphine came within this provision; but, in reality, it is specially exempted, being mentioned by name among the additions to the second part of the schedule issued in 1869, as one of the drugs which need only be labelled with the name of the article, the word "poison," and the name and address of the seller. The druggist, in this case, had complied with these requirements, and had not, therefore, acted illegally; but the carelessness shown in this case by a man who was a legally qualified chemist and druggist, betrays an almost incredible indifference to the demands of ordinary prudence.

CONVERSAZIONE AT THE ROYAL COLLEGE OF SURGEONS.

THE President of the Royal College of Surgeons, Mr. Savory, gave a *conversazione* in the College Buildings on Wednesday night. Over thirteen hundred guests were present, including Dr. Oliver Wendell Holmes and other distinguished persons. The picturesque costumes of a large number of nurses from St. Bartholomew's Hospital, who were invited, added a feature of interest to the assembly, never witnessed at former entertainments of this kind at Lincoln's-Inn-Fields. The Museum was brilliantly illuminated by the electric light of the Maxim Weston Electric Company, and the string band of the Royal Artillery played a selection of music; whilst the Blue Hungarian Band performed in the Theatre. The arrangements were excellent, and the entertainment gave universal satisfaction.

OLIVER WENDELL HOLMES.

DR. HOLMES has met with an exceptionally warm reception in this country. Seldom has any visitor to our shores received the homage of a more universally affectionate and respectful greeting from every class of society. There are few men in our generation who have ever received a more flattering welcome from all the noblest and best elements of English society. Since the visit of Longfellow, perhaps no other American has been received with such unanimous and affectionate enthusiasm. He has seen the best and most brilliant side of London society, and has made the personal acquaintance of all that England can boast that is most representative in rank, wealth, intellect, statesmanship, and humanitarian energy. Dr. Holmes has reached an age when common prudence compels a man to husband his resources, and to limit the tax upon his physical energies; and he has not been able, therefore, in the overwhelming calls upon his time, and the flattering offers of hospitality from all sides, to fulfil more than a tithe of the opportunities that were offered him of studying the institutions, and extending his acquaintance with all the classes of the country, in the limited time at his disposal. Seeking rest and recreation, and declining public receptions, he has, nevertheless, availed himself of various opportunities of identifying himself with the profession which he adorns, and which is proud to claim him among its members. He has been seen at more than one medical house, and has made the acquaintance of most of the leading medical men in London during his short stay here. On Wednesday last, after dining with Sir Henry Thompson, who had assembled to meet him a small party, including Mr. Gladstone, Mr. John Morley, Mr. Robert Browning, Sir James Hannen, Sir James Paget, Professor Masson, Mr. Alma Tadema, Mr. Du Maurier, Mr. Knowles, and Mr. Ernest Hart, Dr. Holmes attended the *soirée* at the Royal College of Surgeons, and paid his respects to the President, Mr. Savory. He took the opportunity of going through parts of the museum in which he was particularly interested, under the guidance of Sir James Paget. Dr. Holmes expressed not only his delight and high admiration at this magnificent museum, and the unparalleled scene it presented, but was particularly interested, and especially admired, the complete typical osteological specimens arranged by Professor Flower for the purposes of anatomical study. Dr. Holmes, although advanced in years, retains all the vivacity and sympathetic flexibility of mind which are characteristic of the fullest vigour and freshness of mind. It is fifty years since he had visited London. He then made the acquaintance of Lawrence, Brodie, Tyrrell, MacMurdo, Abernethy, and some of their contemporaries. He makes this week a visit to Lord Tennyson, after which he will go to Oxford and Cambridge, and probably to Edinburgh, to receive the honorary degrees which those Universities propose to confer on him. In receiving Dr. Holmes with such unanimous enthusiasm, English society has done much to vindicate its claim to sound catholicity, and sincere appreciation of a most wholesome and penetrating genius. More than one Royal and illustrious visitor has been present in London during the season. None has received so warm, unforced, and universal a welcome as the "Autocrat of the Breakfast Table."

THE OUTLOOK FOR THE INTERNATIONAL MEDICAL CONGRESS.

AN occasional correspondent writes from Philadelphia:—The annual meeting of the American Medical Association has taken place without effecting any essential change in the position of affairs, and without a restoration of that professional harmony which has been, of late, so sadly disturbed. It must be extremely puzzling for you, in England, to understand these dissensions; and I have no idea of attempting an analysis of the causes which have led to them; but it is a matter of some importance that you clearly comprehend the existing conditions. In the profession of every country, a limited number of men become widely known by their work and writings, and are regarded by their brethren as more or less representative, in the various departments in which they labour. It was from this class that the original Congress Committee made the appointments to office. They ignored locality altogether, and the cities of the East, being older medical centres, came in for a very large share of these appointments. The Committee did not act wisely in every instance; but, in selecting the most eminent men for responsible places, they followed the custom of the European countries in which congresses have been held. In ignoring altogether the code question, which has divided the profession in New York State, they may have erred grievously (and, if so, grievously have we all answered for it); but it was done with the best of intentions, and in the fulfilment of a specific promise made at Copenhagen. The spirit of the subsequent action of the American Medical Association, in repudiating the work of the original Committee, can be understood from the following extract taken from a recent number of the journal of the Association. "The medical profession of this country will not be content to sit and see a few men arrogate to themselves all the learning, all the prestige, and everything else which goes to make the complete professional man. Our country, our customs and institutions, are too democratic to allow a few men to style themselves 'representative.'" This democratic spirit has had full play, with the sad effect of alienating a majority of the men who, to an independent onlooker, must be regarded as essentially the representative men of the profession. It is useless for the present organisers of the Congress to comfort themselves with the thought that they have filled the places of the "irreconcilables" with men equally good for Congress purposes. A comparison of the officers of sections named by the original Committee, with those finally selected by the present Committee, affords a most painful contrast; and the notable absence in every section of the men most prominent in American medicine, will strike even the casual observer. The great cities of the East, Boston, New York, Philadelphia, and Baltimore, will not be represented scientifically, for, with two or three exceptions, the leaders and workers will hold aloof. Austin Flint, Junr., Lewis Sayre, and Lewis Smith, of New York, are the only men of first rank to represent the East in the present Congress. A list of those who are "out" will embrace the men best known in Europe as American writers and workers, such as Bigelow, Bowditch (H. J.), Bowditch (H. P.), Holmes, Warren, Chadwick, and Homans, of Bos-

ton; Delafield, Draper, Dalton, Loomis, Seguin, Sands, Markoe, Jacobi, Lusk, Barker, and Lefferts, of New York; Stillé, Da Costa, Pepper, Bartholow, Goodell, Gross, Weir Mitchell, Agnew, Ashhurst, Wood, and Leidy, of Philadelphia. It has been a struggle of the West and South against the North and East, and the West and South have won. Perhaps, in the hands of the men now in office, the Congress may be made more distinctively American than if the men of the East were in charge, who are strongly tinctured with European methods, and would have managed the meeting in a conservative fashion. The local attendance will certainly be large, and there are, in the present organisation, men of sufficient force and weight to ensure for the meeting a certain measure of success; but scientifically the outlook is, at present, far from brilliant.

CHINESE MEDICAL MISSIONS.

UNLIKE Japan, which has rapidly absorbed European medical and biological science, and is training men of first-rate knowledge and considerable original research, China is still in outer darkness. Chinese medicine is a by-word; Chinese surgery is almost non-existent; it is not surprising, therefore, to find that the Celestials are willing to take advantage of European skill, and attend the mission-hospitals at Swatow and Ung-Kang-Phu in considerable numbers. The hospital arrangements for in-patients appear to be delightfully simple. "Scarcely a day passes," writes Dr. P. B. Cousland, in his annual report, "but little groups of, perhaps, husband and wife, mother and children, or a company of fellow villagers, may be seen coming into the hospital courtyard, with their baskets of the all necessary rice, a few cooking utensils and bed-mats, and, perhaps, a mosquito-curtain, depositing them in a convenient corner until the janitor, or matron, has assigned to them their proper ward." Though there were 3,867 in-patients during the year, the only expenditure by the hospital in food seems to have been a sum of ninety dollars for "rice and cash tickets," so that the expenses are limited to the cost of drugs, and the wages of assistants and servants. The assistants, who do duty as house-surgeons and dispensers, are natives. The objection to submitting to amputation is very strong, and Dr. McPhun, in his report from Ung-Kang-Phu, where 2,620 patients were treated, complains that the majority of his patients were either incurably ill, or suffering from external diseases, because the Chinaman fears that internal remedies will work magically upon the heart to turn it from his ancestral religion. A very large proportion of the patients treated at the mission-hospitals are suffering from diseases of the eye, the most common being trichiasis, and granular ophthalmia with its consequences. The number of opium-smokers treated at Swatow alone was 649, but the prospect of permanent cure is not spoken of hopefully; many run away, unable to endure the misery of the first few days, and but few remain long enough to undergo a course of tonic treatment, which is considered to be essential.

"POST-GRADUATE" TEACHING.

ALTHOUGH there is no specially organised school in London such as has been established in New York, for the instruction of qualified practitioners who desire to rub up their knowledge, or make themselves acquainted with the advance of the science and art of medicine since their student days, yet many excellent opportunities exist for attaining these ends; in fact, it is most easy to obtain instruction from teachers and specialists of the first eminence. At the Royal London Ophthalmic Hospital in Moorfields, diseases of the eye may be studied under the direction and with the assistance of such well-known ophthalmologists as Messrs. Lawson, Couper, Tweedy, and Nettleship, to mention no others; and at the Royal Westminster Ophthalmic Hospital classes are held at intervals by Messrs. Henry Power, Cowell, Macnamara, Juler, and Adams Frost. Skill in the use of the ophthalmoscope can be gained at either of these hospitals, and its application to the study of diseases of the nervous system can be learnt in the out-patient department of the National Hospital for th Paralysed and the Epileptic. Every week a large number of practitioners attend the clinique held by Dr. Gowers, who is in the habit of giving an impromptu clinical lecture on every case of interest which comes before him; and by an arrangement with one of his junior colleagues, which appears to work very well, only cases of special interest are sent on to him. In this way, during the course of a few weeks or months, all the main classes of diseases of the nervous system are passed in review, and it would be impossible to exaggerate the interest and value of these *vivâ voce* lessons, where the teacher feels himself untrammelled by the necessity of speaking down to the comprehensions of raw students, and is able to go straight to the kernel of his subject. Dr. Ferrier, we understand, also gives instruction in this way. Not to prolong this list, which may be easily expanded by any person interested, it will suffice to indicate that opportunities for the study of diseases of the chest may be had at the Hospital for Consumption, Brompton, as well as at other chest-hospitals; for the study of diseases of children at the hospital in Great Ormond Street, at the East London Hospital for Children at Shadwell, and at the Evelina Hospital; and for the study of diseases of the skin under the ablest guidance at the Blackfriars Hospital for Diseases of the Skin, and at the Middlesex Hospital, where Dr. Liveing gives clinical instruction. We have here merely indicated some of the best known cliniques, but it would not be difficult to draw up a very much longer list, embracing every department of medical and surgical practice. Systematic courses, such as are held in New York, have certain advantages, but they have this great drawback, that they cannot be so entirely objective and practical as clinical instruction given in the out-patient room.

ST. JOHN AMBULANCE ASSOCIATION.

THE following extract from a letter from one of the examining staff affords a striking instance of the really practical nature of the instruction given by the St. John Ambulance Association. "There were works being carried out at Charlton Kings, near Cheltenham—excavations for waterworks. In the class taught by Mr. Cardew, were two or three navvies, and when two of them came in together for examination, I thought what loutish-looking fellows they were. After a minute or two, I gave as a question to one of them 'Suppose, whilst you are at work at the waterworks, a large piece of ground, some tons in weight, falls in, and knocks down one of your fellow-workmen, and break his thigh; how would you know that his thigh is broken? What would you find? and how would you pack him up to go five miles in a cart to the Cheltenham Hospital?' Whilst I was putting the question, the other man began to grin. 'What are you laughing at?' I said. 'Well, sir, you see,' he said, 'last week, after we had attended the lecture on broken bones, just such an accident as that you have asked about happened to a man working with this one, and he packed him up in splints, and sent him to the Cheltenham Hospital, and the doctor said he'd done it all right.' 'Capital,' I said, 'then just tell me what you did;' and he went through movements of finding a fracture and putting on splints, and then we did stretcher work, to put the patient in a cart, and take him out again to put into bed. I asked no more questions about fractures of that man; and after a few questions passed him, and you sent certificate. I think this was a good case."

STATISTICS OF MEDICAL STUDENTS.

THE Statistical Committee of the General Medical Council appointed to report on the number of medical students registered, and the number who eventually obtain qualifying diplomas, have issued a valuable report. Additional details with regard to the students entering in 1871 are given, and some corrections are made in the statistics with reference to this year printed in the first report. Statistics for the years 1872 to 1875 inclusive are also given, as well as a series of figures and tables, which trace the movement of students down to 1880, the latest year at present available. There has been a steady

increase in the number of students during the decade, the course being only broken by two descents in 1873, which appear to have been produced chiefly by the fluctuations in the Irish students. The number of students in England has increased more rapidly than in Ireland or Scotland, but the number registered in the latter country shows a more steady rise than in either of the others. From a series of tables, which, however, only apply to the five years 1871-75, it would seem that the curriculum was gradually lengthening even at that time, though, towards the end of the period, an opposite tendency showed itself. The proportion of registered students who eventually obtain a place on the *Medical Register* did not seem to have varied very much. Some curious facts have come out incidentally during the inquiry; one of the most unexpected is, that the average expectation of life at the date of the first qualification is greater for practitioners whose place of study was London than for practitioners who studied in the provinces, Scotland, or Ireland. The comparative figures are, taking the average of all places as unity: London, 1.103; Provinces, .946; Scotland, .943; Ireland, .928. Evidently, the strong men come to London. An argument for those who desire to increase the facilities for granting degrees to London students will be found in the fact that England supplied only 46.93 per cent. of the total number of practitioners who began their studies in 1871, while she has resident within her borders 64.13 per cent., whilst Scotland, on the contrary, supplied 27 per cent., and retained 8.64 per cent.; and Ireland supplied 25.95 per cent., and retained 8.38. Of the total number of practitioners in England, 13.88 per cent. have a single qualification; in Scotland, the proportion is 12.12 per cent., and, in Ireland, 14.6 per cent. Another curious fact which comes out is, that the proportion of practitioners who finally settle in practice near the town at which they were educated is very large. Thus over 32 per cent. of practitioners who were London students practise in London; nearly 25 per cent. of those in the provinces practise in the very towns in which were their places of study, and many more in the vicinity of those towns. In Scotland, however, only 8.30, and in Ireland only 8.5, are thus attracted by the towns in which they studied.

SCOTLAND.

AT a meeting of the Faculty of Physicians and Surgeons of Glasgow, on June 6th, Dr. D. C. McVail was appointed, by a majority, representative in the General Medical Council, in the room of the late Dr. Scott Orr.

DESTITUTE SICK SOCIETY, EDINBURGH.

THE quarterly report of the Society for Relieving the Destitute Sick in Edinburgh, which was read at a meeting last week, shows the valuable aid rendered by the Society to the sick poor. Its visitors (whose remuneration lies in their labour of love) have made over 8,000 visits, and considered nearly 1,000 new cases; in money, meal, coal, and clothing, they had expended £1,300. The subscriptions received amounted to £553, and the legacies to £680.

OUTBREAK OF MEASLES NEAR EDINBURGH.

THERE is, at present, a very considerable outbreak of measles existing at Colinton, a village a little distance west from Edinburgh. It began in Juniper Green, a contiguous village. To show the extent on which it has fastened on Colinton, it may be mentioned that, of 120 boys attending school, only 58 were present a fortnight ago; while, in the girls' school, out of a total of 55, only 9 were present. By advice of the Medical Officer of Health, the schools at Colinton have been closed, and it is probable that the schools in the adjacent villages of Juniper Green and Slateford will be closed next week, as the disease is increasing there.

EDINBURGH UNIVERSITY UNION.

THE Edinburgh University Students' Union has not yet found itself in a position to commence building operations for its club-premises, the required amount of money not having been raised yet. A fillip will, however, be given to affairs by the fancy fair which is to be held in its interests in November, and of which the Committee met last week. At the meeting, Lady Muir presided (in the absence of the Duchess of Buccleuch), and it was announced that twenty stalls have already been arranged for, and that other preparations are also well advanced.

LECTURES ON EMBRYOLOGY.

A COURSE of lectures on Embryology (Comparative) having been instituted in Edinburgh University as a supplement to professional teaching on allied subjects, the first lecture was delivered last week by Dr. G. Brook, in the old Natural History Class Room. This course will prove a boon to all who have the time and desire to cultivate a knowledge of so interesting a subject, and to such as propose to follow out a career devoted to biological science.

THE APPOINTMENT OF VISITING PHYSICIAN TO EDINBURGH FEVER HOSPITAL.

THE question as to the power of appointing a visiting physician to the Edinburgh Municipal Hospital for Infectious Diseases having been settled in favour of such power being vested in the Medical Officer of Health for the City, the Public Health Committee on Tuesday discussed a remit from the last Council meeting on the subject, and resolved to ask the Town Council to authorise the appointment, and to call upon Dr. Littlejohn to appoint a physician.

GLASGOW FACULTY OF PHYSICIANS AND SURGEONS.

THE Glasgow Faculty of Physicians and Surgeons has had occasion to exercise discipline on one of its members. The Fellow in question is Robert Bell, M.D., Physician to the Glasgow Institution for Diseases of Women. Dr. Bell was alleged to have patented a liniment, whose virtues have been duly set forth in leaflets, in the advertising pages of the *Century*, in placards, and by various other means. At a general meeting of the Faculty on June 6th, a statement was read from the Council, characterising Dr. Bell's conduct unfavourably. The opinion of the Council was adopted as that of the Faculty; and, thereafter, it was decided to suspend Dr. Bell from the exercise of all the rights and privileges of Fellows. Dr. Bell threatened legal proceedings.

GLASGOW INSTITUTION FOR THE DEAF AND DUMB.

THE annual meeting and examination of the pupils of this Institution was held at Langside, on May 26th. The report states that in August, 1885, after the summer vacation, 114 pupils returned, and 28 new pupils have since been admitted, making the number for the year 142. Of that number, 2 boys, aged 10 and 12 respectively, died late in the spring, owing to bronchitis, in spite of the utmost care exercised by the visiting and consulting physicians, Dr. Duncan and Dr. McCall Anderson. For seventeen years previously, no death had taken place in the institution. Suitable employment was found for the 31 pupils who left at last vacation, the boys being engaged as draughtsmen, engravers, bookbinders, ticket-writers, saddlers, joiners, tailors, and ploughmen; and the girls as dressmakers, milliners, and fancy box-makers, and one as a photographer's assistant, though the most of them returned to their homes. Fifty-eight pupils attended the Government examination in drawing, of whom 3 received prizes, 21 were awarded certificates, and 25 papers were marked "fair." The question of teaching by lip-reading, or by signs, or by both combined, continues to be debated. The combined system still seems, to the Directors of the Glasgow Institution, the only practical way of teaching. Unless pupils begin earlier, or are left at the institution longer than at present—and of this there seems no prospect—the directors are advised that it is impossible to teach lip-reading

to such a point as to enable the pupils to understand and take part in an ordinary conversation. The ordinary income for the year amounted to £3,149 5s., and the ordinary expenditure to £3,453 2s. 11s., showing an excess of expenditure over income of £303 17s. 11d.

IRELAND.

MRS. MARY E. DOWSON, L.R.C.S.I.

THIS lady has the honour of being the first woman admitted as a surgeon on the roll of the Royal College of Surgeons in Ireland. She was examined at a special meeting of the Court of Examiners on four several days, and, as we are informed, passed a most creditable examination. Mrs. Dowson obtained the licences of the King and Queen's College of Physicians in Ireland to practice medicine and midwifery in October, 1884.

BELFAST ROYAL HOSPITAL.

FROM the report of the quarterly meeting held last week, it appears that, when the April accounts are paid, there will be an amount due against the hospital of £579. There has been a falling off in the general subscriptions from the working classes, and an increase in the amount obtained from bequests and donations. Whether the expenses of the institution are increasing or not, it is evident that the ordinary income of the charity has not kept up with the ordinary expenditure. It was thought that the donations on Hospital Saturday would place the committee in a satisfactory condition ; but, this expectation was not realised.

KILDARE COUNTY INFIRMARY.

THE cesspayers at the County at Large Presentment Sessions, last week, rejected the half-yearly presentment for £700 for this institution. The Kildare Infirmary is a spacious building, well constructed, and capable of accommodating fifty-two patients. The animus shown against this and kindred institutions by a certain section of the community is most ill advised, and must, in this particular instance, be a subject of deep regret, as in all probability the governors will be compelled, in a very short time, to close the building for want of the necessary funds. Should this occur, the infirmary can never be reopened, as, by a clause in the lease, once the building ceases to be utilised for the purposes for which it was constructed, the landlord, who at present only receives a merely nominal rent, takes immediate possession.

BELFAST BRANCH ST. JOHN AMBULANCE ASSOCIATION.

A MEETING in connection with the Belfast Branch of the St. John Ambulance Society was recently held in the extern department of the Belfast Royal Hospital. The honorary secretary, Dr. John Moore, read the report, which stated that the Executive Committee were pleased to find that the organisation of the Belfast centre was now complete, and that classes for instruction could be formed at any time. A staff of examiners had also been appointed, so that examinations might be held at the termination of each course of lectures, and certificates of efficiency awarded to those whose examinations would show them to be qualified. Since the formation of the centre, courses of lectures had been delivered in Belfast, Limavady, Omagh, and Portrush ; and seventy-one members passed the examination, and received certificates from the Association.

THE ULSTER MEDICAL SOCIETY.

AT a meeting of the members of this society held last week in the Museum, College Square, Belfast, the portraits of the past presidents were presented. The likenesses measure about 20 by 30 inches, are carbonised enlargements of photographs mounted in oak frames, and bear the autographs of the various presidents of the society. The Ulster Medical Society, it may be remarked, was founded in May, 1862, by the amalgamation of the Belfast Medical Society, a society which had been in existence from 1806, with the Clinical and Pathological Society, which was established in 1853 by Dr. Malcolm. Another society, called the Ulster Medical Protective Association, was also in active operation until May, 1862, so that it also merged into the new society. Mr. Fagan, the president for the year, opened the proceedings by some introductory remarks, and the treasurer, Dr. Esler, as the portraits were unveiled, gave a short notice of the salient points of interest in the lives of each president. Dr. Esler, in asking the president to take charge of the portraits for the society, hoped that each succeeding year might see an addition to their number, and he only wished that the historian of the future might have as satisfactory a record of human goodness, professional skill, and good public reputation to submit, as it had been his pleasing duty to furnish on that interesting occasion. He hoped that the committee of the Free Public Library might be induced to set apart a small room in the building for the use of the Society. In it could be placed a large collection of valuable works, and there also room might be found for these portraits.

CONSULTANTS AND GENERAL PRACTITIONERS.

WE are requested to publish the following circular-letter, which is now being issued in London and its suburbs.

ASSOCIATION OF GENERAL PRACTITIONERS.

It is the opinion of this Association that the dignity of the profession and the welfare of its members can be more effectually maintained by clearly defining the position which one section of the profession hold in relation with the other—namely, consultants and general practitioners.

In the legal profession, the position of the consultant is very definite ; under no circumstances whatever will he permit himself to be approached by the public in matters relating to his profession. Advice is given to the solicitor, and not to the client. So in medicine : it is the opinion of this Association that the consultant should be applied to for advice by the practitioner, and not by the patient ; that the advice should be given for the instruction of the practitioner in the management of the case, and not for the instruction of the patient, who, having no technical knowledge, can profit little by it.

Since the practice of medicine has become more scientific and more specialised, it follows that the practitioner is required, in the interest of his patient, to seek the advice of a consultant more frequently than it was considered necessary in the past, and "a need has arisen for a class of men who will practise as consultants in the strictest acceptation of the term" (*vide* BRITISH MEDICAL JOURNAL, May 29th, 1886)—a class of men above suspicion, and whose interests are identical with those of the general practitioner. For the action of the consultant, who derives a portion of his income from general practice, may at times be misunderstood, and may at times lead to relations between himself and the ordinary medical attendant which are not conducive, and, indeed, are opposed, to the dignity of the profession.

With those so-called consultants who practise as general practitioners this Association will have nothing to do ; it will not seek to discredit them, nor will its members refuse to meet them when required to do so ; but it will exert all its individual and collective influence in favour of those who act as consultants as the term is understood by this Association.

The members of this Association pledge themselves, individually and by their united action, to support, and support only, those distinguished members of the profession who practise purely as consultants—that is to say, who consult solely with the profession, and not with the public.

The necessity of reform in the relations of the two sections of the profession is patent to everyone who has experience in the management of a general practice in London. There is a general feeling abroad that the existing state of affairs cannot possibly continue. Sooner or later, a reform must come. The necessity has arisen, and men will be found who can take a higher view of their duties to the profession.

In order that this undertaking may be successful, men in general practice must combine, and speak with no uncertain sound. Should a thoroughly representative Association be formed, its success is inevitable. The weight of your name and your active influence in the

cause is desired. No pecuniary liability is entailed by becoming a member of the Association.

Honorary Secretaries: H. Walter Verdon, M.D., F.R.C.S.Eng., 410, Brixton Road, S.W.; W. Gibson Bott, L.R.C.P., M.R.C.S., 414, Clapham Road, S.W.

THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, 1886.

THE meeting of the Association at Brighton, in August, should be, and bids fair to be, a great success. "Doctor Brighton" is, we suppose, the oldest of English physicians now living, and it is only right and fitting that he should entertain, with all due honour and hospitality, his younger professional brethren.

Brighton, as a town, owes its existence almost entirely to the medical men; for long before George IV, then Prince of Wales, visited the town, Dr. Russell had come down from London, and brought with him a crowd of patients. He it was who made Brighton a health-resort. His death occurred in 1759, and it was not until 1783 that George, Prince of Wales, first set eyes upon the town. George IV, by his love of Brighton, served to establish the reputation of the town—a reputation that has never left it. After the death of George IV, the town still flourished under royal patronage; but, with the accession of Her Majesty Queen Victoria to the throne, Brighton practically ceased to be a royal residence. "Doctor Brighton" ceased to be a court physician, but, in spite of his deposition, his practice grew and thrived. Convalescents, in search of strength and health, thronged, in ever-increasing number, to the consulting-room of the kindly old medical man.

In the last census, the population of the town had risen to close upon 130,000, and that, be it remembered, at a time of the year when things are at their dullest. It is not unfair to suppose that, in the late summer and autumn, 15,000 visitors have to be added to the above number, so that Brighton, when the Association visits her, will have stowed away in her houses, lodging-houses, and hotels, not fewer than 145,000 folk. Many things conspire together to promise the success of this meeting. The nearness of the town to London, coupled with the good train-service, should ensure the presence of many of the leaders of the profession. The multitude of lodging-houses, the crowd of hotels, and the great number of resident medical men, should overcome the difficulty of housing the members. We should not, we believe, insult our professional brethren by hinting that Goodwood, holding its race-meeting so near in point of time and place, may also attract some members of the profession, who desire to mingle outdoor amusement with the sedentary occupations of the section-rooms.

Then, too, Brighton is worth seeing. True it is that the scenery is poor; that the country round is bare and treeless; that the coast has nothing grand or wild; and that there is hardly one architectural beauty, or one archæological object of interest in the place. All this is true; still the town is well worth a visit. The King's Road, the Marine Parade, the old Chain-pier, are all very fine. It is worth a visit to see only such a three miles of sea-drive as is given by the King's Road and Marine Parade.

All these advantages tend much to ensure the success of the meeting; but we have still one more advantage to take count of, and that is, the goodwill of the townsfolk themselves. The present Mayor will, we know, do his very utmost to make the whole thing go off well He, as representing the town, has placed at our disposal and use the whole of the Pavilion, so that every Section will meet, if not actually under the same roof, still within the same grounds. This will be a great convenience; nearly every Section-room will be within a few yards of the general assembly and reading-rooms; so that there will be none of that "running about the town, to find my Section-room," that is so often complained of at meetings. In fact, it would be impossible to find any building more admirably suited for such a meeting than is the Pavilion. Its large number of rooms, and its private grounds, make the question of accommodation a very simple one to answer.

The Mayor, not content with placing the Pavilion at our disposal, intends to do much in personally welcoming and entertaining the members of our Association. He hopes to be able to welcome the guests on Tuesday morning, and intends to receive them also at the Pavilion on the Friday evening. On this latter occasion, there will be a grand ball, to be held in the Dome. The Dome will hold about 3 000 people, so that the spectacle should be indeed a grand one.

On the Saturday, there will be, of course, the customary excursions. of these are at present arranged for, namely: 1, a trip by steam-boat to Ryde; 2, an excursion to Arundel, where the Duke of Norfolk has kindly ordered the grounds, castle, and cathedral, to be thrown open to the members; 3, an excursion to Hastings, where Sir Thomas Brassey hopes to receive the members at Normanhurst; Battle Abbey will also be visited; 4, an excursion to Eastbourne, Beachy Head, etc.; 5, an excursion to Tunbridge Wells. The members of the Association who go on any of these last three excursions will be received and entertained by the medical men living in those towns.

On the Wednesday evening, the medical men of Brighton will receive the members at the Pavilion. There will be a dance, and many other entertainments, including the illumination of the Pavilion grounds, with out-of-door concerts, etc. On the Thursday evening, there will be the public dinner.

These are the more important of the official entertainments; but there will be, we doubt not, many others of a private character, and conducted on a smaller scale, all of which will unite in helping to make the meeting what it should be—namely, a grand success.

The programme of the meeting, together with a preliminary list of papers and discourses promised and arranged for up to the present time, is published on page 1136. It will be seen by this that the arrangements for the scientific work of the meeting, as well as for social recreation, are on an extensive scale, and in a very satisfactory state of progress.

It will be seen from the programme that arrangements have been made for discussions in the several sections on various important practical subjects. The list of papers promised has also already attained fair proportions.

AMERICAN MEDICAL ASSOCIATION.

THE thirty-seventh annual meeting of the American Medical Association was held at St. Louis, on May 4th, 5th, 6th, and 7th. The President, Dr. BRODIE, of Detroit, delivered an address, which was chiefly directed to the discussion of matters connected with the internal economy of the Association.

MEDICINE.

Bacteriology.—Dr. WHITTAKER, of Cincinnati, the President of the Section on Practice of Medicine, delivered a historical address on bacteriology.

Knee-phenomenon.—Dr. PHILLIP ZENNER, of Cincinnati, read a carefully prepared paper on the value of the knee-phenomenon in the diagnosis of diseases of the nervous system; after quoting the statistics of various German observers who had sought to ascertain the frequency with which the phenomenon was absent in health, he gave some figures of his own. He had examined 1,174 persons inmates of insane asylums; the phenomenon was absent in 28, of whom 5 had fully developed locomotor ataxy, 12 were in the earlier stages of the same disease, while 11 manifested no other symptom of disease of the cord. It was absent in 5 out of the 932 sane persons examined; he had never found it present in locomotor ataxy, and had noted its suppression in chronic alcoholism; in the latter condition, it was restored by strychnine. In locomotor ataxy, he had only once found it absent, and, in that case, the lesion in the cord was found to be a diffuse myelitis, rather than a systemic disease. He pointed out the best method of eliciting the phenomenon, and insisted on the great care that must be exercised before deciding that it was absent.

Dengue.—Dr. J. W. MCLAUGHLIN read a paper on bacteriological investigation of the blood and secretions in dengue. He described a variety of micrococcus as occurring constantly in the blood of different individuals at different times and places, and during the various stages of dengue. The blood of forty patients was examined. Cultivations in sterilised media yielded a white growth on the surface at the point of inoculation, which became elevated above the surface. In certain malignant cases, the matters vomited contained the same micrococci; and, in a few cases, casts in the urine were found to be largely composed of these micrococci, held together by the gelatinous envelopes with which they might sometimes be seen to be provided even in the blood.

Potassium-Chloride.—Dr. A. F. POTTER, of Boston, recommended potassium-chloride as a remedy in pelvic cellulitis (ten grains every three or four hours), and in epilepsy. In the latter disease, he thought it more valuable than bromide of potassium.

SURGERY.

Abdominal Surgery.—Dr. NICHOLAS SENN, of Milwaukee, the President of the Section, delivered an address on the present state of abdominal surgery. He considered that exploratory laparotomy was justifiable in all doubtful cases, for the arrest of hæmorrhage, the removal of extravasation or the restoration of a breach of continuity.

The results of the treatment of peritonitis by abdominal section and drainage had been, in his opinion, most successful where the disease had not become diffused, and where the original cause could be removed.

Dr. J. McF. GASTON, of Georgia, read a paper, in which he passed in review the various conditions of the ileo-cæcal region which might demand abdominal section. A discussion on penetrating wounds of the abdomen was raised by a paper by Dr. HENRY SMITH, of Philadelphia; and the majority of the speakers seem to have favoured immediate laparotomy.

Lumbar Abscess.—Dr. ANDREWS, of Chicago, recommended the treatment of lumbar abscess by free incision, so as to permit thorough digital exploration, followed by the use of antiseptic solutions.

Dr. BYRD, of Illinois, urged that peroxide of hydrogen was the best antiseptic for such a purpose.

Radical Cure of Hernia.—Dr. H. O. MARCY, of Boston, urged that, whenever there was strangulation, or failure of trusses to retain the hernia, and in infantile hernia, it was advisable to ablate the sac, freshen the pillars and suture them with chromicised kangaroo-tendon sutures.

Cranial Hæmatomata.—Dr. W. M. MASTIN, of Mobile, read a paper of venous blood-tumours of the cranium in communication with the intracranial venous circulation. The tumours might be congenital, spontaneous, or traumatic, and might be diffuse, or of the nature of varix; for the latter, he recommended electro-puncture.

Osteoplastic Resection of Foot.—Dr. CHARLES FENGER, of Chicago, read a paper on Osteoplastic Resection of the Foot, Excision of the Heel, as devised by Wladimiroff and Miculicz. The operation consisted in exsecting the calcaneum and astragalus, and removing the cartilaginous ends of the tibia and of the scaphoid and cuboid bones, and bringing the sawed surfaces together, so that the patient walked upon the toes. The indications for the operation were: 1. extensive injury to the heel and adjacent parts of the foot; of the nineteen recorded cases, not one had been done to meet this indication; 2. caries or tuberculosis of the os calcis and adjacent tissues; this was the most frequent cause noted; 3. extensive disease of the soft parts of the heel. The after-treatment consisted in keeping the foot at rest upon a splint.

OBSTETRICS AND GYNÆCOLOGY.

President's Address.—Dr. S. C. GORDON, of Portland, President of the Section, delivered an address, which was chiefly occupied with some general considerations regarding the management of labour, and the indications for removing the uterine appendages. He had performed the latter operation twenty-five times, and had had one death.

Perineal Operations.—Dr. H. O. MARCY, of Boston, exhibited sections, made by freezing, of the perinæum and adjacent structures, illustrating especially the effects produced by distension of the bladder or rectum. Dr. Marcy's method of operating in perineal rupture, reported to the Section two years earlier, was warmly commended by Dr. Wathen.

Uterine Sound.—The routine use of the uterine sound was strongly condemned by Dr. W. W. POTTER, of Buffalo, who was supported by the President (Dr. Gordon) and Dr. Engelman, of St. Louis.

Early Diagnosis of Pregnancy.—After pointing out the difficulty of establishing the existence of pregnancy, Dr. E. S. MCKEE, of Cincinnati, expressed the opinion that Hegar's sign was of great value. This consisted in an unusual resilience, compressibility, softness, bogginess, yielding, and thinning of the lower uterine segment, that is, the section immediately above the insertion of the ligamenta sacro-uterina. The shape assumed was that of a fan, balloon, or jug. The change was most apparent in the median line. In the majority of cases, the sign could be made out by the ordinary bimanual method of examination.

Antiseptic Injections.—Dr. GUSTAV ZENKE, of Cincinnati, read a paper, in which he expressed the opinion that, to wash out the vagina immediately after normal labour, was meddlesome midwifery; and that, even in prolonged or instrumental delivery, if the hand had been introduced, or if injuries had been sustained, vaginal injections were always, but uterine injections rarely, indicated.—The majority of the speakers also condemned the routine use of vaginal injections.

Electrolysis in Gynæcology.—Dr. FRANKLIN H. MARTIN, of Chicago, sketched the uses to which electrolysis might be put, especially dwelling on its application to fibroid tumours.—After some discussion, in which certain bad results were described, Dr. G. ENGELMAN insisted that, unless the strength of the current was accurately measured, failures, from the use of too strong or too weak currents, would certainly ensue. He used one needle and a large plate (14+16 inch), and gradually added cells until the galvanometer showed a current of forty, fifty, eighty, or a hundred milliampères, according to the endurance of the patient; five or six sittings, of five minutes each, might be sufficient; pain, slight at first, soon subsided.

THE IRISH MEDICAL ASSOCIATION.

THE forty-seventh annual meeting of this Association was held in the College of Surgeons on Monday, June 7th; Dr. EDWARD HAMILTON in the chair.

Report of Council.—Dr. CHAPMAN (Honorary Secretary) read the annual report, reciting the labours of the Council during the year. It stated that the principles and provisions of the Medical Bills, now before Parliament, were, as far as they went, in complete accord with the views of the Association; also that, mainly by Dr. Jacob's exertions, a clause had been added to the Labourers' Amendment Bill, giving remuneration to the medical officers of health acting under its provisions, such as may be approved by the sanitary authorities, subject to the sanction of the Local Government Board. The unsatisfactory character of the Poor-law Officers' Compensation or Abolition of Office (Ireland) Act, in its being a permissive instead of a mandatory Act, was commented upon; as were also the rules recently issued by the Irish Local Government Board, laying down that a child under 12 should not be revaccinated, even in the midst of a small-pox epidemic, and thus depriving the medical officer of all discretionary power in the matter. In connection with the long-standing grievances of the surgeons of Irish prisons, especially that of their having to pay their substitutes out of their own pockets when absent on duty or on leave, attention was drawn to a circular-letter, recently sent to the governor of each prison, laying down regulations which it would be ridiculous to submit to.

The adoption of the report, and a vote of thanks to the Council, Committee of Council, and officers, was moved by Dr. KINKEAD, of Galway, seconded by Dr. TAGERT, of Clones, and adopted.

The Medical Acts Amendment Bill.—Dr. A. H. JACOB moved: "That the Medical Acts Amendment Bill recently introduced to Parliament, though it fails to deal with the unqualified practice of medicine, and is deficient in other respects, is yet in conformity with the declared policy of the Association, and is, therefore, so far as it goes, deserving of its approval and support." Their approval, he said, was qualified; but the Bill conceded two most important points—a standard of competency, and reform of the Medical Council, for which they had been labouring for fifteen years. The great point on which the Bill had fallen short of their expectations and wishes was that it took no cognisance of unqualified practitioners, "quacks," and other persons on the confines of the profession. At the same time, Sir Lyon Playfair had acted judiciously in not weighting his Bill with this, the most difficult of all matters to settle. The quack nuisance had never taken root in Ireland, he was happy to say, and, therefore, it did not affect them as it did the people of England; but they sympathised with their English brethren, and they wished to put a stop to the monstrous system under which sick people were treated by persons ignorant of the very elements of medicine and surgery.—Dr. WHARTON seconded the motion, and concurred in the general consensus of approval with which the Bill had been received.—The resolution was adopted.

Poor-law Medical Officers.—Dr. CORNELIUS moved:

"That this Association strenuously protests against the injustice done to union medical officers by depriving them of their means of livelihood upon abolition of office consequent upon the amalgamation of unions, without securing to them provision for their compensation. That such method of dealing with those officers is at variance with the custom of the public service, and a great hardship upon them."

Dr. F. J. DAVYS, County Coroner, seconded the motion, which was adopted.

Dr. H. W. OULTON moved:

"That it is indispensable to the efficiency of the Poor-law Medical Service that the issue of medical relief tickets shall be limited to deserving cases, and that, with this object, some means of cancelling improperly issued tickets should be provided more effective than that which the existing system offers. That the Council be directed to promote an amendment of the law on the earliest favourable opportunity."

Mr. FERGUSON seconded the motion, which was adopted.

Dr. DAVYS moved, and Dr. WALSH, of Kilmacthomas, seconded the following resolution.

"That this meeting, in appreciation of the desire of Mr. Sexton, M.P., to aid the poor-law medical officers in Ireland in any legislative enactments in the House of Commons, approves of the suggestion

that each poor-law medical officer do subscribe a sum of ten shillings to the Sexton Testimonial Fund."

After a rather animated discussion, in which objection was made to the proposal, as having a tendency to introduce political matters into a non-political Association, the resolution was withdrawn.

Officers and Council.—The result of the ballot for the officers and Council was announced. Dr. Kinkead, of Galway, was declared President; and for the provinces of Leinster, Ulster, Munster, and Connaught, Dr. Ridley, of Tullamore, Dr. Vesey, of Rostrevor, Dr. Cummins, of Cork, and Dr. Nolan, of Gort, were declared to have been elected Vice-Presidents. The following gentlemen were elected on the Council: C. Bent Ball, J. W. Boyce, R. Browne, William Carte, J. P. Chaplin, A. H. Corley, H. G. Croly, F. Davys, O'C. J. Delahoyde, R. V. Fletcher, Kendal M. Franks, Edward Hamilton, J. R. Harvey, W. J. Hepburn, A. H. Jacob, David Jacob, G. H. Kidd, G. J. Mackesy, James Martin, A. Meldon, R. M'Donnell, F. V. M'Dowell, G. Morrogh, J. Molony, J. F. Pollock, Sir G. H. Porter, T. Purcell, W. Thornley Stoker, Tagert, William Thomson, Usher, J. L. Walshe. *Honorary Secretary:* Dr. Chapman. *Honorary Treasurer:* Dr. Minchin. *Auditors:* Dr. Alexander Patton, Dr. Oulton.

Vote of Thanks.—The newly elected President, Dr. Kinkead, having taken the chair, on the motion of Dr. CHAPMAN, seconded by Dr. DILLON KELLY, thanks were voted by acclamation to the outgoing President, Dr. Hamilton.

Dr. KINKEAD having thanked the Association for having elected him President, the proceedings terminated.

Dinner.—The annual dinner was held in the evening in the Royal College of Surgeons, and passed off successfully. The President, Dr. Kinkead, was in the chair, and was supported by a large number of members of the Association and guests, including the Vice-Presidents of the College of Physicians, the Vice-President of the College of Surgeons, Sir George Porter, Sir Charles Cameron, the President of the Dublin Branch of the Association, etc.

THE CHOLERA.

ITALY.

SINCE the last report, every day has brought with it a gradual increase of heat, until the maximum shade temperature has reached nearly 90° (Fahr.), and coincidently we hear of the appearance of cholera in many directions. Cases have again been reported at Padua, imported this time, it is asserted, from Venice; and, in that city, there is no diminution in the severity of the epidemic, the number of cases for the week ending at noon on the 6th having been 215, and the deaths 121, as compared with 169 and 85 respectively, in the immediately preceding week. The authorities have been urged to close the schools, but do not, so far, seem to have agreed to this very elementary precaution.

At Bari, a few cases still occur—15, with 11 deaths, in the week—and one or two are again reported from Brindisi; while there have been as many as 15, with 8 deaths, at Oria, a small village in Apulia, from which the Doria family take their name. From Rocchetta Tanaro, near Asti, in Piedmont, an outbreak is spoken of, in which the disease was thought to have been imported from Marseilles, although no official nor other information of the reappearance of cholera, for the third season, in the French city, has reached us.

There is still considerable indifference shown to all these discouraging reports. No alarm is expressed publicly, and the Government has had no wild appeals made to it for assistance, as would have certainly been the case two years ago, although the only pressure brought to bear on it—that of the Sicilians for quarantine—was yielded to at once. As no improvement in the local sanitary conditions, worth mentioning, has been effected in the two years, the present apathy can only be explained by the fact that a more intimate acquaintance with the true nature of cholera, taught by the epidemics of 1884 and 1885, has dispelled some of the mysterious terrors associated with its name, and quite as probably by the existence of a very widely spread, although vague and certainly erroneous, impression that a third year's epidemic can never be a severe one. A rude awakening probably awaits the Italians; and the news that Florence too has been infected, through articles of clothing brought from Venice, it is said, will have more influence in bringing home to their minds the necessity of facing a widely spread epidemic than have hitherto all the other oubreaks combined.

Florence, like Rome, escaped entirely in 1884 and 1885, and it is still possible that the first cases may be successfully isolated, and the disease arrested. But the water-supply is bad, not more than 1,500 families using that of aqueducts, the rest of the population, according to Sir J. Bazalgette's report, having nothing but well-water to drink, a most serious aggravation of the danger where cholera is introduced.

The somewhat dramatic incidents attending the outbreak among the troops of the territorial militia assembled at Cuneo for their annual drill did arouse a good deal of languid interest. As there is a limited compulsory service in Italy, the social status of some of the men up for training was above that of the ordinary soldier, and the number of deaths, and the rapidity of the fatal issue in many of those attacked, naturally caused some little emotion.

The Minister of the Interior, the Italian Home Secretary, has sent one of the permanent staff of his office to make an inquiry in conjunction with the military authorities, but no report has, up to the present, been published. The men were dismissed to their homes, and several small local outbreaks have been traced to their dispersion.

THE MOTHER OF THE TRUE MAHDI.

AN Indian correspondent (Surgeon H. G. Hathaway, Calicut, Madras) writes:—There is a widespread belief amongst the Moplahs, on the coast of Malabar, that the mother of the true Mahdi, as yet unborn, is living near Calicut. As the subject of their belief is of medical interest, I send home an account of my examination of her, with photographs.



"Taking pictures" being contrary to the *Koran*, there was great difficulty in photographing her. She is a child, with full development of a woman, and her people consider her now pregnant with the true Mahdi. Her parents give her age as two and a half years, which is about correct, as she has only temporary teeth, the first permanent molars not having appeared. Her height is three feet. Her breasts are fully developed, and the external organs of generation have also the appearance of maturity. A slight enlargement of one or both of the breasts in children is doubtless more common in this country even than at home, but hers are enlarged to an inordinate degree. The child has all the appearance of health; there are no signs of inflammation or any other disease in the region of the mammary glands. Needless to say, she has not the appearance of pregnancy. The race to which she belongs are Muhammadans of Malabar, who have become notorious through their fanatical outbreaks. They are supposed to be the descendants of Arabs who landed in the country several centuries ago, and formed connections with the native women (tradition assigns A.D. 843-44 as the year of their landing). The Moplahs

belong to the Sunni branch of Muhammadanism; they are generally strict in the observance of the forms of their religion. They are extremely bigoted; many of them have exhibited a thoroughly Arab contempt for and hatred of the infidels. Almost every year, after being roused to fanatical ardour by their priests (styled "Tangals"), parties of Moplahs throw away their lives to become "shahids," or martyrs, by dying in arms against the Kafir.

GLASGOW MEDICAL SCHOOLS.

An important deputation from the managers of the Glasgow Royal Infirmary, introduced by Dr. Cameron, had an interview with the Earl of Dalhousie and the Lord Advocate, at Dover House, London, last week, to urge on the Government the desirability of introducing, in the forthcoming Universities (Scotland) Bill, a clause providing for the erection of the Medical School of the Glasgow Royal Infirmary into a College of Glasgow University.

Dr. Blackie explained that since the University had been transferred to its present site—about three miles from the hospital—the number of students had considerably fallen off. While, at one time, they had some 90 students, the number was reduced last year to 51; and the number of clinical students had diminished from 260 to 60. That reduction had taken place from causes over which the managers had no control; and these causes would be very greatly modified, if not completely done away with, were the hospital school erected into a College of the University of Glasgow.

Dr. McVail stated that the Royal Infirmary was the largest infirmary in the West of Scotland, and it was, so far as Surgical Hospitals were concerned, the greatest Hospital in the United Kingdom. It had over 5,000 patients every year, who were received from the workshops and the great industries of Glasgow. This hospital had expended upon it a sum of not less than £23,000 a year, and to bring it into the teaching circle of the University, would certainly be to strengthen the University, and to make it a far more important institution. He said that the class of extra-mural students in connection with the Andersonian and in connection with the Royal Infirmary School were every year diminishing. There were causes at work which made it extremely undesirable on the part of a student studying in Scotland that he should be content merely with a licence. It might be asked whether it would answer the purpose if all the classes were allowed to be taken outside the University. As a matter of fact, that would not answer the purpose; for students would not take the classes with men who were not to be examiners, so long as rival teachers were the examiners. By adding this great hospital to the University, and by adding a set of teachers to the University, which the great population of Glasgow and the West of Scotland urgently demanded, the Government would be doing a great public service. It was said that there was no precedent whatever for a Scotch university having two colleges. Of course there was really a precedent in the oldest Scotch university, for St. Andrew's had two colleges. The moment they crossed the Border, they found that the universities were only too glad to have a multiplicity of educational institutions, provided those institutions were worthy to be a part of the university.

Dr. Duncan having spoken to the like effect, the Earl of Dalhousie said they had his hearty sympathy, and without prejudice to the opinion he might form, should he hear the other side of the question, they would certainly have regard to the views put forward. The deputation had shown that the object they had at heart was one which was parallel with the interests of the past medical teaching.

INSURANCE OF MEDICAL MEN AGAINST SICKNESS, ACCIDENT, AND DEATH.

The monthly meeting of the Executive Committee of the Medical Sickness, Annuity, and Life-Assurance Society was held on the afternoon of Wednesday, June 9th, at 38, Wimpole Street, W. There were present, Mr. Ernest Hart (Chairman), Dr. W. M. Ord, Mr. S. W. Sibley, Mr. Major Greenwood, Mr. F. Wallace, and the Secretary.

It was stated that, during May, there had been nine new proposals, bringing the total up to 769; there being now a regular average addition to the number of members of a little over 100 per year. During the previous month, £124 1s. had been disbursed for sickness-pay to fifteen claimants. This was within a very few pounds of the amount paid under the same head in the corresponding months of the preceding year, so that the demand on the funds of the Society had not grown in proportion to the increase of membership. The quarterly accounts for disbursements for management showed that the expenses under this head did not amount to more than a charge of five per cent. on the total premium income, this being only one-half the allowance made by the actuary in computing the tables; there thus being a profit, due to office-economy and the honorary services of the committee, of five per cent. on the total income.

It was agreed to instruct the actuary to prepare a new annuity table, providing that, where a member did not reach the age to receive an annuity, a sum equal to half his total payments, if he had been five years a member, and three-fourths the amount if ten years, should be paid to his representatives on his death.

In reference to the annual report, to be prepared up to June 30th, and presented for consideration at the annual meeting in August, it was stated the total balance in hand would be found to be over £11,000, and that the year's income would reach at least £7,000, which would include a considerable and increasing item of interest on investments.

The sickness fund had been in full and useful activity during the term, the disbursements to totally incapacitated members, all of whose claims had been certified and supervised, amounting, during the last eleven months, to £1,248. This had been paid to 106 members, for an aggregate period of 390 weeks 3 days' sickness, an average to each illness of a little under 3 weeks 5 days.

The claims had arisen from a great variety of causes, including twelve accidents (chiefly in riding or driving), of which six resulted in fractures. There were several cases of rheumatism, pneumonia, bronchitis, and catarrh, and a lesser number of blood-poisoning and operations on eyes, glands, etc., while there had been four instances of fever. The claims were made from a great number of localities, including Ireland, Scotland, Wales, Lancashire, Warwickshire, Devonshire, Shropshire, Hampshire, Staffordshire, Notts, Lincolnshire, Herefordshire, Essex, Yorkshire, Sussex, Suffolk, Worcestershire, Surrey, Derbyshire, Somerset, Herts, Northamptonshire, Cumberland, Kent, and the Metropolis.

From the life-insurance fund, three claims had been paid, at a cost of £500, all the deaths occurring after short and sudden illnesses, one being from typhoid fever, and two from pneumonia; and, the necessary legal proofs being produced, payment had been made in each case within a month of the decease of the member.

The statements generally were considered satisfactory, as proving that the medical profession had been the first to successfully found on a secure and lasting basis a society of an useful description, which, from its mutual character, may be almost indefinitely extended in the future.

Further particulars, reports, proposal forms, and every information as to the Society, will be forwarded on application to the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, London, S.W.

Bequests and Donations.—Mr. Foster Connor, of Bangor, county Down, and of Belfast, has bequeathed £2,000 to the Belfast Royal Hospital.—Dame Anna Maria Hare Clarges has bequeathed £500 to the Royal Hospital for Incurables at Putney, and £500 to the Taunton and Somerset Hospital.—Mr. John McDuff, of Dublin, has bequeathed £500 to the Mater Misericordiæ Hospital, £200 to the Roman Catholic Convalescent Home in connection with St. Vincent's Hospital, £100 to the Children's Hospital in Upper Temple Street, and £100 to the Jervis Street Hospital.—Mr. Arthur Blewert Bryer, of Kennington Park Road, has bequeathed £200 to the Royal South London Dispensary.—The Hereford Infirmary has received £200, under the will of Miss Cooke.—The Eastern Counties Asylum for Idiots, at Colchester, has received £100, less duty, under the will of Mrs. K. Hines, of Wyvenhoe.—Mrs. Mary Ann Humphrey, of Helmdon, has bequeathed £50 to the Northampton Infirmary, and £50 to the Brackley Cottage Hospital.—The Corporation of the City of London have voted £105 to the Cancer Hospital, £52 10s. to the Public Dispensary for the Relief of Sick Poor (Stanhope Street, Clare Market), and £52 10s. to the West London Hospital.—The Earl of Rosebery (the President) has given £50, additional, to the Ventnor Consumption Hospital.—The Clothworkers' Company have given £50 to Miss Mary Wardell's Convalescent Home for Scarlet Fever Patients.—Mr. Henry Coxhead, of St. Lawrence, Thanet, has bequeathed £100 to the Hospital for Consumption and Diseases of the Chest, at Brompton; £100 to the Cancer Hospital; £50 to the Kent and Canterbury Hospital; £50 to the Seamen's Infirmary, at Ramsgate; and £50 to the Ramsgate and St. Lawrence Royal Dispensary.—The Clothworkers' Company have given £50 to the Great Northern Central Hospital; £50 to the Royal London Ophthalmic Hospital; £50 to Queen Charlotte's Lying-in Hospital; and £31 10s. to the Royal Infirmary for Children and Women.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1886.

Thursday, June 3rd.

Sir HENRY W. ACLAND, President, took the chair at 2 P.M.

Examination in Elementary Mechanics.—The Council resolved itself into Committee, and resumed the debate on Elementary Mechanics.

Mr. MACNAMARA said it was true that there were some schools in the County Dublin which taught hydrostatics, but it would be evident to all who knew the geography of the district that it would be impossible for the students to attend them. Most of the schools at which the subject was well taught were Roman Catholic, but the majority of students were Protestants, and their parents would not suffer them to attend such schools. Six Irish representatives had declared that it was impossible to do what was required, but the English and Scotch members had, in their superior wisdom, told them to go home and achieve the impossibility. Nothing was more calculated to change his political convictions, which hitherto had been wholly against Home Rule, than such conduct on the part of the Council.

Dr. HERON WATSON said that all the mechanics required could be obtained from the text-books, though of course the subject could be much better taught in schools possessing the proper appliances. He regretted that the representatives of the great English universities were so strongly opposed to the enforcement of so small an amount of preliminary knowledge in physics as was implied in his amendment. Such opposition might naturally lead the profession to infer that the universities did not wish to encourage the students to enter upon subjects which would facilitate their study of medicine.

Dr. BANKS did not think it likely that the University of Dublin would, at the bidding of the Council, alter its requirements, which were in reality higher than those of the Council.

Dr. PETTIGREW thought that all difficulties would soon be removed if the Council persisted in its recommendation. The higher standard of the universities ought not to be allowed to stand in the way of the lower standard required by the Council.

Dr. QUAIN complained of the waste of time involved in the discussion of the question of preliminary education, and contended that the subject should be left to the educational bodies themselves. He hoped that the everlasting changes which were so perplexing to teachers and students would now cease.

Mr. MARSHALL said that the Council, in its desire that physics should be included in the preliminary education, had removed history and geography from the curriculum; and he hoped that its resolution would not now be abandoned. Even if university students would not go on the *Register*, that would be a less evil than that attending a change in the present regulation of the Council.

The Rev. Dr. HAUGHTON said that his university would never have an arts examination for any particular profession, but only such as would be best for all professions. It was impossible to compel the students to go upon the *Register*, and no great harm would arise if they did not do so. He quite agreed that it was desirable that the subject of mechanics should form part of the student's training.

Dr. HUMPHRY suggested that the amendment of Dr. Watson might be adopted, with a proviso that university examinations might be accepted as heretofore, on condition of the students passing in mechanics at a later stage.

This suggestion was adopted, and the amendment was agreed to in the following form: "That examination in the subject of elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics should be required in the preliminary examination, and should be passed before registration in the *Students' Register*; but, in universities with a prolonged curriculum, where the examination in mechanics required for their degree is taken at a more advanced period of study than before commencing medical education, the registration may be effected on having passed the examination in mechanics, and it shall be the duty of the Registrar to antedate the entry to the period at which the preliminary was passed."

Visitation of Medical Schools.—The Rev. Dr. HAUGHTON moved: "That, in the opinion of the Council, it is highly important to visit and report upon the methods of teaching required by the licensing bodies." The Council, he said, had exerted a great moral influence by its visitations of examinations, but he considered that the appliances and means of teaching were far more important than the mere examinations. The tendency of enlightened medical education was to reduce the formal lectures, and increase the means of learning by the eye and the hand. He objected to the Scotch system of delivering courses of a hundred lectures, believing that a study of the text-books might be substituted for at least half of the lectures. He also disapproved of the system in Dublin, of requiring the student to attend, or at least pay for, three course of lectures on the same subject. If his motion were adopted, many skeletons would be found in the cupboards that would be unlocked. Some pretentious schools would be found to be ill provided with the means of teaching; and it would be ascertained that grinders often took the place of brains, eyes, and hands. The work of inspecting appliances at schools could be carried out very cheaply by the Branch Councils. In the London medical schools, there were ample facilities for practical instruction for hospital work, but much of the teaching of anatomy, chemistry, botany, and zoology was most crude and elementary. As the Colleges of Surgeons and Physicians in London had not inspected the schools, the matter ought to be taken up by the Council. It might not have any legal power, but it could, as it had done in other cases, exercise a salutary moral influence. Good schools would be glad to be visited, and bad ones would endeavour to work up to their level.

Dr. MATTHEWS DUNCAN seconded the motion. He thought the Council had the same power to interfere in regard to courses of study as in regard to examinations. Indeed, in former years it had entered upon a laborious inquiry on the subject, presided over by Professor Symes, but, for some reason or other, it was abandoned. He did not agree with Dr. Haughton as to the value of lectures, which, according to his experience, were most regularly attended by the best students, and they were much more effective than text-books.

Dr. BANKS supported the motion.

Mr. SIMON said that, while sharing in the sentiment of the resolution, he thought that the Council had no power to institute an inspection of the means of teaching, though it had the power to require the licensing bodies to give information as to their means of teaching.

Dr. HERON WATSON supported the motion. It was most important that instruction should be given in such a way as to improve the thinking faculties, and not simply by cramming six hours a day, as though medicine could be learned by a series of Pinnock's catechisms. In Edinburgh and Glasgow, no one outside the universities was accepted as a lecturer, unless he had a proper museum to enable him to fulfil the requirements of the licensing bodies. Lectures in London and Dublin were also accepted, but the Edinburgh bodies had no control over them. It was highly important that all the bodies should have the assurance that the teaching in all the schools was, if not of an uniform standard, at all events of an uniform quality; and that could only be attained by the action of the Council. He had heard rumours of a case, in which a lecturer on operative surgery had announced a course of lectures, and had turned up the first day, but nothing was heard of him for a week, while the corpse was going to corruption. The Council should assure itself whether there was any truth in such rumours.

Dr. QUAIN thought that attendance on lectures was, in half the cases, a waste of time. The Council had no power to visit the schools, but it might, and should, call the attention of the examining bodies to the necessity of a careful supervision of the teaching in the schools.

Mr. MARSHALL said he was of opinion that the Council could send a visitor to an university to report, both on the examination and on the course of study, but not to the medical schools. He repudiated the suggestion that London teachers did not perform their duties, and, unless proof were brought forward, no reliance should be placed on such assertions. The London College would soon become acquainted with any defects existing in the schools. The College of Surgeons had exercised its power of striking a school off its list, but it had not recently done so, because there had been no ground for interference. There was, no doubt, a great difference in regard to the materials for teaching; but the means of the smaller schools should be duly measured against the requirements made upon them. A school with twenty students did not require the same expenditure as one with a hundred students; but the teaching might be just as good. He saw no harm in passing the motion as an abstract resolution.

Mr. MACNAMARA said it was true that the Council had no legal power to inspect the schools; but no school in London would refuse to admit a gentleman sent by the Council, and good might be done by inquiries made by the Branch Councils. The College of Surgeons in Ireland, when the Carmichael School was established, found that their own facilities for teaching some subjects were not so good as those in the school, and they accordingly set to work to improve their means; and he thought it likely that a similar result would follow elsewhere.

Mr. TEALE regarded the mere fact of the motion being brought forward and discussed as a valuable proceeding, even if no further action were taken. If steps were taken in the direction indicated, the members of the Council would be brought into contact with the hard-working junior teachers, and it would be seen that examinations were, to a growing extent, spoiling study, the students having no time except to prepare for the examinations.

Dr. HUMPHRY, after reminding the Council that ten years ago he brought the same subject forward, said that examinations should not be regarded simply as tests, but also as directions for teaching. Every question set should be a guide to the teachers in the schools. The best mode of repletion in teaching was depletion, and he had sometimes been asked by students if he could not give them a whole course of teaching by examinations. At the present day, the tendency was to run rather too much into practical matters, while theory was not sufficiently attended to. He believed that the proposed visitations to schools would lead to their improvement.

The Council then adjourned.

Friday, June 4th.

Sir HENRY W. ACLAND, President, took the chair at 2 P.M.

Visitation of Medical Schools.—The Council resumed the debate on the motion of Dr. Haughton on the visitation of schools, which, after some remarks by Dr. STRUTHERS, Dr. PETTIGREW, and Dr. HALDANE, was agreed to *nem. con.*

The Rev. Dr. HAUGHTON moved:

"That visitors be appointed by the General Medical Council to visit the several medical schools (with their permission) in each division of the kingdom, and to report upon their methods of teaching the subjects required by the licensing bodies."

The object of the motion, he said, was to give effect to the resolution just passed by the Council. It would, he thought, be unpleasant and invidious for the universities or corporations to conduct the proposed visitation. He suggested that it should be undertaken by each Branch Council in its own division, with the assistance of a representative from each of the other two divisions. The moral weight of the visitation would thus be increased, and all delicacy and difficulty would be removed.

Dr. HERON WATSON seconded the motion, suggesting that the inquiry should be carried out with greater economy than had hitherto been observed in the visitations. Members of the Council on the spot would, he thought, take their share of the work without reference to cost; but members from a distance would, of course, have to be paid. He also suggested that the subject should be referred to a committee, to report upon the best mode of carrying out the inquiry.

Dr. AQUILLA SMITH supported the motion, and proposed that the investigation should also include teaching appliances.

This suggestion was adopted by Dr. HAUGHTON and Dr. HERON WATSON, and permission was given to add to the motion the words, "and upon the appliances possessed by them for such purpose."

Dr. QUAIN thought that the Council ought not to make regulations which it might not have funds to carry into effect. The proposed inquiry would, he thought, cost £1,500 or £2,000.

Dr. STRUTHERS moved, as an amendment:

"That the Council, having had under consideration the subject of visiting and reporting on the methods of teaching, resolves to communicate with the several licensing bodies, and to ask for information as to the means taken by them to secure the best methods of teaching."

Dr. QUAIN seconded the amendment.

Dr. MATTHEWS DUNCAN thought it would be unworthy of the Council to consider the subject of expense, having £33,000 in hand.

Mr. MARSHALL, Dr. CHAMBERS, and Mr. TEALE supported the amendment.

Dr. HAUGHTON said that the corporations and universities had not done their duty in the matter, and he declined to put upon them the responsibility which belonged to the Council, and which it ought not to shirk. At present, certificates of lectures and hospital attendances were often granted without any guarantee that such attendances had ever been given.

Mr. SIMON supported the amendment, and said that the real check on a medical school was to be found in its own commercial interests. Where there was a proper system of examination, a school that did not properly educate its students would not pay.

Dr. PETTIGREW suggested that, if the schools were informed that, at a certain date, the visitations would begin, they would soon set themselves in order, and supply any deficiencies that might exist.

Dr. HUMPHRY said he should protest against any visitor attending one of his own lectures, with a view of reporting upon it to the Council. He should not object to any inquiry into the plan adopted, but should object to an inquiry into the manner of teaching adopted by individual teachers.

Dr. HAUGHTON said that that was not the intention of the motion.

The amendment was put, and negatived, 10 voting in its favour, and 11 against.

The PRESIDENT called attention to an elaborate report on the subject by a committee, of which Mr. Syme was chairman, the object being purely to seek information from the best authorities, and not to criticise. The arrangements for teaching, and the appliances in medical schools, had immensely improved during the last thirty years; but he had known of many instances where, from sheer ignorance, the managers of institutions would not provide the necessary funds for proper appliances. It was for the Council to decide whether they would carry out the proposed inquiry in a critical spirit, or simply with a view of obtaining trustworthy information.

Dr. Haughton's motion was then put, and carried by 13 votes against 4.

A committee was then appointed, on the motion of Dr. HERON WATSON, to consider and report upon the best system by which the visitation of the schools could be carried out. The committee consisted of Dr. Haughton, Dr. Humphry, Dr. Chambers, Dr. Struthers, and Mr. Marshall.

A Library of Reference.—On the motion of Mr. MARSHALL, seconded by Dr. A. SMITH, the Registrar was empowered to collect the various Acts of Parliament, Reports, Bills, etc., in England and the Colonies, and other suitable works and documents, to form a library of reference, to be available to members of the Council, and other persons receiving the permission of the Registrar.

Consolidation of the Funds of the Branch Councils.—Mr. MACNAMARA moved: "*a.* That the invested funds of the several Branch Councils should be consolidated into one capital fund, vested in trustees, on behalf of the General Medical Council. *b.* That the Local Registrars should continue, as at present, to register and receive registration fees in their respective localities, but should, without loss of time, transmit such fees to the Medical Registrar when they amount to ( ). *c.* That the Treasurers of the General Medical Council should transmit, from time to time, to the Registrar for Scotland or Ireland, such sums as may be necessary to defray the current expenses of the local offices. *d.* That the salaries of the Registrars of the Branch Councils for Scotland and Ireland should be paid by the Treasurers of the General Medical Council. *e.* That fees for attendance on Branch Councils should also be paid by the Treasurers of the General Council, at the end of each current year." The General Medical Council, he said, was a very poor body, receiving only a small income. The amounts received by the Branch Councils, for registration, were very disproportionate, and they contributed a percentage towards the expenditure of the General Council. The amount now standing to the credit of the English Branch Council was £33,000, in consols; of the Scottish Branch Council, £3,800; and of the Irish Branch Council, £1,869. It appeared that 3,223 names had been recorded in the *Register*, by the English Branch Council, in virtue of qualifications obtained exclusively in Scotland and Ireland. The explanation was that students, after they had completed their education, sought assistantships in England, and, as registration was required for that purpose, they went to the English Branch Council, and paid over £5, which ought to have been given to the Scotch or the Irish Branch Council. In 1860, a committee of the Council had called attention to the circumstance that, under the Act, it was possible that so large a proportion of the registration fees might be paid into the fund of any one Branch Council, as to leave the others without sufficient funds to carry out the objects of the Act; and they recommended in their report, that all monies should be paid into one common fund, from which all the expenses of the General and Branch Councils should be defrayed, subject to the supervision and approval of the General Council. The matter came before another Committee in 1878, in consequence of a letter sent to the Council by Mr. Peel, and the present motion was identical with the recommendation of that Committee. In the event of the Bill before Parliament becoming law, great expense would have to be incurred in the visitations contemplated under it, and the funds of the Irish and Scotch Branch Councils would soon come to a vanishing point unless some special means were provided in the Bill, and the work would consequently collapse. When they thus became bankrupt, it was obvious they could not longer contribute to the required percentage. He was authorised to state that, if the Council accepted his resolution, an amendment would be introduced into Sir Lyon Playfair's Bill to that effect.

Dr. HERON WATSON seconded the motion.

Mr. SIMON considered it would not be right for the Branch Councils to dip their hands in the common funds, unless the General Council had some control over their expenditure.

Dr. QUAIN said the other Branch Councils had no more right to touch the funds of the English Branch Council than to interfere with his own private income. From 1860 to 1886, the Irish invested funds had diminished from £3,120 to £1,870; while, during the same period, the Scotch funds had increased from £2,000 to £3,300. The Irish had, therefore, been very extravagant, and no doubt it would be a delightful thing if they could draw upon the English fund. Why did they hold six meetings at an expense of £76 to consider the Medical Bill?

Dr. A. SMITH supported the motion, and stated that the first annual account showed that the total receipts of the English Branch Council were then £26,000, while those of the Irish Branch Council were £4,400, and of the Scottish £3,700.

The motion was lost, the numbers being nine for and ten against.

The Council then adjourned.

Saturday, June 5th.

SIR HENRY W. ACLAND, President, took the Chair at 1 P.M.

Report of the Pharmacopœia Committee.—This report stated that, of the edition of 20,000 copies of the *Pharmacopœia* of 1885, 18,430 copies had been disposed of. It would, therefore, be necessary to prepare for a reissue of the work; and the Committee recommended that the Executive Committee be authorised to take the necessary steps. The Committee recommended that the *Errata* contained on slip issued with the first reprint of the *Pharmocopœia* be inserted in the text of the work, together with some further *errata* now submitted to and approved of by the Committee. They further recommended that the slips of *Errata* be kept in stock for distribution to former purchasers of the work, and for insertion in the still unsold copies. With reference to the proposed annual report on such changes or additions as might be required, that so short an interval had elapsed since the publication of the work, that it would be undesirable to submit a report until next year. The sum of £2,713 8s. 5d. had been expended on the production of the present edition of the *British Pharmacopœia*, and £3,194 12s. 11d. had been received from its sale.

Dr. QUAIN, in moving the adoption of the report by the Pharmacopœia Committee, said that the sale of the *Pharmacopœia* had resulted in a large profit. If such a rapid sale had been anticipated, the Council would have been justified in charging a smaller sum for it. When the previous *Pharmacopœia* was issued, an honorarium of £500 was voted to the Committee, but he hoped that nothing of the sort would occur on the present occasion.

Dr. AQUILLA SMITH seconded the motion, which was agreed to.

Sir Dyce Duckworth was appointed a member of the Pharmacopœia Committee.

Report of the Finance Committee.—The report of the Finance Committee was also adopted. It stated that the income of the General and Branch Councils for the year 1885 had been £11,113 8s. 9d., an amount which exceeded by £2,689 6s. 6d. the income for 1884. The expenditure during 1885 had been £12,083 16s. 4d. The expenditure during the past year had been in excess of the income by £970 7s. 7d. The largest item of increase had been that caused by the publication of the new edition of the *British Pharmacopœia*. This excess amounted to £2,279 18s. 3d., which was in process of being recouped. The expenditure involved by the Visitation of the Final Examinations of the Universities represented an increase of £2,207 14s. 4d. An increase in expenditure had also been incurred, to the amount of £198 7s. 6d., on account of the investigations of the Statistical Committee. In Law Expenses, there had been an increase of £159 10s. 11d. In General Printing, there had been an increase of £54 6s. 7d. The only items which showed a diminished expenditure for the year 1885, as compared with 1884, were a decrease of £110 1s. 8d. in fees to members of the Executive Committee, in consequence of fewer meetings having been held, and a decrease of £62 in the fees paid to members of the General Council. The receipts of the Dental Registration Fund were £507 13s. 2d., and the expenditure £713 15s. 10d. The deficiency of income for the year amounted to £206 2s. 8d., as compared with a deficiency of £310 4s. 10d. in 1884.

Report of the Statistical Committee.—Mr. MARSHALL presented this report, which was adopted. It stated that, by the continued labours of the Registrar, assisted by the accurate statist whose services were engaged last year, tables corresponding with those already published for the year 1871 had been prepared for the years 1872 1873, 1874, and 1875. It was recommended that these tables should be published in the form of an appendix to this year's volume of the *Minutes*. It has been found desirable, for the sake of accuracy, to make some slight additions to, and corrections in, the data and the summary given for the year 1871. It was proposed, in the interval between the present and the next meeting of the Council, to prepare, on the lines of the summary for the year 1871, a review of the statistical results of the several years of the entire quinquennium, and also a comparison between those of the first and the fifth year. The 250 copies printed of the first report had nearly all been distributed (or sold), a fact which attested the general interest taken in the inquiry which has been intrusted to the Committee.

Preliminary Examinations.—Dr. STRUTHERS moved:

"That it is desirable that the Council should have information, so far as possible, as to the standard of attainment required in the several subjects included in the various preliminary examinations recognised by the Council as qualifying for admission to the *Medical Students' Register*, as by the inspection of the examination-papers and of a selection of the answers of candidates; and that it be delegated to the Executive Committee to make the necessary arrangements for carrying out this resolution."

The motion was not seconded.

Monday, June 7th.

Sir HENRY W. ACLAND, President, took the chair at 2 P.M.

Visitation of Examinations.—Mr. MARSHALL brought up an *interim* report from the committee on the visitation of examinations, a fuller analysis being deferred to a future meeting of the Council.

The Council went into committee on the report.

Dr. CHAMBERS, speaking for the University of Oxford, said that the visitors had in some cases based their judgment on single samples of examinations; and those, it had been said, not always fair ones. He had made out, from the *Medical Register* and the *Medical Directory*, a list of the men of mark, dividing them according to the universities from which they came. The percentage of men of mark among the graduates of all the universities was 5.2, while among the general body of practitioners it was very nearly 3. The percentage of Oxford was 32.4. The best pupils would always chose the best examinations.

Dr. MATTHEWS DUNCAN thought that the Council had only to deal with the universities as licensing bodies.

Dr. CHAMBERS said that the classical paper, referred to by the visitors as set at the Oxford examination, was but a survival from the past, and would probably soon disappear, together with the custom of requiring candidates to write prescriptions in full. The surgical examination had not yet got into order, but steps were being taken to make it adequate to the requirements of the case.

Mr. TEALE said that, the period of transition having ceased, it had now been determined at Oxford, not only to examine fully in surgery, but to give a special degree in it. It so happened that, at the last examination, all the candidates were Members of the College of Surgeons; and it had been mooted by the authorities whether all their graduates should not be required to pass a conjoint examination of the Colleges of Physicians and Surgeons. He thought that the examining powers ought to be economised, and many routine matters taken for granted, or testimonials accepted from other boards.

Dr. HUMPHRY, speaking in reference to the Cambridge examinations, said that, since the report of the visitors, the authorities had decided that, in future, clinical surgery should form a subject in the examinations for the M.B. degree, and that candidates should be required to attend twenty instead of ten midwifery cases. The majority of the M.B. candidates did not pass on to the degree of Bachelor of Surgery, but he hoped that they would do so as surgery became more and more developed.

Dr. HERON WATSON expressed his satisfaction at the reluctance of the Cambridge authorities to sanction gynæcological examinations by candidates in the presence of examiners.

Dr. PYLE said that, as the report of the visitors of the Durham examinations was so favourable, that he had no remarks to make upon it.

Sir DYCE DUCKWORTH thought that the Durham examination of fifteen-year practitioners was the least satisfactory part, and required to be strengthened.

Dr. HERON WATSON thought that the visitors had nothing to do with the examinations for higher qualifications, and that some of them had exceeded their duty in inquiring into those examinations.

Mr. MACNAMARA considered that the Council was entitled to know under what conditions the higher qualifications were conferred.

Dr. HERON WATSON said that, in that case, it would be necessary to visit the examinations for the Fellowship of the College of Sur-

geons and Membership of the College of Physicians, which would be a serious and costly undertaking.

Mr. MARSHALL said that the Committee had in their report called attention to the fact that some of the visitors had exceeded their instructions.

Dr. STRUTHERS said it appeared that the school of medicine of the Durham University was at Newcastle, and it was not necessary for the students to reside at Durham. He thought that residence should be a primary condition of university education.

Dr. QUAIN said that students could attend the Newcastle school and yet reside at Durham. The great thing, after all, to be relied upon, was a thoroughly good examination.

Dr. A. SMITH said he thought that the visitors were fully entitled to visit the examinations for higher qualifications.

Dr. QUAIN referred to the remarks of the visitors on the examinations of the University of London. It had been stated in the report, that the examiner was not present to observe the mode in which the candidate conducted his clinical examination. It was the rule of the University that the candidate should be left unembarassed during that part of his examination, and be required to furnish an independent report upon the diagnosis and treatment. As to the statement of the visitors, that sufficient time was not given in certain cases, and that the answers were mere guesses, that was a mere idle piece of criticism, the guesses being perfectly plain ones. With reference to the suggestion, that there should be a more complete examination in surgery for the M.B. degree, that had been accepted by the authorities.

Mr. MACNAMARA said that the visitors had specially noticed the want of supervision on the part of the examiners, and they regarded, as a great defect, the entire abscence of curricula. There was no *vivâ voce* clinical examination in clinical medicine, and candidates were not asked the grounds on which they arrived at their diagnoses. Another feature noticed was that there was no test as to the use of instruments and appliances.

Mr. TEALE said it was very important that some common decision should be arrived at as to the general lines on which clinical examinations in surgery and medicine should be conducted.

Dr. QUAIN said that, during the clinical examinations, the examiners usually went round the wards three times every half-hour. All who passed at the last examination would have passed at the College of Surgeons—a statement that was endorsed by Sir James Paget and two Fellows of the College of Surgeons. Five years' medical study was required; but it was left to the students to attend the best lectures they could on six subjects. That was much better than listening to the dogmata of those who had an interest in the fees paid for lectures.

Mr. SIMON said that the students who went to the University of London, for medical qualifications, must previously have matriculated there.

Dr. HUMPHRY expressed his great surprise that there was no *vivâ voce* clinical examination in medicine.

Mr. MACNAMARA said it was simply impossible, in three hours, to examine thoroughly thirty-six candidates. The visitors considered that the surgical part of the examination was insufficient as a test of fitness for practice.

Dr. HUMPHRY, in reply to Dr. Quain, said that at Cambridge, surgery had been required for the M.B. degree for more than ten years.

Sir DYCE DUCKWORTH alluded to the great importance of oral examinations.

Dr. QUAIN said that the authorities of the London University had freely admitted that oral examination might be extended with advantage, and that more surgery might be included in the M.B.; but, was it worth £370 to bring that out?

Dr. STRUTHERS thought it was worth that sum to find out the University of London. It might be desirable to have one institution like the University of London, where residence was not required, to meet special cases; but, in such an institution, the examinations should be thorough. The examiners were highly paid, and the work ought to be well done; but he was amazed at some of the revelations in the visitors' report. The authorities (in violation of what had been laid down by the Medical Council) appeared to sanction the principle of "compensation;" for certain candidates, who were marked in some subjects as "doubtful," "very doubtful," and even "bad," were allowed to pass. As to the clinical examinations, the visitors reported that they were unsatisfactory as a reliable test of practical capacity, and inferior to similar examinations elsewhere. They also thought that more prominence and value ought to be given to oral examinations; and disapproved of there being no clinical examination in surgery for the M.B. degree. In Scotland, they never had a Bachelor of Medicine degree without a surgical examination. The visitors had called attention to the absence of tests as to bandages, splints, etc.; and to the fact that attendance on twenty labours was all that was required in the obstetric examination, the student not being compelled to attend a course of lectures on obstetrics or gynæcology. As to midwifery, the visitor reported that he was much disappointed with the average quality of the candidates, although the examinations were not above the average severity. Scotch universities had been visited from London, and severely criticised; but now the tables were turned; for the painful result came out that the London University did not come up even to the standard of the despised corporations of the North. It was, in fact, discredited even in the house of its friends.

Dr. QUAIN, in reply, said that the report of the visitors, after all, only contained expressions of opinion, to which he would simply oppose facts. Its examinations had been complained of by students as too strict, and they had declared that, if they were not reduced, they would have to go to Scotland, where they could pass more easily. Nothing had been criticised which did not admit of a satisfactory answer, except in reference to two points, on which the visitors' recommendations would be followed by the University. They had the best examiners in the world, and it was a matter of regret that they had to reject so large a number of candidates. The Scotch system of a teacher examining and licensing his own pupils was a great scandal.

The PRESIDENT, in putting the motion (by Dr. HERON WATSON) for the adjournment of the debate, commented on the good humour which had been manifested in the criticisms passed on the examinations. The Council, he said, had deliberately resolved that the different divisions should be reported on by each other, not with a view to unfriendly criticism, but in order to get the benefit of the experience of all the divisions.

The debate was adjourned.

Tuesday, June 8th.

Sir HENRY W. ACLAND, President, took the chair at 2 P.M.

New Member.—Dr. D. C. McVail took his seat as representative of the Faculty of Physicians and Surgeons of Glasgow, in the room of the late Dr. Scott Orr.

The Medical Bill.—The PRESIDENT, in opening the proceedings, said it was impossible to say what the fate of the Medical Bill would be, but, at all events, the mass of information before the Council would be increased by the autumn session, so that there would be ample work to be undertaken then.

Visitation of Examinations.—The Council resolved itself into Committee to continue the consideration of the report by the visitors at the university examinations.

The PRESIDENT said he had visited the representative of the University of London, Sir William Gull, who said he should like to see the universities so associated with the practical bodies in London, that those who passed the matriculation examination and the preliminary scientific examination should, with the co-operation of the College of Physicians and the College of Surgeons, be able to obtain their degree. It would certainly be suggested to the University of London that they should make some such proposals to the Colleges of Physicians and Surgeons as would tend to promote scientific and practical education throughout the country.

Dr. HERON WATSON said that, at the University of London, it appeared that a student might go up for examination for the M.B. without having attended a course of lectures on descriptive and surgical anatomy, or any course upon surgery and medicine. The regulations did not even ensure the requisite attendance of students upon lectures or on subjects that were absolutely essential.

Mr. MACNAMARA hoped that the Senate of the University of London would try to improve the arrangements. The purely scientific examinations were fully up to the mark, but the important object was to secure a good sound professional education.

Dr. QUAIN, in answer to a question by Mr. MARSHALL, said he had no doubt that the University of London would introduce clinical examinations in surgery.

Mr. SIMON was of opinion that the fact that a candidate was passed whose mark in obstetrics was "reject," was a contravention of the recommendations of the Council, and of the regulations of the University itself, which ordered that a competent knowledge must be shown in all the subjects of examination. He, however, sympathised with those who doubted the wisdom of enforcing compulsory attendance on lectures.

Dr. MATTHEWS DUNCAN did not at all believe that medical education could be carried on without lectures. If it were true that there

was not so much desire in London for lectures as in Scotland, it was because appetite had not been stimulated by satisfaction. If good lectures were delivered, the students would diligently attend them. Formerly, if a man were rejected in midwifery at the University of London, he was rejected altogether; and he wished to know if there had been any change in that system?

Dr. QUAIN said there had been no change.

Dr. DUNCAN said there was this fault with regard to the University of London, that, in a year of bad men, a bad man might easily get into the first class, while, in another year, good men might find themselves in the second class.

Dr. QUAIN said that the best test of the efficiency of the University of London was the actual results. He had looked through the list of Fellows of the College of Physicians of London, and he found that 70 of them came from the University of London, 30 from Cambridge, 28 from Edinburgh, 24 from St. Andrew's, 22 from Oxford, 11 from Aberdeen, 6 from Dublin, 5 from Glasgow, 1 from Durham, and 17 from foreign universities; while several eminent surgeons, among whom were Sir Joseph Lister and Sir Henry Thompson, belonged to the University of London. No institution had sent out a more distinguished body of men.

The Rev. Dr. HAUGHTON considered that the state of the law was mainly to blame for the faults of the London University, and, when the law was changed, a severer practical test would be applied in medicine, surgery, and midwifery.

The Committee then proceeded to consider the report on the University of Edinburgh.

Dr. STRUTHERS pointed out that the visitors had said that the surgical appliances used in anatomy were behind the times, and rather old-fashioned, but the University had given a complete reply to that statement.

Dr. QUAIN mentioned that three of the most distinguished professors of the University of Edinburgh—Professor Crum Brown, Professor Greenfield, and Professor Turner—belonged to the University of London.

Dr. HERON WATSON thought it was a serious blot on the examinations that the teachers examined their own pupils. Such a system compelled students to attend the courses of lectures given by their teachers, in order to become acquainted with their peculiar methods and ideas.

Dr. MCVAIL suggested that the Council might refuse to register any qualification granted when the students were examined by their own teachers.

Dr. PETTIGREW approved of the system of having an equal number of professional and non-professional examiners.

Sir DYCE DUCKWORTH had been for five years an examiner in the University of Edinburgh, and was of opinion that the work there was carried out in the most satisfactory manner. The best system was where independent examiners acted in conjunction with a professor, but the extra examiner should never become the creature of the professor. He had never had any occasion to remonstrate on any matter that was not immediately attended to. It was becoming a most serious question, that Edinburgh was drawing so many students from all parts of the world, that she was slowly being asphyxiated. The difficulties of teaching and examination were becoming stupendous, because of the impossibility of finding clinical material with which to educate the masses of students.

Dr. MATTHEWS DUNCAN considered that a great deal of the success of Edinburgh arose from the excellence of its teaching. There was an abundance of obstetrical material there, and the students had to pass through the Maternity Hospital.

Dr. HALDANE said that the non-professional examiners had frequently been assistants to the professors, and, therefore, naturally deferred to them.

Dr. PETTIGREW agreed that it would be better if the non-professional examiners were appointed by an independent body.

Dr. STRUTHERS said the style and tone of the teaching in a university could not be maintained unless the professors were also examiners; but he would approve of the Crown or the Medical Council appointing the outside examiners.

Mr. MACNAMARA said the visitors were of opinion that the competency of the candidates in practical surgery was not sufficiently tested, there being no examination in operations on the dead subject. There was also no living body present, on which the student could be required to show how to compress one of the large arteries. At the time of the visitation, too, there was no ophthalmoscope or laryngoscope in the room.

Dr. STRUTHERS said that the visitors were only present when eleven candidates were examined out of 230. After all, it was the teaching that was of importance, and no student was examined in anatomy at the University who had not carefully dissected a whole body. The use of the ophthalmoscope and the laryngoscope was systematically taught.

Dr. MCVAIL considered that the custom of employing teachers as examiners in Glasgow greatly hindered the utilisation of the clinical material available there.

Dr. HERON WATSON said that, some years ago, a committee was appointed with reference to the supply of dead bodies, but the report was not made public.

The report of the visitors to the University of Glasgow was next discussed.

Mr. MACNAMARA approved of the manner in which the examination in surgery was conducted at Glasgow; but he thought, if it were clearly proved early in the examination that a candidate could not pass, it was a waste of time to continue to examine him in other subjects.

Dr. PETTIGREW thought that, if a man passed well in other subjects, but failed in obstetrics, he should be permitted to come up again in that subject without going through the other examinations again.

Dr. BANKS said that the plan recommended by Dr. Pettigrew was adopted at the Royal University of Ireland.

Dr. HERON WATSON supported the principle of permitting students to take their examinations as they chose.

The debate was adjourned.

Wednesday, June 9th.

Sir HENRY W. ACLAND, President, took the chair at 2 P.M.

The Medical Acts Amendment Bill.—The PRESIDENT said he was able to state that it was the intention of the Government, if possible, to get the Medical Bill passed during the present session.

Visitation of University Examinations.—The Council resumed, in committee, the adjourned debate on visitations of the university examinations.

Dr. MCVAIL alluded to the report on the University of Glasgow, and attributed the waste of clinical material for the students to the fact of their not being properly distributed throughout the hospitals, and their non-attendance at the schools of extramural teachers, who took no part in the examinations. He expressed his belief that, until the present system was changed, there would not be a proper utilisation of the great clinical field existing in Glasgow. He knew of no case in which an extramural lecturer was also an examiner, except for pathology.

Dr. PETTIGREW could not believe that the examiners rejected candidates on the ground that they did not attend their lectures. There was, no doubt, a certain difficulty with regard to the assessors, but it might, perhaps, be obviated by their being appointed by some independent body.

Dr. CHAMBERS said it was almost impossible for the University of Glasgow to elect as examiners those who had not been teachers there. He had found, from the list which he had compiled, that there had been thirty-three men of eminence among the Glasgow graduates, as compared with 134 in the London University, the total number of graduates being about the same.

Sir DYCE DUCKWORTH said that the smaller of the two hospitals in Glasgow (the Western) attracted the majority of the students because it was close to the University Buildings. The examiners ought, of course, to be absolutely above suspicion; and, if they were not appointed in a satisfactory way, the matter ought to be taken into consideration by the Council. The extra-examiners, as a rule, were very poorly paid.

Dr. HERON WATSON characterised the practice of appointing teachers to be examiners as a serious blot on the Glasgow system.

Mr. TEALE suggested the payment of the students' fees into a common fund, out of which the teachers should be paid according to some definite arrangement.

Mr. SIMON considered that students were largely attracted to the Scotch universities by their monopoly of certain titles to which they had no exclusive right. It was disastrous that such titles should be sought and given for mere market purposes.

Dr. PETTIGREW contended that the students went to the universities because of the superior teaching. Students in Edinburgh, he said, often attended the classes of an extramural teacher when the regular professor was an indifferent one.

Dr. MCVAIL said that Glasgow students, who attended outside classes, also went to the university professor and paid him his fee.

Dr. STRUTHERS said that the Scotch Universities would consent to the appointment of outside examiners by an independent body. He

repudiated the suggestion of Mr. Simon as to the reason why students went to Scotland, and maintained that the real reason was to be found in the superiority of the teaching.

Dr. PETTIGREW upheld the Scotch system of appointing teachers to take part in the examination, maintaining that it conduced to good teaching, as shown by the good men who were turned out under it. The universities, he had no doubt, would be willing to concede the point as to the appointment of the extra examiners by an independent body.

Dr. HERON WATSON objected to the application of the term "grinder" to one who prepared pupils for a licensing body, any more than to one who prepared them for a university examination. There had been a strong outcry in Scotland at the composition of the University Court, as not fairly representing anything but the professors. In coming days he thought that such antiquated institutions would be swept away altogether, and their funds applied in a more suitable manner.

Dr. HUMPHRY thought that the deficiency in clinical examination in Edinburgh was owing to the deficiency in the number of examiners; but, if it were proposed to exclude the professors, he hoped the Scotch universities would resist the proposal. The teaching of anatomy in the Scotch universities had never been equalled, and it was from Scotland that he brought the secret which was turned into active influence in England when the Anatomy Bill passed. When the English universities had nearly allowed the subject of medicine to slip from their grasp, the Scotch universities held tightly on.

The PRESIDENT also expressed his high sense of the value of the teaching in the Scotch universities.

Dr. STRUTHERS then referred to the report on the University of Aberdeen. He explained that the visitors had visited at the second period of the examination in the summer, when rejected candidates came up again. As to the system of partial passes condemned by the visitors, Mr. Holden, who wrote the report, ought to have known that that system had been sanctioned in connection with the joint examinations in the London Colleges.

Mr. MARSHALL said that Mr. Holden had left the Council of the College of Surgeons before the conjoint scheme was established; and, even had he known of the regulation in question, he might have disapproved of it.

Dr. QUAIN directed attention to the criticisms of the visitors on the insufficiency of the practical element in the curriculum, and the large number of lectures; also to the circumstance that the surgical examination was considered too superficial, and the judgments too lenient. Candidates were not required to do any operation on the dead body, and they were inadequately tested in bandaging and surgical appliances. Mr. Holden also reported that some of the candidates were admitted to the degree of Master in Surgery on rather too easy terms.

Mr. MACNAMARA said that the students were required to study anatomy only six months, and midwifery three months, at a hospital, with the alternative of a certificate of attendance on six cases. He suggested that, on these and other points, the authorities should bring about a much needed improvement.

Dr. HERON WATSON called attention to the fact that, while the University accepted the arts education of any other university, it did not act in the same liberal spirit with reference to any part of medical education.

Dr. CHAMBERS expressed his belief that the University of Aberdeen was improving.

Dr. STRUTHERS replied to the strictures on the University of Aberdeen, contending that they were uncalled for, except as to the surgical examination; as to which, he said, the recommendations of the visitors had been accepted by the authorities, who were willing to make a change. He maintained that the university was a hard-working one; and, on the whole, the visitors had reported upon it very favourably.

Dr. PETTIGREW, dealing with the report on the University of St. Andrew's, said it contained some statements which were not in accordance with the facts. The University gave a medical degree under two conditions—first, M.B. or M.C. to young men who had attended there two years and two years elsewhere, or four years there; secondly, ten M.D.s annually to registered practitioners over 40 years of age. The candidates for the latter came from all parts of Her Majesty's dominions. They had to bring testimonials from eminent medical men as to their fitness for the degree, and were then examined, there being seven examiners for the ten candidates. The visitors said that the most serious defect was the absence of a clinical examination, but as the candidates were already on the register, and were over 40 years of age, it was difficult to see why such an examination should be required of them. As a proof that St. Andrew's was doing useful work in giving this degree, he claimed that they, perhaps, had a higher percentage of eminent men as medical graduates than any other university.

Dr. CHAMBERS said that the percentage of eminent men from St. Andrew's was only 2.3, while at Cambridge it was 25.7, at Dublin 11, at the London University 13.1.

Dr. MATTHEWS DUNCAN considered that the testimonials were not of much importance, and mentioned a case that occurred when he was an examiner at St. Andrew's, in which a gentleman was uncompromisingly rejected in midwifery, though he had credentials from two very eminent men as to the possession of a splendid knowledge of the subject.

Mr. MACNAMARA said the returns supplied to the Medical Council showed that in seven years, sixty-eight candidates passed, and only two were rejected. At the examination, there was a plentiful supply of re-agents and specimens, but, as a matter of fact, none of them were used. The difficulty with regard to the clinical examination was that there was no hospital at St. Andrew's; but that might be got over by the candidates stopping at Edinburgh on their way down, and being clinically examined there.

The Council then adjourned.

Thursday, June 10th.

The consideration of the cases of the Dublin University and the Royal University in Ireland, this afternoon, completed the discussion on the *ad interim* report of the Committee on the Reports by the Visitors of the Final Examinations.

At 4 o'clock, in the Tea-Room, the Honorary Fellowship of the Royal College of Surgeons in Ireland was presented to Mr. Marshall by Dr. Haughton and Mr. Macnamara, in recognition of his valuable contributions to surgical science.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.
ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, CANCER OF THE BREAST,
OLD AGE, THE VALUE OF HAMAMELIS,
THE VALUE OF PURE TEREBENE.

Memoranda on the above, and forms for recording individual cases, may be had on application.

The inquiry on Acute Rheumatism is now closed, as the printing of the Tables is completed. *Any cases, of which Reports are sent by June 1st, will be added to the Tables.*

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into THE THERAPEUTIC VALUE OF HAMAMELIS AND PURE TEREBENE have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to

the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

South Indian Branch.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary.—J. Maitland, M.B., Honorary Secretary, Madras.

Southern Branch.—The thirteenth annual meeting will take place at Gosport on Wednesday, June 16th, 1886. The general meeting will be held at the India Arms Hotel, at half-past twelve. Luncheon will be provided by the President-elect between twelve and one o'clock. In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers or other communications are requested to forward at once the titles to the Honorary Secretary. No communications must exceed ten minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect (Dr. Kealy) at half-past 2 P.M. During the afternoon, the members are invited to visit the Royal Naval Hospital, Haslar, and to take a carriage-drive in the neighbourhood. The dinner will take place at the India Arms Hotel, at 6 P.M.; charge, 6s., exclusive of wine, etc. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Mr. Gregory Kealy Forton, Gosport, on or before Tuesday, June 15th.—J. Ward Cousins, Honorary Secretary and Treasurer.

Metropolitan Counties Branch.—The Annual Meeting of this Branch will be held at the Holborn Restaurant, on Tuesday, June 29th, at 5.30 P.M. President: Walter Dickson, M.D.; President-elect: John S. Bristowe, M.D., F.R.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine.—Alexander Henry, M.D.; W. Chapman Grigg, M.D., Honorary Secretaries.

South-Wales and Monmouthshire Branch.—The annual meeting will be held at the Infirmary, Cardiff, on Thursday, July 8th. Members wishing to read papers should send titles before June 20th. Gentlemen wishing to join the Branch or Association should send notice before July 7th.—A. Sheen, M.D., D. A. Davies, M.B., Honorary Secretaries.

Birmingham and Midland Counties Branch.—The Annual General Meeting of this Branch will be held on Tuesday, June 29th next, in the Medical Institute, Birmingham. An address will be delivered by the President, S. H. Agar, Esq. The annual dinner will take place at the Grand Hotel, Colmore Row, at 6 P.M.; dinner tickets, exclusive of wine, 5s. each.—Alfred H. Carter, M.D., 21, Temple Row, Birmingham; Robert Saundby, M.D., 83, Edmund Street, Birmingham, Honorary Secretaries.

North Wales Branch.—The annual meeting will be held at Festiniog, in the first or second week in July. Members having cases to communicate, or papers to read, or who wish to propose new members, should advise the Secretary on or before the 21st instant.—W. Jones-Morris, Portmadoc, Honorary Secretary.

Yorkshire Branch.—The annual meeting will be held in the Town Hall, Bradford on Wednesday, June 30th, at 3 P.M. Gentlemen intending to read papers are requested to communicate with Arthur Jackson, Sheffield.

Cambridge and Huntingdon and East Anglian Branches.—There will be a combined meeting of these Branches at Ipswich on Friday, July 9th, under the presidency of Dr. Elliston. It is requested that early notice of intended papers, or other communications, be given to one of the Secretaries: B. Anningson, M.D., Cambridge; M. Beverley, M.D., Norwich; W. T. Jackman, Coggeshall; W. A. Elliston, M.D., Ipswich.

Border Counties Branch.—The nineteenth annual meeting of this Branch will be held at the Grand Hotel, Whitehaven, on Friday, June 25th, at 1 P.M., under the presidency of Mr. C. S. Hall, Carlisle. A Council meeting will be held at 12.50. The usual election of office-bearers for the year will take place, the Council will present their report, and the meetings for the year have to be fixed. The President-elect, Dr. Eaton, Cleator Moor, will deliver his inaugural address. Dr. Welby l'Anson, Whitehaven, will read notes of a case of Intussusception. Dr. J. R. Irwin, Whitehaven, will show the following specimens: Oblique Fracture of the Femur; an Aortic Aneurysm; Cystic Sarcoma of the Ovary; and a patient with Favus. Dinner at the hotel at 4 P.M., 5s. per head. The Secretary will be glad to receive notices of papers for reading, and patients or specimens for exhibition, without delay.—H. A. Lediard, 41, Lowther Street, Carlisle, Honorary Secretary.

South-Western Branch.—President, Edward Sharp, Esq., Truro; President-elect, William Powell, M.B., Torquay. The annual meeting of the Branch will be held at Torquay, on Monday, June 21st, under the presidency of Dr. William Powell. *Programme of Proceedings.*—12 to 2. Luncheon, by invitation of the President, at his residence, Hill Garden. 1 P.M. Meeting of Council at Hill Garden. 2 P.M. Annual meeting in the Natural History Society's Museum, Torwood Street. 6 P.M. Annual dinner at the Royal Hotel. The following communications, etc., have been promised: 1. Mr. J. D. Harris (Exeter): Two cases of Ovariotomy, with exceptionally low temperatures, with notes. 2. Mr. W. E. C. Nourse (Exeter): Notes on a case of Poisoning by Carbolic Acid. 3. A discussion on Rheumatism will be opened by Dr. William Henderson (Exeter). 4. Mr. J. M. Ackland (Exeter) will show a case illustrating the Mechanical Treatment of Cleft Palate. 5. A demonstration will be given by Mr. E. Burrows (of Messrs. Burroughs, Wellcome and Co.) on Physiological Experiments with Digestive Ferments (Fairchild), and a display of Freshly Peptonised Foods. Dr. Deas (Exeter) gives notice that he will move "That Rule 4 be altered so as to read as follows: 4. That, in addition to the annual meeting, intermediate meetings may be held at such places, and at such times, as may be determined by the Council; or, upon a requisition to the Secretary, signed by not less than six members residing in or near the town where the meeting is proposed to be held, provided that such meetings shall not be held oftener than once in three months, nor twice consecutively in the same place." Members intending to be present at the annual dinner are requested to give notice to the Honorary Secretary, not later than June 14th, and to enclose, with the notice, Post Office Order or cheque for 7s. 6d., when a ticket for the dinner will be forwarded.—P. Maury Deas, Honorary Secretary, Wonford House, Exeter, May 28th, 1886.

Lancashire and Cheshire Branch.—The annual meeting of this Branch will be held in the Town Hall, Lancaster, on Wednesday, July 7th, at 2 P.M. The President, Dr. Harker, will deliver an inaugural address. Subject: The Study o Nature as the Foundation of Medical Thought and Practice. The following medical and surgical communications have been promised. Mr. Walter Whitehead: Three cases of Suprapubic Lithotomy. Dr. Stewart: A paper on Provident Dispensaries. Dr. Farrar will show Gerrard's Ureometer, and give a practical demonstration of its action. Mr. Christopher Johnson: A paper on Sanitary Reform a Hundred Years Ago. Dr. Ashby will show a specimen of Congenital Biliary Cirrhosis of the Liver from an infant aged 4 months. Dr. Griffith will read a paper on Tobacco Amblyopia in Women. Dr. Walter will show an unusual form of Uterine Polypus. Dr. Davidson will read a short communication upon a Medical Subject. Dr. Charles Rayne will read a paper on General Peritonitis as an early and prominent feature in Glanders. Luncheon will be provided by the President, at the Town Hall, from 12.30 to 2 o'clock. The members will dine together at the King's Arms, at 5 P.M.; dinner-tickets, 7s. 6d. (wine not included).—Charles Edward Glascott, M.D., Honorary Secretary, 23, St. John Street, Manchester.

Midland Branch.—The annual meeting will be held at the Lincoln County Hospital, on Thursday, June 17th, at 2 P.M. After the transaction of the usual business, the following papers will be read and discussed. 1. A few words on Collective Investigation: Isambard Owen, M.D. 2. Cases illustrating recent advances in Abdominal Surgery: G. Elder, M.D. 3. Cases of Ovariotomy: T. M. Wilkinson, F.R.C.S.Ed. 4. Rare forms of Skin Disease illustrated by Photographs: H. Handford, M.D. 5. A Note on Pick's Operation for Fissure of Anus: L. W. Marshall, M.D. 6. Case of Repair of Serious Injuries in a Man, aged 81: T. Sympson, F.R.C.S. 7. Retinitis Pigmentosa affecting a whole family: W. J. Cant, M.R.C.S. 8. Notes of three cases of Intestinal Obstruction: M. Johnston, M.R.C.S. Luncheon will be provided by the President-elect at the Hospital, at 1 o'clock. Dinner at the Great Northern Hotel, at 5 o'clock; tickets (not including wine) 7s. 6d. each. Members are requested to send early notice of their intention to dine to Dr. Carline, Lincoln.—W. A. Carline, M.D., Honorary Secretary and Treasurer.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

The annual meeting was held at the Pier Hotel, Sandown, on April 28th. The chair was taken by Dr. Beaton, who read a report of the proceedings of the District during the past year, and proposed a vote of thanks to those gentlemen who had read papers and otherwise assisted in the work of the District. This was seconded by Mr. Green, and carried unanimously.

Mr. Lloyd, the President-elect, then took the chair.

A Vote of Thanks was unanimously accorded to the retiring President, Dr. Beaton.

The President-elect then read an address on Venesection as formerly practised in this, and as still carried out in other countries. A vote of thanks was unanimously accorded.

Officers.—The following officers were then elected:—*President-elect:* Dr. Williamson (Ventnor). *Vice-President-elect:* Dr. Hutton Castle, (Newport). *Honorary Secretary and Treasurer:* Mr. W. E. Green (re-elected). *Secretary to Collective Investigation Committee:* Dr. Robertson, Ventnor. *Representatives on Branch Council:* Drs. Coghill (Ventnor) and J. Neal (Sandown).

Next Meeting.—It was agreed that Newport be the next place of meeting.

The accounts were audited and passed.

Communications.—The following communications were made.

1. Dr. Robertson exhibited India-Rubber Stamps for clinical purposes.

2. Dr. Coghill gave a few notes, and exhibited exhaustive charts, showing the action of Thalline on the Pyrexia of Phthisis. The conclusions arrived at were that this remedy was of little value in these cases, and that many were the worse for its use.

Mr. Green read some notes and statistics on Thalline, as compared with Antipyrine.—Drs. Williamson and Robertson also spoke on this subject.

3. Dr. Williamson (Ventnor) read notes of a case in which alarming symptoms followed the administration of tannin, on three separate occasions, in the same patient. The symptoms included severe dyspnœa of an asthmatic character, some lividity, and slight mental disturbance, along with erythema over the head and neck. The patient was a lady, aged 57, anæmiated by copious hæmorrhoidal losses, but otherwise healthy. She had been able to take gallic acid, without any disturbance. Dr. Williamson considered that, perhaps on account of the defective oxygenating power of the anæmic blood, there must have occurred some interruption to the usual process by which tannic acid was speedily reduced in the system, and excreted as gallic and pyrogallic acids in the urine.

4. Dr. Gowers's Hæmatocytometer and Hæmaglobinometer were shown and described by Dr. Mason, of the National Consumptive Hospital.

Other papers were, for want of time, postponed until the next meeting.

Dinner.—The members afterwards dined together.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING.

THE fifty-fourth Annual Meeting of the British Medical Association will be held at Brighton, on August 10th, 11th, 12th, and 13th, 1886.

President: W. T. Edwards, M.D., F.R.C.S., Physician to the Glamorgan and Monmouth Infirmary, Cardiff.

President-elect: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President of the Council: Balthazar Foster, M.P., M.D., F.R.C.P., Professor of Medicine in Queen's College and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by Surgeon-General John S. Billings, M.D., United States Army Medical Department, Washington.

An Address in Surgery will be delivered by Frederick Abell Humphry, F.R.C.S., Surgeon to the Sussex County Hospital.

An Address in Public Medicine will be given by E. D. Mapother, M.D., Consulting Medical Officer to the City of Dublin.

The scientific business of the meeting will be conducted in nine Sections, as follows, namely:

MEDICINE.—*President*, W. H. Broadbent, M.D. *Vice-Presidents*, Frederick Bagshawe, M.D., Hastings; Joseph Ewart, M.D., Brighton. *Honorary Secretaries*, Francis Warner, M.D., 24, Harley Street, London; Henry Seymour Branfoot, M.B., 42, Norfolk Square, Brighton.

SURGERY.—*President*, John Eric Erichsen, F.R.C.S., F.R.S., London. *Vice-Presidents*, Frederick William Jowers, M.R.C.S., Brighton; John Ward Cousins, F.R.C.S., Southsea. *Honorary Secretaries*, William Johnson Walsham, F.R.C.S., 27, Weymouth Street, London; Willoughby Furner, F.R.C.S., 2, Brunswick Place, Brighton.

OBSTETRIC MEDICINE.—*President*, Alfred Meadows, M.D., London. *Vice-Presidents*, Constantine Holman, M.D., Reigate; Frederick W. Salzmann, M.R.C.S., Brighton. *Honorary Secretaries*, Charles J. Wright, M.R.C.S., Lynton Villa, Virginia Road, Leeds; Alban Doran, F.R.C.S., 9, Granville Place, W.

PUBLIC MEDICINE.—*President*, Richard Patrick B. Taaffe, M.D., Brighton. *Vice-Presidents*, Sir Charles Alexander Cameron, M.K.Q.C.P., Dublin; Charles Kelly, M.D., Worthing. *Honorary Secretaries*, W. Brown, M.R.C.P.Edin., Carlisle; William Joseph Tyson, M.D., Folkestone.

PSYCHOLOGY.—*President*, Thomas Smith Clouston, M.D., Edinburgh. *Vice-Presidents*, Charles A. Lockhart Robertson, M.D., Brighton; Joseph Raymond Gasquet, M.B., Brighton. *Honorary Secretaries*, Charles Spencer Waller Cobbold, M.D., Earlswood Asylum, Redhill; James M. Moody, M.R.C.S., Surrey County Asylum, Canehill, Purley.

PATHOLOGY.—*President*, Julius Dreschfeld, M.D., Manchester. *Vice-Presidents*, James Frederick Goodhart, M.D., London; Heneage Gibbes, M.D., London. *Honorary Secretaries*, John E. Ranking, M.D., Mount Ephraim Road, Tunbridge Wells; John Caldwell Uhthoff, M.D., 9, Brunswick Place, Brighton.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Thomas Lauder Brunton, M.D., F.R.S., London. *Vice-Presidents*, John Mitchell Bruce, M.D., London; Edward Mackey, M.D., Brighton. *Honorary Secretaries*, Cornelius William Suckling, M.D., 108, Newhall Street, Birmingham; John Theodoré Cash, M.D., Drumearn, Earlsfield Road, Wandsworth Common, S.W.

OPHTHALMOLOGY.—*President*, Chas. Oldham, F.R.C.S., Brighton. *Vice-Presidents*, Louis Tosswill, M.B., Exeter; George Anderson Critchett, F.R.C.S.Edin., London. *Honorary Secretaries*, Frank Henry Hodges, F.R.C.S.Edin., 17, Horse Fair Street, Leicester; Arthur Nicholson, M.D., 98, Montpellier Road, Brighton.

OTOLOGY.—*President*, G. F. Hodgson, M.R.C.S., Brighton. *Vice-Presidents*, Alphonso Elkin Cumberbatch, F.R.C.S., London; Edward Cresswell Baber, M.B., Brighton. *Honorary Secretaries*, Henry Albert Reeves, F.R.C.S.Edin., 78, Grosvenor Street, W., London; Patrick William Maxwell, M.D.Edin., 16, Warrington Place, Dublin.

Honorary Local Secretaries: Thomas Jenner Verrall, M.R.C.S., 95, Western Road, Brighton; Alfred Scott, L.R.C.P., German Place, Brighton.

TUESDAY, AUGUST 10TH, 1886.
2 P.M.—Meeting of 1885-6 Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 11TH, 1886.
9.30 A.M.—Meeting of 1886-87 Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione*.

THURSDAY, AUGUST 12TH, 1886.
9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Surgery.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 13TH, 1886.
10 A.M.—Address in Public Medicine.
11 A.M.—Sectional Meetings.
4 P.M.—Concluding General Meeting.
8 P.M.—Reception.

SATURDAY, AUGUST 14TH, 1866.
Excursions.

The following discussions and papers are promised up to the present time. Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

SECTION A.—MEDICINE.

The following subjects have been chosen for special discussion.

1. Cases in which Disease of the Valves of the Heart has been known to exist for upwards of five years, without causing Serious Symptoms. Introduced by Sir Andrew Clark, M.D., F.R.C.P., F.R.S., London. The following gentlemen have promised to take part in the discussion: Drs. Gairdner, Clifford Allbutt, B. Foster, M.P., Douglas Powell, Sir Dyce Duckworth, M. Bruce, Burney Yeo, Skerritt, Byrom Bramwell, and Saundby.

2. On the Effects produced by Gall-stones, with particular reference to some Rarer Points in their Symptomatology. Introduced by W. Ord, M.D., F.R.C.P., London. The following gentlemen have promised to take part in the discussion: Drs. Byrom Bramwell, Clifford Allbutt, B. Foster, M.P., Pavy, Shingleton Smith, Saundby, and Ralfe.

The President of the Section will deliver his Address on August 12th.

The following papers are promised.

COUTTS, J. A., M.B. Latter Effects of Rickets.
EARDLEY WILMOT, R., M.B. A Case of Gall-stones.
EYLANDT, J. E., M.D. (Riga). Treatment of Diphtheria.
GAMGEE, A., M.D. On Compressed and Rarefied Air.
MOXON, W., M.D. Effects of Turpentine, Ergot, and Water, on Albuminuria.
RALFE, C. H., M.D. Functional Albuminuria.
SAVAGE, George H., M.D. Mental Symptoms with Locomotor Ataxy.
WHITE, W. Hale, M.D. Inexplicable Pyrexia.

SECTION B.—SURGERY.

Sir Henry Thompson will open a discussion on Suprapubic Lithotomy. The following gentlemen will take part in the discussion: Messrs. W. Cadge, Reginald Harrison, Professor Humphry, Berkeley Hill, T. R. Jessop, Greig Smith, W. Pye, and Bruce Clarke.

The following papers are promised.

HARLEY, George, M.D., F.R.S. Hepatic Phlebotomy and Puncture in Hypertrophic Congestions of the Liver.
TAIT, Lawson, Esq., and THORNTON, J. K., Esq. Surgical Treatment of Diseases of the Liver.
WILLETT, A., Esq., and MEREDITH, W. A., Esq. Cholecystotomy.

Messrs. Macnamara, Morris, Bellamy, Jessop, and Professor Gastin, of Georgia, will take part in the discussion.

HORSLEY, Victor, M.B. A paper, illustrated by Photographs illuminated by the Lime-light, in connection with the Advances in the Surgery of the Central Nervous System.

Mr. E. Bellamy and Dr. Hughes Bennett will join in the discussion.

ADAMS, W., Esq. On the Treatment of Congenital Displacement, the so-called Congenital Dislocation of the Hip-Joint, by long-continued Recumbency and Extension.

BENTON, S., Esq. Fistula in Ano of the Horse-Shoe Shape.

CLARKE, Bruce, Esq., and STEAVENSON, W. E., M.D. The Employment of Electricity in the Treatment of Diseases of the Urinary Organs.

FITCH, Simon, M.D. (Nova Scotia). The Dome-Trocar and associated Instruments in Paracentesis, Aspiration, Transfusion, Ovariotomy, and Tunnelling the Prostate.

KEETLEY, C. B., Esq. Further Remarks on the Radical Cure of Hernia by Injections into the Inguinal Canal.

PYE, W., Esq. A Case of Multiple Papilloma of the Bladder, removed by the Suprapubic Operation.

WHITEHEAD, Walter, Esq. Three Hundred Consecutive Cases of Hæmorrhoids cured by Excision.

SECTION C.—OBSTETRIC MEDICINE.

The President will deliver a short address.

The following two special discussions will take place.

1. The Alternatives to Craniotomy. This discussion will be introduced by Dr. Robert Barnes; and Professor Porro, Dr. Halliday Croom, Dr. E. T. Davies, Liverpool, Mr. Greig Smith, Clifton, and others, will be among the speakers.

2. On Removal of the Uterine Appendages. Papers will be read by Dr. Savage, Birmingham; Dr. More Madden, Dublin; and others; and Dr. Bantock; Dr. E. T. Davies, Dr. G. Elder, Nottingham, and Dr. Imlach, Liverpool; Mr. Lawson Tait, Birmingham; and others, will take part in the discussion.

The following papers are promised.

AVELING, J. H., M.D. A Case of Extra-uterine Fœtation arrested by Electricity.

BARNES, Fancourt, M.D. On Perinæorrhaphy.

BRAITHWAITE, J., M.D. On a Mode of Treating certain Cases of Amenorrhœa.

EDIS, A. W., M.D. Cases illustrating the Difficulties of Diagnosis in Gynæcological Practice.

ELDER, G., M.D. A Case of Vesico-vaginal Fistula.

GRIGG, W. C., M.D. On the Antiseptic Use of Bichloride of Mercury in Obstetric Practice.

HANDFIELD-JONES, M., M.B. Scanty Secretion of Liquor Amnii in the Early Months of Pregnancy, and its Bearing on Diagnosis.

HART, D. Berry, M.D. Successful Case of Abdominal Section for Ruptured Fallopian Tube Fœtation, with Microscopic Examination of the part of the tube removed.

HEWITT, W. M. Graily, M.D. The Early History and Etiology of Uterine Flexions and Displacements.

LUSK, W. T., M.D. (New York). The Proper Moment for the Performance of Gastrotomy in Abdominal Pregnancy.

ROUTH, C. H. F., M.D. On some Points of Difficulty as affecting Medical Men in Cases of Hysteria with Erotic Symptoms.

SECTION D.—PUBLIC MEDICINE.

The general subjects for discussion are the following.

1. Scarlet Fever; its Causation, and the best Sanitary Measures for Dealing with the Disease as it exists among Urban Populations. Dr. Ewart, of Brighton, will open this discussion.

2. On the Duration of Infectiousness in the following Infectious Diseases: Scarlatina, Small-pox, Measles, Mumps, and Diphtheria. Dr. A. Ransome, of Manchester, will open this discussion.

3. Diphtheria in Rural Districts: (*a*) Causation; (*b*) Influence of Soil upon the Disease. Dr. C. Kelly will open this discussion.

4. Reports of Water Analyses: the best Method of Stating these so as to secure one Uniform Plan. Dr. Whitelegge will open this discussion.

The following papers are promised.

ASHBY, H., M.D. On the Duration of Infectiveness in Scarlet Fever.

CARPENTER, A., M.D. The Causation of, and on the Quarantine which is necessary to be observed in, Scarlatina.

EVATT, Surgeon-Major G. J. H. On the Medical Department of an Army Corps in War, with proposal for a more efficient Volunteer Medical Organisation.

KERR, Norman, M.D. On Hydrophobia, and its Prevention.

PAGET, C. E., Esq. The Influence of Acute, supposed Simple, Sore-Throat in the Spread of Diphtheria.

PRINGLE, Surgeon-Major R., M.D. 1. The Advantages and Disadvantages of Human and Animal Lymph compared. 2. State Vaccination, with special reference to the Compulsory Clauses in the Vaccination Acts.

SEATON, E., M.D. A paper on Scarlet Fever.

TATHAM, J., M.D. Scarlet Fever, and the best Means for its Prevention amongst Urban Populations.

VACHER, F., Esq. Duration of Infectiousness in the Exanthemata and Allied Diseases.

WHITELEGGE, B. A., M.D. Reports of Water Analyses.

SECTION E.—PSYCHOLOGY.

The President, Dr. T. S. Clouston, will deliver an address on the Relationship of Bodily and Psychical Pain.

The following papers are promised.

CLARKE, A. Campbell, M.B. Glasgow. Experimental Dietetics in Lunacy Practice. A Record of Investigation and Results.

GILL, Stanley A., Esq., B.A. The Use and Abuse of Seclusion.

SAVAGE, G. H., M.D. On Alternations of Neuroses.

SHUTTLEWORTH, G. E., M.D. The Relation of Marriages of Consanguinity to Mental Unsoundness.

THOMSON, D. G., M.D. On the Separate Care and Medical Treatment of Recent Cases of Insanity, either in Existing Asylums, or in Lunatic Hospitals to be Established for that Special Purpose.

TUKE, D. Hack, M.D. On the Alleged Increase of Insanity.

The President will introduce a discussion as to How the Medical Spirit can best be kept up in Asylums for the Insane.

Discussions will also be invited upon Degradation of Habits and Feelings in Relationship to Mental Disease, and other subjects. The Secretaries will be glad to receive communications from members willing to read papers or to take part in the discussions.

SECTION F.—PATHOLOGY.

The following subjects have been chosen for special discussion.

1. Peripheral Neuritis. Opened by papers by Dr. Ross (Manchester), and Dr. Buzzard (London). Mr. Watson Cheyne, Professor Charcot, and Dr. Whittle, will take part in the discussion.

2. Aneurysm. Introductory paper by Timothy Holmes, F.R.C.S. Messrs. Barwell, Bryant, Savory, H. Morris, C. J. Symonds, Watson Cheyne, and E. Lund, will take part in the discussion.

3. The Etiology and Pathology of Pneumonia. Introductory papers by Dr. Octavius Sturges and Dr. R. Douglas Powell. Dr. Churton and Dr. Hollis will take part in the discussion.

The following papers are promised.

BARWELL, R., Esq. On Aneurysm.

CHEYNE, Watson, M.B. On Cholera.

CHURTON, T., M.D. The Pathology of the Adrenals.

GREVES, E. Hyla, M.D., Liverpool, will show a Rare Form of Cerebral Tumour, and give an account of the same.

HOLLIS, W. A., M.D. Pulmonary Tuberculosis, associated with Heart-Disease.

RAKE, B. N., M.D., (Government Medical Officer, Trinidad). 1. An Inquiry into the Distribution of the Leprosy Bacillus. 2. Experiments on the Communicability of Leprosy to Animals.

SECTION G.—THERAPEUTICS AND PHARMACOLOGY.

An Introductory Presidential Address will be given by Dr. T. Lauder Brunton, F.R.S.

The following subjects have been selected for special discussions.

1. Antipyretics; to be opened by Dr. Carter, of Liverpool.

2. Analgesics; to be opened by Dr. Spender, of Bath.

3. Action of Drugs in Albuminuria; to be opened by Dr. Saundby, of Birmingham.

The following gentlemen have promised papers: Messrs. Mitchell Bruce, J. M. Jessop, and Stone.

ST. GEORGE, George, Lisburn. Experiments with Manaca in the Teatment of Rheumatism.

SECTION H.—OPHTHALMOLOGY.

Mr. Jonathan Hutchinson will open a discussion on the Different Forms of Choroiditis, in relation to their several Causes.

Mr. Anderson Critchett will open a discussion on Episcleritis.

An improved Electric Refraction Ophthalmoscope will be shown by Mr. Henry Juler.

The following papers are promised.

ABBOTT, G., Esq. The Use of Styles in the Treatment of Epiphora.

ANDREW, Edwyn, M.D. Ophthalmic Hints.

BARRETT, J. W., Esq., and LANG, W., Esq. On the Causation of Phlyctænular Ophthalmia and Sycosis.

BROWN, Edgar, Esq.

CRITCHETT, G. Anderson, Esq. On Dislocation of the Lens.

FROST, W. Adams, Esq. What is the best Method of Dealing with a Lost Eye?

GLASCOTT, C. E., M.D. On Sarcoma of the Choroid, followed by Amblyopic Symptoms in the Sound Eye.

HARTRIDGE, Gustavus, Esq.

HEWETSON, H. B., Esq. The Treatment of Interstitial Keratitis by Operation, without Constitutional Remedies.

HIGGENS, Charles, Esq.

JOHNSON, L. L., Esq. Paper, and Demonstration of several new Ophthalmic Instruments.

TAYLOR, Charles Bell, M.D. 1. Is it Desirable, in Certain Cases, to Substitute Resection of the Optic Nerve for Ablation of the Eye-ball? 2. On a Method of Treating Epiphora without Slitting the Punctum Lacrymale.

SECTION I.—OTOLOGY.

The following papers are promised.

BABER, E. C., Esq. On Examination of the Nasal Cavities from the Front (illustrated with Diagrams).

BARR, T., M.D. 1. On the Varieties, with Appearance, of the Tympanic Membrane compatible with Good Hearing. 2. On the Value of Rinne's Test, wieh Diagnosis of Disease of the Nervous Structures of the Ear.

CUMBERBATCH, A. E., M.B. Aural Vertigo.

Members desirous of reading papers are particularly requested to communicate without delay, with the Secretaries of Sections, that the arrangements may be as complete as possible prior to the meeting.

Annual Museum.

The twentieth annual museum will, by permission of the Town Council, be located in the Corn Exchange, a large hall, communicating with the Dome, and having a separate entrance in Church Road.

It will be open to the profession from August 9th to August 15th, and will be classified in three sections.

Section A.—Foods, drugs, hygienic and sanitary appliances. A specialty will be made of all kinds of prepared, peptonised, and other compound nutrients. (Honorary Secretary, Dr. Mackey, 1, Brunswick Road, Hove, Brighton.)

Section B.—New books, instruments, and appliances—medical and surgical; galvanic and other batteries and apparatus. (Honorary Secretary, Dr. Whittle, 65, Dyke Road, Brighton.)

Section C.—Anatomical and pathological specimens, diagrams, casts, or models; microscopes and microscopical preparations. (Honorary Secretary, D. W. Giffard, Esq., 5, Pavilion Parade, Old Steine, Brighton.)

A name and description, printed, if possible, must be attached to each exhibit, which should be sent to the Corn Exchange, Brighton (to the care of the Secretaries of the respective sections), between Monday, August 2nd, and Saturday, August 7th. Ample counter space will be provided, and, so far as possible, equal facilities will be given to every exhibitor.

A description, for insertion in the Museum Catalogue, should be forwarded to the private address of the respective Secretaries, at least one month before the meeting, that is, by July 10th.

Catalogue.—The catalogue will be provided gratis, but advertisements will be charged at the usual rate, namely, one page, £1; half-page, 12s. 6d.; quarter-page, 7s. 6d.

To Exhibitors.—The expenses of carriage and of removal to be borne by the exhibitor. The Committee will exercise every reasonable care as to objects entrusted to them, but will not be responsible for risk or accident.

Notices of Motion.

Dr. Ward Cousins hereby gives notice that he will move the following addition to, and alteration of, the By-laws; namely,

Page 17, By-laws. Addition to "d," second line, after the word "member," add "of a Branch within the limits of the United Kingdom of Great Britain and Ireland."

Addition to "d."—"No person shall be eligible as a representative member of a Colonial or Indian Branch unless, at the time of his election, he shall be a recognised member of the Branch, and shall have resided within the area of the Branch for at least twelve months prior to his election. The election of Crown, Colonial, and Indian members of the Council shall be annual, and shall be subject to the same by-laws as the election of other representative members."

May 6th, 1886. Francis Fowke, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[from our own correspondent.]

Hygiene in the Isthmus of Panama.—Favus among Conscripts.—Fowl-Favus and Human Favus.

Dr. Nicolas, last January, was commissioned by the Paris Société des Travaux to go to the Isthmus of Panama, to organise there a medical service in connection with this Society, to ascertain what are the unhealthy conditions of the isthmus, their causes, and the means of removal or mitigation to be adopted. Dr. Nicolas was surprised to find that malarial affections were not in proportion with the building operations and displacement of soil, nor with the quantity of work achieved, nor with the nature of the soil, whether earth, clay, or rock. All the areas worked on have been, in their turn, healthy and unhealthy. This unhealthiness depends more on the kind of work done than the nature of the soil. Accurate statistics cannot be obtained. Dr. Nicolas thinks that the estimate of mortality on the isthmus will be still more faulty, as each separate enterprise has its own organisation, and the company only exercise a general overlooking. Dr. Nicolas believes that the mortality of the isthmus is exaggerated. He ascertained that in the city of Panama there are six burials a day, in a population of 25,000—three times the number of burials that take place in Paris daily. Morbid influences vary according to the altitude of the ground or its incline; they are manifested by the affections special to tropical climates. Dr. Nicolas leaves out hepatic affections and dysentery among the white population, and fevers among the negroes. He considers only fevers among the white population; dysentery and pulmonary affections among the negro population. He is of opinion that these affections among the negroes result from cold. He believes that, if the negroes were protected from the effects of cold, mortality among them would be greatly diminished. Intermittent or paludal fever is at Panama, as elsewhere, peculiar to marshy and delta-land. Dr. Nicolas believes the bilious form of remittent fever to be a malarial fever, with typhoid symptoms; it is peculiar to the higher encampments; yellow fever is peculiar to the coast. It is intended to have a staff to ensure sanitary measures being taken. Houses suspected of being unhealthy will be, meanwhile, disinfected, by having the walls, floors, and ceilings, washed over with a sublimate solution at 1,000, and, if necessary, disinfected by pulverisers. There is no water on the isthmus fit for drinking purposes; Dr. Nicolas, therefore, proposes that water-works should be organised, in order to utilise the water of a torrent situated higher than the encampment, and, as all water on the isthmus is of doubtful purity, that it should be filtered on a large scale.

At a recent meeting of the Academy of Medicine, M. Feulard furnished statistics concerning the cases of favus among conscripts. From 1873 to 1885, 3,872 men were rejected by the examining jury, because they had favus. The departments which furnished the most of these cases were the Pas-de-Calais, Nord, Aveyron, Tarn, Hérault, Landes, Seine-Inférieure, and Cotés-du-Nord. These departments constitute three distinct geographical groups—north, west, and south. These results are the same as those obtained by M. Bergeron, who made similar researches in 1865. From 1841 to 1849, M. Bergeron recorded 730 annual exemptions, from favus. At that period, a comparatively small number of men were examined. He estimates that, in each class of conscripts, 1,000 or 1,100 have favus. From 1850 to 1860, the yearly average is estimated at 438 men, with favus, among the total number examined, but the real number is much higher; it may be estimated at 800. From 1873 to 1885, the yearly average is stated to be 300; there is thus a decided decrease of more than half in the number of exemptions from this cause. Inspection of schools is indicated as a means of eradicating favus.

At a recent meeting of the Paris Biological Society, M. S. Neumann read a paper on the identity of the favus of fowls with that of the human subject. The works of Gerlach, Miller, and Leiserung made known, in 1858, a dermatomycosis, which has been generally considered as a favus, but the identity of the parasite with the *Achorion* was only based on a morphological resemblance. Recently, M. Mégnin has considered the fungus that produces favus to be of an order closely resembling the *Achorion Schönleinii* and *Oïdium Albicans.* He names it *Epidermophyton Gallinæ.* This fungus was named by Rivolta *Aspergillus Microsporon Flavescens Gallinæ.* M. Neumaun believes that dermatomycosis of the head and neck of fowls is a favus, and is due to the *Achorion Schönleinii.* It is thoroughly demonstrated that the latter can produce favus in rats, mice, cats, dogs, and rabbits. Gerlach and Schutz tried unsuccessfully to transmit favus of fowls to domestic animals. M. Neumann inoculated a young dog with fowl-favus, and with favus of the human subject. The affections of the two animals presented the same clinical features; both were quickly cured without treatment, as generally happens in this affection with animals. The same experiment was repeated with two rabbits, with the same results.

A hospital for children is to be built at Milan. This good work is due to the Knights of Malta.

SWITZERLAND.

[from our own correspondent.]

Swiss Central Medical Union.—Meeting of Soleure Practitioners.—Foreign Practitioners in Switzerland.—Factory Inspectors.—Trained Nurses.—Swiss Medical Benevolent Fund.—Prostitution in Basle.—Resection of Pylorus and Gastroenterostomy.—Cholecystotomy.—Death of Professor Luchsinger.

The thirty-first annual meeting of the Swiss Central Medical Union (*Der Aerztlicher Central Verein*) will be held on the 29th instant, at Zurich. The main communication, dealing with bacterioscopic researches, will be made by Professor Cramer.

On February 13th, a free meeting of medical men of Canton Soleure took place in Olten, at which Drs. von Arx, Munzinger, and Christen reported an interesting case of extirpation of ruptured kidney for

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arresting an incontrollable bleeding, in a porter, aged 59, who had fallen, with his right loin against the edge of a cast-iron stove, from the height of three feet. About fourteen days after the accident, blood disappeared from the patient's urine under ordinary means, his general state being satisfactory. Contrary to the authors' advice, the man insisted on his being immediately discharged. On the next day, he returned with alarming renal hæmorrhage. On the twentieth day after the accident, antiseptic nephrectomy, after the lumbar method, as the last refuge, was resorted to. The kidney, being displaced, was found, but with some difficulty. Twenty-four hours later, the man died from acute anæmia and exhaustion. Another able communication at the Olten meeting was that of Dr. Stocker, of Balsthal, who sketched his views on osteomyelitis as a mycotic disease. He thinks it highly probable that the disease is caused by Rosenbach's *staphylococcus pyogenes aureus*.

A correspondent, writing in the *Correspondenzblatt für Schweizer Aerzte*, No. 9, 1886, page 244, bitterly complains of the fact that several cantons grant the right of free practice to all foreign medical men, without requiring from them any State examinations. "The first best foreigner who comes," he says, "and who happens to meet the approval of the proprietor of a curort, begins to practice in Schoeneck, Seelisberg, Engelberg, and, if he should be an Englishman, also in other curorts." A Swiss practitioner, who must bear all taxes and all other State burdens, is obliged, in addition, to treat the local inhabitants, up to the remotest hovels on the mountains above, and in the valley below. But the foreigner may flatly refuse to do any such drudgery, pays nothing, does nothing for the country, fills his pockets as tightly as possible, and then goes away as soon as he begins to feel in any way uncomfortable. Meanwhile, when a Swiss practitioner happens to go, say, to Germany or France, he is permitted to practice only after passing through a full State examination.

An assistant to the indefatigable Dr. Schuler, factory-inspector of the first district, will be soon appointed. The editors of the *Correspondenzblatt*, etc. (Professor Burckhardt-Merian and Dr. A. Baader), justly urged that this new place should be filled by a medical man. The writer would venture to say that, generally, only medical men should be appointed as factory inspectors, since only medical men, on obvious grounds, may be fully competent judges of the matters concerning health and life of the workers.

A third report on the Schwesternhaus vom Rothen Kreuz (Red Cross Sisters' Home), an institution for training sick nurses in Fluntern-Zürich, has just appeared. In 1884, this house received 1,000 francs from the canton, and 20,000 francs from the charitable, a part of the sum being laid aside for establishing an infirmary in connection with this useful institution. According to Herr Thurnheer, the treasurer, the demand for trained nurses was ever greater than the supply. It proved rather difficult to find girls possessing all qualities which are necessary for nursing the sick.

According to the report on the Swiss Medical Benevolent Fund (Hilfskasse für Schweizer Aerzte), the receipts which, in 1884, had amounted only to 3,700 francs, in 1885 rose to nearly 10,000 francs.

At a meeting of the Basle Medical Society, Dr. Sury, town physician, read a report on prostitution in Basle. Following the suggestion made by Drs. A. Baader and A. E. Burckhardt in March, 1882, the cantonal police department organised sanitary control, all prostitutes being periodically examined by the author at a special house, where they appear for the inspection, cleaned by a bath, and clad in a kind of night-dress. The number of venereal cases, especially syphilis, has been steadily decreasing for these twenty-one months. As a further effective step in a right direction, Dr. Sury recommends that practitioners, when coming across infected males, should systematically obtain from them a precise information concerning the source of infection, and duly notify the latter to the police.

At another meeting of the same society, Professor Socin, of Basle, showed the stomach from a woman in whom he had performed, first, resection of the pylorus, and, subsequently, a year later, gastro-enterostomy. The patient died, from return of malignant disease, eighteen months after the second operation.

Dr. E. Koehl, of Zürich, describes (in the *Correspondenzbl. für Schw. Aertze*, No. 8, 1886, p. 193) antiseptic cholecystectomy performed by Professor Kroenlein, for dropsy of the gall-bladder in a woman, aged 34. The patient was up and about by the end of the third week, and left the hospital on the forty-first day. When seen five weeks later, she weighed 5½ kilogrammes more than before the operation. It is the eleventh cholecystectomy in literature (the other ten cases were published by Langenbech, Heyernam, Reidet, and Courvoisier).

Dr. Barth, of Basle, states that, in a case of obstinate facial lupus in a woman, aged 55, which he treated by scooping out the diseased tissue with a sharp spoon, the operation was made entirely painless by preceding injection, under the nodule, of a five per cent. solution of cucaine.

Professor Balthazar Luchsinger, of Zürich (formerly of Berne), who died suddenly, in his 37th year, in Meran, on January 20th, 1886, has left seventy-one original experimental works on physiological, pharmacological, and toxicological subjects; moreover, ten inaugural works were made under his guidance in Berne

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Mr. Reginald Harrison's Candidature for the Council of the College of Surgeons.—The Provident Medical Society.—Hospital Saturday Fund.—Donation to Liverpool Charities from Her Majesty.

GREAT interest is felt in the approaching elections at the College of Surgeons by all members of the profession here, by reason of the fact of Mr. Reginald Harrison being again a candidate. It is hoped that on this occasion he will be very strongly supported, and that he will be successful. On personal grounds, no one is more deserving of support, for Mr. Harrison possesses the full confidence of the entire body of his medical brethren in Liverpool; and his professional position fully qualifies him for the honour of a seat in the Council. It is further considered that it is only reasonable that Liverpool should have a local representative on the College Council. As one of the promoters of the University College and its union with the Victoria University, and as one of the professors, Mr. Harrison will be an admirable and most efficient representative, to whom the interests of the medical faculty of our College, and of the profession generally, may safely be confided.

The Liverpool Provident Medical Society may now be regarded as fairly established. At the public meeting last January, which was mentioned in a previous communication, an executive committee was elected. Subsequently, several medical men and other gentlemen interested in the scheme, joined this committee, which has met several times and drawn up a code of regulations. The first branch, called the Derby Branch, in honour of Lord Derby, one of the patrons of the Society, was opened in Beaumont Street on April 15th last. The medical staff consists of Drs. Shearer and Rentoul—the latter the original promoter of the scheme—and Mr. Steele, with Mr. Hindley as dental surgeon. And a consulting staff has been arranged, consisting of Drs. Gee, Finegan, Grossmann, Reginald Harrison and Paul. At the time of opening of the first branch, £185 had been subscribed for defraying the preliminary expenses; and, up to May 28th, 220 persons had become benefit members. The terms for membership are:—man and wife, 10d. per month; over 14 years of age, 6d. per month; under 14 years, 3d. per month; members of sick benefit societies, 4d. per month; entrance-fee for single members or entire family, 1s. Not more than four children of any family are charged for; and, to prevent abuse of the system, a wage limit is fixed for qualification for membership. The Charity Organization Society is taking a warm interest in the project, and success is confidently expected.

A very powerful appeal from the Working Men's Committee of the Hospital Saturday Fund, calling upon the working classes to make a special effort to assist the medical charities, was extensively circulated for some weeks prior to Hospital Saturday, May 29th. It is hoped that this year the collections will reach a satisfactory figure. As already stated in your columns, the Sunday collection showed a considerable falling-off this year, and hence it is very much to be desired that the Saturday donations may more than make up the deficiency.

At the close of the Queen's recent visit to our city, Her Majesty handed to the Mayor, Sir David Radcliffe, a cheque for £100 for distribution among the local charities.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Hospital Sunday and Saturday Fund.—Country Lodgings for City Children.—The Health-Report for Manchester.

AT a recent meeting of the Committee of the Hospital Sunday and Saturday Fund, it was announced that £7,200 would be distributed amongst the medical charities of Manchester and Salford. The Royal Infirmary, with its affiliated institutions—the Fever Hospital at Monsall, and the Convalescent Home at Cheadle—gets £2,853. The Children's Hospital and St. Mary's Hospital for Women receive £907 and £604 respectively. The sum divided this year is less by some hundreds than it was last year, and is also less than it was ten years

ago. Since the establishment of the Hospital Sunday and Saturday Fund in 1870, upwards of £120,000 have been collected for distribution among the medical charities.

With the advent of the summer months, the operations of the several societies for sending convalescent and weakly children to the seaside, or of boarding them out in the country, have commenced. Among these societies, the committee of the Children's Holiday Fund, which is presided over by the Dean of Manchester, is conspicuous for its activity. By means of this fund, six hundred children were transferred last summer from the stifling crowded courts of the city to cottages and farmhouses in the country districts of Cheshire and Derbyshire, and arrangements are being made to send at least one thousand this year. It is pleasing to hear from their report, recently issued, that this unobtrusive way of doing good has not only given brightness and happiness to some little lives during a few weeks in the summertime, but has led to a kindly intercourse being kept up during the winter between the town visitors and their country friends. Many of the well-to-do classes who have residences in the country have, at their own expense, provided accommodation for the city children for a few weeks during the summer, and some in this way are being sent to Lytham and other seaside resorts, and others as far as Dovedale, in Derbyshire. It is to be hoped that this kindly benevolence will prove contagious.

The report of the medical officer of health for this city for the years 1884 and 1885 was presented to the Council last week. It is a valuable one, and well worthy of attentive study, dealing as it does with the statistics of our high infant-mortality, and the vexed questions connected with the improvement of dwellings in our crowded courts and alleys. It seems a pity that this time the report deals with the past two years; it surely is not too much to expect that there should be enough of interest connected with the vital statistics of a large city to warrant an annual report. It is rather disappointing to find no reference to the working of the Act for the Compulsory Notification of Infectious Disease, which has been in force in this city since 1881, and to hear to what extent it has aided the health-authorities in the isolation of cases of scarlet fever and other zymotic diseases. At a meeting of the Council at which the report was presented, one of the members suggested that a special report should be presented in reference to the sanitary condition of the districts where the infant-mortality is high; the number of deaths of children under five years of age in some instances amounting to 60 per cent. of the total deaths.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

The Clinical Society.—Tynemouth Infirmary.—Sunderland Infirmary.—Death of a Giant at South Shields.

THE final meeting of the Clinical Society for the session 1885-86 was held last month. Dr. Limont showed a good example of dermoid ovarian cyst, gave a history of the case, and of its successful removal by Mr. Page. Dr. Farquharson showed a fœtus which had been expelled from the uterus by the action of potassium permanganate, some quantity of which had been taken by an unmarried woman as an abortive. The following officers for the next session were then elected. *President*, Dr. Oliver; *Vice-President*, Dr. Campbell; *Treasurer*, Dr. Beatley; *Secretary*, Mr. Black. The last session has been a very successful one; the number of members has increased, and the work done has been above the average.

A site for a new infirmary at Tynemouth having been fixed upon, a special effort was made last Saturday to bring the claims of the institution before the public. In order to raise funds, it was proposed to make a Hospital Saturday, and the first annual collection was made last week. Collection boxes were placed in various parts of the town under the charge of about seventy Sunday-school teachers, and were open for contributions all day. In the evening, an entertainment was held, and it is hoped that a considerable sum of money has been received.

It is proposed to add another wing to the Sunderland Infirmary, to be called the "Hartley" wing. This addition will be erected to perpetuate the memory of the late Mr. James Hartley, who, for many years, took a very active part in the administration of the charity. Such an improvement will add greatly to the usefulness of the institution, and will, doubtless, increase the zeal of an enthusiastic staff.

Last week, a man, known as the Irish giant, died at South Shields Workhouse. He was 7 feet 6 inches in height, weighed 27 stone, and was 38 years of age. Special arrangements had to be made for him in the hospital, neither bed nor bedding being large enough for him.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE NEW SYDENHAM SOCIETY.

SIR,—I have been requested, by the Council of the New Sydenham Society, to seek your aid in bringing under the notice of those of your readers who are not its members, a few facts as to our past history, present condition, and future prospects.

We are now in the middle of our twenty-eighth financial year (our financial year dating from January to December, subscriptions being due in advance, and our year of issue being from June to June). Our twenty-eighth year of issue of books begins this month, and the first volume of the year is in course of distribution to our members. It consists of a volume of short essays and papers, chiefly from German sources, on *The Relations of Micro-parasites to Disease*, and it will be followed, in the course of a month, by the twelfth part of our *Lexicon of Medical Terms*. We commence, this year, several new works; and the present is, therefore, an excellent opportunity for new members to join us. The hope of inducing a large number to do so is, let me say at once, my motive in asking insertion for this letter.

During our twenty-eight years of work, we have enjoyed an income varying from £2,000 to £3,500, and have had a members' list which has averaged three thousand. Of some of our more important works, such, for instance, as Trousseau's *Clinical Medicine*, we have been the means of sending abroad amongst the profession, in all parts of the world, not fewer than four thousand copies. The volume which is now going out counts as our one hundred and fifteenth, which gives an average of considerably more than four volumes to each year. I must explain that, in this calculation, the parts of our *Lexicon*, and the fasciculi of our two *Atlases*, count as volumes. In each of the three years, 1880, 1881, and 1882, we issued six volumes; whilst, on three occasions, one of which was last year, we have been obliged, by the state of our funds, to be content with only three. The two other years when this happened were 1863 and 1865. When I add that we have but seldom issued thin volumes, that we have been liberal in woodcuts and lithographs, and that we have had constantly in hand a very expensive *Atlas* (first, of *Dermatology*, and now of *General Pathology*), and, more recently, a yet more expensive *Lexicon of Medical Terms*, I think I shall have justified the claim that we have achieved a very considerable amount of success. The maintenance of such a members' list through so long a series of years proves that our efforts to provide sound medical literature have been appreciated, and that, in the main, our publications have been approved.

Beginning with Dr. C. J. B. Williams, our first President, we have in Sir Thomas Watson, Sir James Paget, Sir George Burrows, Mr. Cæsar Hawkins, Sir Prescott Hewett, Mr. Hilton, Dr. Peacock, Dr. Stokes, Sir W. Gull, Sir W. Bowman, and Sir Andrew Clark, a series of Presidents who have all taken a vigorous interest in the Society's welfare. They have been constantly aided by members of Council equally willing to devote time and labour to its interests. Of Treasurers we have had but two. Up to the time of his death, the duties of this post were discharged by the late Dr. Barlow; and for the last twenty years the Society has owed more than I can say to the alike able and indefatigable services of our present Treasurer, Dr. Sedgwick Saunders. In its management, the Society has always aimed carefully at economy. Its expenses under the head of Depôt, agent's salary, distribution of books, and advertisements, have seldom been so much as a fifth part of income, and often not a sixth. Our local secretaries have always given their valuable services gratuitously; and those services have, I know, often been very laborious.

I now come to the point to which I am especially desirous to ask general attention. It is this: that the Society is an organisation for the mutual advantage of its members; and that not only is its scope enlarged by increase of members, but it gains directly in its capabilities of usefulness. With a small members' list, only a small number of books for the year can be issued; and with a larger one, that annual number is at once increased. It is, therefore, the direct interest of all members to endeavour to enlist others. When once the type for a book is set up, or the stone prepared for a plate, it costs very little to print off an extra thousand. If our members' list could be kept permanently at about four thousand, we could issue six

volumes regularly every year with ease. I feel sure that this number might without difficulty be kept up, if once its desirability were widely recognised. In the hope of offering attractions to those who have not yet joined us, permit me to enter into a little detail as to the works which we have now in preparation.

Our *Lexicon of Medical Terms*, under the editorship of Mr. Power and Dr. Sedgwick, has now advanced fully halfway to completion, and its editors promise us to finish it in four years. I hesitate not to assert that, when finished, it will be, for completeness and conciseness, without its equal in any language. The two large volumes to which it has already attained extend to the letter H, and constitute, even as they are, a most valuable addition to the practitioner's library. New subscribers will be allowed to procure these two volumes as the equivalents of two years' subscription.

Of our *Atlas of Pathology*, a sixth fasciculus is now nearly ready, and, should our funds permit it, others, which are in preparation, will be regularly issued.

The *Atlas of Skin-Diseases* we regard as complete, and no more fasciculi of it will be brought out. It is out of print, and most of the stones have been destroyed.

The Council has come to the conclusion that, for the present at least, it will consider the issue of reprints of English authors concluded. It believes that the great activity of research, which characterises the present day, renders, as regards the larger number of its members, translations of recent publications more acceptable, and perhaps more useful, than reprints of the classics of the past. The same statement applies to collections of the scattered publications of recently deceased British writers. Our New Sydenham library, under these two classes, contains reprints from the works of Gooch, Bright, Addison, Latham, Smellie, Colles, Stokes, Graves, and Warbourton Begbie. Although I believe that all of these were well worthy the Society's adoption, and were very acceptable when issued, yet I also quite think that the Council has acted wisely in deciding to devote all available funds in future to translations of recent books, and to the completion of our *Pathological Atlas* and *Medical Lexicon*.

In reference to the observation sometimes made that it is better to read foreign works in their original tongue, I may ask attention to the fact that some of the Society's books are by no means mere translations. The volume of Billroth's *Clinical Surgery*, prepared for us under the editorship of Mr. Clinton Dent, comprises the cream of many separate books, and reports not very easy of access. It would be a boon to the German profession if, in its present form, our book were translated back into that language. The same remark applies to Dr. Vivian Poore's single-volume-edition of the very able, but very diffuse, publications of the late Dr. Duchenne, of Boulogne. Every member of our Society possesses a far better compendium of Duchenne's works than any which the author's fellow-countrymen can possibly procure in their own tongue. A volume of the same class is in preparation to comprise the most valuable parts of Alfred Fournier's works; and the work in *Micro-parasites* just edited for us by Mr. Watson Cheyne, may claim something of the same character. Our two volumes of German *Clinical Lectures* were also carefully selected, and gave to our readers the best of the voluminous series which appeared in the original.

Of the works on which translators for the Society are now actually engaged, I may mention the following: Hirsch's *Manual of Geographical Pathology* (Dr. Creighton); a third volume will conclude this work: Cohnheim's *General Pathology* (Dr. McKee): Spiegelman's *Midwifery* (Dr. Hurry), undertaken on the strong recommendation of Dr. Matthews Duncan, Dr. Barnes, Dr. Herman, and others. This work is a large and freely illustrated manual of the subject, and has attained great popularity abroad. Dr. Barlow has in hand for us the original essays of Dr. Raynaud on the disease which is likely in the future to bear his name, and Dr. Fancourt Barnes has translated Neugebauer's monographs. Another volume of Charcot's *Clinical Lectures* (not as yet quite complete in the original) has been adopted, as have also the works of Flugge on *Micro-parasites*, Litzmann on *Contracted Pelvis*, and Bandl's two short monographs on special subjects in connection with pregnancy and labour. A third volume of German Clinical Lectures is contemplated, and many other works have only been put aside by the Council, because it cannot see its way to the probability of being able to afford to issue them within a reasonable period. There is no lack of works in foreign languages, the reproduction of which in English would be a direct and great boon to professional knowledge amongst ourselves. No machinery can possibly be devised better fitted for the production of such works than a mutual translation company, such as is our Society. The works which we publish cost our members certainly less than half of what they would do if purchased through the trade. The recent remarkable cheapening of medical works has, I have no doubt, to some extent conflicted with our interests. It is, however, a fact on which we congratulate ourselves, partly because we believe that what we have done has had a share in bringing about the reformation, and in part because it helps to attain the end which the Society seeks. When, however, medical publishers have done the utmost that enterprise can attempt, we still feel that there will be abundant room for our Society's special function. In that belief, on behalf of the Council, I now appeal to the English-speaking profession all over the world to come forward and recruit our ranks. We have no formalities of election, and all who send their names and subscriptions are enrolled at once. Those who may possibly feel, respecting some of our works, that they do not personally wish to possess them, may yet have the satisfaction of knowing that they are helping the success of a Society which has in the past done much honest work in the cause of medicine, and which trusts to be enabled in the future to do much more.

—I am, sir, yours, etc., JONATHAN HUTCHINSON,
Honorary Secretary, New Sydenham Society.

15, Cavendish Square, W.

REVIVAL OF OVARIOTOMY AND MR. TAIT.

SIR,—A student of the history of modern surgery may be placed in some difficulty by the continued attempts made of late years by Mr. Lawson Tait, of Birmingham, to deprive Sir Spencer Wells of the credit accorded to him by almost every other surgeon at home or abroad, of having established ovariotomy as a recognised surgical operation, and of having raised it from the position in which it was left by Charles Clay and Baker Brown in 1856. Mr. Tait and Dr. Clay have supported the peculiar views of the Antivivisection Society, and the Society, in return, has extolled Mr. Tait and Dr. Clay in successive editions of sensational pamphlets, and has, at the same time, indulged in attacks, both personal and professional, upon Sir Spencer Wells. He has left (so far as I have observed) all these attacks unnoticed. But if somebody do not reply to them, frequent repetition may lead some people to accept them as accurate. Let me, then, place before your readers the opinions published, nine years ago, by Mr. Tait (before his alliance with the antivivisection party), and that expressed by him in your columns of the 29th of May last, page 1042.

Mr. Tait's work on the *Diseases of Women*, published in 1877, has, next to the title-page, the following dedication:

"DEDICATED TO THOMAS SPENCER WELLS, IN ADMIRATION OF THE BRILLIANT WORK BY WHICH THE ART OF SURGERY HAS BEEN ENABLED MATERIALLY TO PROLONG HUMAN LIFE."

And at page 273, there is a sentence which may be contrasted with that on your own page 1042, as an aid to the surgical student.

TAIT, 1877.	TAIT, 1886.
"To Mr. Spencer Wells must be accorded the credit of having placed ovariotomy in the position not only of an acknowledged operation, but of one of the most successful of the great operations of surgery."	"It is difficult to see upon what basis your claim for Sir Spencer Wells is founded. Dr. Clay fully established the operation years before Mr. Spencer Wells began to operate."

With regard to Mr. Tait's statement that Sir Spencer Wells had a mortality of 25 per cent. in 1,000 cases, he cannot, I think, successfully answer the charge of very unfairly representing the statistical results of Sir Spencer Wells' practice, by intentionally grouping together all the earlier and later cases, and suppressing the fact that, in successive periods of five years, the mortality in his practice had been reduced from thirty-four in the first hundred, to eleven in the tenth hundred. A more ingenious combination of the *suppressio veri* and the *suggestio falsi* can only be equalled by the most bigoted member of the Antivivisection Society.—I am, sir, yours obediently,

HISTORICUS.

CONSULTANTS AND PRACTITIONERS.

SIR,—The profession will thank you for finding space in the JOURNAL for discussing what is to many a real heart-felt grievance. I fear that, in not a few instances, medical men are rendered chary of seeking the help of their consultant brethren, by bitter experience of ungenerous, and sometimes something uncommonly like dishonest, treatment at their hands. Of course, as you suggest, the man once shadily treated would cease to call in help from the same quarter. But his medical neighbour, in ignorance, might still seek his assistance, and meet the same fate. It is, therefore, very desirable that the black sheep of the consultant flock should be generally known and avoided. This could, I believe, be easily accomplished, if the injured practitioner would, in the simplest possible way, state his case, not forgetting to name the wrong-doer, something after this fashion.

"SIR,—I had occasion, on May 10th last, to seek the advice of Dr. ——, of —— Street, about a patient suffering from incipient phthisis, since which time I have seen nothing of my patient, who, I understand, has put herself entirely under the care of Dr. ——.—Yours, etc, PETER GRIEVOUS."

A few letters of this sort in your columns devoted to correspondents would, I fancy, soon make a change for the better in the relationship of the general practitioner and consultant.—I remain, sir, yours faithfully, E. M. C. HOOKER.

SIR,—I note in your article of June 5th, you draw attention to the strained relations that exist between consultants and general practitioners at the present time, and none too soon. How is it? There are, no doubt, faults on both sides, Let us speak plainly. There are certain rules of etiquette that are frequently broken probably by both parties. 1. With regard to general practitioners. How often do we find patients come to consultants or specialists without their medical adviser or even a letter from them? Surely this is scarcely courteous when sent up; and can the consultant be expected to write or communicate under such circumstances to the medical adviser? If patients come to consult a consultant or specialist on their own responsibility, of what can the medical practitioner complain? Are they not free to do so? The complaint of the general practitioner is often very bitter in such instances. But are they not to blame sometimes by keeping their patients on their hands unduly long without suggesting further advice?

2. With regard to consultants. Patients coming to them should be invariably asked if their medical adviser sent them; and if so, it is the duty of the consultant to communicate with their family medical attendant. If not sent, and the case is under treatment, the patient should be refused to consult again without communicating with the medical attendant. It so often occurs that patients ask, when shall they come to the consultant again.

Another matter concerning consultants. We should live and let live. How is it that some of the chief consultants in London and heads of the profession see patients for one guinea, twice and sometimes three times for that fee, so I am informed both by brother consultants and by patients? Is it possible for our younger consultants to live when such fees are taken? No senior consulting physician or surgeon should take a less consulting fee than three guineas; it makes a difference from the general practitioner.

This I know to be a great cause of friction in the profession. Then again such practices as asking patients large consulting-fees, and telling them to take rooms in London, so that they may be seen daily, when the nature of the case does not demand it, brings upon the profession such names as "extortionists." There should be some recognised stated fee that the profession and the public understand.

Then, again, the envy, jealousy, and vicious backbiting that goes on at the present day is something terrible to contemplate in the profession; the shrug of the shoulders; the evil word spoken, one of another;—Is it brotherly? Is it decorous?

Then as to advertising. What is the difference between certain eminent members of the profession allowing their names to appear in the bulletins in relation to certain eminent patients in the advertisements of insurance societies, charities, or mineral waters, drugs, etc.; and the man who advertises in the public press—a medical work? There is too much of the "straining at the gnat and swallowing the camel" about it all; better not advertise at all.

There is a difference between the consultant pure and the specialist, and reasonably so; a man does not devote ten, fifteen, or twenty years of his life to some branch of medicine, be it the eye, throat, skin, or other, without obtaining experience in it, and naturally expects to get practice from the public; not only the public, but their brothers in medicine, are glad to consult them themselves very often—at least, such is my frequent experience as a consulting specialist; but the same rule applies with regard to consulting specially as pure consultants in their relation to the general practitioner.—I remain, your obedient servant, A CONSULTING SPECIALIST.

THE POSTAL MICROSCOPICAL SOCIETY.

SIR,—Thinking there may be many members of the profession who do not know of the existence of a special medical section, for the circulation of histological and pathological slides, in the above Society, I insert this in the hope that it may come under the notice of gentlemen interested in pathology, etc., and to ask them to assist the section by becoming members, or obtaining friends to do so. The advantages of the Society are these: 1. It takes up very little of their time—that is, only that in which the specimens and notes are examined, and once a year a new selection to be got ready, and sent to the Secretary to forward on the various circuits. 2. Members who cannot attend the meetings of societies for various reasons, and those who live too far distant from them, are thus brought into communication; ideas and notes are exchanged; and much useful information is brought to light. Often, the specimens present features of special interest.

The section is gradually increasing, and we hope, before long, to have many more among our ranks. Those gentlemen, in whose student days pathology and histology were only in their early growth, would, in this way, become acquainted with the progress of the science, and the various processes, etc., used in them. Of course, the slides of the medical section are not circulated amongst any but those of their own professional section. Should any further particulars be desired, they can be obtained from the Secretary, Mr. Alfred Allen, 1, Cambridge Place, Bath. Thanking you in prospective for the insertion of this letter, I am, yours truly, V. A. LATHAM.

Manchester.

THE USE OF CUCAINE IN PROSTATIC CATHETERISM.

SIR,—Mr. Hurry Fenwick, like Hotspur, will "cavil on the ninth part of a hair." My original statement was that, in order to anæsthetise the prostatic urethra with cucaine, the end of an instrument must first be placed there, and that this, as a preliminary to simple catheterism, made the game not worth the candle. In his last defence of the use of cucaine, Mr. Fenwick is obliged to change his ground. In his first letter, he enthusiastically advocated the use of a Guyon's "sonde" when injecting the deep urethra with cucaine; he now makes the following extraordinary statement, "the entire bladder and prostatic urethra may be cucainised without being entered by an instrument." Why then the Guyon's "sonde"? The use of cucaine in prostatic catheterism is doubtless charming in theory, and nearly faultless on paper; but, in practice, it is unfeasible.—I am, sir, yours very faithfully, G. BUCKSTON BROWNE.

Wimpole Street, W.

*** This correspondence must now cease.

UNIVERSITY INTELLIGENCE.

VICTORIA UNIVERSITY.

STATE AID.—A large and influential deputation waited upon Earl Spencer, a short time ago, to urge upon him the advisability of adding his support to an appeal which is shortly to be made to the Treasury, for an annual grant for defraying the working expenses of the youngest university in the kingdom. There can be no doubt that the representatives made out their case as one deserving of very serious and favourable consideration from the Government. Founded only in 1880, the Victoria University has done already much useful work; and, if it be properly supported, it ought, and doubtless will, become a great university. There is no reason why it should not become as useful in the Lancashire district of the kingdom as the Scottish universities have become, not only for Scotland, but for a large area of England as well. So far, the funds have largely come from voluntary subscriptions of the people of Manchester and the surrounding districts; and considering that Manchester has organised and equipped Owens College in the most handsome and liberal manner, and Liverpool has followed fast in its erection of University College, it is too much to expect that the Victoria University also can be maintained by voluntary donations. The principle of State-aid to the universities is conceded, if Wales, and Scotland, and London, are to be taken as examples. The Colleges of Wales receive several thousands *per annum* from the Government, while the Scottish universities are largely state-supported and endowed institutions. In a Parliamentary return obtained by Sir Lyon Playfair, the total sum paid by Government from public funds for the ten years 1873-74 to 1882-83 reached the total of £409,250, or about £40,000 *per annum*. This sum includes £20,000 as part of a grant in aid of £120,000 advanced by the Government for the University of Glasgow, and £80,000 paid by Government towards the expenses of the new Edinburgh Medical School. It also includes sums for pensions, and such important items as the following: Edinburgh receives £500 *per annum* for the maintenance of its buildings; the buildings of St. Andrew's and Aberdeen are maintained by the Board of Works; while Aberdeen has received, from time to time, comparatively small sums for the extension of its buildings, especially of the medical school, and, quite recently, it has appealed to Government for further aid. Glasgow alone of the Scottish Universities receives no aid from Government for the maintenance of its buildings. The University of London also receives a large annual grant. With all these facts

before us, it is difficult to see why Victoria University should not be similarly helped, especially as its demands were moderate, only £2,500 *per annum*. We understand that it is the intention to apply, ere long, to the Treasury for some aid from the Imperial Exchequer.

Victoria University has also been active in seeking representation on the Medical Council. Consisting of two powerful colleges, or rather having affiliated to it Owens and University Colleges, it refused to accept a joint representative for itself and Durham; and we are glad to see that the amendment of Sir Henry Roscoe was carried in committee, whereby Victoria University will obtain a representative for itself.

All this is, so far, so good; but something more is required; and that is, that the degrees of Victoria University shall be of such a standard as to be within the reach of the average student. Professor Stirling, in his inaugural address, discussed this subject from the medical aspect; and he said truly that the degrees in Medicine should be "accessible" degrees—that is, that a fair average student of medicine, who is a student at Owens or University College, should feel—if he be desirous of obtaining a University degree—that, with due attention to his studies, he ought to seek and obtain his degree in his own town, without wandering across the border to get what should be obtainable at home. We feel sure that the remarks of Professor Stirling are likely to bear good fruit in the future, by directing attention to the necessity for encouraging the desire to obtain an university qualification in medicine. We have reason to believe that Dr. Stirling's remarks on this subject were endorsed by the whole medical profession in Lancashire.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ACTION FOR LIBEL BY A MEDICAL PRACTITIONER: DAMAGES £500.

LAST week, before Mr. Justice Harrison and a special jury, an action for damages for libel was brought by Dr. O'Callaghan, surgeon to the county Carlow Infirmary, against Mr. Vigors, J.P. The libel was contained in letters published by the defendant in a local newspaper, and was to the effect that an operation for removal of the tonsils in a boy, a son of an employé in the house of Mr. Vigors, had been unskilfully performed. The jury, after the absence of an hour and a half, found a verdict that the plaintiff was not guilty of negligence as a surgeon to the Infirmary, and was not guilty of negligence as a physician; that the words complained of by the plaintiff were a libel, and were not fair comment, and were not true in the sense imputed. They assessed damages at £500, and Mr. Justice Harrison gave judgment for plaintiff in accordance with the verdict.

ASSISTANTS AND FEES FOR ATTENDANCE IN COURT.

SIR,—Will you be kind enough to let me have your replies to the following questions?

Is a medical assistant, when summoned to appear and give evidence in a distant court of justice, and detained for two days and two nights, bound to hand over to his principal the money paid to him by the law to defray his expenses? No fee is allowed for evidence, nor is compensation given to anyone for loss of time.

The assistant attended the local police-court, before the justices, at the preliminary trial, and, at the termination of the case at the assises, was paid 10s. 6d. for that attendance, which was handed to the principal. Can he claim more?

Should the assistant pay his expenses out of his own pocket, and hand over the guinea a day, and the half-a-crown he gets for each night, to his employer?

Is not an assistant justified in travelling in any class of carriage he likes, and pocketing the difference, if any, between that and the first-class fare, which is always allowed?

The principal holds that the £2 2s. is a fee. The assistant maintains it is only the return of the approximate amount of witness's expenditure.—Your kind advice will greatly oblige,—Yours obediently, AN ASSISTANT.

*** The official scale allows to a medical witness for attendance before magistrates, "for loss of time and trouble in attending to give professional evidence," a sum of 10s. 6d. In the same way, for each day's attendance at assizes, a sum, not to exceed £1 1s., is allowable, "for trouble, expenses, and loss of time." How sums so paid are to be divided between principal and assistant, is a question which can only be answered by reference to the wording of their agreement. It seems clear that they are not all to be regarded as fees, and that the assistant, who attended as a witness, would be entitled, at least, to be recouped his expenses out of pocket. On the other hand, the principal was deprived of his services during the time he was away as a witness, and may fairly claim some part of the money as earned for him. Travelling allowances can be spent as the witness likes. The taxing officer would be sure to disallow first-class fare if he knew that the witness had travelled third.

PROFESSIONAL ETIQUETTE.

SIR,—Will you kindly express your opinion on the following case? Some little time ago, my sister paid a visit to my brother (a layman), residing at a distance from our town, and, while there, contracted typhoid. A medical man, Mr. B., was called in, and attended the patient until she was able to return home. Soon after my sister was taken ill, I went over to see her, and met Mr. B. in consultation. A short time ago, my brother forwarded me a bill he had received from Mr. B., for medicine, etc., for my sister, which I at once paid, though, at the same time, I was surprised that any charge should have been made. I have several times attended the relations of medical men, and never even thought of charging for my services.—I am, yours truly, PHYSICIAN AND SURGEON.

P.S.—I may mention that Mr. B. lives close to my brother's residence.

*** We must refer our correspondent to the rule in the *Code of Medical Ethics* bearing on the subject of attendance on the families of medical brethren, a copy of which is given in the JOURNAL of April 3rd, 1886, page 664. He must remember that, if the general and discretionary principle, which he appears to indicate, were recognised as one of inflexible ethical law, a severe tax might be inflicted on the time and pocket of a practitioner, who happened to be acquainted with a large family, one of the members of which was a professional neighbour. "A Physician and Surgeon" deserves credit for his generous liberality; but it would be going too far to accuse of disregard of professional etiquette those who do not, under all circumstances, feel disposed to act in the like manner.

F. W. S.—There cannot, we think, be a doubt that many of the wrongs from which the profession suffer arise, as, apparently, in the case herein alluded to, out of our defective conduct to each other; and that, by avoiding invidious remarks and every unworthy artifice to elevate self at the expense of other practitioners, we should achieve the greatest good that could possibly be conferred upon our profession; unhappily, however, there is, and, we fear, ever will be, a tendency on the part of some practitioners to ignore the moral obligation to do unto others as they would wish to be done by, and thus lead to serious disputes, lasting estrangements, and professionally injurious public criticism.

In reference to the statement submitted to us by Mr. S., we may briefly remark that, if it be a fair representation of all the facts, Mr. A.'s omission to reply to our correspondent's note and enclosure of May 12th is much to be regretted, and, moreover, subjects his unexplained conduct to adverse criticism.

QUALIFIED OR UNQUALIFIED.

BETA asks if a person, who signs death-certificates M.D.Phil. and L.M.Dublin after his name, and who visits regularly in a large town, is liable to prosecution. His name does not appear in the *Medical Directory*, and his death-certificates are accepted by a registrar. He charges some patients a shilling a visit, and gives them medicine in a tumbler.

*** If the letters "L.M.Dublin" mean Licentiate in Medicine of the University of Dublin, and the person in question possess that qualification, he is not liable to prosecution for what he is alleged to be doing; if this do not mean that, in other words, if it be not a registrable qualification, of course he is liable to prosecution.

FEES FOR MEDICAL WITNESSES.

MR. JACK (Warrington).—In criminal prosecutions at assizes, the authorised scale of costs for witnesses, being members of the profession of law or medicine, attending to give professional evidence, is a sum not to exceed £1 1s. for each day they shall necessarily attend the court to give professional evidence. No witness is to be allowed anything for his attendance, loss of time, trouble, or expenses, in more than one case, on the same day.

OBITUARY.

FRANCIS MASON, F.R.C.S., Surgeon to St. Thomas's Hospital.

THE melancholy circumstances attending the death of this genial surgeon are noted in the present number of the JOURNAL. Mr. Mason was born in 1837, and received his education at the Islington Proprietary School, and at the King's School, Canterbury. He studied for the profession at King's College, and took the diploma of Member of the College of Surgeons in 1858. In 1859-60 he held the appointment of House-Surgeon to King's College Hospital, and there attracted the attention of Sir William Fergusson, who took great interest in him, and employed him as an assistant in private practice for many years.

Mr. Mason held, for a short time, the appointment of Assistant-Surgeon to King's College Hospital. In 1862, he took the diploma of Fellow of the College of Surgeons. In 1867, he was elected to a similar appointment on the staff of the Westminster Hospital, where he became full Surgeon in March, 1871. In July of the same year he was appointed Assistant-Surgeon to St. Thomas's Hospital; and, in 1876, he was promoted to the full surgeoncy. At the date of his death, he was Lecturer on Practical Surgery at his hospital.

Mr. Mason was a member of the Association. He was at one time President of the Medical Society, delivering the oration in 1870, and the Lettsomian Lectures on "The Surgery of the Face" a few years later. He was chiefly known in the profession as an authority on the plastic surgery of the face and palate, and performed staphylorraphy

with dexterity and success. Mr. Mason was an accomplished gentleman, possessing agreeable social qualities, which won him a wide circle of friends. His death came as a great surprise and shock to them. The nature of his illness appeared to indicate that his health had been impaired for some time, yet he had been in excellent spirits during the whole of the past winter and spring, and looked particularly well and cheery at a dinner given by the President of the Metropolitan Counties Branch a few weeks ago, where he greatly amused the company by his clever vocal and instrumental performances.

The funeral took place on Wednesday morning at Highgate Cemetery; nearly the entire staff of St. Thomas's Hospital were present. Mr. Mason leaves a widow, but no family.

NAVAL AND MILITARY MEDICAL SERVICES.

ACTING-SURGEONS OF VOLUNTEERS.

WE are glad to be able to announce that it has been decided that service as an acting-surgeon of volunteers is allowed to count as qualifying service towards the honorary rank of surgeon-major.

FIELD-ALLOWANCE.

SIR,—About ten years ago, a naval surgeon volunteered, and was "lent," as medical charge of a detachment of a West Indian regiment sent from Bridgetown to Speight's Town, Barbadoes, to quell a rebellion. On return, a requisition was sent to the military authority at Barbadoes for the amount to which the medical officer was entitled; but, having rejoined his ship, and sailed before the necessary approval could be effected, he heard no more of the affair.

Could anyone, military particularly, inform me if the right could now be maintained, and, if so, to whom the applicant ought to refer?—Yours sincerely,

ARGUS.

*** As ten years have elapsed since the occurrence named in our correspondent's letter, we do not think the necessary official certificates could be obtained for the recovery of the field-allowance mentioned. But there could be no objection to an application being made for it to the War Office through the Director-General of the Army Medical Department, full and precise particulars being, at the same time, furnished with the application.

ORDER OF MEDICAL MERIT.

SIR,—Kindly allow me space for a few remarks, anent the proposed Order of Medical Merit. Such an order I consider, and there are many out here holding the same opinion, to be an ill advised one, for two reasons.

1. Army medical officers neither desire nor deserve any higher reward for their purely professional work, than is received by medical practitioners in civil life.

2. An army medical officer has to face dangers, endure hardships, and perform duties peculiar to his position as a soldier; they are the inevitable concomitants of campaigns, of marches, of foreign service; therefore, when he merits a distinction, it should in no wise differ from that given to other soldiers. He should be allowed to compete with them for such honourable rewards as the V.C., C.B., C.I.E., etc., and not be put off with such an exclusive order as the one suggested by Dr. Quain, which would, ere long, be styled by our brother officers in the combatant ranks, the "doctor's order," and would be regarded very much as an ordinary medical qualification.—I remain, yours sincerely,

SIRHIND.

THE LATE SURGEON TURNER.

THE following subscribers to the memorial of late Surgeon C. P. Turner, Army Medical Staff, have paid their subscriptions: Surgeon-Major A. F. Churchill, Surgeons G. Laffan, R. C. K. Laffan, R. P. Bond, R. C. Johnston, T. H. Parke, A. Harding, T. Boyd, A. M. Davies, J. F. Jencken, W. H. P. Lewis, A. W. Carleton, C. A. P. Mitchell, T. R. Lucas, J. A. Smith, Surgeons-Major T. J. Galwey, and N. McCreery, Surgeons T. Lingard, R. Hetherington, M'Grath, J. M'D. Stewart.

REWARDS FOR SERVICE IN EGYPT.

SIR,—I would feel obliged if you could tell me why it is that not one single surgeon of the Army Medical Staff has received a decoration from the Egyptian Government (except the Khedive's star, which everyone received), since we landed in Egypt in 1882, particularly as the "Medjidie" and "Osmanieh" have been so profusely distributed to all other officers? This is difficult to understand, for if any officer had a claim on the Khedive for a decoration, surely the surgeons had, considering they cared for and operated on such a large number of Egyptians after Tel-el-Kebir and other battles. Independent of the work done by surgeons in war-time, they also had to contend with the cholera epidemic in 1883, which should further entitle them to some recognition. Would not this be a fit question to ask Parliament?

By surgeons, I do not mean medical officers of any other rank, such as surgeons-major, brigade-surgeons, etc. Numbers of officers of the same rank, and junior to surgeons in every other branch of the Army, have received decorations for their services in Egypt.—I am, etc.,

STAFF-SURGEON.

PAY OF BRITISH ARMY SURGEONS IN INDIA.

"SURGEON M. S." writes:—I think "A Father," who complains of the pay and allowances of his son in India, must be in error when he says his son receives 417½ rupees a month. A surgeon, under five years' service, receives only 317½ rupees a month; after five years, and less than six years' service, he receives 333 rupees 12 annas 2 pi a month; thus, the difference of pay received by a surgeon and a captain, is even greater than "A Father" thinks. I went to India fully persuaded I should draw English pay converted into Indian money, *plus* captain's allowances, but was wofully disappointed; and, partly as a warning to others, and partly with the hope that the grievance might, in some way be remedied, I wrote a letter to you on the subject, which you were good enough to publish in the JOURNAL of May 27th, 1882. My object, however laudable, does not appear to have been very effectual. Others, apparently, have not been warned; and, certainly, my grievance was in no way remedied, for I never once drew the pay to which, I considered, and still consider, I was entitled by the Royal Warrant of 1879; but I had the satisfaction of knowing instead, that the Indian Government were receiving the services of a hard-worked body of men without giving us our due, because that "Royal Warrant did not apply to India," although that Warrant does apply to Ceylon, and all the other colonies in which British troops serve.

THE NAVY.

STAFF-SURGEON FLEETWOOD BUCKLE, M.D., has been promoted to the rank of Fleet-Surgeon in Her Majesty's Fleet. Dr. Buckle received the thanks of the Chilian Government for his services to the wounded after the battles round Lima in 1880, during the war between Chili and Peru. He was entertained at a public banquet, and presented with a valuable ring by the staff of the Panama Canal Company, in grateful recognition of his services during the yellow fever epidemic in 1881. He served with the Royal Marines in the defence of Suakin, and in the operations in the Eastern Soudan in 1884-85, including the engagement on March 24th (medal with clasp).

Messrs. P. A. SIMPSON, M.A., M.D., and J. C. WOODBURN, M.D., are appointed Surgeons to the Clyde Brigade of the Royal Naval Artillery Volunteers.

The following appointments have been made at the Admiralty during the past week:—HENRY HADLOW, Fleet-Surgeon, to Haulbowline Hospital; W. E. BENNETT, Staff-Surgeon, to the *Rupert*; EDWIN NEWELL, Surgeon and Agent, to Moville.

MEDICAL STAFF.

Surgeon R. H. GARDNER, M.D., having returned from field service in Burmah, is appointed Staff-Surgeon at Fort William, Bengal, in addition to his own duties.

Deputy Surgeon-General R. WEBB, serving in Bengal, has leave of absence for six months, on medical certificate.

The Lahore paper says that several medical officers have been refused leave to England, owing to the large number of doctors required with the troops in Burmah.

Surgeon R. J. FAYLLE, doing duty at the station-hospital at Secunderabad, is ordered to do duty at the station-hospital Wellington, Madras command.

Surgeon J. F. BURKE, on arrival from England, is directed to do duty with the Burmah Field Force at Mandalay.

Surgeon-Major A. F. PRESTON, M.B., has been appointed to perform the medical duties of the Lawrence School and Civil Establishment at Mount Aboo, Bombay Presidency.

THE INDIAN MEDICAL SERVICE.

Deputy Surgeon-General H. COOK, M.D., of the Bombay Establishment, is allowed leave to Europe for six months on medical certificate. Brigade-Surgeon H. V. CARTER, M.D., Bombay Establishment, is to act as First Physician of the Jamsetjee Jejeebhoy Hospital during the absence of Dr. Cook.

Brigade-Surgeon H. R. L. MCDOUGALL, of the Bombay Establishment, is permitted to retire from the service on a pension of £500 per annum, payable in England. He entered as Assistant-Surgeon May 28th, 1858, and rose to Brigade-Surgeon May 1st, 1883. He was in the Indian Mutiny Campaign in 1859, including the operations against Fort Beyt and Dwarka; also in the war with China in 1860, when he was at the taking of the Taku Forts (medal with clasp).

Brigade-Surgeon G. FARRELL, of the Bengal Establishment, has been gazetted a Companion of the Bath; and Surgeon-General M. C. FURNELL, M.D., Madras Establishment, Surgeon-General with the Government of Madras; and Deputy Surgeon-General A. M. DALLAS, Bengal Establishment, to be Companions of the Indian Empire. Brigade-Surgeon Farrell served in the war in Afghanistan, in 1878-80, and was in the actions at the Sapri Pass and Charasia, for each of which he was mentioned in despatches. Surgeon-General Furnell was engaged in the Indian Mutiny Campaign in 1858-59.

Mr. E. A. BURNSIDE is appointed Surgeon to the London Companies of the Volunteer Medical Staff Corps.

The undermentioned gentlemen have been appointed Acting Surgeons to the Volunteer Corps specified: EDWARD CLARKSON, to the First East Riding of Yorkshire Artillery; J. E. Fairlie, to the 6th Lanarkshire Rifles; WILLIAM GIBB, to the 2nd Perth (Perthshire Highland) Rifles.

The undermentioned Surgeons of Volunteers have been granted the honorary rank of Surgeon-Major: D. B. BALDING, 1st Hertfordshire; T. W. THURSFIELD, 2nd Volunteer Battalion of the Royal Warwick Regiment (late of the 2nd Warwick Volunteers).

Acting Surgeon TREVOR WEBSTER, of the 1st Volunteer Battalion of the Worcestershire Regiment (late of the 1st Worcester Volunteers), has been gazetted Lieutenant in the same corps.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITAL FOR SICK CHILDREN.

THE thirty-fourth annual meeting of the governors of the Hospital for Sick Children, Great Ormond Street, was held on May 19th. The report showed that the number of in-patients admitted during the year 1885 was 1,114, and of out-patients 14,281. At Cromwell House, Highgate, 250 children were admitted; 152 chronic cases, and 98 convalescent. A sum of £1,500 was collected at the last anniversary festival, and £700 was received from the proceeds of a concert given by Madame Cellini. The total income for the year was £11,916, and the expenditure had exceeded that amount by about £500. It was

stated that the City companies, in response to an application, had contributed a sum of £743. There was at present in hand about £3,000 towards the £20,000 required for the completion of the building.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

PUBLIC SANITARY INSPECTORS.

On Saturday evening the third annual dinner of the Association of Public Sanitary Inspectors was held at the Holborn Restaurant, under the presidency of Mr. Edwin Chadwick, C.B. After the usual loyal and patriotic toasts (Sir W. Guyer Hunter, M.P., responding for the army) Dr. Alfred Carpenter proposed "The Association." He explained that the sanitary inspectors appointed under the Public Health Acts were combined, not only for the purpose of mutual support, but in order to ascertain how best to administer those Acts, and urged that these officers should be paid out of the Consolidated Fund instead of out of local rates. The President, in response, dwelt upon the advantages of sanitation in comparison with those of militarism. The expenditure of a million of money—the cost of one big ship—would, he stated, serve for the sanitation of some twelve or thirteen Maltas, would save yearly a hundred lives, and more than 2,000 cases of sickness, and all the expense of lost labour to the adult population. The money wasted on two big warships would suffice to advance the health of the population of Naples to its normal state. The sanitary deficiences in Paris were due to the wasteful expenses of its armaments. In our colonies, where, in the ignorance of sanitation, settlements had been made on undrained and malarious sites with undrained houses and towns, there was a great excess of preventable disease. Sanitary defences against these were of primary importance, compared with which those military defences imagined to be immediately necessary sank into insignificance. "The Houses of Parliament" was acknowledged by Earl Fortescue. Dr. Alexander Bain, Lord Rector of Aberdeen University, proposed "The Health of the Executive," to which Mr. G. B. Jerram responded. Other toasts followed.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 5,704 births and 3,033 deaths were registered during the week ending Saturday, May 29th. The annual rate of mortality, which had declined in the three preceding weeks from 20.6 to 18.7 per 1,000, further fell during the week under notice to 17.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Nottingham, 12.2; Norwich, 12.5; Bristol, 12.8; Wolverhampton, 14.4; Huddersfield, 15.3; London, 15.5; Hull, 16.1; Brighton, 16.1; Sheffield, 16.3; Plymouth, 16.3; Derby, 16.5; Bradford, 17.4; Leicester, 17.9; Birkenhead, 18.1; Birmingham, 18.7; Salford, 18.8; Liverpool, 19.2; Leeds, 19.2; Sunderland, 19.2; Newcastle-upon-Tyne, 19.8; Cardiff, 20.2; Manchester, 22.2; Preston, 23.2; Portsmouth, 25.7; Oldham, 26.4; Blackburn, 28.7; Halifax, 30.0; and the highest rate during the week, 32.8 in Bolton. The death-rate in the twenty-seven provincial towns averaged 19.0 per 1,000, and exceeded by as much as 3.5 the rate recorded in London, which, as before stated, was only 15.5 per 1,000, and, with the single exception of the rate in the third week of September last, was the lowest in any week on record. The 3,033 deaths registered in the twenty-eight towns during the week under notice included 90 which were referred to measles, 76 to whooping-cough, 36 to diarrhœa, 28 to diphtheria, 20 to "fever" (principally enteric), 23 to scarlet fever, and not 1 to small-pox; in all, 278 deaths resulted from these principal zymotic diseases, against 367, 324, and 286 in the three preceding weeks. The zymotic death-rate was equal to 1.6 per 1,000. In London, the zymotic rate was 1.5, while it averaged 1.7 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Norwich, Wolverhampton, and Halifax, to 5.0 in Blackburn, 5.1 in Preston, and 6.9 in Bolton. The fatal cases of measles, which had been 90 and 108 in the two previous weeks, declined again during the week to 90, and caused the highest death-rates in Portsmouth, Blackburn, Preston, and Bolton. The deaths referred to whooping-cough, which had declined in the three preceding weeks from 141 to 87, further fell during the week under notice to 76; this disease showed the largest proportional fatality in Salford, Sheffield, and Newcastle-upon-Tyne. The 36 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths from diphtheria, which had been 30 and 15 in the two preceding weeks, rose during the week to 28, and included 20 in London, 2 in Plymouth, 2 in Birmingham, and 2 in Leeds. The 25 fatal cases of fever showed a decline of 2 from the number in the previous week, and caused the highest death-rates in Bolton, Portsmouth, and Derby. The deaths referred to scarlet fever, which had been 23 and 21 in the two preceding weeks, rose again during the week under notice to 23; this disease was somewhat fatally prevalent in Leeds. No death from small-pox occurred during the week, either in London, or in any of the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased from 7 to 35 in the nine preceding weeks, were again 35 on Saturday, May 29th; 6 new cases were admitted to these hospitals during the week, against 9 and 10 in the two preceding weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 2.8 per 1,000, and was considerably below the average. The causes of 57, or 1.9 per cent., of the 3,033 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, May 22nd, 804 births and 526 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had declined in the four preceding weeks, from 23.1 to 21.8 per 1,000, further fell during the week under notice, to 21.3, but exceeded by 3.9 per 1,000 the average rate during the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 9.0 in Greenock, 18.5 in Aberdeen, 19.1 in Paisley, 19.1 in Dundee, 19.6 in Edinburgh, 23.7 in Leith, 24.7 in Glasgow, and 27.9 in Perth. The 526 deaths registered during the week under notice in these Scotch towns included 60 which were referred to the principal zymotic diseases, against 55 and 44 in the two preceding weeks; of these, 17 resulted from whooping-cough, 17 from measles, 9 from scarlet fever, 8 from diarrhœa, 6 from "fever," 3 from diphtheria, and not one from small-pox. These 60 deaths were equal to an annual rate of 2.4 per 1,000, which exceeded by 0.8 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Edinburh, Leith, and Glasgow The fatal cases of measles, which had been 17 and 10 in the two preceding weeks, rose again during the week to 17, of which 10 were recorded in Edinburgh, 3 in Leith, and 3 in Glasgow. The deaths referred to whooping-cough, which had declined in the four previous weeks from 21 to 11, rose again during the week to 17, and included 16 in Glasgow. The 9 cases of scarlet fever showed a further increase upon recent weekly numbers, and included 8 in Glasgow. The 8 deaths from diarrhœal diseases were slightly below the average. The fatal cases of fever (principally enteric) which had been 5 and 6 in the two preceding weeks, were again 6 during the week under notice, of which 2 occurred in Glasgow, and 2 in Dundee. The 3 deaths from diphtheria showed a decline of 2 from the number in the preceding week. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 3.7 per 1,000, against 2.8 in London. The causes of 63, or 12.0 per cent., of the 526 deaths registered during the week in these Scotch towns were uncertified.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, June 10th.

The Medical Acts Amendment Bill.—In the course of his announcement, touching the impending dissolution, and the Bills the Government proposed to deal with before going to the country, Mr. Gladstone said: With regard to the Medical Acts Amendment Bill, which has been before Parliament an almost countless number of times, it has now reached a most favourable position. As I understand it, hardly any point remains for settlement, and there is nothing in it which is seriously contested. We do not abandon the hope, therefore—I may say, we cherish the hope—that that Bill, which is not a subject of contest between parties, may pass into law.

Monday, June 7th, 1886.

The Science and Art Department and Medical Schools.—Mr. Cozens-Hardy asked the Vice-President of the Committee of Council whether a special arrangement had been recently made between the Secretary of the Science and Art Department and the medical schools of certain hospitals in London, by which the medical students from those schools were to be transferred to the Science School at South Kensington for certain scientific classes at special fees.—Dr. Farquharson inquired whether it was not the fact that medical students enjoyed the right of attending science-classes in Government schools.—Sir L. Playfair: In acceding to a request made and initiated by a joint committee of the four unendowed hospitals—namely, Charing Cross, Middlesex, St. George's, and Westminster—an arrangement has been made by the Secretary of the Science and Art Department, with the sanction of the Lord President and myself, for the admission of certain students from their medical schools to that part of the courses which is limited to elementary instruction in biology, physics, and chemistry at the Normal School of Science at South Kensington. The only thing special in regard to the fees was that they were slightly raised; for whereas for the elementary instruction in those sciences the annual fee is £33, the medical students will have to pay not £33, but £35, with about £3 in addition for apparatus. In answer to the further question of my hon. friend the member for West Aberdeenshire, medical students have attended science-classes in the Government School for the last twenty years, and care has always been taken that the fees charged should not be so low as to compete with private schools.

Thursday, June 3rd.

Physical Training in Elementary Schools.—Mr. Buxton asked the right hon. gentleman the member for the Newton Division of Lancashire, whether the Royal Commission on Education would include within the scope of its inquiry the means for the physical training and recreation of children in elementary schools.—Sir R. Cross: Yes, sir, certainly.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, June 3rd, 1886.

Boyton, Edward Thomas Augustus, Wathington, Oxfordshire.
Brazil, Walter Henry, Highview, Sharples, Bolton-le-Moors.
Davis, William, Bank House, Ashford, Kent.

MEDICAL VACANCIES.

The following vacancies are announced.

AXBRIDGE UNION.—Medical Officer. Salary, £47 10s., with additional medical extras. Applications by June 28th to W. Reece, Esq.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE. Gloucester.—Junior Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. Applications to Dr. Needham.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Honorary Assistant-Surgeon. Applications by June 14th, to E. J. Abbott.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £100 per annum. Applications to Mr. J. Ostell, 14, Bank Street, Carlisle.

EAST LONDON HOSPITAL FOR CHILDREN.—Resident Clinical Assistant. Board and lodging. Applications by June 24th to A. Warner, Esq.

EAST RIDING ASYLUM, Beverley.—Assistant Medical Officer. Salary, £100 per annum. Applications to Medical Superintendent by July 1st.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by June 30th to the Secretary.

GENERAL INFIRMARY, Northampton.—House-Surgeon. Salary, £125 per annum, with furnished apartments, board, attendance, and washing. Applications by June 22nd to S. P. Bennett, Esq.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square, W.—Resident Medical Officer. Salary, £100 per annum, with board and rooms. Applications by June 15th to the Honorary Secretary.

INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £80 per annum, with bed, board, and washing. Applications by June 17th, to Dr. Aitken, Medical Superintendent.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £50 per annum. Applications by June 18th, to the Secretary

LIVERPOOL INFIRMARY FOR CHILDREN.—House-Surgeon. Salary, £85, with board and lodging. Applications by June 12th to the Honorary Secretary.

LONDON DENTAL HOSPITAL, Leicester Square.—Assistant Dental Surgeon. Applications by June 21st to the Honorary Secretary.

OWENS COLLEGE, Manchester.—Professor of Chemistry. Applications to the Council of the College, under cover, to the Registrar by August 31st.

RIPON DISPENSARY.—Resident House-Surgeon and Dispenser. Salary, £100 per annum. Applications by July 1st to the Honorary Secretary.

ST. NEOT'S UNION, Hunts.—Medical Officer of Health for the combined Rural Sanitary District of Caxton and Arrington, and St. Neot's Union and the St. Neot's Urban District. Salary, £237, inclusive of travelling expenses. Applications by June 14th to J. H. Ennals, Esq.

SUSSEX COUNTY HOSPITAL, Brighton.—House-Surgeon. Salary, £80 per annum, and £10 per annum for each resident pupil. Applications by June 23rd to the Secretary.

SUSSEX COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, £40, with board, residence, and washing. Applications by June 23rd to Lieutenant-General Bourchier.

URLINGFORD UNION.—Medical Officer. Salary, £120 per annum and fees. Applications to Mr. Michael Bownes, Honorary Secretary, Dispensary Committee. Election on June 17th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications by June 28th to C. A. Newnham, Esq.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Resident Assistant. Board, lodging, and, washing. Applications by June 28th to the Chairman of the Medical Committee.

MEDICAL APPOINTMENTS.

BUTLER-SMYTHE, A. C., F.R.C.S.Ed., appointed Surgeon to St. George Hanover Square Dispensary, *vice* H. F. Prince, deceased.

CALCH, Clement C., M.B., M.S.Durham, A.K.C.Lond., appointed Professor of Physiology and Pathology in the Medical College, Lahore, Punjaub.

CANN, R. T., M.R.C.S., L.R.C.P., appointed Visiting Surgeon to the Chester General Infirmary, *vice* W. Lees, M.R.C.S., L.S.A.Lond., resigned.

CASTLE, R. F., B.A Cantab., M.R.C.S.Eng., appointed House-Surgeon to the North Cambridge Hospital, *vice* W. Sharples, M.R.C.S.Eng., L.S.A., resigned.

CREGAN, W. J., L.R.C.P., L.R.C.S.Ed., appointed Assistant-Surgeon to the Liverpool Dispensaries.

DALZELL, W. R., M.A., M.B., C.M.Edin., appointed Head Surgeon to the Liverpool Dispensaries.

DIXON, J. R. L., M.R.C.S., L.R.C.P., appointed Second House-Surgeon to the Royal Southern Hospital, Liverpool, *vice* F. Knight, M.B., resigned.

DUNN, L. A., M.B.Lond., F.R.C.S.Eng., appointed Assistant-Surgeon to the East London Hospital for Children, *vice* H. A. Reeves, F.R.C.S., resigned.

SILCOCK, A. Quarry, M.D., B.S., F.R.C.S.Eng., appointed Surgeon in charge of Out-patients at St. Mary's Hospital, and also Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

SIMPSON, A., M.A., M.B., C.M.Aberdeen, appointed Second Medical Officer to the Weston-super-Mare Hospital.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

STEVENSON, J., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant-Surgeon to the Liverpool Dispensaries.

STOOKES, A., M.B., C.M.Edin., appointed Head Surgeon to the Liverpool Dispensaries.

WALKER, A. C., L.R.C.P.Edin. and L.M.Edin., appointed Assistant-Surgeon to the Liverpool Dispensaries.

WESTBY, G., M.K.Q.C.P.I., L.R.C.S.I., appointed Medical Officer to No. 6 District of the Ladies' Charity and the Lying-in Hospital, Liverpool.

WIGMORE, F. H., M.B.Cantab., M.R.C.S., appointed Senior House-Surgeon to the Royal Southern Hospital, Liverpool, *vice* A. H. Gordon, M.R.C.S.Eng., L.R.C.P.Ed., resigned.

WILDE, R. P., L.R.C.P.Ed., appointed Assistant-Surgeon to the Liverpool Dispensaries.

WILLS, W. A., M.B.Lond., appointed Resident Clinical Assistant at the Brompton Hospital for Consumption and Diseases of the Chest.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held at the College on Thursday afternoon, the 10th June.

A report was received from the Court of Examiners, submitting the names of those who had passed the examination for the Fellowship of the College; and the issue of diplomas to the candidates mentioned was authorised. Drs. Gee and Roberts were re-elected, and Drs. Moxon and Payne were elected, Examiners in Medicine for the ensuing year. Drs. Williams and Herman were re-elected Examiners in Midwifery; Mr. C. S. Tomes was re-elected Examiner in Dental Surgery for a further period of five years; and Mr. G. S. Turner was elected an Examiner in Dental Surgery, in room of Mr. Moon, resigned.

A second report from the Committee on the question whether it is desirable, and, if so, under what conditions, that degrees in Medicine and Surgery should be given by the two Colleges in combination, was received, adopted, and ordered to be entered on the minutes. The Committee submitted the following recommendations:

"1. That it is desirable that Degrees in Medicine be conferred on candidates who have passed the examinations of the Examining Board in England by the Royal Colleges of Physicians and Surgeons. 2. And that the terms upon which titles shall be conferred be referred to the Committee of Delegates of the two Colleges, to consider the same and report thereon."

Three additional delegates were appointed, subject to a similar number of additional delegates being appointed by the Royal College of Physicians, to form the Committee of Delegates.

The nomination of Professors and Lecturers for the ensuing year was made, and their election will take place at the next meeting of the Council in July.

Regarding the unoccupied ground near the new Examination Hall, it was agreed to take united action with the College of Physicians; and, accordingly, sixteen delegates were appointed to meet and confer with those appointed by the College of Physicians.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

UPPLEBY.—On May 4th, 1886, at Port Elizabeth, South Africa, the wife of J. G. Uppleby, L.R.C.P. and S., of a son.

WHITELEGGE.—On June 1st, at 13, Belgrave Square, Nottingham, the wife of B. Arthur Whitelegge, M.D., of a son.

MARRIAGES.

ISAAC—STAMPS.—June 1st, at Aston Church, Birmingham, by the Rev. W. Eliot, George Washington Isaac, M.B., C.M.Lond., to Florence Emily, second daughter of Thomas Stamps, Esq., Copeley, Gravelly Hill, Birmingham.

JONES—SIMPSON.—On June 8th, at St. Paul's, Wilton Place, James Thoresby Jones, M.R.C.S., L.R.C.P., son of the late Rev. James Jones, Rector of Llanfwrog, to Janet, eldest daughter of James Simpson, of Inverboyndie, Banff, N.B.

MACKERN—GIBSON.—On May 5th, at St. John's Church, Buenos Ayres, by the Rev. Austin West, M.A., assisted by the Rev. A. G. Lennox Robertson, M.A., George Mackern, M.D.Lond., late of Guy's Hospital, eldest son of William Mackern, Esq., of Buenos Ayres, to May, eldest daughter of Thomas Gibson, Esq., of 1, Eglington Crescent, Edinburgh.

OMAN—DARRACOTT.—On April 14th, at Holy Trinity Church, Sliema, Malta, by the Rev. Dr. Bullock, Senior Chaplain to Her Majesty's Forces, N. D. I. Oman, M.D., to Rosie, youngest daughter of the late Thomas Bligh Darracott, Esq., of Kingsbridge, Devon, and of Trinidad, W.I.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal West minster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

HYDROBROMIC ACID.

MR. C. CLARK BURMAN, (Belford, Northumberland) writes: Will any of your readers inform me if they have noticed intense cutaneous irritation to follow the administration of hydrobromic acid?

RISE OF TEMPERATURE IN THE EVENING.

T. D. writes: I have often been struck with the fact that, in most cases of illness which are attended with elevation of the temperature, the said elevation is invariably higher in the evening than in the morning. This is a remarkable fact, to which I believe there are no exceptions, and one well worthy of diligent study. Why should the temperature of a body be higher in the night than in the day? It is a fact frequently to be observed in persons who never leave their beds, who take no more nourishment during the day than in the night, the temperature of whose room is kept at the same height night and day, and the only difference in whose surroundings night and day is apparently the presence or absence of light from the sun.

CURE FOR INEBRIETY.

A. B. asks what would be the best to do in order to cure a man, about 35, of inebriety, who has had several attacks of delirium, and who is now very nervous. Is there any book upon this subject wherefrom advice could be taken?

*** We know of no book which treat exhaustively on the subject. The predisposing and exciting causes of the disease should be ascertained, and, if possible, remedied. Total abstinence is essential, with strict attention to diet, hygiene, and elevation of the *morale*. Probably from six to twelve months' residence in a genuine home for inebriates may be found useful.

A QUESTION IN DERMATOLOGY.

ENQUIRER writes: Would any dermatologist tell me what the following condition is? On the hands and wrist of the patient, a woman, where the skin, from exposure to the air, is darker than it is on the forearm, there appear certain well defined islands of fairer skin, very like the patches of healthy skin seen in connection with chloasma. There is no trouble at all in connection with the skin itself, but the patient suffers from somewhat peculiar general symptoms.

ANSWERS.

A QUESTION FOR DIAGNOSIS AND TREATMENT.

M.D. writes:—In an answer to "M.B.'s" query (JOURNAL, May 22, p. 1010) I think that his patient is suffering from chlorosis, the bodily and mental hyperæsthesia being pathognomonic. The continuance of the symptoms, with normal temperature, does away with the possibility of meningitis or tuberculosis. The drug I have found almost specific in these cases is iron, given in the following formulæ: ℞ Ferri sulphatis, potass. carb. āā ʒss; tragacanth, 2 s. Divide into 100 pills; three pills to be taken three times a day until at least 200 pills are taken. A very common error is to attribute to the furred tongue, dyspepsia, malaise, etc., "symptoms of the disease," to the iron. You must strike at the cause, "olegocythæmia," with this useful drug; and then these symptoms will disappear, and not before; as attempting to relieve the digestive disturbance, neurasthenia, and other troubles, due to the state of the blood, by means of acids, bitters, and other medicines, will only unnecessarily retard the recovery.

Relapses of chlorosis cannot be averted, especially when it sets in at the commencement of the period of evolution, as in "M.B.'s" case; but the second attack is as curable as the first. Should he fear further relapses, I would recommend him to send his patient to Pyrmont or Moritz, in Switzerland, for a few months.

THE ELECTRO-MAGNET IN SURGERY.

MR. SIMEON SNELL (Sheffield) writes: In answer to "W. M. H.," in the JOURNAL of May 22nd, I would say that the electro-magnet only requires to be employed by the general surgeon for him to find its usefulness. When first devising my electro-magnet for use in the eye, I confidently expected that employment would be found for it in general surgery, and stated so in my writings: and the facility with which any length, or thickness, or variety, of extremity can be screwed into the instrument, renders its adaptability to most cases very easy.

At a recent meeting of the Sheffield Medico-Chirurgical Society (p. 398), the President, Mr. Pye-Smith, referred to its usefulness; and Mr. Lockwood, house-surgeon at the Public Hospital, mentioned several instances where success had followed its employment. I hope he may be induced to publish his interesting cases. One was the removal of a small splinter of steel from the urethra. Quite recently, I myself witnessed the following case. When visiting my brother, Mr. J. Snell, of Gargrave, I took, at his request, an electro-magnet. A broken needle had penetrated the wrist of a woman, and a sinus existed. The accident dated some time back, and the patient insisted that the needle had travelled up the forearm; she felt it. A delicate suspended magnet appeared to indicate, though not very decidedly, the situation of the piece of steel near the original wound. The point of the electro-magnet was next introduced into the sinus, and towards the point indicated by the suspended magnet, something firm was felt, which gave a distinct resistance to the withdrawal of the instrument. There was no doubt as to the situation of the needle. Esmarch's bandage was applied. My brother enlarged the wound in the direction which our examination indicated, and, whilst this was held open, the magnet was again introduced, and the portion of the needle withdrawn. The necessity for brevity prevents me entering more into details as to the manner of using the magnet in such cases.

PAPAIN AND DYSPEPSIA.

DR. G. HERSCHELL writes: In answering the letter of Dr. Martin in the JOURNAL of April 10th, I would first of all point out a logical fallacy in his train of reasoning. He makes the following statement. "The fact that papain does not act in acid media is important, *inasmuch as it contraindicates the administration of the drug by the mouth.*"

Now, leaving out of consideration entirely, for the present, the question whether it does, or does not, act in acid media, and, for the purposes of argument, assuming it does not, are we not in the habit of giving pancreatin, which only acts in the presence of an alkali, by the mouth in cases of dyspepsia? Does not the greater portion of digestion take place in the intestines, where the

food remains much longer than it does in the stomach, and where the reaction is alkaline? The great superiority of papain over the other digestive ferment lies in the fact, not so much that it has an energetic action in acid media, for we know it has not, but from the fact that the passage through the acid stomach does not destroy its activity, as it does that of pancreatin, and that, when it arrives in the small intestine, it is just as active as when first swallowed.

Secondly, as regards the two kinds of papain. I have it on the authority of Professor Finkler himself, in a letter just received, that Dr. Martin is not well informed when he asserts that there is only one proteolytic ferment in the papain-juice. The ferment, which is obtained at different times, and from different parts of the plant, varies greatly. It shows this not only in the rapidity of its action, but also in the quality of the results of that action.

Again, Finkler's papain shows an energetic action entirely free from the danger of corrosion to an anæmic stomach. This is not an imaginary danger, as it is a fact well known in the laboratories where the drug is prepared, that some of the ferments, such as Christy's papain, act so energetically, as to cause serious inflammation of the eyes when accidentally coming into contact with them, and frequently to attack the finger-nails of the workmen engaged in its manufacture.

As regards my statement that papain is "a true catalytic ferment," to which Dr. Martin takes exception, I may say that it is the fact that Finkler's papain does not lose its power of action during digestion, which proves it to be a catalytic ferment, and not an agent in the formation of peptones, as it is well known that they can be produced by the action of heat and acid without the presence of any ferment at all. I may also state that Dr. Martin decidedly has not proved, as he says he has, by his experiments, that Christy's papain peptonises in a more energetic manner than Finkler's papain, but rather the reverse, as, when used in smaller proportion, the action suffers accordingly; while, when Finkler's papain is used, it suffers no change, except taking a longer time for the process to be completed.

Theoretically, an indefinitely small quantity of a catalytic ferment will convert an indefinitely large quantity of material without itself undergoing change; and this is just what Finkler's papain does, as it will digest even when as weak as 1 in 10,000 in from forty to sixty hours.

In conclusion, I may inform Dr. Martin that, when I wrote my letter, I had already tried Christy's papain clinically, but found that it produced, very often, gastric pain, and that large doses were necessary to produce any result; and, consequently, I abandoned it in favour of Finkler's papain, which can be given in much smaller quantity, and which I have never found to give the smallest inconvenience.

PRELIMINARY EXAMINATIONS.

A MEMBER.—There is no list of "specified authors." The classical authors, on whose works candidates will be examined, are decided on by the several examining bodies, and notice is given of the titles and extent of the works. Our correspondent will be able to obtain the desired information by application to the bodies whose examinations are recognised.

NOTES, LETTERS, ETC.

LIFE-INSURANCE COLUMN.

MAY I suggest the opening of an "Insurance Column" in the JOURNAL, as a medium through which medical referees can obtain information on any doubtful points coming under their notice, and as a means whereby the usefulness of the JOURNAL will be increased? At present, references to questions which come before the life-insurance examiner, are few and far between. Cases, however, for his opinion, frequently come before him in which no help is to be obtained from books. It has, therefore, occurred to me, that a column, in which referees could ask questions, would be exceedingly useful. The instruction given to students on the subject of life-insurance is so small, and the importance of being able to examine well so great, that I think you could distribute much useful and practical knowledge by the adoption of the means I suggest. With a view of eliciting information, I append the following questions, to which I shall be glad of answers from you, or some of your readers, who will, I hope, sign their names. W. G. KEMP, L.R.C.P.Lond. and M.R.C.S.Eng.,

Chief Medical Referee, N. Z. Branch Australian Mutual Provident Society.

Wellington, New Zealand.

1. Should a man, whose occupation does not predispose to heart disease, be loaded if his father or mother, or their collaterals, have suffered from it? If so, to what extent?

2. A man, aged 40, of healthy occupation, with no family history of rheumatism, has had an acute attack of rheumatism lasting from four to eight weeks when 20 years of age. No return since, nor any cardiac symptoms. Should he be loaded? If so, to what extent?

3. A man, aged 22, draper, with good family and personal history, is 5 ft. 10 in. in height, 10st. 2 lbs. in weight, and 31 to 35 inches in chest-measurement. Should he be loaded on account of weight and measurement? If so, to what extent?

4. A man, aged 51, with good family and personal history, is 5 ft. 8 in. in height, 13 st. 2 lbs. in weight, and 43 to 46 in chest-measurement. Should he be loaded on account of weight and measurement? If so, to what extent?

5. Does a family history of cancer in father or mother necessitate loading in (*a*) male, (*b*) female applicant.

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LECTURES
ON
THE SURGICAL TREATMENT OF STONE IN THE BLADDER.

Delivered in the Royal College of Surgeons of England, June, 1886.

By WILLIAM CADGE, F.R.C.S.,
Hunterian Professor at the Royal College of Surgeons; Senior Surgeon to the Norfolk and Norwich Hospital.

Lecture I.

Introductory.—Sounding.—Lateral Lithotomy in Adults: in Children.—Median Lithotomy.—Difficulties.—No Stone Found.—Encysted Stone.—Wound of Rectum.—Perforation of Bladder.

The Council of the College having conferred on me the honour of giving these lectures, I have selected the subject of the Surgical Treatment of Stone in the Bladder, because it is the department of surge with which I am most familiar. It may, perhaps, be thought that it has so often been treated of publicly, and more than once partially from this chair, that further discussion of it can neither be required nor right. But when I recognise the progress of opinion, and the changes of treatment which have taken place in my own time; when I contrast the first two cases of stone on which I operated in 1850, with the last two, only a few weeks ago; the former, a case of lateral lithotomy and a case of lithotrity in six sittings; the latter, a case of suprapubic lithotomy, and a case of lithotrity in one sitting; this contrast of proceeding will, I hope, in some degree, justify me in occupying your attention with the old, old subject of stone in the bladder.

I do not, however, propose to treat it systematically; that I have recently and briefly done elsewhere (*vide* Heath's *Dictionary of Practical Surgery*); nor to speak of the ætiology or geographical distribution of stone, a subject of great interest; that, too, I have partially discussed in an address on surgery delivered at Norwich, in 1874. Rather, I desire to travel through the subject, and to communicate such facts and hints as my experience may furnish; and, chiefly, I intend them for the possible assistance of my younger brethren. Assuredly, it is not my intention to enlarge on any successful work, but rather to point out some difficulties and dangers which beset the surgeon's course. I have the belief that, in the literature of this subject, we have heard over-much of the triumphs and successes, and too little of the obstacles and failures, which are incidental to bladder surgery. It is probable that more instruction and benefit are to be derived from a candid statement of our failures and mistakes than of our clever doings. In lithotrity especially, there is need for a fair and explicit account of certain drawbacks and defects which have been too little spoken or thought of by its partisans; drawbacks which the operation can well afford to admit in consideration of its brilliant achievements. Neither is it my intention to trouble you, to any extent, with statistics, for obvious reasons. They are often fallacious; the practice of no two surgeons is the same; one who, like myself, practices largely amongst the poor in hospital, must, of necessity, deal with very different cases from those treated by him who sees chiefly private patients of the educated and wealthy classes. In the one case, the poor unenlightened labourer seldom applies for relief so long as he can earn his daily bread, while the rich private patient will seek aid early; in the poor, the stone is apt to be large, and the urinary organs damaged; in the rich, the stone is probably small, and easily dealt with. One surgeon, like myself, will have most to do with stone in the aged; in my list of 300 cases, there were only 31 in children under 10, while 182 were over 60 years; while another, living, for instance, in one of the midland counties, will probably operate chiefly on the young. One surgeon refuses scarcely any cases, another refuses many; one includes amongst his fatal cases those who die from all causes during treatment; another, those only whose deaths are directly connected with, or caused by, the operation. Hence statistics, except for special purposes, have little or no general value.

As I am about to speak from the experience and observation of stone as it is seen around and in the Norfolk and Norwich Hospital, I may be allowed to refer briefly to a few of those who have done good work in that institution. Before, however, the hospital was erected, it would appear that, as on the continent, so in Norfolk, the offices of

clergyman and lithotomist were sometimes associated. In the village church of Stoke Holy Cross, near Norwich, is a mural tablet to the memory of the Rev. Thomas Havers, "qui Theologia, Medicina, Chirurgia, et Lythotomia doctus fuit et expertus." He died in 1719, aged 60.

Benjamin Gooch, whose work, *Cases and Remarks in Surgery*, is a standard book to this day, practised in Norwich about the middle of the last century. He was a lithotomist of distinction, and a man of great erudition. He was one of the first, if not the first, who practised vaginal lithotomy, and he also advocated cystotomy for vesical diseases other than stone. He was one of the founders of the hospital, and was consulting surgeon to it, but without any active duties.

Mr. Donne was the first surgeon appointed to the hospital in 1772. He had two colleagues, but it would appear that Donne must have taken all the stone cases, for the names of the others do not occur in the museum-books. He must have been a very excellent lithotomist; his name and cases are frequently mentioned in Gooch's work; and, during his thirty-two years of service, he operated on 173 patients (a larger number than any of his successors, except myself), with a mortality of 1 in 7.

Mr. Rigby, the father of Edward Rigby, the gynæcologist, was surgeon to the hospital for twenty-four years, and then physician for another seven years. He operated on 106 patients. He was a man of strong intellect, and was the author of an admirable essay on uterine hæmorrhage.

Mr. Martineau, the writer of the well known paper on Lithotomy, in the eleventh volume of the *Medico-Chirurgical Transactions*, in which he reported 84 cases with only 2 deaths, was connected with the hospital for 50 years, during 35 of which he was full surgeon; he operated on 149 cases, with a mortality of 1 in 8. Very many were children, and he was known to be careful in the selection of his cases.

Mr. Dalrymple, the father of Mr. J. Dalrymple, the ophthalmologist, was surgeon to the hospital for twenty-five years, and operated on 90 cases with good success; in one case, the stone weighed 13 ounces, but he failed to extract it. Although a man of great ability, and enjoying a wide influence in the county, he was over-sensitive and nervous in his work as a surgeon, and was eventually unable to encounter great operations.

Mr. J. G Crosse was undoubtedly the most distinguished of the surgeons who have flourished at Norwich during this century. His indefatigable industry, his untiring energy, and his habit of copious note-taking, and of critical commentary on all he saw and did and read, enriched his mind with abundant knowledge. That which he published bears but small proportion to the volumes he left of diaries and reflections, which richly deserve to be rescued from oblivion. His Jacksonian prize essay on Stone in 1835, with its solid body of information, its full illustrations, its appendix of important cases elaborately detailed, its statistical tables, and its full catalogue of works on stone and lithotomy in all ages, and in all languages, is a lasting proof of his great merit, and stamps him as one of the foremost of provincial surgeons. He was, for twenty-four years, surgeon to the hospital, and he operated on 52 cases of stone. This may seem to be but a small number for so eminent a surgeon, but it is explained by the curious fact that Dr. Lubbock, one of the hospital physicians, with a love for surgery, operated about that period on 85 cases of stone, chiefly in small private houses, and so depleted the supply of cases to the hospital that only one or two were admitted during several separate years.

I will not pursue further this biographical digression, but proceed at once to the subject before me.

Little need be said concerning the symptoms of stone; they are generally clear and palpable enough, but sometimes they are conspicuous by their absence, and many a surgeon, led astray by this absence, has lost credit in consequence.

When the stone is small, and falls readily about the bladder, it seldom fails to cause some degree of pain and irritation; but if the patient do not seek advice, and time go on, and the stone become a large one, the symptoms may become obscure, and it is the common observation of all surgeons that, occasionally, the largest stones produce the least trouble. Here, for instance, is a lithic stone, weighing nearly nine ounces, which was removed after death. The old man had little or no pain; he never, I believe, consulted a surgeon, and died from another ailment. I found the bladder perfectly healthy, and lying loosely round the stone, which seldom moved.

Another cause of obscurity is the fixed position of the stone. I know nothing of what is called adhesion of the stone to the bladder, nor have I ever met with an instance in which it passed occasionally in and out of a cyst or sac; but it is not very unusual to meet with cases in which the stone is held immovable by irregular contraction of the

muscular columns. This large rough mulberry caculus was held in the upper fundus of the bladder; the sound detected it there, and, at the operation for its removal, I was obliged to depress the handles of the forceps, and push the blades up behind the pubes. This gentleman had carried the stone for many years, during which he experienced but very slight symptoms; he travelled much, both in England and abroad; he occasionally called on an eminent surgeon as he passed through London; but so little did he suffer, that, for a long time, there seemed no excuse for sounding. Sometimes a stone case is mistaken for one of hæmorrhoids; this is apt to be the case in old men with enlarged prostate. The piles probably exist, and the associated forcing action of the bladder and rectum will aggravate the piles, and induce the belief that they alone cause all the trouble. Hæmaturia is, of course, an usual accompaniment of stone; it is generally small in amount, and is caused by movement in exercise; but it is sometimes in large quantity, and is attended by so little irritation of the bladder, that no suspicion of stone is entertained.

Many years ago, I removed a stone, weighing two ounces, from a man who had twice been in hospitals under the physicians. The stone broke in the forceps, and large quantities of black material, like cinders, came away mixed with scales of calculous matter. It was found to be composed of alternate layers of dried blood and stone, with a nucleus of oxalate of lime. This man was cut a second time, eight years after the first, and a mixed phosphatic and lithic stone removed, and I believe he was operated on a third time by Mr. Teevan in London, where he came to reside.

Sounding for stone is by no means always a simple or easy proceeding, judging by the large number of cases in which the stone is undetected by the sound, and of those instances, also, in which it was said to exist, but in which it was really absent. Nor can it be said that this uncertainty is always due to inexperience; for I believe, and I could support this opinion by a good deal of strong evidence, that there is no surgeon, however great his experience and his manipulative dexterity may be, who has not now and again left a stone undetected in the bladder. I quite readily admit the failure in my own case, and admit also the feeling of chagrin and self-reproach which I have felt on being told of my failure.

The difficulty sometimes experienced in introducing a sound may be due to spasm; it may be the first time that any instrument has entered the urethra, and we all know how often a hitch is found at a first attempt, when no organic obstruction really exists. By far the most frequent cause of difficulty that I have noticed, however, is enlarged prostate; the altered course of the prostatic urethra, or the bar caused by hypertrophy of the median lobe, may make it especially awkward for the short sharp curve of a sound to find its way; but there is one cause of failure to find a stone which I have specially noticed, and by which even experienced surgeons have been misled. It is by sounding the deep prostatic sinus, and never reaching the bladder; the latter is at a great distance; the sound looks as if it were well in, and can be moved more or less from side to side; the bladder is assumed to be contracted; no stone is felt, and an erroneous opinion is given. If the suspicion do not cross the surgeon's mind that he has not reached the bladder, he will rest contented and mistaken; if it do, he will overcome the difficulty by well raising the patient's hips, well depressing the handle of the sound, and, by a semi-rotatory and firm forward movement, making it glide over the obstacle; if it will not do so, a sound, with a less abrupt curve, will probably pass. In this, and in all cases, the use of an anæsthetic will greatly facilitate the proceeding; but in these prostatic cases, and especially in children, it is almost essential.

I do not profess to describe the usual mode of sounding, but I may venture to remind my younger hearers that the object of sounding is much more than simply to ascertain the presence or absence of a stone; we not only do that, but we also ascertain the probable size and nature of it, and whether it is movable or fixed; the condition of the bladder as to irritability, capacity, softness or hardness, whether it is smooth or rugous; also, we note the size and prominence of the prostate. All this information the practised hand will endeavour to elicit, in order to select by what operation, if any, the calculus is to be removed. It is good that some, but not too much, urine should be present—perhaps the secretion of an hour or two. Children will not unfrequently, so much do they dread the pain in micturition, accustom the bladder to retain a large quantity; in which case, the coats of the bladder feel hard and rigid, the bony wall of the pelvis is immediately contiguous, and, between these two conditions, the sensation, but not the sound, of a foreign body is produced; while the stone itself, if one be present, is not easy to find. Very often, as the chloroform takes effect, or as the sound is passing, the bladder contracts, and a large quantity of urine is expelled with straining. Phimosis and other ailments will often give rise to vivid symptoms of stone in young children. Some months ago, I was requested to go to a distance, prepared to do lithotomy for a child three years old. When I stated to my medical friend that I had only once in my life met with stone in a child of well-to-do parents, he replied, that he had sounded, and felt no doubt of the presence of a stone of some size; however, no stone could we then detect, but simply a phimosis; this was remedied, the symptoms abated, and I have heard no more of it.

Sounding, as every one knows, may be followed by serious and even fatal consequences. Retention, prostatitis, orchitis, cystitis, and nephritis—any of these may ensue, and we are warned, and properly warned, against sounding patients who have to travel immediately after it. It is, however, almost impossible to adhere to this rule; patients come up from a distance, expect to be told what is amiss, and return to their homes; and, without an examination, it may be impossible to diagnose or treat their malady. A few hours' rest should be insisted on, with simple food and a warm drink, and, where retention seems likely, an opium pill and hot fomentations. Two fatal cases from sounding have occurred to me: one from nephritis when all proper precautions were taken, just as it may occur after a simple lithotrity or after the first use of the catheter for atonic retention; the other, a few months ago, from continued prostatic retention. The sounding was easy, a small stone was detected, the patient never left his room, but there followed the necessity for constant use of the catheter, which was attended sometimes with difficulty, and bleeding, and death in about a fortnight.

The presence of a stone having been assured, the question whether any, and what, operation for its removal presents itself, and I know of none more difficult, in many cases, to decide; this question, however, I will defer for the moment, and will suppose that the old lateral operation is selected. Its applicability is becoming more and more limited, on the one hand, by the adoption of litholapaxy; and, on the other, by the improved method of suprapubic lithotomy. Those surgeons who recognise the drawbacks incident to this method, or who are not expert lithotritists, will still march on the old lines for all moderately sized stones, and it is yet to be proved that any more successful operation has been devised.

Lateral Lithotomy.—Without describing the details of the operation, I may say that at Norwich we have followed in the main the method as performed there by Martineau and Crosse, and here by Liston and Fergusson. When I entered on practice in Norwich, now thirty-five years ago, I first saw the blunt gorget in use; by degrees it became restricted to those cases in which, from great enlargement of the prostate, or from great obesity, the finger could not reach the bladder, and soon it disappeared entirely; I never used it, and now I believe the hospital is without one.

Let me say a word or two as to the mode of holding the staff. Most authorities advise that it should be held perpendicularly, and hooked up under the pubic arch. Liston used to say, "you may almost lift the patient off the table with it," meaning that it would thus be well out of the way of the rectum, and held steady. When I was demonstrating anatomy at University College, I was struck, in making dissections of the pelvis from the perinæum and by vertical section, to see how easy it was to bring the membranous urethra nearer to the surface of the perinæum, by inclining the handle of the staff considerably towards the abdomen. By this manœuvre its point need not, and should not, be withdrawn from the bladder; but, if it were, it would be of no consequence, because it would reenter it the moment the handle is raised; the membranous urethra, instead of being almost perpendicular to the surface of the perinæum, as it is when the staff is held upright, is brought down almost parallel with it, and is much easier to find with the knife; there is no inducement to open the urethra too far forward, and consequently less risk of wounding the bulb or its artery. The staff gets a steady rest against the front of the pubes; there is no danger to the rectum at this stage, the left forefinger is in the wound, the knife is close to it, and the bowel is guarded by it. As soon as the knife's point enters the groove, the staff is raised and hooked well up under the pubic arch, and the knife is carried on into the bladder, quite to the end of the groove. I did my early operations with the staff held in this manner—it was described in a short paper in the BRITISH MEDICAL JOURNAL; and I am so convinced of the facility it affords to the operator, and especially to the beginner, that it has been adopted by the members of the hospital staff ever since.

As to the deep incision, about which much has been written, I can only say that it should be moderate, but sufficient; it is useless to waste more words about it. I believe that, in many operations, the neck of the bladder is not incised at all, the knife being carefully drawn back in the same line as it was introduced, half hidden in the

groove of the staff. Some division of the prostate is necessary, and my plan is to make it as the knife is withdrawn, outwards and downwards. Experience alone can guide the surgeon, and even with experience he may do more or less than the size of the stone calls for; it is better to do less, because the knife can easily be re-applied if extraction of the stone is difficult; if more be cut than is required, the danger is, not so much of inducing urinary infiltration, as of dividing some of the plexus of vessels which surround the prostate, and so causing very troublesome hæmorrhage.

The finger follows the knife immediately; the stone is felt; and then comes what I have always deemed to be a very important step in the operation; namely, the dilatation of the deep part of the wound by the finger. Liston used to accomplish this while he seemed to be selecting the forceps, pulling the bladder down and pressing forcibly with the finger in all directions. In this I believe he imitated Martineau, who made this a special feature in his operation. Mr. Crosse says, "the staff being withdrawn, Martineau was accustomed to introduce his left forefinger (which was particularly long and large) into the bladder, forcibly dilating the opening and using the finger as a powerful but safe instrument for rendering the neck of the bladder ample to admit the forceps. The force and determination with which the finger was then used, dilating if not lacerating the undivided portion of the prostrate gland and the neck of the bladder, I always regarded as a particular and intrinsic part of his operation."

I have often thought that some special means might be adopted slowly to dilate the deep part of the wound. Such an instrument as this—a Todd's dilator for the rectum—would, by its smooth surfaces and gradual extension, make the prostate yield to the very utmost before lacerating. Professor Ellis has shown, by his excellent dissections, that the so-called gland is very largely composed of muscular fibres (*Medico-Chirurgical Transactions*, vol. lxxxix); and we all know to what a great extent the sphincter and other muscles will yield to slow and forcible stretching. Let the dilatation, however, be as slow and careful as possible, laceration will take place if the stone be of any considerable size, or if it be awkwardly seized. When splitting does take place, it is always at the rectal aspect, between the two lateral lobes, and not through the left lobe, where the knife has traversed. Who has not felt, when a full-sized stone has been dragged through a large prostate, the unmistakable sense of yielding? and, when the finger is introduced, there are the two lateral lobes, and a rift, or sense of nothing, towards the bowel. If the resistance to extraction be great, and the yielding just spoken of do not occur with moderate tractile force, it is the common and good practice to re-apply the knife; and the only question is, what is the safest and most serviceable direction in which to cut? The majority of surgeons and writers recommend a division of the right side of the prostate; but Martineau, Crosse, and the Norwich surgeons generally, have made the further incision in the same direction as the first. It may, indeed, be made in any direction; but it has always seemed to me best to keep to the first line of wound, and cut, by little and little, until the stone shall come through with moderate force applied. The motive for cutting on the right side was the fear that urinary infiltration might follow the too free division of the base of the prostate and its enclosing fascia; but now we know that infiltration of urine is seldom the cause of death after lithotomy, and I know of no fascia, at the base of the prostate, other than that which encloses it altogether. The one objection to this left side extension of the incision is, that the numerous veins which surround the gland may be cut, and lead to hæmorrhage, which is difficult to arrest; and this has always made me not averse to obtain the necessary room by splitting.

Let me advert, for a moment, to those cases in which, either from the great size of the prostate, or the great amount of fat, the finger cannot reach the bladder. I have often thought that very fat people are unusually prone to stone; and, I might add, to diabetes. Within the last three years, I have cut three men, who each weighed about 18 stones. Brodie speaks of a patient, from Norfolk, who was so large and fat that he was obliged to have a lithotrite of extra length expressly made for his case; and it fell to my lot to attend the son of this gentleman, who weighed 24 stones, and who died of suppression of urine, due to calculous obstruction of the ureter. Whatever may be the cause, the inability to reach the bladder is a serious drawback. You cannot tell the size and shape of the stone, or the precise condition of the vesical orifice; and, what is of more importance, should there be several stones, or a breakage of one, there cannot be absolute certainty of entire clearance of the bladder. In my earlier operations, I used to be somewhat disconcerted by this difficulty; but it has so often occurred, that I am quite familiar with it now. I have never resorted to the gorget as a guide to the forceps, but have introduced the latter over the finger, and have scarcely ever found any difficulty in reaching the bladder with them. Should the stone, as well as the prostate, be of full size, and the patient fat, an association of evils by no means very unusual, in such a case the chiefest difficulties of lithotomy are accumulated; and it will require the utmost care and steadiness to overcome them, and do the least amount of injury.

In very large stones, the prostate is seldom much increased in bulk, the stone seems to weigh down the neck of the bladder, and is readily approached, if not easily removed. It has never been my lot to encounter a huge calculus, such as are to be found in every museum; the pleasant idea has been suggested that, in these enlightened days, when medical education has reached a high perfection, and when the fear of operations is allayed by anæsthetics, stone, if not stamped out, should be detected when it is small, and easily cured without lithotomy; yet even in this very year, stones weighing respectively twenty-five, twenty-three, and fourteen ounces, have been met with. I find that, a hundred years ago, the first fifty adults cut at the Norwich Hospital had an average weight of stone of 765 grains, the average age was 47, and there were thirteen deaths. In the last fifty, the average weight of stone was 590 grains, the average age was 64, and there were eight deaths. It should, however, be remembered that, during the last period, a considerable number of cases in which the stones were small were relegated to lithotrity; still, the difference is not so much as might have been expected.

Lithotomy in Children.—To go from great things to small, I desire to say a few words on lithotomy in children, chiefly with reference to the difficulty of passing the finger along the staff safely into the bladder. Sir W. Fergusson described the difficulty so well, that I will quote his words. He said: "In March, 1849, I had to operate on a boy, aged 4. I used a scalpel, and made the usual incision. In making the deepest part of the incision, I purposely used the knife as lightly as possible, with a view to open only a part of the membranous urethra, and notch the prostate and neck of the bladder. These objects being effected, the point of the left forefinger was, as usual, placed on the staff, and pushed gently towards the bladder. The finger went on, but I was aware that it had not got between the urethra and staff. With an insinuating movement (much to be appreciated by the lithotomist, who, as I do, professedly makes a small incision in this locality), I endeavoured and hoped to get its point, as usual, into the urethra and neck of the bladder. But here I felt conscious that I had failed, and was aware that the finger was getting deeper as regarded the depth of the perinæum, but that I was not materially nearer the bladder. I could feel a considerable space at the point of the finger, and was convinced that the upper part of the membranous urethra, as well as the sides above the wound, had given way to the pressure, and that now, as the finger was getting deeper into the wound, I was only pushing the prostate gland and neck of the bladder inwards and upwards. These parts seemed to recede before the smallest imaginable force, whilst I felt that I could, in a manner, make any amount of space round the bare part of the staff. I had no difficulty in distinguishing between the surface of this space and that of the mucous membrane of the bladder. Moreover, I knew that I had never crossed that narrow neck which is always felt as the finger passes into the bladder when a limited incision is made. An impression came over me that I was about to fail in getting into the bladder, and I had an idea that, unless I could open the urethra just in front of the prostate more freely, I should probably never reach the stone. This I effected with great caution, and then I could appreciate the passage of the finger, as usual, through the neck of the bladder. The stone was thereafter easily touched and removed; but, when all was finished, I was forcibly impressed with the idea that I had nearly failed in the performance of the operation." Fergusson was a master of the art of operative surgery; and, if the difficulty occurred to him, we may conclude that it is not unlikely to occur to any of us. He was under the impression that the difficulty had never been described before he mentioned it in 1864; but, in Crosse's book, published in 1835, there is a case exactly similar, with this addition, that the staff had been removed before the bladder was opened, whereas Fergusson recognised his error in time, and remedied it by a further incision.

I have seen this misadventure in several cases; in one, the staff was withdrawn; it could not be reintroduced; the stone was not removed, and the child died. One of these cases occurred to a very experienced operator—Keith, of Aberdeen. He was on a visit to me, and having two stone cases, I invited him to do one, a child aged 3½. This was in 1862, and I find, in my notes, that "he quickly bared the staff, laid aside the scalpel, used a probe-ended bistoury, and ran it along to the end of the groove, but could not find the bladder with his finger. The staff was carefully replaced in the bladder, a further division of its

neck made, and two stones easily removed." How is this mishap to be avoided? I have just stated how Ferguson and Keith overcame it by a further incision; but there must be a limit to even free incision, and my object in discussing this matter is to point out another plan which I have frequently adopted, and I can best describe it by relating the only case in which this difficulty has occurred to myself. It was many years ago when I first began to operate; the patient was an infant, only 1½ years old. I felt the impossibility, even with a fair incision, of distending the wound with my finger—it was like trying to get it into the orifice of the urethra; I therefore desisted before doing any harm, and, taking a pair of common dressing forceps, I passed them easily along the staff into the bladder; by opening the blades gently but firmly, room was gained, and the finger entered, and made room for a small lithotomy-forceps. But I have repeatedly, after passing the dressing-forceps, withdrawn the staff, and removed the stone with them, without introducing the finger at all. I can recommend this manœuvre, as both safe and efficient. I dare say it has been adopted by others, but I do not find it alluded to in modern text-books.

In older children, as in boys from 6 to 12, this want of room for the finger is still manifest. Pressure will probably overcome it, but I have sometimes pursued a method which renders the passage of the finger quite easy. Having made the requisite incisions, place the tip of the finger on the groove, and then direct the staff to be withdrawn; this being done, worm the finger along the empty urethra gently, and you will feel it glide along, dilating as it goes, until you place it on the stone; it is then used, as in the adult, to press and stretch the neck of the bladder in all directions. If the stone be found to be large, or the division of the neck of the bladder insufficient, nothing is easier than to slip a bistoury flatwise, alongside the finger, and extend the cut a little outwards and downwards. This plan I know contravenes that inflexible rule of never withdrawing the staff until the finger is in contact with the stone; but inflexibility does not always imply wisdom, and, I can answer for it, that it is much easier to pass in the finger through the empty urethra, than by the side of a large staff. The possible objection would be that the finger might perhaps wander elsewhere than into the bladder; but where could it go so easily as along the wound and open urethra, through which it passes as it would into a kid glove, and does not bruise, lacerate, or injure any part?

Median Lithotomy.—I need say but little on this subject. Some years ago we, at Norwich, gave the plan a good trial. I believe that for some years there were very few lateral operations; nearly all were done by the median method, but by degrees it came to be almost relinquished, and now it is very seldom practised there, for these reasons. By it there is not room enough to deal with stones of any considerable magnitude; the rectum on the one hand, and the bulb and its artery on the other, are both in greater danger of being injured than in the lateral operation; troublesome bleeding is more frequent; the wound being small, you cannot bury the knuckles in it and reach the bladder as easily as in the larger lateral wound; and therefore, having done fifty to sixty cases by the median plan myself, and having had rather a higher mortality than by the lateral, I am not disposed to continue or advise it, except in particular cases; cases in which the stone is small, and in which, for some good reason, lithotrity is not available. While, however, I should seldom resort to it, I must admit that I have seen a quite considerable number of instances of it in which recovery has been marvellously rapid; the urine has resumed its natural route almost immediately after the removal of the tube; the wound, instead of gaping and healing slowly as the lateral wound does, falls into accurate apposition naturally, and heals almost by first intention. All this, however, does not compensate, in my opinion, for the disadvantages just described. Some surgeons, I believe, still retain a preference for it, especially in children; but my observation and experience would lead me to say, avoid it generally, but especially in children, in whom, comparatively speaking, a free incision is necessary in order to facilitate the passage of the finger into the bladder, but in whom the limit of space for the knife is very small indeed.

Other methods of lithotomy have been practised; namely, the medio-bilateral; the recto-urethral or recto-vesical; various directions of the external and deep incisions; the combination of perineal lithotomy and lithotrity, etc. These various proceedings have never found much favour in this country; and, as I have no personal experience of them, I may pass them by. The suprapubic operation I will speak of by-and-by.

Difficulties.—Let me, however, refer to some of the troubles and accidents which may occur during and after lithotomy. The staff may fail to touch the stone; this will seldom occur, but, should it do so, a sound will probably at once detect it, and the operation may proceed. Should it, however, elude the sound, it will be right to postpone the operation for a few days. I have never had to do this, but I well remember that, in a private case of Liston's, the operation had to be postponed twice. This was annoying, seeing that preparations had been made, assistants had come some distance, and the patient and his friends were disappointed by the delay. On the third occasion, the stone still could not be felt by either staff or sound, although it had been clearly detected the day before. The operation was done. The patient was a large fat man, with hypertrophied prostate, and the finger could not reach the bladder; the forceps was used, but no stone was felt. Practically, however, two stones were unconsciously removed, so enveloped in a clot of blood, that they did not communicate any sense of touch to the operator. Once, and once only have I seen the bladder opened and no stone removed; but that case impressed itself on my memory, not only because of this awkward incident, but it was also the first case I ever witnessed at the Norwich Hospital. The surgeon, now deceased, was a good and experienced lithotomist, and after trying various instruments—I do not think he syringed the bladder, which would probably have washed the stone out—he desisted, and the stone came away with the urine a day or two after the operation In this case, too, the stone was small; and I apprehend that the difficulty arose from its having got into some recess of the mucous membrane, or having been held by the muscular columns in a part which the finger could not reach, and enveloped in clot. These, however, are but curiosities of experience, and can but very rarely happen.

Encysted stone, too, is, happily, a rare occurrence; but, on looking through my notes, I find records of five cases in connection with lithotomy, and as many, or more, with lithotrity, of which, however, I will not now speak. The mode of formation of cysts, or sacculi of the bladder, is too well understood to need explanation; they are due, in all cases, to obstruction to the easy outflow of urine, and by far the commonest cause of obstruction is enlargement of the prostate gland. When sacculation of the bladder co-exists with stone, this has been by some thought to be the cause; but, inasmuch as sacculation of the bladder very frequently, indeed generally, exists more or less completely in the bladder of old people whose prostate is enlarged, where no stone is present, so I conclude that the co-existence of stone and sacculation is only a coincidence, and that the utmost which can be said is that stone may add to the completeness of the sacculation by increasing the irritability of the bladder, and its vain efforts to overcome the prostatic obstruction. Moreover, stone in the young and middle aged seldom exists with sacculation.

The fact of the stone being in a sac or cyst can seldom be accurately diagnosed, but it may sometimes be shrewdly suspected. The pain is felt more in the bladder itself than in the glans penis; there will be unusual difficulty in finding the stone; and, when found, probably only a point of it can be touched, and it cannot be moved. This fact of always finding the stone at one spot, where it seemed to be fixed, has several times led me to make an accurate diagnosis, more especially if that spot were somewhere near the right ureter, which, I believe, is the most frequent place in which to find an encysted stone. If there be chronic cystitis, the point of stone which projects into the lumen of the bladder becomes covered with phosphatic deposit, so that there are two stones, one composed of uric acid, the other of phosphates, connected by a narrow neck; the phosphatic part is often broken off by the movements of the bladder, and again a fresh mushroom-like deposit of phosphates grows up from the broken neck; and in this way is explained the occurrence of one stone lying free in the bladder in addition to the encysted one.

In 1860, a man, aged 30, was cut by my colleague, Mr. T. W. Crosse, and a cup-shaped phosphatic stone was removed; it had clearly formed over some projecting surface, and, on searching, the finger detected a round smooth substance at the base of the bladder; its exact nature could not be made out, and it was left. The patient rapidly recovered, and remained well for a year. Symptoms of stone then returned, and he was again admitted into the hospital, by chance, under my care. One stone, which was free in the bladder, having been removed, the forceps then grasped the substance above mentioned, and, with very little force, it was extracted. It proved to be an encysted stone, covered only by mucous membrane; it was pear-shaped, about the size of the end of one's thumb, and had on it at one end a nipple-like process, which protruded through the opening of the cyst into the bladder. The stone lying free was composed of white phosphates, and that in the cyst of brown uric acid. The patient suffered nothing from the injury to the mucous membrane, and was almost well in a week. This, however, was not a typical case, although a very interesting one, and one the like of which I have never seen in museums

or read of in books. The mucous membrane was not, as in true sacculation, forced through the muscular wall, so as to be, as it were, outside the bladder; the patient was only aged 30; had, of course, no prostatic enlargement, and no obstruction to lead to sacculation. The stone, as I have said, lay directly beneath the lining membrane, bulging it up, and communicating with the cavity of the bladder by a narrow opening. I know not how to explain its mode of formation. These sacculi, however, although they are generally complete, and are formed of only the mucous membrane and peritoneum, in which case they may reach any size, larger by far even than the bladder itself, may, when small, consist of all the coats of the bladder. They may be numerous or single, large or small, and in any part of the bladder; but when they exist, and when, in addition, a stone passes down from the kidney, they form a very present danger, lest this wee stone should be entrapped in one of them. It is true that their communication with the general cavity of the bladder is small, and is almost closed by the interlacing muscular columns; but it is impossible to overlook the risk that, as the urine constantly passes into them, when there is distension of the bladder, so, every now and then, will a stone or piece of stone, no larger than a millet-seed, find in them a resting-place too, to the future trouble of the surgeon, and the probable ruin of the individual.

The records of surgery contain many instances of gallant encounters with these hidden calculi; too often they resist all attacks, and the surgeon has to acknowledge his defeat; and, when his resolute endeavours have been crowned with success, too often it has been at the cost of the patient's life. I have failed, as others have, in these cases; but two instances may be mentioned in which the stones were removed, because they exhibit points of interest, and perhaps hints, for the guidance of others.

In 1862, a man, aged 58, applied to me, having a piece of stone impacted in the urethra near the meatus; this was extracted, and he showed me other pieces which he had voided during the previous years; he had never had an instrument passed, and they were the product of spontaneous disintegration of a stone. In the bladder, there were indications of multiple stones. He was cut by the median method, and five calculi, weighing thirteen drachms, composed of urate of ammonia, were removed. He recovered, and remained well for six years; then his symptoms returned, he re-entered the hospital with persistent cystitis, and a small stone was detected. A lithotrite was used, but the stone could not be properly seized, and only some soft phosphatic matter was scraped off it. A second trial was made, but with no better result; the stone seemed to be fixed at the lower and right side of the bladder. He was again cut median-wise; the finger could hardly reach the bladder, owing to prostatic enlargement, but the stone was felt at the lowest part of it. Small forceps broke off portions of phosphates, but still I could just nibble with my finger-nail the small stem of an encysted stone embedded amongst the folds of mucous membrane. With a stick-sponge, well oiled and pushed up the rectum beyond the prostate, I could elevate and pull the bladder forwards, so as to reach the stone more easily, but not sufficiently to raise it out of its bed. A small forceps, however, grasped and brought it away with a portion of mucous membrane, sabulous matter, and mucus. It was dark-coloured, small, and had a narrow neck, with a fractured surface, from which the white phosphatic bladder-stone had been broken. The bladder was well washed out, and searched, but no more stone could be felt. He recovered fairly well, but, in a few months, his old symptoms recurred; he was examined with a lithotrite, and a soft stone was detected, just as before, on the right side of the bladder, and fixed, so that it could not be grasped. Feeling sure that this stone was encysted at that spot, and thinking that a little better approach to it would be obtained, I performed lateral lithotomy on the right side, with my left hand; it was awkward, but the bladder was quickly reached, and, with the utmost stretch of the right forefinger, I could just feel the point of the stone; the left finger could not reach it, and, with the right, the knuckles were so buried in the wound, that no instrument could, at the same time, be used. Forceps would not seize or even touch the stone, but I succeeded in slipping a narrow sharply curved scoop, along the back of the stone down into the cyst; then, finding the scoop had a good hold, by pulling it towards the perineum, and giving it a half turn, the stone was dislodged and brought into the wound, and easily caught by forceps. It was oval, pointed at one end, marked by slight circular grooves, where the mucous membrane around the orifice of the cyst had clipped it. This operation was followed by cystitis, and the discharge of some soft phosphatic matter, but he entirely recovered, did not have any recurrence, and died, some years after, of paralysis. The practical hints to be drawn from this case were: that cutting on the right side gave rather a freer access to the stone, and, also, that tilting up the rectum and base of the bladder facilitated the operation. In the present day, we, perhaps, should use a rectal bag moderately distended, or, better still, should have recourse to the suprapubic operation. Dr. Humphry has recorded a case, almost the very copy of this, in which he met with the same conditions and the same position of the stone. He performed lateral lithotomy four times, but could not, on the last occasion, extract the stone. On the fifth recurrence, he resorted to the recto-vesical plan, and succeeded in enlarging the mouth of the sac, with a hernia-knife, and removed the stone with forceps; but, unfortunately, this entailed rupture of the cyst-wall, and death of the patient. Dr. Humphry also records another case, in which, at a second operation, he enlarged the opening into the sac, and extracted the stone with forceps, and complete recovery resulted.

The only other case with which I will trouble you was in a woman, aged 61, who came into the hospital two years ago. She had difficulty in micturition, owing to a thickening and swelling around the orifice of the urethra; this was clipped off with scissors, but still the pain and irritation remained; and, on sounding, a stone was felt lying free in the bladder, and in addition, there was a hard lump to be felt with the finger in the vagina, which I took to be a stone in a cyst. She was in a low weak state, and the urine was alkaline, thick, and fœtid. The urethra was dilated, and the stone, lying loose, and about the size of a chesnut, was easily removed. Again using the finger, I could detect the encysted stone, and on trying to dislodge it, the part which projected into the bladder was broken off and removed. Then it was not easy to find the broken stalk, as it lay embedded in folds of membrane; but when it was found, I dilated the orifice of the cyst with the finger, and, guiding a narrow scoop into it, and at the same time tilting the stone up with another finger in the vagina, I easily drew it out of the sac, and removed it with forceps. The woman died of peritonitis in a week, and the *post mortem* examination showed that the bladder was rather thick and contracted; there were two sacculi, one as large as the bladder itself, communicating with it by a round aperture in the centre of the posterior wall; this sac was thin and sloughy, and was the starting point of the pelvic peritonitis which proved fatal; the other sac, much smaller, was that from which the stone had been removed; it was situated close to the right ureter; it contained some creamy pus, and the orifice had contracted, and bore no sign of my manipulation, nor were there any indications of inflammatory mischief around it. This is the only instance of genuine sacculation of the bladder and encysted stone in the female that I have met with.

These cases, with a few others like them, which I have met with but have not now described, are numerous enough to form almost a class, having many features in common, and worthy of being specially noticed, because they will probably occasionally occur to those who may be frequently called on to treat cases of stone.

They differ entirely from those in which the stone lies embedded and fixed in a recess or pouch; the true cyst which I have been describing is a hernia or protrusion of the mucous membrane between and through the muscular fibres, but the pouch is simply a bulging of the entire bladder-wall in some direction, in which hollow a stone, frequently a large one, is fixed and embedded. This is sometimes seen in women, when the bladder wall and stone are more or less prolapsed towards the vagina; or, in men, when the stone lies almost fixed in a pouch behind an enlarged prostate; such a case, for instance, as that described by the late Mr. Southam, in which he successfully removed a very large calculus from this situation by the recto-urethral operation.

Wound of the rectum is an accident which, I suppose, has occurred to all lithotomists; generally it betrays a fault on the part of the operator, but it may be an unavoidable incident due to sloughing, following the extraction of a large stone. I have sometimes traced it, I believe, to the pressure caused by a plug used for restraining hæmorrhage; and it is more liable to occur during the median, than during the lateral operation. The surgeon who wishes to avoid this fault, should observe caution on three points: namely, to guard the bowel with the left forefinger as much as possible; to direct the staff to be well hooked up against the pubic arch during the deep incision, and to lateralise the edge of the knife well and cut away from the bowel. Against this last rule I am disposed to accuse myself of having offended; and when we remember how the old surgeons speak of directing the first incision towards the left hip, and of their sometimes cutting the trunk of the pudic artery, I am led to think that they kept more clear of the rectum than we do now. The part most in danger is the ampulla, just above the internal sphincter; and, seeing how close is the anatomical relation of the two canals, we ought not to be too quick to attribute blame or express surprise at the occasional occurrence of this accident. I have only one hint to give by way of remedying this mishap: namely, to wait for a long time before resort-

ing to caustics or to division of the sphincter. Nature seldom fails to bring about a cure, or so to contract the wound as to leave but trifling inconvenience.

Perforation of the bladder.—I have twice witnessed this accident, once by the elbow of an assistant striking the handle of the staff while the anklets were being locked, and so driving its point through the posterior wall; and a second time, by either the point of the staff or the knife being carried too far across a contracted bladder. The accident has been attributed to the rough use of the forceps; but this, if it ever happen, must surely indicate a degree of violence that could only be used by a wild and nervous operator.

INGLEBY LECTURES
ON SOME FUNCTIONAL DISORDERS OF FEMALES.

Delivered at Queen's College, Birmingham.

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LECTURE II—*(concluded).*

BEFORE proceeding to consider some of the details of this subject, let me ask your assent to certain postulates of a general character. These will serve the useful purpose of helping in the distinguishing of hysterical cases one from another. Let it be granted, then:

1. That any nerve-centre (that is, any collection of grey nerve-matter) may have its excitability exalted, so that it becomes unusually responsive to its accustomed stimulus.
2. That any nerve-centre may have its excitability lessened, so that it becomes less than usually responsive to its accustomed stimulus.
3. That the permeability of any part of the nervous system may be increased.
4. That the permeability of any part of the nervous system may be diminished.
5. That increased permeability may cause ganglia to co-operate which do not usually do so. That is, that excitement of one ganglion may excite the action of other ganglia which, under other circumstances, it would not excite.
6. That diminished permeability may have the contrary effect, so that ganglia which usually act consentaneously, may cease to do so.
7. That any one or more of the cerebral ganglia which usually co-operate may be thrown out of gear, so that it, or they, cease to co-operate with the rest.
8. That the ganglia not thrown out of gear continue to co-operate as usual.

It may be that nerve-trunks have their sensitiveness or excitability increased or diminished. I do not propose either to deny or to affirm that this is so. The result would be the same as if the centre with which they are connected were affected.

Let us turn, now, to the consideration of some diseases commonly termed hysterical; and, first, to a common form of hysterical paralysis.

The patient has lost, almost completely, the power of moving one or more limbs—almost, but rarely quite completely: for I can recollect only one case in which no power of movement remained. The motions which do remain are, although extremely limited in area, yet often of considerable complexity. Such a paralysis, though remaining constant for weeks or months, or even years, may yet disappear in an instant, under the influence of sudden and violent mental emotion—such, for example, as an alarm of fire. Hence it has very properly been termed functional, as distinguished from organic. How are we to interpret this curious phenomenon? It was long ago suggested that we should look upon it as a paralysis of "the will;" and this view is still pretty generally current.

Without raising abstruse metaphysical questions, I fancy that, in speaking of the "will," we commonly include two separate and distinct ideas—one, the idea of a wish to do something; and the other, of our power to give effect to that wish. If we consider "paralysis of the will" by the light of this analysis, we come to this result: firstly, that, in regard to the second idea, it is a mere clothing, in pseudo-scientific phraseology, of the fact that the patient has lost the power of voluntarily moving her arm or her leg. It contains no explanation of this fact; and, therefore, conveys none. It is, in short, a meaningless phrase. Secondly, as regards the first idea, it is untrue in fact. These patients, so far as I have been able to understand them, have a very strong wish to be able, and are deeply distressed by their inability, to move the limb. They are also extremely grateful to us when we have cured them. To arrive at a more adequate interpretation of these cases, we must go some way round, and consider subjects which may, at first sight, appear remote. Nature is, in some cases, not content to leave the activity of a nerve to be regulated by the greater or less amount of force emitted by its ganglionic centre. A second nerve, arising from a different centre, is told off to diminish, or even arrest, its action. Such superior nerves are called, as you know, "inhibitory" nerves; and the control which they exercise is called "inhibition."

It is not difficult to perceive that this method is employed in the highest departments of the nervous system, as well as in the lower ones. We find evidence of this operation in connection with the high cerebral ganglia, the organ of the mind, as we call it. In the passage, "Thou shalt renounce, thou shalt renounce, thou shalt renounce—this is what the whole world is hoarsely crying to thee," "inhibit" might be substituted for "renounce," without any alteration of the meaning. An inhibition of this kind, which at first requires a voluntary effort, acquires, by frequent repetition, an involuntary or automatic character. Most of us can see a desirable object in the possession of another, without any nearer approximation to an intention of annexing it, than is contained in "I wish I had one like it." In the child, this inhibitory power is, at best, but latent, and requires, for its development, moral and social education. In some children it is difficult to develop it, even when the reasoning-powers are indirectly stimulated by irritating applications to the peripheral nerves distributed to the skin covering the gluteal muscles. In some few, it appears to be absolutely non-existent; we hear of individuals in whom the reflex act of taking is, all their lives through, the inevitable result of the act of seeing a desirable object. Some little mass of grey, or some slender thread of white, nerve-tissue, is wanting. The same thing is seen in some savage races, who are incurable pilferers.

We find, in another set of circumstances, something even more directly bearing upon our subject. We have most of us, at some, now probably remote, period of our lives, run up to a hedge with the intention of jumping over it, but, not "liking the look of it," stopped short, without making a spring. This is a rational and intelligent act, though it may afterwards be evident that it was a mistaken one. We have, also, similarly run up and made a spring, but, at the same moment, allowed the principle inelegantly called "funk" to intervene, with the result of inhibiting our muscular action, and thereby "bringing us to grief;" while a second, more confident—that is, an uninhibited effort—has carried us safely over. The secret of what is called "Dutch courage," lies partly, at all events, in the fact that one great effect of alcohol is to relax or paralyse inhibition. To this, mainly, is to be attributed the loquacity of intoxication; and so is the proclivity to the committal of crimes, by persons under the influence of alcohol. Examples of the higher forms of inhibitions are common among animals. Most of the tricks taught to dogs depend upon it. The exertions of a horse who has, on some previous occasion, been severely flogged, are, in some cases, inhibited by his hearing the sound of a whip raised to strike him.

Let us now turn to an entirely different class of phenomena. Under certain circumstances, those parts of the nervous system which usually, and, for useful purposes must, act in concert, cease to co-operate, one portion remaining active, while another portion is in a state of suspended animation. This is what happens spontaneously in sleep-walkers. A similar condition is producible artificially by means of mesmerism, hypnotism, and the like. In some instances, there has, no doubt, been fraud and imposition practised by unscrupulous performers; but, the most liberal abatement having been made on this score, there remains a series of facts of the most interesting description. If you or I were told that we could not lift from the table a pocket-handkerchief because it was so heavy, we should at once confidently proceed to show that we could. Why? Well, to put it shortly, because we should believe our experience, and disbelieve what we were told; but, if a hypnotised person were told the same thing, he would be unable to lift it. Why? Well, again, to put it shortly, because he would believe what he was told, and would be unable to correct the statement by reference to his experience, in consequence of some portion of his brain being out of gear; and something like this, I submit, happens in hysterical paralysis, in which, on this theory, the primary cause would be not deficient, but excessive, nerve-action. Muscular action is inhibited by the belief that it is impossible. A principal element of cure, then, is to con-

vince the patient that her belief is erroneous. It is not easy to do this directly, for it is notoriously difficult to remove any belief by the mere assertion that it is erroneous, or even by argument. Such a course indeed, is likely rather to strengthen than to weaken a belief. In these cases, a little benevolent trickery, or pious fraud, is often successful, as in the following case.

A young girl was brought, by several friends, to the General Hospital, when I was house-physician. The whole party was in a state of great lamentation and woe. It appeared that the girl had lost the use of her left arm an hour or two before; the same thing had happened on two previous occasions, and the medical man who had attended her had, so they stated, told her and her friends that a third attack would be certainly fatal. Feeling, after examination, pretty certain of the real nature of the case, I pacified her by saying that, although it was no doubt a serious matter, there was every probability that she would not die, and even good hopes that she might recover the use of her arm. She was taken in and sent to bed. It does not do to pooh-pooh these cases. You may succeed; but if not, you lose all control over the patient, and then good-bye to any prospect of usefulness. The next morning, she moved her arm a little, as she had done the night before. She was comforted by my telling her that it was a good sign that the paralysis had not increased. The following morning, she again raised it to the same extent as previously. I put my finger a couple or three inches higher, and said, "Oh, but you moved it up to here yesterday," she immediately moved it up to my finger. On the fourth day, the same manœuvre was repeated; on the fifth, the same trick being repeated, she got the tips of her fingers to her lips. I said, "How much farther do you want to get them?" She laughed, and the case was at an end.

Another girl was brought to the hospital who had been lying in bed for eleven months with a paralysed leg. On admission, she could, by moving the foot, rotate the end of the great toe through a circle of about an inch in diameter. I need not say that even such limited motion require the action of a number of muscles, and so facilitated diagnosis. By a judicious admixture of trickery, coaxing, and firmness, she was cured, though not so quickly as the former case.

I saw, some years ago, a fasting girl. The amount of food or even water that she was able to take was incredibly small. She was never exhibited; her emaciation was amazing, and there was no ground for reasonable doubt as to her veracity. She dwindled, and died some time after I saw her.

It is difficult to resolve the problem presented to us by these cases; but I am inclined to associate them with the preceding class, and to think that they may depend upon a belief that eating is impossible. And this belief may have had originally a substantial basis. From the dangerous extreme above mentioned, we can, without any distinct break, see all degrees of inappetence up to slight anorexia, or indifferent appetite. The slighter cases are undoubtedly often due to gastric catarrh, not necessarily of great severity. In saying this, it is perhaps right also to say that, in my opinion, there is little difference in point of frequency of occurrence between gastric and bronchial catarrhs.

Gastric catarrh, though sometimes provocative of ravenous, is more commonly associated with diminished, appetite. The view here suggested seems to me to receive support from the success of the method of treatment originated by Dr. Weir Mitchell. Take such a girl from her home, place her in the midst of new surroundings, of fresh faces, inspire her by confident assurances of her recovery, tell her you are going to restore her appetite by a new treatment, insist upon her taking food, subject her to massage, shampooing, rubbing, or whatever you like to call it. The effect is speedy, the result surprising. The quantity of food consumed soon becomes as remarkable for its largeness, as it had before been for its exiguity.

Cases of hysteria may be usefully, if not scientifically, divided into three classes; first, the simple, genuine, or involuntary cases; second, those in which there is unconscious exaggeration; third, those in which there is conscious fraud or deception. These classes might, perhaps, be as properly described as stages, for there is no doubt the first may glide into the second, and afterwards into the third; or, in other words, there has probably been a time when a case of the third class has belonged to the first. We meet, especially in the third class, with some very curious cases. And oftentimes they are not only curious, but puzzling. For example, a middle-aged unmarried lady's maid, precise and respectful, and quiet in manner and demeanour, as became the long and highly valued domestic of two or three decorous and not over youthful gentlewomen, came to the General Hospital. She had been living in London, but had been obliged to leave her place in consequence of feeble health, caused by repeated attacks of "inflammation of the bowels, with sloughing of the mucous coat." Oh no! not dysentery, but inflammation of the small bowels. So she had been told by several medical men in London, whom she named, who had been called in by her mistresses from time to time. Such were her statements; and, though I cannot vouch for their truth, I saw no reason to discredit them. Her reason for coming into the hospital was, that she feared that another attack was impending. After a few days, during which she insisted that she was suffering from gradually increasing pain in the abdomen, but no objective phenomena presented themselves, she said she had diarrhœa; and, a few days after that, she produced a liquid stool containing some smooth-edged, flat, whitish pieces of something. We found by experiment that these sloughs could not be distinguished, microscopically or otherwise, from pieces of chamois-leather or kid-glove, macerated in water for twenty-four hours. I told her that what she had passed was not mucous membrane, but something she had eaten; and, a few days afterwards, she found herself so much better, that she would like to go home, and she went.

It is not much use arguing or quarrelling with these persons. What you want to do is to take the romance out of their cases; to show that, so far from your thinking them remarkable, and therefore interesting, you know them to be commonplace and uninteresting. Thus I entirely checkmated a girl who pretended that her bowels had not been open for weeks. I told the mother the truth (which was, that I knew it be to untrue), and got her to tell the patient that we did not think anything of it; that some people had evacuations, and others had not; that there was no rule about such things. With this somewhat audacious statement, which she, of course, knew to be untrue, but could not well repudiate without spoiling her case, the patient's renewed attempts to excite interest in her case were consistently met, and she was ultimately beaten out of the field. Instead of denying her statement, we accepted it as gospel, but in a way that took all the interest out of it. She kept up the pretence for a very long time; and, curious to say, although frequently watched, it was never discovered where or when the bowels were moved. I have seen other like cases. In another very curious case, an abandoned thief imposed upon the gaol authorities, and obtained a free pardon on the ground of ill-health, and so escaped a long term of imprisonment. On her discharge, she was brought to the hospital, and the only thing that was real about her case was, that her periods were very profuse. In the gaol, she was supposed to have copious hæmatemesis, and had been seen by the matron in the act of vomiting blood, the possible source of which I refrain from even suggesting.

On hysterical retention of urine, I have only two words to say. It is very commonly the initial phenomenon, and is most useful, therefore, as furnishing the key to subsequent manifestations; and, secondly, it is not often repeated, when its treatment is left in the hands of the nurse, instead of being undertaken by the medical man.

Of hysterical vomiting I have seen several cases, and have not found much difficulty in dealing with them; but a particular course must be followed, which presents no difficulties in hospital practice, in which only have I met with these cases. In private practice, it might be less easy to pursue.

These cases begin with occasional vomiting two or three times a day only, or even less. As soon as you know what it is (which at first you may not), treat it with indifference. It soon becomes more frequent. In a few days, the nurse will tell you that everything taken is immediately rejected. You order a teaspoonful of water to be given at intervals, and nothing else, saying you are quite sure that will stay down. You will hear, the next day, that even that is immediately thrown up. Then you have got her. Place her flat on her back, with the head well thrown back on the pillow, the neck and upper part of the chest being fully exposed. Let her swallow a teaspoonful of water, and keep your eyes steadily fixed on the throat. In a short time, you will see a slight movement in the muscles of the throat. Say at once, "Don't do that again; anyone can make themselves sick in that way." The attempt may be repeated, and must instantly be checked. You watch her for a quarter of an hour, and then point out to her that she is wrong in supposing that nothing can be retained. You will not be troubled with any recurrence of this symptom.

We do not see a great deal of emotional hysteria in our practice; and what we do see is rather in the middle-aged than in the young; and is, in fact, if I may be allowed the Hibernicism, not hysteria, but drunkenness. Judging from my experience in Parisian hospitals, I should say that this phase of hysteria is more common in the Latin races than in the Anglo-Saxon. "Attacks of the nerves" seem to me, also, of more frequent occurrence in French than in Anglo-Saxon works of fiction.

In slight attacks, a simple expedient is often successful, probably

by diverting the patient's attention. Cause her to make a deep inspiration and a full expiration ; a few repetitions are followed by complete calm.

Hysterical coma is a very curious condition, and is commonly, in some degree, connected with alcohol. It is most quickly relieved by an enema of assafœtida.

Reverting, for a moment, to the cases in which we are wont to recognise the existence of fraud and imposition, it is questionable whether, in many of them, we are not using a term not strictly accurate ; whether we should not rather regard them as examples of partial mental aberration, the result of a dominant idea, the desire for sympathy, than of intelligent, intentional, and conscious deception. It is, perhaps, a fine distinction, and, if sometimes a just one, we must admit that, in the words of the cynical Heine :

"In case of women,
One knows never where the angel
Ceases, and the deuce commences."

These words are, also, apposite to another question. To what extent is there commonly in hysteria an erotic element ? The answer to this turns largely on the meaning which we attach to "erotic." Amongst men of the world, the interpretation would be of the grossest and most carnal character ; and too many of us would, and do, accept this view, thoughtlessly, I think, and erroneously, in respect to the virginal sex in general, and no less erroneously as regards cases of hysteria.

But the word has another sense, not less classical, for it rests on the authority of Plato, and one which, in my judgment, is more in accord with the passive or receptive function of women in the processes of reproduction. In this sense, it refers not so much to the lower animal passions—though these are not altogether excluded—but to the higher sentiments, from which spring all the graces and most of the charms which adorn the sex, and which do, as there is a physiological reason—indeed, necessity—for their doing, attract our own. In this sense, there is, I believe, commonly, and, in the other, but rarely, an erotic element in hysteria.

The time at my disposal, and, possibly your patience, are alike exhausted. Yet, even within the narrow limits I have fixed for myself, there are left many interesting and important topics at which we have not even glanced. For indeed, to quote a brilliant writer, "La femme, vois-tu, c'est un théme inépuisable : on a beau l'étudier, on rencontre toujeurs de nouveau."

I have desired on this, as on other analogous occasions, to remember that I am speaking, as one of themselves, to those whose duty and honour it is to apply, in practice, the art of medicine. But, you may object, such professions are but little consistent with the scheme and tenour of my lectures. You may think that there has been but a pitiful proportion of the bread of clinical facts, to an intolerable quantity of the sack of speculation and opinion. It is true that this is so. But this has arisen, not from my forgetting, but from my remembering, that we are all practitioners of medicine.

Our predecessors have had, our successors will have, general conceptions, views, opinions, speculations, hypotheses, theories, choose which term you will, which did, and will, exercise an influence upon their acts. We ourselves, all of us, have them, and they influence our acts. None amongst us, indeed, are greater slaves to them than many of those who, in good faith, lay special claim to the title of practical men.

Nor is this subjection to speculative views peculiar to the medical profession. The conceptions of mankind are compounded in varying proportions: of truth, that is to say knowledge ; of error, that is to say ignorance ; of prejudice, of imagination, fancy, faith, wishes, hopes, fears. This strange medley produces forces which, intense and far-reaching in their operations, do indeed govern the world. Take a quite recent example of practical results from such a cause. The Arab conception of Paradise, and of the means of getting there, has cost us many lives and much treasure, and may yet cost us more. But we have no need to go so far afield for an illustration.

There is a prevalent conception of disease, which is not explicitly stated in books, and of which, in its nakedness, there is perhaps no one who would not be ashamed. It embodies the unquestionable fact that there are relations between disease and that which we vaguely call debility. It is true also that these relations are often so intimate and direct, that it is of the utmost practical importance to recognise their existence.

But, when this conception obtains such a preponderance in the mind that it almost effaces the distinction between disease and debility, its evil consequences are most serious. It renders therapeutical efforts injudicious, confused, timid, and irresolute. It may, indeed, inhibit them altogether. It certainly does appear to me that such an undue preponderance is, at the present day, but too widely spread, and that the practice of many is thereby unfavourably influenced. This may be so, or it may not. What I really want you to admit is, that a abstract conception, difficult to formulate, except perhaps, if that can be called formulation, in the shape of a truism, does actually and largely influence practice ; for, to put the question in a concrete form given a case, in which we correctly recognise the existence of disease, and also the existence of debility,—In what measure is our treatment of the disease to be biassed by our recognition of the debility; or our treatment of the debility to be biassed by our recognition of the disease ? That is a reasonable question, which it is incumbent upon us to put to ourselves, and to answer. Now, in my firm opinion, the answer given, too often even in the present day, results in treatment unduly recognising the debility, and unduly neglecting the disease. And there is very much in female disorders to bring them within the possibility of being affected by such views.

It is unsound to think that conceptions, which contain an element of truth, cannot be noxious. On the contrary, it is that very fact which renders them dangerous ; for it is that which makes them seductive, which gives them currency, and secures to them continued existence. The element of truth is an antiseptic which protects them against the forces of decay. It has, then, appeared to me that current conceptions of the relations between their periodical functions and the general health of women have been inadequate ; that some facts have been unduly exalted, whilst others have been unduly debased ; and I have endeavoured to bring this before you, in order that, in your own minds, the balance might be readjusted. In like manner has it appeared to me, that there are inadequacies and imperfections in current conceptions of the female nervous system, and its aberrations. And I have endeavoured to lay before you some considerations on this subject, which seem to me to be of importance. At all events, what I have done, however halting the argument, or deficient in coherence, I have done in good faith. I ask you to take the trouble to think about it ; and then, I should be the last to quarrel with any one who arrived at conclusions different from my own. For I have been, all my life, an unswerving advocate of free thought ; accustomed to swear by the words of no master, unless they commended themselves to my own independent judgment.

ON THE NATURE OF THE SO-CALLED "HYPERTROPHY OF THE PROSTATE."

By SIR HENRY THOMPSON, F.R.C.S., M.B.,
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One of the facts most familiar to the medical practitioner is the occurrence, in elderly subjects, of an affection of the prostate gland, frequently occasioning more or less retention of urine. At and after about fifty-four years of age, and rarely quite so soon, this change is liable to take place. As I have long ago shown by numerical researches, a small minority alone are affected by it ; and it is, therefore, by no means a necessary concomitant of old age. On the contrary, it rarely commences at a period which can be thus designated ; for, if it do not show manifest signs of its approach before sixty years of age, and become considerably developed before sixty-four or sixty-five, it is seldom manifested at a later period, or, at all events not to a considerable extent. It will, of course, be understood that from the above category all examples of malignant growth (carcinoma and sarcoma) are excluded, as well as all enlargements of a simple inflammatory character, not uncommon in youth, but rare in advanced years.

Hitherto it has been the custom to regard all non-malignant forms of enlargement met with among elderly men as "hypertrophy of the prostate," and invariably thus to denote them. Thirty years ago, when occupied with an extended anatomical examination of the prostate, I came to the conclusion that all enlargements which were neither malignant nor inflammatory could not be regarded as hypertrophy, in the true meaning of that term. Hence I avoided the use of it, and employed "enlargement" as a better appellation ; adopting it also as the title of my first work on the subject. Subsequently, I contented myself with the old designation, "hypertrophy," finding that it was universally used, and that it sufficed, for the present, for all practical purposes. But the more exact knowledge of morbid structure and action which has been acquired since the date named supports the original view, that several varieties of enlargement have been confounded under that single term. It will be my object here very briefly to show that a more accurate apprecia

tion of these will be obtained by using "enlargement" as a generic distinction, and "hypertrophy" only to designate a small and subordinate group.

I shall premise, then, that in making an anatomical examination of any form of senile enlargement of the prostate, hitherto included under the term "hypertrophy," in no single instance are any tissues discoverable besides those which are the natural constituents of the organ. These tissues may be unduly—sometimes enormously—developed in quantity; and they are also mostly presented in different proportions, relative to each other, from those that characterise the normal structure.

A healthy prostate is made up:

1. Of pale muscular fibres, connective tissue, and the yellow elastic fibres, constituting the stroma of the organ;

2. Of simple gland-cavities and their ducts, lined with epithelium; these interpenetrate, more or less, the fibrous stroma.

In addition to these elements, a quantity of secretion, more or less abundant, is always present; besides which, certain bodies, known as "prostatic concretions,"[1] are always met with.

The varied arrangement of these tissues occurring in abnormally large prostates, and referred to above, together with the associated matters named, as I have observed it in dissecting a large number of such prostates, are here set forth in a tabular form, in order to present a general view of the facts obtained.

Prostatic Enlargement of Advancing Years.

A overdevelopment of tissues, gland-stromal, mostly in normal ons throughout. This may ded as "true hypertrophy"	A less common form of enlargement than others. The degree of enlargement less considerable than others	On section, the secretion abundant; concretions numerous.
B. Increase of stromal tissue, but due chiefly to overdevelopment of the white fibres, not of the unstriped muscular fibres. The original secreting structure may still exist, or may have diminished in quantity. This form may be regarded as a "fibrous hyperplasia," rather than as a general hypertrophy. If the pale muscular element is developed in like proportion, the term "fibro-muscular hyperplasia" might be applied	The most common form and attains the most considerable size	On section, the secretion appears according to the amount of gland-tissue present; it is mostly smaller than in health. A few concretions.
C. Excess of glandular tissues over stromal. This, on the same principle, may be classified as "glandular hyperplasia"	Rare	Secretion abundant; concretions also.
D. Rearrangement of the normal structures—fibrous and glandular—in the form of tumour	Common	—

Respecting the group A, described as "true hypertrophy" in the table, it is not necessary to add any particulars to those already mentioned there. It is probable that no serious objection will be taken to the position assigned to this form of enlargement, although it is confessedly not due to any new labour imposed on the organ; and that the hypertrophy differs in its origin, and therefore in its nature, from that which occurs in the walls of a heart or of a bladder compelled by obstruction at some outlet, to perform an unnatural amount of labour.

But, respecting the group B, I would remark, especially of those examples which have attained the greatest size, that the "stroma" of the gland is not identical with that of the normal organ. The white, or connective tissue fibres, are notably in excess of the other constituents, the unstriped muscular fibres being usually found in small proportion. There may be some cases, but, if so, they are rare, in which the muscular fibre is increased, so as to maintain its normal proportion to the white fibres. It is in relation, then, to these varying products that I venture to propose the term "hyperplasia," in order to replace the old one of "hypertrophy," as more accurate and distinctive. Thus applying it to the first named division of group B, marked by an excess of the white fibres, I should regard them as examples of "fibrous hyperplasia." To the second and much smaller division, the term "fibro-muscular hyperplasia" would, on the same principle, be appropriate.

It is due, probably, to the great prevalence of the former variety that hypertrophy of the prostate, as hitherto understood, has lately been represented by Professor Guyon, of Paris, as essentially identical with the change known in other organs as sclerosis. In regard of this view, I am compelled to express a doubt whether, at all events in the sense in which that term has been employed by pathologists in this country, senile prostatic enlargement can be so considered. A typical example of sclerosis, according to our usage of the term, is that change in the spinal cord in which nerve-tissue is replaced by a gradual formation of white fibrous tissue, with a tendency to subsequent contraction. Perhaps a deposit which affects the structure of the liver in a similar manner, and produces contraction of the lobules (cirrhosis), may be cited as another example of sclerosis. In neither case is there any increase in bulk of the organ affected, but the reverse. Still, Professor Guyon appears to consider all forms of the ordinary enlarged prostate of advancing years to be produced by a process of degeneration, as he says, often associated at that period of life with atheroma of the vessels, etc., and resulting in sclerosis of the organ.[1]

I cannot altogether assent to this view, although it has emanated from a source entitling it to the very highest respect. I find it difficult to admit that the steady increase in size of the enlarged prostate, proceeding as it does with ceaseless activity in the production of new tissue, is necessarily associated with impaired vascular supply, or is by any means a process of degeneration in pre-existing structures. In fact, the hypertrophied prostate is very far from being invariably the local expression of a general deprivation of nutrition affecting the constitution, or of diminished vitality. I have seen numerous examples in persons whose condition of body was remarkably healthy for their age, although they have been compelled, for fifteen or twenty years, perhaps, to remove all their urine by catheter on account of large obstructing prostates. I have known several such, hale and hearty men, reaching eighty years and upwards in tolerable comfort. One, well known here in town, continued to enjoy fair health until ninety years of age, with the power of relieving himself by instrument almost to the last; a practice he had pursued for nearly thirty years. No doubt such patients are exceptions to the general rule, but their existence proves that the disease is by no means necessarily associated with a feeble or decaying constitution.

But further, the action of sclerosis, as hitherto understood, tends ultimately to contract the bulk of the organ affected. No such tendency is ever observed at any stage of the development of enlarging prostate, which almost uniformly continues to increase, so long as the subject of it lives; at all events, at no period of its course is any contraction and diminution in size observed to take place.

Of group C, in which excess of glandular tissue over stromal may be observed, the examples are extremely rare. I have only met with two undoubted specimens. One weighed 14 drachms, just three times the normal weight, and enlargement affected the organ equally throughout. Under the microscope, gland structure was seen to abound throughout the organ, and gland-products pervaded almost every part. The second was a little smaller, but otherwise similar to the first.

The group D is designed to include all those rearrangements of the normal structures of the prostate, fibrous and glandular, in more or less independent forms of production, and assuming the condition of outgrowth or tumour. These are found to be present, for the most part, in all enlarged prostates, and sometimes, also, in those of natural weight and size. They may be regarded chiefly as local developments of "hypertrophy," of which nothing further need be said in this place.

[1] Small yellow semi-translucent bodies, at first, as seen under the microscope, showing concentric rings, resembling the section of a uric acid calculus; but, when fully developed, becoming dark opaque, and of the size of small poppy-seeds. They are found in all adult prostates, healthy and diseased.

[1] Annales des Malad. des Org. Gén. Urin., Legon Clinique, No. 4, March, 1885. Paris.

ZENANA MEDICAL COLLEGE.—The report presented at the annual meeting of the Zenana and Medical Mission, for the training of ladies as medical missionaries, held at 58, St. George's Road, S.W., showed that, during the year, twenty-seven pupils had left the college for the mission-field, making seventy-one in all who have gone out since the foundation of the institution; the Society being represented in India, China, Africa, Ceylon, and wherever women only act as doctors. Several of the Society's students have their own hospitals and dispensaries, where, in addition to the ordinary Zenana work, they are training native women in the scienee of medicine. The college at Pimlico has, during the past year, had on its out-patient roll over five thousand patients. The year's receipts were £1,104, and the expenditure left a deficit of £215. The committee do not undertake to send out any missionaries; but each lady, as her course is finished, is handed over to the care of one or other of the established missionary societies. The whole of the staff give their services gratuitously.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
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[*Continued from Page 1097.*]

IX.—Recurring Attacks of Chilliness followed by Slight Erysipelas of Face: Xanthelasma of Eyelids.

Mrs. B.'s account of her symptoms was very interesting. She said that she had, for three years, been liable to periods of chilliness, during which she could not keep warm. Nothing warmed her; neither exercise nor fire-heat; the nearest approach to warmth being obtained in bed. After two or three days, the attack would end by a blush of redness appearing across the forehead. When this came, the chilliness always ceased. During these attacks, she does not usually feel ill, but takes her food almost as usual. Recently, that is, during the last six months, the attacks, which have recurred almost monthly, have been attended by swelling of the eyelids. The lids, when I saw Mrs. B., were still somewhat swollen, the lower ones especially, and the condition of solid œdema of the lids was clearly threatened. Her ears also had of late become swollen and red during the attacks. Thus it seems probable that the attacks of chilliness was really a modified form of rigor preceding slight attacks of recurrent erysipelas. It is remarkable that they should be so prolonged and attended by so little disturbance of health, and followed by such very slight erysipelatous redness. Still the gradual increase of the local change, and the production of œdema, seem to definitely place the attacks in this category.

Another explanation is, however, possible, and it is that the attacks are indicative of liver-disturbance. Mrs. B. has large patches of xanthelasma on her upper eyelids, the largest being, contrary to rule, on the right side. She has known of these for two years or more. She is also liable to attacks of dizziness and dimness before her eyes. Mrs. B. is 62 years of age, of a phlegmatic temperament. She says that she cannot exist without fresh air, and is accustomed to sit in a draught of wind whenever she can.

X.—Dupuytren's Induration of Palmar and Plantar Fascie, without Material Contraction.

A rather peculiar form of contraction of the palmar fascia was presented in the case of Mr. L. F. It occurred in his right palm only, and affected the fascia in front of the middle finger, and not that of the ring finger; and, although there was a long thick band of indurated tissue, there was comparatively little contraction. He had similar bands in the plantar fascia of each foot, but again without any obvious tendency to contraction. His age was 52. He was in tolerably good health, and there was no history of gout in the family.

As is well known, the prominent symptom in Dupuytren's disease is contraction. We see every now and then, however, cases, such as the above, in which there is great induration and but little tendency to contract. In these, I think, the induration is more superficial than in the more common cases. I have just seen another case much like that of Mr. F. A long band of bossy induration extended up the palm in front of the ring finger, puckering the skin, but not drawing down the phalanges in the least. It is not common (as in Mr. F.'s case) to find the plantar fascia affected.

XI.—Asphysia of the Extremities, beginning in Middle Life: Inherited Gout: Curious form of Cutaneous Tophi in Hands and Feet.

A very remarkable example of asphyxia of the extremities came under my notice in the person of a Miss B., in November, 1885. She was 60 years of age. Her hands were livid and cold, like those of a corpse (although she had been sitting for some time in a warm room), and her feet were almost in the same condition. Her legs, just above the ankle, pitted on pressure, the skin being pale and tallowy. The urine had been frequently examined, and never contained albumen. She could never put her hands into cold water, since it always made them die, and caused her a distressing sensation at the heart. Anything in the slightest degree tight on the hands or feet made them yet colder, and caused them to ache. Thus she had quite given up the wearing of gloves, and carried her hands in a large muff. Her feet were in loose fur-lined boots; and, when at home in the evening, she often found it more comfortable to take off her stockings. It was a very interesting question as to how far Miss B.'s condition was connected with gout. There was no doubt that she inherited it in an unusual degree. Her grandfathers on both sides had suffered severely from it. She herself had passed through an acute, definite attack of gout in the great toe, some years ago, at Aix-la-Chapelle, and she had had many less definite attacks of inflammation of joints. Twenty years ago, the late Dr. Falconer, of Bath, whom she had consulted on account of an inflamed knee, had told her that she was most certainly the subject of hereditary gout; yet, not a single joint had become crippled; she had no nodi digitorum, nor any tophi in her ears. She asserted that she had "often had chalk-stones come out of her fingers." On investigating this symptom, I found that she did not mean the ordinary discharge from large concretions about the joints, but the escape of little sub-epidermic masses, not bigger than shots. One of these she brought for my inspection, and she showed me in her fingers, and chiefly in their palmar aspects, many little pits, from which, she said, others had escaped. Some had also come away from the skin of her heels, but none from the toes. These concretions were coming away at the time that she consulted Dr. Falconer, twenty years ago, and were one of the conditions which caused him to declar that she was the subject of gout. In addition to the inheritance o gout, as possible factors in the production of her present condition, we must note that, in early life, she suffered much from biliousnes being habitually, as she said, yellow as a lemon; and, next, that in 1847, an influenza year, she had nearly died of that disease. She believed that her heart had been much weaker ever since that illness, and she had been told that, during her illness, they did not dare to move her, on account of its extreme feebleness.

Miss B.'s mode of life had always been careful. She took, in great moderation, home-brewed beer in early life. She was a lady of remarkable intelligence, great benevolence, and very active habits. As a fact for ophthalmologists, it may be recorded that she suffered from myopia; and had used the same spectacles, for all purposes, from the age of 12 to that of 60, and still enjoyed perfect sharpness of vision. Her pulse was compressible, but by no means very feeble, having an intermission every ten beats. There was no evidence of calcareous disease of the arteries. I must now describe a very remarkable illness which Miss B. had recently passed through, and for the remains of which, in fact, she consulted me. She had all the spring "felt much gout about her." It was in November that I saw her, and she told me that, in the preceding August (2nd), she had awoke, one morning, to find her left foot dead. It felt like wood, and was cold and livid. In the course of the following morning, severe pain developed in the sole and heel, and whole foot, excepting the toes. The pain became intense, and finally passed upwards, and settled in the back of the hip. At this part, it was unbearable in severity, and was only relieved by a morphine-injection. After lasting about twenty-four hours in the hip, it passed again to the foot, and settled in the sole. She was six weeks in bed with this attack, and could not bear anything to touch her foot; yet, during this time, it was not much swollen, but felt hard, and, instead of being red and hot, remained cold and livid. She says that she was never out of pain, and never slept. The deeply seated pain had not left her when she got up, nor, indeed, was she wholly free from it when I saw her. The whole instep was still swollen. She said that she had felt as if there were a raging fire in her foot, while its surface was still cold. Was this an attack of gout? If we reply in the affirmative, as I think we should be justified in doing, we have to meet the fact that all sorts of gout-medicine were used during the attack, without material benefit. She was under the able care of Mr. Willis, of Gloucester, in the first instance; and, at the end of her illness, Dr. Long Fox, of Bristol, was consulted. Miss B. was of dark complexion, and rather pale. She had enjoyed perfect regularity of menstruation from the age of 15 to 35, and she considered that, since the cessation of the function, her health had not been so good as formerly. She had been liable to flushings and headaches, from which she had been previously free. Her hands felt, she said, wooden and awkward, from their coldness and slight swelling; but, as already stated, none of her finger-joints were in the least swollen or stiff. I examined her ears, and there were no traces of tophi or of chilblains. Her urine contained neither albumen, sugar, nor excess of acid.

I got some further facts, at a subsequent visit, as to the very peculiar form of chalk-stones which had occurred in this case. It is to be noted that they had never occurred except on the fingers and the heels, and that the liability to them had extended over twenty years. They formed in, or just under, the inner layers of the skin, and gradually worked their way to the surface, appearing as little dull white patches. Some of them inflamed before giving way; but others burst, and discharged their contents, without ever becoming, in any degree, either red or painful. The contents discharged differed much in different instances; sometimes, a little dry powdery chalk; sometimes, chalk and water, or pipeclay; and at others, a little nodular mass, as hard as bone. One of the latter kind Miss B. brought to me. It was about as big as the thicker half of a barleycorn, very hard and smooth, like bone.

What I subsequently learnt, made me yet more certain that the attack in the foot was, as diagnosed at the time by her surgeon, acute gout. The pain began in the middle of the night, and after an unwonted supper on beef. The numbness of the foot was probably due to the extreme severity of the pain in the tarsal joint which was inflamed. I have known a case of acute gout of the shoulder-joint mistaken for paralysis of the upper extremity, on account of the helplessness and numbness of the limb, which were induced, I believe, by the extreme severity of the pain in the joint.

The peculiarities of the attack; the coldness of the part, instead of heat; and its lividity, instead of redness, were, no doubt, due to the previously existing peculiarities in Miss B.'s circulation. Turgescence of the venous system is, under many conditions, a noticeable feature in gout. We may ask the question, whether, in Miss B.'s case, the gouttendency had anything to do with the production of the general asphyxia of the limbs. I saw, some years ago, a gentleman, a member of our own profession, aged about 65, in whom there was good reason to suspect gout, and who, subsequently, had a chronic enlargement in the joint of one of his fingers, and a very peculiar condition of one toe. It became a little swollen, blue, and livid, and remained so for a month or two. We were very anxious lest it should pass into gangrene; but the condition was unattended by pain, and eventually it passed completely away. In Miss B.'s case, at the time of her second visit, I again carefully observed the state of her circulation. Her fingers, on this occasion, were not either livid or cold; for the day was warmer, and she had been sitting in a very warm room. Notwithstanding this, however, her feet were cold, and as blue as those of a corpse. I noticed that her hands, which were cool and of a dull-red colour, were rough and coarse, like those of a labouring man, and her nails were broad and somewhat roughened. She complained that all her fingers felt thick and awkward; they were "all like thumbs." When we remember the remarkable tendency to the formation of subcutaneous tophi on the hands and feet, and on these parts only, the conjecture becomes, I think, not improbable, that the venous circulation, in parts which had long suffered from definite gout, may have become permanently altered by it.

As regards diet, Miss B. has possibly not managed herself quite well. In early life, she took home-brewed beer regularly, in small quantities. Dr. Falconer told her, twenty years ago, to avoid beer as poison, and she did so with decided benefit. She continued, however, to take wine irregularly—that is, occasionally, when feeling to need it; and she has consumed meat rather largely. I advised that she should cautiously put herself on partial vegetarianism, and take, as a stimulant, whisky and water only. She said that she was very dependent on meat, and never felt at her best until she had had her meat-meal.

[*To be continued.*]

ACTINOMYCOSIS HOMINIS.

By T. D. ACLAND, M.D.,
Demonstrator of Morbid Anatomy at St. Thomas's Hospital, etc.

ACTINOMYCOSIS is a progressive inflammatory affection, caused by a definite micro-organism; it results in the formation of granulation tumours and fibrous tissue, and, in man, generally ends in suppuration. The disease is characterised by the presence of minute rosett like nodules, which are found firmly embedded in the centre of masses of recent inflammatory tissue, or floating in the pus from suppurating cavities. It attacks all organs and tissues alike, producing results which depend rather upon the nature of the tissue affected, than on the specific character of the disease.

The organism was first accurately described by James Israel in 1877 (Virchow's *Archiv*, vols. lxxvi and lxxviii), though it had been observed, and its presence noticed, long before this date. Ponfick subsequently brought forward evidence to show that the disease in man was the same as that which had been described in animals. This, although no doubt true in some cases, must, for the present, be considered as incapable of general proof; for, though there are many points of resemblance in the course of the disease, as it affects man and cattle, yet the appearances of the organism in the two cases often bear no resemblance to one another. Hence, probably, more than one organism is included under the same name. In man, the general tendency of the new formations is towards rapid disintegration, with the formation of abscesses, sinuses, and fistulæ, and by the growth of dense bands of fibrous tissue, which give to the abscess-cavities a honeycombed appearance, which is almost characteristic of the disease.

In cattle, the tendency of the disease is towards the formation of tumours, from which fact it has received a multitude of names, such as osteosarcoma, lymphoma, lingual tuberculosis, from its supposed resemblance to such diseases; and the calcified remains of the organisms have been recognised by Duncker and Virchow in nodules in pork, which had, up to that time, been regarded as cysticerci which had undergone calcareous degeneration (Virchow's *Archiv*, vol. 98, page 546).

The first case recognised in England, in man, was discovered by Dr. Sharkey and myself in the early part of 1885 (the appearances are described in the *Proceedings* of the Royal Medical and Chirurgical Society, November 24th, 1885); and, subsequently, Mr. Shattock found two specimens of the disease which had been placed in the museum of St. Thomas's Hospital, as abscesses of the liver. My thanks are due both to Dr. Sharkey and Mr. Shattock for the material which has enabled me to work out, as far as it has been possible to go, the minute structure of the organism from which the disease has derived its name; and the object of the present notes is to call attention to the occurrence of the disease, and the differences which exist between it and that which is described in all recent works on pathology, which seem to be taken from specimens of that which is known as actinomycosis bovis. The organism, in this latter disease, is described as a tufted rosette of radiating pyriform, or club-shaped structures. These are either single, or divided into dissepiments, and are of considerable bulk. On reaching its full development, it has the outward form of a mulberry, this appearance being due to the aggregation of separate masses of the club-shaped elements, which spring in all directions from a matted tuft of filaments within (Ziegler's *Pathological Anatomy*, ed. I, art. 134). This very accurately describes the appearances in cattle; but in some cases, at any rate in man, they are entirely different.

In three out of the four cases which I have had the opportunity of examining sections, stained with logwood or methyl blue, showed growths varying in size from that of a pin's head downwards, which seemed to consist of broad striæ radiating from a common centre, or enclosing a central space, which was to be filled with the *débris* of inflammatory cells.

These striæ had nothing in common with the sharply defined, highly refractory, club-shaped masses described above, and, when stained by Gram's method, showed that the appearance of radiation is due to the streaming out into the surrounding cells of innumerable very fine threads, some twisted, some branched, many single, and often running for a considerable distance away from the central mass, or terminating in minute clumps of fibres, which were evidently the foci of new growths of a similar kind. As the growths extend peripherally, a series of fairy rings were formed, which, fusing together, leave considerable areas of degenerated products in the centre of the widening ring; both amongst the rings, and external to them, were considerable numbers of cells, which had undergone fatty degeneration, with a few large epitheloid cells. In two cases, no traces of the club-shaped elements, so characteristic of actinomycosis bovis, were to be found; in the third case, which died in the Military Hospital, Berlin, and for which I am indebted to the kindness of Dr. Erhardt, there were a few club-shaped masses occurring amongst the fibres, but the majority of the growths consisted of fine threads, branching frequently, and radiating from a common centre. It might be urged that the method of preparation had destroyed the club-shaped elements, and left only the threads. This is not the case; as specimens of actinomycosis bovis, treated in identically the same manner, not only showed the well known rosettes in their typical form, but showed no trace of the radiating fibres, which are so characteristic of this particular form of the disease in man. In a fourth specimen, given me by Dr. James Israel, the club-shaped masses preponderated, and the appearances were very much like those that are seen in cattle, but smaller and less clearly defined than in actinomycosis bovis. These observations show either that the organism may be present under the different forms, or that similar diseases are produced by different organisms. There is, at present, no proof that the one form can, by a process of involution, or evolution, pass into the other.

Numerous experiments have been made, with a view of deciding these points, and of endeavouring to settle the precise nature of the organism described. It has been supposed that the club-shaped bodies were conidia, and that the threads were mycelium; neither observation or experiments have confirmed this view.

Dr. James Israel considers the results of his own experiments as unsatisfactory, and this is the conclusion at which most observers,

myself included, have arrived; but, more recently, Professor Boström, of Giessen, reports[1] that he has succeeded in making artificial cultivations on solidified blood-serum, Agar-Agar, and gelatine, that the growths come to maturity in five or six days, and present the typical appearance of actinomyces. This typical appearance he considers to be that which has been described as occurring in man, for he believes that the club-shaped elements occur only where the nutritive material is becoming exhausted, or where involution is taking place. If these observations be confirmed, the organism will have to be classed amongst the schyzomycetes or bacteria, instead of, as heretofore, amongst the hyphomycetes or moulds; this view is taken by Dr. Israel, and is supported by my own specimens.

It has been doubted whether the "rosettes" in cattle are organic at all, whether they are not crystals of fat or calcareous masses formed in caseous areas of inflammation. In the cases observed by myself, the evidence against these views is very strong, since neither acetic or nitric acids, ether, or alcohol, have any destructive effect upon the threads; although, in the specimen given me by Dr. J. Israel, alcohol and ether caused the club-shaped bodies to shrivel, but did not entirely dissolve them; and, in the second place, heat does not liquefy, or osmic acid stain them; there is, too, the positive evidence that all forms, from the single rod-shaped elements up to the complete circle of threads with a hollow centre, are to be found often in a single specimen, so that it is not any great assumption to suppose that the larger forms have developed from the smaller ones, not by a process of crystallisation, but of actual growth.

Little is known as to the origin of the disease. Dr. James Israel believes that it may develop from some form of leptothrix found in the mouth; and in the last case which he has had under his care, a hollow tooth was found embedded in the lung under the pleura, and apparently the starting-point of the disease. Johne has recorded cases in which the disease attacked the spermatic cords of horses which had recently undergone castration; so that there can be little doubt that the organism may be derived from many different sources, and that, when it finds a suitable nidus, it develops, and by its growth sets up those processes of inflammation which constitute the disease known as actinomycosis.

ON THE TENDON-REACTIONS.

By A. de WATTEVILLE, M.A., M.D., B.Sc.,
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In the first of Dr. Sharkey's admirable Gulstonian Lectures, there occurs a passage (see British Medical Journal, March 20th, pp. 532 and 533) of which I gladly avail myself to enforce the views of those who, like myself, object to the name of "tendon-reflexes," or "deep reflexes," generally given by medical writers to phenomena more correctly described as "tendon-reactions," or "myotatic contractions." It is true that, as the lecturer observes, the short latency of these muscular spasms, as compared to that of true reflex contractions, is, for those accustomed to physiological methods of investigation, an argument of considerable weight. Many clinical observers, however, do not seem to appreciate this kind of proof, and experience no difficulty in assuming that certain nervous impulses may, without obvious reason, travel three times as quickly as others along paths similar in every respect, and identical up to a certain point. But the data of measurement are not the only considerations which make the reflex nature of tendon reactions doubtful; and my object is to state, as briefly as possible, the other aspects of the case.

1. I have adverted elsewhere to the fact that true spinal reflexes usually consist in movements of a more or less co-ordinated nature, involving more muscles than one. The reason of this fact is, that the motor physiological units in each spinal segment are not representative of single muscles so much as of certain actions resulting from muscular combinations. In that form of contraction which follows an extensile vibration communicated to a tendon, the response is limited to the muscle of which the tendon is submitted to the exciting process, and bears a close analogy to the effect of an electric or other direct excitation of the muscle. Reflex actions differ from such manifestations of peripheral irritability, inasmuch as they either possess a "purposive" character, or appear to be survivals of protective movements developed in the course of the evolution of ancestral forms.

[1] *Jahresbericht über Path. Org.*, Baumgarten. 1886. P. 143.

2. True reflexes occurring in the sphere of voluntary muscle are amenable to volitional inhibition; tendon reactions can be only neutralised by contraction of the antagonists. Hence, our opponents must assume that there are, not only two rates of travelling of nervous impulses, but two different kinds of discharge from the spinal motor cells: one that can be inhibited, the other that can not.

3. The myographic curve of a muscle, excited by extensile vibration, appears to differ somewhat from that of a muscle responding to a sensory excitation, inasmuch as its ascent appears to be more abrupt. (See British Medical Journal, May 20th, 1882.)

4. The diffusion of true spinal reflex processes in the cord differs by obviously different characters from the apparent diffusion of "myotatic" contractions, which can be shown to depend upon vibrations, transmitted through the bony structures to hypertonic muscles attached to them. This point leads me to consider

5. The phenomenon known as the crossed knee-jerk. It is not rarely observed, in cases where the jerk is abnormally marked, that the two legs respond to percussion of one patellar tendon. This has often been triumphantly adduced by our opponents as proof of the reflex nature of tendon-reactions; but, as I have shown in the paper just quoted, the closer study of this phenomenon furnishes us with most convincing arguments. First, it is to be observed that, on the one hand, contraction of the muscles in the opposite leg, does not occur after percussion of the patellar tendon, unless the position of the experimentee is such as to allow the impulse to be transmitted through the femur to the pelvis; that on the other, percussion of the heel also excites this contraction when the whole leg is kept extended at a right angle to the pelvis. Flexion of the limb (or fracture of the bone, as Waller has shown in rabbits) arrests this mechanical impulse and, along with it, the crossed muscular contraction. Secondly, it must be noted that the muscles excited in the opposite leg are not the extensors, but the adductors, which, by their anatomical relations, are those most liable to be stretched by an impact communicated to the pelvis. Thirdly, as I have shown, the direct and crossed contractions occur at the same instant after the percussion of the tendon. Now, if there is one fact certain in the range of spinal physiology, it is that a relatively considerable time is required for the transmission of an excitation from one side of the spinal cord to the other; and that a true crossed reflex has a much longer latency than a direct response. Hence, we have two good reasons for rejecting the reflex nature of the crossed reaction.

Such is, expressed in as few words as possible, the cumulative evidence upon which we base our view that the usual muscular contractions obtained by very sudden extension or percussion of tendons are not true reflexes. It is, of course, perfectly possible that, in certain cases of spinal over-excitability, the usual methods employed to elicit them may give rise to true reflected spasms; but it must not be forgotten that, in hypertonic conditions of the muscular system, any vibrations, even very slight, imparted to the bony frame-work, may give rise to symptoms simulating the effects of intrasinal diffusion.

Before concluding, I must allude to a defective argument in Dr. Sharkey's discussion of this point. He compares the latency of the closure of the eye to light excitations with that of the knee-jerk; and, from the similarity of the two, appears to conclude that measurements are, after all, not opposed to the reflex theory of tendon-reactions. But he does not allude to the enormous difference between the length of the nervous paths along which the nervous impulses have to run in each of the two cases.

Finally, with reference to the shorter latency of the jaw-jerk as compared with that of the knee-jerk, I may observe that it does not militate against the view that both are phenomena of direct muscular excitation; the relative bulk of the muscles involved, and of the parts to be moved, in the two cases, explains the apparent discrepancy. The shortening of a small muscle, like the masseter, as judged by the movement of the jaw, must obviously consume less time than a contraction of such a mass as the quadriceps femoris in effecting the extension of a pendulous leg.

I shall conclude with a short recapitulation of what I, in common with others, hold to be the most likely hypothesis concerning the nature of tendon-reactions. In its normal condition, all muscular tissue remains in constant relation with the spinal grey matter, by means of afferent and efferent nervous fibres. Upon integrity of this nervous arc depends the so-called "tonicity" of muscle, as well as its property of contracting in response to the stimulus of sudden extension. All conditions that augment or impair tonicity modify likewise this property. Hence the state of the tendon-reactions may be used as a test of the presence or absence of alterations in the muscular reflex spinal arc, without any direct appeal to its activity.

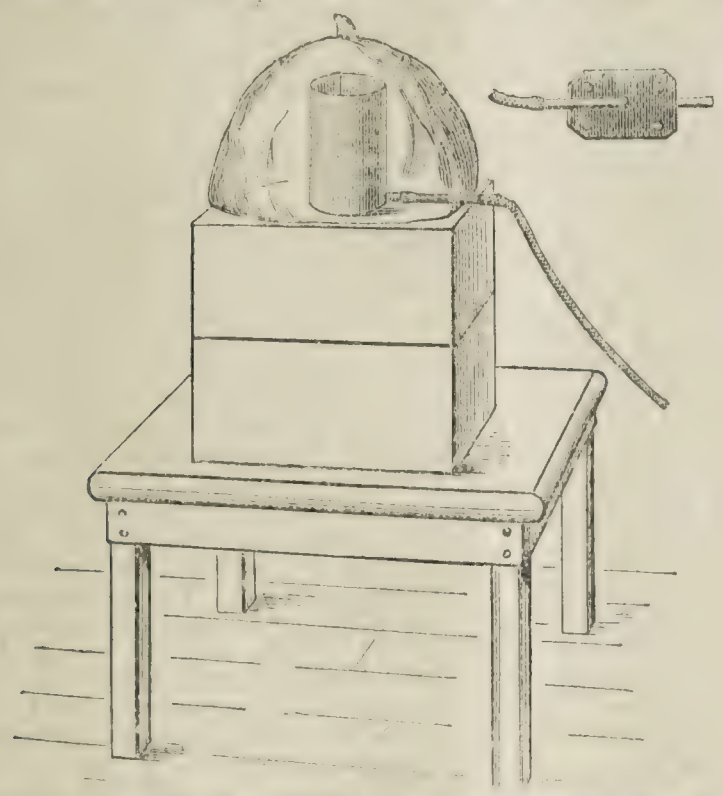
CONTINUOUS RECTAL ALIMENTATION; AN ARTIFICIAL STOMACH.

By DUNCAN J. MACKENZIE, M.D., Glossop, near Manchester.

The labours of Sir William Roberts, of Manchester, and others, in the field of artificial alimentation, have undoubtedly made the prospect of supporting life by rectal feeding more bright. There is, however, this difficulty in intermittent administration, that an enema, however small, is apt to cause a desire for defæcation.

It has occurred to me that we may imitate the process of nature more closely by the gradual passage of a fluid from an artificial cavity, in which its digestion takes place, into the rectum for absorption. In this way, supply keeps pace with absorption, and the bowel is not loaded.

The way in which I proceed is as follows. A piece of celluloid catheter (No. 5) is passed into the anus for about two inches; if passed too far, there is a risk of its being closed by the folds of gut. When once introduced, the sphincter closes upon it, and its presence is hardly felt by the patient; and the celluloid, rigid when introduced, becomes rather softer from the heat of the body. Previously to introduction, this piece of catheter is passed through a thick piece of India-rubber, perforated so as to grasp the catheter tightly. To the four corners of the India-rubber are attached tapes, which are tied, two in front and two behind, to a band round the



loins. The India-rubber is passed close up to the anus, and the tapes are tied as tight as convenient. Over the outer end of the catheter is passed one end of a piece of fine India-rubber tubing, such as is used for babies' feeding-bottles. The piece of tubing should be about two yards long, and its other end slipped over a metal tube let in close to the bottom of a moderately tall narrow vessel, made of tin or other material, and capable of holding a pint of fluid. To increase steadiness, the bottom is leaded on the outside. The only other apparatus required, are a milk-strainer to fit the mouth of the vessel, a table about the same height as the bed on which the patient lies, a few small boxes, or some suitable support by which the elevation can be varied, and an ordinary tea-cosy.

A pint of milk is warmed to a temperature suitable for pancreatic digestion; a little bicarbonate of soda, and a proper quantity of some preparation of pancreas, two teaspoonfuls in the case of Mr. Benger's liquor pancreaticus, are added, and it is allowed to stand in a moderately warm place for half an hour. It is then passed through the strainer into the vessel mentioned above. I find that, after standing half an hour, the milk leaves little or no curd upon the strainer, and, when strained, readily passes through the tubes. If the curdling of the milk, by the pancreatic extract, give trouble, it may be prevented by previously adding one-fourth of its bulk of water to the milk (Roberts).

The milk, having been put into the vessel, which acts as the artificial stomach, it is raised from 2 to 2½ feet above the level of the patient's bed, the height being altered according to the rapidity with which the milk runs through the tube. The vessel is then covered with the cosy to keep it warm, and, if necessary, a heated plate may be put under it at intervals. The pint of milk should run into the rectum in about three hours, which time fairly corresponds to the average digestion-period of pancreatised milk. If a desire for defæcation be felt, the flow should be made slower, or the apparatus entirely removed for a time.

When the milk has all run out, the apparatus is removed, some clean water passed through the tubes, and the patient allowed to rest for a time before re-introduction.

In this way, a patient of mine, suffering from cancer of the stomach, in whom the colon was obstructed at the junction of the transverse with the descending portions, received an average of three pints of milk per day for a month, with an average daily evacuation of about a pint, consisting chiefly of curd; his nutrition was fairly kept up until vomiting of blood, mucus, and fæcal matter became excessive; and, after death, the whole descending colon was found well nourished and containing condensed milk. His evacuations generally took place from two to eight or nine hours after milk had been administered, care being taken not to give any when the rectum felt irritable.

The necessary apparatus may be made by any local tradesman, or it may be obtained from Messrs. W. Wood and Sons, 74, King Street, Manchester.

ON REMOVAL OF TUMOURS OF THE BLADDER; WITH FOUR CASES.

Read before the Bath and Bristol Branch.

By J. GREIG SMITH, M.A., M.B., F.R.S.E.,
Surgeon to the Bristol Royal Infirmary.

The following remarks are intended to embody the fruits of experience and study, rather than to be a record of cases. As briefly as I can, I will make a plain statement of what, in my belief, are the best modes of removing growths from the bladder.

In females, I believe that the operation is best carried out by incision of the meatus and outer two-thirds of the urethra, and dilatation of the inner third and the neck of the bladder. Dilatation of the urethra I do not regard with favour. I have, on three occasions, dilated the female urethra for purposes other than the removal of tumours; and, though I have found it quite possible to explore the whole of the vesical cavity, I have been conscious that delicate operative proceedings could not be carried out with thoroughness and precision. In a female urethra, the forefinger is so confined and constricted that at least two-thirds of its working capacity is done away with; free manipulation is possible only at the expense of serious traumatic injury to the urethral tissues. One effect of this is seen in the not unfrequent incontinence of urine which is produced, and which may give the patient trouble for weeks, or even for a life-time.

The plan which I recommend is, to lay open the outer two-thirds of the urethra by one stroke of scissors, and to carry out the intravesical operation through the dilated outer third of the urethra and the neck of the bladder. After the operation, the urethral wound is accurately closed by three or four sutures; it will heal by first intention, and no incontinence will be left. Dilatation of the neck of the bladder is extremely easy; while the orifice of the urethra offers considerable resistance. The finger, freed from the coarctation of the urethra, can reach the whole bladder-surface with the greatest ease. Between the finger inside and the hand over the pubes, the anterior vesical wall can be palpated; while, if the middle finger be placed in the vagina, with the forefinger in the bladder, the posterior walls and the fundus may be explored with like precision.

In my first case, operated upon now several years ago, I followed the ordinary mode of dilatation of the urethra, removing a papillomatous growth; and, though there has never been actual incontinence, the patient has not recovered perfect control of the bladder.

In my second case, I incised the outer urethra; and, though Thompson's large bladder-forceps was several times introduced alongside of my finger, the patient had, from the time of the operation, complete control of the bladder. She was dying of hæmorrhage from a growth, which proved to be epithelioma. Removal of the growth, with the portion of bladder-wall in which it lay, was contemplated; but this was found impracticable, on account of the involvement of the ureters. I removed the bulk of the tumour, down to the level of the mucous membrane; and, from the time of the operation to the day of her death, nine months later, there was no hæmaturia. Her strength and

comfort were greatly improved by operation; from being bedridden, she was able to get about almost to the last.

In my third case, I performed the combined operation of incision and dilatation. With my finger-nail specially trimmed, I scraped papillomatous growths from the fundus of the bladder, removed the growths by suction through a Bigelow's large evacuator, and sutured the urethral wound. No catheter was used; the patient was told to pass urine when she desired. This she did six hours after operation, then again eight hours later. Next day, I washed out the bladder, to make sure that no blood-clot had been left behind to undergo decomposition. From this time she was well, and no further interference was necessary beyond the removal of the stitches on the fourth day. At the end of a week, she was up and walking out of doors. Since the time of operation, now ten months ago, the patient has not lost a drop of blood, and the bladder-functions have continued perfectly normal. She has rapidly regained the strength lost during a period of five years' almost constant loss of blood. Her case had been diagnosed as gouty kidney, and she had undergone varied treatment for this disease at several spas.

For the removal of tumours from the male bladder, the suprapubic operation is, in my opinion, by far the best. I have, on several occasions, had to perform the perineal operation for exploration or the removal of a foreign body, and I have four times performed suprapubic cystotomy: three times for calculus, and once for tumour. This experience has convinced me that, in the matters of affording greater facility in diagnosis, more freedom in operating, and fuller potentiality of extending the operation to removal of portions of the bladder, the suprapubic is by far the superior surgical method.

The bladder is first washed out, by means of an irrigator, with warm boracic or boro-glyceride solution; and the catheter, a rubber one, is left *in situ*, with the long rubber tube and irrigator attached. The irrigator is placed on a table, at the level of the patient's bladder. The rectum is now dilated by a rubber bag, in the manner recommended by Petersen and Sir Henry Thompson. It is better to dilate with water than with air, because water can be measured. The suprapubic incisions are now made. Scalpel and catch-forceps are all the instruments necessary. The lower end of the incision ought to be carried at least half an inch over the symphysis; this gives additional room where it is most wanted, just above the bone. If the recti muscles be tense and thick, a little portion of their insertion into the pubic bones may be divided to give more space. The edges of the wound are kept apart by suitable retractors, held by an assistant. The finger of the surgeon is now placed on the bladder over the pubes, and an assistant raises the receptacle of the irrigator two or more feet above the level of the patient. The bladder dilates, and, as it dilates, the surgeon may feel the folded peritoneum gliding upwards, and may estimate the amount of tension put upon the bladder-walls. When the dilatation seems sufficient, the receptacle is again placed on a table at the level of the bladder, and left there. This simple plan does away with the necessity of tying the penis, is perfectly efficient, and occupies only a few seconds. I think it is better to make the preliminary incisions before the bladder is distended, as then there is a gap of cellular tissue between the parietes and the vesical wall, and there is less risk of wounding the peritoneum. After the bladder is distended, the cellular tissue overlying it is teased aside; the peritoneum is pushed upwards, and any vessels are gently pushed out of the way.

For opening the bladder, I would recommend the use of a Lister's sinus-forceps. The closed points are first gently insinuated through the outer coat, then sharply plunged through the inner coats. The blades are separated, and, as they are separated, the bladder-wall is partly dilated, partly torn open, while, at the same time, it is pulled outwards into the wound. In the meantime, most of the lotion in the bladder will have escaped. When the opening is large enough to admit the finger, two tenaculum-forceps are placed on the lips of the wound, and held by the assistant while the finger is inserted. I have used fixation threads, introduced by a curved needle, but they are no better than forceps, and make openings of considerable size in the friable and distensile tissue. I am by no means certain that incision by a curved bistoury, first puncturing and then cutting outwards, would not, in respect of the advantages to be secured when the bladder wound is sutured, be the best mode of opening the bladder. Bleeding is a small objection, easily met by a catch-forceps and a ligature.

Of the removal of the growth, nothing need be said. Suitable instruments will be at hand, and will be selected as the conditions indicate. Sir Henry Thompson's bladder-forceps will be found invaluable in most cases.

If the growth be malignant, and if, from its proximity to the ureters, or its connection with contiguous structures, it cannot be completely removed, all protuberant granulations which, sodden and macerated in the urine, are the chief source of bleeding, may be taken away. If the growth be well free of the ureters, and if it be confined to the bladder-tissues, an effort ought to be made to resect it. It will very rarely be the case that resection can be performed outside of the peritoneum. And if the tumour lie in a portion of the wall covered by peritoneum, it will rarely be advisable to peel it off that membrane, for the double reason that it might slough, and that it is likely to be infected with the growth. For resection of bladder-growths, I conceive that the most favourable conditions would be—a bladder kept dry by fine catheters placed in the ureters, and carried out through the penis; stuffing of the bladder cavity by dry sponges during the operation; prolongation of the incision upwards, with entrance into the peritoneal cavity; protection of the bowels by a large flat sponge; and suture of the bladder-wound on the principle of apposition of peritoneal surfaces. The operation has little more than passed beyond the stage of conception, and experience alone can show its feasibility.

In every case of epicystotomy, I would suture the wounds in the bladder and the parietes, draining away the urine by a catheter in the urethra. With the plan of separately suturing the bladder and the parietes, I am by no means satisfied. My experience in four cases has been that matters progress most favourably for two or three days; the wound seems healed, and there is no leakage from the drainage-tube placed over the pubes. But, on the third or fourth day, the catheter ceases to act, and urine flows from the wound in small quantity, causing a fistula which may not close for one, two, or even three weeks. The trouble thereby induced may be slight, but its existence is a surgical imperfection.

In my next case, I intend to adopt a plan which, at first sight, may seem to be objectionable. This is to include the bladder-wound in the parietal wound, and to fix both in one series of sutures. The advantages, as preventing urinary infiltration, and supporting the vesical wound by a solid mass of readily healing healthy tissue, are at once apparent; the only disadvantage is the fixation of the bladder too high up by cicatricial tissue. This disadvantage is, in my belief, insignificant. Times out of number the bladder has shown its capacity of acting normally in most abnormal situations; and even if it did not, we may fairly reason that, when the sutures are removed at the end of a week, the adhesive material then developed will stretch, and permit the bladder to fall back into its normal situation.

The only case of bladder-tumour in the male, with which I have had to deal, was a malignant one in the region of the ureters. The patient was in the last stage of exhaustion from anæmia, and the suturing of the bladder could not be satisfactorily performed, on account of his condition on the operating table. The bladder was distended almost to the umbilicus with blood-clot, which could not be removed by syringing through the urethra, and this had to be removed in handfuls, through the bladder-wound, before the tumour was discovered. The granulating surface was removed, and al bleeding at once stopped. Clear urine came away through the catheter in abundance, and the wound seemed to be healed, when a fistula formed, through which urine dribbled. Tenesmus and pain, from which the patient suffered severely before operation, disappeared, but the patient did not gain ground, and he died within the fortnight. His case, however, showed that, even in the most desperate circumstances, the operation offered a very fair chance of recovery.

To recapitulate. For the removal of tumours from the female bladder, the best mode of procedure is by division of the outer urethra, and dilatation of the inner urethra and neck of the bladder. The urethral wound is sutured, and no catheter is left in the bladder.

For the removal of growths from the male bladder, suprapubic cystotomy is the best operation. The proceeding is facilitated by dilating the rectum and the bladder. A rubber bag in the rectum is distended with water by means of a Higginson's syringe; the bladder is dilated after the parietal incisions have been made, and while the surgeon's finger rests upon it, by the elevation of a receptacle attached by a long rubber tube to a soft catheter in the bladder. Distension is maintained by placing the irrigating receptacle on the same level as the bladder, and it is unnecessary to ligature the penis. Accurate closure of the wounds in the bladder and the parietes is recommended.

For resection of portions of the bladder-wall in the male or the female, abdominal section combined with epicystotomy will, in most cases, offer the best chance of success.

THE annual report of the Gloucester General Infirmary shows a balance due to the Treasurer of £1,637 10s. 6d.

A CASE OF STRANGULATED INTERNAL HERNIA INTO THE FORAMEN OF WINSLOW.

By J. ELLIOT SQUARE, F.R.C.S.Eng., Plymouth.

The following case, I think, deserves publication, although its details are, of necessity, very imperfect.

R. F., aged 25, a clerk, was apparently in perfect health when he sat down to his dinner at noon on May 7th. He made a good meal of beefsteak-pie and potatoes, and walked to his office as usual, a distance of about a quarter of a mile. Without any apparent cause whatever, about two o'clock he was suddenly seized with excruciating pain in the epigastrium. He walked home at once with difficulty, and was "doubled up with pain"; he was given brandy and water, and a dose of castor-oil, after which he vomited for the first time about four o'clock. Pain and vomiting continued, with sleepless nights, until the 9th, when he was so much easier that, in the afternoon, he sat out by the fire; but, in the evening, his symptoms returned, as severe as ever.

At seven o'clock, on the evening of the 10th, I saw him for the first time; practically nothing, until then, had been done for him. I found him in bed in a most excited state, his face anxious and somewhat pinched, his temperature 103.4° in the axilla, and his pulse 122, regular, and small. His parents had had great difficulty in keeping him in bed, and had found it quite impossible to keep the bed-clothes upon him. They were very inexperienced and foolishly nervous people, had none of his vomit to show me, and quite misinformed me as to its character; he had not vomited for an hour or two. The legs were not drawn up, and he said that he had then no pain, but that the pain over the ensiform cartilage, and immediately below it, had been excruciating. The abdomen looked natural, except that the umbilicus was somewhat prominent; in infancy, he had worn an umbilical pad. Percussion and manipulation gave no pain, except around the umbilicus and in the epigastrium, where there was decided tenderness. The abdomen was everywhere resonant, except in the flanks, very resonant over the transverse colon. The bowels had not acted since the morning of the 6th; the urine contained no albumen.

Feeling certain that there was an intestinal obstruction, I accordingly gave orders for treatment, and administered an injection of warm water and soap. Three hours afterwards I returned, and, finding that there had been no relief, gave a second larger injection, which soon brought away what might be termed a diarrhœa stool, with two solid fæcal masses. This gave him great encouragement; and, after giving fresh instructions, and, having arranged for an early consultation, I again left him.

The vomit was now fæcal, though without the offensive smell. At 3 A.M., in answer to an urgent summons, I was again at his bedside. He was much changed, and was in the most childish condition; we could neither keep him in bed, nor prevent him from throwing off the bed-clothes; his restlessness was intense. His hands and feet were cold and clammy, and his pulse feeble, though he was quite conscious. He was given three small hypodermic injections of morphine at intervals of about two minutes, and I left him moderately quiet at 4.30. He became quieter, and sank at 7 o'clock, after an illness of three days and seventeen hours.

The examination of the body was obtained with the greatest difficulty, and was performed at great inconvenience, without skilled assistance. On opening the abdomen, a moderate amount of peritonitis only was at first noticeable, with a small amount of lymph and bloody serum among the intestines. The umbilicus was quite free. The great omentum was drawn in among the small intestines, to the left of the middle line, and was moderately congested. The intestines contained only a very small quantity of fæcal matter, but were distended with gas. Fully eight inches of the ileum, about two feet from its termination in the cæcum, were firmly incarcerated in the foramen of Winslow, and were, with some difficulty, withdrawn. Its mesentery was much congested; the intestine itself much more so; and, though, at the junction of the two, there were three or four soft disintegrating patches, in no part was there found any perforation or ulceration through the coats of the intestine. On withdrawing the intestine, the foramen gaped, and would easily admit two fingers; its margins were rounded, thickened, and congested. The cæcum was freely movable, and possessed a meso-cæcum. Had an operation been performed at an early date, I have every reason to believe it would have been successful.

SURGICAL MEMORANDA.

SCIRRHUS OF THE BREAST: RECURRENCE LONG AFTER REMOVAL.

The recent correspondence on this subject has served a useful purpose. It has reminded us of two important factors in the prognosis of cancer of the breast, which, in these latter days, have been too much neglected.

In the first place, in a considerable number of cases, recurrence does not take place until long after removal of the primary disease. We are accustomed to say that the patient will enjoy a year and a half or two years of immunity, and this is the average period; but average results, though true in themselves, may be, and in this case are, misleading. Here is a tabular statement of 31 cases of recurrent breast cancer under treatment at the Middlesex Hospital during the last few years, which gives a good idea of what may be expected.

In 10 cases	recurrence	under	1	year	after	operation	
,, 9	,,	from	1	to 2	years	after	operation
,, 5	,,	,,	2	,, 3	,,	,,	
,, 2	,,	,,	3	,, 4	,,	,,	
,, 1 case	,,	,,	4	,, 5	,,	,,	
,, 1	,,	,,	5	,, 6	,,	,,	
,, 1	,,	,,	6	,, 7	,,	,,	
,, 1	,,	,,	8	,, 9	,,	,,	
,, 8	,,	,,	10	,, 11	,,	,,	

In the second place, in many cases the progress of the disease was exceedingly slow. The average duration of from four to five years is often greatly exceeded. Of 125 consecutive cases under treatment at the Middlesex Hospital, 22 exceeded the limit, as follows:—

In 3 cases	the duration	was	from	5	to	6	years
,, 3	,,	,,	,,	6	,,	7	,,
,, 4	,,	,,	,,	7	,,	8	,,
,, 1 case	,,	,,	,,	9	,,	10	,,
,, 3 cases	,,	,,	,,	10	,,	11	,,
,, 1 case	,,	,,	,,	11	,,	12	,,
,, 2 cases	,,	,,	,,	12	,,	13	,,
,, 1 case	,,	,,	,,	14	,,	15	,,
,, 1	,,	,,	,,	16	,,	17	,,
,, 3 cases	,,	,,	over			20	,,

In one of the last cases, the total duration of the disease was close on twenty-four years. It is right to mention these facts to our patients. We ought not to withhold such consolation from those who are suffering from this most distressing disease.

W. Roger Williams, F.R.C.S.

REDUCTION OF DISLOCATION OF THE SHOULDER BY ABDUCTION.

Mr. Clement Lucas's note, in the Journal for June 5th, will have served an useful purpose by drawing attention to the fact, that lateral traction for the reduction of a dislocated shoulder is by no means a novel method of procedure. As early as 1579, Paré, writing on "an expression of the first manner of putting a shoulder into joint," describes and figures the mode by abduction. A little later, Richard Wiseman, Sergeant-Chirurgeon to King Charles II, describes a variation of reduction by the "coulstaffe," which scarcely differs from that of Paré. Sir Astley Cooper advocated a similar method for obstinate cases; and, later, Samuel Cooper emphasised its importance. Clearly, therefore, it cannot claim to be modern. For years I have seen it practised, and consider it to be the best routine plan where manipulation has failed, being less dangerous to the axillary contents than systems which involve heels or pads in the armpit. I think, however, it is a mistake to adhere rigidly to any one plan. The best way is to note the exact position of the dislocated humerus and the glenoid cavity, and to exercise sufficient ingenuity to lift the one into the other.

Robert Jones,
Senior Assistant-Surgeon, Stanley Hospital, Liverpool.

Dr. Illingworth's claim to priority, in suggesting abduction for reducing this dislocation, is scarcely borne out by facts. He described a mysterious depression of the scapula, by way of slipping the glenoid cavity over the head of the humerus—a proposal of no value. He seems now to be aware that all he did was to steady the scapula, while his assistant reduced the humerus. Dr. Macleod attains this steadying by laying the patient on his back; and not, as Dr. Illingworth seems to suppose, by any pressure of hand or foot. On the other hand, Dr. Illingworth did not originally attribute any import-

ance to the abduction; in this resembling many others, including myself, who, in the course of manipulation, must often have reduced by abduction, while attributing the result to something else.

PHILIP MIALL.

THERAPEUTIC MEMORANDA.

NOTE ON BACTERIOTHERAPY.

THE use of spraying with *bacterium termo* in the treatment of tubercular phthisis cannot be of much value, notwithstanding all that has been said in its favour of late. Knowing from experience that in sputum, many months old, properly prepared cover-glasses will show the bacillus, intact in form and numbers, it struck me that it might help to settle the bacteriotherapy, as far as *bacterium termo* was concerned, by first satisfying myself that, in a sputum fourteen months' old, the bacilli of tubercle were still demonstrable; and, secondly, by making a cultivation of a particle of this sputum to see whether the bacilli or their spores were still viable.

The cultivation was made for me by Mr. James Edington, in the laboratory of Professor Chiene, in which he is an assistant, and succeeded. The outcome of it all is, that a sputum which has putrefied for fourteen months, still contains tubercular bacilli, which are capable of reproducing their kind; and, therefore, the good results asserted of spraying with *bacterium termo* must be attributable to some other cause. I have a strong belief that, in those latter days, many of the drugs, and much of the medication, in use, have as little claim to credit as beneficial agents as the *bacterium termo* treatment of phthisis, the supposed utility of which this experiment completely demolishes.

FRAS. TROUP, L.R.C.S.E., M.R.C.P.E., M.D., Edinburgh.

CLINICAL MEMORANDA.

MEMBRANOUS CROUP AND DIPHTHERIA.

I HERE give a few details of another case, apparently identical with membranous croup of the mucous membrane of the prepuce and glans penis, having sufficient similarity to that published by Dr. Leslie Phillips in the JOURNAL of June 5th to admit of comparison. It is, however, antagonistic to the theory of the identity of membranous croup and diphtheria, in so far as it corroborates the opinion that a membranous exudation indistinguishable from that of croup may form on a mucous membrane, independently of a specific virus or germ.

A few weeks ago, I circumcised a child; and, on the following day, I found a membrane having the appearance of a thick yellowish-tinted white paper, extending laterally over the mucous membrane from the frænum and upon the glans. This, as well as the incised mucous membrane and integument, was very œdematous, and caused difficulty and pain in micturition. This membrane seemed identical with that of croup, in being easily detached, and involving only the epithelium, and not the subepithelial tissue, as in diphtheria. Believing it to be fibrinous exudation, resulting from local irritation and destruction of the epithelium by the urine, I only removed a small portion of the membrane, leaving the rest as a protection; and employed oil freely as a dressing. The membrane did not spread, and was confined to the part where the urine would naturally trickle down and become diffused. It separated in a few days, and was not reproduced. It differed from diphtheria, as apparently also in Dr. Phillips's case, in being fairly easily detached from the subjacent tissue. I had not seen a case of diphtheria for months, and my instruments were perfectly clean.

It seems to me that irritation from urine was competent to produce the phenomena in both cases; and, if so, why resort to the theory of specific contagium? In my case, oil afforded sufficient protection to the tissues to prevent further extension of the membrane.

Although the coagulation-necrosis of diphtheria and the fibrinous coagulation of croup are closely allied, there is no proof that the same *materies morbi* is the irritant in different degrees in both cases; and my case suggests that a membrane indistinguishable in its macroscopic characters from that of croup may result from a non-specific irritant, the inhibitive power of epithelium on fibrinous coagulation being destroyed. Another marked distinction between the two diseases has been evident in those I have attended, in the essentially asthenic symptoms of diphtheria and the sthenic reaction of membranous croup.

WM. J. MACKIE, M.D., Freshwater, Isle of Wight.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

UNIVERSITY COLLEGE HOSPITAL.

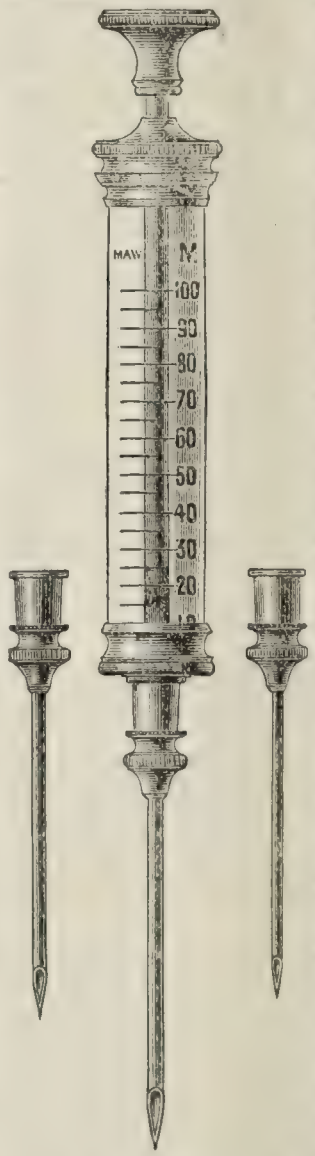
TWO CASES OF HYDROCELE SUCCESSFULLY TREATED BY INJECTION OF CARBOLIC ACID, AFTER KEYES'S METHOD.

(Under the care of Mr. BERKELEY HILL.)

[For the notes of these cases we are indebted to Mr. VOLCKER, House-Surgeon.]

CASE I.—G. M., a boy, aged 9, had, for the twelve months before admission, noticed a lump on the right side of the scrotum. The swelling had gradually been growing larger, and caused pain on walking. He was admitted on March 30th, 1886; and, on examination, was found to have a hydrocele of the cord. The testicle was apparently healthy.

March 31st. *Operation.*—The scrotum was put on the stretch, and Mr. Hill tapped the swelling, and drew off about four drachms of clear hydrocele fluid with the hypodermic syringe represented in the annexed figure. The syringe was then unscrewed from the nozzle, emptied, and refilled with carbolic acid rendered liquid by solution in glycerine (1 in 10); the syringe was then again screwed to the needle, and fifteen minims were injected. The patient acknowledged that he felt no pain. He was put to bed. On the next day, the scrotum was red, tender, and slightly œdematous, and there was a swelling, due to an enlargement of the hydrocele sac. The testicle itself was not enlarged. The scrotum was painted with glycerine of belladonna, and hot fomentations applied. Under this treatment, the tenderness and œdema of the scrotum subsided, and the boy got up in a week; he still had slight pain on walking.



A fortnight after admission, as there was still some swelling above the testicle, the patient was again put under chloroform. Mr. Hill punctured the swelling with a trocar and cannula; only a few drops of clear serum, followed by a little blood, escaped. The puncture was sealed by collodion. After this, the swelling diminished, and there was no pain or tenderness. On the seventeenth day, he was discharged, cured. The patient, when seen subsequently, presented no return of the hydrocele, and was free from pain.

CASE II.—C. D., aged 44, was admitted on March 17th, 1886. He had noticed his scrotum growing larger for the last two years. Five months before admission, the left swelling was tapped, and clear fluid withdrawn. Since this, the swelling had increased in size. It was found to be a large hydrocele; a smaller one was also present on the right side. There was also a small inguinal hernia on the right side. Both testicles appeared to be healthy.

Operation.—The left hydrocele was tapped by Mr. Hill in the manner before stated, and fourteen ounces of ordinary hydrocele fluid withdrawn. The syringe was then screwed on to the needle, and thirty minims of carbolic acid and glycerine injected. Two drops escaped on to the scrotum, and caused the patient some pain and smarting of the skin for about an hour, but these passed off. He was put to bed. On the next day, there was slight pain on coughing, but there was no œdema of the scrotum, and the testicle was not inflamed. The pain disappeared on the third day, and he was discharged on March 21st. He was told to come back if any return of the hydrocele took place. He has not since presented himself at the hospital.

REMARKS BY MR. BERKELEY HILL.—The above cases corroborate the claims of Dr. Keyes as to the painlessness, freedom from dangerous complication, and efficacy of this method of treatment of hydrocele.

In both cases, the operation was almost painless, and not followed by any irritation of the testicle. It is important that the carbolic acid should be rendered liquid in glycerine, not in water, as the latter solution causes pain, when concentrated, if injected into the serous cavities.

[We append the description of the instrument and the method of operating, as recommended by Dr. E. L. Keyes, in the *New York Medical Record*, February 10th, 1886, p. 204. He states that, since Dr. Levis, of Philadelphia, first made known, about five years ago, the excellent qualities of pure deliquesced carbolic acid as an injection, he had used the method in more than fifty cases, without any serious accident or complication. It had not always been necessary to keep the patient in bed, but, occasionally, sharp inflammatory reaction, and prompt reaccumulation of fluid, requiring to be drawn off with the aspirator, occurred about the second day; suppuration had never occurred, nor any evidence of carbolic-acid poisoning. The apparatus used by Dr. Keyes was a glass-syringe, holding 100 minims, having for its nozzle an ordinary hypodermic needle. Where the cyst was small, the needle was thrust into it, and the clear contents drawn out with the syringe, which was then washed and filled with the carbolic acid and glycerine; the syringe was again screwed on to the nozzle, and from thirty to sixty minims thrown in. Where the hydrocele was large, Dr. Keyes says, "I first insert the hypodermic point, and see that a drop of clear serum oozes from it. I now puncture the cyst at another point with a fine aspirating needle, empty the contents, and withdraw the aspirating-needle. I then screw the glass syringe upon the hypodermic point first introduced, and throw in the drachm of deliquesced acid, which appears to be all that is required to accomplish the cure. Nothing is easier; no operation of minor surgery, in my hands, has been more satisfactory in its results."]

ST. MARY'S HOSPITAL.

ULCERATIVE ENDOCARDITIS: DEATH: NECROPSY: REMARKS.

(Under the care of Dr. W. H. BROADBENT.)

[Reported by Mr. GUTHRIE N. CALEY.]

M. C., a labourer, aged 23, had an attack of acute rheumatism in childhood, and had since had frequent attacks of less severity, but no other illness. The present endocardial disease dated from January, 1881, when, whilst in this hospital with acute rheumatism, the following note was made. "Over mid-sternum is an aortic systolic murmur, not loud, but heard distinctly in carotids; mitral systolic murmur audible at apex." His heart seemed not to have given him any trouble until the end of September, 1883, when he began to suffer from dyspnœa and palpitation, and he was admitted on November 14th, 1883. The apex-beat was then seen and felt in the normal situation; dulness extended from the third to the fifth space, and from the left edge of the sternum to within one finger's breadth of the left nipple. A loud systolic murmur was heard at the apex, extending into the axilla. In the second left space, a double murmur was heard. The urine contained no albumen. On November 28th, there was some impairment of resonance for half an inch to the right of the lower sternum; a systolic aortic murmur was heard all over the back; a diastolic murmur was heard over the lower sternum and in the neck; the aortic second sound was not heard; the pulmonary second sound was audible.

On December 11th, a diastolic murmur was heard to the left of the sternum from the third space downwards, almost to the margin of the ribs, also to a similar extent along the sternum and to the right of it, beginning with an accent. The pulse was dicrotic; the urine, of specific gravity 1023, contained blood, and a trace of albumen.

On December 22nd, the apex-beat was in the sixth space inside the nipple; the auscultatory signs were unchanged; the urine contained an excess of urates, blood, and one-half albumen.

During the past six weeks, the temperature had been very variable, ranging from 98° to 102° Fahr.; the pulse was regular, varying from 96 to 112. He insisted on going home to spend the Christmas.

Early after his admission in November, Dr. Broadbent diagnosed ulcerative endocarditis.

On the evening of February 4th, 1884, M. C. was readmitted, exceedingly ill, with a temperature of 102.6° Fahr. When examined next morning, he was noted to be a tall, well built, well nourished young man; he was anxious and restless, complained of giddiness, was distressed with dyspnœa, and was extremely pallid, with blanched lips. There were numerous purpuric maculæ, strictly limited to the legs, but the skin was otherwise normal. The pulse was 120, regular, large, soft and compressible, fairly full between the beats, distinctly visible and audible. There was a general heave visible over the whole præcordial region, and epigastric pulsation; the apex-beat was in the sixth space, slightly outside the nipple-line; there was a scarcely perceptible systolic thrill; cardiac dulness extended from half an inch to the right of the lower sternum to one inch outside the left vertical nipple-line, and from the third space to the apex; at the apex, a double murmur was heard, syotolic—high pitched, extending into the axilla, diastolic—feeble, and blowing, merging into the aortic diastolic on tracing it towards the sternum; to the right of the sternum, in the second space, the first sound was dull, with a blowing systolic murmur, which could be traced with diminishing intensity along the sternum to the epigastrium, and also upwards for a short distance; there was no second sound, but a somewhat loud, high pitched, diastolic murmur, extending along the sternum nearly to the xiphoid, but not carried into the neck; nor was the second sound heard in the neck; the pulmonary second sound accentuated, and the carotid pulsation was slightly visible. Respirations 32. Dyspnœa was considerable; inspiration jerky. There was frequent cough, but no expectoration, and resonance and entry of air were good. The abdominal parietes were tense and resisting; the liver was much enlarged, the edge being felt midway between the ribs and umbilicus; the spleen was very large and tender, and could be felt below the level of the umbilicus. The urine was acid; it contained no blood, but one-third albumen; there was a sediment of granular, with one or two epithelial casts; the bowels were open regularly; he had little appetite; the tongue was fairly clean and moist. A mixture containing iodide of potassium (three grains) with ammonia and ether, was ordered to be taken thrice daily, and brandy (four ounces).

On February 8th, he had an attack of vertigo lasting several minutes. The pulse was 112, soft, dicrotic, fairly full between the beats. The respirations were 40.

February 9th. The dicrotism of the pulse (120) was very marked. The respirations were 48. The urine was dark, of specific gravity 1025, acid, contained one-half albumen and blood, but no bile. Tincture of digitalis (fifteen minims) was added to the mixture.

On February 11th, 4 A.M., he was seized with severe præcordial pain, which continued throughout the day; the dyspnœa had increased (respirations 52); the pulse was 120, sudden, smaller, and not dicrotic. The gums were spongy and bleeding. On the following day, the diastolic aortic murmur was not heard at the apex, and only feebly at the second right cartilage.

February 13th. A pustular and hæmorrhagic eruption, evidently due to iodide of potassium, had appeared on the left cheek. The pulse was 140, and dicrotic; the respiration 44. The mitral systolic murmur was louder, and heard farther towards the axilla. The urine was dark, specific gravity 1022, and contained one-third albumen, blood, and granular and blood casts. The iodide mixture was discontinued, and a mixture of ether and ammonia, with tincture of digitalis (♏xv) was given thrice daily.

On February 15th, he was seized with sudden severe pain in the splenic region at 7 P.M., but, on the following day, it had subsided; the eruption on the face was dying away. The pulse was 100, large, soft, jerky, not collapsing, but there was a perceptible diminution of volume between the beats. He suffered from great dyspnœa; the respirations were 52; cough was frequent and distressing, and the sputa was scanty, with specks of blood. The urine contained less blood, but two-thirds albumen, and numerous hyaline and granular casts.

On February 19th, he was so ill that death seemed imminent. Dyspnœa was urgent (respirations 58). The pulse was 116, irregular, occasionally intermittent, soft, sudden, markedly dicrotic. The heart's sounds were tumultuous; occasionally a distinct pause was followed by one or two irregular beats, and then for a time moderate regularity. He had had a sharp attack of diarrhœa.

February 20th. The dyspnœa was very urgent (respirations 58). The urine contained one-half albumen. The diarrhœa continued. He slept little, and lay constantly on the left side. On the following morhing, the pulse was 108, sudden, large, markedly dicrotic, regular for ten or fifteen beats; then running, the beats being irregular, and scarcely perceptible. Cardiac action was very irregular. At the apex, the first sound was reduplicated, and the second sound somewhat accentuated. After ten or fifteen regular beats, the contractions became extremely irregular, so that it was impossible to distinguish the sounds. The systolic mitral murmur was heard at the apex, but no diastolic murmur. The diarrhœa had ceased.

February 22nd. The heart had become nearly regular. Dyspnœa was still extreme (respirations 56). At 7 P.M., he was seized with very intense "shooting" pain in the splenic region, with marked tenderness. This pain persisted; and, on the next day, two or three hæmorrhagic spots, probably embolic in origin, were noticed on the left ear. The urine was acid, of specific gravity 1025, and contained a small quantity of bile, two-thirds albumen, very little blood, and no casts.

The general condition remained without material alteration until

February 27th, when he was somewhat easier. The pulse was 96, regular, and markedly collapsing; this collapsing character had mainly developed since the previous day. A loud systolic murmur was heard at the apex; a short smooth diastolic murmur, of maximum intensity to the left of the lower sternum, was heard as high as the third space, scarcely to the right of the sternum. The urine, of specific gravity 1022, contained more blood, two-thirds albumen, and granular and epithelial casts. There was some œdema of the feet and legs.

February 29th. The patient was very restless, and desirous to get out of bed. The œdema of the legs had rather increased. The pulse was 112, slightly dicrotic, collapsing. The diastolic aortic murmur was louder, and was heard as high as the second right space, where there was also a systolic murmur. The respirations were 60. The spleen extended as low as the iliac fossa. The liver reached more than half way to the umbilicus.

March 3rd. The feet and legs had become more œdematous, and there was a fresh crop of purpuric spots; both legs were very tender. The respirations were 60, the pulse 100, collapsing. The following day, the skin and conjunctiva were distinctly jaundiced, and the urine contained bile. Two days later, the patient died, the immediate cause of death being gradual cardiac failure, supervening on the extensive pulmonary complication.

Temperature.			Temperature.		
	Morning.	Evening.		Morning.	Evening.
Feb. 4	—	102.6	Feb. 20	98.2	97.2
5	99.2	100	21	97.6	99.8
6	99.3	100.2	22	98 6	99.6
7	99	100	23	98.8	98
8	101	100	24	98.2	97.2
9	100.5	99.8	25	97	98.8
10	99	99.4	26	96.4	99.4
11	99.8	100.8	27	97.2	99.6
12	99.2	99.8	28	99.8	101
13	100	99	29	99.6	99
14	99.4	98	Mar. 1	100	100.4
15	98.8	98	2	100	98.4
16	99	100	3	97.6	99.2
17	99.2	99	4	98.4	99
18	98	98.8	5	98	98
19	100	101	6	97	—

Necropsy.—The heart weighed 30 ounces. There was slight excess of clear serous fluid in the pericardium. Beneath the epicardium of the right auricle were numerous hæmorrhages; the epicardium of the right ventricle was covered with minute flecks of adherent and granular material (old lymph); a few petechiæ were seen elsewhere over the heart. The right auricle was distended with *post mortem* clot, dilated, and hypertrophied; entangled amidst the columnæ carneæ, especially in the appendix, were numerous yellowish-white nodules, resembling decolourised clot; one of these, rather larger than a pea, was evidently an abscess; its walls were formed by the substance of the auricular wall; some of the smaller nodules were also softening down in the centre. No vegetations were found in the right auricle. The right ventricle was distended with *post mortem* clot, dilated, and hypertrophied; it contained one or two yellowish-white nodules, similar to those in the right auricle, but no vegetations. The tricuspid valve, 5 inches in circumference, was slightly thickened; the pulmonary valve was normal. Microscopic examination of the fluid contents of the small "abscesses" in the right auricle, showed extremely granular pus corpuscles, and multitudes of minute granules, which readily stained with the aniline reagents; there were, possibly, micrococci. The left auricle contained *post mortem* clot; it was dilated and hypertrophied; on the posterior wall, at the spot where the stream of regurgitant blood from the mitral orifice would impinge, the endocardium was beset with a mass of warty vegetations, which extended thence downwards to the mitral valve, and were continuous with those on the valve-curtains; the endocardium was generally thickened.

The left ventricle contained *post mortem* clot, was considerably dilated, and its wall was greatly hypertrophied, measuring ¾ inch. The mitral valve was 4 inches in circumference; the edges were enormously thickened masses of large warty vegetations, which in some instances hung freely in the cavity of the ventricle; they were found on both ventricular and auricular surfaces, but were more numerous on the auricular aspect; vegetations were also attached to the chordæ tendineæ as low as their insertion into the papillary muscles. The aortic valve was beset with large masses of vegetations, which considerably narrowed it, and must have caused a good deal of obstruction. Neither in the left auricle or ventricle were there any of the "abscesses" noticed on the right side. The heart-muscle generally was pale, softened, and flabby. Both lungs were bound down by old pleuritic adhesions, and were partially collapsed; the upper lobes were deeply congested, with circumscribed patches of red hepatisation; the lower lobes were more generally hepatised, and exhibited several recent prune-coloured infarcts; the mucous membrane of the bronchi was congested, containing muco-sanguinolent pus. The peritoneum contained a slight excess of bile-stained serum. The liver weighed 79 ounces, was in a very advanced state of "nutmeg liver." The spleen weighed 33 ounces; it contained a large yellow wedge-shaped infarct, evidently of considerable duration; also many recent prune-coloured infarcts. The kidneys each weighed 10 ounces; the capsule stripped off easily, leaving a smooth surface; they were very pale on section, swollen and somewhat softened; in the cortex of the left kidney was a small recent infarct; microscopic examination showed parenchymatous nephritis and minute embolisms of Malpighian glomeruli. The brain, retinæ, and optic discs, were normal. The left femoral vein was occluded, just above the entrance of the profunda femoris, by a partially decolourised thrombus. No emboli were found in the larger arteries of the lower limbs.

Remarks.—Although there was distinct evidence of disease affecting the aortic and mitral valves in January, 1881, yet it was nearly two years before he began to suffer any inconvenience. In September, 1883, dyspnœa and palpitation first troubled him; and when, two months later, he was admitted into the hospital, it was remarkable that, in spite of auscultatory signs of mitral incompetence and aortic incompetence and obstruction, there was, nevertheless, no distinct cardiac hypertrophy, nor did the pulse, until considerably later, show any marked sign of aortic regurgitation, nor yet, again, was there cardiac dilatation to account for the urgent symptoms, which were altogether in excess of what was explicable by the condition of the heart and circulation generally, as revealed by physical examination. That there was evidently some other cause, not purely mechanical, at work, was further shown by the rapid development of the symptoms. These considerations, together with the intense anæmia, and the irregular febrile temperature, led to the diagnosis of ulcerative endocarditis, which was confirmed by the rapid changes observed in the heart, by the somewhat sudden appearance of albumen in the urine, suggestive of renal embolism, but more especially by the extreme gravity of the patient's general condition. When, after an absence of six weeks, the patient again came under observation, the disease had made very considerable progress. The anæmia, at this time, was excessive. His distress was extreme; great restlessness, inability to sleep, excessive cardiac dyspnœa, and a frequent, dry, harrassing cough, formed a combination of troubles, which continued up to the time of his death. To these were now added signs of multiple embolisms.

The duration of the disease was unusually prolonged; it was diagnosed three and a half months before death; and to this may be added at least six or seven weeks, being the period which elapsed from the onset of unmistakable symptoms to the patient's admission into the hospital. This gives the unusually long duration of five months, and it was probably somewhat longer even than this. The mode of onset is generally sudden; but in this case, however, chronic rheumatic endocarditis seemed gradually to assume the vegetative form. One or two points are worthy of note in connection with the heart. The valvular incompetence was by no means sufficient to explain the symptoms, but the great hypertrophy of the left ventricle showed that the growths gave rise to considerable obstruction at the aortic orifice. It is interesting to observe how rapidly this hypertrophy of the left ventricle took place when once the vegetations began to cause serious obstruction. On November 14th, the apex-beat was in the fifth space, well to the right of the nipple, and this although for two years there had been auscultatory evidence of disease of mitral and aortic valves; ten weeks later, the apex-beat was in the sixth space, and outside the nipple-line.

As is usual, the vegetations were found, *post mortem*, to be strictly limited to the left side of the heart, and in the auricle they were specially luxurious where the irritation of the endocardium had been greatest, that is, at the point where the regurgitant blood-stream had impinged. Up to within a few days of death, the pulse was regular, ranging from 90 to 140, large, soft, markedly dicrotic, and fairly full between the beats. The pronounced and persistent dicrotism was a remarkable feature throughout.

On February 25th, the dicrotic wave was so marked as to be visible in the carotids, immediately following the systolic wave. During the last fortnight, when the disturbance of the circulation in the lungs, spleen, and kidneys began to throw upon the heart greater strain than it could contend against, its failing power was clearly indicated by the irregularity of the rhythm and force of the pulse. In spite of the

aortic incompetence, the pulse was always fairly full between the beats until February 27th, when it underwent a remarkable change. On the evening of February 25th, the pulse was markedly dicrotic, somewhat sudden, but by no means collapsing. Next day, it was slightly collapsing; on the day following, it was markedly collapsing. This sudden change in the character of the pulse occurred at a time when there was evidence of fresh embolisms of the lungs and spleen; and it is highly probable that the detachment of considerable portions of vegetations from the aortic valves allowed of a marked increase in the reflux from the aorta. Of great value, diagnostically, is the irregularly febrile temperature so typically seen in this case; it varied from 96.4° to 102.5°. The excessive anæmia is also specially noteworthy.

The lodgment of many of the emboli in the spleen, kidneys, skin, and lungs was marked by distinct symptoms. The evidence of renal infarction was the sudden appearance of blood and albumen in the urine, quickly followed by the passage of casts, as inflammation was excited around the infarct. Severe pain in the splenic region, often coming on suddenly, with tenderness and rapid enlargement of the organ, afforded unmistakable evidence of the lodgment of an embolus in the spleen. Enlargement of the spleen must not be too much relied upon as a diagnostic sign of ulcerative endocarditis; but, in typhoid fever, we should not expect to find the combination of sudden severe pain, and marked tenderness, with rapid and considerable enlargement of the spleen seen in this case.

The evidence of pulmonary embolisms was the increased dyspnœa, pain, and scanty rusty expectoration; the patient's condition forbade physical examination. The sudden development, on three occasions, of purpuric patches in the skin was undoubtedly due to capillary embolisms.

On *post mortem* examination, similar petechiæ were found on the visceral layer of the pericardium. The diarrhœa, which occurred a few days before death, was probably due to capillary emboli in the mucous membrane of the intestine. The cutaneous embolisms were undoubtedly of cardiac origin. Three factors were probably at work in the causation of femoral thrombosis: (*a*) altered condition of the blood, (*b*) failure of cardiac force, (*c*) embolism of the vasa vasorum of the femoral vein. Thrombosis of a large vein from an altered state of the blood, together with diminished cardiac power, often observed in such diseases as typhoid fever, or the later stages of pulmonary phthisis, would be sufficient to have caused it in this case. But embolism of the vasa vasorum of the femoral vein, by seriously affecting the nutrition of its coats, would of itself be sufficient to cause thrombosis. It is remarkable, considering how frequently embolism of the cerebral arteries, especially the middle cerebral, occurs without evidence of embolism in any other part of the body, that, in this case, not one of the many embolic fragments scattered through the body, should have found its way into the brain.

Lastly, the question arises, how are the pulmonary infarctions to be explained? Certainly the vegetations of the left side of the heart cannot have been their origin. Two sources suggest themselves: the right side of the heart, and the general venous system. As is usual in ulcerative endocarditis, there were no vegetations in the right side of the heart; but portions of blood-clot may have been set free, and subsequently lodged in the branches of the pulmonary arteries; and, indeed, inasmuch as it is very probable that the extreme irregularity of the heart, which occurred at a time when the patient appeared as if every hour must be his last, was due to the formation of clot in the right heart, what is more likely than that portions of such clot should be swept into the lungs?

That this is the explanation of nearly, if not quite, all the pulmonary infarctions is without doubt, but it is possible that some of the later ones may have been due to detachment of portions of clot from the femoral vein, which was occluded for several days before death, as evidenced by swelling and pain of the limb. The excessive restlessness of the patient must have strongly tended to detach a portion of the clot, which, once started, would probably find its way through the right heart, to one of the lungs.

LEEDS GENERAL INFIRMARY.

A CONSECUTIVE SERIES OF CASES IN WHICH THE ABDOMEN WAS OPENED FOR THE PURPOSE OF REMOVING THE OVARIES OR UTERINE APPENDAGES.

(By A. W. Mayo Robson, F.R.C.S.)

(Concluded from page 1110.)

Case viii.—H. C., aged 38, a chronic invalid, on account of pelvic distress, dated her illness from a confinement several years previously. Various methods of treatment had been adopted, both in and out of hospital, without any real benefit. She was admitted on June 19th, 1885. Bimanual examination revealed a tender and painful mass in Douglas's pouch. Oöphorectomy was performed on July 6th; the right appendages were easily removed, but the left, being adherent to the bottom of Douglas's pouch, and to the intestines, were taken away with difficulty, the ovary being cirrhosed, and the Fallopian tube inflamed. The temperature and pulse were normal for three days, and abdominal symptoms absent throughout; but, owing to an attack of bronchitis, there was a little anxiety from the fourth to the twelfth day; after which, recovery was uninterrupted. Three months afterwards, she was quite well.

Case ix.—M. C., aged 26, was admitted on July 6th, on account of pain and some difficulty in micturition, apparently due to an abdominal tumour, of one and a half years' growth; it was of the size of the uterus at the seventh month of pregnancy, and had lately increased rapidly. Fibroid of the uterus was diagnosed, and oöphorectomy was performed on July 20th to arrest its growth. On opening the abdomen below the umbilicus, a huge plexus of veins, each as large as the little finger, came into view—adherent, on the one hand, to the parietal peritoneum, and, on the other, to the tumour; on prolonging the incision, up and down, the same condition was found, as was the case for two inches laterally from the middle line; near the centre of the incision the veins were separated, so as to expose a portion of the tumour, into which a small trocar was passed, with a negative result; but, on its withdrawal, a jet of blood poured out, and had to be checked by ligature of the puncture. As leave to perform hysterectomy had not been obtained, I was compelled to close the abdomen, which was done by suturing the peritoneum to peritoneum, muscle to muscle, and skin to skin, separately. Recovery was rapid, the temperature never rising above 99°. This patient was seen three months after operation; she expressed herself as being very well, and was in very good spirits, because the tumour was much less. She had never menstruated since the operation.

Case x.—E. M., aged 35, married, admitted on August 25th, 1885, had had one child ten years previously. Severe menorrhagia had existed for about six months, and had blanched her considerably. A fibroid was diagnosed; it reached up to the umbilicus. Oöphorectomy was performed on September 3rd, 1885, Mr. Teale and Mr. Hartley being present. The patient began to menstruate on the second day after the operation, and this raised the temperature to 100.6°; but, beyond this, there was nothing to record in the after progress. She was discharged at the end of three weeks, with the abdomen almost as flat as if there had never been a tumour, and, when seen in the last week in October, the uterus was so small that it seemed as though she were about two months advanced in pregnancy; she was quite well, and had not menstruated since leaving the hospital.

Case xi.—A. M., aged 36, was admitted on August 25th, 1885, for ovarian tumour, thought to have been growing about three years. On August 28th, a dermoid cyst of the left ovary was removed, containing hair and sebaceous matter; there were no adhesions. Recovery was slow, on account of her previous debilitated condition. She was discharged cured at the end of a month.

Remarks by Mr. Mayo Robson.—The cases may be roughly arranged in three classes.

1. Operations for removal of ovarian tumours, of which there were three, one solid, one cystic, and one dermoid. The solid tumour had extensive adhesions, and the patient was in a condition of extreme asthenia. The cystic was adherent over the front, although it had only been noticed after a confinement a few weeks previously.

2. Operations for arresting the growth of uterine fibroids by removing the appendages, of which there were three cases. Two were completed, with the result of causing an immediate shrinking of the tumours, and apparently a permanent cure, the patients having been seen after twelve months and three months respectively, in good health, and without any appearance of abdominal enlargement. In one case, the operation was begun, but, on account of large plexuses of veins over the whole front of the tumour with extensive adhesions, it was found impracticable to get at the ovaries; and, as I had not prepared the patient for the more serious operation of hysterectomy, I did not feel justified in proceeding. Curiously, this patient reported herself last week, saying that she had never menstruated since the operation, but that the tumours were much less, and that she was feeling well.

3. Operations for the removal of diseased uterine appendages, of which two were cases of pyosalpinx, one of hydrosalpinx, one of salpingitis, with cyst of the broad ligament, and one of salpingitis, with ovaritis. In all these examples, serious illness and entire inability to work were present, and in every case great relief or cure resulted, except in one where the peritoneum was studded over with miliary

tubercle; and this patient recovered from the operation, was aspirated, and left the hospital relieved. Such cases as these are constantly coming under the notice of medical men, and, in my experience, account for the failure of pessaries and other local treatment in many cases of chronic uterine ailment.

As will have been noticed, recovery ensued in all the cases, and for the most part, as the temperature-charts indicate, without any trouble or anxiety to either patients or attendants.

In the operations, antiseptic precautions were adopted, and every care was exercised in having hands and sponges perfectly purified, instruments thoroughly cleaned, and ligatures boiled and asepticised. For the pedicles, silk ligatures were employed. Great care was taken in removing all fluid from the peritoneum; and in one case, when oozing was expected, a glass drainage-tube was employed. In the after-treatment, there is nothing special to mention except that the catheter was never used. It is important to remember that attention to details is of equal importance in those who assist, and I have been fortunate in having the help of our resident surgical officer, Mr. F. H. Mayo, and my house-surgeon, Mr. Ambrose Atkinson, who have always done their utmost to carry out my suggestions.

I feel that I ought not to conclude my paper without acknowledging my great indebtedness to Sir Spencer Wells, Dr. Keith, and Mr. Lawson Tait, who have all of them shown me great kindness in permitting me to see their modes of operating, and in giving me many valuable hints which I have found of great service in practice.

REPORTS OF SOCIETIES.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JUNE 8TH, 1886.

JONATHAN HUTCHINSON, F.R.S., F.R.C.S., President, in the Chair.

Foreign Body.—Mr. BRUDENELL CARTER showed a young man, in the background of whose eye a fragment of steel had been embedded for nearly twelve months; the chip had entered one line from the cornea on the outer and lower side, and had gone directly backward, and could be seen embedded in the choroid or sclera, and surrounded by a few small blood-clots. The eye was kept under the influence of atropine; the chip became coated with lymph; the blood-clots underwent absorption, and vision returned to the normal. All congestion had disappeared in three weeks, when the patient returned to his work as a carpenter. Central vision was unimpaired, and the blind spot, due to the fragment, could be found with difficulty. —The PRESIDENT mentioned that he had met with cases where a foreign body had remained long without causing any disturbance.—Mr. SIMEON SNELL referred to the three cases he had described last October. He had also met with a case in which a piece of steel was detected lying above the optic disc; but no sign could be found of its mode of entry.—Mr. BRUDENELL CARTER described a case of a dark amber-coloured cataract in one eye, where, after extraction, a small fragment of iron was detected in the centre of the cataract. The man had once witnessed the explosion of a steam-boiler, though he was unaware that any accident had happened to his eye.

Cholesterine in Detached Retina.—Mr. SIMEON SNELL (Sheffield) related the case of a boy, aged 11, who had been blind with the right eye since about three years of age. When seen in the early part of 1886, the retina was detached, opaque, and thickened, but more so in some parts than in others. Cholesterine-plates were studded over the retina, chiefly on the inner side; these were visible to the naked eye, but much better with focal illumination or the mirror. The retina was nearly universally detached, and only at the periphery outwards was a slight glimpse of indistinct red reflex obtained. The character of the subretinal fluid could not be made out. The left eye had a high degree of hypermetropia (8 D), but was otherwise normal. Mr. Snell remarked on the presence of cholesterine, which had been observed in most parts of the interior of the globe.—Mr. NETTLESHIP thought that the total detachment of the retina at so early an age was most unusual. It might be classed with a series of cases where, in children, gross detachments of the retina occurred in connection with patches, sometimes white, sometimes yellow, on or behind it, with an appearance as if indicating subretinal hæmorrhage. In one such case which he had examined, there was a sediment in the subretinal space, consisting chiefly of fat-globules. The patient had suffered from scarlet fever, and he suggested that there might be some connection between the detachment and the exanthem.—Dr. W. A. BRAILEY had published a certain number of cases of detachment of the retina in children in a paper on pseudo-glioma. Where a large hæmorrhage occurred, tension was increased, and the vitreous chamber was small.

Exophthalmic Gôitre.—A paper, by Mr. W. O. MAHER, of Melbourne, Australia, was read by the Honorary Secretary (Dr. W. A. Brailey.) It related a case of exophthalmic goître, with unilateral exophthalmus, occurring in a man, aged 34. Exophthalmus had been noticed by the patient a year before he applied for treatment; palpitation had been present for three years; the thyroid gland was found to be notably enlarged, especially on the right side, and the exophthalmus was present on the same side, the right cornea being 2.5 millimètres to 3 millimètres in advance of the left. Von Gräfe's symptom was absent.

Detachment of Retina.—A second paper, by Mr. MAHER, on a case of total detachment of the retina, in a boy, aged 8, was also read. The child had had a divergent squint for four years before he came under observation. The pupil did not react directly to sight, and but slightly indirectly; extending across the retina, at the upper part, was a thin band of organised lymph. Vision was so defective, that there was not even perception of light. The mother was confident that the child had never received any blow on the eye, and that the only injury the eye could have received was at birth, when the forceps was used. The presence of the band of lymph in the retina was thought to point to the detachment being of traumatic origin; and, as complete congenital detachment of the retina was probably unknown, Mr. Maher was inclined to think that the detachment was due to injury by the forceps.

Embolism of Central Artery of Retina in Puerperal Septicæmia.—Mr. SIMEON SNELL (Sheffield) related a case of embolism of the central artery, occurring in a young woman aged 26. After the birth of her first child, on November 19th, 1885, she was much neglected by the midwife, and was not kept clean. Four days later, rigors commenced, and symptoms of septicæmia developed. The pulse was 120, and the temperature 103° Fahr. The medical man called in thought the condition very grave at first. During the night of November 27th, sight was suddenly lost in the left eye. She gradually recovered from the septicæmic state, but vision remained lost; and, when first seen by Mr. Snell in January, 1886 (two months after the attack), the appearances in the fundus were those of embolism of the arteria centralis retinæ in a late stage. There was no cardiac disease. The interest of the case lay in its association with puerperal septicæmia. In the puerperal state, and in the feeble condition of the patient, simple thrombosis of the heart or pulmonary vessels could easily have occurred, and might have been the source of embolism. The source of the embolus was doubtful; but he wished to record the fact of the occurrence of embolism of the central artery of the retina in septicæmia, and that its course was not attended with any unusual or inflammatory effects.—Mr. NETTLESHIP observed that there seemed to have been an unusual amount of hæmorrhage.—The PRESIDENT suggested that the embolus was probably infective.—Dr. STEPHEN MACKENZIE had never seen a case of embolism of the retina in association with the puerperal state, though embolism in other situations was far from uncommon.—Dr. ANDERSON said that he had collected statistics which showed that embolism of the left middle cerebral was most liable to occur, when stenosis of the mitral valve was complicated by pregnancy.

Meningitis after Enucleation.—A letter from Dr. DYCE DAVIDSON (of Aberdeen), relating a case of meningitis after enucleation, was read by Dr. Stephen Mackenzie. The patient, a woman aged 49, had received an injury to the right eye four or five years before the enucleation was performed; the eye had been quiescent for three years until three weeks before she applied for treatment. She was impoverished, ill-nourished, and broken down in health, but presented no signs of any disease. The urine did not contain albumen. The eye, which was painful and tender in the ciliary region, was enucleated three days after admission, antiseptic precautions being used, and a salicylic pad applied. Twenty-four hours later she was in a high fever, had vertical headache and a foul tongue, but the wound was healthy. She died comatose on the third day. The wound looked œdematous at the time of death. At the necropsy, meningeal inflammation, redness of the optic nerve, and œdema of the orbit, were observed. All the other organs were healthy except the uterus, which was in a condition of catarrhal inflammation. Dr. Davidson suggested that the case was one of pyæmia started by this condition of the uterus, and surmised that this suggestion might explain other cases.—Dr. W. A. BRAILEY asked for further details with regard to local treatment, as he believed that there were important variations in treatment with regard to the use of pads.—The PRESIDENT said that he had never met with such a case. He had enucleated over and

over again during the acute stage of suppuration, but had never had a case of meningitis.—Mr. NETTLESHIP said that half the cases had occurred in males ; for other reasons, also, he thought it was unnecessary to look to the uterus for a source of septic infection.—Mr. WAREN TAY felt that further particulars with regard to the nature of the meningeal inflammation and the state of the optic nerve, which was not usually affected, were to be desired.

Cataract Extraction.—Mr. BRUDENELL CARTER read a paper on some practical points connected with extraction of cataract. He commenced by referring to a paper by Mr. Critchett, dealing with certain improvements of detail on which further progress in cataract extraction must chiefly depend. Mr. Carter expressed his concurrence in Mr. Critchett's remarks about the spring speculum, the entire abandonment of which he had himself advocated, in a note added in the beginning of 1885 to the still unsold copies of his Lettsomian lectures. He did not, however, approve of Mr. Critchett's suggestion to use the third finger of the fixing hand as a lid-elevator, preferring the elevator of Noyes in the hands of a careful assistant. He thought that Mr. Critchett's method unduly restricted both the choice of a fixing-point and also the mobility of the fixing-hand ; and he condemned the oblique section which these restraints rendered necessary, on account of its tendency to expose the coloboma iridis, and to produce astigmatism along an oblique corneal meridian. He referred to the application of antiseptic surgery to operations upon the eyes, and advocated the use of a solution of cucaine, 10 per cent., and of salicylic acid. Dr. Galezowski's dressing of specially prepared gelatine had not been successful in his hands; and he recommended a compress of wet cotton-wool, placed over a morsel of linen smeared with sanitas-vaseline, and retained by a strip of knitted cotton which was secured by three pairs of strings. Among trifles contributory to perfection, he attached much importance to this method of dressing.—Mr. ANDERSON CRITCHETT defended the use of the finger in the place of the speculum, because he found it best to make fixation just below the point of counter puncture. The old French toothed-forceps used to tear the conjunctiva ; he had found that the double fixation-hook answered well in some cases, but the best instrument was a slight modification of the forceps, used by Dr. Bell Taylor ; with this instrument, a few fibres of the sclerotic could be pinched up, and a firm hold got upon the eye at any point. Holding the eye at the point where the counter-puncture was to be made, the section could be made of any size. It was impossible for the assistant to work in perfect harmony with the operator, and time might be lost. Where the operator depended entirely upon himself, the commencement of a spasm could be felt, and the finger relaxed. In completing the section the finger was withdrawn, the lid closed gently, and there was thus less chance of the lids being squeezed together. With cucaine, the patient had less control over the lid, and the danger of a squeeze was greater. With regard to the oblique incision, he was in the habit of making his puncture very little below the centre of the pupil, and it was not necessary, as a rule, to remove more than the central portion of the iris. He had not suggested that it was desirable to cut out with one push ; three-fourths of the incision might be made with the push, and the remainder in withdrawing. The knife he used was curved, had a central point, and commenced to bulge immediately below ; so that, with a steady onward push, it cut its way so far as to complete three-fourths of the section. He referred to the case of an old man, aged 84, in whom he had operated on both eyes simultaneously. In the one eye, he had made the incision entirely in the sclerotic ; in the other eye, he had made it entirely in the cornea. In this, he had followed a dictum of his late father, who had always taught that, in operating on both eyes simultaneously, it was always right to give the patient every chance by choosing a different operation for each eye. M. Galezowski, who was present at the operation, provided some of his gelatine discs, which he stated he had used in 107 consecutive cases without a single case of suppuration. In this case, unfortunately, the eye in which the incision was confined to the cornea suppurated with remarkable rapidity ; the other eye did very well, and sight was good. The case illustrated the wisdom of the late Mr. Critchett's dictum : if the incision had been made in the cornea in both eyes, probably both would have been lost.—Mr. NETTLESHIP commented on the very strong solutions of cucaine used by Mr. Carter. He agreed with those who believed such a custom to be dangerous, and used a 2 per cent. solution. He thought the exact direction of the incision was of small consequence ; the incision directly upwards gave the best cosmetic results. Liebreich always made his section downwards entirely in the cornea, and never used a speculum ; in his hands the results were good on the whole.—Mr. M. MCHARDY suggested that it was advisable to put a drop of cucaine in the eye not to be operated on ; spasm was less liable to occur when this was done.—Mr. HODGES (Leicester) had performed Mr. Critchett's operation in several cases, but only in one case without the speculum. He had been exceedingly pleased with the case with which the operation could be performed and with the final result.—Mr. BRUDENELL CARTER, in reply, said that he had not met with the tendency to spasm with the frequency Mr. Critchett inferred. For fixing, he preferred forceps with a broad flat point, and with at least three or four teeth. The advantages of the meridional fixing-point were considerable, and he thought it important to have freedom of movement in the fixing hand. The cucaine solution contained salicylic acid ; it was thus antiseptic, and it had the advantage that in washing the eye the cucaine was not all washed away.

Living and Card Cases.—Mr. W. P. KEALL (Bristol) : a boy, in whom evisceration of the eyeball was performed, and a hollow silver ball introduced. The boy had subsequently received a blow, followed by a "black-eye," but without any other consequences.—Mr. W. LANG : a young woman, in whom evisceration was performed, and a glass ball inserted in the manner recommended by Mr. Mills. A glass eye had been fitted, and the movements were fairly good.—Mr. S. SNELL : Stamp for indicating axis of cylindrical lens.—Mr. J. B. LAWFORD : New tissue formation in choroid (and retina ?), following injury, probably rupture.—Mr. MARCUS GUNN : a woman, who had presented for many years symptoms of locomotor ataxy, and exophthalmic goître fourteen years, in whom marked pigmentation (? Addison's disease) had recently developed.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 26TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Scleroma Adultorum.—Dr. EDWARD BLAKE showed a well marked case of this disease associated with pelvic disorder. The patient was a widow, aged 41. The skin of the chest was the part affected. She had been under his care for some time for retroflexion and subinvolution. The pelvic troubles had disappeared, but there was no improvement in the scleromatous skin.

Cystic Myoma.—Dr. WALTER (Manchester) showed a large cystic myoma of the uterus, removed by laparotomy, which contained eleven quarts of pus. The patient was 29 years of age. Ten months before, the myoma was quite solid ; and, on account of menorrhagia and pressure-symptoms, the appendages had been removed. The operation checked the menorrhagia, and during the following ten months the catamenia recurred four times. For at least five months the tumour did not alter in size or consistence ; it then gradually increased, becoming at the same time cystic ; and, for a few weeks before the laparotomy, the tumour filled the abdomen, and evidently contained fluid. The patient's condition became rapidly worse, and, when Dr. Walter saw her, she was suffering from hectic fever. The operation was attended with much difficulty, and profuse hæmorrhage from numerous vascular adhesions. The patient sank from exhaustion the same day.—Dr. ALFRED MEADOWS thought that the case of removal of the uterine appendages for uterine fibroma, which had just been related, although not successful in one sense, in no way militated against that operation ; for it appeared that the menstrual flow had been considerably reduced ; and, although the tumour increased in size, and required ultimately the major operation for the extirpation of the growth, yet it did not appear that this was due to any actual increase of the neoplasm, but rather to certain tissue-changes which it underwent, and notably the formation of a huge abscess. It appeared to him that this abscess might possibly have resulted from the use of the trocar or exploring-needle. He did not approve of this practice ; for, though there might be doubt as to its effects, he could not regard it as a perfectly innocuous proceeding. Anyhow, the case, as a whole, could not be regarded as opposed to the practice of removing the uterine appendages for the arrest of uterine fibromata.—Dr. BANTOCK remarked that, while it was well known that cystiform degeneration attacked fibrous tumours of the uterus, especially the hard variety, he could not help thinking that the introduction of the trocar was probably the exciting cause in this case. The result certainly showed that the proper course would have been hysterectomy in the first instance ; and it confirmed the view he had frequently expressed, that, when a tumour had attained the size of this one, the removal of the appendages was quite insufficient, even if thoroughly accomplished, which was not often possible.—Dr. ROUTH asked what was the size of the trocar used, because he had shown, in his paper read before the Obstetrical Society, on Extra-uterine Pregnancies, that the trocar was nearly always followed by dangerous symptoms, whereas the smaller tube of the aspirator never

did harm.—Dr. Bedford Fenwick and the President joined in the discussion.

New Trocar.—Dr. C. Cushing (San Francisco) called the attention of the Society to a new instrument for evacuating pelvic abscesses through the roof of the vagina. He termed it a "dilating trocar," and claimed for it greater safety than in the use of the knife, and greater efficiency than in the use of the simple trocar. It consisted of a two-bladed instrument, similar to a Palmer's uterine dilator, but with the point made like a trocar. In using it, the point was introduced through the roof of the vagina into the pus cavity; and then, by closing the handles, the connective tissue was torn in such a manner as to allow free drainage; and the wound was of a character that did not tend to heal readily, and thus the opening remained patent.

Gall-Stones.—The President showed a number of gall-stones, which he had removed that afternoon from a patient at Stratford-on-Avon. The only peculiarity in the case was, that the patient had been suffering intolerable agony for five years, and, during the whole of that time, had been endeavouring to make up her mind for an operation. (This patient has completely recovered.)

Hydatid Tumours.—Dr. Bantock exhibited several hydatid tumours, which he had removed, by abdominal section, from a young woman, aged 25. These tumours were, with one exception, attached to the omentum, and one of them occupied the right side of Douglas's pouch. The exception was one having connection with the intestines only in the left iliac fossa. The wall of this mother-cyst was so friable that, on seizing hold of it with the fingers, it immediately burst, giving exit to a number of pearly cysts, of various sizes, from a pea to a pigeon's-egg. The remains of the cyst-wall were rubbed off the intestine by means of the sponge. Other cysts were seen projecting from the surface of the liver, but were left, as they could not be removed without injuring the liver-substance. The patient was doing well; but the result, at best, could not be considered satisfactory.

A Case of Pyometra.—Dr. Fancourt Barnes read notes of this case. M. D., aged 36, married eleven years, having had one child nine years ago was admitted into the Chelsea Hospital for Women on April 8th. Her history was as follows:—Her labour was a difficult one; she was delivered of a dead child by craniotomy, and was laid up for a long time afterwards; she was sent to Dr. Barnes by Dr. Delépine, of Camberwell. On admission, there was found to be a rounded tumour, apparently uterine, which rose in the abdomen an inch above the umbilicus; it was elastic and very tender to the touch. She had menstruated regularly until two years ago, when menstruation became irregular for six months and finally ceased. At the time of admission, she had not menstruated for eighteen months. There was pain, however, recurring regularly each month. On attempting a vaginal examination, it was found that the vagina was completely occluded from the vulva upwards. On April 10th, Dr. F. Barnes dissected up the occluded vagina to a distance of two inches and a half, when the uterus was reached, and eighteen ounces of thick yellow pus escaped in a full stream. The vagina was then allowed to collapse, so that the pus which remained in the uterus might gradually ooze away. She passed a good night, the temperature next morning being 101° Fahr. The vagina was syringed daily with a carbolic solution. During the first three weeks after the operation, the temperature varied from 100° to 103° Fahr. The vagina was prevented from closing again by frequent digital examinations. She left the hospital on August 30th, cured, the sound passing the normal length. Dr. F. Barnes had not been able to find any similar case recorded. There had evidently been a cicatricial closure of the vagina from the vulva to within half an inch of the os uteri. Succeeding menstrual periods gradually filled the uterine cavity, which became distended by the retained blood; the hæmatometra thus created ended in suppuration. The cases usually described under the title of pyometra were those in which there was a free opening to the vulva. When the patient was admitted into the hospital, she was in a state of septicæmia, with emaciation, and apparently had not long to live.—Dr. Mansell Moullin thought the very interesting case related by Dr. Fancourt Barnes was unique. There were one or two points, however, on which he should like to have further details. He was hardly prepared to accept the explanation that had been offered. Hæmatometra, under such circumstances, was rare; it usually occurred in cases where the occlusion was congenital, or had taken place from injury prior to the advent of menstruation. When the injury took place subsequently to that period, the menses generally managed to maintain a passage for their exit, however minute it might be. The tarry fluid found in the uterus, in cases of retention, would scarcely have disappeared completely, and given place to the pus which was evacuated at the time of operation. Absence of menstruation was easily explained by the condition of the patient.—Dr. Bantock referred to a case under his care, some years ago. The patient was married, but sterile. The vagina was not more than an inch in length, and terminated in a minute opening, just capable of admitting a fine surgical probe. On dilating this opening, by means of tangle-tents, he found a collection of muco-pus in the upper part of the vagina. The case was cured by bilateral division, followed by continuous dilatation. The difference between the two cases was that, while there was only incomplete atresia in his case, with partial accumulation, not sufficient to distend the uterus, in the case under discussion these conditions were complete. In the impression he had formed of the case, from the title of the paper, he was a little disappointed to find that the case was not, as he understood it, a case of pure pyometra; for he regarded a case of pyometra as one in which the pus was wholly contained in the uterus. Such a case was that of a lady upon whom he had operated, about two months ago, on account of ovarian and tubal disease. On one occasion, a few years ago, she had passed, from the uterine cavity, a pint at least of the most horribly offensive purulent matter. At the time of the operation, the chief symptom was menorrhagia, and the uterus was considerably enlarged.—Dr. Walter failed to see why an objection to the term pyometra should be raised in this particular case. Even supposing it were true that pus first accumulated in the vagina, and subsequently filled the uterus, it would simply be a parallel condition to what occurred in retained menses from imperforate hymen, where the fluid pus, accumulating in the vagina, afterwards distended the uterus into a hæmatometra; and it made no difference whether the hæmatometra or the hæmatocolpos occurred first. So long as the uterus was distended with blood, it was a hæmatometra, or, if with pus, a pyometra. If it so happened that the vagina also contained an accumulation of pus, there was a pyocolpos, in addition to the pyometra.—Dr. Fancourt Barnes replied.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, June 2nd, 1886.

J. B. Potter, M.D., President, in the Chair.

Specimens.—The following specimens were shown:—1. Fibroids in twin pregnancy by Dr. John Phillips; 2. Fœtus and placenta from extra-uterine gestation removed by abdominal section by Dr. Herman; 3. Ovarian tumour and fibro-myoma uteri removed at the same operation by Mr. Knowsley Thornton.

The Artificial Production of so-called "Lymphatic Varix."—Dr. F. H. Champneys read a paper on this subject. His object was to determine whether so-called "lymphatic varices" could not be produced at will by cupping striæ in the skin which were not œdematous. If this produced appearances which could not be distinguished from so-called "lymphatic varices," it would tend to prove that these were really due to general lymphatic œdema, showing most plainly over the least supported parts of the skin, and not to any peculiar arrangement of lymphatics, nor to obstruction of any particular lymphatic trunks. This was shown to be the case. The author concluded that "lymphatic varix" was a misleading expression.—Dr. Herman said that Dr. Champneys had spoken of "lymphatic œdema" and of "œdema." He asked whether this alternative mode of expression was simply for brevity, or whether it illustrated his view as to the nature of the fluid filling the cracks. He believed, with many others, that in phlegmasia dolens there was not simply œdema from venous obstruction, but there was obstruction in the lymphatic system of the limb. There was little direct proof of this, but there were strong arguments from analogy in its favour. Dr. Duncan's case was important; for if the fluid in the varicose skin-cracks were lymph, it furnished some direct evidence that there was obstruction to the return of the lymph from the limb. When Dr. Champneys spoke of "œdema," did he mean the swelling that resulted from altered pressure-relations in the capillaries; or did he mean, by "lymphatic œdema," that the fluid had been exuded from the lymphatic vessels?—Dr. M. Handfield-Jones called attention to three cases of dilatation of lymphatic radicles which were in St. Mary's Hospital. They closely resembled that of Dr. M. Duncan. Mere œdema was not sufficient to produce the appearances described. Some active pathological condition attacked the small spaces from which the lymphatic vessels started, and spread thence along the larger canals. It was noteworthy that, considering the frequency of œdema of the lower limbs, the appearances described in the cases referred to were rare.—Dr. Champneys said, in reply to Dr. Herman, that he meant ordinary œdema, not any special affection of the lymphatic vessels.

One of the Causes of Difficulty in Turning, with Remarks on the Practice of Amputating the Procident Arm.—Dr. G. Ernest Herman described difficulty in turning due to impaction of the point of the shoulder below the imperfectly dilated internal os. In these cases,

there was no great difficulty in seizing the lower extremity, but when this had been done, the condition described prevents the child from rotating. The proper way to overcome the difficulty was to press the point of the shoulder towards the middle line of the cervical canal, and thus disengage and raise the shoulder. When this was done, the child was easily turned. The author then referred to the writings of those who had advocated amputation of the arm in cases of transverse presentation, which could not be turned, on the ground that turning became easy when this had been done. He believed that these cases were of the kind now described by him, and that the amputation of the arm was effective by removing the resistance offered by the impacted shoulder. But he did not think that amputation of the arm was proper in such cases, for the child could be turned if the point of the shoulder was disengaged in the manner he had described; and if the child were dead, decapitation was better than amputation of the arm, followed by turning.—Dr. GALABIN did not think that the internal os could prevent the shoulder from being pushed directly upwards. It might, however, prevent its ascent when the attempt was made to turn, as described by Dr. Herman, by acting on both poles of the fœtus at once; for this would move the shoulders not only upwards, but also outwards, and it would be more likely to be resisted by the projecting ring. He had never had occasion either to cut off the arm or push the shoulder, and he had only once met with a case in which it was impossible to turn, and he had to decapitate. In this case, a shoulder had been mistaken for a breech, and expectant treatment continued for two days. He believed that there was no case in the records of the Guy's Hospital Charity in which turning was impossible, and alternative embryotomy became necessary. Where it was necessary to act on both poles of the fœtus, he would make the action alternately, pulling down a leg and pushing up a shoulder. He asked if Dr. Herman had been always successful with his method, or whether embryotomy was still necessary sometimes.—Drs. BOXALL, CHAMPNEYS, PLAYFAIR, CLEVELAND, and the PRESIDENT, also made remarks.—Dr. HERMAN, in reply, said that he did not assert that the condition described in his paper was the cause of difficulty in every case; but that, on the contrary, he thought it an occasional and rare source of difficulty. There was in these cases little difficulty in bringing down the foot, but much in turning the child; while, where the uterus was contracted tonically round the child, there was difficulty in getting the foot. He agreed with Dr. Galabin, and pointed out in his paper that the difficulty was augmented by pushing up the shoulder while pulling down the leg. The defined swelling of the shoulder which was present showed that it had been encircled for a long time. He had felt the contracted ring above the shoulder. He adopted, in turning, the plan advocated before the Society in a valuable paper by Dr. Galabin; that is, he seized the most easily accessible foot. Attempts at turning had been made under anæsthesia in one of his cases for three-fourths of an hour; in the second, anæsthesia was not employed, and he did not remember as to the third.

Four Cases of Spurious Hermaphroditism in one Family.—Dr. JOHN PHILLIPS gave the family history. Out of nine pregnancies, the fourth, sixth, eighth, and ninth were hermaphrodites. Fright during the third month of pregnancy, in the mother's opinion, caused the first. None of them survived more than a few days, and the author had an opportunity of *post mortem* examination. The family antecedents were very carefully gone into, many of them being personally examined. Several defects, such as hernia and the like, had been discovered. A genealogical tree was appended. The author gave a historical review of the whole subject. There appeared two causes at work on the mother's side, in the production of this deformity: (1) the initial fright which she received when pregnant with the first; (2) the continued dread and mental distress which ensued on her bearing a deformed child. The following conclusions were drawn. 1. A hernial or other weakness present in one parent, acting as a predisposing cause, any deep maternal impression received about the third month might induce some impediment to the proper differentiation of the urogenital system. 2. A distinct tendency towards bearing hermaphrodites might be developed in a mother who had already borne one.—Dr. M. HANDFIELD-JONES asked as to the relative frequency of sterility in these spurious hermaphrodites. It was a law of evolution, that, in hermaphrodites, one set of organs atrophied in proportion to the development of the other; and so in cases with a large clitoris, imperfect uterus and ovaries might be expected.—Dr. CLEVELAND mentioned that he had a patient with only one testicle descended, who was the father of a large family, none of whom were deformed.—Drs. JOHN WILLIAMS, WILCOX, CHAMPNEYS, and GALABIN, also made remarks.—Dr. JOHN PHILLIPS, in reply, said that he thought specimens of spurious male or female hermaphroditism were not uncommon, but that four in one family were unique. The father was the elder of the two parents, but his exact age he could not remember. He could not throw any light on Dr. Handfield-Jones's queries.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 7TH, 1886.

W. B. HEMMING, M.R.C.S., President, in the Chair.

Specimens.—Dr. SEYMOUR TAYLOR showed a case of Unilateral Pigmentation of the Eyelid.—Dr. BALL showed a case of Multiple Warts.—Drs. BALL and COLCOTT FOX showed several cases of Hereditary Syphilis, and a collection of Skulls illustrating the effects of bone-syphilis in infants.

Cases of Hereditary Syphilis in Infants, in which the Bones were affected.—Drs. COLCOTT FOX and J. B. BALL contributed a paper under this title. CASE I.—An infant, aged 8 weeks, had snuffles, hoarseness, maculo-papular syphilitic eruption, and was much wasted. The child had lost the use of his limbs in great measure. There was fusiform swelling of both elbow-joints, due to thickening of the lower third of the humeri and upper ends of both bones of the forearm. There was enlargement of the lower ends of both tibiæ and of the right fibula. Rapid improvement took place under grey powder, and all trace of the disease disappeared in eight weeks. CASE II.—An infant, aged 10 weeks, had snuffles, hoarseness, dirty pallor of skin, and eroded papular syphilide. There was loss of power of the right arm. There were thickening of the upper part of the right radius and ulna, and a hard swelling of the proximal segment of the right index finger. The further progress of this case was not known. CASE III.—An infant, aged 9 weeks, had snuffles, hoarseness, *café au lait* tint of skin, a syphilitic eruption, and enlarged spleen. He was much wasted, and had only very slight power of movement in the arms. There were swelling of the hands, chiefly on the dorsal aspect, and enlargement of the metacarpal bones. The digits were also swollen, and each phalanx of both hands was thickened, and presented a fusiform enlargement. There was swelling and crepitus at the lower end of the left humerus, and swelling about the bones of both forearms. The feet were swollen, especially on the dorsum, and the metatarsal bones were thickened. The lower ends of the left femur and right tibia were enlarged. Soft spots were felt in the parietal bones, and also in the frontal bone. The lesions steadily subsided under grey powder; and, in three months, all traces were gone. The authors called attention to the dactylitis present in two of their cases.—An interesting discussion followed, in which Drs. PARSONS nd THUDICHUM, and Messrs. DUNN and WAINEWRIGHT, took part.—Drs. COLCOTT FOX and BALL briefly replied.

Chronic Cerebral Abscess Following Otitis Media: Death.—Dr. SCANES SPICER described this case. F. D., labourer, aged 16, of strumous aspect, was admitted into the Fulham Union Infirmary on April 6th, 1885, suffering from severe pain in the left ear and head, delirium, and discharge from the left ear and from an opening over the corresponding mastoid process. The parents stated that he had never had scarlet fever nor measles. Sixteen months ago, after exposure to cold, he had a very severe pain in the left ear, and an abscess broke through the meatus; after this, there was a permanent chronic discharge, varying in amount, and he had occasional headaches. He had no ear mischief before the attack, and no injury. The patient enjoyed good health, and was at work till four weeks previously, when he took to his bed with severe pain in the left ear, rigors, vomiting, and muscular twitchings; the ear discharged foul pus copiously. A week later, a swelling appeared over the left mastoid region, which was lanced and poulticed, and continued to discharge pus up to the date of admission. Constipation had been obstinate, but there had been no vomiting for the last fourteen days. On admission, the patient was drowsy and delirious; the pupils reacted to light; there was no marked contraction or dilatation, no photophobia. There was a scanty foul discharge from the ear, and from a sinus over the mastoid process; the integument there was puffy, with a superficial scab; he had an impetiginous scab round the mouth; he lay with his head retracted; sensation, tested by a pin, was apparently everywhere good; he had twitchings of both hands, and of the mouth and eyelids; pulse full large 80, breathing natural, temperature 98°. The patient gradually became worse, and died on the morning of April 10th. On examination of the brain, five ounces of fœtid greasy looking fluid, containing brown curdy flakes, mixed with globules of yellow pus, escaped through a rent in the left temporo-sphenoidal lobe; the convolutions were flattened upon the surface of the same; there was no recent meningitis, nor thrombosis of any sinus. The opening into the abscess-cavity was seen at the junction of the outer and under aspect of the left

temporo-sphenoidal lobe about the centre; the cavity occupied only the white substance, entering the grey matter only where the brain was adherent to the membranes over the mastoid cells. The cavity was lined with a brownish black organised firm membrane, one eighth of an inch in thickness. The corpus fimbriatum was thickened and injected, and some small clots were seen in it. The descending horn of the lateral ventricle on the left side was filled with healthy-looking pus; pus was also seen on the surface of the corpora quadrigemina.—In the discussion which followed, Drs. ALDERSON and ATKINSON, and Messrs. LLOYD, DUNN, and WAINEWRIGHT took part, and Dr. SPICER replied.

Educational Overpressure of Young Children.—Dr. CLIPPINGDALE said that the cases, twenty-three in number, had occurred among ninety-five children of school age, and came under his care at the Kensington Dispensary. The symptoms attributed to overpressure were sleeplessness, giddiness, vomiting, noises in the ears, nervousness, and loss of appetite, with consequent wasting. The youngest patient was 3, and the oldest 19 years of age. The symptoms indicated a venous congestion started by stimulation of the brain, and assisted by the bent posture of the child at school. The causes were mainly two—overteaching and underfeeding. All pressure should be removed both from teacher and taught, and a child should be provided with a frugal breakfast.—A discussion followed, in which Drs. ALDERSON, THUDICHUM, PARSONS, BALL, BENNETT, and Mr. CHAPMAN took part; and Dr. CLIPPINGDALE briefly replied.

Pathological Specimens.—Mr. H. P. DUNN showed the following specimens: 1. The Brain of a Child, showing a large Chronic Abscess in the Left Hemisphere. 2. Pneumonia of the Apex in a Child, followed by Gangrene. 3. A Pericardial Sac, Heart, and Adjacent Parts, showing the effects of Pyo-pericarditis. 4. A Bladder, showing a large Intraperitoneal Rent.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MAY 19TH, 1886.

ALEXANDER OGSTON, M.D., President, in the Chair.

Spina Bifida.—Dr. JAMES TAYLOR (Keith) showed a preparation of a spina bifida, and the contents of the sac. The child, which was small and feeble, lived only six days. The tumour occupied the entire lumbar region, and did not pulsate, nor did the size of the tumour vary with the position of the child. The sac-contents could not be pressed upwards, either before or after death. Treatment consisted in applying a soft compress over the tumour, and maintaining the strength of the child.

Paralysis of Cranial Nerves.—Dr. MACGREGOR showed a case with paralysis of the sixth and seventh cranial nerves. The patient, a boy, aged 6, had been ailing for a month. The affection began suddenly with a scream, followed by vomiting and squinting, and accompanied by pain in the right side of the head and paralysis of the right facial and right sixth nerves, the face, head, and eyes being turned to the left side. Sensation on the right side, and the movements of the tongue, were not affected. Taste and smell were intact, and the patellar reflexes were normal. Hearing on the right side was markedly deficient. The right pupil was contracted, but dilated under atropine. There was no pain on the left side. The site of the lesion was probably the lower half of the pons Varolii and the upper half of the medulla oblongata.

Detachment of the Retina.—Dr. MACKENZIE DAVIDSON showed a case of detachment of the retina, and a chart of the defective visual field. The patient was aged 46, and had enjoyed good sight until a year ago, when she received a blow on the left eyebrow, and, some time after, found that the vision of the left eye was much impaired. Vision of the right eye was good.

Spina Bifida.—Dr. GORDON gave details of a *post mortem* examination of a spina bifida, of the size of a small orange, occurring in the lumbar region.

Poisoning from Fermented Ginger-Beer.—Dr. PRESSLIE narrated two out of a series of cases of poisoning resulting from the use of fermented ginger-beer. In the first case, that of a very temperate man in an easy situation, dyspeptic symptoms had lasted for two years, and the patient had lost much flesh. One day he was found shivering, having vomited a brownish substance, smelling of alcohol. The temperature rose gradually, and then fell. The patient recovered, and resumed work. The vomit consisted of schizomycetes and saccharomycetes, which underwent the alcoholic, acetic, and butyric fermentations. Ginger-beer gave such a ferment, which would multiply with great rapidity. In both cases, the patients indulged in this liquor. The similarity of the symptoms in these two cases, and their recurrence in seven days, was interesting; and their causation could not be referred to the alcoholic or acetic ferment, or sarcina ventriculi. Dr. Presslie promised to bring up the subject at greater length, when he had pursued his investigations further.

Paralysis of Ocular Muscles, with Polyuria.—Dr. MACKENZIE BOOTH read notes of a case of complete paralysis of one eye, and ptosis of that side, in which polyuria was present, and brain-symptoms preceded sudden death. Unfortunately, a *post mortem* examination was not allowed.

Liquid Extracts.—Dr. PRESSLIE showed a number of new American preparations of drugs, in the form of liquid extracts.

Large Hydrocephalus.—Dr. BRANDER showed photographs of a child with huge hydrocephalus, measuring thirty-three inches in the fronto-parietal circumference. The child was aged fifteen months, and was the second so affected in a family of four. All four had suffered from convulsions during teething. No hydrocephalic history could be elicited on either the father's or the mother's side.

REVIEWS AND NOTICES.

ARTIFICIAL LIMBS AND AMPUTATIONS WHICH AFFORD MOST APPROPRIATE STUMPS IN CIVIL AND MILITARY SURGERY: together with Descriptions of best Prothetic Appliances, and also of the Government Regulation Appliances. Illustrated. By HEATHER BIGG, Assoc. Inst. C.E., Acting Surgeon 22nd Middlesex R.V. 1885.

THIS is an unpretending, but very practical, little work, and will well repay careful study by surgeons. There is no doubt that a surgeon, in operating, looks much more to the saving of tissue, and the risk to a patient's life, than to the usefulness of a stump for the ultimate application of artificial limbs. This may, perhaps, be accounted for by his not knowing generally the principles which have to guide the mechanician in supplying the substitute for what is lost, and this book will, therefore, be of real value, as it treats the subject from the mechanician's and patient's point of view; and it keeps clearly separate the important differences between the requirements of the working man, and the patient who can afford to spend money on appearance. In the former, strength and usefulness are the essentials; in the latter, usefulness, combined with something like the reproduction of the lost part, and concealment from public notice are the aims of the mechanician. No doubt, too, the mechanician has been handicapped, by want of anatomical knowledge and surgical experience, and we recognise the advantage which a combination of these, with mechanical and special skill in the same individual, ought to afford. That the work is of a kind wanted, is indicated by the fact mentioned in the preface, that no special work on the subject has appeared since the time of the Crimean War.

The first chapter deals generally with amputations, and it is of importance to notice that, from the mechanician's point of view, amputation through a joint, or near it, is not to be recommended, either for rich or poor. In the case of those who can afford artificial limbs, with mechanical joints, amputation through a joint, or near it, does not leave sufficient space for the mechanism of the artificial joint. In the case of the working man, the author maintains that pressure cannot be borne on the end of such a stump, in the majority of cases. The length of the stump should be enough to govern the artificial limb which is attached to it. The amount of covering should be as little as possible, provided it be sound, for it is a rule never to take any bearing upon the operative end of a stump, if it can be avoided. But it is of importance to round the ends of a cut bone; and this is generally lost sight of by surgeons. This may be done by a file or rasp, and he even proposes a conical rasp for general use in amputations; but the roughness of such carpentery hardly recommends itself.

It is useful to remember that changes take place in stumps, which influence the fitting of artificial limbs, and they are most marked in the lower limbs. First, there is usually an increase in size, and this is followed by a diminution for a variable time, but generally for about ten to fifteen months, when increase again occurs. Consequently, the socket, or corresponding part of the apparatus, becomes irksome to the patient, and he may give up his appliance in disgust. But if these changes be foreseen and understood, neither patient nor surgeon will be disappointed, and it is best, in the author's opinion, and appears most reasonable, to apply the artificial limb as soon as possible—frequently only a few weeks after the operation—and be prepared to make alterations as they become necessary.

Taking the amputations in the lower limb into consideration—and these are the most important, undoubtedly, from the mechanician's

point of view—we find the author's opinions very decided, and opposed to our usual ideas of conservative surgery. "If possible, preserve the tread of the foot; if this cannot be done, preserve the heel; if this is impossible, preserve the knee, with sufficient of the lower leg to utilise it; and, if this cannot be done, preserve the hip-joint, with sufficient of the thigh to utilise that joint." In other words, save the great toe, with its metatarsal bone; if this be impossible, do a Pirogoff; if this cannot be done, amputate in the middle third of the leg; and, if this cannot be preserved, amputate as low in the middle third of the thigh as possible. This applies to the well-to-do especially; for, in the case of the working man, greater advantage is allowed to occur when the amputation of the leg is done a hand's breadth below the knee. It will be seen by this that many of the recognised amputations of the foot are condemned; that it is useless to perform Chopart's, Heys', the mediotarsal, and the subastragular amputations; and removal of the great toe, with or without its metatarsal bone, is condemned; and, in place of all these, it is desired by the mechanician to substitute Pirogoff's amputation, though Syme's is accepted as the next best.

With amputations through the tibia, the point of election is the middle of the leg for those who can afford an artificial foot, but, for the labouring man, a hand's breadth below the knee is the most suited for the serviceable "bucket-leg," which should be jointed to enable the wearer to sit with comfort.

Amputation through the knee-joint, the author maintains, interferes very materially with the strength of the artificial knee, so that section through the femur just above the condyles is preferred. But "the *beau ideal* of operation at the knee-joint would be to amputate through the knee, and excise about two inches of the femur just above the condyles." This would allow of bearing on the end of the stump, and a strong bolt-joint could be used below the shortened knee. The benefit of simple amputation through the knee-joint for a labouring man does not appear to be very carefully considered. There is a practical observation on the advisability of not giving up, in despair, the use of an artificial jointed limb, and taking to the peg for this latter appliance leads to an unsightly throwing round of the limb, which is not easily cured as a habit.

We have entered fully on the questions involving the lower limb, as of the greatest practical importance to surgeons, but the remarks on amputations of the upper limb are also good, and the mechanical means employed to replace the hand and fingers are very ingenious. The author has succeeded in making an artificial hand grasp at will, by a rather simple means, the essence of which is the influence exerted upon a water-bag in the armpit.

Suggestions are made for simple improvements in the Government appliances provided for those who have lost their limbs in the service, and these are, mainly, that joints with a catch should be added to the peg to represent the knee, that the old "long stump-arm" should be abolished, and what is called the "improved arm," with elbow and wrist movement, allowed. The "stump-arm below" is serviceable, but the wearer should have the opportunity of selecting at least three useful instruments which could be used with the arm, and the Nelson's knife, which is a table-knife blade, with prongs at the back of the curved end, should be allowed in every case.

This book is likely to be of real service to surgeons in hospital and private practice, where amputations have to be commonly performed, and, perhaps, most especially to military and naval surgeons. It is simply, but clearly, written, and is free from any blemishes of self-advertisement.

La Fièvre Typhoïde traitée par les Bains Froids. Par R. Tripier, Professeur à la Faculté de Médicine de Lyon, et L. Bouveret, Agrégé à la Faculté de Médicine. Paris et Lyon. 1886. (Typhoid Fever treated by Cold Baths.)

The treatment of prolonged or high fever by systematic cold bathing is one which, for no very evident reason, is not much employed in England. Though other methods of applying cold to the surface of the body, such as douching, sponging, and packing, are used, yet these are, as a rule, reserved for cases of high fever; and in very few instances is there a systematic treatment of a febrile disease by the application of cold. In Germany and, to a less extent, in France, this method has been strongly recommended; and, owing chiefly to the able advocacy of Brand and Jurgensen, has been widely employed in the former country, especially in the military hospitals.

In the work under notice, Drs. Tripier and Bouveret have detailed the results of the experience of twelve years in the Hôtel-Dieu and the hospital Croix-Rousse at Lyons. The advantages claimed (in the first instance, by Brand, and subscribed to by the authors) for the treatment of typhoid fever by systematic cold bathing, are as follows. The intermittent reduction of the body-temperature by cold produces a condition of relative apyrexia, that is, a condition in which, though there is fever, yet this is not so high as it would be if cold were not employed. Further, from the effect of cold on the nervous system, the patient can sleep better, and has more strength to struggle with the prolonged fever; at the same time, meteorism and diarrhœa are diminished. These good effects are only observed if the treatment be prescribed from the commencement of the fever, before the sixth day. The method of giving the baths, according to the authors, is important; thus, a bath at 15° to 20° C. (59° to 68° F.), must be given for fifteen minutes every time the rectal temperature of the patient reaches 39° C. (102.7° F.), which will be, during the first three weeks of the fever, nearly every three hours. The baths must be continued until the temperature falls to normal. The inconveniences to the attendants in applying this treatment need not be considered; but the inconveniences and dangers to the patient are much more important. The frequent moving of the patient from bed to bath, and back again, is not considered by the authors as any drawback in the treatment; and they even allow their patients, if they be strong enough, to walk to the bath. Moreover, it has been said that this method of treatment predisposes to hæmorrhage; but this statement is controverted by the cases observed. Pneumonia, bronchitis, broncho-pneumonia, collapse are not considered as contra-indications of the cold bath treatment; but chronic valvular disease of the heart may lead to serious consequences.

Of 233 cases treated by Brand's method at Lyons, twenty died, a mortality of 8.5 per cent. Though these figures, however, are favourable, they do not of themselves indicate that the treatment employed is one to be prescribed in every case of typhoid fever. For not only are there many individual differences in the severity of cases of this disease, but the characters of epidemics vary so much, that the record of a very large number of cases is necessary before any definite conclusion can be drawn.

It is impossible, in this short notice, to discuss the many more interesting points treated in this work. Besides giving an excellent historical account of the treatment of fever by cold, Drs. Tripier and Bouveret have added to our knowledge many important facts, which will aid in the elucidation of the treatment of one of the most serious of diseases.

NOTES ON BOOKS.

Klinitchesky Sbornik (Clinical Magazine or Archives). Observations and Notes from the Hospital Therapeutic Clinic of the Imperial Warsaw University. Edited and published by Professor L. V. Popoff. Pp. 414, with nine chromo-lithographs. 1885. Warsaw.—This voluminous but neatly published book teems with interesting and carefully written contributions. It contains twelve papers: 1. Kasimir Chelchowski: A Case of Stenosis of the Main Branches of the Right Pulmonary Artery. It is the second case in Russian literature, the first being published by Dr. Bogoiavlensky in Botkin's *Archiv*, vol. vi. 2. The same author: A Case of Chronic Dropsy of the Cerebral Ventricles. In spite of extreme atrophy of the cerebral substance, and an enormous ventricular dropsy of very long standing, the patient's intellect remained rather above the average than anything. 3. H. Ruppert: A Case of Terotaxy in a Patient with Relapsing Fever. 4. The same author: A Case of Stricture of the Gullet, in consequence of Hypertrophy of the Muscular Coat. 5. The editor: Remarks on Ruppert's Case, as well as on the Process of Starvation in general. 6. The editor: A Monograph on Croupous Pneumonia, complicated with Cerebro-spinal Meningitis, with three cases of his own. 7. The editor: Observations on the Course of Typhus, Typhoid, and Relapsing Fevers, based on 188 cases from the author's clinic. 8. The editor: A Note on the Occurrence of Kurschmann's Spiral Fibres in the Sputum. 9. K. Chelchowski: A Case of Gangrene of the Skin of the Fingers, resulting from Thrombosis of the Ulnar Artery. 10. H. Ruppert: On a Case of Hæmorrhage into the Spinal Cord (a short report on the Case may be found in the *London Medical Record*, April, 1886, p. 172). 11. Adam Cieglinski: A Case of Paraplegia Urinaria, of a Reflex Origin. 12. K. Chelchowski: A Case of Primary Cancer of the Bladder in a Woman. It is well worth mentioning that many of the pages of the volume have been written by the diligent editor himself. He was appointed a professor to the Warsaw University in March, 1881; in 1885, the book under consideration already appeared (according to the editorial preface, it ought to appear much earlier, but was detained by various causes, over

which Professor Popoff had no control). How immensely the medical literature could be enriched, if every clinical professor would follow the instance of Professor Popoff, and every four years publish so substantial a collection of contributions, based on the material from his own clinic. Popoff's *Sbornik*, however, may be welcomed not only on that general ground, but also as a natural link between Russian and Polish medical literature; it is enough to point out that the remaining three contributors to the *Sbornik* are Poles, whose names we meet in Polish professional periodicals.

Zübovratchebny Vestnik (*The Dentiatric Herald*). Edited by Dr. B. ABOLENSKY, and published by Mr. A. P. Sinitzyn, dental surgeon, St. Petersburgh. 1886. Nos. 1-4.—This monthly, the first of its kind in Russia, has now entered the second year of its existence, and, seemingly, fully secured a necessary contingent of subscribers. Four numbers for the current year contain very detailed reports and transactions of the papers by Fredel (on Replantation of the Teeth); J. Hardman (on Amalgams); Ulrich, Hollander, Ed. Blanc (Teeth in Hereditary Syphilis); David, Doremus (on Toxic Effects of Cucaine); Mosich, Professor Miller, Witzel (Diseases of the Dental Pulp); Préterre (on Straightening the Teeth), etc. In a paper on Russian dental matters, Mr. Sinitzyn gives the Government some useful hints concerning the elevation of the average educational level of dentists.

Year-Book of the Scientific and Learned Societies of Great Britain and Ireland. Third annual issue. (London: Charles Griffin and Co. 1886.)—This book affords a chronicle of the work done during the past year by the various scientific and learned societies of Great Britain and Ireland, compiled from data furnished by the societies themselves. Among other things, it includes accurate lists of the papers read before, or published by, nearly every society throughout the kingdom during 1885. Such a record is both valuable and suggestive.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

INCLINATION OF AXIS OF A CYLINDRICAL LENS.

To the ophthalmic surgeon a ready means of indicating in his case book, and on the prescription paper, the axis of any given cylindrical lens is a desideratum. I believe the india-rubber stamp which I have had in use myself for some time will be found convenient and useful. It will be sufficient to indicate by a pen or pencil mark the degree corresponding to the desired axis of cylinder. In ordering simple sphericals, especially when those of different focal lengths are prescribed for each eye, the numbers may be written in the corresponding frames. Mr. W. Godley, 57-59, Eyre Street, Sheffield, is the maker.

SIMEON SNELL.

SEMPLE'S ATOMISING INHALER.

IN the article on Pure Terebene in the Treatment of Winter Cough, by Dr. William Murrell, in the BRITISH MEDICAL JOURNAL of December 12th, 1885, an anatomising apparatus, invented by Mr. W. F. Temple, of Ohio, was mentioned as "one of the best forms of spray-apparatus ever invented." This apparatus can be supplied through Messrs. Burgoyne and Co., of 16, Coleman Street, E.C., as the agents of Messrs. Parke, Davis, and Co., of Detroit, Mich., U.S.A., under the name of "Semple's Atomising Inhaler."

THE LATE DR. APJOHN.—At the monthly meeting of the Directors of the City of Dublin Hospital, on June 11th, the following resolution was proposed by Dr. Hawtrey Benson, seconded by Captain Hardy, and passed unanimously: "That this board, having heard with much regret of the death of Professor Apjohn, one of the founders of this hospital, and for many years its consulting physician, a respected member and brilliant ornament of the medical profession, desires to express its sympathy with his relatives."

BEQUESTS AND DONATIONS.—The Rochdale Infirmary and Dispensary has received £450 under the will of Mr. J. T. Pagan.—Mr. H. L. Raphael has given £200 to University College Hospital.—The Great Northern Central Hospital has received £134 under the will of Miss Harriet Chaffe.—Mr. Thomas J. Stallard-Penoyre, formerly of The Moor, Herefordshire, but latterly of Hove, Sussex, has bequeathed £50 to the Cancer Hospital, Brompton.—The Grocers' Company have given £50 to the Mary Wardell Convalescent Home for Scarlet Fever Patients.—The Corps of Commissionaires have given £23 8s. to the Charing Cross Hospital.

BRITISH MEDICAL ASSOCIATION
SUBSCRIPTIONS FOR 1886.

SUBSCRIPTIONS to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 19th, 1886.

MEDICAL ACTS AMENDMENT BILL.

THE Medical Act of 1858 was obtained through the persistent labours of the profession, and particularly of the Reform Committee nominated by the British Medical Association, of which Sir Charles Hastings was Chairman. Few members of that Committee now survive to witness the passing of the Medical Act of 1886 as the crowning result of their early efforts.

The difficulties which beset medical legislation before 1858 were created by the medical corporations and universities, which proved sufficiently powerful to defeat the recommendations of a Select Committee of the House of Commons, which sat in 1856, and reported in favour of a Medical Council, absolutely independent of all the universities and corporations, and which also unanimously decided that the diploma they would give of "Licentiate in Medicine and Surgery" should be all-sufficient to enable its possessor to practice, there being no clause to force him to join any college.

The corporations proved themselves sufficiently powerful to defeat both these recommendations, though supported by a powerful government; and then Mr. Headlam, acting for the Association, in a spirit of conciliation, suggested the present Medical Council, containing representatives of all the medical corporations and universities, with the addition of members chosen by Her Majesty's Government, but, as intended, not holding any place or office in the corporations or universities—a proviso sadly disregarded.

When the Bill of 1858 was passing through Committee, the present Lord Mount-Temple, on behalf of the Association, pressed a clause rendering it imperative on every candidate for registration to produce proof that his qualifications comprised both medicine and surgery. This necessary provision was, however, rejected, and the *Medical Register* remains, to the present day, blurred by the presence of half-qualifications, which are not tolerated in poor law medical officers. Like failure attended an attempt to enforce improved general education on the part of medical students.

These facts are reiterated to make manifest certain defects in the Act of 1858, which the Association failed to rectify at the time of its passing into law, namely: 1, the absence of any direct representation of the profession in the Medical Council; 2, the non-enforcement of the double qualification, as essential for admission to the *Medical Register*.

After the passing of the Medical Act of 1858, the Association watched with the deepest interest the working of the General Medical Council. During the first and second years of their existence,

considerable attention was devoted to the question of general education, but the activity soon languished. The necessity for an amendment of the Medical Act was, however, acknowledged in the Council; and the British Medical Association, in May, 1867, communicated to the Medical Council an expression of their desire to support the Medical Council in the endeavour to amend the Medical Act, and to improve medical education. The organisation of the Association was to be placed at the service of the Medical Council in a work on all hands deemed urgent, but the conflicting interests represented in the Council rendered every attempt at legislation abortive. The Medical Council found themselves unable to draft a bill such as the Government of 1869 would accept.

At this time a resolution was proposed in the Committee of Council of the Association by Mr. Husband, seconded by Dr. Simpson, of Manchester, and adopted:—"That, in any alteration of the Medical Act, the constitution of the Medical Council ought to be reconsidered, so that the great body of the profession should be fairly represented."

In consequence of this resolution, a committee was named, of which Dr. Edward Waters was made chairman, with instructions to report to the ensuing annual meeting of the Association in Dublin in 1867. The Report was in favour of the addition of direct representatives to the Medical Council, and embodied the mode of their election. It was adopted by an overwhelming majority. Nineteen years have elapsed since this Committee was formed. Many members have, alas! disappeared—Hughes Bennett, A. P. Stewart, Southam, Charlton, Falconer, Wilkinson, Nunneley, and others; but the Committee, with their Chairman, have ever held unswervingly on their course, year by year receiving a vote of confidence from the Association, while struggling to attain the two great objects of direct representation and complete qualification on the part of all registered practitioners of medicine.

In 1858, the Association would have been content with the qualification in medicine and surgery. In 1886, the triple qualification in medicine, surgery, and midwifery, under the sanction and approval of the Medical Council, is secured. The fight for the one portal on equal terms in each division of the kingdom has been strenuously maintained, but the corporations and universities, through their vested interests, their prescriptive rights, their influence over a sufficient number of members of Parliament to render hostile legislation impossible, have compelled the strongest Governments to succumb, and to abandon the attempt to coerce them. The one portal, pure and simple, has been found unattainable, still the triple qualification, under the control of the Medical Council, is a decided improvement and advance; and, as such, the Medical Reform Committee and the Council of the Association decided to accept it.

Compromise is of the very essence of Parliamentary legislation; and as with the one portal, so with the constitution of the Medical Council, the reality falls somewhat short of what was demanded. In the Bills promoted by the Association exclusively, no attempt was ever made to disfranchise any of the corporations or universities. The addition of direct representatives was alone aimed at, leaving, as it was supposed wisely, the disfranchisement of any particular body to amendments in Committee. The Bills of the Association have invariably been endorsed by members of Parliament of the highest character, including Cabinet Ministers, and their experience has governed the action of the Reform Committee. None of them could ever be induced to authorise any attempt at disfranchisement; all regarded such an attempt as a certain means of inviting defeat.

No subject has been so thrashed out as that of medical legislation. Committees sat before the passing of the Act of 1858. Committees sat during the sessions of 1879 and 1880. In 1882, a Royal Commission took evidence on a still more extended scale. Twenty-three medical bills are said to have been introduced since 1858. With all this evidence, Lord Carlingford and Mr. Mundella, with a powerful majority at their back, failed during two sessions to carry a Bill based on, and therefore strengthened by, the Report of the Royal Commission, although supported by the leaders—and, indeed, the great majority of the rank and file—of the Opposition.

The Bill based on the Report of the Royal Commission was a far bolder measure than any other that has ever been tried. It proposed a radical reform of the Medical Council, giving no direct representatives to the universities and corporations, but framed divisional boards in each of the three divisions of the kingdom by which, collectively, a small number of members of the Medical Council were to be elected. The difficulty in framing these divisional boards was found to be far greater than was anticipated, or could well have been imagined. The universities dreaded any preponderance on the part of the corporations, and the corporations reciprocated the fear. This conflict of interest, to Lord Carlingford, was incomprehensible (the general good was the last instead of the first thing to be considered); and finally, in despair, Lord Carlingford and Mr. Mundella abandoned the Bill.

In the session of 1885, Lord Carlingford prepared a Bill of a much simpler kind, involving no disfranchisement of Corporations or Universities in the Medical Council, and giving up the Divisional Boards. He assigned four direct representatives to the profession. His lordship's experience had convinced him that, with every desire to carry a larger measure, success was impossible, and that, if he desired to achieve success, the attempt must be of a less ambitious character. Sir Lyon Playfair has followed the same course; he, also, has avoided disfranchisement, but he has given one more direct representative, and equalised their number with that of the Crown nominees, making them five respectively. By Clause 10, the Medical Council may give another direct representative, and, if bodies should become extinct, their representatives may also be allotted to the profession. One striking fact has been demonstrated during this very prolonged struggle; namely, that in proportion as the difficulty of establishing the one portal, pure and simple, has been demonstrated, the necessity and the justice of according direct representation, the cardinal principle with which the second crusade for medical reform started, has been generally admitted. Tories, Liberals, Radicals, and Home Rulers, agree in this.

Although the Association has not won all for which it has fought, it has at last achieved Direct Representation, as a boon to the profession, and the Triple Qualification, as a protection to the public. In the conduct of the Bill through the House of Commons, the Association has derived valuable aid from Dr. Foster, the President of the Council, especially in bringing the insufficiency of the proportion of two direct representatives, originally allotted to England, to the notice of the House.

Mr. Lennox Peel, C.B., Clerk to the Privy Council, has been untiring, most courteous, and conciliatory during the ever-recurring and prolonged negotiations connected with the thorny subject of medical legislation; and the friendly manner in which he has discussed the

numerous and varied questions submitted to him on the part of the Association, is deserving of the most grateful recognition.

Sir Lyon Playfair, equally, during the last eighteen years, has willingly placed his parliamentary experience and knowledge at the service of the Association, and he is to be congratulated on the success of the first Bill which he has framed, and which promises to settle the question for many years.

We cannot conclude our comments on this subject without expressing the deep obligations, not only of the British Medical Association, but of the whole medical profession, to the Medical Reform Committee of the Association, and especially to its Chairman, Dr. Edward Waters, of Chester. For the last eighteen years, notwithstanding the pressing claims of an extensive practice, and in spite of disappointments which would have discouraged many men, Dr. Waters has assiduously laboured to promote the good cause, the success of which we have now the pleasure of recording. To his unwearied energy and judicious management is very largely due the victory which has been achieved. Not only is he to be congratulated on the success of his endeavours, but he has laid the profession under an obligation which will not soon be forgotten.

THE DEATH OF THE KING OF BAVARIA.

The tragic end of the King of Bavaria is only a natural consummation of his life; nor does it call for any surprise when a career such as his eventually leads to, or culminates in, either a suicidal or a homicidal attempt, or both.

Born in the purple; at an early age firmly seated on the throne; enjoying the respect and affection of a people of monarchical feeling; himself a lover and patron of art, gifted with artistic feeling and sympathy; and placed in a position of power, prestige, and pecuniary resources, enabling him to gratify that feeling and sympathy to the utmost extent, and to secure the friendship and companionship of men of light and genius; there seemed to be before him a life and a career well worth living, and at once sunny, prosperous, satisfying, and ennobling. The fusion of Bavaria with the German Empire must have released him, moreover, from many of the graver anxieties of State, while, at the same time, it left his kingly prerogative largely unimpaired, and in no way wrenched from him the respect and love of his subjects, and the outward signs of the same. But a dark strain of inherited mental disease soon set on foot a work of discord, dissolution, and destruction of the mental powers. From small beginnings (on a congenital basis), it appears to have gradually gathered volume and strength, and to have been fostered by the King's position, and his relation to those about him, which, unfortunately, gave opportunity for the full gratification of his morbid ideas and feelings; so that their waxing strength was unopposed by any of those salutary checks which would have been brought to bear on similar manifestations in one of more humble social status.

From the meagre reports at our command at the moment of writing this, we gather that the course of psychical disorder and deterioration had been slowly progressive. An aversion from companionship and society, a love of solitude, sweetened only by the solace of music and other arts, seem to have grown upon the King. As if selfishly immersed in the pursuit of his favourite arts, and shirking the duties of his position, the cares of State, or any thoughtfulness for, or effort on behalf of, the welfare of his subjects, he seems to have gradually become more and more unsociable and misanthropic; and yet extravagant in his projects, and betraying an expansive tinge in his ideas. We hear of a theatre built for his personal use; of operas placed upon the stage with a full cast, and with complete scenic and orchestral effects, for the sole gratification of one auditor only—the King himself. Nor did he merely avoid the general public, and sedulously withdraw himself from its sight; he also avoided his Ministers of State; and on one occasion took speedy flight, when unexpectedly approached by his uncle on some pressing matter of public business. At night, drawn in a brilliant equipage, he issued from his palace, and for hours in the dead of night, was swiftly driven over the wintry roads. He built castle after castle on an ascending scale of magnificence.

> "He doth rely on none;
> But carries on the stream of his dispose,
> Without observance or respect of any,
> In will peculiar and in self-admission."

Tardy intervention arrived at last, and the King was deposed. So extraordinary and unimpeded had been the growth of his morbid inclinations, that the deposition might well have stirred up feelings of intense revulsion and resentment, and have brought to a climax the latent, or only obscurely admitted, suicidal feeling or intention.

With reference to the suicidal attempt and struggle, in which both the King and his physician lost their lives—the combined suicidal and homicidal act of the former—it is perfectly astounding to find how gross, apparently, was the laxity, how strange the carelessness, somewhere, which led to the leaving of a powerful lunatic, known to have suicidal tendencies, to walk alone with his physician, and by a lake—no notice being taken of their continued absence for hours, and no search made until late at night. There is scarcely a pauper lunatic who would not have been the subject of better precautions than were taken in the case of the unfortunate King and Dr. von Gudden. Nor are we fully prepared to accept the alleged explanation, that the catastrophe was entirely due to the asserted reliance of the latter "on his great moral influence over insane persons." No man can follow or influence all the workings of the insane mind, or rely on moral influence alone in dealing with a lunatic, dangerous to himself or to others. Here, as elsewhere, force *is* a remedy, and a means of prevention.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

We have reason to believe that Mr. Sibley's candidature is popular among the ranks of those who hold the Fellowship of the College. His professional ability and personal character have long tended to make him popular with leading hospital surgeons in London, amongst whom he enjoys the further advantage of being well known. The rank-and-file of the Fellows, metropolitan and provincial, cannot but feel satisfaction in the possible election of one of their number who will break through a stereotyped tradition. Lastly, the Members have every reason to be satisfied at the prospect of a general practitioner sitting on the Council; indeed, this innovation will be satisfactory to all practitioners, inclusive of those who do not hold a College diploma. If elected, the presence of a courteous advocate of reform at Lincoln's Inn Fields will be of the greatest service to outside reformers. It is to be hoped that the latter will always choose leaders of known position and recognised social abilities as spokesmen at conferences with representatives of the Council, and particularly at those meetings of Fellows and Members in presence of the Council which have become a prominent feature in contemporary medical politics. The licentiates

of the College have exhibited both enthusiasm and courage at the meetings in question, but they have not yet reaped the fruits of their exertions. This is due partly to the natural dislike of the Council to yield in any way whatever; partly, it is only fair to add, to the impracticability of some of the proposed changes without an alteration in the charter; but still, in great part, to a certain want of experience and organisation amongst the Fellows and Members themselves. Representative men like Mr. Holmes and Mr. Gamgee have taken part in the College meetings; and it will be better if the Fellows and Members place even more confidence in such advocates, and leave affairs more in their hands.

Mr. Reginald Harrison is an honoured provincial surgeon, and, as we observed last week, he practises in a great city which has never, as yet, had a representative on the Council. Mr. Lund has well fulfilled his trust, and, we believe, well deserves re-election. Mr. Willett has taken an active share in the movement amongst the Fellows and Members, and, joined to Mr. Macnamara, Mr. Sibley, and other actual or possible members of Council, would greatly help the good cause. Mr. Couper is another recognised advocate of reform. Mr. Berkeley Hill, Mr. Rouse, and Mr. Brudenell Carter, are all London surgeons more or less well known. All three will, of course, be supported by their friends amongst the Fellows, and by others who will vote for them simply because their names are familiar. It is to be hoped, however, that the associations formed for promoting the interests of the Fellows and Members will take care to ascertain the views of these gentlemen respecting reform in the Council, and the rights of those who hold the diplomas of the College.

THE Very Reverend the Dean of Westminster will distribute the prizes to the students of the Medical School of St. Thomas's Hospital, on Wednesday, June 30th, in the Governors' Hall.

THE Governors of Middlesex Hospital have decided to initiate a scheme for building residential chambers for medical students on the site of three houses in Cleveland Street. A limited liability company is to be formed, with a capital of £7,000, to be divided into shares of £5.

SCARLET FEVER appears to be lifting its head again at Salford. Last week 34 cases of it were recorded, as against 11, 12, 20, and 22 in the four preceding weeks.

THE annual meeting of the Association for the Promotion of Medicine by Research was held at the Royal College of Physicians, on Tuesday, June 15th. The officers and Council for the ensuing year were elected. Mr. Clinton Dent having resigned the post of secretary, Mr. Stephen Paget was elected in his stead.

IN replying to the observations made at the meeting of the General Medical Council, on the report of the visitors of examinations, with reference to the University of London, Dr. Quain adduced, in evidence of the position which the graduates of that University held, that, of the Fellows of the Royal College of Physicians of London, elected during the last twenty years, the numbers for the several universities were as follows: London 70, Cambridge 30, Edinburgh 28, St. Andrew's 24, Oxford 22, Aberdeen 11, Dublin 6, Glasgow 8, Durham 1, and foreign 17.

BRITISH MEDICAL BENEVOLENT FUND.

ON the occasion of the celebration of the jubilee of this excellent institution, Her Majesty the Queen has sent a donation of £100 through Sir James Paget.

DEATH OF MR. ROYES BELL.

WE regret to have to announce the death of Mr. Royes Bell, Surgeon to King's College Hospital. Mr. Bell was on a visit to Folkestone, when he was seized with hemiplegia on the morning of June 14th; he never recovered consciousness, and expired early on the following day. Mr. Bell, who appeared to be in his usual health up to the time of his sudden illness, was only 44 years of age. The funeral took place yesterday (Friday), at Brompton Cemetery.

CAMBRIDGE MEDICAL GRADUATES' CLUB.

THE annual dinner of the Cambridge Medical Graduates' Club will be held this year at Cambridge, on Saturday, July 17th. The Master and Fellows of Caius College have kindly promised the use of the College Hall for the occasion. The chair will be taken by Sir George E. Paget, M.D., K.C.B., and a large gathering of graduates is expected, as this is the first time the Club has met in Cambridge since its formation.

PHOSPHORUS POISONING FROM SUCKING MATCHES.

THE deaths of children from sucking lucifer matches have of late years happily been decidedly unfrequent, but it appears that this form of poisoning is not quite obsolete. At an inquest lately held in Chiswick, the evidence showed that the deceased, a child of two years old, had been taken ill with vomiting after playing with some lucifer matches; death had ensued on the following day. The name of the maker of the matches did not transpire, so we have not the opportunity of cautioning the public against the articles supplied by that firm.

POISONING BY LOBELIA.

AN inquest was lately held on the body of a man who died from an overdose of lobelia seeds. So many similar cases have been recorded during the last thirty or forty years, that it is unnecessary to state the symptoms, or *post mortem* appearances, which were both quite characteristic, and may be found in any of the text-books on forensic medicine. The herbalist who had sold the drug, with the usual assurance of his class, boasted of the amount he sold yearly, and was prepared to produce a couple of hundred people who would give a practical demonstration that the doctors knew nothing about the drug, or the effects of a so-called fatal dose. There was no evidence that he advised the deceased to take the seeds (though he had offered to sell him a smaller quantity), and, therefore, the jury could not return a verdict of manslaughter against him; but it is certainly time that some steps were taken to diminish the number of deaths for which this drug is responsible; and if anyone would take the trouble to collate all the cases which have been recorded in this country in the last fifty years, we have no doubt that such a profound impression would be produced on the public mind as would lead to the speedy inclusion of lobelia amongst drugs that may not be sold except by licensed persons.

HEALTH OF THE TROOPS IN EGYPT.

THE telegrams published by the daily papers have caused a good deal of uneasiness in the public mind with regard to the health of the British troops in Egypt. This uneasiness has been only partially allayed by Mr. Bryce's statement in the House of Commons on Wednesday last. From inquiries which we have made, we are enabled to state that the amount of sickness, though very considerable, has not been so great as to justify the alarmist rumours which have been put in circulation, and that the mortality has been by no means high. It was inevitable that troops, consisting, in large part, of very young soldiers, exposed for a prolonged period to one of the most trying climates in the world, should show a high rate of sickness on the return of the hot season. The official returns for the week ending May 21st, which are the latest detailed returns received in this country, show a total mortality of 11 in a force of 3,279 men at the front. Most of the cases of serious illness were due to enteric fever (68) or dysentery (26); but there had also been a considerable number of cases of other fevers

(32); altogether, there were 126 cases of these three diseases with 10 deaths, all attributed to enteric fever. This week showed the highest mortality up to that time. In Lower Egypt, the rate of sickness and mortality were much smaller. On the whole, therefore, it may fairly be said that, though there has been a great deal of sickness, a large proportion of the cases were not serious, and the mortality has been low. The number of men invalided home has been large. There is, we believe, a desire to reduce the force in Egypt; and, therefore, where there is a doubt, the decision is always in favour of sending the man home. Prevention is better than cure; and it is certainly a wise policy to get young men, debilitated by a slight attack of illness, out of so trying a climate with all possible speed.

THE SOCIETY OF MEDICAL MEN QUALIFIED IN SANITARY SCIENCE.

THE Society of Medical Men qualified in Sanitary Science, which came into existence about three months ago, already embraces a hundred ordinary members, and has recently elected a number of honorary members, among others, Dr. R. Koch, of Berlin. Sir Joseph Fayrer is the President, and Sir Charles Cameron, Sir Douglas Maclagan, and Mr. John Simon, C.B., are the Vice-Presidents. The first annual meeting of the Society will be held during the present month. All medical men possessing a sanitary science qualification obtained after examination in the United Kingdom are eligible for election as members; and one of the objects of the Society—the registration of such qualification—appears likely to be very quickly attained, through the agency of the Medical Bill. The Honorary Secretary is Mr. J. E. Cooney, 20, Vereker Road, S.W.

THE MICRO-ORGANISMS OF LUNG-DISEASES.

ON Wednesday, June 16th, Dr. Acland gave a demonstration, at the Brompton Hospital for Diseases of the Chest, of the micro-organisms found in diseases of the lungs. He exhibited a large number of cultivations as types of the various species of organisms, as well as microscopical specimens of aspergillus mycosis, woolsorters' disease (anthrax), septic pneumonia, pus from empyema, diphtheritic membrane, and actinomycosis in man and cattle. The next demonstration will be on June 26th, at 4 P.M., when the organisms found in pneumonia and tubercle will be exhibited, and the subject will be illustrated by cultivations, drawings, and many of Dr. Crookshank's microphotographs.

HEALTH OF HASTINGS.

THE corrected death-rate of Hastings, for the past quarter of the present year, calculated upon a total of 228 deaths, was equal to 18.73 per 1,000; this is 1.39 per 1,000 above the average of the past five years. Of the 215 registered deaths, 32, or 14.88 per cent., occurred amongst non-residents or visitors. The severe and trying weather experienced during the quarter has told its tale by the increase in the quarterly death-rate, this increase being observed not only at Hastings, but throughout the country generally. The general death-rate of England exceeded by 0.6 per 1,000 the average rate of the corresponding quarter of the past ten years, and was higher than any recorded in the first quarter of any year since 1879. The deaths from diseases of the respiratory organs (including phthisis), 91 in number, or 39.91 per cent. of all the deaths recorded in Hastings, were very largely in excess of any quarter during the past six years.

BRAIN SURGERY.

A MAN was recently admitted into the National Hospital for the Paralysed and Epileptic (Queen Square), suffering from a severe form of epilepsy consequent upon an injury to the head which had involved the brain. About three weeks ago, Mr. Victor Horsley, who is assistant-surgeon to the hospital, trephined in the neighbourhood of the scar, cleared away the injured bone, and excised the scar in the brain. In order to remove the whole of the scar tissue it was necessary to excise from the upper end of the fissue of Rolando a mass of mixed cicatrical and brain tissue measuring about an inch and a half long, an inch deep, and three-quarters of an inch broad. A drainage tube was introduced at the operation, but removed on the following day; a little serum had to be let out from the cavity of the wound on the fifth day, but the wound was practically healed within a week, and all dressings were removed on the tenth day. The patient never had a bad symptom, but it is as yet too early to form any opinion as to the prognosis with regard to epilepsy, though when inquiry was made we were informed that he had had no fit since the operation. It is interesting, in face of the reiterated misstatements of a certain knot of agitators, to learn that the operator in this most successful case,—successful that is so far as surgery can make it—was guided not by the generally prevailing doctrines with regard to the treatment of wounds, but by principles established by experiments on animals.

DURHAM UNIVERSITY AND THE MEDICAL ACTS AMENDMENT BILL.

WE have received a communication from Dr. Luke Armstrong, writing on behalf of the council of the University of Durham College of Medicine, in answer to certain observations made by Sir John Lubbock and Professor Sir Henry Roscoe during the discussion on the Medical Acts Amendment Bill in the committee of the House of Commons on Monday, May 31st. Sir John Lubbock is reported to have stated that "he should say there were not more than twenty or thirty medical undergraduates at the Durham University." As a matter of fact, the medical undergraduates in attendance at the university during the last year, 1885, numbered 234 (see *The University Calendar*, 1886), of whom many were already qualified to practise, and the number of individual entries for the examinations for the degrees in medicine (excluding those for the special arts examinations for the degrees in medicine) during the period from May 1st, 1885, to April 30th, 1886, was 245. Of this number, 186 passed the various examinations for the degrees, of whom 53 graduated, 42 passed the first examination (old regulations), 54 the first examination (new regulations), and 27 the second examination (new regulations).

HOME HOSPITALS ASSOCIATION.

FROM the eighth annual report of the Home Hospitals Association, presented at the annual meeting, presided over by Sir Rutherford Alcock, K.C.B., it appears that the total number of admissions during the year was 282; of these, however, 48 were relatives in attendance, the actual number under treatment being 234 (114 males and 120 females); 87 applications were rejected for want of room, and 46 were ineligible from nature of illness. Of the number of cases treated, 10 were fatal. The financial condition of the Association remains very satisfactory, the annual expenditure being £3,787 2s. 7d., and the income £4,574 12s. 6d., showing a balance in favour of the Society of £787 9s. 11d. for the year, which is devoted to the reduction of the existing debt, there being a heavy mortgage and a loan unpaid. The report concluded by thanking the Medical Board of Reference, and the staff of the hospital, for their services during the past year.

NATIONAL PHYSICAL RECREATION SOCIETY.

A SOCIETY, with Mr. Herbert Gladstone as chairman, and such representative men as Lord Charles Beresford, Lord Harris, and Messrs. A. G. Steel, Edwardes-Moss, and Dr. Pilkington, M.P., on its Council, has been formed to promote physical recreation amongst the working classes. Wherever facilities for such recreation have been provided, they have been highly appreciated, and have undoubtedly done much to raise both the mental and the physical standard of those who have been wise enough to avail themselves of them. *Mens sana in corpore sano* is a saying as true as it is trite; and the new Society may reckon upon the hearty support of the medical profession, which has always shown itself an unselfish guardian of the public health. The objects of the Society are stated to be: "1. To assist the working classes in obtaining, especially during the winter months, physical recreation, consisting of musical drill, vocal marching, calisthenics, gymnastics, and other healthful games and exercises. 2. To organise and obtain honorary instruction from existing public gymnasia. 3. To

hire or obtain the loan of suitable halls for recreative purposes during the winter months. 4. To assist, by small grants, in providing suitable apparatus. 5. To encourage a taste for physical recreation, and promote the physical development of the people, by issuing a national challenge shield for competition between the various affiliated public gymnasia, and also local challenge shields for competition amongst the voluntary classes in each affiliated district. 6. To encourage legislation in the direction of providing systematic physical recreation in the public elementary school-board system."

DR. VON GUDDEN.

DR. BERNHARD VON GUDDEN, whose melancholy death is reported in connection with that of the King of Bavaria, was Professor of Psychiatry in the University of Munich, Superintendent of the Lunatic Asylum of that city, and a Member of the Supreme Council of Health.

GERMAN OPINION ON BRITISH MEDICAL SOCIETIES.

THE *Deutsche Medizinal Zeitung* expresses great admiration of the manner in which discussions are conducted in British medical societies. In relation to the debates on the removal of the uterine appendages, held last February at the Liverpool Medical Institution, the *Medizinal Zeitung* observes:—"The spirit of sound common sense and the candour of Englishmen was admirably displayed throughout the discussion. This proves the influential position held by English medical associations unsupported by any kind of State assistance, and the power which they exercise by means of their free discussions, in the course of which the welfare of the patient is ever held to be, together with the dignity and brotherly feeling of the medical profession, the foremost aim of medical labour. Such clinical histories as were thus brought forward should be more frequent amongst us. Yet where could we find, in Germany, a society which could get medical men to divulge similar experiences at its meetings?" This complimentary harangue is not entirely unmerited; and, much as they may be deprecated, the disputes as to priority in the introduction of a new operation, so familiar to our readers, are not without their advantages. They not only favour the freedom of discussion so dear to our countrymen, but they also display emulation in curing persons or saving their lives. However selfish such a spirit may be, its fruits are of direct advantage to the community.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

IN 1880, this Association was established for the purpose of providing efficient medical relief, upon mutual assurance principles, "for that large class among the wage-earners which is between those who can afford to pay the ordinary medical fees and those who are fit recipients of the medical relief provided by the poor-law." At the annual meeting of the society, held lately, the Secretary (Mr. W. G. Bunn) made a statement of the work of the Association during the past year. Active operations, he said, were commenced in 1881, since which time eight branches had been opened, and three existing provident dispensaries taken over, making eleven branches at work, in the following districts: Bloomsbury, Clerkenwell, Croydon, Camden Town, Deptford, Dalston, Hackney, Kensal Town, Pimlico, Rotherhithe, and Soho. Each dispensary had the services of a staff of respectable qualified medical practitioners resident in the neighbourhood, and members were required to make regularly, in sickness and in health, small monthly contributions. In this way, working men, at a cost within their means, had, along with their wives and children, the advantage of the highest medical skill and the best medicine, with treatment at their homes, if necessary, while suitable cases were recommended to general or special hospitals. Of the eleven branches of the Association, five were now entirely self-supporting, and there was every reason to believe that two others would become so by the end of the present year. It was estimated that a sum of £500 would be necessary to enable the Association to meet the requirements of the six branches still depending upon it, and to carry on its work to the end of the present year.—Dean Bradley moved the first resolution, which affirmed the beneficial character of the work done by the Society in supplying good medical attendance and medicine to about 26,000 members of the working-classes on "reasonable, paying, and non-pauperising terms."—The motion was seconded by Sir Spencer Wells, supported by Mr. Claude Montefiore, who pointed out that the work of the Association greatly relieved the pressure on the outdoor departments of the great London hospitals, and carried unanimously. The second resolution, which was moved by Mr. Bousfield, set forth the desirableness of sufficient funds being raised to extend the same self-supporting system into such districts where it is urgently needed. In the course of subsequent speeches, allusion was made to the unsatisfactory nature of the present dispensary system, which was often worked by unqualified men, who, in some cases, it was alleged, prescribed the same, or, at least, some two or three medicines, for all sorts of diseases. The resolution having been adopted, the meeting was brought to a conclusion.

A PIONEER OF EUROPEAN MEDICINE IN JAPAN.

THE *Sei-i-Kwai Medical Journal* for April contains a biography, by Dr. W. Norton Whitney, of Sugita Gempaku, a Japanese physician and scholar, who lived in the middle and latter part of the last century, and who took a prominent part in breaking down the prejudices against European medicine and surgery, which had been supported by the Chinese and Japanese schools. The difficulty of his labours was greatly increased by the policy then in force on the part of the Japanese Government, who had excluded foreigners from the country, and had even prohibited the study of their language. The latter obstacle was, however, overcome by the perseverance of Sugita, whose position was probably favoured by the circumstance that he was a member of a family who had for many years rendered medical service to the rulers of Japan. In 1771, he obtained possession of a Dutch work on Anatomy, the *Tafel Anatomica* of John Adam Kurumanns. On looking over this book, he was struck with the numerous discrepancies between it and what he had been taught as to the anatomy of the human body. He thereupon, having obtained permission, went with two friends to witness the dissection of the body of an executed criminal. It appears that this ceremony was performed by the executioner, who pointed out the different viscera. Sugita and his friends compared what they saw with the diagrams in the book, and found that they agreed, while the description given in the Chinese books was altogether different. This discrepancy had already been observed by two court physicians, Okada and Fujimoto, who had accounted for it by supposing that the anatomical structure of one race differed from that of another. After this, Sugita and his friends determined to study Dutch, in order to translate the work on anatomy into Japanese. This undertaking was beset with very great difficulties; Sugita, at the time, knowing little more than the alphabet, and one of his friends, Maeno, possessing only a Dutch vocabulary of a few hundred words. They had no dictionary nor grammar. Notwithstanding these difficulties, they set to work ravely, spending sometimes a whole day in tracing out the meaning such a simple sentence as "the eyebrow is hair growing a little above the eye." In a graphic account of their labours in ascertaining the meaning of a Dutch word, and the success which attended their efforts in reasoning out the meaning from analogy, Sugita says: "The feelings of joy which I experienced then cannot be told; I felt as if I had obtained a whole castle full of precious stones." Gradually, by perseverance, and meeting six or seven times every month, they became better acquainted with the language, and were, after a while, able to translate ten lines in a day. The whole work occupied four years in translation. It was rewritten eleven times, and was published by Sugita under the name of *Kai-tai-shin-sho*, or *New Work on Anatomy*. It met with a favourable reception, and passed through two editions and a revision. It consisted at first of three volumes, but was afterwards enlarged by another writer to thirteen volumes, under the name of *I-han-tei-kō* (*Outline of the Principles of Medicine*).

is satisfactory to learn that Sugita, and those who assisted him, received many honours, and that a large number of students came to them from all parts of the country. His descendants to the present day have followed in the footsteps of their worthy ancestor, and have done much towards the establishment in Japan of a new civilisation, one of the forerunners of which was the introduction of Western medicine. The memory of such a man as Sugita Gempaku deserves to be held in honour, not only by his own countrymen, but by all who feel an interest in the progress of science and civilisation.

DEATHS AFLOAT.

A REPORT, written by Mr. Thomas Gray, one of the Assistant-Secretaries to the Board of Trade, and recently presented to the President of the Board of Trade and the Royal Commission on Loss of Life at Sea, has been published as a Parliamentary paper. In dealing with the mode of inquiring into the causes of death at sea, a suggestion is made which may have an important bearing on a subject recently discussed in these columns, that is, the present state of the Medical Service of the Mercantile Marine. Under existing regulations, if it come to the knowledge of the officials of the Board of Trade, on the arrival of a ship in port, that a death has occurred from injury or ill-treatment, the superintendent of a Mercantile Marine office can hold an inquiry; he can take evidence on oath, can summon witnesses, and, if it appear to him that death has been caused by violent means, he can take immediate steps for bringing the offenders to justice. Where injury or death has been caused by a negligent or wrongful act which renders the ship-owner liable, damages may be sued for before a sheriff and a jury; but, "as the proceedings are cumbrous and expensive, and the amount which can be recovered is only £30 in respect of each death or injury, the law is practically a dead letter." Moreover, any inquiry held ashore into the cause of a death at sea must be unsatisfactory, for the body cannot be inspected, essential witnesses may not be forthcoming, and months may have elapsed since the event. Mr. Gray thinks that an "important step would be to ensure, in foreign-going ships, that an inquest be held on board at the time, in which the whole, or in large ships a certain number, of the crew, and, in the case of ships carrying passengers, of the passengers also, should form a jury like a coroner's jury, and that a full report, with signatures, should be made and entered in the log." If such an inquiry is to be held, it would seem to be essential that it should be conducted by an officer not directly responsible for the working of the ship, and holding a position which gave him some independence. If the reforms in the Mercantile Medical Service already indicated in these pages be carried out, such an officer would exist in the surgeon of the ship, and it is suggested that he would be the proper official to act as coroner, to inquire into and report upon all deaths by violence on ship-board. No reliance could be placed on a report drawn up, or an examination held, by any officer of the ship, who is entirely in the hands of the ship-owners; and, as to the passengers, it would not, as a rule, be possible to obtain their attendance at an inquiry held after the return of the ship to this country, especially if the ship had been outward-bound at the time of the accident. The medical officer could, of course, always be summoned to attend any subsequent inquiry; and, if a Mercantile Marine Medical Service were organised whose members would have an official standing, with adequate pay and retiring allowances, there would be no difficulty in securing the services of a thoroughly trustworthy set of gentlemen.

PHYSIOLOGY OF MARRIAGE.

IN the cyclical discussion which takes place on the question of the propriety of marriage with a deceased wife's sister, many of the speakers give evidence of a want of familiarity with the physiological aspect of the question, which is probably, after all, the most important factor in the case. In any case, it is the only aspect of the question which can appeal to members of the medical profession, and therefore merits that a little light should be thrown upon the subject. It is a generally accepted maxim that interbreeding affects the offspring injuriously; but, without entering into the subject, it may be mentioned that this opinion does not rest on an absolutely unimpeachable basis, and is moreover absolutely contradicted in many particulars by breeders of cattle. The probability is, that marriage between members of the same family is only attended with undesirable effects on their offspring when a hereditary taint exists, which is thereby intensified. But even if we admit the assumption that marriage within certain limits of consanguinity is undesirable and hurtful, the argument is still without value in the present instance. It is impossible to allege any consanguinity between individuals, such as a man and his sister-in-law, who spring from different family stocks, and have, physiologically speaking, nothing in common. Whatever evil results may attend marriages between near relations are certainly not to be feared here. The question is really one of social order, and should be decided, not on political or family considerations, but in accordance with the dictates of physiological science and common sense. It is absurd to lay down, or attempt to lay down, any absolute rule on the subject of the marriage-laws, seeing that in no two countries are they quite alike; and what may be admissible with one people is not uncommonly peremptorily negatived elsewhere. Even the fundamental laws are subject to the influence of civilisation, and climate, and custom. It is, nevertheless, extremely desirable that the question should be disposed of in such a way as to avoid the necessity for a constantly recurring discussion, which can do no good, and may not improbably be attended by disageeeable results with regard to the relations in the domestic circle throughout the country.

THE ODOURS OF PARIS.

WITH the first few days of hot weather, the annual wail has gone up in Paris, against the intolerable emanations which appear indigenous to the gay, but unhygienic, capital. The "full seven and twenty stenches, all well defined, and several stinks" of Coleridge, may all be recognised and classified under favourable circumstances, in the French metropolis; and even the natives, *blasé* though they must be towards olfactory inconveniences, are fain to articulate a complaint. The causes of the "bouquet" are by no means agreed upon. By some, they are attributed to the fermentation of the material stored up in the 80,000 cesspools of Paris, while others ascribe them to the sewage-farms, which are established outside the city. No doubt can exist, however, that the former are largely responsible for the nuisance. Anyone who has chanced to pass along a street where one of these cesspools is being pumped out by steam—and no one can be much about at night without tripping over the tubes of half a dozen—can bear witness to the insupportable stench with which they infect a considerable area—a stench so powerful, that it produces a feeling of asphyxia in the unlucky individual who unsuspectingly inhales it, and which requires a cigar, and, sometimes even a *bock*, to overcome the fœtid taste and smell. Now and again the pipes burst, under the pressure, and then a whole quarter is rendered impassable, except with a nose firmly pinched and a handkerchief to the mouth. Apart from these constitutional stinks, every French house contains its own little collection of disagreeable effuvia, and this remark applies just as much to the best as to the worst houses. Even where the so-called "water-closets" are kept tolerably clean, in apartments, by the aid of a few drops of water, and a brush at the end of a stick, those at the top of the houses for the servants, and those at the bottom for the stable men, are invariably in as filthy a condition as disgusting personal habits and studied neglect can make them. The *concierge* is responsible for their maintenance in a state of cleanliness; and he is not likely to do his duty conscientiously, seeing that when, under great pressure, he pays them a visit with a pail of water and a broom, it necessitates the ingurgitation of several *gouttes* to remove the souvenir of his exploit. The owners and occupiers appear to treat the matter with the most utter contempt and indifference, although this is indicative of a shortsightedness which would disgrace a navvy. The

fact is, Frenchmen look upon hygiene as a theory to be admitted and discoursed upon, but not carried into practice. They keep their streets tolerably neat and clean, and relegate their filth to the interior of their dwellings, where only the privileged get a glimpse of it. It may be thought that these strictures are too severe, but no one, who has lived in *maisons meublées*, or in unfurnished apartments, would question their justice or their accuracy. It would be difficult to find a house, even in the Avenue des Champs Elysées, where a "water-closet," in the English sense of the term, exists, unless perchance it has been inhabited by an Englishman or an American, whose first care is to remodel these conveniences in accordance with Anglo-American ideas of what is right and proper. So long as the plainest scientific facts are ignored by the authorities, and by individuals, little can be done to prevent the tendency of Parisian atmosphere to "*puer et tuer*;" and, until the faculties of medicine in France have used the weight of their influence for the better observance of the precepts of sanitary science, they must lie under the accusation of culpable indifference to the public health, which is seriously menaced by the neglect of the most elementary principles. Another smart outbreak of cholera may, perhaps, contribute to their better appreciation, although the relative mortality from typhoid fever in Paris and in London, with twice the population, should long since have sufficed to direct attention to the necessity for vigorous and efficient interference.

THE PHYSIOLOGY OF THE LONDON SEASON.

THE use and the abuse of the London season is a subject of vast importance. When it is considered what an unusual strain is borne by those who systematically "do" their season, it is a matter of no small surprise that so little illness results from their exertions. Nevertheless, when we contemplate the jaded faces and disappointed expressions of those who are to be found at the railway stations after the conclusion of the Eton and Harrow match, we cannot but conclude that some of Nature's most potent laws have been rudely violated during these two or three months of so-called pursuit of pleasure. Take any ordinary London dissipation in the hot weather, and ask, what does it mean physiologically? It often implies a subsequent loss of strength, a sensation of fatigue, *malaise*, loss of temper, and irritability. The inhalation of carbonised, in place of oxygenated air, involves a retardation of the pulmonary circulation. Hence, an extra amount of work is thrown upon the heart, doing its best to force on the blood *à tergo*, which is impeded by the stagnation in front. Hence, again, less energy of the heart to supply the locomotory apparatus. Thus fatigue, produced by deficient blood-supply, and also by deteriorated quality of that fluid, is the result. The proper rate of exchange of tissue is delayed. Hence, accumulations of urea, bile, and other secretions or excretions, which are normally got rid of as soon as their duties have been performed, but which now are unable to "move on." Hence, also, the indescribable feeling of fatigue, as opposed to being tired after healthy exertion, that feeling which renders a man unable to take exercise, although he has the inclination to do so, which makes him cross and irritable, which renders his special senses so acutely sensitive, that a very slight noise, a very bright light, a very faint perfume of fresh flowers, are regarded by him as personal insults. Not the least important element in the causation of fatigue during the London season, is found in the exertion undergone by the muscles of the eye, in the pursuit commonly called "sight-seeing." Take, for instance, the Royal Academy. Supposing a person looked at 500 out of the 2,000 or odd articles, and, between each inspection, glanced down at his catalogue to find what it was all about. This would involve 1,000 motions of the iris, not to mention the upper and lower recti, and the more complicated, but equally necessary, trochear muscles. Then, again, in addition to the nervous energy expended in this amusement, we have to consider the intellectual, the emotional, and the volitional functions, which are actively called into play. It has been said by an eminent teacher of elocution, that, in public speaking, we have three things to do—to stand, to think, and to speak. The devotee to art has to stand, to think, and to sweat; and it is only by the perspiration expended in his researches, that he is enabled to carry away enough information to hold his own in society during the London season. Yes, indeed, the race is to the swift, and the battle to the strong, if we are only to pursue, even in moderation, the temptations to fatigue which are now so alluringly spread before us. The strain upon the locomotory, the digestive, the respiratory, the circulatory, and the nervous systems, is very great; and happy is he who is clever enough to have learnt the secret of using, without abusing, the sweets and pleasures of the glorious season, now almost at its height, in our civilised metropolis.

CORROSIVE SUBLIMATE AS AN ANTISEPTIC.

THIS substance has come into very general use during the last few years, in the form of a solution, as an antiseptic. There can be no doubt that it possesses very considerable antiseptic powers; but, unfortunately, it is also a violent poison, and abundance of cases are now on record which show that its use is often attended with very great risk of toxic effects resulting from its absorption. In a paper recently contributed by Dr. Lucien Butte to the *Nouvelles Archives d'Obstétrique et de Gynécologie*, a long series of such cases are adduced, in many of which a fatal result followed persistent vaginal injections of the solution of Van Swieten (1 in 1,000). The symptoms of poisoning were the more difficult to detect from the fact that, occurring during the puerperal period, they were masked, to some extent, by those incidental to this state. They consist principally of hypogastric pain and tenderness, violent abdominal pain of a colicky character, accompanied by frequent mucous stools, often stained with blood. The urine is generally diminished in quantity, and contains epithelial cells, casts, and more or less albumen. Salivation is most frequently absent, but the mouth and throat are red and dry, and there is marked thirst. Dr. Butte is inclined to consider that absorption occurs most frequently in cases where lacerations of the perinæum, or of the cervix uteri, have taken place, or where large ulcerating surfaces are present. The toxic effects are naturally more marked in debilitated and cachectic patients. The *post mortem* appearances are indicative of enteritis, with sloughing of the mucous membrane of the large intestine, while the kidneys are enlarged and anæmic. Deposits of crystals of oxalate of lime are common in the uriniferous tubules, due, it is suggested, to the decalcification of the bones, which is said to result from the presence of the bichloride in the system. As Dr. Butte quotes no fewer than twenty cases, in which the fatal result was attributable to absorption of the mercury, it is evident that, in obstetric practice at any rate, the use of even extremely dilute solutions requires very great caution.

SCOTLAND.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.

THE monthly Report of the Royal Hospital for Sick Children, Edinburgh, shows that, during May, 114 patients were treated there. On April 30th, 62 patients were in the hospital, and 52 were admitted during the month; 33 were discharged cured, and 8 were relieved. The average daily sick in the hospital during the month was 62. At the dispensary, 509 patients were treated, and 22 vaccinated, making a total of 531. Of the 260 new cases during the month, 211 were from the city, 33 from Leith, and 16 from the country. Thus the total number of patients treated at the hospital during the month was 645.

ABERDEEN ROYAL INFIRMARY.

THE annual report of this institution, which has just been issued, shows that 1,951 patients were treated in the infirmary during the year. The receipts show a decrease of £950; this represents one-eighth of the total annual expenditure, and is, indeed, a serious

matter. The managers point out that, if annual deficits are to continue, the number of patients received must in future be curtailed. A new charter has been drafted, and it contains numerous changes and improvements in the constitution and working of the institution. As in other large hospitals, there is to be a board of directors elected by the contributors. The management of the lunatic asylum is to be separated from that of the infirmary.

SERIOUS FIRE IN ABERDEEN LUNATIC ASYLUM.

A FIRE of a serious nature, but fortunately entailing no loss of life or serious injury to anyone, occurred in one of the dormitories of Aberdeen Lunatic Asylum on Tuesday night. The part of the building attacked by the fire was that occupied by the pauper lunatics. All the inmates were in bed at the time, but we are glad to say they were soon removed to a place of safety; one only, it is said, has escaped. The fire brigade, with the assistance of Dr. Reid and the attendants, succeeded in subduing the conflagration, but damage to the extent of £1,000 has been done.

NEW CHARTER FOR ABERDEEN INFIRMARY AND LUNATIC ASYLUM.

THE new draft charter for Aberdeen Infirmary and Lunatic Asylum has just been prepared, which carries out the resolutions adopted by the managers in December last. It separates as completely as practicable the management of the Lunatic Asylum from that of the Infirmary and Convalescent Hospital, considering the same body of managers have the control. The number of each of the two boards of directors required respectively for the Infirmary, Convalescent Hospital, and Asylum was fixed, by the resolutions, at fifteen; but, subject to the approval of the managers, the committee have fixed the number at nine. The difficulty felt about the nomination of representation by bodies which had no corporate character, has been removed by the new charter, and any body of persons, slight though the bond between them may be, subscribing the necessary funds, may nominate managers; while power is given to those providing a perpetual income to the institution, to have power to make provisions for the nomination of managers in perpetuity. An important change has taken place, following the example of the Royal Infirmary, Edinburgh, which popularises the management, by admitting members of £1 annually so soon as they have paid three subscriptions, and so long thereafter as they shall continue to subscribe. It is suggested that the Committee of Management should be directed to inquire as to the expediency of carrying out the contemplated changes by means of an Act of Parliament in place of a new charter.

LECTURES TO PRACTITIONERS IN GLASGOW.

WE learn that a course of lectures to practitioners is being organised in Glasgow for the coming autumn, the lecturers being Professor Gairdner, Dr. Joseph Coats, and Dr. D. Newman. Each of the lecturers proposes to take up a branch of medicine or surgery with which he is specially familiar, and it is intended to make the course as practical as possible. The course will extend over the first three weeks of October, and the meetings will be two in the week. At each meeting, there will be two lectures, so that the whole course will include twelve lectures, or four by each lecturer. Dr. Gairdner will probably lecture on some of the abdominal diseases associated with the name of Tabes Mesenterica in the Registrar-General's returns; Dr. Coats proposes to take up the Pathology of Phthisis Pulmonalis, with special reference to its causes and associated lesions in other organs; and Dr. Newman has chosen Affections of the Kidneys to which surgical treatment is applicable.

GLASGOW AND THE BRITISH MEDICAL ASSOCIATION.

THE following is the list of the Committee formed in the prospect of the Association going to Glasgow in 1888. Nominated to the Council of the Association as *President-elect:* Professor W. T. Gairdner. *Chairman of the Executive Committee:* Dr. Andrew Fergus. *Honorary Local Secretaries:* Professor J. G. McKendrick, F.R.S.; Dr. J. Christie; and Dr. J. Glaister. *Honorary Local Treasurers:* Dr. D. Yellowlees and Dr. J. Coats. *Committee:* Professor McCall Anderson, Professor George Buchanan, Drs. Barr, Barlow, Beatson, Carr, H. C. Cameron, M. Cameron, W. T. Dun, E. Duncan, J. Dunlop, J. Finlayson, A. L. Kelly; Professor Macleod; Drs. McVail, Morton, E. Maylard, Macewen, Newman, Napier, Perry, A. Robertson, McGregor-Robertson, J. B. Russell, Russell (Western Infirmary), W. L. Reid, Renton; Professor P. A. Simpson; Drs. J. L. Steven, A. Wallace, John Wilson, Thomas, and Drs. Goff (Bothwell), Dobbie, Naismyth, and McKerrow (Ayr); Wallace and Marshall (Greenock); Douglas Reid (Helensburgh), Rutherford (Dumfries), Muirhead (Cambuslang), Loudon (Hamilton), Moyes (Largs), Hunter (Rothesay), Robertson (Dumbarton), Fraser (Paisley), and Frew (Galston). The Committee has power to add to its number.

GLASGOW ROYAL INFIRMARY.

A DEPUTATION from the managers of the Glasgow Royal Infirmary had an interview with the Earl of Dalhousie, and the Lord Advocate for Scotland, on June 3rd. The object of the deputation was to urge on the Government the propriety of introducing a clause into the forthcoming Universities (Scotland) Bill, providing for the erection of the Infirmary into a college of Glasgow University. The deputation consisted of the Lord Dean of Guild, Dr. W. G. Blackie, the Chairman of the Infirmary House Committee, Mr. Hugh Brown, the Secretary of the Infirmary, and Drs. McVail and Duncan. They were accompanied by a large number of Scotch members of Parliament, including Dr. Cameron and Dr. Farquharson. Dr. Blackie stated the case for the Infirmary, going on the lines of the memorial, which was noticed in a previous issue. Dr. McVail and Dr. Duncan followed. The Earl of Dalhousie, in reply, assured the deputation that they had his hearty sympathy, and that, without prejudice to the opinion he might form, should he hear the other side of the question, though, at that moment, he could not understand what the other side could be, he would have regard to the views put before him in framing the Universities Bill. It appears that the representatives of the University at the Infirmary Board of Directors declined to take any part in the discussion of this question.

BEQUESTS TO MEDICAL CHARITIES.

MISS RATTRAY, of Springfield, Dundee, has bequeathed a donation of four hundred guineas to the Royal Infirmary, Dundee, for the founding of two cots in the children's ward.—Miss Isabella Marnie, of Deuchar, near Brechin, who died last week, has bequeathed to Arbroath Infirmary, £100; to Forfar Infirmary, £50; to Brechin Infirmary, £50.

DUNDEE ROYAL INFIRMARY.

THE annual meeting of the Governors of the Dundee Royal Infirmary was held lately. The Report stated that 2,101 cases had been treated in the infirmary during the year; of these, 1,220 were medical, 772 surgical, and 109 fever, the largest number since 1872, when nearly half the cases were fever. The number of deaths was 167, or 7.9 per cent. The medical mortality was 10.7 per cent., the surgical 4.3, and fever 2.8. Excluding the cases which proved fatal 48 hours after admission, the total mortality was 6.6 per cent. In the waiting-room, 1,646 patients were treated, and 6,883 were attended by the district surgeons. The financial report showed that the income for the year amounted to £7,150, being £579 less than the expenditure. At the Convalescent Home at Broughty Ferry, 990 patients were admitted during the year, being an increase of 284, and there was a deficit in the expenditure of £175. The chairman of the meeting, Mr. James Luke, in moving the adoption of the report, mentioned that the directors had resolved to name one of the wards the Miss Baxter Ward, in recognition of the interest shown by that lady, and her generosity to the Institution. The report was adopted, and the managers for the year were elected, Sir John Ogilvy being reappointed president.

VACCINATION IN SCOTLAND.

Dr. Blair Cunynghame has presented to the Registrar-General of Scotland the twenty-first annual report on the vaccination of children born in Scotland during 1884. The returns for that year show that, of the 129,123 children born, 112,122, or 86.334 per cent., were successfully vaccinated. In 1,964 cases, or in 1.521 per cent., vaccination was postponed by medical certificate when the return was made up at the close of 1885; 242 children, or 0.187 per cent., were declared to be unfit for vaccination from constitutional insusceptibility; 265 children, or 0.205 were insusceptible, from previous successful vaccination. None of the children were insusceptible from having previously had small-pox; 11,694, or 9.057 per cent. of the children born, died before vaccination; and in 2,836 cases, or 2.195 per cent., the children were removed from the district in which they were born before vaccination, or, from some other cause, they were unaccounted for. A noticeable feature is the steady increase of postponed cases. The average of postponed cases during the previous ten years was 1.103 per cent,, while for the year 1884 the proportion was 1.521 per cent. Of 117,429 children who were living at the age of six months, 112,122, or 95.481 per cent., were certified to have been successfully vaccinated. In 1,964 cases, or in 1.672 per cent., vaccination was postponed. In 242 cases, or 0.206 per cent., the children were stated to be constitutionally insusceptible of vaccination; 265, or 0.226 per cent., were insusceptible from previous successful vaccination; but none were insusceptible from having previously had small-pox. In 2,836 cases, or 2.415 per cent., the children were unaccounted for, from having previously left the district in which they were born, or otherwise. The deaths from small-pox in Scotland during the last ten years have been as follows: 1876, 39; 1877, 38; 1878, 4; 1879, 8; 1880, 10; 1881, 19; 1882, 3; 1883, 11; 1884, 24; 1885, 16. In eight of the principal towns, only 8 of the deaths were caused by small-pox during 1885, of which 6 occurred in Glasgow, 1 in Greenock, and 1 in Paisley. With reference to the death from small-pox in Greenock, it is explained by the sanitary inspector "that the deceased arrived in Greenock by the Allan liner *Buenos Ayrean* on November 24th, suffering from small-pox, which he had contracted in Montreal. The *Buenos Ayrean* left that port on November 12th, and the deceased sickened on the 21st."

IRELAND.

Mr. Charles Burke Gaffney, demonstrator of anatomy in the Ledwich School of Medicine, and formerly house surgeon to Mercer's Hospital, has been appointed assistant-surgeon to St. Vincent's Hospital.

CORONERSHIP OF SOUTH ANTRIM.

An active and animated canvass was prosecuted in connection with the contest for the vacant coronership of South Antrim. There were, we believe, originally five medical practitioners in the field, but, ultimately, only two gentlemen decided to go to the poll, Dr. Spearing and Dr. J. J. Adams, both of Antrim. Dr. Adams was elected.

BEQUEST TO STEEVENS'S HOSPITAL.

We learn from an American paper, that an Irish gentleman, Mr. Robert N. Moore, who made a fortune by operating in mines and lands in New Mexico, has left, among numerous other bequests, to Protestant Charities in Ireland, and to Trinity College, Dublin, and other educational institutions, a sum of £2,000 to the trustees of the above hospital.

THE MATER MISERICORDIÆ HOSPITAL.

In addition to the appointment of Messrs. Chance and Lentaigne to be surgeons to the Hospital, as mentioned last week, Mr. John Murphy, assistant-physician, has been promoted physician to the institution. We are informed that it has been decided to abolish the office of assistant-physician, and of assistant-surgeon; and that it has been intimated to the holder of the last-mentioned office that his services are, consequently, no longer required.

SOCIETY FOR PROVIDING NURSES FOR THE SICK POOR, BELFAST.

The annual meeting of this valuable Society was recently held in Belfast, and from the report of the work done, it unquestionably fills a want long felt, while its financial condition is satisfactory. During the year, 819 patients were attended by the nurses at their own homes, and no less than 24,394 visits were paid in the past twelve months. The "Needlework Guild," which was established last year, has been very successful; and as a result, 1,195 articles of clothing were received and distributed. The Society has been of incalculable benefit to the suffering poor of Belfast, and we trust may long receive the support of the charitable.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The stated annual meeting of the Fellows of this College, for the election of its Council and officers for the ensuing year, was held on Monday, June 7. On this occasion, the election took place, for the first time, by voting-papers, so that more uncertainty than usual existed as to the result. The main interest was in the contest for the Vice-Presidency, between Dr. A. H. Corley and Mr. William Frazer. Dr. Corley received 110 votes, and Mr. Frazer 78. Mr. Stokes, Professor of Surgery in the College School, was elected President, and Mr. William Colles, Secretary, of the College. The following is the nominal return of the Council elected, and of the votes polled by each. Sir Charles A. Cameron, 166; W. Colles, 166; E. Hamilton, 163; G. H. Kidd, 159; R. McDonnell, 159; H. G. Croly, 158; W. I. Wheeler, 153; E. H. Bennett, 150; Sir G. H. Porter, 144; J. K. Barton, 144; P. C. Smyly, 144; R. Macnamara, 141; W. Carte, 139; W. Stoker, 139; S. Chaplin, 137; H. Fitzgibbon, 137; W. A. Elliott, 133; B. Story, 127; A. Meldon, 123. The only difference between this Council and that of last year is, that Mr. Croly assumes the place of Mr. Wharton who, much to the regret of the College, did not seek re-election to an office in it, which he filled, for many years, with honour and usefulness.

LOCAL GOVERNMENT BOARD FOR IRELAND: ANNUAL REPORT.

From the fourteenth annual report of the Local Government Board, which has been lately issued, we learn that the average daily number of persons receiving in-door relief during the year amounted to 46,188, being 1,139 less than in the preceding year. The out-door lists show an increase of 1,136 in comparison with the corresponding return of 1884-5; while the returns up to January 30th last, in regard to the workhouse inmates, show an increase of 573 over the number relieved at the same time last year, and in regard to those in receipt of out-door relief, an increase of 6,854, being a total increase of 7,427. During the year ended January 16th last, the total number of deaths in the various workhouses was 10,925, showing a decrease of 313 deaths as compared with the number last year. Of these, fever caused 371, against 510; lung-disease, 1,997, against 1,929; and small-pox, 2 deaths, against 1 in last year. There were for the twelve months ending September 29th, 52,238 admitted into workhouses for sickness, being a decrease of 865 as compared with the previous year; and an increase of 22,218 in the number admitted who were not sick; a decrease of 1,151 in those suffering from fever or other contagious disease; and an increase of 20,587 in the total number relieved. In the various dispensary districts, the medical officers during the year attended 414,670 cases at the dispensaries, and 180,816 patients at their own homes, or a total of 595,486, and vaccinated 102,312 persons. Of these latter, 87,771 were under one year when vaccinated, 11,432 above one year old, while 3,109 were re-vaccinations. Up to last January there were 2 deaths from small-pox in workhouses, while the number of cases treated in dispensary districts came to 17, or one

less than the previous twelve months. As regards scarlet fever, it was more prevalent than in the preceding year, there having been 3,526 cases treated by medical officers of dispensary districts in 1885, as compared with 3,198 cases in 1884, or an increase of 328. The Medical Charities' Expenditure amounted to £160,667, under which heading is included the cost of medicines and medical appliances, salaries of medical officers and apothecaries, vaccination fees and other expenses, showing an increase of £2,304 over that of the preceding year. The commissioners have recommended loans amounting to £179,151 9s. 9d., to various towns in Ireland, principally for sewerage and water-supply.

WATERFORD LUNATIC ASYLUM.

At a meeting of the guardians of Waterford Union last week, a resolution was read from the Kilrossenty branch of the Irish National League, asking for an inquiry, by the proper authorities, into the management of the Waterford District Lunatic Asylum, in consesequence of disclosures in recent articles in the *Waterford News*. Alderman Redmond moved that the resolution be adopted by the board. Dr. Scott said that the statements which appeared in the *Waterford News*, with reference to the Asylum, were anonymous. The fact was, the expenses of the Waterford Asylum seemed very much under the general average. The average cost of the asylums throughout Ireland was £23 1s. per inmate during the year, and the cost of the Waterford Asylum was £22 19s. per head. Dr. Buckley, who had been *locum tenens* in the asylum for some time, had denied that the statements that were published in the newspaper were correct, and reported that he had nothing to do with their publication. Another guardian remarked that these articles accused the superior officers in the asylum of gross mismanagement, and if one-sixth of the accusations were true, there ought to be a sworn inquiry. But how could they act on a resolution of the Kilrossenty National League, which resolution was only grounded on articles in a newspaper? After some discussion, the resolution was adopted.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.

The annual general meeting of the Irish Branch of this Association was held, in the Royal College of Surgeons in Ireland, on the 8th instant. Deputy Surgeon-General Gunn presided. The annual report, which was read by the Honorary Secretary (Dr. MacDowel Cosgrave), stated that the number of members in the Branch was fifty, and of associates thirty-four. At the end of last year, the numbers were, respectively, forty-three and twenty-two; two years ago, on the formation of the Branch, they were twenty-eight and three. During the year, the Council had tried, and with success, to spread the work of the Association in the various medical schools. The Honorary Secretary stated that the accounts were fairly satisfactory, and that they had a small balance in hand. From a letter he had received from the Secretary of the principal Branch, he learned that there were now three hundred and forty-one members and fifty-six associates. Ireland stood very high in the list of associates, and their share in the membership was much larger than their proportion. A new Branch is in process of formation at Belfast.

IRISH ASYLUMS AND VISITING PHYSICIANS.

We observe that the subject of visiting physicians to asylums for the insane is causing considerable discussion in Ireland, in consequence of the recent decease of Dr. Henry Mac Cormac, who held the office at the Belfast District Asylum. We are not prepared to say that under no circumstances should there be a visiting medical officer to an institution for the insane, even when a physician resides on the spot. At St. Luke's, for example, the practice is in force, and is successful. But this is an exceptional case, and we feel strongly that the District Asylums in Ireland do not profit by this arrangement, and we hope it will not be continued. It is a sinecure, and is no more required across the Irish Channel than in the county asylums of England and Wales. It is said that, if the office be abolished in Ireland, all exterior supervision will cease—an extraordinary statement when we remember that there are a Board which meets periodically for this purpose, and an Inspector of Lunacy. We have good reason to know that Dr. Nugent, so far from being anxious (as has been alleged) to forward the attempt to get rid of visiting physicians, happens to take the opposite view. This by the way. The real point is, that the district asylums in Ireland derive no benefit whatever from the appointment, and its continuance is mainly due to the satisfaction which governors experience in retaining a little patronage, which is usually bestowed upon one of their favourite medical attendants.

THE CHOLERA.

ITALY.

[FROM OUR OWN CORRESPONDENT.]

Although cases of cholera continue to show themselves in different parts of Italy, the stress of the disease is still confined to Venice and the Venetian province, which is most widely affected. At a small village called Rossano Veneto about eighty cases with twenty deaths occurred in one week in the beginning of June; and, if it be true, as stated in one of the Roman newspapers, that 700 cases have been registered in Venice since April 5th, when the epidemic is held to have begun there, it is clear that, however anxious the authorities may have been to conceal nothing, their published bulletins can only have served to mislead the public, nothing like that number having been officially given up to the present time.

The statement for the week ending at mid-day on the 13th is 103 cases with 61 deaths—not quite half the mortality of the preceding one. This notable diminution coincides with a lower temperature for all the seven days. The Prefect is engaged in inspecting the various contaminated localities in the Province of Venice to find out whether the sanitary regulations are being complied with.

At Bari, there have been sixteen cases, with fourteen deaths, in the same week, and in Apulia generally, there have been decidedly fewer cases, and no new foci of contagion are known so exist in that province.

From Florence comes a persistent denial of the prevalent rumours, but it must be borne in mind that the same tactics were pursued a little too long at Venice. It is to be hoped that there is better justification for the assertion in the case of Florence, where the official world insists, at any rate, that the public health continues excellent. Another of the soldiers belonging to the territorial militia, who were attacked at Cuneo, has died, and as he, too, belonged to a family in easy circumstances, a veritable panic is said to exist among the men who took part in this year's training there.

Bequests and Donations.—Miss Mary Sterndale Rooke, of Keswick, has bequeathed £1,000 to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties at Lancaster, £500 to the Cumberland Infirmary at Carlisle, and £500 to the Cumberland and Westmorland Convalescent Institution at Silloth.—Miss Elizabeth Lancaster has bequeathed £250 to the Cheltenham General Hospital and Dispensary, £250 to the Samaritan Fund and Dispensary, and £250 to the scarlet fever ward and £250 to the small-pox ward of the Delancy Hospital.—The National Hospital for the Paralysed and Epileptic has received £500, "a thank-offering from one who wishes to lay up treasure in heaven," and £20 from "E. F."—The Salop Infirmary, Shrewsbury, has received £360, being a sum entrusted for its benefit.—Louisa, Lady Goldsmid has given £250 10s. to University College Hospital; that is, £200 for the further endowment of the Harriet Henley Cot, and £52 10s. for general purposes.—The Vestry of the Parish of St. Martin in Ongar have given £21 to the London Hospital, £10 10s. to the East London Hospital for Children, £10 10s. to the City of London Truss Society, and £5 5s. each to the Lock Hospital and Asylum, the City of London Lying-in Hospital, the City of London Hospital for Diseases of the Chest, the Cancer Hospital, the Hospital for Consumption and Diseases of the Chest, the Chelsea Hospital for Women, the British Home for Incurables, the City Orthopædic Hospital, St. Peter's Hospital for Stone, etc., the Royal Hospital for Incurables, the Royal Free Hospital, and the Hospital for Women.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1886.

Thursday, June 10th.

Sir HENRY W. ACLAND, President, took the Chair at 2 P.M.

Visitation of University Examinations.—The Council again resolved itself into Committee for the further consideration of the reports on final examinations.

Dr. HAUGHTON, referring to the report on the University of Dublin, said that both the opinions of the visitors and the replies of the Examining Court must, to a certain extent, be discounted. A number of serious charges had been made by the visitors, founded upon supposed facts, which they must have evolved out of their own inner consciousness. These had, however, been so fully answered by the examiners, that it was unnecessary for him to make any remarks upon them. Two of the recommendations had been accepted; namely, that the examination for degrees should be more extended than that for licences, and that more marks should be given by the extern examiners at the medical degree examination. Their silence upon the other recommendations must be taken as indicating a fixed determination not to adopt them. They had separate examinations in medicine, surgery, and obstetrics, and they would never consent to introduce clinical and operative surgery into an examination for a medical degree, any more than clinical medicine into an examination for a surgical degree. The principle that excellence in one subject should not compensate for failure in another, was carried out in its entirety, so far as the three important branches of medicine, surgery, and midwifery were concerned.

Dr. BANKS pointed out that the visitors had stated that the degree of M.B. did not entitle a candidate to registration. The fact was that, when the curriculum for the degree was formulated, it was never intended that physicians should be general practitioners, but it was now the practice in Ireland to obtain a surgical degree as well. There was an inconsistency in the report; for, in one part, the visitors "unreservedly" praised "the *vivâ voce* examination in Materia Medica and Therapeutics;" and, in another, spoke of the "incomplete character" of the examination in "Practice of Medicine and Materia Medica and Therapeutics." It was incorrect to say that the candidate in each case was examined by his own teacher, for neither he nor the Regius Professor of Surgery was a teacher, and they knew nothing about the candidates until the examination. It was also a mistake to say that only six attendances at labours were required as a minimum, for the University was not satisfied with less than six months' practical acquaintance with midwifery, and, for the M.B. degree, the candidates must prove that they had attended from twenty to thirty cases. Referring to the report on the Royal University of Ireland, Dr. Banks said that the visitors had expressed in strong terms their approbation of both the curriculum and the conduct of the examinations. The examiners fully concurred in the remarks about the unpreparedness of the candidates, as was proved by the fact that the rejections amounted to 50 per cent. Experience had not shown that there was any inconvenience in sending back candidates, which most commonly occurred in clinical medicine or surgery. The absence of pathological specimens and drawings was due to the fact that the University buildings were not yet completed; and, on the whole, he thought that such a young university had reason to be proud of the report.

Sir DYCE DUCKWORTH pointed out that the candidates were for the most part only examined by one examiner, a practice which was opposed to the opinion of the Council. He considered it hard on the students to compel them to pass again in anatomy and physiology at their final examination. It must distract the attention of the students from the practical subjects.

Mr. MACNAMARA said every other branch of the profession could be studied after the qualification was obtained, but anatomy could not, as, under the Anatomy Act, no man could pursue his anatomical studies except in a school licensed for the purpose. It was therefore necessary that he should utilise every opportunity of acquiring a knowledge of the subject before he obtained his qualification.

Mr. SIMON considered that the examination in surgery would show if the candidate were ignorant of anatomy; and if he were, he would not pass. He might come out fresh in anatomy at the cost of being flabby in physic. The lamentable ignorance spoken of by the visitors, as displayed in medicine and midwifery, showed that the students had been distracted from the study of those subjects in order to cram for the anatomical examination.

Dr. STRUTHERS thought that, after the students had already passed a "stringent examination" in anatomy and physiology, it was injudicious to subject them to another examination at the end.

Dr. HAUGHTON called attention to the fact that the Royal University had raised the standard of the preliminary arts examination far above the level of the recommendations of the Council. They had to overcome great difficulties in accomplishing this, for vested interests were involved in keeping down the standard.

Dr. LYONS said that the Senate would be happy to do their best to remedy the deficiencies pointed out by the visitors. The number of cases of labour which the students were required to attend had already been raised to twenty; and the number of fever-cases attended must be at least ten.

Dr. BANKS, in reply, said that the rule of the University was that there should be two examiners in clinical subjects. The authorities were quite prepared to say that there should be no anatomy taken at the final examination.

On the motion of Mr. MARSHALL, seconded by Dr. HERON WATSON, the Committee's Report was adopted, and the Council then resumed.

On the adoption of the same motion being again proposed, Dr. QUAIN suggested that its final acceptance had better be deferred until the entire report was presented to the Council.

The PRESIDENT said he felt convinced that there had never been a discussion on educational matters which was more likely to be fruitful for the work the Council had in hand. Matters would be brought to such a practical point that, whether the Medical Acts Amendment Bill passed or not, the discussion of the details of the educational questions could be continued without interruption. If the Bill did pass, the new members, whom the Council would welcome, would be able to assist in bringing to a conclusion the long and anxious deliberations on education. He felt that whether the Bill were or were not the best solution of the disputes, nothing could be so bad as the continuance of the suspense. There were, however, pitfalls in the Bill, which might compel them again to discuss the constitution of the Council. He thanked the members for the extreme kindness with which they had accepted what he had been able to do, assisted by the Chairman of Business. It was the happiest work he now had in life, and he should be sorry when the day arrived, which could not be far distant, when he would have to leave it.

The session then terminated.

PRESENTATION OF THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS OF IRELAND TO MR. MARSHALL.

ON the last day of the session of the General Medical Council, the Rev. Dr. Haughton, Honorary Fellow of the College of Surgeons in Ireland, and Professor Rawdon Macnamara, the representative of the College on the Medical Council, on behalf of the College, presented to Mr. Marshall the honorary Fellowship of the College of Surgeons in Ireland, a distinction recently conferred upon him by that body in recognition of his valuable contributions to surgical science. Professor Macnamara, in a few well chosen sentences, conveyed to Mr. Marshall the sense of his College of his important services, and regretted the cause of his absence (illness) upon the public occasion when a similar distinction was conferred on Sir James Paget, Bart., who had then attended in person to receive the honour. Mr. Marshall, in accepting the diploma, which was engrossed on vellum, the seal of the College being enclosed in a handsome silver box, richly chased, expressed his high sense of the honour conferred upon him, acknowledged the important manner in which the Irish College of Surgeons had from its foundation laboured to promote surgical progress, and frankly admitted that, personally, he himself had derived no small amount of information from the writings and labours of Irish surgeons.

ROYAL MEDICAL BENEVOLENT COLLEGE.—At the twenty-third annual festival of the Royal Medical Benevolent College, presided over by Sir Andrew Clark, on Tuesday, May 25th, attention was called to the fact that the whole cost of the foundation has to be defrayed out of annual subscriptions and donations, which have for some years past been insufficient for the purpose; and, unless the income was increased, a reduction of the foundation would be necessary. The cost of the work was about £5,000 *per annum*, and there was a yearly deficit of about £1,100, which had to be met by making use of what should be capital. The chairman made an earnest appeal for support, in response to which subscriptions were announced to the amount of about £4,000.

METROPOLITAN COUNTIES BRANCH.

DEGREES FOR LONDON MEDICAL STUDENTS.

On Monday, May 31st, a largely attended meeting, convened by the Council of the Metropolitan Counties Branch of the British Medical Association, was held at the Royal School of Mines, Jermyn Street, to consider the subject of degrees for students of the London medical schools. The chair was taken at 8 P.M. by Dr. Dickson, President of the Branch.

The President, in opening the proceedings, said that the present meeting was in continuation of that of March 6th last year, when it was resolved, first, that the Council of this Branch should be directed to petition the Senate of the University of London to receive a deputation, with a view to modify their regulations as to the examinations for medical degrees, so as to render them more accessible to London students ; and, secondly, that, failing to receive such concessions, the Council should be empowered to take, in conjunction with the Royal Colleges of Physicians of London and of Surgeons of England, such steps as they might deem necessary to facilitate obtaining degrees by London medical students. Accordingly, deputations of the Branch had, in April and July, interviews with the Senate of the University, when several eminent teachers, members of the Branch, addressed that body in support of the views expressed at the meeting in March. The result of the negotiations was considered by the Council of the Branch to have been unsatisfactory, and hence the members were again assembled to see what further steps could be taken to attain the desired object. The matter was one of great importance, not only primarily to students and teachers, but to the profession and to the public at large. It was allowed that the unreasonable stringency of the regulations of the London University compelled young men desirous of obtaining medical degrees to migrate to other schools of medicine, most often in the last years of their curriculum; thereby interrupting, at a critical time, the most essential, that was, the clinical, part of their education, and causing them to lose the unrivalled opportunities of practical instruction in every branch of medicine which London offered. The subject had received, for some years, the careful attention of the Branch. Under the auspices of Sir A. Clark, Mr. Hutchinson, Mr. Macnamara, and others, much evidence was obtained, and a report was issued in January, 1881, in which many important recommendations were embodied. Meanwhile, Dr. Bristowe, the President-elect, a distinguished graduate of the London University, had addressed, in December, 1879, a letter to the Chancellor of the University, pointing out the small results, and, therefore, comparative failure of the institution to attract graduates in its medical faculty, and ascribing this, in great measure, to the serious impediments which the matriculation and preliminary scientific examinations opposed to the candidates, 72 per cent. of them being rejected. No objection was taken to the professional or technical part of the examination, which eminent teachers, themselves examiners, stated was not unreasonably stringent, nor, indeed, more severe than at other universities. The suggestions submitted to the Senate by the Branch had, doubtless, been long familiar to the members, as likely to appease the discontent so generally felt; and they were strengthened by a valuable series of elaborate statistics drawn up by Dr. Gilbart Smith, wherein it was shown that, while the average number of medical degrees of London University was only forty *per annum*, the average number in the other universities of the United Kingdom was 450 *per annum*. Strong hopes were entertained that the moderate and reasonable changes suggested might have been agreed to ; and the Senate's unwillingness was the more to be deplored, as it was believed their acquiescence would have afforded an easy and happy solution of the difficulty, would have given immediate relief from the grievance alleged, and, in all probability, would have restored prosperity to the London medical schools, now unduly depressed through competition with those of the other universities. But, as these expectations had been frustrated, it had become necessary to comply with the mandate of the last meeting embodied in the second resolution, that the Royal Colleges be requested to intervene, and take such steps as they might deem expedient for the desired object. The time had apparently arrived when the practical teaching of the medical sciences, so varied, so extensive, and so important in their application to the relief of suffering humanity, might be appropriately united in a medical university (say "of England"), under the auspices of the combined Colleges, whose portal might be guarded by reasonably stringent matriculation and preliminary scientific examinations, and whose scheme of education would be more in accord with the real wants and wishes of the profession and the public. As an encouraging fact in medical history, and of good omen, he might mention that, from very small beginnings, in the united action of the two Colleges of Physicians and Surgeons of Edinburgh arose, two centuries ago, the medical school of that University, which for a century and a half had held a high position among the medical schools of Europe. In the year 1720, a man of genius, the first Monro, was appointed Professor of Anatomy. He was young, only 23, enthusiastic in his science, and inspiring enthusiasm in others. He began with fifty-seven students, but, before many years, his class had increased to 150, from all parts of the United Kingdom, the Colonies, and the Continent. The other medical chairs were well filled, including midwifery, which not for a century after was recognised in London as fit to be taught. In 1746, the Royal Infirmary was opened, and clinical instruction was regularly imparted to a gradually increasing concourse of students from all quarters. These appeared to have been attracted chiefly by the celebrity of the school and the excellence of the teaching, for during many years the medical degrees did not number more than six a year. In 1750 they had risen to 12 a year, in 1790 to 50 a year, and in 1800 to 100, culminating in 1827 in 160, of whom 50 were Scotch, 46 English, 36 Irish, and 28 from the colonies or abroad. Of late years, the graduates had averaged 140. In his (the President's) own time, forty-five to fifty years ago, the fame of that school mainly depended on the excellence of the lectures and the renown of the professors, men such as Sir Charles Bell, Sir Robert Christison, Sir James Simpson, Dr. Alison, Mr. Syme, and others. There was, besides, an extra-academical school flourishing side by side with the University in friendly rivalry. Systematic teaching in all departments and clinical instruction, so far as it went, were all that could be desired ; but lectures were not everything in medicine, a practical knowledge of which could only be grasped by the constant watchful examination of the sick. The wards were overcrowded with students anxious, but unable, to learn. Dresserships and clinical clerkships were often difficult to obtain, and studious men frequently sacrificed their vacation to get them. He had the highest regard for his *Alma Mater*, in which he had spent six years in arts and medicine, and he had also some acquaintance (from residence) with other medical schools in England and the Continent, and in all were to be found desirable features for adoption or imitation. But the great and unapproachable distinction of the London Medical School was the abundance, compared with other medical centres, of its clinical teaching and practice, and that these should not be availed of and utilised to the utmost possible extent by the rising generation was, he thought, a heavy misfortune to medical science and the public welfare. With (according to Dr. Gilbart Smith's statistics) 5,000 beds in the general hospitals, and 3,000 in the special hospitals, and twice as many in the poor-law infirmaries and lunatic asylums, there was an aggregate of 25,000 persons for clinical observation, besides out-patients innumerable. With such wealth of opportunity, a great medical school could be soon properly organised and constituted, if placed under wise central guidance, and, in attractiveness and efficiency, would soon equal all others in the world, as much as this vast metropolis eclipsed in magnitude all other cities. The Council of this Branch ventured to think that the resolution to be laid before the meeting would tend, in some degree, to this happy consummation ; and he would, therefore, call on Sir Andrew Clark to address the members.

Sir Andrew Clark said that he was unable to divest himself of a sense of responsibility in proposing the resolution which had been committed to his care. It was really a grave question to discuss ; and, were it not that he had confidence in the wisdom and justice of the profession, he would have hesitated before committing himself to the movement. So fully was the subject dealt with in the report of the committee appointed by the Branch, that very little remained to be said, although it was desirable that as many voices should be heard as possible. Moreover, the President had, in his speech, cut the ground from under his feet, by telling the history of the Edinburgh University. Without going more deeply into the question, he would content himself by remarking that the number of medical students in London was steadily decreasing, while, in certain provincial schools, it was equally certain that the numbers were increasing. The question naturally arose as to why this should be—why so many students left London to go to Edinburgh. Was it because the teaching was better, or living cheaper? Or was the material for study greater, or in greater variety? He thought not ; for his own investigations had always shown that one went to Edinburgh because, after a good education, there was an examination by the same teachers who had taught, and a degree was given which was more useful than the licence to practise given in London. This was the grievance which they had set themselves to remedy, and he felt most strongly that it

was a just grievance. Was it proper that, with the same curriculum, and a similar examination, such unequal symbols should be given? Nor was it only a sentimental grievance; although sentiment, as such, went a long way in the world. It affected not only the practice and the social status of the medical man, but he, if not possessing a degree, was even looked down upon by his more fortunate professional brethren. He had known many instances where men, who only held the licence of the College of Physicians and of the College of Surgeons, had been kept in an inferior position, because they were not considered equal to the others who held degrees. As to the grievance being widely felt, he had only to refer to the medical journals to see the interest taken in the question. In his intercourse with provincial men, he had noticed that, although some of the older men professed indifference to the scheme, the junior members of the profession were unanimously of opinion that a degree in medicine was indispensable in practice. No further proof could be asked than the fact that parents and guardians sent their children elsewhere than to London. Not only was the education in London not inferior to that in Scotland, but the personal influence exercised in England by the teachers on the students was not practicable in Scotland. We had, he said, a right to claim—and we would claim—that, for an equal curriculum, and an equal examination, a symbol should be given which should not be inferior to that given by Durham, Glasgow, and Edinburgh. As to the course to be pursued, it must be remembered that medicine was an art, and required to be taught. Students must be taken into the wards, and brought face to face with the problems which they would be called upon to solve in after-life. He did not wish to say anything to disparage the Scottish universities; nor was there any need to do so; but, at the same time, he could not help remarking that there was not that close approximation of the student and his practical work that obtained in London. There were 2,000 students in Edinburgh; and he asked the members present, as practical men, how it was possible to teach that number of students except by lectures, and how far lectures, complete though they might be, could be relied upon to make medical men who were to be of use to society. It might naturally be asked why application was not made to the University of London. Without going into the reasons why that could not be, and expressing his great sense of the benefit conferred on medical education by that body, the idea was quite impracticable. He called attention to the fact that men, at the close of their career, were rejected by the University on account of some imperfection in their knowledge of Moral Philosophy. A great many proposals had been made; but, in reality, they converged towards one. A nucleus existed in the united Colleges, which might become one of the greatest medical universities in the world if they could be induced to unite for the purpose. Provision would doubtless be made for a preliminary examination, followed by a scientific examination, and a third purely professional examination. As regarded the objections to the scheme, there were only one or two which merited notice. In fact, the puerility of the objections constituted one of the greatest arguments in its favour. He had great pleasure in proposing the following resolution:

"That, negotiations with the University of London not having led to the desired result, this meeting recommends that the Royal College of Physicians of London, and the Royal College of Surgeons of England, should continue their endeavours to obtain power to grant degrees in Medicine."

Mr. JONATHAN HUTCHINSON congratulated himself on the fact that a great deal he had intended to say had been ably disposed of in the previous speeches. He had for many years past advocated the consolidation of the colleges, and the granting of an uniform degree for medical practitioners; and he was glad to see that one part of his scheme had already come to pass, and that the other was under consideration. He knew few questions on which he had heard more utter nonsense talked than on the one before the meeting; and it became all persons to put aside all little questions of personal interest, and endeavour to take a broad view of the interests of the English profession now and in the future. He had little doubt that, if that were done, the conclusion would be arrived at that the profession in England should have one uniform title; and, as to what that title should be, there could not be much division of opinion. He thought the inconvenience and loss of time involved in looking out in the *Medical Directory* whether ones' friend was or was not M.D. in answering letters, was a serious item in itself. It had been suggested that the uniformity might be attained by addressing every medical man as M.D. indiscriminately; but, in that case, they might retaliate. But, beyond these trivial instances, it occasioned, he said, a good deal of real heart-burning in many places which led to positive ill-feeling between members of the profession. He would not allude to the confusion which existed in the public mind on the subject. Sir Andrew Clark had alluded very ably to that point. As to the objections urged against the scheme: First, it was said it would be unjust to those who already possessed the degree of M.D.; but, he would say, let every degree-granting body stand on its own reputation, and then the degrees given by bodies of known merits as regarded their examinations and the curriculum they required of students, would have their proper worth in the eyes of the profession, and they ought to have no more. The minor universities would doubtless be the first to oppose such a proposition; but it was not, at their first institution, contemplated that they should give degrees for the whole kingdom; they were local universities, and their degrees were for local use. It was not reasonable that London students should be sent to John o' Groats's for a degree because, in mediæval times, permission to grant degrees was given to some body of men there. Let each body attract its own students, but not endeavour to assume any monopoly. It might be preferable that, instead of asking power to grant a degree in medicine, that of conferring a title should be demanded. He would denounce the attempt, on the part of those who already had a degree, to preserve the monopoly of what was, after all, a mere matter of chance. Moreover, if they attached any importance to their own particular university, the holders of the M.D. would always be free to add the word or the letters indicating their *Alma Mater*. Some little injustice might be done, but it would only be of a temporary character, and no great change could ever be carried out without passing injury to somebody. A good deal might be said on the advantages attending residence in London, more especially as regarded the facilities for clinical work. He maintained that the monopoly enjoyed by certain universities of granting degrees in medicine, had led to the degradation of the university curriculum, for there was a tendency to eliminate everything not connected with medicine from the examination, a tendency much to be regretted. Even at some very meritorious universities, it was possible for a man to obtain his degree without showing any general knowledge beyond what was required in the examination known as the "little go." But then there was the residence; and, since no great difference existed elsewhere, the superiority of the degrees must be derived from the residence. All he would say on this head was, that the advantages attending residence in a university town must be very great indeed to account for the alleged difference. But, when a man had to leave London, where there were lectures at the different colleges, institutions, and hospitals, together with a vast field for clinical study, in order to complete his curriculum in a small town, then the residence became a positive evil; and a man who boasted of having a certain M.B., obtained in such a town, boasted of something of which there was really no reason to be proud. He had known excellent students leave London hospitals for a period of one or two years, to go to a place where, to say the least, they had no better opportunities for professional study than they would have had in London. As to the method of granting the degree, he had no doubt that it should be by the conjoined Colleges of Physicians and Surgeons. Their examinations were at least equal to the professional examinations which candidates had at any one of the universities; and, as a matter of fact, many of the London examiners were also examiners for the universities in question. The perfection of an examination depended on the number and independence of the examiners; and it would be difficult to point out any place where these conditions were better complied with than at the London colleges; which possessed enormous advantages in this way. He would not advocate giving the degree of M.D. to all who passed under the conjoint scheme. Without rendering it inaccessible by too severe alterations in the curriculum, he would suggest that, when a man had obtained his licence, he should be required to present himself, a year later, for further and practical examination in professional subjects, before granting him the degree of M.D. This must not be made too severe, or they would be as far off uniformity as ever. For that reason, he would not greatly increase the preliminary work. A year's residence in London after the examination for the licence had been passed, with the prospect of a further test, would, he felt sure, be productive of the greatest benefit, if only by keeping men at hospital work a little longer. If success attended the efforts of the Branch, they would, he said, have done very much to advance the future of the profession. He second the resolution.

Dr. PYE-SMITH expressed his opinion of the indebtedness of the University of London to Sir Andrew Clark, for the liberal way in which he had alluded to the value of their degrees. With reference to the first clause of the proposed resolution, he would ask the members if it was really just and accurate to say that negotiations with the University of London on this subject had failed? In the first place, the question of reform was still under consideration, and until

that was settled, it would scarcely be said that the negotiations had failed. There was a very great difference between making examinations easier to pass, and making it easier to take degrees; and he did not think it would be fair to hold out any hope that the examinations would ever practically be diminished in difficulty. If they were, it would be an injury to the profession. Nevertheless, it would be possible to facilitate degrees being taken without lowering the examinations; as, for instance, having two examinations a year instead of one, etc. The question still remained as to how to remove the disabilities under which students laboured. If the scheme before the meeting were adopted, what would become of the men who had passed, and were now passing, and who would go into the country to practise? In a year or two, they would be overtopped by some of their ignorant or idle fellow-students, who had been enabled to take advantage of the scheme to take a degree. The injustice would, doubtless, be temporary, but it would last for some years. It seemed to him, therefore, that the measure ought to be retrospective, as well as prospective. Did the members think it desirable that men who passed the examinations of the two Colleges, should take the degree upon the ordinary terms? In the scheme at present before the Colleges, it was contemplated to institute a higher preliminary examination in arts; and, if this were carried out, the grievance complained of would still be unremedied. If every student, on passing, were to have the degree of Doctor of Medicine, then, from being a high and noble degree, it would become the lowest. Again, if the power to grant degrees were conferred on the London Colleges, it could not be expected that the other Colleges in Edinburgh, Dublin, and Glasgow, would consent to be left out in the cold; and they would, accordingly, petition for similar powers. The only way out of the difficulty, in his opinion, would be to agree that all registered medical men were entitled to the degree of M.D. Then hospital physicians, for the sake of distinction, could drop the title, like their friends and colleagues, the surgeons. He thought the question of university life in London was quite distinct from, and superior to, the mere question of granting titles, and was, moreover, one in which, as teachers, they were deeply interested.

Mr. C. MACNAMARA said that most universities had a very different idea of the value of the M.D. from that of the last speaker. Dr. Pye-Smith had talked of the colleges in Scotland and Ireland claiming to grant degrees in medicine if the London colleges did so; but by far the larger majority of the Scotch students already obtained degrees, so that there would be a very small number left for the colleges to give degrees to. In Scotland, 86 per cent. of the students took a degree, whereas, in England, only 12 per cent. did so, owing to the greater facilities in Scotland for taking a degree. He was not afraid of the Scotch and Irish colleges; Parliament would only grant a degree-giving authority to a proper examining board holding proper examinations. They had been obliged, in the first instance, to see what they could do with the University of London, because, if they had applied for powers before so doing, they would have been referred to the University for a solution of the question. In spite of Dr. Pye-Smith's assertion, they did go there, but they received no reply from the University; then they waited on them a second time, and still no answer had been received. In the meantime, there had been a large scheme started for a teaching university; but that did not, he said, touch the question they had met to consider. He thought the London University was quite right in keeping up the standard of the degrees; but it had to be remembered that London students practically could not obtain degrees, and the result was that they left London just at the very time when they would derive the greatest advantage from the large field for clinical study which London offered, to go into out-of-the-way parts of the kingdom. He would, therefore, ask them to do all they could to get the colleges to unite for this purpose; and, if they did so, he had no doubt they would obtain the charter they required.

Dr. COLLINS, in answer to the statement that no reply had been received from the University of London, observed that, if no direct reply had been accorded, it was probably owing to the ambiguity of the request. He would like to know in what particular the University of London had refused to comply with the demand, not, perhaps, in words, but in acts. First, as to the modifications of its procedure in favour of medical students, certain alterations had been introduced in the frequency of the examinations and otherwise, with this object in view; and, as to the admission of representatives, most of those present were probably aware that the proposition which originated with Mr. Justice Fry, was now under consideration. He thought that, in the scheme proposed by Mr. Magnus, at the University of London, a real means existed of getting out of the difficulty. He believed that if the Colleges of Physicians and Surgeons had power to grant degrees, the standard of examinations would be lowered.

Dr. HABERSHON would not like to be behind anyone in expressing his sense of the value rendered to the medical profession by the University of London. At the same time, they must not lose sight of the fact that, at present, there was a great determination on the part of those entering the profession to obtain a degree, and it was far from his mind to say that they wished a trifling degree. From what had fallen from one or two gentlemen who had spoken, one would be tempted to believe that there existed a tendency to competition downwards; but it was nothing of the kind. The preliminary examination had been made more severe, and there was no talk of lowering the standard. He, for one, quite failed to see how the scheme for the reformation of the University of London could touch the question before them. He quoted the case of his late colleague, Dr. Mahomed, who found it easier to go backwards and forwards to Cambridge every day, than to comply with the requirements of the University of London. He knew no university examination which exceeded the examinations as now conducted by the two colleges. If, then, their examinations were not inferior, and their examination in arts was not less, why should their diploma be spoken of in slighting terms? He agreed with Sir Andrew Clark and Mr. Hutchinson as to the advantages that would accrue to the profession from some such scheme as the one before the meeting.

Dr. MOXON expressed his satisfaction at seeing that the cause he had at heart was not without a speaker in its favour. Dr. Pye-Smith had said that the University of London was doing something, and that was so far true that that gentleman had been placed on the Senate; he did not know which to congratulate most, the Senate or Dr. Pye-Smith. The fact was, that the London degrees were too stiff to be had; and it appeared, from what had been said, that the number of examinations had been increased, so that the number of the "plucked" would probably be increased. It was felt that, in this vast metropolis, where a great number of persons, by mere natural selection, capable and distinguished, must both practice and teach the profession, they ought to have, not the smallest and most dwindling of medical concerns, but the largest and most flourishing of medical schools.

Dr. WALTER SMITH said that most of the speakers had dwelt too much on the question as to whether there really existed a legitimate grievance; but he fancied nobody doubted that. He did not see how the scheme could be carried out by the University of London, nor did he think it desirable it should be. He regretted that more had not been said in reference to the scheme for a Teaching University for London, which would be much preferable to the scheme for the conjoined corporations. He proposed, as an amendment, "That negotiations with the University of London not having led to the desired result, in the opinion of this meeting it is desirable that immediate steps be taken to found a Teaching University for London, and that the Council be requested to consider and report as to the best means of carrying the same into effect."

Mr. EDWARDS seconded the amendment.

Dr. BROADBENT thought the granting of degrees by the Colleges was probably the only way to get out of the difficulty. He hoped that means would be found of organising, not only medical education, but also the great scientific institutions, so as to enable the hospital schools to concentrate their labours on the teaching of practical subjects. He believed that, out of this movement, all the advantages claimed by the supporters of the teaching university would be obtained in the shortest time, and in the best manner.

Dr. SANSOM corrected a verbal error of Dr. Pye-Smith. It was not said, in the preamble, that the negotiations with the University of London had failed, but that the desired result had not been obtained. Several speakers seemed to have gone on the assumption that the University of London would be antagonistic to the scheme; but he could assure them that this was not by any means the case.

Dr. BERNARD O'CONNOR asked in what way it was proposed that the Royal Colleges should proceed—whether by Act of Parliament or by Royal Warrant.

Sir ANDREW CLARK, in reply, said that he thought Dr. Collins's remarks were somewhat unbecoming, and that he had introduced matter which had better have been left aside. He would ask Dr. Collins what ground he had for assuming that the result of the additional powers would be a degradation of the standard? Neither Dr. Pye-Smith nor Dr. Collins seemed to think that the degree of Edinburgh was either good or honourable (Dr. Pye-Smith: I never said anything of the kind); Sir Andrew maintained that it was both. He said he was speaking advisedly, when he said that none of the examinations at Edinburgh were one whit superior to those of the London Colleges. Why, then, did Dr. Pye-Smith suppose that a degree conferred by the Colleges would be less honourable than that given at

Edinburgh? He had looked over the papers of both bodies, and obtained all the information he could as to the standard accepted. He then alluded to the detailed requirements of the University of Edinburgh, showing that they were not more onerous than those of the London Colleges. If the examinations and the curriculum were the same, why should they have to go to Edinburgh to take a degree? As to the method of procedure, that, he said, was rather a matter for the College authorities to decide; all that they were now called upon to do was to affirm a principle. He thought there was a rooted vice in the London University; for when they took away moral philosophy from the final examination, they substituted psychology, as though the science of medicine were not amply sufficient to engage the mind and energy of the student.

The PRESIDENT put Dr. Walter Smith's amendment to the meeting, when it was lost.

The original resolution was then put, and was adopted without a dissentient voice.

THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THIS Society held its forty-fourth annual meeting in the King and Queen's College of Physicians on Monday last. In the absence in England of the President of the College, Dr. FINNY, its vice-president, occupied the chair. The report of the Central Committee for the past year was read by Dr. J. W. Moore, one of the honorary secretaries. It expressed regret that the number of subscribers to the fund remained so limited. The grants were consequently far below the requirements of the cases, many of the applicants being in a condition of the deepest and most urgent want. The financial condition of the Society was reported to be by no means satisfactory. During the twelve months ending May 31st, 1886, sums amounting to £1,321 2s. 7d. passed through the treasurer's hands, which, with the balance of £289 6s. 11d., reserved from last annual distribution for current expenditure, made a total of £1,610 9s. 6d.; of this, £39 9s. would be added to the funded property of the Society, in accordance with the wish of the donors. The sum of £1,203 had been awarded, of which £157 had already been distributed in anticipation of the annual meeting, £1,046 would be distributed immediately after the meeting, a balance of £135 13s. 9d. would then remain to meet the working expenses, etc. Of the amount distributed during the year, £185 was to medical men, £932 to widows, and £86 to orphans. The funded property of the Society had been augmented by the amount of £39 9s.; and under one of the clauses of the order of the Master of the Rolls for re-administration of the will of the late Surgeon Carmichael, the Society would shortly be handed over a sum of about £96 by the Council of the Royal College of Surgeons in Ireland. The subscriptions from students, specially mentioned in last year's report, and also the contributions from the Indian branches, had considerably fallen off this year. The Report concluded by strongly urging the claim the Society had upon every medical man, "for never was there more need of united efforts to combat the misery which the present condition of the country inevitably entails on many helpless members of the profession and their families."

The CHAIRMAN announced that Dr. Harvey had sent a donation of £20 to the Society.

The adoption of the report was moved by Sir GEORGE PORTER, seconded by Dr. HEMPHILL, of Clonmel, and carried.

Dr. E. HAMILTON moved the following resolution: "That this meeting desires to convey its warmest thanks to the committee and officers of the parent Society, as well as to those of the provincial and Indian branches, for their hearty zeal in the Society's beneficent work, and also to those of our student brethren who have contributed a tangible proof of their generous sympathy in the cause; and would urge strongly upon the profession that even a moderate annual contribution to this fund would enable them to assist more adequately our necessitous brethren and their families, upon whom the disturbed state of the country has imposed much additional privation and embarrassment."

Dr. PATTON seconded the motion, which was adopted.

Dr. FLETCHER moved the election of the central committee and officers, and the honorary secretaries and treasurers of branches for the ensuing year.

Brigade-Surgeon POTTER seconded the motion, which was adopted.

On the motion of Dr. KIDD, seconded by Professor BENNETT, a resolution was adopted acknowledging the support of the Press to the Society.

Dr. Wharton having been called to the second chair, a vote of thanks was unanimously accorded to Dr. Finny for his conduct in the chair, on the motion of the REGISTRAR-GENERAL, seconded by Dr. ADRIEN.

NATIONAL AID SOCIETY.

THE Report of the National Society of Aid to the Sick and Wounded in War, a copy of which has been forwarded to us by Lord Wantage, deals with the part taken by the Society in connection with the Servo-Bulgarian war of 1885-6. In reply to inquiries made by the Society at the commencement of the campaign, it was reported, both from Belgrade and Sofia, that help from England would be gratefully received; whereupon Mr. Kennett Barrington, accompanied by Dr. Featherstonhaugh, Major-General Laurie, with Dr. Hume, were sent to Bulgaria and Servia respectively, to ascertain the needs in those countries. It was especially desired by Her Majesty the Queen that a nursing sister (Miss H. Stewart) should accompany the staff to Bulgaria, and be under the protection of the English Red Cross. As it was found that the wounded in Bulgaria had already been distributed among various public buildings, it was arranged that Dr. Featherstonhaugh should be attached to the Alexandria Hospital; and that money and material should be given to the existing hospitals, instead of establishing a new one on behalf of the Society. Major-General Laurie, on arriving at Belgrade, found that the most efficient aid would be given by taking over two or three buildings and maintaining them as hospitals for the sick and wounded. At the same time, he telegraphed for three surgeons, in response to which Drs. Newby, Boyd, and Lake were despatched to Belgrade. Five hundred pounds was handed over to Sir F. Lascelles, in aid of the sick and wounded in Sofia. Altogether, the sum expended in connection with the Society's operations in this war was £3,733 13s. 9d. The thanks of the committee are tendered to the Commissioners, and to Drs. Featherstonhaugh, Newby, Hume, Boyd, and Lake, and others. Accompanying the report is a map showing the operations of the Society, and the report of the Commissioners, printed as an appendix to the report.

COLLECTIVE INVESTIGATION COMMITTEE.

LIST OF RETURNS RECEIVED DURING THE MONTH OF MAY, 1886.

Aberdeen Branch: II (3), III, XIVB.C., J. Mackenzie Booth, M.D.; Hamamelis, J. Barclay, M.D.

Bath and Bristol Branch: Intemperance, H. G. Terry.

Border Counties Branch: Terebene, J. R. Hamilton, M.D.

Cambridge and Huntingdon Branch: Intemperance, Messrs. Copley and Clark (2).

Gloucestershire Branch: Terebene, G. A. Cardew.

Lancashire and Cheshire Branch: Bolton District: Hamamelis, J. E. Scowcroft, M.D., F.R.C.S.; J. Robinson, M.D. Liverpool District: Intemperance, W. Macfie Campbell, M.D. Manchester District: Terebene, D. J. Mackenzie, M.D.

Metropolitan Counties Branch: Intemperance, A. R. Hamilton Bland, M.D.; M. Greenwood, jun.

North of England Branch: XIV, A, B, C, J. Coatsworth Watson, M.D.

North of Scotland Branch: Hamamelis, W. R. Duguid, M.D.; G. H. Mackay, M.D.; Terebene, W. R. Duguid, M.D.

Shropshire and Mid-Wales Branch: X, W. Hammond; XIII, F. H. Thompson (2).

South-Eastern Branch: East Kent District: Hamamelis, R. E. England, M.D.; C. Wood; Intemperance, J. W. Hayward (2). East Surrey District: Terebene, H. G. Plimmer; J. Rand, F.R.C.S.; R. Lawson; Hamamelis, H. G. Plimmer; Intemperance, J. H. Galton, M.D.; J. Sidney Turner. West Surrey District: Hamamelis, Terebene, T. Frederick Pearse, M.D. West Sussex District: Hamamelis, A. E. Buckell, E. H. Buckell; Terebene, A. E. Buckell, E. H. Buckell.

South Wales Branch; Intemperance, D. A. Davies, M.B. (2); Hamamelis, Terebene, Evan Jones.

Southern Branch: Isle of Wight District: III, W. E. Green (2); Intemperance, H. M. Barker, M.B. Wilts District: Hamamelis, F. Fawson Lee, M.B., F.R.C.S.; J. H. Gordon, M.D.

Staffordshire Branch: Intemperance, J. T. Hartill (2).

West Somerset Branch: I, R. J. Clement.

Worcester and Herefordshire Branch: Hamamelis, G. W. Crowe, M.D.; Stanley Haynes, M.D.; J. J. Sarjant; Terebene, G. W. Crowe, M.D.; Stanley Haynes, M.D.; M. A. Wood

Yorkshire Branch: III, J. Holmes, M.D. (3); Intemperance, J. Eaton, M.D. (2); Hamamelis, M. D. Sadler, M.D.

The Committee beg also to acknowledge (June 10th) the receipt, since their last acknowledgment on May 22nd, of the following replies to the International Inquiry into the geographical distribution of certain diseases.

Border Counties Branch, 2.
Cambridge and Huntingdon Branch, 1.
Lancashire and Cheshire Branch: Manchester District, 1.
North of Scotland Branch, 1.
South-Eastern Branch: West Sussex District, 15.
South Wales Branch, 1.
Southern Branch: Wilts District, 1.
Yorkshire Branch, 6.

The Secretary to the International Committee begs also to acknowledge (June 10th) the receipt, since his last acknowledgment on May 22nd, of the following returns to the same inquiry from members of the profession, not being members of the Association:

Metropolitan Counties, 4.
England, Wales, and the Channel Islands, 4.
Scotland, 1.

The Secretary to the Collective Investigation Committee will feel obliged if any contributors who do not find their returns included in this list will communicate with him at once.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1886.

ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are in progress on the subjects of

DIPHTHERIA, CANCER OF THE BREAST,
OLD AGE, THE VALUE OF HAMAMELIS,
THE VALUE OF PURE TEREBENE.

Memoranda on the above, and forms for recording individual cases, may be had on application.

The inquiry on Acute Rheumatism is now closed, as the printing of the Tables is completed. *Any cases, of which Reports are sent by June 1st, will be added to the Tables.*

THE ETIOLOGY OF PHTHISIS.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into THE THERAPEUTIC VALUE OF HAMAMELIS AND PURE TEREBENE have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

PROGNOSIS IN HEART-VALVE DISEASE, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; THE EXTREME DURATION OF INFECTIOUSNESS IN INFECTIOUS DISEASES. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH INDIAN BRANCH.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary.—J. MAITLAND, M.B., Honorary Secretary, Madras.

METROPOLITAN COUNTIES BRANCH.—The Annual Meeting of this Branch will be held at the Holborn Restaurant, on Tuesday, June 29th, at 5.30 P.M. President: Walter Dickson, M.D.; President-elect: John S. Bristowe, M.D., F.R.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine. Dr. Walter Smith has given notice that he will propose that the number of Vice-Presidents be increased from four to six, and that of ordinary members of the Council from eighteen to twenty-four.—ALEXANDER HENRY, M.D.; W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

SOUTH-WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at the Infirmary, Cardiff, on Thursday, July 8th. Members wishing to read papers should send titles before June 20th. Gentlemen wishing to join the Branch or Association should send notice before July 7th.—A. SHEEN, M.D., D. A. DAVIES, M.B., Honorary Secretaries.

NORTH WALES BRANCH.—The annual meeting will be held at Festiniog, in the first or second week in July. Members having cases to communicate, or papers to read, or who wish to propose new members, should advise the Secretary on or before the 21st instant.—W. JONES-MORRIS, Portmadoc, Honorary Secretary.

SHROPSHIRE AND MID-WALES BRANCH.—The annual general meeting will be held at the Salop Infirmary on Tuesday, June 29th, at 2 P.M. W. H. O. Sankey, Esq., M.D., President, in the chair. Members desirous of reading papers or other communications are requested to forward the titles to the Honorary Secretary, EDWARD CURETON, Shrewsbury.

NORTHERN COUNTIES (SCOTLAND) BRANCH.—The annual meeting will be held at Elgin, on Wednesday, July 7th. Members wishing to show cases, or to read papers, will oblige by communicating the titles at once to the Honorary Secretary, J. W. NORRIS MACKAY, M.D., Elgin.

BORDER COUNTIES BRANCH.—The nineteenth annual meeting of this Branch will be held at the Grand Hotel, Whitehaven, on Friday, June 25th, at 1 P.M., under the presidency of Mr. C. S. Hall, Carlisle. A Council meeting will be held at 12.50. The usual election of office-bearers for the year will take place, the Council will present their report, and the meetings for the year have to be fixed. The President-elect, Dr. Eaton, Cleator Moor, will deliver his inaugural address. Dr. Welby I'Anson, Whitehaven, will read notes of a case of Intussusception. Dr. J. R. Irwin, Whitehaven, will show the following specimens: Oblique Fracture of the Femur; an Aortic Aneurysm; Cystic Sarcoma of the Ovary; and a patient with Favus. Dinner at the hotel at 4 P.M., 5s. per head. The Secretary will be glad to receive notices of papers for reading, and patients or specimens for exhibition, without delay.—H. A. LEDIARD, 41, Lowther Street, Carlisle, Honorary Secretary.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The Annual General Meeting of this Branch will be held on Tuesday, June 29th next, in the Medical Institute, Birmingham. An address will be delivered by the President, S. H. Agar, Esq. The annual dinner will take place at the Grand Hotel, Colmore Row, at 6 P.M.; dinner tickets, exclusive of wine, 5s. each.—ALFRED H. CARTER, M.D., 21, Temple Row, Birmingham; ROBERT SAUNDBY, M.D., 83, Edmund Street, Birmingham, Honorary Secretaries.

YORKSHIRE BRANCH.—The annual meeting will be held in the Town Hall, Bradford on Wednesday, June 30th, at 3 P.M. Gentlemen intending to read papers are requested to communicate with ARTHUR JACKSON, Sheffield

CAMBRIDGE AND HUNTINGDON AND EAST ANGLIAN BRANCHES.—There will be a combined meeting of these Branches at Ipswich on Friday, July 9th, under the presidency of Dr. Elliston. It is requested that early notice of intended papers, or other communications, be given to one of the Secretaries: B. ANNINGSON, M.D., Cambridge; M. BEVERLEY, M.D., Norwich; W. T. JACKMAN, Coggeshall; W. A. ELLISTON, M.D., Ipswich.

SOUTH-WESTERN BRANCH.—President, Edward Sharp, Esq., Truro; President-elect, William Powell, M.B., Torquay. The annual meeting of the Branch will be held at Torquay, on Monday, June 21st, under the presidency of Dr. William Powell. *Programme of Proceedings.*—12 to 2. Luncheon, by invitation of the President, at his residence, Hill Garden. 1 P.M. Meeting of Council at Hill Garden. 2 P.M. Annual meeting in the Natural History Society's Museum, Torwood Street. 6 P.M. Annual dinner at the Royal Hotel. The following communications, etc., have been promised: 1. Mr. J. D. Harris (Exeter): Two cases of Ovariotomy, with exceptionally low temperatures, with notes. 2. Mr. W. E. C. Nourse (Exeter): Notes on a case of Poisoning by Carbolic Acid. 3. A discussion on Rheumatism will be opened by Dr. William Henderson (Exeter). 4. Mr. J. M. Ackland (Exeter) will show a case illustrating the Mechanical Treatment of Cleft Palate. 5. A demonstration will be given by Mr. E. Burrows (of Messrs. Burroughs, Wellcome and Co.) on Physiological Experiments with Digestive Ferments (Fairchild), and a display of Freshly Peptonised Foods. Dr. Deas (Exeter) gives notice that he will move "That Rule 4 be altered so as to read as follows: 4. That, in addition to the annual meeting, intermediate meetings may be held at such places, and at such times, as may be determined by the Council; or, upon a requisition to the Secretary, signed by not less than six members residing in or near the town where the meeting is proposed to be held, provided that such meetings shall not be held oftener than once in three months, nor twice consecutively in the same place." Members intending to be present at the annual dinner are requested to give notice to the Honorary Secretary, not later than June 14th, and to enclose, with the notice, Post Office Order or cheque for 7s. 6d., when a ticket for the dinner will be forwarded.—P. MAURY DEAS, Honorary Secretary, Wonford House, Exeter, May 28th, 1886.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in the Town Hall, Lancaster, on Wednesday, July 7th, at 2 P.M. The President, Dr. Harker, will deliver an inaugural address. Subject: The Study of Nature as the Foundation of Medical Thought and Practice. The following medical and surgical communications have been promised. Mr. Walter Whitehead: Three cases of Suprapubic Lithotomy. Dr. Stewart: A paper on Provident Dispensaries. Dr. Farrar will show Gerrard's Ureometer, and give a practical demonstration of its action. Mr. Christopher Johnson: A paper on Sanitary Reform a Hundred Years Ago. Dr. Ashby will show a specimen of Congenital Biliary

Cirrhosis of the Liver from an infant aged 4 months. Dr. Griffith will read a paper on Tobacco Amblyopia in Women. Dr. Walter will show an unusual form of Uterine Polypus. Dr. Davidson will read a short communication upon a Medical Subject. Dr. Charles Rayne will read a paper on General Peritonitis as an early and prominent feature in Glanders. Luncheon will be provided by the President, at the Town Hall, from 12.30 to 2 o'clock. The members will dine together at the King's Arms, at 5 P.M.; dinner-tickets, 7s. 6d. (wine not included).—CHARLES EDWARD GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

BATH AND BRISTOL BRANCH.—The annual meeting of the above Branch will be held on Thursday, June 24th, 1886, at the Mineral Water Hospital, Bath, at 4.30 P.M., when E. C. Board, Esq., will resign the chair to C. Gaine, Esq., President-Elect. The business of the meeting will be to receive the report of the Council; to elect the officers of the Branch; to transact the necessary business; and to discuss such subjects connected with the interest of the Branch and of the profession as may be brought before it. Members having any communications for the meeting are requested to give notice of them to the Secretaries, not later than June 22nd. The Honorary Secretaries would feel much obliged if members would kindly send them notice of any alterations in their diplomas or address. N.B.—Members who have not paid their subscriptions are requested to do so immediately to the Local Secretaries, in order that the accounts may be made up before the anniversary meeting of the Association. The dinner will be held at the Pump Room Hotel, Bath, at 6.30 P.M. Dinner tickets, including ice and dessert, 7s. 6d. each. The wines will be served at moderate charges. The Bath Secretary particularly requests that members will inform him on or before Monday, June 21st whether or not it is their intention to be present at the dinner; by so doing, they will greatly facilitate the satisfactory completion of the necessary arrangements. —R. J. H. SCOTT, Honorary Secretary for the Bath District, 13, Bladud Buildings, Bath; E. MARKHAM SKERRITT, Honorary Secretary for the Bristol District, Thornton Villa, Richmond Hill, Clifton.

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE thirty-first annual meeting of this Branch was held at the Swan Hotel, Bedford, on June 3rd, 1886, under the presidency of of Mr. J. H. HEMMING. Twenty-six gentlemen were present, including Dr. Latham, of Cambridge, as visitor.

Additional Meetings.—The Secretary stated that, in accordance with the resolution passed at the previous autumnal meeting, he had by circular asked the opinion of every member of the Branch as to the desirability or otherwise of holding additional meetings of the Branch. In reply to the one hundred circulars sent out, fifty answers had been received. From them it appeared that a large majority of the members (including the older and more influential ones) were decidedly opposed to any increase in the number of meetings.

Payment of Travelling Expenses of Representatives to Council by the Association.—A letter was read from the East York and North Lincoln Branch asking the opinion of the members of the South Midland Branch on this subject. A considerable discussion ensued, some members being in favour of the proposal, others against it, and one or two suggested that the question might be met by the Council assembling sometimes in the provinces. No resolution was proposed.

Medical Defence Fund.—A circular was read from the East Anglian Branch, as to the desirability of forming a Medical Defence Fund in connection with the Association. The following resolution was carried: "That the South Midland Branch recommends to the Council of the British Medical Association that a Medical Defence Fund be formed in connection with the Association; and that members shall have the option of subscribing thereto, and being entitled to its advantages."

Medical Sickness, Annuity, and Life-Assurance Society.—A letter and printed slip issued by this Society were laid before the meeting; and the Secretary was directed to send a copy of the slip to every member of the Branch.

New Members.—Two new members of the Association and of the Branch were elected.

President's Address.—The President delivered an address, selecting for his subject Diabetes and its Treatment.

Papers and Cases.—The following communications were made.

1. Dr. Goldsmith: Case of Rare Nervous Disease in a Child.
2. Mr. Milligan: Successful Trephining for Gunshot Wound.
3. Dr. Burges: On the Use of the Midwifery Forceps, based on the Results of 623 Cases.
4. Dr. Newman: Laparotomy for Intussusception in an Infant 4½ months old.
5. Dr. Newman: Treatment of Abscess; Local Disinfectants. He specially praised the virtues of iodine.
6. Dr. Jones: Arsenic: a Remedy and a Domestic Poison. He exhibited specimens of arsenical and non-arsenical wall-papers, which it was impossible to distinguish by any outward appearance.
7. Mr. Terry showed a large Intestinal Concretion, weighing 1½ ounces, passed during life, by an adult male.
8. Mr. Evans exhibited a Globular Concretion, weighing 1½ pounds, taken, after death, from the large bowel of a horse.

The reading of every paper and case was followed by an animated discussion, in which many of the members present took part.

Votes of Thanks.—Cordial votes of thanks were passed to the readers of papers; to the ex-President, for his services during the past year; and to the President, for his able conduct in the chair, and for his interesting address.

Dinner.—Eighteen gentlemen, including Dr. Latham, afterwards sat down to an excellent dinner in the hotel.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE sixth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday, May 19th; E. C. BOARD, Esq., President, in the chair. There were also present forty-eight members and three visitors.

Payment of Representatives in the General Council.—The Secretary read a communication from the East York and North Lincoln Branch relative to the payment by the Association of the travelling expenses of the representatives of the Branches in the General Council; and, after discussion, it was resolved unanimously: "That, in the opinion of this Branch, it is desirable that the travelling expenses of the representatives of the Branches in the General Council be paid by the Association." The Secretary was requested to communicate this resolution to the East York and North Lincoln Branch.

Communications.—The following communications were made.

1. Dr. Elliott read a paper on a Case of Intussusception; upon which Dr. Harrison made some comments.
2. Mr. Tivy read a paper on Endometritis, which led to observations by Drs. Davey, Aust Lawrence, Swayne, and Spender, and Mr. Ewens.
3. Dr. Waldo read a paper on the Localisation of a Cerebral Lesion, which was discussed by Dr. Broom, Mr. Cross, and Drs. Swayne, Shingleton Smith, and Markham Skerritt.
4. Mr. Greig Smith read a paper on the Removal of Tumours of the Bladder, with Cases; which was commented upon by Mr. Cross, Drs. Aust Lawrence, Shingleton Smith, Swayne, and Fyffe, and Mr. Ewens.
5. Mr. Dobson exhibited two recent specimens of Ovarian Cysts, which had been successfully removed.

DORSET AND WEST HANTS BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the King's Arms Hotel, Christchurch, on Wednesday, May 19th, 1886, WM. VICARY SNOW, M.D., President, in the Chair. There were also present twenty-eight members and visitors.

Vote of Condolence.—It was resolved unanimously: "That the members of the Dorset and West Hants Branch of the British Medical Association express their sincere sorrow at the great loss they have sustained in the death of their President, Dr. Samuel Sumner Dyer, and desire to convey to Mrs. Dyer and the other members of his family their sympathy in their sad bereavement."

Branch Council.—Dr. G. H. Batterbury, of Wimborne; Dr. C. Childs, of Weymouth; Dr. W. S. Falls, Dr. W. Frazer, and Mr. W. D. Husband, of Bournemouth; Dr. J. C. Leach, of Sturminster Newton; and Dr. P. W. Macdonald, of the Dorset County Asylum, were elected members for the ensuing year.

Representative of the Branch on the Council of the Association.—Dr. W. G. Vawdrey Lush, of Weymouth, was elected the representative of this Branch on the Council of the Association for the ensuing year.

New Members.—The following were elected: Edward Dewes, M.D., Bournemouth; H. G. Dyer, Ringwood; Robert Hardie, M.B., Portland; W. H. Kerbey, Charmouth; J. M. Lawrie, M.D., Weymouth; G. H. Lilley, M.D., Portland; D. R. McArthur, M.B., Sturminster Newton; F. H. Poll, Bournemouth; W. H. Putsey, Royal Naval Sick Quarters, Portland; F. E. Vernede Poole; and Adam Wilkinson, M.D., Shaftesbury.

Next Meeting.—It was resolved that the next autumn meeting should be held at Portland.

Medical Defence Fund.—A communication was made from the East Anglian Branch (Essex District) relating to the formation of a Medical Defence Fund, and it was resolved:

"That as medical men may at any time become liable to false and groundless charges of a ruinous nature, it is most desirable that a Medical Defence Fund be formed and administered in connection with the British Medical Association, and that its members should be asked to contribute a small sum annually to this fund. Those who do so becoming entitled, should occasion arise, to legal advice and assistance."

Payment of Representatives in the Council of the Association.—A com-

munication was read from the East York and North Lincoln Branch relating to the payment by the Association of the travelling expenses of the representatives of the Branches in the General Council, and it was resolved :

"That this Branch does not agree with the proposals of the East York and North Lincoln Branch."

Address by the President.—An able address was given by the President on "The Modern Theory and Treatment of Phthisis;" and the thanks of the meeting were unanimously accorded to him.

Communications.—The following communications were made,

1. Mr. Parkinson : Case of Tumour of the Thigh. (Patient exhibited.)
2. Mr. Lawton : Induced Abortion for the Relief of Reflex Irritation of the Pneumogastrium.
3. Mr. Mahomed : Case of Excision of the Knee. (Patient exhibited.)
4. Dr. Macdonald : Heart-Lesions in relation to Mental Symptoms. (Specimen.)
5. Dr. Macdonald : Specimen of Calcareous Degeneration of Aortic Valves.
6. Mr. Marsh : Case of Skin-grafting. (Specimen.)

Discussion.—A discussion on the administration of Chloroform in private practice was opened by Dr. McLean, and taken part in by Mr. Nunn, Dr. Childs, Dr. Lush, Mr. Watmough, Dr. Griffin, Mr. Embleton, Dr. Snow, Mr. Parkinson, and Mr. Scott.

Visit to the Priory Church.—Members were conducted over the church by Mr. Kemp Welch.

Dinner.—The members and visitors dined together at the Hotel.

NORTH OF IRELAND BRANCH : GENERAL MEETING.

A GENERAL meeting of the Branch was held in the Belfast Royal Hospital on Thursday, April 22nd. The President, Dr. KIDD (Ballymena), occupied the chair, and there was a very large attendance of members present.

Medical Defence Fund.—A resolution was submitted to the meeting from the East Anglian Branch advocating the formation of a Medical Defence Fund in connection with the Association, and it was resolved :—"That we favourably recommend the resolution of the East Anglian Branch in reference to the formation of a Medical Defence Fund to the consideration of the Council of the Association."

Communications, Patients, and Specimens :

1. Dr. O'Neill showed several patients, upon whom he had operated for Hare-lip and Cleft-palate, and he described the various steps of the operation.
2. Professor Cuming gave an account of Hypertrophic Cirrhosis of the Liver, and he exhibited a number of microscopical sections of the disease.
3. Dr. Gray (Castlewellan) read a paper on the Use of the Aspirator in Retention of Urine.
4. Professor Dill read the notes of a case of Pudendal Thrombus.
5. Dr. Byers read a paper on Pelvic Hæmatocele.
6. Mr. Fagan showed three patients, operated on by him for Congenital Tumours.
7. Dr. Lindsay (Belfast) gave an analysis of the Ulster returns in the recent Collective Investigation into the prevalence of Rheumatism, Chorea, Rickets, Cancer, and Calculus.
8. Dr. St. George (Lisburn) showed some patients treated by him for Talipes, by plaster-of-Paris, without division of the tendons.

An interesting discussion took place after each communication.

ABERDEEN, BANFF, AND KINCARDINE BRANCH : ORDINARY MEETING.

AN ordinary meeting of this Branch was held on May 13th, A. Ogston, M.D., President, in the chair.

Papers, etc.—The following communications were made :—

1. Dr. James Taylor : Specimen of Spina Bifida.
2. Dr. Macgregor : Case of Paralysis of the Sixth and Seventh Cranial Nerves.
3. Dr. Mackenzie Davidson : Detachment of the Retina.
4. Dr. Gordon : Case of Spina Bifida.
5. Dr. Presslie : Poisoning by Ginger-beer.
6. Dr. Mackenzie Booth : Paralysis of Ocular Nerves, with Polyuria.
7. Dr. Presslie : American Liquid Extracts.
8. Dr. Brander : Case of large Hydrocephalus.

MEDICAL MAGISTRATE.—Dr. Alexander Harkin has been appointed to the Commission of the Peace for County Antrim.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING.

THE fifty-fourth Annual Meeting of the British Medical Association will be held at Brighton, on August 10th, 11th, 12th, and 13th, 1886.

President : W. T. Edwards, M.D., F.R.C.S., Physician to the Glamorgan and Monmouth Infirmary, Cardiff.

President-elect : Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President of the Council : Balthazar Foster, M.P., M.D., F.R.C.P., Professor of Medicine in Queen's College and Physician to the General Hospital, Birmingham.

Treasurer : C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by Surgeon-General John S. Billings, M.D., United States Army Medical Department, Washington.

An Address in Surgery will be delivered by Frederick Abell Humphry, F.R.C.S., Surgeon to the Sussex County Hospital.

An Address in Public Medicine will be given by E. D. Mapother, M.D., Consulting Medical Officer to the City of Dublin.

The scientific business of the meeting will be conducted in nine Sections, as follows, namely :

MEDICINE.—*President*, W. H. Broadbent, M.D. *Vice-Presidents*, Frederick Bagshawe, M.D., Hastings; Joseph Ewart, M.D., Brighton. *Honorary Secretaries*, Francis Warner, M.D., 24, Harley Street, London; Henry Seymour Branfoot, M.B., 42, Norfolk Square, Brighton.

SURGERY.—*President*, John Eric Erichsen, F.R.C.S., F.R.S., London. *Vice-Presidents*, Frederick William Jowers, M.R.C.S., Brighton ; John Ward Cousins, F.R.C.S., Southsea. *Honorary Secretaries*, William Johnson Walsham, F.R.C.S., 27, Weymouth Street, London; Willoughby Furner, F.R.C.S., 2, Brunswick Place, Brighton.

OBSTETRIC MEDICINE.—*President*, Alfred Meadows, M.D., London. *Vice-Presidents*, Constantine Holman, M.D., Reigate ; Frederick W. Salzmann, M.R.C.S., Brighton. *Honorary Secretaries*, Charles J. Wright, M.R.C.S., Lynton Villa, Virginia Road, Leeds; Alban Doran, F.R.C.S., 9, Granville Place, W.

PUBLIC MEDICINE.—*President*, Richard Patrick B. Taaffe, M.D., Brighton. *Vice-Presidents*, Sir Charles Alexander Cameron, M.K.Q.C.P., Dublin ; Charles Kelly, M.D., Worthing. *Honorary Secretaries*, W. Brown, M.R.C.P.Edin., Carlisle; William Joseph Tyson, M.D., Folkestone.

PSYCHOLOGY.—*President*, Thomas Smith Clouston, M.D., Edinburgh. *Vice-Presidents*, Charles A. Lockhart Robertson, M.D., Brighton ; Joseph Raymond Gasquet, M.B., Brighton. *Honorary Secretaries*, Charles Spencer Waller Cobbold, M.D., Earlswood Asylum, Redhill ; James M. Moody, M.R.C.S., Surrey County Asylum, Canehill, Purley.

PATHOLOGY.—*President*, Julius Dreschfeld, M.D., Manchester. *Vice-Presidents*, James Frederick Goodhart, M.D., London ; Heneage Gibbes, M.D., London. *Honorary Secretaries*, John E. Ranking, M.D., Mount Ephraim Road, Tunbridge Wells ; John Caldwell Uhthoff, M.D., 9, Brunswick Place, Brighton.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Thomas Lauder Brunton, M.D., F.R.S., London. *Vice-Presidents*, John Mitchell Bruce, M.D., London ; Edward Mackey, M.D., Brighton. *Honorary Secretaries*, Cornelius William Suckling, M.D., 108, Newhall Street, Birmingham ; John Theodore Cash, M.D., Drumearn, Earlsfield Road, Wandsworth Common, S.W.

OPHTHALMOLOGY.—*President*, Chas. Oldham, F.R.C.S., Brighton. *Vice-Presidents*, Louis Tosswill, M.B., Exeter ; George Anderson Critchett, F.R.C.S.Edin., London. *Honorary Secretaries*, Frank Henry Hodges, F.R.C.S.Edin., 17, Horse Fair Street, Leicester ; Arthur Nicholson, M.D., 98, Montpellier Road, Brighton.

OTOLOGY.—*President*, G. F. Hodgson, M.R.C.S., Brighton. *Vice-Presidents*, Alphonso Elkin Cumberbatch, F.R.C.S., London ; Edward Cresswell Baber, M.B., Brighton. *Honorary Secretaries*, Henry Albert Reeves, F.R.C.S.Edin., 78, Grosvenor Street, W., London ; Patrick William Maxwell, M.D.Edin., 16, Warrington Place, Dublin.

Honorary Local Secretaries : Thomas Jenner Verrall, M.R.C.S., 95, Western Road, Brighton ; Alfred Scott, L.R.C.P., German Place, Brighton.

TUESDAY, AUGUST 10TH, 1886.
2 P.M.—Meeting of 1885-6 Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 11TH, 1886.
9.30 A.M.—Meeting of 1886-87 Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione*.

THURSDAY, AUGUST 12TH, 1886.
9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Surgery.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 13TH, 1886.
10 A.M.—Address in Public Medicine.
11 A.M.—Sectional Meetings.
4 P.M.—Concluding General Meeting.
8 P.M.—Reception.

SATURDAY, AUGUST 14TH, 1866.
Excursions.

The following discussions and papers are promised up to the present time. Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

SECTION A.—MEDICINE.

The following subjects have been chosen for special discussion.

1. Cases in which Disease of the Valves of the Heart has been known to exist for upwards of five years, without causing Serious Symptoms. Introduced by Sir Andrew Clark, M.D., F.R.C.P., F.R.S., London. The following gentlemen have promised to take part in the discussion: Drs. Gairdner, Clifford Allbutt, B. Foster, M.P., Douglas Powell, Sir Dyce Duckworth, M. Bruce, Burney Yeo, Skerritt, Byrom Bramwell, Saundby, Sansom, Tyson, Thomas, S. Mackenzie, and Oliver.

2. On the Effects produced by Gall-stones, with particular reference to some Rarer Points in their Symptomatology. Introduced by W. Ord, M.D., F.R.C.P., London. The following gentlemen have promised to take part in the discussion: Drs. Byrom Bramwell, Clifford Allbutt, B. Foster, M.P., Pavy, Shingleton Smith, Saundby, and Ralfe.

The President of the Section will deliver his Address on August 12th.

The following papers are promised.

COUTTS, J. A., M.B. Latter Effects of Rickets.
DRYSDALE, C. R., M.D. Treatment of Phthisis.
EARDLEY-WILMOT, R., M.B. A Case of Gall-stones.
EYLANDT, J. E., M.D. (Riga). Treatment of Diphtheria.
GAMGEE, A., M.D. On Compressed and Rarefied Air.
MANTLE, A., M.D. Etiology of Rheumatism considered from a Bacterial Point of View.
MOXON, W., M.D. Effects of Turpentine, Ergot, and Water, on Albuminuria.
OLIVER, T., M.D. On the Relationship of Man to certain Diseased Processes.
PLAYFAIR, W. S., M.D. Concerning so-called Neurasthenia and its Treatment.
RALFE, C. H., M.D. Functional Albuminuria.
SAVAGE, George H., M.D. Mental Symptoms with Locomotor Ataxy.
STRAHAN, J., M.D. Intestinal Ulcers and their Treatment, more especially by Arsenic.
WHITE, W. Hale, M.D. Inexplicable Pyrexia.
WHITTLE, E. G., M.D. Melancholia and Insomnia in the same Treatment.

SECTION B.—SURGERY.

Sir Henry Thompson will open a discussion on Suprapubic Lithotomy. The following gentlemen will take part in the discussion: Messrs. W. Cadge, Reginald Harrison, Professor Humphry, Berkeley Hill, T. R. Jessop, Greig Smith, W. Pye, Barwell, Bruce Clarke, Edward Lund, Walter Whitehead, and J. Ward Cousins, who will exhibit a new mouth-gag with throat-guard.

The following papers are promised.

HARLEY, George, M.D., F.R.S. Hepatic Phlebotomy and Puncture in Hypertrophic Congestions of the Liver.
TAIT, Lawson, Esq. Surgical Treatment of Diseases of the Liver.
THORNTON, J. K., Esq.
WILLETT, A., Esq., and MEREDITH, W. A., Esq. Cholecystotomy.

Messrs. Macnamara, Morris, Bellamy, Jessop, and Professor Gastin, of Georgia, will take part in the discussion.

HORSLEY, Victor, M.B. A paper, illustrated by Photographs illuminated by the Lime-light, in connection with the Advances in the Surgery of the Central Nervous System.

Mr. E. Bellamy and Dr. Hughes Bennett will join in the discussion.

ADAMS, W., Esq. On the Treatment of Congenital Displacement, the so-called Congenital Dislocation of the Hip-Joint, by long-continued Recumbency and Extension.
ANDERSON, W., Esq. On Treatment of Aneurysm by Galvano-Puncture, illustrated by cases.
BENTON, S., Esq. Fistula in Ano of the Horse-Shoe Shape.
CLARKE, Bruce, Esq., and STEAVENSON, W. E., M.D. The Employment of Electricity in the Treatment of Diseases of the Urinary Organs.
FITCH, Simon, M.D. (Nova Scotia). The Dome-Trocar and associated Instruments in Paracentesis, Aspiration, Transfusion, Ovariotomy, and Tunnelling the Prostate.
JESSETT, F. B., Esq. Surgical Treatment of certain Tumours of the Neck.
HARRISON, Reginald, Esq. On the Treatment of Urethral Stricture and Internal and External Urethrotomy combined.
KEETLEY, C. B., Esq. Further Remarks on the Radical Cure of Hernia by Injections into the Inguinal Canal.
OWEN, Edward, Esq. Psoas Abscess: when and where to evacuate it.
PYE, W., Esq. A Case of Multiple Papilloma of the Bladder, removed by the Suprapubic Operation.
SMITH, Noble, Esq. On Obscure Disease of the Spinal Column.
STARTIN, James, Esq. The Surgical Treatment of Acne and Lupus.
SYMONDS, Charters J., M.D. The Treatment of Malignant Stricture of the Œsophagus by Tubage.
SYMPSON, Thomas, Esq. A Case of Myositis Ossificans.
WHITEHEAD, Walter, Esq. Three Hundred Consecutive Cases of Hæmorrhoids cured by Excision.

SECTION C.—OBSTETRIC MEDICINE.

The President will deliver a short address.

The following two special discussions will take place.

1. The Alternatives to Craniotomy. This discussion will be introduced by Dr. Robert Barnes; and Professor Porro, Dr. Halliday Croom, Dr. E. T. Davies, Liverpool, Mr. Greig Smith, Clifton, and others, will be among the speakers.

2. On Removal of the Uterine Appendages. Papers will be read by Dr. Savage, Birmingham; Dr. More Madden, Dublin; and others; and Dr. Bantock; Dr. E. T. Davies, Dr. G. Elder, Nottingham, and Dr. Imlach, Liverpool; Mr. Lawson Tait, Birmingham; and others, will take part in the discussion.

The following papers are promised.

AVELING, J. H., M.D. A Case of Extra-uterine Fœtation arrested by Electricity.
BARNES, Fancourt, M.D. On Perinæorrhaphy.
BRAITHWAITE, J., M.D. On a Mode of Treating certain Cases of Amenorrhœa.
EDIS, A. W., M.D. Cases illustrating the Difficulties of Diagnosis in Gynæcological Practice.
ELDER, G., M.D. A Case of Vesico-vaginal Fistula.
GRIGG, W. C., M.D. On the Antiseptic Use of Bichloride of Mercury in Obstetric Practice.
HANDFIELD-JONES, M., M.B. Scanty Secretion of Liquor Amnii in the Early Months of Pregnancy, and its Bearing on Diagnosis.
HART, D. Berry, M.D. Successful Case of Abdominal Section for Ruptured Fallopian Tube Fœtation, with Microscopic Examination of the part of the tube removed.
HEWITT, W. M. Graily, M.D. The Early History and Etiology of Uterine Flexions and Displacements.
LUSK, W. T., M.D. (New York). The Proper Moment for the Performance of Gastrotomy in Abdominal Pregnancy.
ROUTH, C. H. F., M.D. On some Points of Difficulty as affecting Medical Men in Cases of Hysteria with Erotic Symptoms.

SECTION D.—PUBLIC MEDICINE.

The general subjects for discussion are the following.

1. Scarlet Fever; its Causation, and the best Sanitary Measures for Dealing with the Disease as it exists among Urban Populations. Dr. Ewart, of Brighton, will open this discussion.

2. On the Duration of Infectiousness in the following Infectious Diseases: Scarlatina, Small-pox, Measles, Mumps, and Diphtheria. Dr. A. Ransome, of Manchester, will open this discussion.

3. Diphtheria in Rural Districts: (*a*) Causation; (*b*) Influence of Soil upon the Disease. Dr. C. Kelly will open this discussion.

4. Reports of Water Analyses: the best Method of Stating these so as to secure one Uniform Plan. Dr. Whitelegge will open this discussion.

Dr. Edgar Crookshank will exhibit the various apparatus employed in a Bacteriological laboratory, and give demonstrations of cultivations, microscopic preparations, and photographs of bacteria.

The following papers are promised.

ASHBY, H., M.D. On the Duration of Infectiveness in Scarlet Fever.
CARPENTER, A., M.D. The Causation of, and on the Quarantine which is necessary to be observed in, Scarlatina.
EVATT, Surgeon-Major G. J. H. On the Medical Department of an Army Corps in War, with proposal for a more efficient Volunteer Medical Organisation.
KERR, Norman, M.D. On Hydrophobia, and its Prevention.
PAGET, C. E., Esq. The Influence of Acute, supposed Simple, Sore-Throat in the Spread of Diphtheria.
PRINGLE, Surgeon-Major R., M.D. 1. The Advantages and Disadvantages of Human and Animal Lymph compared. 2. State Vaccination, with special reference to the Compulsory Clauses in the Vaccination Acts.
SEATON, E., M.D. A paper on Scarlet Fever.
TATHAM, J., M.D. Scarlet Fever, and the best Means for its Prevention amongst Urban Populations.
VACHER, F., Esq. Duration of Infectiousness in the Exanthemata and Allied Diseases.
WHITELEGGE, B. A., M.D. Reports of Water Analyses.

Section E.—Psychology.

The President, Dr. T. S. Clouston, will deliver an address on the Relationship of Bodily and Psychical Pain.

The following papers are promised.

Clarke, A. Campbell, M.B.Glasgow. Experimental Dietetics in Lunacy Practice. A Record of Investigation and Results.
Gill, Stanley A., Esq., B.A. The Use and Abuse of Seclusion.
Savage, G. H., M.D. On Alternations of Neuroses.
Shuttleworth, G. E., M.D. The Relation of Marriages of Consanguinity to Mental Unsoundness.
Thomson, D. G., M.D. On the Separate Care and Medical Treatment of Recent Cases of Insanity, either in Existing Asylums, or in Lunatic Hospitals to be Established for that Special Purpose.
Tuke, D. Hack, M.D. On the Alleged Increase of Insanity.

The President will introduce a discussion as to How the Medical Spirit can best be kept up in Asylums for the Insane.

Discussions will also be invited upon Degradation of Habits and Feelings in Relationship to Mental Disease, and other subjects. The Secretaries will be glad to receive communications from members willing to read papers or to take part in the discussions.

Section F.—Pathology.

The following subjects have been chosen for special discussion.

1. Peripheral Neuritis. Opened by papers by Dr. Ross (Manchester), and Dr. Buzzard (London). Mr. Watson Cheyne, Professor Charcot, and Dr. Whittle, will take part in the discussion.

2. Aneurysm. Introductory paper by Timothy Holmes, F.R.C.S. Messrs. Barwell, Bryant, Savory, H. Morris, C. J. Symonds, Watson Cheyne, and E. Lund, will take part in the discussion.

3. The Etiology and Pathology of Pneumonia. Introductory papers by Dr. Octavius Sturges and Dr. R. Douglas Powell. Dr. Churton and Dr. Hollis will take part in the discussion.

The following papers are promised.

Barwell, R., Esq. On Aneurysm.
Cheyne, Watson, M.B. On Cholera.
Churton, T., M.D. The Pathology of the Adrenals.
Greves, E. Hyla, M.D., Liverpool, will show a Rare Form of Cerebral Tumour, and give an account of the same.
Hollis, W. A., M.D. Pulmonary Tuberculosis, associated with Heart-Disease.
Rake, B. N., M.D., (Government Medical Officer, Trinidad). 1. An Inquiry into the Distribution of the Leprosy Bacillus. 2. Experiments on the Communicability of Leprosy to Animals.

Section G.—Therapeutics and Pharmacology.

An Introductory Presidential Address will be given by Dr. T. Lauder Brunton, F.R.S.

The following subjects have been selected for special discussions.

1. Antipyretics; to be opened by Dr. Carter, of Liverpool.
2. Analgesics; to be opened by Dr. Spender, of Bath.
3. Action of Drugs in Albuminuria; to be opened by Dr. Saundby, of Birmingham.

The following gentlemen have promised papers: Messrs. Mitchell Bruce, J. M. Jessop, and Stone.

Drysdale, Charles R., M.D. Mercury as an Antidote in Syphilis.
St. George, George, Esq., Lisburn. Experiments with Manaca in the Teatment of Rheumatism.

Section H.—Ophthalmology.

Mr. Jonathan Hutchinson will open a discussion on the Different Forms of Choroiditis, in relation to their several Causes.

Mr. Anderson Critchett will open a discussion on Episcleritis.

An improved Electric Refraction Ophthalmoscope will be shown by Mr. Henry Juler.

The following papers are promised.

Abbott, G., Esq. The Use of Styles in the Treatment of Epiphora.
Andrew, Edwyn, M.D. Ophthalmic Hints.
Barrett, J. W., Esq., and Lang, W., Esq. On the Causation of Phlyctænula Ophthalmia and Sycosis.
Brown, Edgar, Esq.
Critchett, G. Anderson, Esq. On Dislocation of the Lens.
Frost, W. Adams, Esq. What is the best Method of Dealing with a Lost Eye?
Glascott, C. E., M.D. On Sarcoma of the Choroid, followed by Amblyopic Symptoms in the Sound Eye.
Hartridge, Gustavus, Esq.
Hewetson, H. B., Esq. The Treatment of Interstitial Keratitis by Operation, without Constitutional Remedies.
Higgens, Charles, Esq.
Johnson, L. L., Esq. Paper, and Demonstration of several new Ophthalmic Instruments.
Taylor, Charles Bell, M.D. 1. Is it Desirable, in Certain Cases, to Substitute Resection of the Optic Nerve for Ablation of the Eye-ball? 2. On a Method of Treating Epiphora without Slitting the Punctum Lacrymale.

Section I.—Otology.

The following papers are promised.

Baber, E. C., Esq. On Examination of the Nasal Cavities from the Front (illustrated with Diagrams).
Barr, T., M.D. 1. On the Varieties, with Appearance, of the Tympanic Membrane compatible with Good Hearing. 2. On the Value of Rinne's Test, in the Diagnosis of Disease of the Nervous Structures of the Ear.
Cumberbatch, A. E., M.B. Aural Vertigo.

Members desirous of reading papers are particularly requested to communicate without delay, with the Secretaries of Sections, that the arrangements may be as complete as possible prior to the meeting.

Annual Museum.

The twentieth annual museum will, by permission of the Town Council, be located in the Corn Exchange, a large hall, communicating with the Dome, and having a separate entrance in Church Road.

It will be open to the profession from August 9th to August 15th, and will be classified in three sections.

Section A.—Foods, drugs, hygienic and sanitary appliances. A specialty will be made of all kinds of prepared, peptonised, and other compound nutrients. (Honorary Secretary, Dr. Mackey, 1, Brunswick Road, Hove, Brighton.)

Section B.—New books, instruments, and appliances—medical and surgical; galvanic and other batteries and apparatus. (Honorary Secretary, Dr. Whittle, 65, Dyke Road, Brighton.)

Section C.—Anatomical and pathological specimens, diagrams, casts, or models; microscopes and microscopical preparations. (Honorary Secretary, D. W. Giffard, Esq., 5, Pavilion Parade, Old Steine, Brighton.)

A name and description, printed, if possible, must be attached to each exhibit, which should be sent to the Corn Exchange, Brighton (to the care of the Secretaries of the respective sections), between Monday, August 2nd, and Saturday, August 7th. Ample counter space will be provided, and, so far as possible, equal facilities will be given to every exhibitor.

A description, for insertion in the Museum Catalogue, should be forwarded to the private address of the respective Secretaries, at least one month before the meeting, that is, by July 10th.

Catalogue.—The catalogue will be provided gratis, but advertisements will be charged at the usual rate, namely, one page, £1; half-page, 12s. 6d.; quarter-page, 7s. 6d.

To Exhibitors.—The expenses of carriage and of removal to be borne by the exhibitor. The Committee will exercise every reasonable care as to objects entrusted to them, but will not be responsible for risk or accident.

Notices of Motion.

Dr. Ward Cousins hereby gives notice that he will move the following addition to, and alteration of, the By-laws; namely,

Page 17, By-laws. Addition to "d," second line, after the word "member,' add "of a Branch within the limits of the United Kingdom of Great Britain and Ireland."

Addition to "d."—"No person shall be eligible as a representative member of a Colonial or Indian Branch unless, at the time of his election, he shall be a recognised member of the Branch, and shall have resided within the area of the Branch for at least twelve months prior to his election. The election of Crown, Colonial and Indian members of the Council shall be annual, and shall be subject to the same by-laws as the election of other representative members."

May 6th, 1886. Francis Fowke, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Municipal Laboratory at the Exhibition of Urban Hygiene.—The Relation between Dental and Ocular Affections.—Amblyopia resulting from Paludism.—The Effect of White Light on the Bacillus Anthracis.

The Paris Municipal Laboratory is well represented at the exhibition of urban hygiene now open. The arrangements allow everyone interested to follow minutely the work done by this useful institution. The analyses made by the Municipal Laboratory are, on an average, 16,500 yearly, of which there are 7,000 of wine and 4,500 of milk. The service includes a chief, an assistant-chief, two principal chemists, twenty-three assistant chemists, twenty inspectors, and four clerks. The biological test is used in water-analysis in the laboratory. This is based upon the culture of microbes in gelatine. The cultivations are made in flat-bottomed conical glass bottles; two tubes are placed in the cork, one with a

glass top, and the other plugged with cotton-wool. The process commences by rendering the bottles sterile in an iron stove, large enough to contain one hundred and fifty. Gelatine is afterwards introduced into the bottles, and sterilised at a temperature of 105° and 110° Cent. (221° and 230° Fahr.). When the bottles are required for use, the gelatine is liquefied by means of a slight heat, and the water to be tested, diluted with a sufficient quantity of pure water, is poured through the tube provided with a tap. The gelatine solidifies in the process of cooling. The receptacles are arranged in a large metal chest, with glass doors, in which the temperature is maintained unvarying by means of a thermosiphon. The bacteria develop, and give birth to colonies, which form as many spots as there are bacteria contained in the volume of water used. Wine is more tested at the laboratory than any other food-substance, partly from the number of wine-shops in the capital, and partly from the facility with which it can be adulterated. The density of the wine is first taken; the quantity of alcohol it contains is determined by distillation in an apparatus in which four samples can be tested at the same time, by means of an ebullioscope, an instrument founded upon the difference existing between the two forms of boiling, that of water and that of alcohol diluted with water. In the exhibition, there are various models of these instruments: those of M. Malligand, Dr. Perier, and M. Amagat; also a particular kind of pipette, which fills automatically, and serves to measure exactly 20 cubic centimètres of wine. The proportion of extract is determined in flat-bottomed cylindrical platinum capsules, which are warmed in special water-baths, and afterwards left to cool in drying cages before being weighed. The proportion of extract is ascertained by allowing the wine to evaporate in a vacuum. The extract obtained is incinerated in a large gas-stove, and the ashes are weighed. The proportion of sugar is ascertained by Fehling's test; the proportions of acidity and of tartar are ascertained by reagents of varying strength, contained in bottles of a special form. Intensity of colour is determined by Dubosc's chromometer, founded upon the comparison of light which has travelled up to different heights in the fluid. After wine, of which Paris consumes 1,400,000 litres a day, the most important substance is milk, of which the consumption is about 250,000 litres. The density of the milk is first determined by the lacto-densimeter; then the cream is allowed to rise, and its depth measured. By means of a pipette, ten cubic centimètres of milk are measured and introduced into flat-bottomed platinum capsules. This milk, evaporated at 95° in an air-stove, gives the extract which is weighed and incinerated. A fresh sample of ten cubic centimètres is then introduced into a Marchand's lacto-butyrometer, and mixed with pure alcohol; it is then heated in a special water-bath, and the quantity of butter which is separated is then marked. The Municipal Laboratory also verifies the purity of alcohols and oils by means of a refractometer, which determines, in a few minutes, the coefficient of the refraction of fluids. The density of coffee and of all groceries is determined by a new voluminometer, which is easily used. A special apparatus is used for extracting from those articles of food substances which are soluble in alcohol and ether. A special kind of spectroscope is used; a table showing the spectrum of absorption of the principal colouring substances, due to the researches of MM. Ch. Gérand and Pavot, can be consulted. The microscopic preparations of adulterated food are photographed by a very accurate method.

At the recent Ophthalmological Congress, M. Paul Redard described a number of cases in which dental affections were evidently the source of ocular disturbance, such as glaucoma, amaurosis, amblyopia, and cloudy vision. In asthenopia, without any apparent cause, the teeth should always be examined. M. Gayet mentioned a case in which disturbance was produced by a tooth fixed on a pivot; the symptoms appeared and disappeared according as the tooth was removed or replaced. M. Fieuzal had observed so many of these cases of correlation between ocular and dental affections, that he had urged that a dental clinic should be annexed to the Quinze Vingts Hospital for blind people. M. Suarez and M. Galezowski mentioned similar facts. M. Gaval mentioned a series of cases, of an inverse order, in which dental disturbance disappeared after operating for glaucoma.

M. Trellais, of Nantes, stated that he has often observed that amblyopia is frequently a complication of paludism. It may be only transitory, and it may go on to complete blindness. The time it lasts varies from a few minutes to several months; but, however intense it may be, it is generally cured by antiperiodic treatment, without leaving the slightest trace. In paludal amblyopia, the power of vision is always impaired; the colour-sense is preserved. Lesions of the eye have hitherto only been recorded in connection with pernicious fever or malarial cachexia; but it may exist in all stages of malarial poisoning, and is not always in proportion with the gravity of the malarial manifestation. M. Poncet observed that ophthalmic lesions are very frequent in malarial fevers. The retinæ of the patients are usually pigmented. Emboli are frequently formed by the accumulation of large white corpuscles. After treatment by sulphate of quinine, the accumulation is broken up, and the symptoms disappear. Paralysis of the limbs, which is sometimes observed in marsh-fever, also disappears. Hemeralopia is sometimes co-existent with this condition.

In an article on the effect of white light on the bacillus anthracis by M. S. Arloing, in the *Archives de Physiologie Normale et Pathologique*, the author arrives at the following conclusions. Gas-light is slightly injurious to the growth of the bacillus anthracis. Summer sun-light rapidly suppresses the development of the spores of the bacillus anthracis, if its rays penetrate into fluid which holds them in suspension; summer sun-light gradually lessens the vegetability of the mycelium, and can alter the cultivations as effectually as heat. These results are effected by all the rays combined, and not by one of the constituent rays of light. The results are in proportion to the intensity of the light and the transparence of the medium. Light is probably a factor in attenuating several forms of virus, if not all.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Owens College.—Victoria University.—Superintendent of Nurses in the Infirmary.—Resignation of Sir H. E. Roscoe.

THE medical classes did not meet during Whitsun week, although the laboratories were open for the students to carry on their work.

We understand that there is a good entry for the medical degrees of Victoria University. The examinations for the medical degrees begin shortly after the middle of July, and the practical examinations take place towards the end of the month. The second examination term for medical students for the degrees of Victoria University has hitherto been held in October. The question of changing the examination terms to April and July instead of July and October, is at present under the consideration of the authorities. April and July are certainly the natural terms for examination, and are most convenient for the students themselves.

Miss Alicia Brown, of St. Bartholomew's Hospital, has been appointed Lady Superintendent of Nurses in the Manchester Royal Infirmary, *vice* Miss McKie.

The Council of Owens College have accepted the resignation of Sir Henry E. Roscoe, Professor of Chemistry. Applications will be received up to August 31st, and the appointment will be made as early as possible in the Michaelmas Term.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

CONSULTANTS AND GENERAL PRACTITIONERS.

SIR,—Without at all discussing the special points raised by the circular of the "Association of General Practitioners," it would be well that their allusion to the sister profession should be made more clear. The circular says: "In the legal profession, the position of the consultant is very definite; under no circumstances whatever will he permit himself to be approached by the public in matters relating to his profession. Advice is given to the solicitor, and not to the client." This statement is only correct so far as regards civil cases; but, in all cases where the life or liberty of Her Majesty's subjects are involved, it is not held necessary, by etiquette, to employ a solicitor; but the barrister is at liberty to take instructions direct from his client, and, as a matter of fact, this is generally the case. It cannot be unknown that the bar, as a body, chafe under these restrictions, as their career in life is placed, in civil practice, entirely in the hands of certain solicitors; and, of late, many suggestions have been thrown out to do away with them. One means of counteracting the disadvantage must be well known to us all—namely, marrying the solicitor's daughter. Whether this means will be adopted by the young physicians remains to be seen, when the desire of the "Association of Medical Practitioners" prevails. Another method has been, not unfrequently, adopted—namely, that of throwing up the bar, and becoming solicitors.—I am, sir, yours faithfully,

J. BRAXTON HICKS.

George Street, Hanover Square.

SIR,—Much as I sympathise with the objects of the "Association of General Practitioners," I fear that their programme is on the whole impracticable. The only method of dealing with the question is to mark the men who act dishonestly, and use all our influence to prevent our patients consulting them. The Association might keep a list of the black sheep for the private use of members, on the principle adopted by the Society for the Protection of Trade. The following simple rules for subscription by London consultants might be adopted:—1st, That the fee for a first consultation be two guineas, and one guinea for each subsequent consultation; 2. That, if the patient bring a letter from the general practitioner, the consultant shall communicate to him his opinion of the case and the method of treatment suggested; 3. If the patient come without the knowledge of the general practitioner, he shall give his opinion, but decline to see the patient a second time without the consent of the general practitioner.

So much for the London consultants. But the Association seems to take no cognisance of the country consultants, who really work more evil to the profession than their brethren in London. In the great majority of instances, the country consultant is a general practitioner, who owes his position to the fact of his holding an appointment in connection with a country hospital. I see no objection to this, provided that he acts in a manner consonant with the dignity of his position; but I fear this is often not the case. The servant of a patient of mine a short time ago went to "consult" the senior surgeon of a neighbouring hospital, who is a Fellow of the College of Surgeons. She received his advice and a bottle of medicine, the charge for the whole thing inclusive being two shillings and sixpence. When we find these men charging for bottles of medicine, attending low midwifery, and taking clubs at the lowest possible scale, I think it is time for the profession to cry out, and to ask what right or title they have to set themselves up as consultants, or, for the matter of that, to hold hospital appointments at all. The so-called consulting physicians are little better. They attend patients at their houses for charges below even those of the medium class general practitioner. All this is, of course, a direct incentive to the public to transfer their patronage from the humble general practitioner to the very superior and quite as cheap consultant.

I say, then, that the position of consultant in the country is one calling most urgently for the consideration of the general practitioner. I would suggest, then, that the Association should turn their attention to them, and should ask all country hospital physicians and surgeons to subscribe to the following rule:—That no member of the profession in the provinces shall be recognised as a consultant who attends midwifery, dispenses his own medicine, or takes clubs. As to the question of fees, they must of necessity vary in different parts of the country, and I cannot enter into that question now.—Yours, faithfully,

F.R.C.S.

THE TREATMENT OF STRICTURE OF THE URETHRA BY ELECTROLYSIS.

SIR,—There are one or two points connected with our paper on the above subject, which was read before the Royal Medical and Chirurgical Society on the 25th ultimo, to which I should like to direct attention.

Mr. Berkeley Hill was sorry we had not used an endoscope so as to see really what took place, but we had no doubt as to what occurred. The process can be clearly seen when electrolysis is used around the os uteri for erosion or chronic cervical catarrh. Several such cases have been sent to the Electrical Department at St. Bartholomew's Hospital. These cases had resisted the application of other forms of caustic. I have also viewed the process in conjunction with Dr. Gibbons, at the Grosvenor Hospital for Women. The unhealthy granulations are dissolved at the point of contact of the electrode, and the surface soon becomes covered with a thick froth, as of soap-suds or whipped cream, the surface subsequently healing without the slightest tendency to contraction. In fact, we could see the process in the male urethra in one case operated on by Mr. Clarke, which has occurred since the paper was written. This was a case of constriction of the meatus, which we enlarged by electrolysis. The dissolving of the septum which partially covered the lower part of the opening was perfectly obvious. It proceeded when the current was closed, and stopped when the current was opened. And in another case, sent to me by Mr. Butlin, where there was a nævoid growth in the urethra just inside the meatus, the destruction of the nævus by the electricity was clearly seen.

In your annotation on the subject, you have drawn attention to the fact that scars produced in different ways show a difference in their tendency to contract. It is acknowledged on all hands that scars produced by burns are more liable to contract than others; and, when writing my part of our paper, I had in mind a controversy on the subject of the contraction of eschars, which took place eight or ten years ago, with reference to the use of nitric acid to the uterus as a caustic, by Dr. Lombe Atthill. If my memory serves me, I believe it was maintained by some that the use of nitric acid was followed by more contraction than when other caustics were used, such as caustic potash. I could not find the reference, nor could I find any work in which a description is given of the relative action of caustics, or the reasons for the choice by gynæcologists of one caustic in preference to another. I should be glad of information on this point from any of your readers.

One other reference to your annotation. The writer says, "It is found most successful and least uncomfortable that the negative pole should be in contact with the urethra." It is most essential that it should be the negative pole on all occasions. Should the positive pole be used, it would be found that the electrode would become glued to the side of the urethra, because of the different action produced, and some force would be required for its removal. This would most probably be followed by sharp hæmorrhage.

With regard to the results of the American cases—some of which, according to the reports, have remained well for eight, ten, and eleven years, I have no reason to doubt the accuracy of these reports. In fact, the operation of electrolysis for strictures of all kinds appears to be thoroughly recognised in the States.

A number of Americans visit my department at St. Bartholomew's Hospital, and they are all perfectly conversant with this mode of treatment. I have not the slightest doubt of its efficacy; and, I believe, if adopted by English surgeons, it would be found by them preferable to all others.—I am, yours faithfully,

W. E. STEAVENSON, M.D.,
Electrician to St. Bartholomew's Hospital.

THE REVIVAL OF OVARIOTOMY AND MR. TAIT.

SIR,—Have we not had rather too much of the ovarian biography of Wells according to Tait's 10th edition?

It is notorious that the first and second phases of ovarian history, according to Tait, left ovariotomy in 1857, on its death-bed. Equally notorious is it, that new life was put into it from the moment Wells took it in hand. The late Dr. Robert Lee had denounced it at a memorable meeting of the Royal Medical and Chirurgical Society. In my hearing, he stigmatised ovariotomists as "belly-rippers," and then and there arose a murmur of applause from those present.

No one at all acquainted with the late Mr. Wakley, can think of him as narrow-minded or captious in regard to methods tending to professional advancement. He told me himself he was inclined to hold an inquest on every fatal case.

It was not long before Wells ventured to bring his first account of his work to the notice of the Royal Medical and Chirurgical Society. The prevailing hostility ceased at once. The President declared that, in his opinion abdominal surgery presented a new and altogether hopeful aspect. This opinion was received with acclamation.

This word, "revival," so caviled at by Mr. Tait, made its first appearance in my sketch of the history of the Samaritan Hospital, and my connection with it, written for one of its annual reports. Sir Spencer Wells adopted it fairly enough, in illustration of part of his address before the Areopagus (so-called), in the Midlands. In reply to inquiries, Wells stated that in not one case, amongst his 1,000 ovariotomies, had he perceived any sign of disease in the tubes, as described by Tait; but, he added, "I suppose they all go to Birmingham."

It is well not to forget that Mr. Tait looks upon harmless banter of this kind as injurious to his well-earned reputation; but, what did he himself say about these cases? "These poor women, having gone the round of the profession, and having submitted themselves to all sorts of treatment, at last found their way down to me." (I quote from memory.)

Ovariotomy, Mr. Tait alleges, during his first and second phases of its history, was as successful as other operations. Very likely those were times when the majority of operations comparable in magnitude with ovariotomy ended fatally.

I think I can remember that Mr. Tait stated in one of the journals that, had he started with a mortality of 25 per cent., he would have given up the operation; but why? And if so, what meaning is there in his laudation of ovarian work during the first and second "phases" of his history?

I heartily congratulate Mr. Tait on his marvellous works, not the least of them being 139 ovariotomies in succession through an incision

nly two inches long, without a death ; but I defy him, had he the hoice of any of the five-hundred fingers of the Uranids, to deal with alf the cases which come to the Samaritan Hospital, through an ncision two inches long only.

I need not dwell on the inference except, perhaps, to remark that he loss of a case, the operation accomplished through an incision so mited, would very much surprise the surgeons of the Samaritan Iospital. On the other hand, should I find the signs of mischief in he tubes resist a few flying blisters and appropriate treatment, I should ot hesitate to send the case in all confidence to Mr. Tait.—Remaining, r, yours obediently,

HENRY SAVAGE.

SIR,—Doubtless Mr. Farrant Fry expresses the sentiments of the ajority of your readers, when he asks for more information regard- g the novel treatment of peritonitis, propounded by Mr. Lawson ait.

Although at first sight free purgation appears opposed to that rest hich is needful for the repair of wounds, still, when the matter more closely looked into, the inconsistency is found more apparent han real.

The septic peritonitis with which, most frequently after laparotomy, e have to contend, seems to me to kill, by reason of the profound mpression it makes on the sympathetic nervous system, bringing in s train paralysis of the intestinal muscular coat, with its sequent istension of the bowel, and stretching of the peritoneum. Opium, o which in these cases we have long trusted, not only masks ymptoms, but also deepens the poison-narcosis from which the atient already is suffering ; whereas, by the timely administration of saline purge, tension is relieved, and the functions of absorption nd elimination, which were in abeyance, are once more re-established, nd the parts are put in the best possible condition for recovery.

I have recently found this treatment of signal value, and more par- icularly in a case of acute peritonitis, upon which abdominal section as performed ten days ago. Prior to the operation, the temperature as over 104° Fahr., and the outlook anything but hopeful. A large eculent abscess, encysted behind the sigmoid flexure, was emptied, ashed out several times with plain water, and a drainage-tube left n. The evening temperature ran down to 100° ; but next morning 03° and 104° was registered. The belly was much distended, and ltogether the aspect of the case was even more serious than before he operation. Epsom salts were given in frequently repeated doses, ntil free purgation ensued ; and, as if by magic, the graver sym- toms disappeared, and have never returned. Now, I ask those amiliar with abdominal surgery, what would have been the result had trusted to the routine treatment in this case?

Touching the cleansing of the peritoneal cavity by repeated wash- ng with water, inasmuch as it saves time, and does not injure the erous membrane, which much sponging is apt to do, it must ommend itself as a valuable adjuvant to the present mode. In he *American Journal of Obstetrics* for May, mention is made of its se by Martin, of Berlin. I think the day for upholding the anti- eptic method in abdominal surgery is passed ; and whether the water sed be plain or not matters little if hands, sponges, and instruments e scrupulously clean.—Yours, etc.,

GEORGE ELDER.

Nottingham.

SIR,—The aspersion cast upon me by "Historicus" for having written s I did in 1877 about Sir Spencer Wells and ovariotomy is thoroughly eserved. I have, however, the explanation to offer that I accepted what ir Spencer Wells said about himself, as others did, without inquiry. n fact, the dedication of my book is from Sir Spencer Wells's own en. Some time later—in 1871, I believe—I came across a pamphlet n the history of ovariotomy, by Mr. George Jesse, which showed me he necessity for a full inquiry. I made a careful research, and un- arthed much additional evidence, which completely shows (*a*) that variotomy had never died since 1809, and, therefore, was not revived y Mr. Wells in 1857 ; (*b*) that the first operator in England, Dr. harles Clay, had, over the whole of his series, almost exactly the ortality obtained by Mr. Spencer Wells over what was, at that time, he whole of his work, 25 per cent. ; (*c*) that Mr. Baker Brown had re- uced the mortality on the right lines to 10 per cent. ; (*d*) that Mr. Vells sent it up again to 29 per cent. ; (*e*) and, finally, that it would ave been better for humanity if Sir Spencer Wells had continued is services in Her Majesty's navy, and had never touched abdominal urgery. All the evidence in favour of these conclusions is given i my edition of 1883, which is not dedicated to Sir Spencer Wells.

The last paragraph of the letter of "Historicus" is incomprehensible. e says I suppress "the fact that, in successive periods of five years, e mortality in his (Sir Spencer Wells's) practice had been reduced from thirty-four in the first hundred to eleven in the tenth hundred.' I had no object in suppressing such a fact, for, when it is displayed, it proves my point exactly. Here are the figures, and let anyone try to prove anything else out of them.

Sir Spencer Wells's Thousand Cases in Hundreds.

	Mortality per cent.
First hundred	35
Second ,, ...	29
Third ,, ...	23
Fourth ,, ...	22
Fifth ,, ...	20
Sixth ,, ...	29
Seventh ,, ...	24
Eighth ,, ...	24
Ninth ,, ...	17
Tenth ,, ...	12
1000	23.5

No remarkable diminution of the mortality is visible until the ninth hundred, during the current of which he gave up the clamp, practically in December 1877, actually in August 1878. In fact, "Historicus" is taking some wild statement without investigation, for even when the figures are twisted into five-year periods, here is what results.

Five-Year Periods.	Cases.	Deaths.	Mortality per cent.
1858-1862	53 ...	17 ...	... 32
1863-1867	192 ...	53 ...	... 27.4
1868-1872	281 ...	67 ...	... 23.8
1873-1877	362 ...	85 ...	... 23.8
1878-1880	112 ...	13 ...	... 11.6
	1,000	235	23.5

This proves conclusively the view which I have taken, all through this controversy, that the clamp was at the bottom of all the trouble ; and that the departure from the lines laid down by Nathan Smith and Baker Brown—the adoption of the clamp by Sir Spencer Wells—was a retrograde step. It has actually stopped the development of abdominal surgery for a quarter of a century, besides costing numerous lives which might have been saved, had the departure never been made.

A reference to the dates now explains the difference between the views I expressed in 1877, and those of 1886, as placed in parallel columns by "Historicus." No diminution of any importance occurred in the mortality of Sir Spencer Wells's practice until after I had written what I did in 1877 ; but the moment I recognised the fact that the intraperitoneal method was the one which ought never to have been given up, a recognition which I owe entirely to Keith, the moment I discovered what eminent service Baker Brown had done to abdominal surgery, then my views about Sir Spencer Wells necessarily changed. As I have said, I do not regret the change. What I regret is, that I ever entertained the views that I published in 1877; for, if I had not been led astray by Sir Spencer Wells's practice, in my own experience, I should have been able to save a large number of lives, which otherwise were sacrificed. This change of opinion was forced upon me by the facts of the case ; and the only ill result is, that Sir Spencer Wells has taken the alteration as a personal matter, has deprived me of his personal acquaintance, declines to meet me in consultation, and ignores my letters and telegrams when I communicate with him about patients.

This may be a method of controversy gratifying to him, but it constitutes no effectual argument.—I am, etc.,

Birmingham. LAWSON TAIT.

THE SANITARY CONDITION OF THE HOUSES OF PARLIAMENT.

SIR,—The Palace at Westminster—the most important building in the Empire—ought to be above suspicion as to its sanitary condition ; and after reading the second Report of the Select Committee I venture to think that an additional recommendation might be agreed upon before the arrangements of the Palace are "improved," namely :—That advantage be taken of a competition between a limited number of sanitary experts.

The elevation and plans of a public building are seldom settled without having recourse to competition between architects of standing; and when it is a question involving the consideration of health, the same principle might with advantage be applied. In no other way would that scrutiny and thought be brought to bear on the problem

of making the sanitary condition of the Houses of Parliament as complete and as perfect as possible.

The competition need not be amongst a large number, indeed there is not a large number of experts of sufficient standing to be intrusted with so important a work. This fact in itself seems to call for competition, for it suggests that great as have been the advances in sanitary science, it is yet, to a certain extent, in its infancy, and, therefore, so great a work as the remodelling of the sanitary arrangements of the Palace at Westminster ought to receive the most critical attention before any plan is adopted.

No time need be lost. While one expert is preparing his plans, others could prepare theirs, and I think most people would agree that in no other way could the best plan and advice be obtained.—I am, sir, your obedient servant, G. DANFORD THOMAS.

Park Lodge, Paddington, W.

THE JUBILEE BANQUET OF THE BRITISH MEDICAL BENEVOLENT FUND.

SIR,—I shall be glad to be allowed again to remind your readers of the jubilee celebration of the British Medical Benevolent Fund on Thursday, July 8th. Already so many prominent members of the profession have intimated their intention to be present, that the gathering will be one of the most important which has taken place for many years. It was indeed to be expected that a desire to do honour to Sir James Paget would be a powerful influence in bringing together a distinguished assemblage, and this anticipation is being fully realised. Among those who may be expected to attend are Sir William Jenner, K.C.B., President, Sir Dyce Duckworth, Treasurer, and representative in the Medical Council, and Dr. Habershon, Senior Censor of the Royal College of Physicians; Mr. John Wood and Mr. Henry Power, Vice-presidents of the College of Surgeons; Sir Henry Acland, K.C.B., President of the Medical Council; Dr. Edwards, President, Dr. Withers Moore, President-elect, and Dr. Balthazar Foster, President of the Council of the British Medical Association; Mr. George Pollock, President of the Royal Medical and Chirurgical Society; Sir Andrew Clark, Bart., Sir Prescott Hewett, Bart., Sir Joseph Lister, Bart., Sir Edwin Saunders, Sir Ed. Sieveking, Dr. Clifford Allbutt, Dr. Chadwick, Dr. Coates (Bath), Mr. Crosby (Manchester), Dr. Hare, Dr. Holman (Reigate), Dr. Langdon Down, Dr. Ord, Mr. Winter (Brighton).—Yours faithfully, W. H. BROADBENT.

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

SIR,—With reference to the proposal in the Bill to elect the medical officer of health annually, I append an extract from the Seventh Annual Report of the Board of Supervision. The Board of Supervision are the Board of Health for Scotland, and, in very many instances, the parochial medical officer is *ex officio* medical officer of health.—Yours truly, JAMES GAIRDNER.

Coldwells, Crieff, N.B.

"*Election of Medical Officer.*—Some of the parochial boards have been in the practice of electing annually the parochial medical officer; but, so far as we have had an opportunity of observing the effects of this system, we have reason to believe that they have been prejudicial both to the harmony of the parochial board, and to the interests of the poor. The annual election is apt to degenerate into an annual contest between rival practitioners, in which the most respectable and worthy are unwilling to engage. Each candidate is supported by partisans, in whose estimation professional skill or fitness for the office is not always the primary consideration; and the fact that the election is only for one year apparently tends to produce recklessness in the choice."

SCIRRHUS OF THE BREAST; RECURRENCE LONG AFTER REMOVAL.

SIR,—I concluded my first letter to you upon the above subject by saying, that "no known cause for this recurrence could be assigned," and I thought that Dr. Herbert Snow would have understood that my words were intended to convey that the case I recorded had received from her medical attendant every care and attentive observation from the time of the operation until the period of the detection of the recurrence of the disease; and, further, that no mental anxiety or worry of any kind had at any time annoyed the lady I referred to.

I am sorry that Dr. Snow has had the trouble of writing a second time upon this subject. It has, however, afforded me much pleasure to answer his two questions.—Yours obediently,

Wolverhampton. VINCENT JACKSON.

NAVAL AND MILITARY MEDICAL SERVICES.

GENERAL PRENDERGAST'S DESPATCHES.

SIR HARRY PRENDERGAST'S despatches on the conduct of the expedition to Burmah have been published in India, and highly extol the behaviour of the troops. The despatches are accompanied by a resolution of the Governor-General in Council, fully confirming the praise bestowed by the commanding officer. Among others who are favourably mentioned, the Governor-General desires to record his approbation of the manner in which the medical department, under Deputy Surgeon-General J. M. Donnelly, M.D., have proved the complete efficiency of the department under circumstances of considerable difficulty. The Government of Madras have very fully acknowledged the services of its officers; and the Governor-General wishes to add his own appreciation of the services of, among others, Surgeon-General Irvine, Medical Staff, and Surgeon-General Furnell, of the Indian Medical Department. The thanks of the Government of India are, it is added, also due to Surgeon-General C. D. Madden, Medical Staff, and to Surgeon-General B. Simpson, M.D., of the Indian Medical Department.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

		From	To
Brigade-Surgeon	R. W. Clifton	—	Edinburgh.
,,	J. J. Chapple	Malta	Cork.
Surgeon-Major	T. Murtagh	Plymouth	Devonport.
,,	E. F. Boult	Portsmouth	—
,,	J. A. Campbell	York	Hulme.
,,	G. E. Dobson, M.B.	Netley	Exeter.
,,	F. E. Barrow	Suakin	Egypt.
,,	R. De B. Riordan	Malta	Cork.
,,	W. C. Grant, M.B.	Gosport	Parkhurst.
,,	R. H. Quill, M.B.	Chatham	—
,,	W. H. Briggs	Colchester	Warley.
,,	W. B. Allin, M.B.	Egypt	Woolwich.
Surgeon	C. H. Swayne	Dublin	Madras.
,,	B. W. Wellings	Sheerness	Gravesend.
,,	G. H. Le Mottée	Chatham	—
,,	P. A. Hayes	Portsmouth	Portland.
,,	W. J. R. Rainsford	Egypt	Dublin.
,,	C. K. Powell, M.D.	Kinsale	Madras.
,,	H. C. Kirkpatrick, M.D.	Dover	Canterbury.
,,	H. Grier	Aldershot	Nova Scotia.
,,	H. J. M'Laughlin, M.B.	Netley	Madras.
,,	N. Leader	Suakin	Egypt.
,,	S. L. O'Neill	Netley	—
,,	W. L. Lane, M.B.	Jersey	Madras.
,,	A. S. W. Young	Newport	—
,,	C. B. Hill	Portsmouth	Gosport.
,,	H. E. B. Flanagan	Woolwich	Madras.
,,	J. G. S. Lewis	Kingston-on-T.	—
,,	G. W. Robinson	Birmingham	York.
,,	A. H. Burlton	Dover	Canterbury.
,,	A. Hewett	—	York.
,,	F. B. Maclean	—	Devonport.
,,	G. H. Sylvester	Devonport	Bull Point.
,,	W. J. Macnamara, M.D.	—	Woolwich.
,,	D. O'Sullivan	—	York.
,,	H. W Murray, M.B.	—	Woolwich.
,,	S. A Crick, M.B.	Salford	Madras.
,,	R. H. S. Sawyer	Enniskillen	Dublin.
,,	E. Butt	Belfast	Dundalk.
,,	T. B. A. Tuckey	Templemore	Madras.
,,	J. Maconachie	Winchester	Gosport.
,,	A. H. Morgan	Cahir	Clonmel.
,,	A. M. Davis	Devonport	Netley.
,,	E. M. Wilson	Egypt	Gosport.
,,	W. G. Birrell, M.B.	Leeds	Bombay.
,,	W. G. Clements	Dover	Shorncliffe.
,,	W. L. Reade	Devonport	Horfield.
,,	J. R. Forrest	Suakin	Egypt.
,,	W. E. Berryman	Suakin	Egypt.
,,	C. Hayden, M.D.	Horfield	Avonmouth.
,,	A. P. H. Griffiths	Egypt	Suakin.
,,	J. F. Burke	Curragh	Madras.
,,	L. P. Mumby, M.B.	Portsmouth	Dorchester.
,,	F. W. G. Hall, M.B.	Chatham	Sheerness.
,,	H. W. M. Kendall	Portsmouth	Gosport.
,,	S. J. W. Hayman	Portsmouth	Bombay.

THE NAVY.

FLEET-SURGEON R. R. SICCAMA has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet. He entered the Royal Navy as Surgeon September 22nd, 1857; rose to Staff-Surgeon July 4th, 1866, and to Fleet-Surgeon July 8th, 1878. Mr. Siccama served as Staff-Surgeon of the *Modeste* during the operations in the Straits of Malacca in 1875-76, and has the Perak medal. During the Egyptian War, in 1882, he was Fleet-Surgeon of the *Northumberland*, and was landed in medical charge of the Suez Canal guard, during the occupation of the canal (medal and Egyptian bronze star).

Staff-Surgeon E. W. Doyle has been appointed Fleet-Surgeon. His commission as Surgeon bears date November 26th, 1864; as Staff-Surgeon September 1, 1877.

Staff-Surgeon George Kell has alse been promoted to Fleet-Surgeon; he ranked as Surgeon July 1st, 1864; and as Staff-Surgeon September 5th, 1877.

The following appointments have been made at the Admiralty during the past week: Henry Gramshaw, to be Surgeon and Agent at Walton-on-the-Naze; John Jenkins, Surgeon, to the *Curlew*; James Porter, Surgeon, to the *Impregnable*; W. B. Beatty, Surgeon, to the *Calypso*.

MEDICAL STAFF.

Surgeon J. Armstrong is placed on general duty in the Sinde Circle, and Surgeon O'C. Drury, in the Mhow Circle, both in the Bombay command.

Deputy Surgeon-General T. Tarrant, M.D., serving in the Madras command, has leave of absence for six months on medical certificate.

Deputy Surgeon-General W. H. Corbett, M.D., died at Shahkote, Bengal, on May 8th, in his 54th year. He entered the army as Assistant-Surgeon, December 18th, 1854; became Surgeon, October 23rd, 1867; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, March 28th, 1880; and Deputy Surgeon-General, June 18th, 1884. Dr. Corbett served in the Crimean campaign from January 9th to June 13th, 1855, including the siege of Sebastopol (medal with clasp, and Turkish medal); in India with the 81st Regiment in the Eusoofzie expedition under Sir S. Lotton in 1858 (medal with clasp); and in the Indian mutiny campaign in 1857-58, and was present when the 81st Regiment, under Colonel Renny, disarmed at Lean Meer one Regiment of Native Cavalry and three Regiments of Native Infantry, all disaffected and ripe for mutiny (medal).

Brigade-Surgeon Tyler Oughton has died of heart-disease. He was born in Jamaica, in 1836, and entered the army as Assistant-Surgeon, January 24th, 1864; became Surgeon, March 1st, 1873; and Surgeon-Major, August 22nd, 1876; retiring with a step of honorary rank, October 29th, 1881. He served in the Ashantee war in 1873-74 (medal), and with a mountain battery of Royal Artillery in the Afghan war, in 1879-80; and took part in the celebrated march to Candahar, under Sir Frederick Roberts, and in the battle of September 1st (medal with clasp, and bronze star).

Surgeon-Major T. M. Kirkwood died at Madras on May 7th, aged 45. His commission as Assistant-Surgeon dated from March 31st, 1864; Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. He had no war service.

Surgeon J. J. Falvey has taken up the appointment of Assistant-Instructor at the Depôt and Training School, Aldershot, *vice* Surgeon H. Grier, who has gone to Nova Scotia.

Surgeon A. A. Pechell, serving in the Madras command, has been granted leave to England on medical certificate for six months, with the necessary subsidiary leave.

Surgeon-Major T. Maunsell, Surgeons S. Hickson, M.B., S. Powell, M.B., A. Fitzgerald, C. L. Joslin, J. F. Bateson, M.B., N. C. Ferguson, M.B., and J. Greenway, all of whom are serving in Bengal, have passed the examination for the lower standard in Hindustani.

The undermentioned surgeons have been posted as follows, all being in the Madras command: C. K. Powell, M.D., arrived at Bangalore with troops from England, to do duty, station hospital, Bangalore; H. E. B. Flanagan, arrived at Bangalore with troops from England, to do duty, Eastern District; P. J. R. Nunerley, doing general duty, Eastern District, to do duty, Burma Field Force, Mandalay; H. T. Baylor, doing duty, station hospital, Madras, to do duty, Burma Field Force, Mandalay.

Surgeon-Major W. J. Campbell, doing duty, station hospital, Belgaum, is appointed Senior Medical Officer to the station hospital, Madras.

THE INDIAN MEDICAL SERVICE.

Surgeon H. P. Dimmock, Bombay Establishment, is appointed to act as Civil Surgeon of Sukkur, during the absence of Surgeon-Major M. L. Bartholomeusz, M.B.

Surgeon G. H. Bull, M.D., Bombay Establishment, has been appointed to the Medical charge of the Roman Catholic Orphanage School at Poona.

Surgeon-Major W. Gray, M.B., Bombay Establishment, Senior Surgeon of the Jamsetjee Jejeebhoy Hospital, and Professor of Surgery and Clinical Surgeon to the Grant Medical College, has returned to duty.

The services of Surgeon-Major A. Barry, M.D., Bombay Establishment, are placed at the disposal of Government in the Civil Department.

Surgeon R. Macrae, Bengal Establishment, Civil Surgeon, Julpigoree, has been granted an extension of furlough for six months, on medical certificate.

Surgeon J. Sykes, Bengal Establishment, whose services have been permanently placed at the disposal of the Government of the North-West Provinces and Oude, has been appointed to be a Civil Surgeon of the second class, with grade station at Ghazipore, and to remain in the officiating charge of the Agra Central Prison, until further orders.

Surgeon P. W. H. Boon, Civil Surgeon at Chicacole, is directed to act as Civil Surgeon at Cocanada, during the absence of Surgeon-Major Beech, on furlough.

The services of Surgeon D. F. Dymott, M.B., Madras Establishment, are replaced at the disposal of the Public Department.

Surgeon A. W. F. Street, Bombay Establishment, is appointed to act as Deputy Sanitary Commissioner, Sind Registration District, during the absence of Surgeon J. Parker, M.D.

Brigade-Surgeon W. H. Roberts, M.D., Madras Establishment, is appointed to officiate as Deputy Surgeon-General, with temporary rank, during the absence of C. Farquhar, on other duty.

The undermentioned Surgeons of the Bengal Establishment are appointed to the officiating medical charge of the regiments specified: G. H. Fink, to the 14th Bengal Lancers, *vice* Surgeon W. A. Mawson, granted furlough; P. Mullane, to the 10th Native Infantry, *vice* Surgeon-Major W. Duncan, M.B., granted furlough; J. Drury, to the 16th Lucknow Regiment, *vice* Surgeon-Major A. G. Grant, M.B., granted furlough; H. J. Dyson, to the 45th Rattray's Sikhs; F. D. C. Hawkins, to the 40th Native Infantry, *vice* Surgeon-Major W. E. B. Moynan, M.B., proceeding on leave; J. C. C. Smith, to the 3rd Goorkhas, *vice* Surgeon-Major C. G. Carmichael, M.D., granted furlough.

The undermentioned gentlemen have obtained leave of absence for the periods specified: Surgeon C. H. Bennett, M.D., Madras Establishment, 20th Native Infantry, for one year, on private affairs; Surgeon W. H. Thornhill, M.D., Madras Establishment, 27th Native Infantry, for one year, on private affairs; Surgeon E. Young, Bombay Establishment, Staff-Surgeon at Poona, to Europe, for six months, on medical certificate, with the necessary subsidiary leave; Deputy Surgeon-General H. W. Bellew, C.S.I., Sanitary Commissioner of the Punjab, for six months on medical certificate; Surgeon-Major W. E. B. Moynan, M.D., Bengal Establishment, in medical charge of the 40th Native Infantry, to hills north of Deyra, for six months; Surgeon-Major L. Beech, Civil Surgeon of Cocanada, for one year on private affairs.

Surgeon-General C. L. Cox, of the Bengal Establishment, died at Clifton on May 23rd. He entered the Indian Medical Service as Assistant-Surgeon, July 27th, 1841; attained the rank of Deputy Surgeon-General June 22nd, 1867; and retired December 1st, 1873, shortly afterwards receiving a step of honorary rank.

Surgeon-Major E. F. Wheatley, Bombay Establishment, died at Bonn-on-the-Rhine on May 27th, at the age of 56. He entered the Indian Medical Service as Assistant-Surgeon August 4th, 1855; attained the rank of Surgeon-Major, December 31st, 1866; and retired May 7th, 1878.

Surgeons-Major J. F. Barter and Hugh Griffith, both of the Madras Establishment, have been promoted to be Brigade-Surgeons; they entered the service as Assistant-Surgeons, July 27th, 1859.

Surgeon-Major H. E. Busteed, M.D., Madras Establishment, having resigned his appointment as Assay Master of the Calcutta Mint, with the intention of retiring from the service, his services are replaced at the disposal of the Government of Madras from June 1st.

Surgeon G. F. Nicholson, M.D., Bengal Establishment, has passed the lower standard in Persian; and Surgeons H. J. Dyson and F. A. Rogers, both of the Bengal Establishment, have passed the lower standard in Hindustani.

Surgeon G. H. Bull, M.D., Bombay Establishment, in medical charge of the 1st Bombay Lancers, is directed to officiate as Staff-Surgeon at Poona during the absence of Surgeon Young on furlough.

Surgeon B. C. Keelan, Bombay Establishment, Civil Surgeon and Superintendent of the Medical School at Hyderabad, Sinde, has returned to duty by permission of the Secretary of State from India.

Surgeon W. H. Quicke, Bombay Establishment, is appointed to the officiating medical charge of the 5th Native Infantry.

The undermentioned gentlemen have been appointed Acting Surgeons to the volunteer corps specified: H. W. Mann, M.B., 1st Inverness Artillery; Charles Macculloch, 1st Cumberland Artillery; C. H. Barkley, 1st Worcestershire Artillery; F. W. Underhill, to the 1st Cadet Battalion of the Royal Warwickshire Regiment.

Acting Surgeon E. T. Collins, 2nd Volunteer Battalion of the South Staffordshire Regiment (formerly the 3rd Stafford Volunteers), has resigned his commission, which is dated April 26th, 1882.

The undermentioned Surgeons of Volunteers have been granted the honorary rank of Surgeon-Major: T. H. Moxon, 1st Norfolk Artillery; J. J. Saville, North Somerset Yeomanry; John Vance, M.D., 4th Volunteer Battalion of the Essex Regiment (late the 4th Essex); E. Sandwell, 2nd London.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE STRENGTH OF SPIRIT OF NITROUS ETHER.

A question of some importance to the medical profession came the other day before the Thames Police Court, when Mr. John Reid Morrison, a practitioner, of 57, Cannon Street Road, St. George's-in-the-East, who keeps a shop, was summoned for selling a quantity of spirit of nitrous ether not of the nature and quality of the article demanded, the drug being deficient in nitrous ether to the extent of 80 per cent. Mr. William Raines, sanitary inspector to the parish of St. George's-in-the-East, said that on June 10th, about 11 o'clock, he called at the shop and asked for two ounces of spirit of nitrous ether, which the defendant served him with, and for which he paid 8d. Witness then told him that it would be analysed by the public analyst. The analyst's certificate showed that the drug was deficient in nitrous ether to the extent of 80 per cent. Mr. Young, who defended, submitted that there had been no offence. The article was pure, and the deficiency was caused by decomposition and evaporation. Mr. John Beckett, assistant to Dr. Tidy, at the London Hospital, said he had analysed the sample of the drug submitted to him by the defendant, and found it to be pure. The nitrous ether was liable to decomposition and evaporation. There was certainly a deficiency. Every time the bottle was opened, some of the nitrous ether would go out. Mr. Hannay said it was too important a question for him to decide at once, and he adjourned the case for a week.

MEDICAL ETIQUETTE.

A. and B. are in practice in the same town, A. is a new comer, and has called on B., who has returned the call. A. is sent for one evening, to a case "not urgent," and, on arrival, finds that B., in the interval, has been called in. A. leaves his card, with the request that it should be given to B. Will you kindly say what B. should do under these circumstances.

*** The entire absence of detail and of the circumstances under which B. was called in, render us unable to do more than simply advise him while, temporarily at least, accepting charge of the patient, to at once call upon A., and, in courteously acknowledging the receipt of his card, tender a full explanation of the facts of the case, and the immediate cause of his attendance; and, if need be, to offer to retire therefrom.

A Scotch Member.—1. That you are morally entitled to a fee there can be no doubt. The fact that the Procurator Fiscal referred the other medical man to you for information is a tacit recognition of the official character of your visit. 2. No medical man ought ever to sign a certificate of death in the case of a person he has not seen during life, unless he has made a complete *post mortem* examination. 3. The proper course would be always to wait for an order from the Procurator Fiscal.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, June 17th, 1886.

MEDICAL ACTS AMENDMENT BILL.

On the motion of Earl SPENCER, the Medical Acts Amendment Bill, which has come up from the House of Commons, was read a first time.

HOUSE OF COMMONS.—Thursday, June 10th.

[SPECIAL REPORT TO THE BRITISH MEDICAL JOURNAL.]

THE committee stage of this measure having been resumed,

Sir LYON PLAYFAIR moved an amendment in Clause 7, to provide that the number of persons elected to the General Medical Council, from time to time, by the registered medical practitioners resident in England should be three instead of two, as proposed in the Bill.

The amendment was agreed to.

On the motion of Sir LYON PLAYFAIR, an amendment was also agreed to, omitting reference to Durham University conjointly with the Victoria University, Manchester, the last-named university having been voted a representative on the General Medical Council to itself.

Sir LYON PLAYFAIR said the next two or three amendments referred to the fact that, in the Bill, the election of direct representatives was to have been made by the General Central Council in London. It had been represented to him that it would be much more convenient for the branch councils in England, Ireland, and Scotland to elect their own representatives instead of centralising the whole in London. The following amendments would carry out that view :—

Amendments agreed to :—Clause 8, page 6, line 9, leave out "registrar," and insert "president;" page 6, lines 11 and 12, leave out "representatives of the profession," and insert "direct representatives;" page 6, line 30, leave out from "returning officer," to "voting paper," in line 33, both inclusive, and insert "branch council in any part of the United Kingdom in which an election is to be held, to cause a voting paper to be forwarded by post to each registered medical practitioner resident in that part at his registered address;" page 6, lines 34 and 35, leave out "returning officer to forward such voting paper," and insert "branch council to cause such voting paper to be forwarded;" and page 6, line 38, leave out "returning officer," and insert "registrar of the said branch council."

Dr. FOSTER called attention to Subsection C of Clause 8, as follows : "Where, in the case of an election by the registered medical practitioners resident in England, there are two representatives to be elected, any registered medical practitioner entitled to vote at such election may vote for two candidates." He moved to leave out the word "two" before "representatives," in order to insert the words "one or more;" and to leave out the last two words of the subsection, in order to insert "as many candidates as there are representatives to be elected."

The amendment was agreed to, as also was an amendment extending the period for compliance with the precept of the returning officer, requiring the Branch Councils to cause the proper number of representatives to be elected, from 14 to 21 days.

Clause 10 (revision of the constitution of the General Council) was omitted on the motion of Sir LYON PLAYFAIR, in order to admit, later on, of the insertion of a new clause.

On Clause 13 (medical diploma of colonial and foreign practioner, when deemed to be recognised),

Sir H. HOLLAND took exception to the following subsection :

"2. Where the General Council have refused to recognise, as aforesaid, any colonial foreign or medical diploma, the Privy Council, on application being made to them, may, if they think fit, after considering such application, order the General Council to recognise the said diploma, and such order shall be duly obeyed."

He moved the omission of the subsection.

Sir LYON PLAYFAIR explained that there were some places where colonial diplomas might be recognised, and it was important that the Privy Council should have power to carry their foreign treaties into effect, where they had made arrangements with the Medical Council.

Sir H. HOLLAND withdrew the amendment.

Clause 18 (default of General Council).

Sir L. PLAYFAIR moved to omit from the clause specifying the conditions under which the Privy Council could undertake to perform the function of the Medical Council, the following words :

"3. If the General Council, in the opinion of the Privy Council, otherwise make default in the performance of their duty under the Medical Acts, or this Act."

The amendment was agreed to.

Mr. J. ROBERTS, in the absence of Mr. Rathbone, moved on Clause 21 (saving as to practice of existing practitioners) to insert the following amendment at the beginning of clause :—

"Every person who on the day preceding the appointed day is registered as a medical practitioner in respect of any qualification granted by any of the college or other bodies mentioned in Schedule (A) to 'The Medical Act, 1858,' and who as a condition of obtaining such qualification was required by colleges or body granting the same to pass, and did pass, an examination conducted by such college or body in medicine, surgery, and midwifery, shall be entitled on and after the appointed day, to all the powers, privileges, and immunities conferred by the Medical Acts on persons registered thereunder in respect of a qualification or qualifications to practice both medicine and surgery, or conferred by this Act on medical practitioners registered on or after the said appointed day, anything to the contrary in the Act of the fifty-fifth year of the reign of King George the Third, Chapter one hundred and ninety-four, or in the Medical Acts contained notwithstanding.

"(2) A certificate purporting to be under the seal of such college or body, and stating that such person, as a condition of obtaining the qualification in respect of which he is registered, was required to pass and did pass such examination as in this section mentioned, shall be *primâ facie* evidence in all legal proceedings of the truth of the matter therein stated.

"(3.) Except as is by this section provided."

It seemed that many of the bodies referred to in the amendment examined candidates not only in medicine, but also in midwifery and surgery, but that the qualification only extended to one branch, leaving out the other two. In his opinion, the qualification should be co-extensive with the examination. There was no objection to this proposal so far as he knew, except on the part of the corporations interested, because by the present arrangement candidates were obliged to pass, not only examinations in medicine, but also examinations in surgery, and pay another fee for it. The candidates had to pay another fee for practically the same amount of qualification.

Sir LYON PLAYFAIR said he was sorry it was impossible to accept this amendment, as, if he did, it would be practically repealing the Acts and Charters which had been granted to the different bodies throughout the kingdom. They might be right, or they might be wrong, but they existed at the present time, and the Bill did not propose to interfere with any of the powers which these institutions possessed.

Amendment, by leave, withdrawn.

Sir H. HOLLAND : Clause 25 says :

"The Acts mentioned in the first part of the schedule to this Act are hereby repealed to the extent mentioned in the third column of the said part; and the Acts mentioned in the second part of the said schedule shall be repealed, *on and after the appointed day*, to the extent mentioned in the third column of the said last mentioned part; provided that the repeal enacted by this section shall not affect anything done or suffered, or any right or title acquired or accrued, before such repeal takes effect, or any remedy, penalty, or proceeding in respect thereof."

I propose to omit the words in italics, in order to insert "on and after the prescribed day as used in part two of this Act."

Amendment agreed to.

Sir LYON PLAYFAIR : I now propose the clause which I wish to substitute for Clause 10, which we have just struck out. This clause relates to the constitution of the General Council, and gives to it considerable powers to add to, or subtract from, its numbers, according as it considers it expedient. I would call the attention of hon. members to the provision for the election of a direct representative in Subsection C, as follows :

"That it is expedient to confer on the resident medical practitioners resident in any part of the United Kingdom the power of returning an additional member to the General Council."

Therefore, the General Medical Council, if it think the number of direct representatives is not sufficient, is able to add to the number.

Amendment proposed, page 7, after Clause 9, insert the following clause :

(1.) The General Council may at any time represent to the Privy Council all or any of the following matters :

(*a*) That it is expedient to confer on any university or other body in the United Kingdom capable of granting a medical diploma, not being one of the constituent bodies for the time being of the General Council, and being, in the opinion of the General Council, of suffi-

ient importance to be worthy of such a privilege, the power of returning a member to the General Council, either separately or collectively with any other body or bodies in the same part of the United Kingdom capable of granting a medical diploma;

(*b*) That it is expedient to confer on any constituent body for the time being returning a member to the General Council collectively with any other body or bodies, and being, in the opinion of the General Council, of sufficient importance to be worthy of such a privilege, the power of returning a member to such Council separately;

(*c*) That it is expedient to confer on the registered medical practitioners resident in any part of the United Kingdom the power of returning an additional member to the General Council;

(*d*) That it is expedient that any constituent body having, in the opinion of the General Council, so diminished in importance as not to be entitled to such privilege, should either be wholly deprived of the power of returning a member to the General Council, or be deprived of the power of returning a member separately, and permitted to return a member collectively with some other body or bodies.

(2) The Privy Council, before considering such representation, shall cause the same to be laid before both Houses of Parliament.

(3) If either House of Parliament, within forty days (exclusive of any period of adjournment for more than one week) next after any such representation has been laid before such House, present an Address to Her Majesty declaring that such representation, or any part thereof, ought not to be carried into effect, no further proceedings shall be taken in respect of the representation in regard to which such address has been presented; but, if no such address is presented by either House of Parliament within such forty days as aforesaid, the Privy Council may, if it think fit, report to Her Majesty that it is expedient to give effect to such representation; and it shall be lawful for Her Majesty, by Order in Council, to give effect to the same, and any Order in Council so made shall be of the same validity as if it had been enacted in this Act.

Clause agreed to.

Sir LYON PLAYFAIR: The next clause to move deals with the default of the General Council, and is in place of Clause 18. It puts the interference of the Privy Council, in default of the General Council, in a more moderate way.

Amendment proposed: Page 12, after Clause 18, insert the following clauses: If at any time it appears to the Privy Council that the General Council has failed to secure the maintenance of a sufficient standard of proficiency at any qualifying examinations, or that occasion has arisen for the General Council to appoint assistant examiners under this Act for the purpose of examinations held by any medical corporation, or to exercise any power or perform any duty or do any act or thing vested in or imposed on or authorised to be done by the General Council under the Medical Acts or this Act, the Privy Council may notify their opinion to the General Council; and if the General Council fail to comply with any directions of the Privy Council relating to such notification, the Privy Council may themselves give effect to such directions, and for that purpose may exercise any power or do any act or thing vested in or authorised to be done by the General Council, and may of their own motion do any act or thing which, under the Medical Acts or this Act, they are authorised to do in pursuance of a representation or suggestion from the General Council.

Clause agreed to.

Sir LYON PLAYFAIR: The next clause is designed to include a degree given by the King and Queen's College of Physicians in Ireland—a degree lately adopted, and not provided for in the Act of 1858.

Amendment proposed, after the last new clause to insert the following clause:

"The diploma of member of the King and Queen's College of Physicians in Ireland, and the degree of Master in Obstetrics of any University in the United Kingdom, shall be deemed to be added to the qualifications described in Schedule A to the Medical Act, 1858."

Clause agreed to.

Sir LYON PLAYFAIR: The next clause, with a small MS. addition, is one that has excited considerable interest. It is to enable medical practitioners who have diplomas or certificates for proficiency in sanitary science, public health, or State medicine, to have those diplomas or certificates registered. The clause is as follows:

"Every registered medical practitioner to whom a diploma for proficiency in sanitary science, public health, or State medicine, has, after special examination, been granted by any College or Faculty of Physicians or University in the United Kingdom, shall, if such diploma appears to the Privy Council, or to the General Council, to deserve recognition in the *Medical Register*, be entitled, on payment of such fee as the General Council may appoint, to have such diploma entered in the said *Register*, in addition to any other diploma or diplomas in respect of which he is registered."

The MS. addition I propose is, after the words "United Kingdom" to insert "or by any such bodies acting in combination."

Clause agreed to.

Mr. PULESTON: Does this make registration compulsory?

Sir LYON PLAYFAIR: No. The registration will take place if the General Council thinks that such recognition is deserved.

Sir H. HOLLAND: I may, perhaps, be allowed to ask a question, the answer to which may cover a good many of the amendments. Does the right honourable gentleman consider that the word "diploma," as defined in the interpretation clause, covers qualification?

Sir LYON PLAYFAIR: The word "diploma," as defined in the definition clause, will have a very wide application. The clause says: "The word 'diploma' means any diploma, degree, fellowship, membership, licence, authority to practise, letters testimonial, certificate, or other status or document granted by any university, corporation, college, or other body, or by any departments of or persons acting under the authority of the government of any country or place within or without Her Majesty's dominions." The term "qualification" is only used in the Bill in regard to qualifying examinations in respect of which degrees are given qualifying persons to practise. A man may be an efficient medical officer of health for a town, though he does not possess a qualifying degree. A degree is in addition to having passed an examination under the Act.

Sir H. HOLLAND: I understand that; but I am told that the word "qualification" is used with reference to sanitary science, public health, or State medicine. I wish to know if the document which is called a "qualification" will be covered by the word "diploma."

Sir LYON PLAYFAIR: Yes, because the words "or other status or document" are in the definition.

Dr. FARQUHARSON: After that explanation we have had from the right honourable gentleman, I do not propose to move my amendment to alter "diploma" into "qualification."

The Bill then passed through Committee, and was ordered to be reported as amended to the House.

Friday, June 11th.

Supply.—The following were among the sums voted to the Civil Service Departments: Royal University (Ireland) Buildings, £4,000; Lunacy Commission (England), £6,000; Registrar-General's Office, £16,000; Lunacy Commission (Scotland), £2,000; Registrar-General's Office (Scotland), £1,500; Registrar-General's Office (Ireland), £6,000; University of London, £4,000; Universities of Scotland, £6,000; Queen's Colleges in Ireland, £2,000; Pauper Lunatics, England, £10,000; ditto, Scotland, £65,000; Hospitals and Infirmaries in Ireland, £5,000. Among the Army Estimates was a grant of £160,000 for Medical Establishments and Services.

Among the Bills withdrawn is the Burgh Police and Health (Scotland) Bill.

OBITUARY.

W. H. CORBETT, M.D., Deputy Surgeon-General.

WE have to record the death of Deputy Surgeon-General W. H. Corbett, M.D., which took place at Cherah, near Peshawur, on May 3rd. Dr. Corbett entered the army as Assistant-Surgeon on December 15th, 1854. He served during the Crimean campaign from January 25th to June 13th, 1855, and was present at the siege of Sevastopol (for which he received the Crimean medal and clasp for Sevastopol, also the Turkish war medal). He served in India with the 81st Regiment in the Eusoofzie Expedition, under Sir S. Cotton in 1858, for which he received a medal and clasp. He also served in the Mutiny in India in 1857 and 1858, with the 81st regiment (receiving a medal). Dr. Corbett served with the 107th and 48th regiments in India, and, at the time of his death, was in medical charge of the Peshawur district.

PRESENTATION.—On the evening of May 31st, a large gathering took place in the Public Offices, Egremont, for the purpose of presenting a testimonial to Dr. T. B. Watson, of Liscard, who is leaving the neighbourhood after a residence of eleven years. The testimonial consisted of a purse of £100 and an illuminated address. A separate gift of a clock and pair of bronzes, from the residents of Wallasey, was handed to Dr. Watson at the same time. Dr. Watson has been especially well known and esteemed for his indefatigable services to the Wallasey Cottage Hospital.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

The Registrar-General's Quarterly Return.

The Registrar-General has just issued his quarterly return, relating to the births and deaths registered in England and Wales during the first or winter quarter of this year, and to the marriages in the three months ending December last. The marriage-rate was considerably below the mean rate in the corresponding quarters of the ten preceding years, and was lower than the rate recorded in the fourth quarter of any year since civil registration was established in 1837. The birth-rate was also below the average, while the death-rate showed a slight excess. The mean temperature during the quarter was considerably below the average; the weather generally was not favourable to the public health.

The births of 230,671 children were registered in England and Wales during the three months ending March last, equal to an annual rate of 33.6 per 1,000 of the population, estimated by the Registrar-General to be nearly twenty-eight millions of persons. This birth-rate was considerably below the average rate in the corresponding quarters of the ten preceding years, 1876-85, and, with the exception of the very low rate in 1884, was lower than that recorded in the first quarter of any year since 1850. The birth-rate during the quarter under notice ranged, in the several counties, from 25.0 in Rutlandshire and 29.0 in Herefordshire, to 37.7 in Staffordshire, 38.4 in Essex and in Nottinghamshire, and 40.6 in Monmouthshire. In the twenty-eight large towns for which the Registrar-General publishes weekly returns, the birth-rate last quarter averaged 34.7 per 1,000, ranging from 25.9 in Brighton and in Huddersfield, to 40.6 in Newcastle-upon-Tyne. The births registered in England and Wales during the quarter under notice exceeded the deaths by 73,763; this represents the natural increase of the population during that period. From the Board of Trade returns, it appears that 42,030 emigrants sailed from the various ports of the United Kingdom at which emigration-officers are stationed; of these, 21,549 were English, 3,460 Scotch, and 6,093 Irish. The proportion of British emigrants to a million of the respective populations of the three divisions of the United Kingdom were 773 from England, 876 from Scotland, and 1,247 from Ireland.

During the first three months of 1886, the deaths of 156,908 persons were registered in England and Wales, equal to an annual rate of 22.8 per 1,000 of the estimated population; this death-rate slightly exceeded the average rate in the corresponding quarter of the preceding ten years, and was higher than the rate recorded in the first quarter of any year since 1879. Among the urban population of the country, estimated at nearly seventeen millions, the rate of mortality, during the quarter under notice, was equal to 23.6 per 1,000; in the remaining and chiefly rural population of nearly eleven millions of persons, the rate was 21.6. These urban and rural rates were above their respective averages for the ten preceding corresponding quarters. The rate of mortality last quarter among infants under one year of age was 4.2 above the average; that among children and adults, aged between one and sixty years, 3.3 per cent. below the average; and that among persons aged upwards of sixty years, as much as 17.0 per cent. above the average.

The 156,908 deaths registered in England and Wales, during the three months ending March last, included 4,890 which were referred to whooping-cough, 3,255 to measles, 1,473 to diarrhœa, 1,246 to scarlet fever, 1,232 to fever, 1,047 to diphtheria, and 147 to small-pox—in all, 13,290 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1.93 per 1,000, which was considerably below the average in the ten preceding corresponding quarters. The mortality of whooping-cough, measles, and diphtheria showed some excess; while that of each of the other zymotic diseases was below the average. The 147 fatal cases of small-pox were fewer than in any quarter since 1880, and included 44 in London and the adjacent counties, 40 in Cheshire and Lancashire, 17 in Durham, and 46 in other parts of the country.

Kenilworth Sanitary District.—The Warwick Guardians recently passed a resolution to increase the salary of Mr. Clarke, medical officer for the Kenilworth district, from £160 to £185 *per annum;* but the Local Government Board have refused to sanction it, as Mr. Clarke's salary is already large, compared with the salaries paid to medical officers in other districts similarly situated as regards population. If any inconvenience is caused, in consequence of the large area of the district, they consider that the district should be divided.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following members having passed the Final Examination for the Fellowship on May 26th, 27th, 28th, and 29th, were, at a meeting of the Council on June 10th, admitted Fellows of the College.

Dudley Cox Trott, L.R.C.P.L., Longton Grove, Sydenham (Diploma of Membership dated November 17th, 1880); Thomas Sinclair, M.D.Q.U.I., Howard Street, Belfast (April 18th, 1882); William R. Buckell, L.R.C.P.L., Romsey (May 15th, 1882); William H. Horrocks, L.S.A., Shoreham, near Liverpool (November 14th, 1882); William Thorburn, M.D.Lond., Rusholme, Manchester (July 24th, 1883); Walter Blaxland, L.R.C.P.L., Torrington Square (November 13th, 1883); William H. Bowes, M.D.Lond., Marine Terrace, Herne Bay (April 24th, 1884); Charles J. Heath, L.S.A., Guilford Street (July 31st, 1884); Charles Y. Pearson, M.D.Q.U.I., King Street, Cork.

Four other candidates passed the examination, but not having attained the legal age (25), will receive their diplomas at a future meeting of the Council when qualified.

Fourteen candidates failed to reach the required standard, and were referred to their professional studies for one year.

King and Queen's College of Physicians in Ireland.—At a special examination for the License in Medicine of the College, held on Wednesday and Thursday, June 2nd and 3rd, 1886, the undermentioned candidate was successful.

Thomas Crowe, Culteen, Tipperary.

At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, June 7th, 8th, 9th, and 10th, the undermentioned candidates were successful.

For the Licenses to Practise Medicine and Midwifery.—Edward Corcoran, Parsonstown, King's Co.; James Corcoran, Parsonstown, King's Co.; Edward J. Goode, Rathgar, Dublin; George E. Hughes, Dalkley, co. Dublin; Richard M. Hugo, Rathfarnham, co. Dublin; John F. Kennedy, Cloughjordan, co. Tipperary; Reginald T. A. Levinge, Mullingar, co. Westmeath; Thomas Vernor, M.D.Vict.Univ., Toronto, Canada.

For the License to Practise Medicine only.—Robert V. Fletcher, F.R.C.S.I., Ballinasloe; Joseph P. Kelly, Dublin; Timothy R. Killeen, Ennis, co. Clare; John E. Langan, Letterkenny, co. Donegal; Charles Madders, Rathmines, Dublin; William J. Peacocke, Kilrush, co. Clare; James A. F. Sawyer, Rathmines, Dublin; Arthur E. Switzer, M.B.Univ.Dub., Dublin; William J. Taylor, Donnybrook, Dublin; Thomas W. Twinem, Moy, co. Tyrone.

For the License to Practise Midwifery only.—Benjamin D. Dickson, M.B.Univ. Dub., Dublin; Alfred E. Thomson, M.D., R.U.I., Bangor, co. Down; Francis E. Townshend, M.D., R.U.I., Cork.

The License to practise as a Midwife and Nurse-tender was, after examination, granted to

Mrs. Maria P. Thompson, Netley, Southampton.

Society of Apothecaries of London.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, June 10th, 1886.

Elliot, William Henry Wilson, 22 Bromar Road, Denmark Hill, S.E.
Hallilay, Richard Percy, 28, Burley Road, Leeds.
Hardwick, Arthur, 1, Victoria Villas, Dorchester.
Rawnsley, Gerald Thomas, Royal Dockyard, Woolwich.

MEDICAL VACANCIES.

The following vacancies are announced.

AXBRIDGE UNION.—Medical Officer. Salary, £47 10s., with additional medical extras. Applications by June 28th to W. Reece, Esq.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE. Gloucester.—Junior Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. Applications to Dr. Needham.

BUCKS GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80, first year, with board and lodging. Applications by July 6th to G. Fell, Esq., solicitor, Aylesbury.

EAST LONDON HOSPITAL FOR CHILDREN.—Resident Clinical Assistant. Board and lodging. Applications by June 24th to A. Warner, Esq.

EAST RIDING ASYLUM, Beverley.—Assistant Medical Officer. Salary, £100 per annum. Applications to Medical Superintendent by July 1st.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by June 30th to the Secretary.

GALWAY UNION.—Medical Officer. Salary, £100 per annum, and £15 per annum as Medical Officer of Health. Applications by June 23rd to C. J. O'Connor, Esq.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer. Salary, £80 per annum, with board and residence. Applications by June 29th to the Chairman of the Medical Board.

GENERAL INFIRMARY, Northampton.—House-Surgeon. Salary, £125 per annum, with furnished apartments, board, attendance, and washing. Applications by June 22nd to S. P. Bennett, Esq.

HULL ROYAL INFIRMARY.—Honorary Physician. Applications by July 5th to the Chairman, Hull Royal Infirmary.

LONDON DENTAL HOSPITAL, Leicester Square.—Assistant Dental Surgeon. Applications by June 21st to the Honorary Secretary.

LYING-IN HOSPITAL, York Road, Lambeth.—House-Physician. Salary, £50 per annum, with board and residence. Applications by June 28th to the Secretary.

ORTHAMPTON GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £80 per annum. Applications by June 22nd to the Secretary.

ORTHAMPTON GENERAL INFIRMARY.—House-Surgeon. Salary, £125 per annum. Applications by June 22nd to the Secretary.

WENS COLLEGE, Manchester.—Professor of Chemistry. Applications to the Council of the College, under cover, to the Registrar by August 31st.

IPON DISPENSARY.—Resident House-Surgeon and Dispenser. Salary, £100 per annum. Applications by July 1st to the Honorary Secretary.

OYAL SOUTH HANTS INFIRMARY, Southampton.—Resident Surgeon. Salary, £100 per annum with board and washing. Applications by June 21st to Dr. Thomas, Anglesea Place, Southampton.

USSEX COUNTY HOSPITAL, Brighton.—House-Surgeon. Salary, £80 per annum, and £10 per annum for each resident pupil. Applications by June 23rd to the Secretary.

USSEX COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, £40, with board, residence, and washing. Applications by June 23rd to Lieutenant-General Bourchier.

EWKESBURY UNION.—Medical Officer and Public Vaccinator for the Overbury District. Salary, £60 per annum, with extras. Applications by July 5th to H. A. Badham, Esq.

OLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications by June 28th to C. A. Newnham, Esq.

OLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Resident Assistant. Board, lodging, and, washing. Applications by June 28th to the Chairman of the Medical Committee.

MEDICAL APPOINTMENTS.

ROWNE, Oswald, M.A., M.B.Cantab., M.R.C.P., appointed Casualty Physician to St. Bartholomew's Hospital.

LAY, Augustus F., M.R.C.S., L.S.A., Casualty Surgeon to the Queen's Hospital, Birmingham, appointed Assistant-Surgeon to the Birmingham and Midland Counties Orthopædic Hospital.

MMETT, R., M.R.C.S.Eng., L.R.C.P.Lond., L.S.A.Lond., appointed Medical Officer to the Portsmouth Royal Dockyard Medical Benefit Society, *vice* A. V. Maybury, M.A., M.R.C.S.Eng., L.S.A., L.M., resigned.

OX, W. Piercy, L.R.C.P. and S.Ed., appointed Surgeon to the Warehousemen, Travellers, and Clerks' Association (Cheapside) for Clapham, *vice* Lionel Druitt, M.D., L.R.C.P.Lond., and also attending Surgeon to the South London Medical Aid Institute, *vice* R. Oswald, M.R.C.S., L.R.C.P., resigned.

ELME, W. Croft, M.B., C.M.Ed., appointed Junior House-Surgeon to the Royal Southern Hospital, Liverpool, *vice* J. R. L. Dixon, M.R.C.S., M.R.C.P.Ed., promoted.

ODGSON, T. M., M.B., C.M.Edin., appointed Assistant House-Surgeon to the Cumberland Infirmary, *vice* G. C. Henderson, M.R.C.S., resigned.

EMP, William G., L.R.C.P.Lond., M.R.C.S.Eng., appointed Ophthalmic Surgeon to the Wellington Hospital, New Zealand.

AVIES, Harry B., M.R.C.S., L.S.A., appointed House-Surgeon to King's College Hospital, *vice* A. Carless, resigned.

EES, W., M.R.C.S.Eng., L.S.A.Lond., late Visiting Surgeon to the Chester General Infirmary, appointed House-Surgeon to that institution.

YDEN, M. A., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer to the Round stone Dispensary, *vice* P. C. Gorham, L.R.C.P., L.R.C.S.Edin., resigned.

ERTON, E., M.B., C.M.Edin.., appointed House-Surgeon to Newark Hospital and Dispensary, *vice* W. H. Bailey, M.R.C.S., L.S.A., resigned.

ITCHELL, J., M.D., L.M.K.Q., appointed Assistant-Surgeon to the Liverpool Dispensaries.

'MEARA, F. A. T., L.R.C.P., M.R.C.S., appointed Assistant House-Accoucheur to King's College Hospital, *vice* C. J. Jacomb-Hood, resigned.

'ARKER, H., M.R.C.S., appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital, *vice* A. S. Myrtle, M.B., C.M.Edin., resigned.

ETHERED, Frank J., M.B.Lond., M.R.C.S., L.S.A., appointed Assistant House-Physician to the Royal Hospital for Diseases of the Chest, City Road.

OOD, G. B., M.B., C.M., appointed Junior Resident Medical Officer to the Huddersfield Infirmary, *vice* W. L. P. Bevan, M.B.Edin., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

McCAW.—On June 10th, 1886, at Alba House, Portglenone, Belfast, the wife of J. Dysart McCaw, F.R.C.S., of a son.

DEATHS.

BELL.—On June 15th, suddenly, aged 44 years, Hutchinson Royes Bell, of 12, Queen Anne Street, Cavendish Square, F.R.C.S., Honorary Fellow of King's College, and Surgeon to King's College Hospital.

BENTHALL.—Alfred Elliott Benthal, F.R.C.P.Edin., of Sherborne, Dorset, aged 30 years, of fibroid phthisis.

POWER.—On June 9th, 1886, John Arthur Power, M.A. and L.M.Cantab., L.R.C.P.Lond., late Senior Fellow of Clare College, Cambridge, died at 65, Ashburnham Road, Bedford, suddenly, of syncope, aged 76.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—British Gynæcological Society, 8.30 P.M. Specimens will be shown. Mr. Bland Sutton: On Menstruation in Monkeys. Mr. Lawson Tait On Eleven cases of Extra-peritoneal Cysts. Council at 8 P.M.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

GRADUATE asks: If it is possible for a married surgeon to live on the salary allowed to a surgeon in the medical staff of Her Majesty's army, supposing him to live economically?

MR. W. NICHOLSON (2, Kent Villas, East Greenwich) would feel obliged if any of our readers could supply him with a copy of Dr. Parkes's Gulstonian lectures on Pyrexia, published in the *Medical Times and Gazette*, 1855.

RESORCIN.

RESORCIN asks: How much of me may be safely given internally, and in what form?

*** Ten to twenty grains, thrice a day in water.

CUCAINE IN CATHETERISM.

MR. B. H. DALE (Devizes) asks if Mr. Hurry Fenwick will give some further information as to the applicability of cucaine in catheterism. Can it be applied low down in the urethra, through a No. 6 catheter? What quantity of the solution would it be proper to inject? Is there any fear of any fatal result? Has he observed any such effect as is produced by contact of chloroform with depuration of air upon a surface? Mr. Dale has used a 5 per cent. cucaine ointment to lubricate the catheter and to fill the apertures at the end, but found it quite useless.

INCOME TAX RETURNS.

PERPLEXED writes, that he should esteem it a great favour if the gentleman who, a few weeks ago, wrote, in the JOURNAL, on the above subject, would kindly send him instructions how to fill up the paper. He always has to study the matter for an hour or two. Address, Dr. Sangrado, The Athenæum, George Street, Sheffield.

S. ASKS: What is the most reliable and best book to serve as a guide to a medical man looking for an English practice or partnership?

ANSWERS.

A QUESTION IN DERMATOLOGY.

DR. FRANK FRASER writes: In answer to "Enquirer," in the JOURNAL, of June 12th, I think that his is a similar case to one that came under my own observation about twelve months back.

The patient in question (a retired Indian officer, well tanned by the sun) had several well-defined whitish patches of healthy skin on the back of his hands and wrists; they were also to be seen on his genitals. This condition had been recognised for over five years by the patient. When I first saw him, he was suffering also from nervous debility. Under the use of general nervine tonics, his constitutional conditions gradually improved, and with the improvement the spots gradually disappeared. I believe my case to have been one of leucoderma or "white skin."

THE LATE MR. THOMAS TURNER.

MR. T. CREWE (Manchester).—We cannot find the exact date of the birth of the late Mr. Thomas Turner, of Manchester; but, as he died in 1873, at the age of 81, the year 1792 may be fairly assumed as that in which he was born. He died on December 17th, 1873.

MR. G. T. BISHOP (West Brighton).—No examinations whatever of students, or of intending students, are held by the General Medical Council.

MR. B. A. HUGHES (Barmouth).—Carbonate of magnesia and sulphate of potash are formed, and carbonic acid is set free.

HYPODERMIC SYRINGE NEEDLES.

MR. C. E. WINCKWORTH (Sheffield) strongly recommends the employment of platinum needles with the hypodermic syringe. These do not corrode, but it is a good practice to pass the needle rapidly through the flame of a spirit lamp or candle, and to insert a bit of silver wire, which prevents any accumulation of deposit.

SCHOOL BOARDS AND MEDICAL CERTIFICATES.

J. H., M.D., replies to "A Young Member" (page 1051).—Whenever a school board or school attendance committee demand a medical certificate, that a child is unable to attend school, the board or committee demanding the certificate is legally liable to pay for the same, there having been at least two cases reported where a school board was summoned for the cost of a certificate and an order made directing payment.

MR. J. WALTERS writes: I take it that it has been legally settled, first, that school-boards have no right to demand medical certificates in cases of illness; secondly, that if they require such certificates, they should pay for them themselves. This they seem invariably to refuse to do.

The following plan (suggested by my assistant, Mr. E. G. A. Walker) has effectually rid us of the nuisance of being continually asked for these certificates. The parent applies for a certificate for the school-attendance officer (we are not yet afflicted with a school-board, I am thankful to say); she is told that there is no need to have one, and that the officer cannot compel her to produce one. "Oh, but he says he will summons me if I do not get one." "Very well; bring the summons, and you shall have the certificate for nothing." The summons is produced, and the certificate granted. In due course, the case comes before the magistrates; the certificate is produced, and the case is dismissed.

A very few applications of this cure have sufficed to stop the evil here as the school authorities object to pay for summonses as much as for medical certificates.

RISE OF TEMPERATURE AT NIGHT.

IN answer to T. D.'s inquiry as to the cause of a rise of temperature at night in cases of illness, Mr. Charles King suggests that the reason is that there is more effort to repair at night than in the day, and therefore a greater expenditure of force, causing a rise of temperature. In good health, a wasting process goes on more actively in the day than in the night; a repairing process more actively in the night than in the day, and this action and habit (unattended with constitutional disturbance in health) may easily be carried into disease, with the result of causing rise of temperature.

NOTES, LETTERS, ETC.

A YANKEE M.D., a note from whom appeared in the JOURNAL of June 5th, will oblige by sending his name and address to the Editor.

DIPLOMAS IN STATE MEDICINE.

IN the JOURNAL of May 22nd, page 990, column 1, it was stated that the Royal University of Ireland alone grants a diploma in Sanitary Science. This statement requires some correction. A diploma in State Medicine is also granted, after examination, by the University of Dublin.

MEMBER, BRITISH MEDICAL ASSOCIATION, writes to complain that, believing an assistant who had been placed by another medical man, at a village within three miles of his own residence, to be unqualified, and having written to the Registrar of the General Medical Council to ascertain the fact, he received, in reply, "a halfpenny post-card, not even dated," stating that he was not. Confidential communications of this nature, our correspondent contends, should be under cover, and not on cards, which, in village post offices, are likely to gain undue publicity.

COMMUNICATIONS, LETTERS, etc., have been received from:
Mr. Henry Gillyl, Abbeyshrale, Longford; Dr. Sinclair White, Sheffield; Dr. Newman, Glasgow; The Secretary of the Chelsea Hospital for Women; Messrs. T. Brainsby and Sons, Peterborough; Mr. Alfred Kebbell, Flaxton; Mr. H. Sell, London; Mr. C. Ashenden, Hastings; Dr. Styrap, Shrewsbury; Mr. Oswald Browne, London; Mr. L. K. Hatch, St. Leonards; Mr. H. T. Batchelor, Cape Colony; Mr. L. F. Hill, London; Dr. T. Jackson, Whitehaven; Dr. A. H. Newth, Hayward's Heath; Mr. C. King, London; Mr. W. Lees, Chester; Mr. N. Alcock, Ballybrack, co. Dublin; Deputy Inspector-General R. R. Siccama, Haulbowline; Mr. J. Crocker, Wellington; Dr. J. W. Norris Mackay, Elgin; Mr. J. E. Cooney, London; Dr. Luke Armstrong, Newcastle-on-Tyne; M.D.; Dr. Parsons, Dover; Mr. R. J. H. Scott, Bath; Dr. Holmes, Radcliffe; Mr. F. J. Wethered, London; H. A. S.; Mr. C. Aitken, St. Mawes; Mr. A. W. Mayo Robson, Leeds; Dr. C. S. Taylor, London; Mr. G. R. Kerbey, London; Mr. C. Lovegrove, Llanwddyn; Messrs. Fletcher and Fletcher, Uttoxeter; Dr. Russell Harris, London; Dr. Stirling, Manchester; Dr. C. R. Illingworth, Clayton-le-Moors; Mr. A. Alexander, Liverpool; Mr. Maurice Wilks, Burnley; Dr. W. R. Grove, St. Ives; Mr. S. H. Appleford, London; Mr. A. Crosbee Dixey, Dover; Mrs. T. R. Lewis, Lewisham; Mr. H. A. Latimer, Swansea; Mr. Druce J. Slater, London; Dr. Hack Tuke, London; Mr. P. H. Gardner, Portsmouth; Miss Mason, London; Dr. Moore, Dublin; Mr. H. T. Dundas Bathurst, London; Mr. Lawson Tait, Birmingham; Dr. Clibborn, Bridport; Mr. W. W. Hardwicke, Dovercourt; Mr. G. Meadows, Hastings; Dr. R. Harvey Hilliard, Aylesbury; A Military Member; Mr. W. J. Meharry, Belfast; Dr. Heywood Smith, London; Mr. Benham, London; Dr. Broadbent, London; Dr. Mickle, London; Mr. H. A. Smith, Ealing; Mr. J. Martin, Huddersfield; Mr. Swain, Plymouth; Mr. T. D. Acland, London; The Secretary of the Coffee Planters' Committee; Dr. Grant, Lagos; Dr. Willoughby, London; Dr. J. Tatham, Manchester; Mr. A. F. Clay, Birmingham; Dr. Fraser, Tonbridge; Dr. W. E. Steavenson, London; Dr. A. C. Rayner, Preston; Mr. T. Orde Smith, Parsonstown; Mr. R. T. A. O'Callaghan, Carlow; Dr. Dempsey, Belfast; Mr. Watson Cheyne, London; Mr. C. E. Scragg, London; Dr. T. Lauder Brunton, London; Dr. Broadbent, London; Messrs. Woollams and Co., London; Our Rome Correspondent; Dr. E. Macdowel Cosgrave, Dublin; Dr. R. Park, Glasgow; Mr. F. W. Passmore, London; G. P.; Mr. George Sturge, London; Dr. E. H. Bennett, Dublin; Ophthalmos; The Secretary of the Working Lads' Institute, London; Mr. Smailes, Honley, etc.

BOOKS, ETC., RECEIVED.

Materia Medica, a Manual for Students. By Isambard Owen, M.D., F.R.C.P. Second edition. London: J. and A. Churchill. 1886.

An Introduction to General Pathology. By J. B. Sutton, F.R.C.S. London: J. and A. Churchill. 1886.

Infant Feeding and Management. By C. S. Redmond. London and Newcastle-on-Tyne: W. Scott. 1886.

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LECTURES
ON
THE SURGICAL TREATMENT OF STONE IN THE BLADDER.

Delivered in the Royal College of Surgeons of England, June, 1886.

By WILLIAM CADGE, F.R.C.S.,
Hunterian Professor at the Royal College of Surgeons; Senior Surgeon to the Norfolk and Norwich Hospital.

Lecture II.

Hæmorrhage after Lithotomy.—Stone left behind.—Various Symptoms.—Causes of Death.—Recurrence of Stone after Lithotomy.—Stone in the Female.—Suprapubic Lithotomy.

Hæmorrhage during or after Lithotomy.—A few years ago, in a paper by an eminent lithotomist, written chiefly to advocate a novel method of arresting bleeding, he mentioned having adopted it six times in twenty cases. I felt some surprise that he should have had so large a proportion of cases of bleeding. On looking over my own list, however, I was equally surprised to find that, out of 168 cases of lithotomy, there were nearly forty in which bleeding was so troublesome as to need special means to arrest it. In many of these, it was wholly unavoidable, but in some, I am free to admit that it was due to the fault of opening the urethra too far forward, and so cutting either the bulb or its artery. Sir H. Thompson says that the knife may be made to touch the staff at the first incision, and that it is pleasant to feel it do so. I have experienced this pleasure; I remember it in my very first case: the operation was quick, and apparently satisfactory, but the patient had troublesome bleeding and made a tedious recovery. This interference with the bulb and its artery should, I think, be deemed to be a mistake; for it in no way facilitates extraction of the stone, and an unnecessary incision is always an evil. Liston, who, take him for all in all, was probably the best lithotomist of his day, seldom had any serious hæmorrhage in his cases; and it was a feature of his operation that he was never in a hurry to reach the groove of the staff, and always entered it at a considerable depth. Indeed, he sometimes erred in the opposite direction; for, in his very last case (a thin elderly man), who recovered from the operation, but died a month after it of erysipelas of the head and face, we found that the urethra had never been cut at all; but that he had worked his way by the side of it into the bladder, and then struck the groove. This fault, however, never probably befel him before; the man was thin, the prostate small, and the bladder at no great depth.

However it occurs, whether from the transverse artery of the perinæum, from the bulb or its artery, from the venous plexus around the prostate, or from the separation of sloughs at a later period, bleeding, to any considerable extent, is a real evil, and may prejudice the recovery of the patient, either by its lowering effect on the vital power, or by the indirect effect of the means adopted to arrest it. Combined with the shock of a great operation, it may cause death in a day or two, or, by its repeated occurrence, in one, two, or three weeks. I notice that, out of these forty cases of hæmorrhage, there were twelve deaths, and some of them I attributed to the consequences of the restraining plug. Whether we use the air-tampon or the umbrella-cannula, or, as we in Norwich prefer, simply long pieces of dry lint, pushed carefully in alongside the silver tube, there is this risk: the plug prevents the flow of blood externally, but it is well-nigh impossible to plug a lithotomy as effectually as an ordinary surgical wound, and the blood is apt to infiltrate into the cellular tissue in the pelvis, and extend sometimes along the ureter towards the kidneys, or around the bladder towards the abdominal wall, even so that a faint yellowish colour, as of a bruise, may appear on the skin, near one groin. Decomposition may take place in this extravasated blood, and lead to pelvic cellulitis and abscess. So much objection have I to a plug of any kind, that I have often in hospital-practice, where a surgeon and good nurses are at hand, put a piece of ice into the wound, held it there with a sponge, and allowed the patient to be removed to bed while some degree of bleeding was still going on. Frequently, the oozing, free though it be, will cease in an hour or two; sometimes, however, it will cease at first; and, as reaction comes on, so does the straining and expulsion of clots. Then, when it is clearly shown to be necessary, the plug is resorted to, and seldom fails.

There are cases, however, in which no form of plug is effectual. A few years ago a young man, aged 22, consulted me three weeks after his marriage, with all the symptoms of stone, which had been going on since boyhood. I removed, by lateral lithotomy, a round rough mulberry stone, which weighed an ounce and a half. The bleeding was moderate at the time, but in two or three hours the straining and extrusion of clots made the plug necessary. On my return, in the evening, from a journey, I found him deadly pale, and the bleeding still going on; a fresh plug was applied, and all went well for some days; the tube and plug came away, and clear urine flowed. On the fifth day a few coagula escaped, next day some more; still nothing was done, and on the eighth day there was no bleeding; on the ninth, however, it returned, and he became blanched and faint. I reintroduced the silver tube, drew off half-a-pint of urine, and tied it in; in a few hours there was more blood, and the tube was blocked. It was removed, and the air-tampon was introduced; still blood and urine escaped through the tube, forcing came on and continued, so as somewhat to displace the tampon. Seeing this, and seeing also that the bleeding was a slow oozing into the bladder from some deep source, it appeared useless to repeat the plugging, and I determined to trust to passing a large flexible catheter through the wound every two or three hours, so as to keep the bladder quiet. At this time, I first learned that he was of an hæmorrhagic diathesis, very liable to free epistaxis, and that every little cut bled freely and stopped unwillingly. On the tenth day, he had a considerable discharge of coagula; then it ceased entirely, and he recovered rapidly. When the artery of the bulb is the source of the bleeding, difficulty will be found in applying a ligature at such a depth in so narrow a wound; but I have sometimes found that the pressure-forceps used in ovariotomy will control it, and may be safely left in the wound for a day or two.

Bleeding which comes from a deep source and passes into the bladder, and is expelled with straining, in the form of coagula chiefly, is very difficult to deal with; the tampon or plug will scarcely arrest it, and the only caution I can give is to keep the bladder as quiet as possible, by passing a large soft catheter through the wound as often as necessary. It may be kept in permanently, but, when this is attempted, it is apt to become choked with blood and inefficient. It is possible that moderate dilatation of the whole wound by a Todd's rectum dilator, or by a full-sized gum-elastic bougie, having a central passage for a catheter, as recommended by Mr. Reginald Harrison, might succeed in these troublesome cases; but I have no experience of either of them, nor have I any of the injection of hot water, which has been found so efficient a hæmostatic in other wounds.

Stones Left in the Bladder after Lithotomy.—Leaving stones or fragments of a stone in the bladder after lithotomy is an accident which may greatly hurt the credit of the surgeon, and is assuredly a great misfortune for the patient. I believe this mishap to be of more frequent occurrence than is commonly supposed; it has occurred to me repeatedly, not only when I was younger, but even of late years, when I have been most fully alive to the risk, and have used every possible means to avoid it. It is especially liable to happen in old men, whose prostate gland is enlarged and the bladder honeycombed and ill-shaped; the finger is probably unable to reach and explore the bladder, small stones or fragments become enveloped in soft clots, or hidden in the recesses of the bladder; they may give no sound or sense of contact to the searcher, and the vigorous use of a syringe, although most proper and necessary, will not certainly insure their expulsion. There is a general belief that multiple stones are smooth and facetted, but this is by no means always the case. Here, for instance, are two stones, each weighing nearly an ounce: neither is particularly smooth, and yet they lay together loose in a man's bladder for several years. Sometimes a large and a very small stone exist together; and it is very conceivable that the smaller, unless it escape with the larger one, should be unsuspected and elude detection. Generally, multiple stones are about the same size, and grow pretty equally; but it may happen that, when a stone of considerable size occupies the bladder, an attack of renal colic may take place, and a fresh stone descends into the bladder; and thus this unequal size is explained. It has more than once occurred to me to witness an attack of renal colic, while a patient was under treatment by lithotomy or lithotrity.

With these several conditions present in his mind, the surgeon cannot be too wary of this danger, both for his own and the patient's sake. He should not consider that the operation is over when a stone has been removed; he should at once ask himself if, possibly, another, or more than one other, may yet linger in the bladder. Especially he will think of this if the stone have broken in the forceps, or if he have had several stones to deal with. He should deliberately and repeatedly examine with finger and with sound, and explore every

corner of the bladder. He should use a good enema-syringe, with a small tube, which will allow a free return-stream; or distend the bladder with a larger tube, and then, by withdrawing it, allow the water to escape with a rush, which will bring any small piece of stone with it. Again he will use the sound after all clots and mucus have been washed away. In this manner, he will do his utmost to clear the bladder entirely, and will not consider appearances or the time occupied; for, with anæsthesia, time is of little moment.

In these cases, where several calculi have been removed, or a soft one broken, a most narrow watch should be observed during recovery. In ordinary cases, there is very little pain or straining after the operation; when they do ensue, the surgeon should look closely to ascertain the cause; if they come on soon after the operation, they may be caused by coagula or urine retained in the bladder, or by an enlarged prostate, still more swollen from rough handling, or by cystitis. These causes will quickly abate; the blood dissolves or escapes, urine is drawn off if and when necessary, the bruised prostate becomes quiet, and the cystitis subsides under proper treatment. The irritation caused by a portion of stone left behind is slower in coming on, and less vivid in its effects; it may escape with the urine in a few days; or, the bladder becoming easy by the removal of the bulk of stone, and the patient resting quietly in bed, it is more likely to remain, and cause but little trouble for a short time. It is not unfrequent in old men with a weak bladder and enlarged prostate, that partial retention of urine follows the removal of the lithotomy tube, and requires the frequent introduction of a flexible catheter through the wound; and with this catheter, in the suspicious cases of which I am speaking, the grating of it against small pieces of stone may be felt, even when the patient has made no complaint of pain. Should a fuller examination prove the presence of a piece of stone, the patient may be placed on his left side, and the bladder well washed out; then, the exact position of the piece of stone being ascertained, it can generally be picked out by long slender forceps, or by one of the numerous instruments contrived for removing small stones without breaking them. In this way, the bladder may be wholly cleared, and the patient will be safe from recurrence of stone. It is quite unlikely that any but small pieces or small stones will have been left behind; if, unfortunately, a piece too large to come away in the manner described be present, it would be right to administer ether, tie the patient up again, dilate the wound, and use such forceps as may be necessary. This proceeding, however, is almost equal to another lithotomy operation, and I have never had recourse to it, but have preferred to let the patient recover, and then remove the remaining stone by lithotrity. Thus, many years ago, I removed by median lithotomy eight or ten small round stones from a gentleman, aged 61. Lithotrity might easily have been adopted, but he was resolute for lithotomy. He was a large fat man, and I could barely reach the bladder through the small median wound. Finding these small stones, I used every possible means to clear them all out of the bladder, syringing repeatedly, and searching with sound and scoop. Two experienced lithotomists who were present examined, but could not reach the bladder. As recovery proceeded, in about ten days, he began to complain of the old symptoms of bladder irritability; and a horrible suspicion came over me that I must have left one or two calculi in the bladder, notwithstanding all the precautions taken. I was young; this was my seventeenth case of lithotomy; the patient was a man of rank and high position, and well known to everybody in the district. He had been advised to go to London for treatment; and now, as he had put his faith in me, I felt that his recovery and my credit were painfully at stake. With a sound, a stone was detected. A day or two afterwards, Mr. Clover administered ether; an unfenestrated lithotrite caught the stone at once, and, feeling sure that it was small, like the others, I tried to extract without breaking it; it passed easily to within a few inches of the meatus; then the instrument was screwed home, the stone was all removed, and he recovered at once. I mention this case in some detail, that it may be a lesson to those who have yet to acquire experience.

Various Symptoms following Lithotomy.—There are some morbid conditions which occasionally follow lithotomy which deserve a brief notice. It has repeatedly occurred to me to witness alarming symptoms of cardiac disturbance, syncope, or angina, coming on suddenly after lithotomy when the patient appeared to be progressing favourably. These symptoms have generally been observed in elderly men, who probably had some degree of fatty or other degeneration of the heart's structure, but who had, nevertheless, surmounted the shock and excitement of a great operation and an anæsthetic combined. These attacks seemed to threaten life, and, in one case, did prove fatal. They may not be restricted to the operation for stone; but I have seen them so often after it, that I have been obliged to think that there was something more than mere coincidence in their association.

Hiccup occurring after lithotomy is generally a grave symptom, especially if it be accompanied with abdominal distension and fever, pointing to peritonitis or pelvic cellulitis; but it sometimes occurs as a very troublesome but not a dangerous symptom, lasting, perhaps, for two or three weeks. In one patient—an enormous man—it endured for fully three weeks, during which time he had at first vomiting, but no fever, and no signs of abdominal mischief. Gregory's powder, as an aperient, and chlorodyne, seemed to afford most relief, and he gradually recovered. Humphry mentions a case of a fat man who suffered from hiccup both before and after the operation; it subsided in a few days, during which the progress towards recovery was favourable. Then he committed some dietetic excess; the flatulence and hiccup returned, with collapse and speedy death. No abdominal or pelvic lesion appeared at the *post mortem* examination. This form of hiccup probably is due to intestinal disorder, and I only allude to it to show that it is not always a dangerous or formidable symptom.

Another condition which has been occasionally noticed is the fœtid or fæcal odour of the urine after lithotomy, to such an extent, that the person of the patient and the room even were almost unbearable. In one case, the wound had been plugged on account of hæmorrhage. There was no difficulty in preventing its escape externally, but it evidently infiltrated the tissues around the bladder, and a tender spot was felt and a yellow stain was seen in the skin above the groin. The man was feverish and low; and ten days after the operation the urine became horribly offensive and continued so for several days, until an abscess discharged itself through the wound, when by degrees the urine lost the fœtid smell and he recovered. In another case, there was no fever and no evident abscess, but simply stubborn constipation. On the second day, the urine was noticed to be peculiarly fœtid—almost fæcal—in odour; there was flatulent distension, but no serious illness. Still, it was noticed that a week after the operation the urine contained a good deal of pus, and I cannot doubt that there was some small purulent collection near the bowel which allowed a diffusion of bowel-gas, just as we sometimes see in common abscesses near the rectum. This fæcal smell of the urine after lithotomy should therefore beget the suspicion of, and cause a strict search for, abscess near the base of the bladder.

Another symptom which I have occasionally noticed to accompany—I will not say to depend on—stone, both before and after operation, either lithotomy or lithotrity, is the secretion of a large amount of non-albuminous urine, almost amounting to diabetes insipidus. In the case of a boy aged 13, it followed scarlet fever, and amounted to five or six pints daily of pale, opalescent, non-albuminous urine, of low specific gravity. A large stone, weighing six ounces, was removed; but the patient died, after a long illness, of pelvic abscess. At the *post mortem* examination, the kidneys were found to be atrophied, and the calyces, pelves, and ureters greatly dilated. In other patients, generally elderly men, recovery took place; but I have always felt distrust of such cases, and have been at a loss to explain and account for the condition. True diabetes is occasionally associated with stone; and it would appear, when it exists in a mild and chronic form, not much to prejudice the recovery after operation. When, however, the disease is present in its more serious and aggravated form, the danger of lithotomy or any other severe operation cannot but be greatly increased. One such case has occurred to me, that of an eminent and well known physician, whose constitution and health were utterly broken by confirmed diabetes. He was pale, anæmic, and emaciated. A lithic stone of moderate size had to be removed; and there seemed good reasons, in addition to his own strong wish, for preferring lithotomy. The operation was quick and easy; but the blood was so watery, and so deficient, apparently, in fibrine, that a light plug was required to stop the oozing. Death took place on the tenth day, from exhaustion. The *post mortem* examination showed that the urinary organs were all healthy and uninflamed, and that the apparent cause of the diabetes was a tumour connected with the dura mater, which pressed on, and deeply indented, the surface of the brain. It may be added that, during life, the patient never had headache, or any cerebral symptoms whatever. Such a case, in a patient with such a frail state of health, would undoubtedly, at the present time, be treated by litholapaxy.

One other symptom may be mentioned, because, in one case, it misled me, and might mislead others. A man, aged 66, had two full sized stones removed by lithotomy; there was troublesome bleeding, which was arrested by the air-tampon. For some days, a good deal of mucus was observed on each draw-sheet, and it was supposed that this was the product of cystitis. On the fourth day, while I was trying to remove the tampon, I observed a quantity of glairy

mucus coming from the rectum; quite two or three ounces bubbled out in a few minutes, and more followed; it was white, like jelly, and odourless, and soon ceased after the removal of the tampon, which, I apprehend, had caused the secretion by undue pressure on the coats of the bowel.

The causes of death after lithotomy are especially deserving of attention, because they may point out some error in the diagnosis of the case, in the operation, or in the treatment after it. How often has it occurred to me to confess, at the *post mortem* examination, that, had I known or suspected beforehand this or that morbid condition, I would have done differently, or not have operated at all. I can scarcely call to mind having declined to operate in more than two or three cases; several were done under circumstances which almost precluded hope of recovery, but in obedience to the pressing desire of the suffering patient to be relieved of the stone at all hazard. Looking through my note-books, I find that the black list is a long one, namely, 29 deaths out of 169 operations; about 1 in 6, or 17 per cent. Of the 29 deaths, 13 cases were aged from 60 to 70, and 10 were over 70. The average age of the whole was 60, and the average weight of stone was 2 ounces. In a man, aged 80, the stone weighed 6½ ounces; in a boy, aged 13, it was 6 ounces; and in a middle-aged adult, it was over 4 ounces. The considerable size of the stones, the great age of the patients, and the serious complications existing in many of the cases, may explain—I was going to say, extenuate—the heavy mortality; and it may be further mentioned that the most favourable cases were reserved for lithotrity. In like manner, Sir H. Thompson, after deducting a very large number of cases of lithotrity, gives his mortality after lithotomy at 35 per cent. It is a curious coincidence that, although my cases of lithotomy have largely consisted of old men with renal, prostatic, and other complicating diseases, the first fatal case was in an infant a year and a half old, who died of convulsions the day after the operation.

The following table shows the age, date, and cause of each of the twenty-nine deaths, from which it will be seen that phlebitis and pyæmia account for nearly a quarter of the whole; and with reference to this, I may say that, for some years, our hospital suffered greatly from pyæmia, and that all efforts to abate it were without avail, until the whole system of nursing was changed, and the entire charge was given over to a skilled nurse, a lady of great force of character and untiring energy. A revolution in management was established; pyæmia almost disappeared as if by magic; a new hospital has since been built, but both in the old and in the new, from the time mentioned, now nearly ten years, I have not had to register a death from pyæmia; and we have almost ceased to think of it. In ten cases, there was marked disease of the kidneys. This is by far the most formidable obstacle to successful lithotomy; it is a complication of stone which no amount of experience seems to enable one to diagnose with accuracy; no symptoms, marked and prominent, and constant enough, exist to indicate it. The condition of the urine throws but slight light on it; the presence of albumen, pus, or mucus, cannot be relied on, for the state of the bladder, with some concurrent cystitis, is probably there to impair this means of diagnosis. The aspect of the patient—pallor, flabbiness, and debility stamped on it; the nature of the stone—phosphatic, with chronic cystitis and vesical atony; these conditions may well produce suspicions of kidney-disease; but, on the other hand, not a few cases have occurred of hard lithic stones in ruddy-faced farm-labourers, in which death from renal disease followed lithotomy, and in which it was wholly unsuspected. The form of kidney-disease which most frequently causes death after lithotomy is nephro-pyelitis, in one or other of its varieties; either acute interstitial nephritis, with scattered abscesses, or more chronic pyelitis, with dilated suppurating pelves and ureters; this form is that in which the pale and anæmic physiognomy alluded to is seen. Another form is that in which the kidney is either in a state of atrophy and contraction, or where it is enlarged and coarse and soft in structure; and this form is that in which there is often, but not always, a florid healthy aspect.

I have only seen two instances of stone combined with Bright's disease—that is, with albuminous urine of low density, and some degree of anasarca and anæmia. Both these cases recovered from the operation, but died some months after of the more serious malady. In two, probably three, cases of kidney-disease, suppression of urine was the proximate cause of death.

Infiltration of urine, pelvic abscess, and peritonitis, separately or in combination, were formerly considered to be the most frequent cause of death after lithotomy. Sir W. Fergusson, however, denied this, and went almost so far as to say that urinary infiltration never occurred. The truth, as usual, I believe lies between these two extreme views. In my own cases, I have never seen pure urinary extravasation leading to sloughy cellular tissue around the bladder; but several cases have occurred of pelvic abscess and peritonitis, which have been attributed to slight infiltration of urine or to decomposition of extravasated blood; and peritonitis also of a purely septic or pyæmic origin has been observed.

Exhaustion due to shock and hæmorrhage combined, to diabetes and anæmia, to chronic pulmonary disease, and to previous hemiplegia, has proved fatal occasionally. Lastly, I have noticed in three fatal cases great enlargement of the spleen; this has occurred in very florid elderly men, with blue feet and legs, and universal congestion; this condition and class of patients would now lead me to prefer lithotrity in all practicable cases, and, where it is not practicable, to adopt the suprapubic operation.

Causes of Death after Lithotomy.

No.	Age.	Weight of Stone.	Remarks.
1	1½	—	Convulsions on second day; no *post mortem* examination; median operation.
2	66	—	Median operation; prostatic retention; catheter used; death fifth day; bladder thin and dilated; kidneys diseased; ureters large; pyæmia (?)
3	66	℥iss	Median; died sixth day; rigors violent; ague (?); bladder sacculated, one very large; kidneys healthy; prostate very large.
4	64	℥xss	Median; nearly recovered; died of acute peritonitis three months after operation; abscess behind pubes, opening into bladder; kidneys diseased; stone in right one; prostate large.
5	62	℥xi	Median; death fifteenth day; old hemiplegia, diphtheria, pyæmia visceral abscesses; contracted kidney.
6	52	℥vij	Median; death eleventh day; phlebitis and pyæmia.
7	60	℥iv	Lateral; hæmorrhage and shock; death second day.
8	68	℥v	Lateral; death seventh day; pyæmia, hepatic abscess; opium eater; great enlargement of prostate; chronic retention.
9	66	℥iij	Median; death in ten weeks from exhaustion and kidney disease, pyelitis, chronic prostatic retention.
10	64	℥iij	Median; death from pyæmia fourteenth day; rigors and fever; enlarged spleen.
11	70	℥x	Lateral; death tenth day: exhaustion, fatty liver, and kidneys.
12	60	℥iiss	Median; death fourteenth day; pyæmia, phlebitis.
13	11	℥iij	Lateral; death tenth day; pyæmia, visceral abscesses.
14	73	℥ix	Lateral; death second day; shock and hæmorrhage.
15	71	℥xiij	Lateral; death fifth day; kidneys diseased, hæmorrhage.
16	70	℥iij	Lateral; death eleventh day; rigors, kidneys diseased, ureters dilated; bladder contracted, and sacculated encysted stone.
17	64	℥v	Median; recovered, and wound healed, then phlebitis and pyæmia.
18	34	—	Lateral; death seventeenth day; pyæmia.
19	63	℥iv	Lateral; death eleventh day; diabetes and exhaustion; tumours of dura mater; no other organic disease.
20	65	—	Lateral; death eighteenth day; cause not clear; no *post mortem* examination; would not eat; probably kidney-disease.
21	80	℥viss	Lateral; exhaustion; death fourth day.
22	76	℥ij	Lateral; three stones; great enlargement of prostate; catheter used for years; death fifth day; suppression of urine.
23	13	℥vj	Lateral; death from pelvic abscess three months after operation; kidneys atrophied; ureters dilated and tortuous; calyces and pelves dilated; had diabetes insipidus.
24	73	℥vi	Lateral; death in two months from lung disease; no *post mortem* examination.
25	57	℥iv ℥j	Lateral; death in a month; secondary hæmorrhage; no *post mortem* examination.
26	61	—	Female; death seventh day; peritonitis, encysted stone, sacculated bladder.
27	70	℥xiij	Suprapubic operation; death fourth day; suppression of urine, kidneys diseased, ureters dilated, injury to rectum.
28	70	℥v	Lateral; death fifth day; enormous man; kidneys diseased, pulmonary congestion; spleen 8 ounces.
29	72	—	Death eighth day; secondary hæmorrhage; feeble man; old retention; pyelitis; stone in kidney; enlarged prostate.

Recurrence of stone after lithotomy is a matter of much interest, because of its bearing on the choice of operation, on the one hand, between perineal and suprapubic lithotomy, and on the other hand, between lithotrity and lithotomy. If it can be proved that recurrence is far more frequent after lithotrity than after cutting, this fact should decide one to adopt lithotomy—and in my own practice it not unfrequently has done so. On this matter of recurrence, the records of the Norwich Hospital afford valuable, if not quite conclusive, evidence. A short time ago, Mr. Donald Day, our late house-surgeon, very much at my suggestion, carefully examined these records, and compared them with the stones in the museum; and he has given the results of his inquiry very clearly and succinctly in the BRITISH MEDICAL JOURNAL (February 13th, 1886). He ascertained that, out of 884 individuals (males), forty-five were cut a second time, an average of about one in twenty, or 5 per cent., and five were cut a third time. Of course, this does not give the whole number of recurrences, but only the number of repeated operations of lithotomy. Doubtless there were some, especially in the pre-anæsthetic period, who declined

to submit to further treatment, or went elsewhere; but, as the same motives would exist in recurrence after lithotrity, the figures are good for comparison.

There are two chief causes which lead to recurrence of stone; namely, 1, the descent of a fresh calculus from the kidney; and 2, the leaving of stone or fragments of stone undetected at the first operation. Of the fifty instances of repeated operation mentioned, rather more than one-third were due to an entirely fresh stone descending from the kidney. Uric acid or urates was the composition of nearly all of them; the second formation was generally the same, and the interval between the operations was frequently long, giving an average of five to six years. The second class, or those in which stones or fragments of stone were left behind, include nearly two-thirds of the whole, and shows the enormous importance, when a stone breaks in extraction or there are multiple stones, of making the most careful search, and the most resolute efforts to effect a thorough clearance of the bladder. In these cases the second stone is often composed of phosphates, or mixed phosphates and urates, and the interval between the operations is much shorter than in the first class. Some few of these cases should perhaps, as Mr. Day suggests, be placed in a separate group; cases in which the bladder has been entirely cleared at the first operation, but in which soft porous masses of white phosphates have subsequently gathered, and have been caused by enduring cystitis, by fistula, or more likely by the incrustation of the deep portion of the wound by phosphatic deposit in weakly patients after a severe operation. This sabulous coating comes away from the wound, and the latter cleans as the patient gains strength; but occasionally some of it at the neck of the bladder remains, and forms a nucleus for fresh phosphatic stone in a few months. Cystitis will not lead to deposit of phosphates, unless some ulcerated or abraded surface, or a clot of blood or concrete mucus, be present, in which case rapid aggregation of soft stone will take place. I will, however, again refer to this matter, in speaking of recurrence after lithotrity.

Stone in the Female.—It must be in the experience of all surgeons, how seldom the sound detects a stone in the female bladder, although the symptoms are present even in vivid intensity. Vesical irritability and cystitis, not dependent on stone, are probably as frequent in women as in men, and are fully as difficult to remedy. They depend on somewhat the same causes; namely, on cold, on tuberculosis, on neglected gonorrhœa, and, as special causes, from pressure on the bladder when distended during labour, or from uterine displacements and versions. When calculus is present, the symptoms are nearly the same as in men; if the stone be small and freely movable, the suffering is great; if it be large and heavy, and weigh down the floor of the bladder into the vaginal canal, so that by this prolapsus it becomes fixed, the suffering may be mitigated and even masked. Paget, of Leicester, reported a case of stone in a woman, which weighed 27 ounces; it was prolapsed between the labia pudendi, and caused so little inconvenience, that the woman never consulted a medical man, and did hard work. In some cases of this kind, nature accomplishes a kind of cure, by a process of inflammation and ulceration of the contiguous mucous membrane and spontaneous escape of the stone. This large stone, weighing over 6 ounces, passed from a woman after a process of prolapsus and ulceration. I once assisted a surgeon to remove a full-sized calculus, which had become partially prolapsed, and had been mistaken for a procidentia uteri.

Dr. Emmet speaks of stone in the female following the operation for vesico-vaginal fistula, and being due either to the ends of the metallic suture having been left, and escaping into the bladder, or to faulty adjustment of the edges of the wound, by which a projecting part or some denuded surface is left, on which phosphatic deposit takes place. In 1,125 operations for stone, at the Norwich Hospital, there have been only 50 in the female, a proportion of about 1 to 20 in the male. In my own experience of 300, I have only met with six in the female.

The earlier hospital cases were, I believe, done by cystotomy; but, for many years, dilatation and extraction, with occasionally a slight incision, has been the plan adopted; lithotrity never, suprapubic lithotomy once, and vaginal lithotomy once or twice only. I say only once or twice, because I have heard of no others, and Mr. Crosse makes no mention of any; but it is just possible that, in the very earliest years of the hospital, that method may have been practised, because Benjamin Gooch, who, if not the originator of it, was one of the first to adopt it, lived at Norwich, and was the chief founder of the hospital, in 1771. He thus describes the operation (*Cases and Remarks in Surgery*, vol. ii, p. 178): "After putting her in the usual position for the operation, I intended to have proceeded in the common manner, by dilating the urethra, and making an incision, as should be found necessary, to facilitate the extraction of the stone; but finding, with my finger, that it lay very favourably to be cut upon, through the vagina uteri, now considerably dilated, I altered my original design, and, with the approbation of two experienced practitioners, cut directly upon it, and extracted it with very little pain to the patient and trouble to myself, compared with what a stone of between 3 and 4 ounces weight must have unavoidably occasioned, by performing the operation in the common method. The symptoms after the operation were most gentle, and she was perfectly cured in three weeks, without any defect remaining in the retentive faculty." He refers, also, to two other similar cases by other surgeons, he being present. Thus, then, vaginal lithotomy, which is generally regarded as a modern operation, due chiefly to Marion Sims and Aveling, and which Emmet describes as nearly the only fitting way by which to remove stone in the female, is at least a century and a half old. Good as the operation is, however, for the removal of stones of about the size of a hen's egg, it is not, I think, adapted for the removal of very large calculi. The distance between the internal orifice of the urethra and the os uteri is limited, and, although an aperture, say of an inch, or an inch and a half in length, would dilate a good deal, there would not be room enough to extract a very large stone with safety. Lately, one of my colleagues removed a stone weighing 7 ounces, by vaginal lithotomy. It was an operation of some difficulty, and the wound was extended unavoidably, by laceration, nearly up to the external orifice of the urethra; and there was, necessarily, a good deal of bruising of the soft parts. Emmet describes a case in which he was unable to extract a stone through the vaginal incision, until he had diminished its bulk by inserting two fingers behind the stone, and chipping off portions of the outer layers, by cutting-pliers or scissors. Moreover, although, as Gooch describes, and as we see in the male, a wound in the bladder will generally heal of itself, it is always thought necessary, in vaginal operations, to close it accurately by sutures; and, if there have been much bruising of the edges during extraction of the stone, union may fail, and this may entail several operations to cure the fistula, and this is, besides, an operation of nicety, requiring an experienced hand. On the whole, it is probable that, for stones of 3 ounces and upwards, the high operation, done by the modern method, will come to supplant the vaginal incision. While I say this, however, it must be borne in mind that, while there is no reason to expect a less mortality in women than in men, from the high operation, we know that all other operations for the removal of stone in women are far less fatal than in men; so that, unless the improved method of the suprapubic operation shall prove to be more successful than the old, there can be no such supplanting as I have mentioned.

In female children, in whom the vagina and urethra are small and undeveloped, the bladder high in the pelvis, and the tendency to urinary infiltration slight, the suprapubic operation is, undoubtedly, the best for all cases, except those in which the stone is very small; and, for these, litholapaxy, according to recent Indian experience, is well adapted.

Having had but small personal experience of stone in the female, I desire to speak with diffidence as to the merits of the various modes of treatment; but I may say that the conclusions to which I have come are, that, for stones of small size—for instance, not larger than a filbert—in the adult female, rapid dilatation of the urethra, and careful extraction, is the best method; that litholapaxy is, probably, the best operation for those which are larger—say, from half an ounce to an ounce, or even more; that, for those which are about the size of a hen's egg, vaginal lithotomy is well adapted, and the high operation for all above that size. Further experience, however, may somewhat modify these conclusions.

Suprapubic Lithotomy.—Suprapubic lithotomy in its revived and modern method requires careful notice and examination. Its past history has been chequered and uncertain, and the results obtained have not been satisfactory, but its future is full of hope and promise. At the present time, surgeons are divided in opinion as to its methods, its capabilities, and its merits.

History repeats itself. In this very year, several cases have occurred in which stones of great magnitude have been attacked by perineal lithotomy without success, and have been at once removed by the high operation. Precisely the same thing occurred to Peter Franco in the middle of the sixteenth century. He attempted to remove a large stone from a child's bladder by perineal section, failed, and was persuaded by the child's parents and others to attempt its extraction by abdominal section. He succeeded; the child recovered, and this was the actual beginning of the history of suprapubic lithotomy. So doubtful, however, was Franco as to the wisdom of the proceeding that was to perpetuate his name, that he warned others against attempting it. It is needless here to trace its history or to relate fully how it was at first greatly extolled by Rosset; how it fell

into neglect until it was revived in 1720 by I. Douglas and Cheselden; how at that time, influenced, no doubt, by Cheselden's success, the surgeons of St. Thomas's and St. Bartholomew's hospitals took it up; how, in consequence of fatal accidents, such as opening the peritoneal cavity, bursting of the bladder by over-distension, etc., it soon became discredited, while the lateral operation practised and perfected by Cheselden gave it its *coup-de-grâce*, in this country at all events, as a general operation for stone. Abroad, it could still reckon its advocates; Frère Côme, who, in 1770, modified it by omitting the injection of the bladder and introducing the *sonde-à-dard;* Souberbeille, in 1818, who nearly followed Côme's method; Valette, of Lyons, who recommended that the bladder should be opened by caustic at a second operation; and many others. In England, for the last 150 years, it has been adopted only in cases in which the stone is very large; and even in those, lateral lithotomy has generally been preferred. Thus we read of stones of 10, 12, or even 15 ounces having been successfully removed through the perinæum, and it is not a little singular that in the Norwich Hospital the high operation has, so far as I know, never been done until two years ago by myself. Still, it must be admitted that perineal lithotomy has been unsatisfactory in its results when applied to stones above a moderate size; it is difficult to do; laceration and rough instrumentation are unavoidable, and the mortality has been great, probably not less than 35 to 45 per cent. when the stone has weighed over 2 ounces. I have long felt this difficulty, and have often, during the last twenty years, asked myself, and those friends who have much practice in lithotomy, what is the best way of removing a stone of 3 or 4 ounces, and whether the high operation did not call for fresh examination, considering the advances of abdominal surgery and the antiseptic method? In 1878, a discussion took place at the Clinical Society on a paper by Mr. Hutchinson on suprapubic lithotomy. The general tone of the meeting was rather deprecatory of than favourable to the operation. Its difficulties and disadvantages were prominently spoken of, and I mention this to show the contrast between the tone then and that confident, buoyant, and laudatory account which was recently given of it at the Royal Medical and Chirurgical Society, and we may now consider the reason for this difference.

At the Clinical Society, in 1878, Mr. Heath said that "he had recently seen a pamphlet in which it was said that distending the rectum did good in making the bladder project above the pubes." This was the paper by Dr. Garson, then just published in the *Edinburgh Medical Journal*, which, beyond all doubt, laid the foundation for, and acted as the pioneer to, the re-examination and revival of suprapubic lithotomy. The facts therein related, and the effects of fully distending the rectum in facilitating the steps of the operation so plainly stated by Garson, attracted little or no notice from British surgeons; but the paper, having been communicated to a Medical Congress at Berlin, in 1878, was not neglected there. Professor Petersen, of Kiel, took the subject up, and, having first repeated Garson's experiments on the dead body, applied his knowledge to the living, and operated on several cases of stone successfully. He has been quickly followed by many in Germany, Russia, and France; and the papers in various continental journals, and at medical congresses, one so lately as April last in Berlin, are too numerous even to mention. In England, we have been somewhat slow to take up the inquiry. Sir H. Thompson alluded to it from this chair two years ago, and soon afterwards performed his first operation. Having followed that by several other cases, he has recently, as we all know, published his views in an excellent essay. Having started in the inquiry, there is no fear of our lagging behind our continental brethren. Rather I should say there is some fear that our enthusiasm should outstrip discretion, that the operation should be applied to all kinds of cases, fit and unfit, and to stones of all sizes, and to persons of both sexes and of all ages, and not only for stone in the bladder, but for tumours of all kinds, and even for stricture of the urethra. While this keen interest in the subject is going on, let us consider (1) the principles on which the modern operation is based, and (2) the advantages and disadvantages of it as compared with other methods. The principle consists in the fact that moderate distension of the bladder and rectum raises the bladder well above the pubes, brings every part of it well within the reach of the finger, and elevates the prevesical fold of the peritoneum considerably above the symphysis pubis. All this is, I think, fully proved by numerous experiments, both in England and abroad; but it may be worth while to examine them somewhat in detail.

The position of the peritoneum lining the anterior wall of the abdomen is, the bladder being empty, that it passes down to the symphysis pubis, and is then reflected over the posterior wall of the bladder, so that an incision in the median line, close above the pubes, would inevitably come directly upon it.

Distension of the bladder only, the rectum being empty, will generally raise this fold of peritoneum from one and a half to two inches above the pubes. Pirogoff, Braune, Garson, Bouley, indeed all, or almost all, observers agree that full distension of the bladder will not only have this effect, but that the effect will be greater in fat than in thin people. There are, however, many exceptions to this rule. The capacity of the bladder varies greatly. Langenbuch says that, by extreme injection, room enough may be obtained above the pubes without filling the rectum. Fehleisen, on the other hand, holds that, the rectum being empty, distension of the bladder has very little effect in raising the fold of peritoneum; that, with twenty ounces in it, the fold will be only three-quarters of an inch above the pubes; and he assigns as a reason for this, that the bladder, as it fills, presses backwards and downwards rather than upwards, filling the hollow of the sacrum. Much caution is required in this proceeding in the living, especially when there is a stone. In old people, there may, and probably will, be sacculi; and the walls of these, being thin and unsupported by muscular fibres, might yield to the distending force. Sometimes, too, the bladder is thick and contracted, and will scarcely distend at all; while M. Polaillon believes that, in one case, the fluid, instead of distending the bladder, found its way into the enlarged ureters, and distended them, instead of, or as well as, the bladder. All things considered, therefore, it may be said that, in operating by the suprapubic method in the adult, we ought not to depend solely on vesical distension.

Distension of the rectum only, the bladder being empty, raises the floor of the latter very considerably; but, according to my observations, it has but little effect on the upper part of it, or on the fold of peritoneum. Whoever will distend the rectum with twelve to fifteen ounces of fluid in a rubber bag, and then examine the parts, will see that the distended bowel fills the whole hollow of the sacrum, where it is bound down by the cellular connections of the gut to the walls of the pelvis; that it elongates the membranous and prostatic urethra, and elevates the vesical orifice and the whole lower fundus of the bladder to such an extent that the finger, passed through an aperture above the pubic symphysis, can reach every part of it easily, and if, while the finger is doing this, the fluid in the rectal bag be allowed to escape, the floor of the bladder will sink almost out of reach.

When both bladder and rectum are moderately filled, the former, not being able to occupy the lower half of the pelvis, is forced upwards and forwards against the abdominal wall, and carries up the prevesical fold of peritoneum from one and a half to two and a half inches, according to the amount of fluid injected into the two cavities. It is needless to recount the actual measurements given by various observers; they have not all been taken precisely in the same way, and they are approximate rather than exact; still, they are tolerably uniform, and liable only to occasional exceptions. It is probable that, in the living body, with its animal heat and less solidified condition of adipose tissue, the separation and elevation of the fold of peritoneum would be easier and more considerable than in the dead body; this, however, cannot be demonstrated. Mr. Barwell, in a carefully conducted series of experiments, has found that distension of the rectum, in addition to that of the bladder, does not sensibly increase the raising of the prevesical fold of peritoneum; he maintains that this is almost entirely effected by distending the bladder only; and he, therefore, in his operations, dispenses with the rectal bag. His investigations, however, were made with the abdomen fully opened, and this may, as Dr. Garson suggested, account for the different results which he has obtained. My own experiments would rather tend to confirm those of Mr. Barwell; but I should still strongly advocate the use of the rectal bag, not only for its influence, slight though it be, in helping to carry the peritoneum out of danger, but chiefly because it brings the floor of the bladder within easy reach of the finger.

As to the method of operating, I have but little to say; that adopted by Sir H. Thompson is probably the best, namely, to use the knife as little as possible, and the finger-nail, or some blunt instrument, as much as possible as the bladder is approached; push up the peritoneum if it be seen; fix the bladder with a hook before opening it; use no suture for the bladder-wall after removal of the stone, and only one or two for the upper part of the external wound. Some surgeons stitch up the bladder accurately, and introduce and retain either a full-sized catheter through the urethra, or a drainage-tube through the perinæum. These means, however, will seldom prevent the urine from escaping by the upper bladder-wound; the catheter or drainage-tube may become blocked, or may slip a little; urine gathers in the bladder, and immediately makes its way upwards between the sutures. There can, I think, be little doubt that the safest course is to leave both the external and the bladder-wound freely open; all fluids—blood

serum, and urine—can then readily escape, and the risk of infiltration of urine is reduced to a minimum. A good-sized rubber, or silk-elastic tube may be used to facilitate drainage for two or three days. I have made this tube of sufficient length to reach into a basin placed by the bedside, and have fastened it to one edge of the outer wound to prevent its being accidentally dragged out; by this means the patient is kept comparatively dry and comfortable; he lies first on one side and then on the other, the nurse carefully carrying the tube from side to side with him. There are two kinds of rectal bag in use: one, a simple pear-shaped rubber bottle, which will dilate to any size; the other has a layer of linen in its walls, and will only hold a certain quantity; the former, when empty and rolled up, is rather the easier to introduce, but it should be filled from a graduated glass vessel, so that the exact quantity desired, say twelve or fourteen ounces, may be introduced. These, and other details of the operation, however, may come to be modified as experience increases.

In females, in whose bladder a full quantity of water cannot easily be retained, Sir H. Thompson has recommended the use of a hollow sound, with a slit at the end, fitted by a stylet; this is made to push against the front wall of the bladder, close behind the pubes, where it is felt in the wound; the stylet is withdrawn, the slit is struck by the scalpel, and the bladder opened. It is doubtful whether this manœuvre will, in practice, be found necessary. I have found that, in the dead body, the pressure upwards of the rectal bag is sufficient to close the vesical orifice, and retain a fair quantity of fluid in the bladder; or the finger of an assistant, pressing the urethra against the pubic arch, would readily retain the water until the bladder is opened from above.

In children, even when the bladder and rectum are empty, the peritoneal fold is generally from half an inch to an inch above the pubes; but, with a distended bladder, with three or four ounces even, it will be carried well up out of harm's way. No distension of the rectum is required, but the finger of an assistant may be of use in helping to raise the stone and the floor of the bladder.

CLINICAL LECTURE
ON CIRRHOSIS OF THE LIVER.

By ROBERT SAUNDBY, M.D.Edin.,
Physician to the General Hospital, Birmingham.

GENTLEMEN,—I wish to direct your attention this morning to the case of the man, J. R., who died, last Tuesday, in Ward VI. He was an engineer, thirty-six years of age, lodging at a tavern in Mott Street. On September 20th last, he was admitted into the hospital, after vomiting about a pint of blood in the surgery. At that time, he told us that he had always enjoyed good health, with the exception of some "rheumatic" pains seven or eight years ago. He admitted that he had drunk spirits freely up to a year ago, but, since then, had confined himself to beer. Two weeks before admission, he vomited a large quantity of blood, and had felt weak and ill ever since. His face and mucous surfaces were very pale; he complained of great thirst, but was in no pain. There was no tenderness anywhere over the abdomen, and there was neither distension nor ascites. The liver-dulness extended only from the sixth to the eight ribs in the vertical mammillary line. The spleen was not enlarged. He had no pain after food. The case was regarded as one of hæmorrhage, dependent upon cirrhosis of the liver; an ice-bag was placed over the epigastrium, and potash imperial was given to allay the thirst. Under this treatment, the hæmorrhage did not recur; and he was ultimately discharged, after being in the hospital three weeks. Six days later, he was re-admitted for hæmatemesis; this being the second attack since his discharge. In spite of the use of similar remedies, the hæmorrhage returned a few days after his re-admission, and he died on October 23rd, after a very severe attack of sickness, attended with pain so violent as to make him roll over in his bed.

I should like to tell you that Dr. MacMunn, of Wolverhampton, found in the urine a pigment called uro-hæmatin, an imperfectly oxidised urine-pigment. Urobilin is the principal pigment of the urine; it is formed by the oxidation of bilirubin, or bile-pigment, which itself is derived by oxidation from effete blood-pigment. Bile-pigment is formed normally by the liver; and we can readily understand that, in conditions where its structure is much altered, this function becomes impaired, and an imperfectly oxidised product is the result.

At the *post mortem* examination, a well marked scar was noted on the penis, and the prepuce was seen to have been, at some time, partly destroyed by sloughing; the left tibia also showed old thickening. The brain appeared healthy; the lungs were anæmic; the pericardial cavity was dry; there were several large milk-spots on the heart, very much thicker and larger than I ever saw before—in one place actually forming pendulous flakes, half an inch in length. There were no adhesions between the opposing surfaces of the pericardium, or any other evidences of pericarditis.

The peritoneal cavity contained no fluid; the liver was irregular in shape, reduced in size, of a pale colour, with a fissured and lobulated surface, and deeply notched at its anterior edge. The capsule of the liver was, in some places, half an inch thick; on section, the hepatic tissue was pale yellow, and divided by bands of fibrous tissue. With iodine, waxy degeneration was well marked.

There was a large depressed cicatrix on the surface of the spleen, which, on section, presented the characters of the "sago" spleen, and gave the waxy reaction with iodine. The kidneys were granular, and waxy.

The intestines contained a quantity of altered blood, and were waxy. The œsophagus showed great varicose dilatation of its veins, some of which contained hard thrombi.

I show you the heart, liver, spleen, and œsophagus. The veins of the œsophagus have been injected so as to display their size. Under one of the microscopes there is a section of the liver showing the characters of the growth, which not only surrounds, but invades the lobules, and forms extensive areas of richly nucleated connective tissue.

This case is an example of the combination of alcoholic and syphilitic cirrhosis.

In Dr. Murchison's classical work on the liver, he places "cirrhosis" under the heading "chronic atrophy of the liver," including it in the following group.

1. Cirrhosis.
2. Hyperæmia from cardiac or pulmonary disease.
3. Soft granular liver.
4. Atrophy from perihepatitis, including syphilitic disease.
5. Chronic atrophy of Frerichs.

I do not think this is a satisfactory classification. Cirrhosis is not a true atrophy; but, in addition, this group leaves out types now recognised, while it includes some which are vague and, to me, meaningless, notably 3 and 5.

The modern French school, led by Charcot, proposes a classification based on certain anatomical features of the morbid process, and would like to group all forms under three heads.

1. Multilobular, hob-nail, or common cirrhosis.
2. Monolobular, or biliary cirrhosis.
3. Monocellular, or syphilitic cirrhosis.

Careful study of this question has led me to reject this classification, while I recognise most cordially the valuable contributions made by this school to our knowledge of the histology of these diseases.

I believe the best division to follow, for the present, is an etiological one, and I distinguish the following types.

1. Alcoholic cirrhosis.
2. Cardiac or cyanotic cirrhosis.
3. Biliary cirrhosis.
4. Syphilitic ,,
5. Tubercular ,,
6. Malarial ,,
7. Scarlatinal ,,

I accept the last, provisionally, on the authority of Dr. Barlow, because there are many cases of cirrhosis in children which, while presenting the anatomical characters of ordinary cirrhosis, cannot be ascribed to the abuse of alcohol. I would add, that Dr. Crooke, our present able pathologist, has shown that a microscopical interstitial hepatitis exists almost invariably in scarlatinal livers, while Wagner, Biermer, and Klein, have observed the same thing. It is therefore desirable to differentiate this type, and to draw attention to the suggestion, that scarlatina may cause changes in the liver analogous to those undoubtedly caused by it in the kidneys.

You observe I do not use the terms "atrophic," or "hypertrophic;" and I avoid doing so, because I believe neither atrophy nor hypertrophy to be a fixed character of any one type.

Under the microscopes I have placed specimens illustrative of the changes observed in nearly all these types; and while I cannot, at the present time, go fully into the question of their clinical relationships and anatomical characters, I must say a few words in explanation of them.

Alcoholic cirrhosis is the common "hob-nail," or gin-drinker's liver, generally small, hard, and granular; met with, clinically, very frequently in association with ascites. I think this association is, perhaps, too much insisted upon. Frerichs found ascites absent in one third of his cases. An advanced stage of this disease is quite compatible with apparent health, and the performance of the ordinary duties of life. Some years ago, I examined the body of a foreman engineer at one of our collieries, who had died suddenly of hæmatemesis from this cause. I was told that he had not lost a day's work for two years; and, in spite of being a hard drinker, was a much valued servant and a good workman. An eminent London physician of the last generation died suddenly in the same way at Bath railway station, whither he had gone on professional business.

Ascites is usually held to be simply a dropsical effusion dependent upon obstruction to the portal circulation in the liver. But it is sometimes distinctly associated with inflammatory action, and it is possible that this may play a more important part than is at present admitted. The known good effects of early and repeated tapping in getting rid of this inconvenient effusion are difficult to account for on the purely mechanical theory. On the other hand, this mechanical theory offers a ready explanation of the liability of the non-ascitic cases to die of hæmorrhage, as the main cause of their freedom from ascites is the great development of the collateral venous circulation, and especially the dilatation of the œsophageal veins.

Cardiac or cyanotic cirrhosis is caused by prolonged venous congestion, depending upon cardiac or pulmonary disease. The liver is, at first, enlarged, but may atrophy. It is usually hard, with a thickened capsule, and is of a dark colour. The liver-cells around the radicles of the hepatic vein, in the centres of the lobules, become destroyed, and are partly replaced by fibrous tissue. There is often slight jaundice, the liver is tender, the peritoneum contains fluid, and the nature of the case is explained by the state of the thoracic organs.

Biliary cirrhosis is best seen in cases where there is some permanent or protracted occlusion of the common duct, as by a calculus. A history of early jaundice is always the leading clinical feature. The liver is enlarged, but may undergo atrophy; its surface is smooth, its tissue deeply bile-stained, and traversed by fibrous bands. Charcot believes this form is specially characterised by the appearance, under the microscope, of numerous newly formed biliary canaliculi; but, as you see from the specimens exhibited this morning, this appearance is quite as well seen in the section of tubercular cirrhosis which I shall describe immediately.

Syphilitic Cirrhosis.—Frerichs says that constitutional syphilis may give rise to three forms of liver-disease: interstitial hepatitis, hepatitis gummosa, waxy disease. In the case of J. R., these three were combined. It is difficult to say how much of the interstitial hepatitis was due to alcohol, and how much to syphilis; but syphilitic hepatitis is a diffuse lesion, not growing around the lobules, but invading them. In the sections from the present case, you will observe that there appears to be a combination of these processes, the lobules being surrounded by the growth, but the areas of newly formed tissue are much more extensive than I have ever met with in alcoholic cirrhosis. The deep cicatrices and fissures are the effects of gummata which have healed, leaving these losses of substance. The waxy degeneration is not uniform, but occurs in patches.

Syphilitic hepatitis is most often met with in children, the subjects of congenital syphilis, but visceral syphilis is not common in Birmingham, and we often go a long time without meeting with a specimen on our *post mortem* table. I ought to mention that gummata in the liver, as a rule, give rise to no symptoms, and are therefore not diagnosed during life.

Tubercular cirrhosis occurs in phthisical subjects, without producing any symptoms. The liver is enlarged and smooth, of normal consistence; but, on section, its surface shows a meshwork of fibrous bands, running between the lobules. I described a case in a paper, published in the *Transactions* of the Pathological Society for 1878, and I now show you a section of the liver. I wish particularly to draw your attention to the great development of newly formed biliary canaliculi.

Malarial cirrhosis is the indurated and pigmented liver found in the subjects of chronic malarial poisoning. The organ is usually large and dark, tough on section, and, under the microscope, the new growth is seen in the portal canals, fissures, and spaces of the liver, from whence it penetrates the lobules (Hayem). The connective tissue is loaded with pigment. Jaundice is variably present. The condition is rarely met with in this country.

From time to time, you will have opportunities of seeing examples of most, if not all, of these types of cirrhosis, and of following out their clinical features in greater detail.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
Emeritus Professor of Surgery at the London Hospital.

[*Continued from Page 1159.*]

XII.—Case of Asphyxia of Extremities (Raynaud's Disease): Patient a Healthy Young Lady: Some Facts as to Inheritance.

Within a month of my having seen Miss B., another example of this condition, in almost exactly the same degree of severity, came under my notice, which seemed to discredit some of my conjectures as to possible causation. In this instance, the patient was a young lady (Miss W., aged 21), who had never suffered from any enfeebling illness, and in whom there was no proved inheritance of gout. It was known that her paternal grandfather had been much troubled by dying of his fingers, and that her father was so also, to a slight extent. Her father, who was still living, had a very slow pulse, not more than 40, but he was, otherwise, in good health. The grand-parent referred to had been robust, and had lived to nearly 90, but the condition had clearly been such as to attract attention. Whether the liability to gout was wholly absent, I cannot feel sure. Her mother knew nothing of it, but I had attended a sister of her's, an aunt of the patient, many years ago, for a severe form of acne tuberosum of the nose. This affection is very rare in women, and, probably, never occurs excepting when hereditary. In men, it is often a consequence of free living, in association with gout. I must not, however, lay too much stress on this, since it cannot be held to prove more than that there was, on both sides, a probable inheritance of feeble circulation.

Miss W. was, when I saw her, aged 21, well grown, rather stout, and, excepting that she was too pale, she appeared to be in excellent health. She was a student at Cambridge, and lived, in all respects, like other people. Yet her fingers were habitually as livid as those of a corpse. It was not a cold morning when she called on me, yet her finger-nails were quite blue. Her hands were dusky, the lividity disappearing by degrees, from the fingers upwards, and being replaced by a dull red. On the backs of the hands were many of the ill-defined, dull, crimson blotches, like the spots on plaice. He fingers and hands generally were a little swollen, and were thus rendered stiff and awkward. Her nails were all slightly rough, and showed conspicuous white spots. On the back of her right hand and wrist were a number of little spots, all about the size of a split pea, which had only appeared during the last fortnight. They were all scaly, and were too uniform for common psoriasis. There were a few like them on the other hand.

It appeared that nothing peculiar had been observed in the state of Miss W.'s hands, until, at the age of fourteen, she went to a boarding-school at York. Here she suffered much from cold, and her hands began to be dusky. Before that, she had suffered much from chilblains, and had noticed that her hands would die if put into cold water. Since they had become livid, she had suffered much, in cold weather, from deep cracks in the fingers, near to the nails. I did not examine Miss W.'s feet, but was told that they were nearly in the state as the hands, but not so bad.

Miss W. had observed that she was very easily heated by exercise, and readily took cold. Nothing, she said, helped the circulation in her hands so much as walking. It was far better than lawn-tennis, which often, although heating her, made her hands very blue. She was always most comfortable in hot weather, but found heated rooms oppressive. A muff kept her hands much warmer than gloves. Her pulse was soft and feeble, and did not count more than 64. It was more feeble at the right wrist than at the left. There were no signs of heart-disease, but very deliberate action.

Miss W. had several brothers and sisters, who showed no peculiarity of circulation; but it was feared that one sister, much younger, was going to develop a similar condition.

XIII. Feeble Circulation and Flushing: Inherited Gout and Child-bearing as Possible Causes.

An interesting example of enfeebled circulation was offered in the case of Mrs. G., a lady aged 25, who had been married four years, and borne three children. She inherited gout, and also, as she said, feebleness of heart. Her chief reason for consulting me was a painful and very annoying tendency to flush. She was vivacious, and fond of society, and said that she was obliged to abstain from dining out on account of her tendency to flush up crimson on the slightest provocation, or without any cause whatever. She assured me that it occurred to such

an extent that every one noticed it. It was usually excited by some ridiculously inadequate emotion ; a question being addressed to her, or the name of a friend being mentioned. With this tendency to flush scarlet over the whole face and ears, was associated extreme coldness of the extremities ; her fingers became, as she described it, "like carrots," red and cold. Her feet were always chilly, but not so much so as her hands. I found her pulse very soft and compressible. She had never herself suffered from gout, and had never had chilblains. The symptoms of which she complained had been present, more or less, all her life, but had much increased of late. She loved warm weather, and never found it too hot.

(To be continued.)

A CASE OF EXCISION OF THYROID CYST.

Abstract of paper read before the Medico-Chirurgical Society of Nottingham.

By RUPERT C. CHICKEN, F.R.C.S.Eng., Nottingham.

I FIRST saw the case December 5th, 1884. The patient was a tall anæmic young woman, aged 29. The tumour was central, regular and elastic ; the surface was smooth ; it was very movable. It disappeared behind the left sterno-mastoid when the patient lay down ; it moved with the thyroid cartilage freely on swallowing. On the following grounds, I recommended excision : 1, other methods were inefficient ; 2, the growth was increasing ; 3, it was an annoyance to the patient. I consider that these reasons are sufficient to justify excision.

The operation was performed on February 3rd, 1885. A central incision was made down to the fascia propria of the tumour ; the cutting by knife was now done. A finger was inserted into the wound, and the tumour separated from the surrounding parts ; whatever impeded enucleation was tied in two places and divided. The vessels were, in this way, easily recognised and secured. Every band that could not easily be broken was so treated until the tumour was free. The cyst was about the size of a Tangerine orange, and had a broad thick base, as thick as the thumb and forefinger combined. A strong double silk-ligature was passed through the middle of this, and the pedicle tied in two halves. The ends of all ligatures were left long ; the wound was closed, and dressed with aseptic sponge. The patient lost perhaps a dessert-spoonful of blood. The smaller ligatures came away in a few days, but the two on the pedicle held firmly for eleven weeks, when choloroform was again given, and they were removed with a fine tenotomy-knife. The wound healed immediately, and has left only a very small scar. Up to the present date, there has been no bad symptom, either of the nervous system or in the wound itself.

REMARKS.—In the simple central hypertrophy of tumours of the thyroid body, excision is the most satisfactory treatment that can be adopted. All methods, no doubt, would bring forward their record of cures, but none are so clean and sure as the knife. Iodine, mercury, conium, setons and tapping are, at the best, tedious, dirty and irksome. The perchloride of iron, too, is especially apt to be followed by unpleasant results. Of electrolysis, I have had no experience in thyroid cases. These are the three objections to excision which we have to overcome.

1. The sentimental and unwarrantable condemnation of the operation by existing authors, mostly copied out of one book into another. They sanction the operation only as a means of snatching the life of a patient from imminent danger ; for the relief of deformity—never.

2. The long-after results of the operation, where the gland has been completely removed ; myxœdema, idiocy, etc.

3. The real practical anatomical difficulties. These are of two kinds, connected with the parts which must, and the parts which may inadvertently be, divided. I have never seen a case of simple hypertrophy or cystic disease where it would be necessary to remove the whole gland. If only a small bit of healthy gland can be left, there will probably remain as many of those mysterious ductless cysts as will suffice to carry on the occult functions of the organ, and thus prevent the occurrence of the unknown and unexplainable neurotic sequences, which often follow extirpation of the whole body.

The most troublesome tissues which must be divided are the numerous inosculating veins, which arrange themselves into plexuses in the superficial thyroid region ; the thyroid arteries and veins ; and the little thyroidea ima, sometimes swollen to large proportions.

The enlargement being central and the capsule of fascia being simply stretched and pushed between other organs, enables it to retain its power of mobility. There is no necessity, but danger, in using the blade of the knife in separating the tumour or gland. The tissue around the thyroid is particularly loose and very easily broken down with the finger. The more mobile the gland is, the better are the prospects of excision. In separating the growth, an artery or vein even is easily recognised by the touch, tied, and divided between the ligatures. If this be properly and firmly done, hæmorrhage is only exceptionally possible. If the knife be not used, nothing can be cut : if the finger or blunt instrument be used with only moderate force, nothing of importance can be torn. But let this emphatically be borne in mind : that, after the first incision, nothing is to be cut until it has been first tied in two places. The pedicle may be ligatured in as many portions as is desirable.

By these means, the special dangers are reduced to a minimum, and there remain only the other things common to all surgical operations. I would draw attention specially to the after-dressing by a large soft sponge, kept thoroughly aseptic.

If the operation can be done—(as it is only too often done)—satisfactorily when the patient has been worn down with hard breathing and anxiety, his spirits depressed with suffering, how much more safely and satisfactorily ought it to be performed when the growth is small, and the patient in comparatively good spirits ? The mass to be removed is smaller, the shock is less, the blood-vessels are smaller, and the anatomical relations of the growth are fewer and less important. If the prospects for the patient are better, so, also, is the operation for the surgeon ; the connective tissue is softer and more easily broken down, and the small vessels are plainer to the touch than where there has been a long course of counterirritants and absorbents.

If the operation is easy for the surgeon, and of better hope for the patient, so, also, is the treatment more pleasant. What can be more disagreeable than doing a long term of penance with a seton in the neck, varied by occasional constitutional disturbances and constant discharge, or the unsavoury companionship of liniments, plasters, and ointments ?

A CASE OF MYXŒDEMA.

By C. E. ABBOTT, M.R.C.S.,
Medical Officer of Health, Braintree Rural District.

Read before the Essex District of the East Anglian Branch.

MRS. C., aged 42, the wife of a working man, consulted me first on August 20th, 1882, for general weakness, numbness, unsteadiness in walking, etc.

Previous History.—Her father was alive, aged 78 ; her mother died four years ago from fits ; she has three brothers and three sisters, all alive and well except one sister, who suffers from "womb affection."

Illnesses.—There are no signs or history of syphilis, or of intemperance. About thirteen years ago she had small-pox, and since then, she states, she has never felt well. She had "fever" when she was 6 ; this left some disease of the bones of the forearms and hand ; cicatrices remain on both forearms and hand. There is no history of any previous mental disturbance. About ten years ago, considerable mental strain was caused by her eldest son, who suffered from chorea, and after this caused much anxiety ; and at this time there was other illness in the family. The patient states that this trouble affected her, and she expresses herself as being broken-hearted. Some weight is to be attached to this statement, from the fact that one of the assigned causes of this disease is anxiety and domestic worry (Dr. Ord). The patient went to live at Stratford about nine years ago, but returned to her native place on account of the change not suiting her. She has been engaged in the usual domestic duties since marriage.

The catamenia began at 13, and have since been regular, but somewhat profuse ; there has been the usual cessation during pregnancy, and much "loss" after the birth of each child.

She has been married fifteen years, and has had eight children, five boys and three girls, and two miscarriages (first miscarriage after fourth child, and second next pregnancy). Instrumental delivery was required in five labours. The youngest child is seven years old ; three children died ; the causes of death being convulsions, injury at birth, and teething. The patient has suckled all her children. It would seem that the youngest child was born about the time the present illness began. The patient is not able to state the part of the body in which œdema first occurred.

Her physiognomy is peculiar ; the features are expressionless, the lips large and pendulous, and the connective tissue round the eyes is puffy, but does not pit on pressure. The face is pale and "waxy" ; on each cheek there is a red blush. The lips are red. The fauces and uvula are translucent from œdema. The tongue is much larger than normal. Speech is characteristic ; it is somewhat slower

than natural, but fairly distinct. The œdema is more marked about the face and hands than elsewhere. The patient was very thin till her last pregnancy. The skin is dry and harsh, and the hair thin and apt to fall out. The thyroid gland is atrophied. Temperature, axillary, 98° F. Pulse, 74. Sense of touch and pain is diminished; she can hardly pick up a pin, and can only sew soft material; she complains of numbness. There is no paralysis, but the patient frequently staggers when walking, and all her movements are slow.

The intellectual changes consist of slowness of thought, and increased irritability; she dreams more than usual, and has loss of memory. The heart-sounds and respiratory system are normal. Deglutition is sometimes difficult; most of the teeth are gone; the gums and tongue are pale. The urine is in quantity 40 ounces in twenty-four hours; it does not contain albumen or sugar. The case tends to become slowly worse. Treatment has been without benefit. (The patient was shown.)

Remarks.—The publication of the Brown Lectures, by Mr. V. Horsley, has given an increased interest to this new disease, or, to speak more exactly, to the affection which has recently been called myxœdema.

Respecting treatment, it would appear from the cases already reported that no drug has had much beneficial effect up to the present. Dr. Ord recommends tincture of jaborandi. Phosphorus, nitro-glycerine, and extractum fuci vesiculosi are all recommended by different observers as having relieved symptoms.

The Turkish bath, the effect of which could be carefully watched, would seem likely to be beneficial.

INOCULATION OF LEPROSY.

By W. K. HATCH, M.B., Surgeon, Bombay Army.

On June 27th, 1885, a student, while making a *post mortem* examination on the body of a confirmed leper, cut his left forefinger at the tip, and received a small abrasion over the dorsum of the right hand.

On the 28th, he noticed swelling and pain of the left supratrochlear gland; and, on the evening of the 29th, the axillary glands were also enlarged and tender. On the 30th, when seen by me for the first time, there was, in addition, considerable enlargement of the ulnar nerve, which was also tender; the enlargement was not uniform, but nodular or moniliform; the whole nerve felt hard, and there was shooting pain along it, extending to the ribs on the left side. The patient was very nervous about himself, and slightly feverish, his eyes bright, and tongue furred; and a general feeling of malaise was present. He was seen by Mr. Manser, of Bombay, at the same time. In July, severe pain in the small of the back, and in the spermatic cord and testicles, was experienced; the temperature varied between 99° and 101° Fahr., but no chart was kept; there was a great tendency to sweat, probably increased by the patient's anxiety about himself, which was naturally considerable. The right spermatic cord and epididymis became hard, nodulated, and tender; but, by August, these conditions had subsided. I then consulted Dr. Vandyke Carter, who agreed with me as to the nature of the case. By this time, there was distinct wasting of the interossei muscles of the left hand and of the little finger, so that, on comparing the two hands, the ulnar side looked much straighter; there was also loss of sensation, the patient saying that it felt like India-rubber; the adductor pollicis and the muscles of the forearm on the ulnar side were not apparently affected.

After this, there was no fresh symptom, but the ulnar nerve and hand remained the same for some time. In April, 1886, the nodulation of the nerve had almost entirely disappeared; the hand was about the same as before; the general health was good, and the patient thought that he was just as well as he had been previous to the accident.

With the concurrence of Dr. Carter and Mr. Manser, I advised the inunction of mercury, but the patient was, unfortunately, very easily affected by the drug; it appeared, however, to have a powerful effect on the condition of the testis, as the pain and swelling, and subsequently the hardness, rapidly subsided under its use.

I have been promised any further information about the case, which is one of the greatest interest; and it is important to note that there was no sore on the finger, or any sign of inflammation present about it.

Health-Classes in Board Schools.—Dr. Munro, the Medical Officer of Health for South Shields, has been recently engaged in conducting classes in physiology and the laws of health in connection with the board schools of that town, with the satisfactory result that 14 of the girls and 10 of the boys obtained over 70 per cent. of marks and were adjudged worthy of receiving prizes.

CLINICAL MEMORANDA.

PRURIGO.

A very typical case of this rare disease came under my care in June, 1884. The patient was a woman, aged 54, a cook, who had always perfect health up to the preceding January, when the arms and inner surfaces of the thighs commenced itching, and she felt hard little lumps in the skin. She became rapidly worse, and after trying many remedies, was sent to Harrogate. She could get no sleep, even with powerful hypnotics, and her nervous system was completely broken down. The prurigo was situated on the upper arms to four inches above the elbow-joints; it was worse on the flexor surfaces; from the elbow-joints to the wrists, it was worst nearest the wrists. The legs were not so bad as the arms, but still were very typically affected from the knees to the upper third of the thighs. The skin was darker than natural, and thickened so much that it could not be picked up between the finger and thumb; its lines and furrows were deepened and widened, particularly so on the extensor surfaces of the wrists. The disease was much less abundant above than below the elbow-joints, which were not affected. The legs were not so severely affected as the arms, where I found the sign which Hebra gives as a certain diagnostic. On passing the hand over the skin, it produced a sound like a short-haired brush or packing paper, caused a prickling sensation to the fingers, and felt like a nutmeg grater. The function of the sweat-glands was in abeyance. The patient's family history was good; she was a well preserved woman, with all her organs and functions normal. I ordered the sulphur-water, before breakfast, in purgative doses, and the magnesia-water at noon, as a diuretic, with a strong sulphur bath every second day. I also ordered the magnesia water to be used as a lotion as often as the patient wished. The progress of the cure was steady and satisfactory, and on July 16th, the arms were well; the wrists almost so; the thighs also were very much better, but not so much so as the arms. There was no irritation even in the night. The patient returned to her work. The result of this case was very satisfactory. It proves the great value of sulphur-water, and the powerful absorbent and softening influence it has over the very worst forms of chronic indurated skin-disease. The relief of the itching I must attribute to the great soothing action the water has upon the nerve terminations. My patient walked into my study a year ago. She was perfectly well, with a healthy, though, in some places, a thickened skin.

James A. Myrtle, M.D., C.M., Harrogate.

SURGICAL MEMORANDA.

THE TREATMENT OF ULCERATIVE OTORRHŒA.

Every surgeon must have often experienced great difficulty in treating discharges from the ear, the result of inflammation of the tympanum, with the formation of chronic ulcers around its boundaries. The following method of treatment is one which I have found most successful in dealing with a very large number of such cases in the out-patient department of University College Hospital.

With a mirror on his forehead, and a good light thrown down a silver speculum therewith, the surgeon first cleanses the whole meatus thoroughly by means of little rolls of salicylic wool, wrapped round the end of a tapering probe. If this is thoroughly done, the granulations will be well seen in every part. Some of them may be so prominent as to form small polypi; others may be hardly at all raised. In either case, they must be scraped away freely with a sharp-edged curette and removed. The whole fundus of the ear is now cleansed and dried with small rolls of salicylic wool, as before; and, when quite dry, is touched freely with a roll of wool, dipped in strong tincture of perchloride of iron. This fluid should be conveyed only to the ulcerating surface, and should be limited in amount. When it has remained in contact with the diseased area for a few seconds, it is dried off; and then a small quantity of iodoform, in fine powder, is blown over the part operated on.

If this treatment be very carefully carried out in detail, ears, which have been discharging for months or years, may often be brought to heal in a few weeks. Everything depends on producing an aseptic, instead of a septic, condition in the ears.

Arthur E. Barker, F.R.C.S.

Death of a Centenarian. — A black woman, named Mercy Bracher, died at Troolie Island, Demerara, whose age was reported to have been 126 years. It is stated that she retained her faculties to the last.

RADICAL CURE OF HYDROCELE BY INJECTION OF CARBOLIC ACID, AFTER IODINE HAD FAILED.

For the last three or four years I have been aware that Dr. Levis, of Philadelphia, had advocated the injection of carbolic acid for the radical cure of hydrocele; but I hesitated to give the method a trial, on account of the pain I imagined it would produce, until I was encouraged to do so by an excellent paper on the subject by Dr. E. L. Keyes in the *New York Medical Record* of February 20th, 1886. Two months ago, a gentleman, H. A. B., aged 23, consulted me about a hydrocele, which had followed an attack of orchitis fourteen months before. He was going abroad, and urgently desired a radical cure. On April 13th, I tapped the hydrocele, and drew off six ounces, and injected two drachms of tincture of iodine. Next day, there was pain in the groin and loin, and the scrotum was tender and full. In four days, so much fluid had re-collected in the tunica vaginalis that I tapped again, and drew off two ounces. In three days, the same amount of fluid had again collected, and I determined to give carbolic acid a trial. On April 20th, I tapped, and drew off two ounces, and then injected, with an ordinary hydrocele-syringe, sixty minims of pure carbolic acid, dilequesced with 5 per cent. of glycerine. The patient was ignorant of what I had injected, but at once said he tasted carbolic acid. Next day, the part was swollen, but not very tender. No fluid was ever again detected in the tunica vaginalis; and he left London in a week, and has remained well ever since. The cure was rapid, complete, and nearly painless; and the case, I think, deserves notice, as the carbolic acid was successful after iodine had clearly failed.

G. Buckston Browne, Wimpole Street, London.

CUCAINE AS AN ANÆSTHETIC.

W. W., a healthy well-built man, an iron merchant, was admitted, under my care, into the Whitworth Hospital, Drumcondra, on June 7th, 1886. He had noticed a lump in his back six years previously; and, for the past five months, it had been perceptibly growing. On examination, an oval tumour was found, measuring $3\frac{1}{2} \times 2\frac{1}{2}$ inches, its long axis coinciding with the posterior border of the right scapula; the skin over it was freely movable.

The tumour was removed by Mr. Foy on June 8th. I injected cucaine into two spots on the long axis of the tumour; the spots were separated from each other by two inches, and from the extremities of the tumour by three-fourths of an inch. Each injection consisted of a grain of cucaine hydrochlorate (Howard), dissolved in ten minims of water. In ten minutes, Mr. Foy operated, making a longitudinal incision, passing through the punctures. The tumour was a fatty one, bound down by numerous fibrous adhesions, and took about fifteen minutes to remove. The patient complained of a little pain at the very centre of the incision, and also, when the incision was being prolonged, at either end; but otherwise the operation was painless, and the patient lay very quiet, only remarking that it seemed so strange to feel the knife cutting him, and yet to have no pain. Four sutures were inserted, the only needle that caused the slightest pain being one which was passed through the centre of the incision. Six hours after the operation, there was no pain, but the patient complained of a peculiar numb feeling.

Had three injections been used, of two-thirds of a grain each, the operation would, in all probability, have been entirely painless.

E. Macdowel Cosgrave, M.D.

Seaside Convalescent Home, Seaford.—The report presented at the twenty-sixth annual meeting of the Seaside Convalescent Home, Seaford, Sussex, showed that the number of monthly admissions for the year 1885-86 had been 605, as against 574 in the corresponding period of the previous year, and of 656 (the largest total record) in 1883-84. The returns of the medical departments showed a total of 297 male and 308 female patients, the results being 390 cases cured, 163 improved, 40 stationary, 11 dismissed, and 1 death. Thus there appeared an increase of 31 cases over the figures of 1884-85, although a decrease as compared with the figures of 1883-84. The finance account was of an equally satisfactory character, enabling the Committee to carry forward to the services of 1886-87 the sum of £1,827.

A Centenarian.—A somewhat singular application was made to the Mitford and Launditch Board of Guardians, at a recent meeting, by a man aged 71, to be released from an order to contribute towards the maintenance of his mother, aged, according to the statement of the relieving officer, about 100 years. The poor fellow said that, when able to work, he only earned 1s. 10d. a day; and the guardians at once granted his request.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

NEWCASTLE-ON-TYNE INFIRMARY.

EPIPHYSITIS AFFECTING THE PHALANGES OF THE HAND AND TOE.

(Reported by Mr. Herbert Bramwell, House-Surgeon.)

The following case adds another example to those cases of epiphysitis described by Mr. James W. Smith.

W. W., aged 24, applied, in March, 1886, at the out-patient department, for advice concerning his finger and toe. The metatarso-phalangeal joint of the left great toe was enlarged, the tissues covering it being thickened, inflamed, and perforated by several sinuses, from which a thin yellow watery discharge exuded. A probe passed down one of these sinuses came into contact with the enlarged end of the phalanx, which was in a softened carious condition. There was grateing in the joint, but no implication of the tendons, and there was no complaint of pain during examination. The distal end of the metatarsal bone was also enlarged, but no carious bone was detected in it. In the left hand, the proximal end of the middle phalanx was enlarged, and a sinus on the dorsum led down to carious bone; there was no implication of the joint or tendons.

Being engaged as a farmer in Yorkshire, he had enjoyed excellent health until May, 1885, when he suffered from an attack of nephritis, brought on by exposure and fatigue. A short time after his recovery, he received a blow with a cricket ball on the finger subsequently affected, followed by swelling at the time, but no great inconvenience. Continuing to use the hand, the swelling persisted, becoming firmer, and the skin redder, and burst a month afterwards, a watery discharge exuding which had not ceased. In September, the great-toe of the left foot became inflamed, the only assignable cause being a long walk. He remembered giving it a blow in July, but had forgotten about it till questioned. The subsequent history of the toe was similar to that of the finger. During the whole of the winter he continued his work, with very little inconvenience either from the foot or the hand.

Amputation of the toe, and an exploratory incision over the phalanx of the finger, were advised, to which he readily consented. On March 7th, the toe was amputated, when it was found that the proximal end of the phalanx was enlarged and softened from chronic ostitis. There was no cavity, but the cancelli were much enlarged, containing quantities of red pulpy matter, purulent at parts. The distal end of the phalanx was quite healthy. The cartilage of the metatarsal joint was gone, and the end of the metatarsal bone inflamed; it was therefore removed. On exposing the phalanx of the finger, the periosteum was found thickened, and a probe passed readily through the outer shell of bone into a soft carious mass, in the centre of the head. After scooping this out, it was found to extend to the cartilaginous surface, which was on the point of perforation; the finger was therefore removed. The joint was healthy, but the end of the metacarpal bone enlarged, and the cartilage had a pinkish-blue colour.

The wounds healed very slowly, the distal end of the metacarpal bone becoming enlarged and the skin over it red and œdematous, a thin watery discharge exuding from the end of the stump. The hand was kept at perfect rest on a splint, and painted over with tincture of iodine, syrup of the iodide of iron being given internally. After a month of this treatment, the inflammation of the metacarpal bone subsided, the discharge ceasing and the wound cicatrising. The toe had already healed.

He was discharged a short time afterwards, being recommended to continue the iodide of iron for some months.

Remarks by Mr. Bramwell.—The points of interest in the case are similar to those mentioned by Mr. Smith—namely: that the disease commenced in the epiphyseal ends of the bones; it was a chronic, almost painless inflammation of the bone. There was a history of an injury, but only in the case of the hand was the inflammation directly traceable to it. There was no history of syphilis or family predisposition to tubercular disease.

Wills.—The will of Mr. Thomas Pennington, M.R.C.S.Eng., of Liverpool, has been proved, the personal estate being sworn at upwards of £121,000.—The will of Dr. F. W. Manford, of Newcastle-upon-Tyne, has been proved, the personal estate being valued at £38,444.

REPORTS OF SOCIETIES.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JUNE 9TH, 1886.

LAWSON TAIT, F.R.C.S., President, in the Chair.

The Dangers arising from Disease of the Uterine Appendages in Child-bed.—Dr. GRIGG read a paper on this subject, illustrating it by the history of four fatal cases occurring at Queen Charlotte's Hospital, between August 27th, 1885, and April 13th, 1886. That disease of the uterine appendages at times led to a fatal result had been pointed out from time to time by various writers; but it had never been looked upon as an important factor in child-bed mortality. This, he believed, was in great measure due to the difficulties in obtaining *post mortem* examinations in such cases. If the clinical history of these cases about to be detailed were carefully analysed, it would be seen that they differed as regards their objective symptoms in no great degree from the ordinary conditions of puerperal complications, and, but for the *post mortem* examinations, not a suspicion would have entered the minds of the medical attendants that there was in three of the cases any mischief of the uterine appendages, directly or indirectly causing their deaths. 1. A. B., married, aged 22, first pregnancy. Previous history good. On admission, she had already been four days in labour. She complained of much pain over the lower part of the abdomen, chiefly to the right side, which was very tender to the touch. On examination, the vagina was found hot and sensitive, and blocking up the posterior part was a semisolid tumour, of the size of a fist, giving the impression of a dermoid cyst. At the *post mortem* examination, it proved to be a multilocular cyst of the right ovary, containing pus in its cavities. The patient was placed under chloroform, and by firm and continuous pressure the tumour was reduced and pushed above the brim of the pelvis, so that the child, which was presenting feet foremost, could be delivered by traction. She suddenly collapsed while the infant was passing through the passages, and in the course of half an hour the temperature rose from 100° Fahr. to 104°, and the pulse from 98° to 144°. She rallied, but died the following day. The woman was a very healthy person, and, had her condition only been recognised before pregnancy, there was no reason why the tumour should not have been successfully removed. Dr. Grigg raised the question whether in such a case it would not have been better to have performed Cæsarean section or Porro's operation, or to have attempted to remove the tumour, and then let Nature take her course. Was not the result due to the recognised manipulative treatment? In this case, a cyst containing pus had been ruptured, and its contents thrown into the peritoneal cavity.—2. A. C., single, aged 21, first pregnancy, had been very hysterical when two months pregnant, and either threw herself or fell out of a window, twenty-five feet from the ground; she was in University College Hospital three months. The duration of labour was twelve and a half hours. Face to the pubes, rotated with forceps by the house-surgeon, and delivered. The perinæum was torn through into the bowel. During labour, she had a succession of severe shivering fits, losing consciousness after each fit for a considerable time. For the first week she did fairly well; the perinæum united perfectly. On the eighth day, the temperature rose to 102°; discharge offensive. An uterine douche was given, and the temperature fell to 102°. The discharge ceased to be offensive. On the eleventh day, and for the following ten days, she had rigors, and temperature ranging as high as 108°. The body was sponged with iced-cloths whenever the temperature rose, and ten-grain doses of quinine were given, and repeated every hour for three or four hours. She died on the twentieth day. The *post mortem* examination showed the left ovary to be a nest of numerous small abscesses, of old standing, with pyosalpinx. The Fallopian tube was dilated and sacculated. All this was evidently of old standing; but there were, in addition, small collections of recent pus behind the peritoneum of the pelvis. Although Dr. Grigg was firmly convinced that there was some accumulation of pent-up pus, he could not discover it by any manipulative procedure. Had the patient not been in such an extremely exhausted condition, he was sure it would have been the right line of practice to have opened the abdomen, in order to discover the source of mischief.—No. 3. F. L., single, aged 23, first pregnancy; duration of labour, seventeen and a half hours; head-presentation; ruptured perinæum. Death occurred on the twelfth day. This case occurred during an epidemic of puerperal septicæmia. Death in this case was attributed chiefly to the bursting of an old ovarian cyst, which occurred either at delivery or shortly after. She convalesced very well up to the evening of the third day, when the temperature rose to 102°; no marked objective symptoms. The lochia were never offensive. Peritonitis, pleurisy, and bronchitis set in on the eighth day. The *post mortem* examination showed acute general peritonitis. A thin-walled cyst of the right ovary had been ruptured, and a portion of its contents expelled into the peritoneal cavity. The left ovary contained several small cysts. On stripping off the peritoneum of the pelvis, the whole of the connective tissue was found to be in a state of acute suppuration. Whatever might be the effect of a rupture of an ovarian cyst, in a non-parturient woman, he was certain that the rupture of an ovarian cyst into the peritoneal cavity, during labour, was a very grave, if not fatal, complication.—No. 4. E. C., single, aged 19; first pregnancy; previous history good. On entry, the urine contained one-fifth albumen. The duration of labour was forty hours; forceps. The presentation was vertex; she had eclampsia. On the sixth day after delivery, the temperature was still high; the vagina was sloughy; the discharge was offensive and purulent. She had a slight rigor whenever the catheter was paased, or she was douched, or parts cleansed. On the thirteenth day, diarrhœa set in; on the fifteenth, she became delirious, and died. *Post mortem* examination showed the kidneys much enlarged; the ureters and pelves were both exceedingly dilated and sacculated. There was also old inflammation, with cicatricial contraction of the ligaments of the ovaries, keeping them closely adherent to the uterus. It appeared probable that the gravid uterus, thus fixed, had pressed upon the ureters, determining their dilatation, and, secondarily, the kidney-degeneration. The uterus was healthy. The conclusion drawn was, that disease of the uterine appendages might account for many of those inexplicable cases of so-called sporadic puerperal septicæmia. Should this view be subsequently confirmed, it would place the importance of recognising diseases of the appendages in another light; and it would be a strong argument in favour of their removal when found diseased. The question might arise, how far a medical man was justified in sanctioning marriage in women in whom the appendages were diseased. The results obtained showed the absolute necessity of making an examination in every death from childbed.—Dr. BARNES did not believe in peritonitis, pure and simple. It was essentially a secondary condition, ensuing upon toxæmia, or propagated from inflammation of the organs it invested. As a consequence of salpingitis in the puerpera, it might arise in one of three ways: 1, the tube might burst, and discharge its irritating contents into the peritoneum; 2, the offending matter might overflow from the fimbriated extremity; 3, from oozing through the walls of the tube. Salpingitis might exist before pregnancy in one tube. Conception almost implied that one tube should be fairly healthy. It might arise in one or both tubes during gestation, although this had not been distinctly proved. It was more likely to arise in the puerperal week as a complication of metritis. The difficulty in diagnosis was explained by the fact that salpingitis was rarely a simple condition. It was commonly associated with metritis, ovaritis, perimetritis, and cellulitis. Probably, it more frequently arose by extension from the uterine cavity. The greatest care should be exercised in making examinations. These should be rare and gentle, lest the tubes be burst or inflammation intensified. He thought that the operation of opening the abdomen might find a legitimate application in these and cognate cases of pelvic disease in the puerpera. He felt that a woman should not be suffered to die without the attempt to free her from the imminent danger attending pent-up pus and diseased uterine appendages. Upon the value of the treatment by cold bathing he was doubtful.—The PRESIDENT was strongly of opinion that Dr. Grigg's paper was of great value, because it was a record of four out of five deaths, which had been the entire mortality in Queen Charlotte's Lying-in Hospital over a considerable space of time, and, in all four, diseased conditions of the uterine appendages were present, and more than sufficient to account for deaths which, had they not been fully investigated, would certainly have been put down in the category of puerperal septicæmia. This phrase was nothing but a huge cloak expressing ignorance, and limiting opportunities of investigation. No sooner did a woman die after her confinement, than the fatality was put down under this head, and, as a rule, no attempt was made to arrive at a proper solution. All such cases ought to be investigated as these had been, not only by *post mortem* examinations, but by such examinations made by altogether independent persons, who could not, by any possibility, have their views warped by obstetric prejudice. That two, at least, out of these four patients, perhaps even three, might have been saved by operative interference seemed, in his view, to be the legitimate conclusion. The further value of the paper consisted in the fact, which was indisputable, that cases of chronic inflammatory disease of the uterine appendages were not only far more common than was usually supposed, but that they were frequently fatal.—Dr. ROUTH, in reply to a question, stated that the puerperal cases he had

seen in Vienna were purely septicæmic, and too rapid to be due to salpingitis. The deaths occurred in from twelve hours to three or four days after delivery. Most, if not all, of the fatal cases were preceded by the death of the infant, generally within a few hours after its birth. The *post mortem* examinations of the children also proved death to have been due to peritonitis. The blood-poison in both cases was, therefore, the same. It was proved to be due to poison conveyed by the medical men in attendance. He approved of the treatment of hyperpyrexia by cold affusions or baths. It was clear that a temperature of 108° Fahr. (except in some peculiar cases of hysteria) must prove fatal in a very few hours if not overcome. Certain elements of the blood were, as it appeared, cooked. It had been shown that these high temperatures precipitated some of the phosphorised elements of the brain, these, like lime, being more soluble in cold than in warm water, hence the delirium and collapse which followed; and this heat, being no longer controlled by nervous energy, would even continue after death. Now, in these cases, all the bad symptoms—nausea, delirium, and collapse—at once disappeared when a patient was placed in a cold bath, and recovery often followed. It had been proved that serous inflammation, pleuritis, and pericarditis were not aggravated by cold baths, and the same held good with peritonitis. Other measures might be adopted synchronously, but the cold affusion or bath would relieve the immediate danger, and give time for their successful and subsequent employment.—Dr. MANSELL MOULLIN thought the cases related by Dr. Grigg were of extreme interest, inasmuch as they threw a light on certain cases of puerperal fever, which otherwise it would be impossible to account for; at the same time, he regarded them as quite exceptional cases, and in no way affording an explanation of puerperal fever generally. They were such as would be likely to be met with among a large number of primiparæ, single women, who had been living, in many instances, an irregular life. This was a subject upon which the majority of medical men could have but a most limited experience; a solitary case, perhaps, or, it may be, two. Experience could, of necessity, belong only to those who had an acquaintance with a large number of labours occurring in a public institution, and who were able, at the same time, to command the services of a skilful pathologist. Long before there was anything like an exact knowledge of the various inflammatory conditions of the ovaries and tubes, it was a well recognised fact that pregnancy seldom occurred when the uterus was surrounded and fixed by any inflammatory condition of the pelvic organs; there was, however, no absolute reason why impregnation should not occur, provided one tube remained tolerably healthy and pervious. Labour undoubtedly had some special influence in exciting acute inflammation in any organ predisposed that way. Whether this was due to direct injury or to other cause, it was difficult to say.—Dr. GRIGG then replied.

Uterine Myoma.—Dr. AVELING exhibited an uterus, containing a large soft myoma, which he had removed by hysterectomy. The specimen showed how difficult and dangerous it would have been to have attempted enucleation, as the walls of the uterus were, in some places, extremely thin. The patient was making a good recovery. He also exhibited a polypus, which had a broad attachment to the cervix uteri posteriorly, and was firmly adherent to the posterior wall of the vagina. The adhesions were with difficulty broken through, and the tumour divided from the uterus by an *écraseur*. No untoward symptoms followed.—Dr. FANCOURT BARNES said the specimen shown by Dr. Aveling demonstrated, in a startling manner, the dangers of enucleating fibroid tumours of the uterus. No one could look at the thin walls of the uterus containing the myoma without feeling that, had enucleation been attempted in this case, instead of hysterectomy, the operator must inevitably have opened the peritoneum through the uterine wall.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, MAY 28TH, 1886.

HENRY KENNEDY, M.D., in the Chair.

Case of Cerebro-spinal Meningitis.—Dr. RICHARD A. HAYES read a short note of a case of cerebro-spinal meningitis, lately under his care at Dr. Steevens's Hospital. The patient, a constabulary recruit, aged 20, was admitted on the evening of March 10th, 1886. He was stupid, and did not appear to understand questions when put to him; his temperature was 104° Fahr.; pulse 120. He did not present any further symptoms, but there was a history given of his having had a chill that morning. At 3 o'clock next morning, he was seized with vomiting, and shortly afterwards became delirious, and so violent that he had to be kept under the influence of chloroform for some hours. When Dr. Hayes saw him at 10 A.M., he was quiet, but quite unconscious, lying with his head thrown back, his limbs flexed, and his arms over his eyes. He groaned loudly, and appeared to suffer much pain when touched or moved. His temperature had fallen to 98°, and his pulse to 90, and irregular; his respiration rapid and shallow; tongue white and furred; his pupils were of normal size. On his trunk and limbs was a slight purpuric eruption. Nothing abnormal could be found in the chest or abdomen. His head was shaved, an ice-cap applied, and the nape of his neck blistered. He was ordered a minim of croton-oil, and fifteen grains of bromide of ammonium every fourth hour. He remained in the same condition during the day, the evening temperature rising to 102°; pulse 110. As he showed signs of weakness, he was ordered some whiskey. Next morning, his temperature had fallen to 102°; he was partially conscious, and complained of pain in his head and neck when pressed on. There were constant twitchings of the face, especially about the mouth. In addition to the purpuric spots, there were now several crops of herpes, these being chiefly on the legs, about the knees. He remained in the same condition all day, but became restless at night. Evening temperature 102°. Next morning, he was clearer, and said he felt better, and had less pain; temperature 101°; pulse quiet and more regular; the rash was fading. Evening temperature 100°. Next morning, he was much worse; temperature 101°; pulse 140, and weak; respirations 38; he was again unconscious; the twitchings of his face were very marked; fresh crops of herpes appeared on legs. He was ordered free stimulation. Evening temperature 102°; pulse very weak; respiration was exceedingly rapid, sometimes reaching 60. Next morning, his temperature was 104°. He was evidently sinking fast, and died at 11 A.M. The total duration of his illness was four days. No *post mortem* examination could be obtained.—Dr. GRIMSHAW said that the last epidemic of any dimensions was in 1867; and in that epidemic a large number of the earliest cases occurred among the recruits at the Constabulary Depôt, Phœnix Park, all of which had come under his care at Steevens's Hospital. At Cork Street Hospital, also, 120 cases were admitted, and a good many of these he likewise treated. The cases in both hospitals differed in an important respect. Those at Steevens's Hospital were nearly all recruits of about six weeks' standing. On the other hand, those in Cork Street Hospital were very largely composed of children, considerably below adult life. A considerable number of the children recovered, whereas the recruits died. While a large number of cases occurred in the Constabulary Depôt, there were very few instances during the epidemic in the city where more than one case occurred in any house. It was also noteworthy that in many of the other cases there was an absence of the purpuric rash.—Dr. J. W. MOORE was surprised to hear the Registrar-General refer to the epidemic of 1867 as the last of any importance in Dublin, seeing that in 1885-86 a serious outbreak had been observed, and from one to four deaths were recorded weekly for some time, fifty-two deaths being registered in 1885. Through Dr. Duffey's courtesy, he had seen, in the City of Dublin Hospital, one of the first cases of cerebro-spinal meningitis last year. The phenomena were precisely the same as those observed in 1867. Dr. Duffey's experience was, that the drug which did most good in controlling the symptoms was opium, or its active principle, morphine, which rendered the patient comparatively free from suffering. The brunt of the epidemic fell on the City of Dublin Hospital in the first instance; but, as time went on, he (Dr. Moore) saw its progress in three cases at the Meath Hospital, and also in a case in private practice. The great majority of the cases occurred in the suburban districts, chiefly in Rathmines, and in comparatively well-to-do persons, such as butlers and coachmen. The presence of the disease at a time when rumours of cholera were in the air was a remarkable coincidence, because the cholera invasion of 1856 gave place, in 1867, to the epidemic of cerebro-spinal meningitis. The question was in abeyance, as to whether the disease was not really of zymotic origin, the virus being, perhaps, connected with that of cholera.—The CHAIRMAN said that the first appearance of the disease in 1867 recorded in the country was in Loughlinstown Workhouse, where Dr. Darby drew attention to it; and subsequently it was noticed by Dr. Mayne in the South Dublin Union Workhouse. In Cork Street Hospital, the majority of the cases were in young persons whose ages varied from 8 to 18. His experience was, that it was best to treat the disease actively, and especially by local leeching at the nape of the neck; and, after that, he gave calomel and belladonna, preferring the latter, applied as a liniment to the spine. Many of the cases ran a peculiar course; they did not die, and did not get well; and, in a week or six months afterwards, the patients got crippled in their joints, which were attacked with pain on account of the terrible shaking the nervous system had sustained.—Dr. BOYD said that the rapidity of Dr. Hayes's case was remarkable. He had, within the last fortnight,

himself received under his care two cases of meningitis in the Mater Misericordiæ Hospital. The symptoms were pain in the back of the head, stiffness, pain in the joints, and uncommonly high temperature. He found that leeching considerably mitigated the pain. As the patient complained of pain in the joints, he considered rheumatism might have been the exciting cause.—Dr. HAYES replied that, although Dr. Boyd thought four days a rapid course for the disease to run, yet it appeared from several authorities that that was the usual period for cases to terminate fatally, while cases that did not terminate fatally ran on for a considerable time—six weeks and more. In reference to the treatment, it was of little use in his case. The patient was comatose, or semi-comatose, and did not appear to be suffering much; but the best was done to keep down the inflammation.

Primary Cancer of Bronchial Glands and Lung.—Dr. M. A. BOYD read a paper on intrathoracic cancer, which he described as being met with in two situations; the bronchial glands, and the anterior mediastinum. The former variety, when it involved the lung, was frequently in its advanced stages mistaken for phthisis, the latter for aneurysm. The paper was illustrated by the histories of three cases which came under his observation last year in the Mater Misericordiæ Hospital, with the *post mortem* examinations made in each case. He regarded the symptoms described in standard works as indicating cancer—such as fixed pain in the chest, red-currant jelly expectoration, and enlargement of cervical glands, as unreliable, these symptoms not being present in a fourth of the recorded cases. His general conclusions with regard to the disease were, that it occurred most frequently in hard drinkers; that pain was not a frequent symptom until pressure on the nerves in the thorax took place; that constant blood-spitting, with symptoms of pressure on the bronchial tubes and obstruction in the œsophagus, indicated malignant disease involving the bronchial glands; that, like malignant disease of the abdomen, with effusion of blood-stained serum into the peritoneal cavity, malignant disease of the thorax was frequently accompanied by pleural effusion containing blood; that the disease sooner or later invaded the pericardium, and compressed the superior vena cava, causing swelling of the face and upper extremity, and occasionally caused pressure on the recurrent laryngeal nerve, with paralysis of one or other vocal cord; that retrosternal dulness, with displacement of the heart, and pressure on the cava, accompanied by paralysis of one or other vocal cord (aneurysm being excluded) was absolutely diagnostic of mediastinal malignant disease; that malignant disease of the bronchial glands in its latter stages (when the patients most frequently sought advice), accompanied by muco-purulent expectoration, mixed with blood, wasting, and night-sweats, resembled phthisis most closely. The disease, in his experience, was fatal in from two months to eight; his three cases having died about six months after the disease first showed itself.—Dr. GRIMSHAW had brought a case before the Medical Society about the year 1870, illustrating some of the difficulties of diagnosis. It was that of a member of the medical profession whom he had had an opportunity of observing for nearly a year. Three of the most eminent physicians in Dublin at that time saw the case, and all differed in opinion with regard to its nature. One took it to be a case of phthisis, a second, cancer of the lung, and the third thoracic aneurysm. He asked if the œsophagus was involved in Dr. Boyd's case.—Dr. HENRY KENNEDY said his experience had been not the difficulty of deciding between phthisis and malignant disease, but between malignant disease and aneurysm. There was a general aspect of congestion about malignant disease that did not exist in phthisis, and again the dyspnœa was out of all proportion. Moreover, patients did not lose flesh, nor was the pulse quickened in malignant disease.—Dr. BOYD replied.

The Section then adjourned until next session.

THE LATE MR. M. L. MANTHORP.—At the meeting of the Tendring guardians on Wednesday, June 2nd, Mr. J. Woodgate, the chairman, called attention to the heavy loss the board had sustained by the death of Mr. Manthorp, the medical officer of the workhouse, and of the parish of Tendring and the district of Thorpe. He moved:—"That this board desires to place upon record an expression of the great loss the union has sustained by the untimely death of their valued medical officer, Mr. Maurice Levitt Manthorp; their high appreciation of his stirling qualifications, and of the assiduity with which he discharged his duties to the poor. The board further desires to convey to Mrs. Manthorp its deep sympathy with her in her affliction, and the hope that she may be enabled to sustain with resignation her irreparable loss." The motion was seconded by Mr. William Thompson, and carried unanimously.

REVIEWS AND NOTICES.

HOSPITAL SISTERS AND THEIR DUTIES. By EVA C. E. LÜCKES, Matron of the London Hospital. London: J. and A. Churchill. 1886.

MANY useful books have been written for the guidance of nurses and others engaged in the domestic management of the sick, and few of these have found more favour than the lectures on general nursing which Miss LÜCKES has already supplied to her fellow-workers; but, in the subdivision of labour insisted on in all large hospitals, it has been felt that something was wanted to define the special duties of the various women engaged in the work. This want Miss Lückes undertakes to supply in the present volume, composed from the fulness of her experience, and in the concise and elegant manner which has characterised her previous essays in the same field.

Lest the term "sister" should move sectarian animosities, we may as well say, at the outset, that the word, as here used, has no religious signification, being identical with that of head nurse, and, as such, has long been in use in most London and in many provincial hospitals. The subject-matter contained in the volume differs much from that usually found in manuals for nurses, inasmuch as it avoids all or most reference to medical and surgical details, and is confined, for the most part, to a commentary on the household, and especially the ward arrangements, the successful carrying out of which is of vital importance in the economy of all hospitals. In furthering this object, the ward-sister has a responsible and often a difficult task to perform, requiring much tact and foresight, and for which a previous training in household work, as well as in medical and surgical nursing, is indispensable. She is not only the recognised medium between the hospital authorities and medical staff in all matters concerning the welfare of the patients, but she has also the supervision and care of the nurses and subordinate ward-servants, and has to see that their work is efficiently performed. Since the system of training probationers has been systematised in our large hospitals, the important duty of initiating the novice to new work, and discovering her capacity for it, rests mainly with the ward-sister; and, considering the rapid succession of recruits required by the frequent retirement of the older hands, this of itself is no light task. The office possesses, also, some features akin to public life, when we take into consideration the multifarious demands on the sister's attention. She is brought into immediate relation with all sorts and conditions of men and women from the outside, comprising strangers, ward-visitors, the friends of patients, and others, who are unwilling to believe that their concerns are not of more vital importance than her ordinary routine duties: yet she is bound, under all and often aggravating circumstances, to maintain a patient and suave demeanour, as most likely to contribute to her own comfort and the reputation of the hospital.

In classifying the duties of hospital sisters, Miss Lückes divides her book into six sections, five of which are devoted to special subjects, while the first, or introductory, forms an excellent thesis on those natural or acquired gifts of temper and disposition which, by culture, become the adornment of the home circle, and are nowhere more highly appreciated than in the hospital ward. In successive chapters, special reference is made to questions of domestic management, such as the supervision of ward-maids and their duties, the relation which the nurses bear to the sisters, the training of probationers, and the best means of economising the work, so that it may be advanced with punctuality and efficiency. Routine work, above all, requires to be done systematically; and, although it may sometimes be necessary to depart from written instruction, nothing tends to promote order and method better than a code of rules, embodied in a time-table, for the guidance of the employees. This, however, must be drawn up, not only in keeping with the discipline followed in each hospital, but with the special requirements of each ward; and the duty of formulating the same must, in great measure, necessarily rest with the sister, who can best appreciate her own wants, and who would take care that, in her absence, a breakdown in any department would be rendered impossible. A knowledge of nursing, however, cannot, any more than a knowledge of bookkeeping or of housekeeping, come by instinct; and the sister is enjoined to regard the duty of training the probationer as her special charge. She is not to escape the obligation by handing her over to the nurse, and to quote the latter's opinion in gauging the probationer's capacity in preference to her own, but, by precept, example, and encouragement, to make her feel that their objects and interests are identical. In the intercourse with the patients, Miss Lückes discovers the great attraction of the work. In the hospital ward, there is the broad

interest of human life, in its numerous and varying aspects; and the intelligent observer cannot fail to have her sympathies awakened and expanded, while her powers of help, which are great, become more and more judiciously expended. If we were all constituted alike, there would be little of interest, morally speaking, in hospital work; but, although there may be met with much that is degrading and repulsive in the history of the patients, there is a great deal more of a cheerful and hopeful character to make amends; while the gratitude shown, and the good work done, will sufficiently repay the helper for years of toil and care. In minor matters, much may be done in a homely way to render the patient's residence in the hospital agreeable. Reading, draughts, dominoes, and other harmless amusements for the men, and sewing and light employment for the women, relieve the monotony of food and physic, and help to make the long hours pass cheerfully; but, unless some one in authority in the ward direct and encourage the innovation, it probably would never be thought of.

Miss Lückes devotes the last chapter of her little work mainly to the duties of the night-sister—an office which, with the improved system of night-nursing now in operation at the best managed hospitals, may perhaps be thought superfluous, but which certainly has associated with it numerous advantages with which we would be loath to part. The post is not coveted, as a rule; but Miss Lückes considers, and we are quite in accord with her, that the valuable experience gained by a sister in this department, in having to wait on all cases of emergency occurring in the hospital during the night, is a fair compensation for the otherwise irksome character of the work.

We can strongly recommend this book for the guidance of matrons, sisters, and charge-nurses of hospitals; and, although the remarks mainly refer to the usages of the London Hospital, it will be found that they are equally applicable to other establishments of a curative nature. To ladies bent on making sick-nursing a profession, it is likely to serve a double purpose; since the difficulties they will have to encounter are fully set forth, and, although sketched by no unfriendly hand, they ought to be sufficient to deter many from entering on a career for which they are totally unfitted.

A MANUAL OF MIDWIFERY. By ALFRED LEWIS GALABIN, M.A., M.D., F.R.C.P., Obstetric Physician and Lecturer on Midwifery and the Diseases of Women to Guy's Hospital, etc. London: J. and A. Churchill. 1886.

THE object of this work is stated to be more particularly the production of a "manual in point of size," containing all the information that is likely to be required by students or practitioners. In the volume before us, the author has taken advantage of the elastic interpretation of the meaning of the word "manual," to produce a book which, probably, contains as much matter, crowded into a somewhat smaller compass, as any of the other well known treatises on this subject. Theoretically, the requirements of the practitioner should be likewise those of the student, since it is by the acquisition of this very knowledge that the latter is, in time, to be converted into the former. Yet it must—possibly with regret—be recognised that the book which answers one purpose is seldom completely satisfactory for the other; and the bulkiness of the present work will be apt to frighten latter-day students.

Dr. GALABIN claims a certain originality in the matter of arrangement, and on some points of detail; but, were it not for their mention in the preface, these might very possibly have escaped notice. He has curtailed the chapter on anatomy, as also the description of the process of development—a difficult subject for students to master, even when every detail is carefully explained. The author's description of the process of flexion, by the pressure of the "girdle of contact," is very good, and may be expected to render its comprehension easier. All the diseased and abnormal conditions which may precede, accompany, or follow labour, are very fully gone into; and, it is probably to the length of these chapters that the size of the book is to be attributed. With one or two exceptions, the illustrations are those with which the study of obstetrics has made every one familiar. A novel section of the pelvis, parallel to the brim, is introduced, for the purpose of rendering clearer the effects of body-weight, and the reactions to the body-weight, on the shape of the brim, both in normal and in deformed pelves. The instructions and illustrations, bearing on the application and employment of the forceps, are remarkably detailed and exhaustive; and they may reasonably be hoped to remedy, to some extent, the lack of practical obstetrics, which is the bane of midwifery instruction in this country.

According to the statistics given as to the relative mortality of long-forceps operations and extraction by version, great advantages would appear to attach to the former. The figures are taken from the records of the Guy's Hospital Lying-in Charity, which, from the number of cases attended, offer a very good field for observation. Nevertheless, *ceteris paribus*, the greater facility attending extraction by version, in other than the most experienced hands, will probably militate against the use of the long forceps becoming really general. Statistics, too, on this subject are liable to such a variety of restrictions, according to the individual case, that deductions drawn from them can only be accepted with reserve.

Two appendices have been added—one on the causation of the Nægele obliquity of the fœtal head, reprinted from the *Obstetrical Transactions;* and the other on the subject of the choice of the leg to be seized in version for shoulder-presentation, from the same source.

The type is small, and the pages are very full; but some compensation has been afforded in a very complete and useful index. The book will, doubtless, early become as well known and appreciated as the author's work on the *Diseases of Women;* and, if it do this, he will probably have every reason to be satisfied.

NOTES ON BOOKS.

Conference on Temperance Legislation, Social Science Proceedings. (London: 1886.)—This detailed and accurate report of the novel and unusually interesting conference recently convened to discuss the different proposals to legislate on the traffic in intoxicants, will deepen the regret that so useful and active a society as the Social Science Association has finished its career. This last work of the Association was one of the best which it carried to a successful issue. Many vexed questions, most difficult of solution, are involved in the attempts to regulate and restrict the liquor traffic. Compensation is but one of the many *pontes asinorum.* At this conference, however, brewers, distillers, wine merchants, and publicans were as fairly heard as were teetotallers and prohibitionists. No members of the community are more deeply interested in the promotion of temperate habits among the people than are the medical profession; and we can heartily commend the volume to all our readers as a handy and useful book of reference on a subject with an important influence on public health.

Vestnik Sudebnoi Meditziny ee Obshtchestvennoi Hygieny. (The Herald of Forensic Medicine and Social Hygiene.) Published by the Medical Department, and edited by Dr. MICHAEL N. SCHMELEFF. St. Petersburg. 1886. Vol. 1.—The current volume of this official quarterly contains, amongst other contributions, Dr. F. A. Patenko's experimental researches (from Professor Brouardel's laboratory in Paris, and Professor Zuntz's in Berlin) on asphyxia in a forensic aspect. 3. Professor J. P. Skvortzogg's report on the Sanitary State of the famous Ural Metallurgic Works. The author, who chiefly dwells on the mines belonging to Demidoff, deserves every praise for his truthful description of the appalling conditions, under which Russian miners are doomed to live, work, and perish; being fettered, hands and feet, by their economic dependency upon the omnipotent proprietor of the mines. The mortality amongst the male inhabitants of Nijni-Tahil (the capital of "Demidoff's land") is 40 pro mille; amongst women 31 pro mille; amongst children under 1 year, nearly 44 per cent. 3. Dr. Pulcheria I. Glushanovkaia-Jakovleva's paper on Vaccination with the Debritur, in the Moscow Government. As supplements are given (1) a portion of Dr. P. O. Smolensky's work on the Hygiene of the Sick-House; and (2) a portion of Materials for the History of Medicine in Russia (the reign of Feodor Alexëëvitch, 1676-82). These materials are supplied by governmental archives, and are really invaluable, not only for a historian of medicine, but also for that of civilisation and culture.

THE NIGHTINGALE FUND.—According to the annual report of this fund, there were 77 probationed nurses in the school at St. Thomas's Hospital, in the year 1885, of whom 19 resigned or were discharged, 27 completed their training and received appointments, and 31 remained in the school. From the opening of the school in 1860 to the end of last year, a total of 833 candidates have been admitted, and 494 have left the school as certified nurses. The accounts for the year show receipts to the amount of £3,942, with a balance over expenditure of £1,829. Mrs. Wardroper, the matron of St. Thomas's Hospital, will give information both as to the admission and training of candidates and the supply of nurses.

BRITISH MEDICAL ASSOCIATION
SUBSCRIPTIONS FOR 1886.

Subscriptions to the Association for 1886 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-Office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 26th, 1886.

THE ANNUAL EXODUS TO THE SEASIDE.

The season of the year is now almost at hand, when the dwellers in large cities begin to contemplate their usual summer recourse to the seaside. This practice is one of very ancient date, if we regard only the wealthy and leisured classes, but its general adoption is a more modern habit. The Roman noble sought refuge from the summer heat of Rome at Baiæ and Paestum, but he was not followed thither by the trader or farmer, and still less by the artisan and mechanic. In modern times, however, almost all classes, except the very poorest, participate, more or less, in the custom of seeking to exchange for a time the heavy and vitiated atmosphere of large cities for the refreshing breath of ocean. It is worth while to inquire the *rationale* of this custom, the benefits to be expected from it, and the classes of individuals to whom it is especially applicable.

We have, first of all, to take into account the simple element of change. Monotony of occupation and diet is, in the long run, injurious to the organism; and change of air operates beneficially by inducing change of habit and of food, and by turning the current of life into fresh channels.

It is not desirable that such a change should be from one extreme to another, such as from a very damp and relaxing atmosphere to a dry and stimulating one, or from a confined and sedentary life to one of boisterous activity. By such extreme changes the system is apt to be overtaxed, and, instead of renewal of health, too often the result is disturbance of sleep and digestion, and the induction of nervous exhaustion.

But the resort to the seaside means much more than mere change of air. It involves the exchange of a more or less vitiated atmosphere for one of almost perfect purity, and the substitution of tonic and bracing conditions for those that are usually relaxing and depressant. Sea-air is free from all sources of organic contamination; it possesses much ozone, and traces of bromine and iodine. Hence, it is highly tonic and alterative, if we may still use a somewhat objectionable term, for which we are yet without any satisfactory substitute. The air at the seaside is also in almost constant motion; and this factor has its influence in increasing the tonic and bracing effect.

In favourable cases, sea-air produces a marked augmentation of appetite, increased desire for sleep, and a proportionate improvement of nutrition. These three factors are usually closely associated, and the effect of sea-air may be accurately gauged by its influence upon appetite and sleep. The increased drowsiness at the seaside is often, for a time, accompanied by a feeling of agreeable langour, which usually gives place to one of renewed energy. The purity of the air, the presence of ozone, and the stimulation of appetite, afford the requisite conditions for improved sanguification; while the fresh-air life and habits of healthful activity tend to the improvement of muscular and nervous tone.

Thus, in a very large proportion of cases, sea-air is beneficial. It suits especially those who are organically sound, and merely exhausted by excessive work or prolonged confinement in impure air. It affords the desired fillip to the energies of those who require a little recuperation for the performance of fresh labours. In most cases, it is admirably adapted to the needs of children, who delight in the fresh atmosphere, the easy careless life, and the facilities for out-of-door amusement. We may lay down, in general terms, that sea air suits the majority of people who are in average health, and tends to promote the increased well-being of those who are already well. Its application to cases of disease is more difficult and disputable. That sea-air is, in many cases, an admirable restorative and a powerful means of changing morbid action, and hastening convalescence, i undoubted; but as little can it be denied that it is often improperly recommended and fruitful in mischief. The chief therapeutic effect o sea-air is its stimulating property; and in considering its application to disease, the first point to be determined is whether the patient is in a condition to bear stimulation. Many diseases require soothing rather than stimulating; and, in such cases, sea-air is contraindicated. Thus, in all cases of nervous excitement, hysteria, and allied conditions, the desideratum is to quiet nervous action rather than stimulate an activity which is already abnormal. Here sea-air is likely to do nothing but harm, and should be avoided.

Again, in convalescence from acute disease, it is always a nice point to determine when the patient has rallied sufficiently to be able to re-act to the stimulation of sea-air. In retarded recovery from typhoid fever, pneumonia, and other acute specific maladies, few things are more worthy of the nicest consideration of the practitioner. On his accurate diagnosis of this point will turn his decisision, whether his patient should continue to enjoy the rest and quiet of his home, or try to hasten recovery by recourse to the seaside. Two points seem of special importance in the determination of this question, viz.: temperature and the condition of the nervous system. If the temperature be normal, and the nervous system fairly quiet, sea-air may reasonably be expected to operate beneficially. If pyrexia and nervous irritation be still present, it is very apt to promote a recrudescence of disease.

There are some constitutional conditions which bear stimulation well, and these may be expected to benefit decidedly by resort to the sea-side. Of such cases, struma affords the best instance in point. Rickety children may also be confidently ordered to the sea-side, as statistics show that rickets is relatively rare at marine localities. In hereditary predisposition to phthisis, sea-air seems almost uniformly beneficial.

Many people suffer from disordered hepatic action at the seaside, and some cutaneous affections, especially eczema, are aggravated by sea-air. These facts point their own moral.

It must be borne in mind that seaside resorts vary in character, and afford many degrees of stimulation. The east coast is highly bracin and stimulant; the west and south-west is almost relaxing in character; and the south-east holds an intermediate position.

In all cases where sea-air seems too stimulating, its exciting action may be reduced by choosing a residence that does not face the sea, by taking inland walks, and by abstinence from bathing.

THE TESTS FOR ALBUMEN IN URINE.

At page 1063 of the British Medical Journal of June 5th, we gave a short summary of the report of the "Albumen Test Committee," which was read at the last meeting of the Clinical Society. As the report, however, is of much interest to practitioners, it will be useful to give a more detailed account of the results obtained by the Committee. The tests of which they investigated the comparative usefulness were the following: 1. Dr. Oliver's papers; 2. Dr. Pavy's pellets; 3. Dr. Johnson's picric acid; 4. Sir W. Roberts's acid brine; 5. A solution of picric acid saturated with common salt—picric acid brine; 6. Solution of potassio-mercuric iodide with citric acid; 7. Nitric acid; *a*, with previous boiling of the urine; *b*, applied according to Heller's method; 8. Acetic acid and heat; the urine being boiled previously to acidification. The Committee experimented with some artificial admixtures of albuminous bodies in fluids other than urine, which need not here be particularised. The general conclusion obtained from these preliminary experiments was that solution of potassio-mercuric iodide with citric acid, particularly when used after Heller's method, gives the most delicate and clearly marked reactions; and that nitric acid is, for use in the consulting-room, not inferior to any but the potassio-mercuric-iodide test; its use in the two ways indicated above being taken into comparative consideration with the other tests correspondingly applied. By the use of different reagents, the Committee were able to distinguish some forms of albuminous bodies from some other states or forms; for instance, peptones from egg-albumen, or serum-albumen, or the albumen of albuminuria.

As regards the clinical use of the tests above enumerated, the committee arrived at the following conclusions.

1. Of Dr. Oliver's test-papers, the potassio-mercuric-iodide give the most delicate reactions of all the papers, and excel nitric acid, however applied. The ferro-cyanide papers come next, but with a decided interval, and the tungstate papers third; whilst the picric-acid papers are less satisfactory, as an inconvenient quantity has to be used. The two first-named papers require the use of citric acid in the cold, which involves a possible fallacy, in that citric acid produces a precipitate when an excess of soluble urate is present in the urine. Urine of high specific gravity should consequently be diluted, to avoid this source of error; and sufficient acid must be added to render neutral or alkaline urine distinctly acid. The potassio-mercuric-iodide papers appear to precipitate all albumens indiscriminately; but the precipitates with artificial peptones are dissolved on heating, and reappear on cooling. The ferrocyanide papers do not precipitate artificial peptones; while their reaction with other albumens is keen. One apparent fallacy that might occur in the use of Dr. Oliver's papers is not noticed in the report. It happened to us once, in employing an iodide paper to test some serum drawn from a hydrocele, to find that the paper gave apparently no reaction, whereas the liquid, when boiled in another tube, became quite solid. Upon taking the paper from the first portion of the liquid, however, and examining it more carefully, it was found to be coated completely with a thick layer of solid albumen, which had apparently prevented any further egress of the salt from the paper into the liquid around, in that way frustrating all further reaction. The very sensitiveness of the test induced a belief in its failure. When, however, the serum was well diluted with water, the albuminous nature of the liquid was at once completely demonstrated by the paper. It is, perhaps, possible that the same thing might occur in a specimen of extremely albuminous urine.

2. Dr. Pavy's pellets of nitric acid and ferrocyanide of potassium are reported to give as good results as the potassio-mercuric papers of Dr. Oliver (neither of these re-agents being quite so searching as the solution of the potassio-mercuric iodide). They are stated not to precipitate peptones; and, therefore, in conjunction with the iodide solution, they may distinguish the two kinds of proteid, and, so far, help in the clinical analysis of pathological conditions. In using this test, citric acid has to be first added; and this source of fallacy (as noted above) must be avoided by dilution, where the specific gravity of the urine is high. Bubbles of gas, which the pellets sometimes liberate, must also be distinguished from a precipitate.

3. Dr. Johnson's picric acid solution requires decided excess of the reagent, or the addition of acetic or citric acid. It is reported to be most useful, giving reactions only second to those of the potassio-mercuric-iodide solution. The mixture of picric acid and urine should be boiled. Artificial peptones are thrown down by this test in the cold, but disappear upon boiling, and reappear as a cloud on cooling. The picric acid solution should be dropped into the tube of urine, held vertically, in such a way that each drop falls upon the centre of the surface of the urine, so as to obtain differentiation by the production of a film around it, if albumen be present. This cannot be managed if the solution be poured down the side of the tube, as the picric acid solution is of low specific gravity, and highly diffusible. This gives a precipitate, not necessarily albumen, in the urines of persons taking quinine. The precipitate is distinguished by its being soluble on boiling, to reappear in a crystalline form on cooling; whilst it gives the quinine reaction with chlorine water. This test also precipitates uric acid in the cold; but this cloud disappears under heat.

4. Roberts's brine-test is stated to be sensitive, and very trustworthy, though not quite so delicate as the other tests. It does not precipitate peptones or quinine; and it is said to allow the discrimination of mucus from albumen, the cloud of the former being superimposed upon the albuminous cloud.

5. Picric acid brine can be used after Heller's method, which is not possible with picric acid solution alone, owing to its low specific gravity; it gives good results.

6. The solution of potassio-mercuric-iodide, with addition of acetic acid, is the most delicate test in the list.

7. Nitric acid, used by Heller's method, and added cautiously, in a somewhat diluted state, to urine just boiled, is declared to be a test of great delicacy, and to be liable to fewer fallacies than the other tests considered. The drawback to this test is its difficulty of portability.

8. Acetic acid, added so as to ensure a decided acid reaction to urine just before, or immediately after boiling, is a delicate test.

The report states of mucin, that it is precipitated by most of the reagents which precipitate albumen. The distinction of the two clouds, when formed by Roberts's brine-test, has been already noticed; the same kind of indication is given with nitric acid, in Heller's method. With regard to the other tests, mucin cloudiness thereby obtained shows less ready sedimentation than albumen cloudiness, and exhibits a marked mobile satiny appearance of the precipitate when shaken in a good light.

In some urines, the potassio-mercuric iodide and picric acid tests produce a precipitate apparently albuminous, when nitric acid afford no such indication.

Finally, the committee think all the tests are valuable practical aids in diagnosis; that some are especially portable, and capable of application without the use of cumbrous apparatus; and that each test has an usefulness of its own. The committee consider that anyone devoting himself to the thorough use of one of the tests, will find it sufficiently precise for all practical needs, and that, by comparative use of several tests, the discrimination of differing forms of proteids may be obtained. The picric acid test, which admirably detects albumen and peptones, if boiled with caustic potash, detects, also, the presence of sugar. The committee lastly note that the knowledge of the reactions of albumens is at present imperfect, and, possibly, capable of much improvement. But to the settlement of this question their functions did not extend.

The points, however, which were delegated to the committee for inquiry, are of great practical importance to almost all classes of practitioners, and have, apparently received a calm judicial investigation. For their labours and this report, which Dr. Ord presented on behalf of the committee, the members will receive appreciative thanks.

The subject of testing for albumen was, many years ago, considered to be settled on a fairly satisfactory basis; and those practitioners who then learned to use heat and nitric acid skilfully have, according to this report, no reason to be mistrustful of those tests. But the appearance, during recent years, one by one, of several other methods of testing, each claimed by its introducer to public favour as the "best on record," has tended rather to shake men's confidence in the tests with which formerly they had been quite satisfied. This report, happily, will go far to reassure practitioners of the excellence of those methods for ordinary laboratory work; whilst of the many portable tests, for use at the bedside, now competing for public favour, they may choose one or more to supplant the nitric acid ordinarily so destructive to the medical man's bag and nearly all its contents.

THE GROWTH OF TEMPERANCE.

WRITERS on historical and economic subjects are fond of insisting that some particular invention or episode in parliamentary legislation will be, in future ages, considered as the distinguishing triumph of the nineteenth century. Sociologists, on the other hand, delight in dwelling on the state of society in our age, which they speak of as "exceptional," "phenomenal," "essentially conservative in instinct," or "persistently subversive of faith, social order, and morality."

There is, however, one fact in the history of Englishmen which does not need proof. This fact is the increased temperance of our middle and lower classes during the past twenty years at least. This fact is not only proved by experience and Excise statistics. It is demonstrated by every agent which reflects public taste and public ideas. It is needless to dwell upon the habits of Lord Chesterfield's club-loungers, nor to lay much stress upon the escapades of the heroes of fashionable eighteenth-century novelists. Let it be remembered that *Pickwick* is still read and admired, and that it was written when many living Englishmen had reached years of discretion. Yet, even the respectable male characters in that great novel are always drinking. They take brandy in mid-day when travelling by stage-coach; they are discovered by their lady acquaintances hopelessly intoxicated at a social gathering, and the ladies have to direct their servants to "carry the gentlemen upstairs." Unfortunately, these glimpses into the eccentricities of middle-class society in living memory were founded upon fact. The social tolerance of intoxication is proved by the frequent episodes in which it is introduced in old-fashioned novels, not so much as a feature of the times when these works were written, as to excite merriment and laughter. In fact, it was a joke to write of gentlemen getting drunk. It is needless to speak of the tenour of contemporary novelists and their readers in regard to intemperance.

The customs of Englishmen mark the growth of temperance. In ladies' society, the five o'clock tea has replaced the sherry and biscuits of a past age. Dessert is short, especially the interval before "joining the ladies." Apollinaris, Seltzer, and other waters, including the simple oxide of hydrogen itself, are largely used for the dilution or in substitution of alcoholic drinks. Lastly, to show signs of intemperance in society is an unpardonable breach of decorum. The working classes have participated in the reform. Anybody who remembers boxing-day twenty years ago, in London or in any large town, must admit this truth, apart from the statistics of temperance societies. There is room for improvement, but that room is being filled.

Advocates of alcohol are fond of declaring that we are temperate because we cannot drink, with impunity, as many bumpers as our ancestors. This is an argument full of fallacy; it depends upon the relative strength of wines at different ages of society, and upon what is meant by "impunity." Thackeray most rightly looked with suspicion on men still young, who spoke of themselves as "past" eating sweets. He believed that "all people who have natural healthy appetites love sweets." He was certainly right. Many practitioners have been struck with the readiness with which adult Englishmen eat sweets in these days, and remember that the heavy drinkers of thirty years ago, as a rule, detested sweets. The toleration of sugar is undoubtedly due to stomachs being stronger through temperance. A common physiological experience with regard to the impairment of digestion, is seen in beer-drinkers. A youth often drinks great quantities of beer with apparent impunity. At twenty-five, when his habits are becoming more or less sedentary, his taste for beer diminishes. At thirty-five, many men cannot tolerate a glass of beer. There can be little doubt that this change represents impairment of digestion; nor can there be great doubt that much of the depression, common amongst very young men, is due to attempts to keep up their strength by good living. Sleepiness and lassitude, interfering with afternoon work, are almost always due either to alcoho or to heavy meat-lunches. In a country where the *siesta* is not in vogue, a full mid-day meal, in the midst of work, is clearly unwholesome, especially when much alcohol is consumed. After a good breakfast, six hours' work, at least, can easily be done before a good dinner, allowing a cup of chocolate and a roll for lunch, excepting where much anxiety is incurred, or a considerable amount of physical exercise is taken.

Hence, temperance has made great progress, and has more to make, but rather in the direction of solids than of liquids. Many persons, who, drinking no alcohol, cannot drink less, still eat too much. They and their supporters, who do not always follow their example, should remember that temperance, amongst other things, demands, not that a glass of good ale or wine should be called poison, but that its votaries should not gorge themselves with animal food or bulky vegetables like potatoes.

A DINNER, in aid of the funds of the National Dental Hospital, will be held on Tuesday, June 29th, at the "Albion," Aldersgate Street; Alderman Sir Robert N. Fowler, Bart., M.P., in the chair.

Sir John Lubbock, the sitting member for the University of London, has issued his address as a "Unionist Liberal."

An institution, in connection with St. Bartholomew's Hospital, for supplying trained nurses to the public, is now in working order. Nurses have been specially trained to apply massage.

The library of the Royal College of Surgeons will be closed on Wednesday, June 30th, for the purposes of the examinations; on Thursday, July 1st, for the Council election, and on Friday, July 2nd, for the purposes of the examinations.

A grand bazaar, which will be opened by Her Royal Highness the Princess Louise (Marchioness of Lorne), in aid of the funds of University College Hospital, will be held in the grounds of University College, Gower Street, W.C., on Friday and Saturday, July 2nd and 3rd.

The meeting of the Fellows of the Royal College of Surgeons, for the election of four Fellows into the Council of the College, will be held at the Hall of the College, in Lincoln's-Inn-Fields, on Thursday, July 1st next, at two o'clock in the afternoon precisely.

MEDICAL CANDIDATES FOR PARLIAMENT.

In the present Parliamentary election, most of the medical members will again be candidates in different divisions, with the exception, we regret to read, of Mr. Pilkington, who does not propose to stand again. Dr. Carpenter and Dr. Watney are both in the field again as candidates for county divisions, and Surgeon-Major Evatt is standing for Woolwich. Mr. Ernest Hart, after declining several invitations to stand for metropolitan boroughs, has been waited upon by a deputation from the Bodmin division of Cornwall, and has been urgently pressed by the Leaders of the Liberal party in London to accept nomination as the Ministerial candidate, but is at present undecided whether the existing condition of his health will allow him to enter on the contest.

GUY'S HOSPITAL.

The annual distribution of prizes to successful students of the hospital will take place at 3.30 p.m. on Friday, July 2nd, in the grounds of the Institution. The wards and museums will be open to visitors from 4 to 5 p.m., and ladies are invited to be present.

THE ELECTION AT THE UNIVERSITY OF LONDON.

The election of a Fellow to sit on the Senate of the University of London will take place on Tuesday next, June 29th. The personal popularity of Dr. Samuel Wilks is shown by the large number of graduates, over six hundred and fifty, who have signed his nomination paper. His election would add an honourable and influential voice to the medical representatives on the Senate, but would afford no indication of the feeling with regard to reform. Mr. Philip Magnus, who is the champion of moderate reform—a Whig, so to say—has also a long nomination list, containing four hundred and fifty names. Professor Thiselton Dyer, the third candidate, is supported by a smaller contingent. Of the other business which Convocation will have before it, the most important is the further consideration of the scheme drawn up by the Committee over which Mr. Magnus presided.

SPONTANEOUS TRANSFORMATION OF MORPHINE INTO APOMORPHINE.

A solution of hydrochlorate of morphine for subcutaneous injection (3 per cent.) was ordered for a patient, and its injection was promptly followed by relief of the pain, without any gastric symptoms whatever. Eleven months later, the patient made use of the same solution; but, this time, the injections gave rise immediately to violent and uncontrollable vomiting. The solution was given to a well known analyst at Paris for examination, and he ascertained that apomorphine was present, thus accounting for the sickness. He recommended, in consequence, that solutions of the salts of morphine should never be kept longer than four weeks, and that freshly prepared solutions should not be mixed with the old.

PROGRESS OF THE CAMBRIDGE MEDICAL SCHOOL.

The twentieth annual report of the Museums-Syndicate of the Cambridge University states that the number of students in the elementary physiological classes have averaged 130 each term; the advanced lectures have been attended by an average of over thirty. Professor Roy, who has been assisted by Mr. Joseph Griffiths, has given, in addition to his systematic course of lectures on Pathology, a course of demonstrations on Morbid Anatomy, a course on Practical Pathology, and on morbid Histology. It is added that more space is required for the further development of these classes. Work will not be entirely intermitted during the long vacation, as the demonstrators will hold classes on Histology and Physiology; Professor Macalister will give a course of demonstrations on Osteology. Clinical lectures at Addenbrooke's Hospital will also be given during the vacation.

PURE HYDROGEN.

Two French chemists, Messrs. Hembert and Henry, are stated to have discovered a process for producing pure hydrogen at a cheap rate. In the first stage, a stream of vapour is decomposed over incandescent coke, hydrogen and carbon monoxyde being evolved. A fresh quantity of vapour is brought in contact with the carbon monoxyde, and the mixture is heated to the temperature of dissociation. A further production of hydrogen then takes place, and the carbon monoxyde is changed into carbon dioxyde, which it is easy to absorb by lime water. It appears that, by the above method, 1,000 kilogrammes of coke yield 3,200 cubic mètres of hydrogen. The cost of the gas is said not to exceed a centime and a half per cubic mètre, or about 30 cubic feet.

THE HEALTH-OFFICERSHIP OF MACCLESFIELD.

Some admissions of a very cynical kind were made, last week, at a meeting of the Sanitary Committee of the Town Council of Macclesfield, convened to select a new medical officer of health. The contest lay between an old and respected practitioner of the place, and a young medical man, who is the son of one of the town-councillors, a chemist. A subcommittee had previously, by the casting vote of the chairman, selected the older candidate, the father of the younger applicant taking part in the proceedings, and voting for his son. At the fuller board, however, the nomination of the subcommittee was ignored, and the son of the councillor elected. Most of those who took part in the debate admitted that the selection was a party and political one, though they sheltered themselves under platitudes as to the promise and ability of the favoured candidate. This latter may readily be admitted; but it is, at the same time, greatly to be deplored that political bias should decide so important a matter as the selection of a professional man to look after the health of the borough and its inhabitants.

A FUTURE SANATORIUM FOR VICTORIA.

It is pretty well known that in Melbourne the heat and dust are intolerable in the months of December, January, and February. At that season, those who are able to leave it, are wont to make a start for Tasmania or New Zealand. Mr. Reginald A. F. Murray has recently pointed out, in the *Melbourne Argus*, the advantages that might be derived from forming a sanatorium on the huge mountain mass of Baw Baw, of an elevation of 5,000 to 6,000 feet. The mountain is as yet little known, partially explored, and difficult of access, but Mr. Murray sees no reason why, with the help of the railway now in progress, and of a new road, the summit of Baw Baw might not be brought within an easy day's journey from Melbourne. Baw Baw presents conditions rendering it peculiarly adapted for the purpose of furnishing mountain retreats for children and for the fagged-out toilers of the city. In the height of summer the hot winds are tempered, not

nly by the elevation of the mountain itself, but by their passage over many miles of ranges of nearly equal altitude to the north. The variety of scenery about Baw Baw would preclude the possibility of a sojourn for a few weeks becoming monotonous, to any one of an exploring turn. There are the waterfalls on the eastern side, the deep ravines and scrub-clothed slopes, the rocky granite summit of the range extending for miles, the glorious views over the best part of Gipps Land, the sunrise and sunset, and the pure bracing atmosphere. "It requires little gift of prophesy to foretell that a very few years will see one or more hostelries, with good roads to them, at or near the summit of the range, and the slopes dotted with villas and gardens of those whose means will allow them the luxury of possessing summer retreats, while of the thousands of pounds annually expended on sight-seeing away from Victoria, a goodly proportion will be devoted to enjoying the beauties and health-giving breezes of their own land."

THE BRITISH MEDICAL BENEVOLENT FUND: JUBILEE BANQUET.

THE President and Committee of the British Medical Benevolent Fund have issued cards for the jubilee banquet, which will be given on Thursday, July 8th, at the Holborn Restaurant, at 6.45 for 7 p.m. Sir James Paget, Bart., will preside. A very large attendance is desired and anticipated. Dr. Broadbent, the treasurer, informs us that the following donations have been received or promised in connection with this celebration: Her Majesty the Queen (through Sir James Paget), £100; Sir George Burrows (President), £21; Sir James Paget, £26 5s., Lady Paget, £10 10s.; Sir Wm. Gull, £20; (through Sir James Paget)—A Provincial Physician, £1,050; A. B., £10; and Messrs Lucas Brothers, £50; J. N. Winter, Esq., (Brighton), £200; Dr. Matthews Duncan, £100; Dr. Hare, £100; Dr. Quain, £52 10s.; Arthur Durham, Esq., £21; J. L. France, Esq., £21; Dr. Frank, £20; John Morgan, Esq., £25; H. Veasey, Esq., £20; Dr. Wilks, £10 10s.; Dr. Haviland, £10 10s.; Dr. E. L. Birkett, £5 5s.; Dr. Travers, £5 5s.; Dr. Douglas Powell, £5 5s.; Dr. Wilson Fox, £5 5s.; B. Barrow, Esq., £5 5s.; Messrs. Morton and Burt, £5 5s.; and A. E. Cumberbatch, Esq., £5 5s.

HOSPITAL SUNDAY FUND.

A PUBLIC meeting, presided over by the Lord Mayor, was held last week at the Mansion House in connection with the Hospital Sunday Fund, to inaugurate a series of public meetings in support of the hospitals and medical charities of London to be held in various parts of London during the six days immediately preceding Hospital Sunday, June 27th. The first of this series of meetings was held on Monday last in the library of Lambeth Palace, under the presidency of Sir Andrew Clark, M.D. Sir Andrew Clark suggested the formation in every parish of a Hospital Sunday Society to give permanence to the work now in hand; each society might send a representative to the Hospitals Association, which would guide the local societies to a continuous and abiding success. The following is a list of the meetings held throughout the week; on Tuesday, June 22nd, at the Rink Hall, Blackheath, President, the Earl of Dartmouth; on Wednesday, June 23rd, at Kensington Town Hall, President, Sir Algernon Borthwick, Bart., M.P.; on Thursday, June 24th, at St. Andrew's Hall, Newman Street, President, the Earl of Northbrook; on Friday, June 25th, at Highbury Athenæum, President, the Duke of Westminster, K.G.; on Saturday, June 26th, at Stratford Town Hall, President, H.R.H. the Duke of Cambridge.

PROPOSED CONVALESCENT HOME AT HAMPSTEAD.

A PUBLIC meeting was recently held, at the Holborn Town Hall, to consider the advisability and practicability of carrying out a scheme which has been set on foot to establish a convalescent home for the poor in the Vale of Health, Hampstead Heath. The proposal is to purchase the large building known as the Athenæum Club, Vale of Health, and convert the same into a convalescent home, for which purpose an organising committee has been formed. The chair was taken by the Hon. Wallace Cochrane-Baillie, who was supported by Lord Ronald Leveson Gower, Dr. Norman Kerr, Dr. J. E. Squire, and others. It was stated by the Chairman that the institution of this home, which would be for the reception of all convalescent cases, except those of contagious disease, it had been ascertained, would be agreeable to the inhabitants of the immediate neighbourhood. It had all the advantages of a good situation and healthy locality, and was in close proximity to the metropolis. A resolution, approving of the project, and recommending that a committee, of not less than nine or more than fifteen, be appointed, and authorised to take all necessary steps for appealing to the public for the necessary funds, was proposed by Lord Ronald Leveson Gower, seconded by Dr. Norman Kerr, and carried unanimously. A further resolution, empowering the committee to purchase the said estate at a sum not exceeding £9,750, or, failing the acquisition of this estate, to be authorised to seek another suitable property for the purpose. Mr. G. H. Leah, junior, and Mr. C. M. Elstob, were appointed (joint) secretaries. It was decided that a subscriber of one guinea should become a governor for one year, and donors of ten guineas life-governors, with special privileges to be determined by the committee.

DR. OLIVER WENDELL HOLMES.

DR. OLIVER WENDELL HOLMES, amid a scene of great enthusiasm, was admitted to the degree of Doctor in Letters (*honoris causâ*) in the Senate House, Cambridge, on Thursday week. The orator characterised him as one who combined enthusiasm for science with distinction in literature, one who "Phœbo ante alios dilectus," had received more than one gift of Apollo, the gift of skill in the healing art, as well as the gifts of eloquence and soul. They had lately heard with pleasure that the writer, whose almost earliest poem was "The Last Leaf," had just announced the "First Opening of the New Portfolio." The well-known volumes of the breakfast-table series were alluded to in the following terms: "Novimus quanto lepore descripserit colloquia illa antemeridiana, symposia illa sobria et severa sed eadem festiva et facota, in quibus totiens mutata persona, modo poeta, modo professor, modo princeps et arbiter loquendi, inter convivas suos regnat." In allusion to an anecdote lately current in Cambridge, respecting some English travellers, who had deliberately taken the *Autocrat* with them as the only literary resource during a long tour in a remote part of Norway, the orator continued: "Talibus libellis comitati, etiam Scandinaviæ solitudines tolerare possumus; talibus libellis edocti, vitæ humanæ societatem melius diligere discimus." He also referred to the fact that the day was the anniversary of the battle of Bunker's Hill, which was commemorated by a monument in the immediate neighbourhood of the Transatlantic Cambridge. It was also the anniversary of the death of Addison, and the language of eulogy once applied to that writer might appropriately be transferred to Dr. Holmes: "Haud ignobili poetæ, in oratione soluta contexenda summo artifici, censori morum gravi sane sed et perjucundo, levioribus in argumentis subridenti suaviter, res etiam serias lepore quodam suo contingenti." Addison, however, died in the 47th year of his age, whereas Dr. Holmes was nearly 50 when his fame as a writer burst out into a fresh brightness like that of the Indian summer: "ubi in ipso autumno novus refulget æstatis splendor." The orator concluded in these words: "Videor mihi vatem quendam canentem audivisse, illum cujus in corde æstas æterna floreret, non vocandum esse senem. Equidem juventutis perpetuæ fontem illum quem trans æquor Atlanticum, Hispanorum nautæ frustra quærebant, nautam hunc feliciorem, non fabulosas inter insulas sed Academicæ juventutis in amore perpetuo, in amore mutuo, invenisse crediderim. Trans occidentis amplum illum sinum, levi phaselo vectus, diu naviget; nautili illius ritu, quem versibus tam pulchris descripsit, indies 'per ampliora ad altiora' tendat. Suam Academiam, per tot sæcula feliciter conservatam, intra paucos menses carmine sæculari iterum celebret, diuque superstes ipse exornet; nostræ denique Academiæ honoris causâ adscriptus, diu et nostrum et totius litterarum reipublicæ ad fructum floreat, vigeat, valeat, litterarum doctor, Oliver Wendell Holmes."

A NOVEL SOURCE OF OXALIC-ACID POISONING.

A REMARKABLE case of accidental poisoning recently occurred at Gravelly Hill, Birmingham, resulting in the death of a boy, Edward Arthur Geary, aged five years. We gather from the report at the inquest, in a newspaper, that, on a Friday, the deceased ate a large quantity of green sorrel, but without any apparent harm. Early on the following morning, however, the child awoke, and, feeling dazed and thirsty, he arose, took up a jug believed to contain soap and water that was standing on a table near at hand, and drank copiously. Alarming symptoms immediately ensued, and the boy became unconscious. Mr. Clarke, surgeon, of Gravelly Hill, was sent for, and Mr. Fairley, of Lichfield Road, Aston, was also fetched. On making an examination of the boy, the symptoms were seen to be incompatible with the drinking of simple soap and water. The boy expired about 5 o'clock on Saturday evening, never having recovered consciousness. The *post mortem* examination of the body revealed the fact that the action of the alkali in the soap and water had liberated the oxalic acid contained in large quantity in the green sorrel, and, consequently, caused death by poisoning from salts of sorrel. The coroner having summed up, the jury returned a verdict of "Accidental death." The case, as thus reported in the newspapers, presents several points for consideration. In the first place, it is difficult to understand how any alkali could liberate oxalic acid from green sorrel. In fact, such a process could not possibly take place in the stomach. Under the name of sorrel are included plants of totally different natural orders. This oxalis acetosella is the common wood sorrel, belonging to the order oxalidaceæ, while more than one species of rumex of the order polygonaceæ are also called sorrel. All, however, contain oxalic acid in combination with potassium as an acid salt. This is but sparingly soluble in water, and the only manner in which any alkali could render it more active, would be by converting it into the more soluble and more easily absorbed neutral salt. It is, however, difficult to conceive that the deceased, having consumed a quantity of green sorrel overnight, should have remained without any serious symptoms until the morning, and that then, by this chemical conversion of the acid salt remaining in the residual undigested sorrel, have immediately developed alarming symptoms. There seems to have been no chemical analysis performed, and we are at a loss to understand how a *post mortem* examination without it could have revealed "the fact that the action of the alkali in the soap and water had liberated the oxalic acid contained in the green sorrel." It seems, on the whole, quite as open to suppose that the jug containing soap and water also contained some poisonous substance, and that that poisonous substance caused the death of the boy.

THE NECROPSY OF KING LOUIS OF BAVARIA.

THE *post mortem* examination of the late King of Bavaria, made by Professor Rudinger, is stated to be confirmatory of the correctness of the decision lately arrived at as to his mental condition. The report drawn up on the latter subject was to the following effect. 1. His Majesty suffers from a very advanced stage of mental disturbance; he labours under that form of insanity which is well known to alienists of experience under the name of paranoia (mental perversion). 2. Considering the gradual and progressive development of this form of disease, and its very long duration, extending over a great number of years, His Majesty is incurable, and further deterioration of the mental faculties is to be expected with certainty. 3. In consequence of the disease, the king is entirely debarred from freedom of volition, and is prevented from exercising the functions of government; this impediment will last not only more than a year, but through his whole life. The following were the conditions found at the *post mortem* examination. The body was about six feet three inches in length, and the circumference of the chest was forty inches. There were extensive changes of a degenerative nature in the skull, as well as in the brain and its membranes, consisting partly of abnormal development, partly of chronic inflammations of old and recent date. The scalp was thick and very vascular. The skull was small in proportion to the size of the body, and somewhat asymmetrical, the diagonal diameter from the left of the forehead to the right of the occiput being 17.2 centimètres, and from right of the forehead to the left of the occiput 17.9 centimètres. The roof of the skull was extraordinary thin, its greatest thickness being three millimètres (0.12 inch). The coronal and sagittal sutures were completely obliterated on the inside of the skull. On the inner surface of the frontal bone, on both sides, were a number of large and small bony growths. The superior longitudinal sinus was excessively wide behind, and remarkably narrow in front, near the ethmoid bone. Groups of Pacchionian granulations projected into the interior of the sinus. The dura mater was generally much thickened; in the frontal region especially it was vascular, and externally shaggy; a bony growth, two millimètres in height, was found here. The left petrous bone showed a projection a centimètre in diameter at the base, corresponding to a depression in the temporal lobe of the cerebrum. The sella Turcica was asymmetrically thickened, porous and fragile in a great part of its extent, as was also the anterior fossa of the base of the skull. All the sinuses in the base of the skull were filled with dark fluid blood. The brain (without the dura mater) weighed 1349 grammes (47½ ounces). The arachnoid, over a great part of both hemispheres, was thickened, and had a turbid white appearance. Over the median end of the left anterior central convolution, and the beginning of the first frontal convolution, the arachnoid and pia mater were adherent over a space of the size of a shilling, and formed a thick hard mass, by the pressure of which the corresponding part of the skull was reduced to the thinness of paper. On the surface of the skull, pretty equally on both sides, portions of the convolutions appeared shrivelled, especially the commencing parts of the three frontal convolutions, the middle end of the anterior central convolution, and the parts surrounding the middle division of the postcentral furrow. The substance of the brain was vascular, and rather soft. The heart and lungs were healthy. There was chronic catarrh of the stomach. The liver was congested; the spleen was enlarged; and the kidneys were large, but normal.

THE SAMARITAN FREE HOSPITAL.

THIS institution, known throughout the world, is approaching an important epoch in its career. About forty years ago, a dispensary for the treatment of the diseases of women was established by Dr. William Jones A few years later, a house was rented by Dr. Henry Savage in Orchard Street. Some beds were eventually provided. Dr. Savage, after Dr. Jones had given up his appointment in the struggling hospital, carried on the work single-handed, but was at length joined by Dr. Routh and Sir Spencer Wells. Mainly through the exertions of the latter in the cause of ovariotomy, the hospital has gained a world-wide reputation, and a large number of British and foreign surgeons flock weekly to its wards. In 1877, Sir Spencer Wells was made consulting surgeon. His work has been satisfactorily continued by the present staff. So large a number of cases of abdominal tumours are sent to this hospital, that, owing to its very limited accommodation, many patients are compelled to wait for months before admission; and we believe that the surgeons are not unfrequently obliged, in order to give surgical relief in the more urgent cases, to defray the expenses of maintenance, etc., in private nursing-homes. After many efforts to obtain a suitable property, the committee of the hospital have secured a freehold in the Marylebone Road, at a cost of £12,500; and upon this site a new hospital will have to be shortly erected. It is roughly estimated that the cost will be about £30,000. A deposit of £1,200 has been paid, and the purchase-contract must be completed by Michaelmas next. The lease of the Dorset House Branch of the hospital will expire in less than two years. The maintenance of two establishments, the one for abdominal sections, the other for external operations, separated from each other by several streets, is no longer advisable

and it is hoped that on the new site may rise, not one large edifice, but a series of closely adjoining buildings, suitable for the medical and surgical treatment of diseases of women, with large and commodious out-patient rooms. For the promotion of the cause of the Samaritan Hospital, a meeting will be held at Chesterfield House, Mayfair, by special permission of Sir Arthur and Lady Bass, on Thursday, July 1st, at 3 o'clock. The chair will be taken by the Earl of Jersey, vice-president of the hospital. It may be anticipated that this institution, still consisting of two insignificant houses in Lower Seymour Street and Dorset Street, will soon take a form more in accordance with the most approved principles of hospital construction, and more in harmony with its high reputation. Owing to the conspicuous success of several well-known provincial surgeons, more than one of our northern and midland cities possess very fine hospitals for the treatment of the diseases of women.

HYPNOTISM IN ITALY.

A GOOD deal of sensation has been excited in Milan, by the lectures and experiments of a certain Signor Donato, an admittedly assumed name, who has been reproducing the ordinary phenomena of mesmerism amongst the susceptible citizens of the capital of Lombardy. It would have been quite unnecessary to draw the attention of the readers of these columns to the well-known results of expectant attention and unconscious reception of suggested ideas which are so familiar to the profession in our country, and in Germany, were it not for the purpose of showing that the Italian authorities have the power, apparently, of putting a legal veto on all such proceedings, if they are pronounced injurious to the subjects of the experiments by medical or scientific experts whom the authorities consult. The Prefect did thus put an end to the performances of Donato, on the passing of a motion by the Medical Society of Milan, that the experiments were injurious to the nervous systems of those who submitted to them, and referred the matter to the central authority at Rome, who consulted the Upper Sanitary Council of the Kingdom. Baccelli, the President of the Council, having requested and obtained permission to summon some of the leading Italian physiologists and psychologists to the assistance of the sanitary members, a meeting has taken place, and a resolution has been passed to the effect that, for the protection of the liberty of every person, it is essential to prevent experiments which, while abolishing the consciousness of actions, produce morbid physical effects on predisposed persons, and render them subject to the will of others. The Council says that public displays of hypnotism must produce great disturbance in the nervous susceptibilities of the spectators, and maintains that physiology and clinical experience offer decisive proof of this assertion. It is certain that the Government will empower the local authorities to act on this opinion, and that such experiments as Donato's will be no longer tolerated in any Italian city where the Prefect, or his representative, thinks it worth while to interfere.

SCOTLAND.

THE KNIGHTHOOD OF SIR DOUGLAS MACLAGAN.

To mark the satisfaction that is felt in the Edinburgh School, at the honour of knighthood which has been conferred on Professor Douglas Maclagan, the Students' Representative Council, on Wednesday, before a large number of students, teachers, and members of the profession, presented him with an address.

DUNDEE ROYAL ASYLUM.

THE annual meeting of the directors of the above institution was held last week in Dundee. Their report stated that there were at present 284 patients in the house, compared with 293 at the same date last year. The Treasurer reported that the total income for the year had been £8,987, and the expenditure £9,177, showing a loss of £190. The reports were unanimously adopted.

POSTGRADUATE COURSES.

THE important subject of postgraduate courses has, for some time, been before the teachers of medicine in Edinburgh; and a plan is being elaborated for such courses of instruction for graduates in medicine, which will appear in a subsequent number of the JOURNAL.

ZYMOTIC DISEASES IN THE ABERDEEN ROYAL INFIRMARY.

IT was resolved some time ago to exclude the treatment of all zymotic diseases, excepting typhoid fever, from Aberdeen Infirmary. At a meeting, held last week, the Rev. Mr. Calder desired the managers to limit the number of cases of that description to three males and three females, so that the students in attendance might study the disease. But, on the motion of Dr. Urquhart, it was resolved by 42 to 27 votes that all the cases should be admitted into the infirmary.

UNDERGROUND DWELLINGS IN EDINBURGH.

AT a meeting of the Public Health Committee, Edinburgh, held on Tuesday, presided over by Baillie Russell, there was reported by the burgh engineer and the medical officer of health, in pursuance of the instructions of the Committee, the result of a complete survey of the lower flats of houses in Jamaica Street. These houses were constructed fully seventy years ago, according to the best notions prevalent at the time. The builders, in order to make as much as possible of the expensive sites, had excavated to too great an extent; and in all the houses reported upon, the chief sanitary defects were found to be deficiency in light, deficiency in height between the floor and the ceiling, and also the presence of damp. According to the requirements of the Public Health (Scotland) Act, 1867, these houses were found defective so far as accommodation for a family was concerned. But, in addition, the other defects mentioned were sufficient, in the eyes of the Committee, to justify the Town Council to call upon the proprietors to show cause why these underground dwellings should not be closed. A letter was also read at the meeting with reference to the general sanitary condition of the village of Dean. The Committee instructed the medical officer of health and the burgh engineer to make a survey of that portion of the water of Leith, and report to the next meeting of the Committee. The medical officer was also instructed to report on the whole question of visiting physicians to the City Fever Hospital.

THE EDINBURGH HOSPITAL FOR INCURABLES.

AN addition which has been in progress for some months past to the Edinburgh Hospital for Incurables, Salisbury Place, has just been completed, and additional patients will now be taken in. The extension has been accomplished by the purchase of two houses adjoining the Hospital—Nos. 5 and 6, Salisbury Place. No. 6 is the uppermost storey of a tenement immediately adjoining the hospital, the lower two flats of which, being No. 7 Salisbury Place, have been for some years the property of the Edinburgh Association for Incurables. Alterations have been carried out in No. 6 and 7, and additional accommodation has been obtained for four male and five female cases in the ordinary wards, and four cancer cases—two male and two female. A room has also been set apart for dying patients, and accommodation provided for the requisite staff of nurses and servants. In the meantime, No. 5, Salisbury Place, cannot be occupied for hospital purposes on account of want of funds; but the plans have been prepared with a view to its being connected with the new part of the building, when further extension can be proceeded with. The cost of the purchase of 5 and 6, Salisbury Place (defrayed from legacies bequeathed to the institution), has been £1,544, and there appears in the accounts a sum of £14 on account of hospital extension and £40 16s. for furniture. The daily average number of patients for 1885 was 50.83. Though providing for 13 additional cases, it would appear that the accommodation is still insufficient, and that the committee of management will still have 30 applications undisposed of hen new beds are fixed.

THE ABERDEEN ROYAL INFIRMARY.

At a recent Quarterly Court of Managers of the Aberdeen Royal Infirmary, several resolutions of interest to the profession were adopted; 1. The addition of an Assistant-Physician to the Hospital staff; 2. That the number of resident-assistants be increased to four, two physicians' assistants, and two surgeons' assistants; 3. That the medical staff should meet together as a "Medical Committee," at least once a month, and report on such subjects as the Committee of Management may request their opinion upon, and on any matter which they may desire to bring under the notice of the Committee of Management; 4. That the fees paid by the students for admission to the Infirmary (other than fees paid for the Clinical Lectures) should belong to the hospital. These were among the reforms suggested by the Special Inquiry Committee, appointed in September last, of which Professor Struthers was chairman. They were then, on the motion of Dr. Struthers, remitted for the consideration of the Committee of Management, and now came before the quarterly court with the approval of that committee. Another recommendation of the special committee, also approved by the Committee of Management, "That the limit of service for the visiting medical officers be restricted to fifteen years, except in the case of professors in the University, engaged in clinical or pathological teaching, whose services the executive may deem it expedient to continue," is deferred till the next meeting of the Quarterly Court of Managers. The new office of Assistant-Physician is creating much interest in the profession in Aberdeen, a number of the most promising of the junior members being already in the field for the appointment, which will take place in September. Among the candidates are Drs. M. Booth, Edmond, Macgregor, Rodger, and Blaikie Smith.

IRELAND.

URLINGFORD DISPENSARY.

Last week, an election for a medical officer to this dispensary took place. There were about a dozen candidates, but ultimately the number was reduced to two, namely, Drs. Coyne and Finnelly. Dr. Coyne, who was acting as *locum tenens*, was elected by a majority of four votes.

MANSLAUGHTER BY A LUNATIC.

Dr. Davys, one of the coroners for the county Dublin, held an inquest, last week, at the Rathdrum Workhouse, in reference to the death of a lunatic who was killed by another lunatic inmate of the workhouse. The jury, after hearing the evidence, brought in a verdict that the deceased died from spinal concussion, the result of a severe blow inflicted upon him by another lunatic. They further added, that they considered that the hospital sergeant of the workhouse had too many duties to perform, and thus was unable to give the necessary attention to the male lunatics engaged on the farm; and they recommended that a special attendant should be employed for this purpose.

THE NEW MEDICAL ACT.

The position of representatives by votes of the registered practitioners on the General Council will be probably sought for by Dr. G. H. Kidd and Dr. A. H. Jacob, who have taken for many years a very active interest in medical education.

St. John Ambulance Association.—At the annual distribution of certificates to the successful members of the St. John Ambulance classes at Huddersfield, Mr. Martin, the surgeon-instructor, showed the great increase which had taken place in the numbers attending the classes, the total in the two years being 509, of whom 467 had gained certificates. It was stated that of the members of the police force, all of whom had undergone instruction, 93 had obtained certificates. At the conclusion, a presentation was made to Mr. Martin of a handsome liquor-cruet by Mr. J. A. Sykes, on behalf of the students of the Lindley class.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council Room Exeter Hall, Strand, London, on Wednesday, the 14th day of July next, at 2 o'clock in the afternoon.

June 24th, 1886. Francis Fowke, *General Secretary.*

NOTICE OF QUARTERLY MEETINGS FOR 1886. ELECTION OF MEMBERS.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 14th, and October 20th, 1886. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, June 24th, and September 30th, 1886.

Candidates seeking election by a Branch Council should apply to the secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

The Scientific Grants Committee of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences, that they are empowered to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting should be made without delay to the General Secretary, at the office of the Association, 161a, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research, in furtherance of which the grant was made.

COLLECTIVE INVESTIGATION OF DISEASE.

Inquiries are in progress on the subjects of

Diphtheria, Cancer of the Breast,
Old Age, The Value of Hamamelis,
The Value of Pure Terebene.

Memoranda on the above, and forms for recording individual cases, may be had on application.

The inquiry on Acute Rheumatism is now closed, as the printing of the Tables is completed. *Any cases, of which Reports are sent by June 1st, will be added to the Tables.*

The Etiology of Phthisis.—Continuation of inquiry. The Committee will be glad to receive the names of gentlemen willing to engage in joint investigation of any of the following points in relation to the origin of cases of Phthisis;—(*a*) The influence of residence and occupation; (*b*) the previous state of the patients' thoracic organs and general health; (*c*) heredity and communication. Full particulars will be sent on application.

General inquiries into the Therapeutic Value of Hamamelis and Pure Terebene have been issued. A report will be made to the Section of Therapeutics at the annual meeting.

Prognosis in Heart-Valve Disease, based on an examination of cases in which the lesion has existed for an unusual length of time without producing serious symptoms; the Extreme Duration of Infectiousness in Infectious Diseases. The Committee has proposed these two subjects for future inquiry, and has referred them to the Branches of the Association, in accordance with its regulations, with a view to preliminary discussion during the present year. Arrangements have also been entered into with the Section of Medicine of the Annual Meeting of 1886 to hold a discussion upon "Cases in which Disease of the Heart-Valves has been known to exist for upwards of five years without causing serious symptoms;" and with the

Section of Public Health to hold a discussion on "The Duration of Infectiousness." The former discussion will be opened by Sir Andrew Clark, Bart., the latter by Dr. Arthur Ransome. The inquiry-papers, to be subsequently issued, will be based upon the information afforded in these Branch and general discussions.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

South Indian Branch.—Meetings are held in the Medical College, Madras, on the first Friday in the month, at 4.30 P.M. Gentlemen desirous of reading papers or exhibiting specimens are requested to communicate with the Honorary Secretary. —J. Maitland, M.B., Honorary Secretary, Madras.

Metropolitan Counties Branch.—The Annual Meeting of this Branch will be held at the Holborn Restaurant, on Tuesday, June 29th, at 5.30 P.M. President: Walter Dickson, M.D.; President-elect: John S. Bristowe, M.D., F.R.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine. Dr. Walter Smith has given notice that he will propose that the number of Vice-Presidents be increased from four to six, and that of ordinary members of the Council from eighteen to twenty-four.—Alexander Henry, M.D.; W. Chapman Grigg, M.D., Honorary Secretaries.

South-Wales and Monmouthshire Branch.—The annual meeting will be held at the Infirmary, Cardiff, on Thursday, July 8th. Members wishing to read papers should send titles before June 20th. Gentlemen wishing to join the Branch or Association should send notice before July 7th.—A. Sheen, M.D., D. A. Davies, M.B., Honorary Secretaries.

North Wales Branch.—The annual meeting will be held at Festiniog, in the first or second week in July. Members having cases to communicate, or papers to read, or who wish to propose new members, should advise the Secretary on or before the 21st instant.—W. Jones-Morris, Portmadoc, Honorary Secretary.

Shropshire and Mid-Wales Branch.—The annual general meeting will be held at the Salop Infirmary on Tuesday, June 29th, at 2 P.M. W. H. O. Sankey, Esq., M.D., President, in the chair. Members desirous of reading papers or other communications are requested to forward the titles to the Honorary Secretary, Edward Cureton, Shrewsbury.

Northern Counties (Scotland) Branch.—The annual meeting will be held at Elgin, on Wednesday, July 7th. Members wishing to show cases, or to read papers, will oblige by communicating the titles at once to the Honorary Secretary, J. W. Norris Mackay, M.D., Elgin.

Birmingham and Midland Counties Branch.—The Annual General Meeting of this Branch will be held on Tuesday, June 29th next, in the Medical Institute, Birmingham. An address will be delivered by the President, S. H. Agar, Esq. The annual dinner will take place at the Grand Hotel, Colmore Row, at 6 P.M.; dinner tickets, exclusive of wine, 5s. each.—Alfred H. Carter, M.D., 21, Temple Row, Birmingham; Robert Saundby, M.D., 83, Edmund Street, Birmingham, Honorary Secretaries.

Yorkshire Branch.—The annual meeting will be held in the Town Hall, Bradford on Wednesday, June 30th, at 3 P.M. Gentlemen intending to read papers are requested to communicate with Arthur Jackson, Sheffield

Cambridge and Huntingdon and East Anglian Branches.—There will be a combined meeting of these Branches at Ipswich on Friday, July 9th, under the presidency of Dr. Elliston. It is requested that early notice of intended papers, or other communications, be given to one of the Secretaries: B. Anningson, M.D., Cambridge; M. Beverley, M.D., Norwich; W. T. Jackman, Coggeshall; W. A. Elliston, M.D., Ipswich.

Lancashire and Cheshire Branch.—The annual meeting of this Branch will be held in the Town Hall, Lancaster, on Wednesday, July 7th, at 2 P.M. The President, Dr. Harker, will deliver an inaugural address. Subject: The Study o Nature as the Foundation of Medical Thought and Practice. The following medical and surgical communications have been promised. Mr. Walter Whitehead: Three cases of Suprapubic Lithotomy. Dr. Stewart: A paper on Provident Dispensaries. Dr. Farrar will show Gerrard's Ureometer, and give a practical demonstration of its action. Mr. Christopher Johnson: A paper on Sanitary Reform a Hundred Years Ago. Dr. Ashby will show a specimen of Congenital Biliary Cirrhosis of the Liver from an infant aged 4 months. Dr. Griffith will read a paper on Tobacco Amblyopia in Women. Dr. Walter will show an unusual form of Uterine Polypus. Dr. Davidson will read a short communication upon a Medical Subject. Dr. Charles Rayne will read a paper on General Peritonitis as an early and prominent feature in Glanders. Luncheon will be provided by the President, at the Town Hall, from 12.30 to 2 o'clock. The members will dine together at the King's Arms, at 5 P.M.; dinner-tickets, 7s. 6d. (wine not included).—Charles Edward Glascott, M.D., Honorary Secretary, 23, St. John Street, Manchester.

Oxford and District Branch.—The annual meeting will take place at Oxford on Wednesday, July 15th. Members who wish to read papers or show cases of interest are requested to inform one of the Honorary Secretaries on or before July 11th.—Dr. Darbishire, 60, High Street, and Mr. Morgan, 42, Broad Street, Oxford, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

A meeting of the above District was held at Tunbridge Wells on May 28th, 1886. Mr. Abbott presided.

The next Meeting, it was decided, will be held at Hastings, in September.

Secretary.—Mr. T. Jenner Verrall was re-elected Honorary Secretary for the ensuing year.

Meetings of the District.—Mr. Verrall brought forward a proposal to reduce the number of meetings in the year from four to three. The attendance had not of late been good, and the custom in other districts seemed to show that three meetings were as many as could be well attended. He wished to ascertain the feeling of members on the point.—Dr. Withers Moore seconded, but regretted that there should be any occasion for the change, as he regarded these gatherings as of great value both from a scientific and a social aspect.—Several of those present expressed similar views; and eventually it was decided that the present number might be retained for another year, in the hope that, the question having been raised, more interest might be shown.

The Royal Medical Benevolent College.—Mr. Marsack drew attention to a circular lately sent out, asking for help for the Royal Medical Benevolent College.

Communications.—The following communications were made.

1. Mr. Gorham gave some interesting and instructive reminiscences of Guy's Hospital relating to Ovarian Dropsy, and the difficulty experienced by the early advocates of removing the cyst in gaining recognition for the operation.

2. Dr. Stowers read a paper on Rodent Ulcer, its Nature and Treatment; and showed microscopical specimens. He discussed the nature of the disease with regard to its origin as an epithelioma or carcinoma, giving his adhesion to the former view. After indicating the various methods of treating the established disease, he laid stress on the desirability of removing in early life those warts or moles which were likely, in later years, to prove spots for the invasion of this affection.—Dr. Mackey, Mr. Verrall, and Dr. Moore took part in the discussion.

3. Dr. Mackey showed varieties of Unna's Ointments, spread on muslin and gutta-percha.

Papers by Mr. Watson and Mr. Lammiman were not read, owing to their being unable to attend; and one by Dr. Elliott was postponed for want of time.

MIDLAND BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held at the County Hospital, Lincoln, on Thursday, June 17th, under the presidency of Dr. Newman.

Officers, Council, etc.—The representatives in the General Council of the Association were re-elected. In the Branch Council, Dr. Handford (Nottingham) and Mr. Rice (Derby) were elected in the places of Dr. Stephenson and Mr. Dolman, who retire from lapse of time. Dr. Curgenven (Derby) was chosen as President-elect on the proposition of Mr. J. Wright Baker, seconded by Mr. Sympson. The Honorary Secretaries and Treasurer were re-elected.

New Members.—Dr. H. P. Berry, Dr. Thos. E. Carter, Mr. Okell Mr. Peacock, Mr. Johnston, Dr. Bernard, Dr. McFarland, and Mr. Webster, were elected members of the Branch.

Reorganisation of the Branch.—On the proposal of Dr. Handford seconded by Mr. Sympson, the following resolution was passed:—"That the secretaries of the four divisions of the Midland Branch be instructed to ascertain and be prepared to report to a future meeting the view of the members of the several divisions as to the reorganisation of the Branch."

Proposed Invitation to the Association.—The question of inviting the Association to hold its annual meeting in 1887 in the Branch having been raised, Mr. Wilkinson proposed, "That, with a view to settling the question more definitely of holding the annual meeting in one of the centres of the Midland Branch, a meeting of the members of each county be called to consider the question, and report to a general meeting of the Branch."

President's Address.—Dr. Newman read an address on the Medical Treatment of the Poor and the Provident System.

Papers, etc.—The following were brought before the meeting:—

1. Dr. Isambard Owen: On Collective Investigation.
2. Mr. Wilkinson: Cases of Ovariotomy.
3. Dr. Handford: Rare Forms of Skin-disease illustrated by Photographs.
4. Dr. Marshall: Pick's Operation for Fissure of Anus.
5. Mr. Sympson showed a case of Myositis Ossificans.

Luncheon and Dinner.—The President entertained the members at lunch in the board-room of the hospital; and, after the meeting, about eighteen members dined at the Great Northern Hotel.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Cases of Pneumonia with Pyæmic and Septicæmic Complications.—The Suture of widely divided Nerves.—M. Pasteur.—A New Way of Purifying Sewage.—The Vaccination Service in France.—The Medulla and Respiration.—Drainage of the Bladder after Suprapubic Lithotomy.—Iodol in Ocular Surgery.

M. HARDY recently gave an interesting clinical lecture at the Charité Hospital on a fatal case of lobular pneumonia and septicæmia. The patient was 64 years of age; he had never contracted any serious illness, but was ailing during eight days before entering the hospital. He had a pain on the right side of the chest, with cough. He continued at work until two days before entering the hospital. Expectoration was scanty; sibilant and subcrepitant rhonchi were heard on both sides; the temperature varied from 102.2° to 104°; the pulse ranged from 100 to 110. The symptoms were somewhat contradictory. The temperature and the pulse increased. The patient became prostrate, and pain in the side excessively severe. The sputa, of a greenish yellow colour, did not present the colour of pneumonia; but their consistency was that of pneumonia. In the right axilla, on auscultation, subcrepitant rhonchi were heard, and bronchophony in the subscapular region. On percussion, there was decided dulness. Respiratory vibrations were heard below; the *souffle* and the sibilant rhonchi were likewise heard on the left side. Bronchitis, complicated with lobular pneumonia on the right side, was diagnosed. The patient was dry-cupped, and a saline draught administered. The sharp pain in the side disappeared; but, on the fifth day after his entry, the temperature rose to 104.2°, and the pulse to 120. All the other local symptoms remained. M. Hardy administered full doses of tartar emetic. Vomiting and purging being produced, the emetic was discontinued. The patient improved. The temperature fell to 102.2°, and the pulse to 110. On the sixth day after the improvement in the patient's condition, the morning temperature rose to 104°, the pulse to 124. Neither auscultation nor percussion revealed any indications of return of pneumonia. The patient died on the same night, twelve days after admission, and twenty days after the actual onset of his illness. At the necropsy, extreme congestion of both lungs was discovered. There were several patches of hepatisation in the central region of the right lung. The spleen was considerably enlarged and diffluent, as in septicæmia; the kidneys were enlarged and congested, as in infectious nephritis. The liver was also above the normal size, and there were several detached patches of fatty degeneration in its substance. The gall-bladder contained three large calculi. During life, the patient's skin was slightly jaundiced. The mitral valve was affected with disease, of old standing. The necropsy thus revealed all the characteristics of septicæmia. Death resulted from a general condition for which it was found impossible to account, perfectly independent of the pulmonary affection. At the Pitié Hospital, two servants of the establishment, man and wife, were seized with pneumonia, the husband being taken ill a day or two after the wife. He died on the fourth day. The wife was delivered of a live seven-months' child, and died four days later. The sputa from these cases contained Friedländer's lanceolate encysted micro-organisms. At a recent meeting of the Académie des Sciences, M. Jaccoud read an interesting note on blood-poisoning consecutive to pneumonia of the ordinary acute form, not traumatic. He has observed the following two cases. Both patients were in perfect health when the pneumonia followed the usual course. After defervescence, the local pathological condition was not thoroughly repaired; a limited area of lung tissue presented the lesions characteristic of pneumonia. Finally, the patients died, after exhibiting the symptoms of blood-poisoning. In one of the patients, these symptoms appeared eleven days after defervescence; the temperature then rose to 104°, and a purulent effusion appeared in the right knee. At the necropsy, there was entire hepatisation of the right lung, with several purulent foci. On the tricuspid and mitral valves were fungating growths, with bleeding surfaces. There were miliary abscesses in the kidney, suppurative arthritis of the right knee, and a purulent effusion along the back of one brachialis anticus muscle. Dr. Netter detected in the suppurating foci in the lung-tissue the two fundamental forms of pyogenic organisms, the streptococcus and the staphylococcus, as well as the pneumonococci of Friedländer. These organisms were also observed in the purulent effusions which were independent of the lungs. A mouse and a guinea-pig were inoculated with the pus taken from the right knee of the patient twelve hours before death. The animals thus inoculated died twenty-four hours subsequently, and presented multiple suppurations. The second case, also fatal, presented similar features in respect to the micro-organisms.

At a recent meeting of the Biological Society of Paris, Dr. Assaky presented his doctoral thesis, *La Suture des Nerfs à distance*. It may be summed up as follows. When there is loss of substance in the peripheral portion, it is advisable to join the central to the peripheral extremity by means of catgut sutures. Even though the two nerve-extremities cannot be closely united, the sutures, by their presence, produce excellent results. Experiments made on animals show that this method hastens nerve regeneration. Sutures thus applied keep the nerve in a proper state of tension, and lessen the space which divides the extremities. The cicatrix along the track of the catgut sutures is richer in newly formed nerve-fibres than when no sutures are used.

M. Pasteur's patients are now received at 14, Rue Vauquelin, where the inoculations are practised. This arrangement is only temporary, but is rendered necessary by the influx of patients at the laboratory of the Rue d'Ulm, which was a serious hindrance to the scientific researches carried on there. Anyone who has unfortunately been bitten by a mad dog will be received between 10 and 11 A.M. at 14, Rue Vauquelin.

M. Defosse believes that he has discovered a method of purifying sewage, so that it can be emptied into rivers without danger to the public health. Sewage is at first treated with lime, sulphate of aluminium, and permanganate of potash; then filtered through bricks, broken into pieces. After it has been filtered, other reagents are used, which the author does not specify; and the sewage is again filtered, but through a bed of peat. Sewage, thus treated, is clear and inodorous; whether it is organically pure, remains to be proved by chemical tests.

Dr. Liouville has, in a letter to the Académie de Médicine, proposed that £400 be voted for the vaccination service, instead of £310, the usual sum; and that £4,000, instead of £2,000, be voted for the medical services established in the Departments, in order to organise a special institution for practising and studying vaccination and inoculation, for the prevention of transmissible diseases.

Since the publication of Legallois's works, and especially of those by Flourens, nearly all physiologists, notwithstanding the objections brought by Brown-Séquard, have admitted the existence of a respiratory centre in the medulla oblongata. Through damage to this centre, the respiratory movements are arrested when the spinal cord is cut between the atlas and axis. Recent researches, however, have shown that the cord, though severed from the medulla oblongata, can, under certain conditions, act as a respiratory centre. P. Rokitansky (*Wien. Med. Wochenschrift*, 1874) demonstrated this fact. He cut the cord, in young rabbits, between the first two cervical vertebræ, the animals being previously poisoned with strychnine. During the convulsions, some respiratory movements took place. The most complete researches of this order have been made by Langendorff (*Arch. für Physiol.*, 1880). M. E. Wertheimer recently made a communication to the Paris Biological Society, in which he stated that, in a number of experiments made on adult dogs of all ages, sometimes with strychnine, sometimes without, he obtained the same results as Langendorff, and observed respiratory movements after the cervical spinal cord had been severed. These phenomena occurred in fully developed animals without the use of strychnine. Severing the cord not only cut off the centres above the point of section, but, for a certain time, rendered inert all the centres situated below it. This result of the operation was less evident and more transitory in newly born animals, especially in young cats; in them, respiratory movements returned soon after they had been thus operated upon, but even in them evident excitability of the cord did not last long. It must be stimulated on Langendorff's principle, by a weak dose of strychnine. In order to obtain, in adult animals, more striking results, a sufficient interval of time must be allowed to elapse, to enable the momentary nervous exhaustion to wear off, and then no strychnine need be given. M. Wertheimer severed the spinal cord of an adult dog at 11 A.M., and artificial respiration was carried on during some hours afterwards. The animal was carefully enveloped in cotton-wool, and kept warm, to prevent its temperature from falling too low. At 5 P.M., general reflex action had returned in the limbs. Artificial respiration was suspended two minutes afterwards; only a few respiratory movements were observed, they gradually became more and more frequent and more defined. When five minutes had elapsed, about fifteen to thirty were counted in a minute. The respirations became again slower; artificial respira-

tion was resumed, and afterwards definitively discontinued. The same phenomena as those already described were observed. M. Wertheimer therefore concluded that respiratory movements returned in the trunk of an adult animal when the cord was cut between the atlas and the axis, if the time necessary to allow the excitability of the organ to return were allowed to elapse. If artificial respiration were suspended at this moment, the blood, highly charged with carbonic acid, acted as a stimulus; and it could be observed that the cord was not only the centre of the origin of the nerves which innervated the respiratory muscles, but, in a physiological sense, a centre directly influencing the rhythmic movements of these muscles.

At a recent meeting of the Academy of Medicine, M. Demons read an interesting paper on drainage of the bladder after suprapubic lithotomy. In this operation, consecutive urinary infiltration was the great difficulty to contend with. Different methods had been adopted to prevent it. M. Péan invented a special drainage-tube, but sometimes urine escaped through it. It was also too large, and it increased the size of the wound, and kept it open too long. M. Demons had recently performed suprapubic lithotomy on an old man sixty-three years of age, who was greatly debilitated. A calculus measuring six centimètres and a half had to be extracted. M. Demons passed along the urethra a firm red India-rubber tube, 90 centimètres long. One extremity was passed through the bladder, and brought out beyond the wound; both extremities of the tube were in communication with a urinal. Perforations in the walls of the intravesical portion allowed the urine to flow away; and, strangely enough, this was found to take place through the inferior extremity of the tube, through which the superior antiseptic injections were made. Five days after the operation, the tube originally used was removed, and a smaller one was introduced, which later on was replaced by a thread fastened to the hairs of the pubes. On the tenth day, the temperature was normal; there was a very small hypogastric fistula, which quickly closed. On the eleventh day, there were no traces of the operation, and the bougie or thread was removed.

Iodol, which was discovered last year, presents the aspect of a greyish powder, free from any kind of odour. It is a combination of iodine and pyrrol, containing 85 per cent. of iodine. This therapeutic agent is analagous to iodoform, which is known to be most effective in ophthalmic therapeutics, but it has the further advantage of being inodorous. Dr. Trousseau has tested its value in ophthalmic surgery, by making experiments on rabbits and dogs; and the results obtained led him to recommend an ointment, composed of vaseline 10 grammes, and iodol 2 grammes. A solution composed as follows: iodol, 3 grammes; alcohol, 35 grammes; glycerine, 62 grammes; a total of 100 grammes. In his experiments, Dr. Trousseau found iodol in powder to be too irritating for general use. It was impossible to obtain a concentrated solution of iodol in water. Pure alcohol was the best dissolvant of iodol, but this rendered the solution painful on application. Dr. Trousseau, therefore, on M. Bozmond's suggestion, added a considerable quantity of glycerine to his preparation, and it could be used for the cornea and the other highly sensitive parts of the eye without any disagreeable results. Dr. Trousseau used both the ointment and the solution in his practice. The ointment did not cause the slightest pain. The solution caused a certain amount, at the moment it was applied; and on that account it ought not to be used unless followed by results superior to those of the other curative agents which it replaced. The pain, nevertheless, was not greater than that caused by nitrate of silver and sulphate of copper. In blepharitis, without ulceration, iodol was inferior to the ointments in current use (mercuric sulphide, zinc oxide), but when there was ulceration, the iodol preparation was more efficacious. Frequent application of the ointment, say five or six times a day, favourably modified the ulcerated surface, especially if every night and morning the ulcers were painted over with the solution. In affections of the lacrymal duct and gland, iodol could only be used as a solution; but the disadvantages attending its use prevented Dr. Trousseau from recommending it. He concluded, from his practice and experiments, that iodol could replace iodoform in ocular treatment. It favourably modified ulcerated blepharitis, chronic conjunctivitis, and some forms of vascular keratitis. It was especially efficacious in phlyctenular ophthalmia, and sluggish ulcers of the cornea. In solution, it modified granulations. Dr. Trousseau did not consider that its antiseptic properties were sufficiently marked to warrant him in using it for infectious ulcers of the cornea, or in dressings after operations for cataract, iridectomy, etc. When its antiseptic properties were confirmed, it would rank as a valuable agent in ocular surgery.

A MEDICAL CORONER.—Mr. Richard Jelly, surgeon, of Totnes, has been appointed Deputy Coroner for the district.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication; and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to return, and hold over a great number of communications, chiefly by reason of their unnecessary length.

GOVERNMENT COMPETITION IN THE TEACHING OF MEDICAL STUDENTS.

SIR,—I trust to your sense of fairness to allow me to state that the Faculty of Science of University College is being exposed to a very iniquitous competition, by the action of the persons who are responsible to the public for the management of the South Kensington Normal School of Science. This school is supported by the money of the British taxpayer; amongst others, by the taxes paid by the professors of University College. The excuse which has been given for the employment of public funds in maintaining a college of science subject to the arbitrary management of government clerks, is that the college would be confined to certificated school-teachers and the students of the Royal School of Mines.

Now, however, Colonel Donelly has boldly launched a scheme which threatens absolute ruin to the science-schools of University and King's Colleges. Is it right that the Government should thus enter the field so as to injure independent institutions? Is it right that I should pay taxes in order to provide a salary and equipment for teachers at South Kensington who are not merely about to compete with me for the fees of London medical students, but who are to have these students bodily handed over to them by certain medical schools?

Hitherto, the students at the various London schools have been free to attend the Preliminary Science Classes at University College, and they have largely done so. Only a third of these students attending these classes have, as a rule, proceeded to the Medical Faculty of the College. After spending a year in our science classes, they have proceeded to enter for medical study at this or that hospital, according to their choice. No attempt has been made to detain them at University College; but, with complete loyalty, the College has endeavoured to make its Faculty of Science the preliminary school for all the London hospitals. This position is now, it appears, to be denied to the Faculty of Science of University College, by a definite arrangement between South Kensington and four London Hospital Schools. The students of those schools are to be handed over to the Government Training College and the companionship of certificated schoolmasters. The Faculty of Science of University College has offered to these schools, and is prepared to offer to any London hospital school, the most absolute guarantees that students, who attend the preliminary science curriculum of the College, shall not be (as they have not been in the past) induced, or persuaded in any way, to proceed from the Science Faculty into the Medical Faculty of the College. We are prepared to give tickets to any London medical school for our science-curriculum, which will enable it to secure the subsequent entry of the students, who take those tickets, to the medical classes of the particular school which thus makes use of our arrangements for science-teaching.

I should very much like to know whether it is not, in your opinion and that of your readers, a cruel wrong to those who have laboured to build up the Science Faculty of University College, and have made its laboratories and museums more complete than those of any institution in London, not excepting South Kensington, that the London medical schools should deliberately organise a plan for preventing students from exercising a free choice as to attending our classes? And, further, whether it is possible to justify the employment of public funds for the support of the College at South Kensington, which is now stepping out of the lines agreed upon when Parliament voted the supplies upon which it has been raised, and is actually entering a field already occupied and well filled by independent colleges unsupported by Government grants.

A Parliamentary Commission to inquire into the administration of the Normal School of Science, and to assign due limits to its operations, as well as to report upon the mode of appointment of the professors and lecturers, and the flagrant departure, on the part of the Science and Art Department, from the conditions laid down by the last Treasury Minute, relating to the salaries of the professors of the Normal College of Science, will be the first result of the aggressive action of Colonel Donelly. Not only the friends of University and King's Colleges, but all those who are unwilling to see self-supporting, hard-working, and worthy Colleges such as these, injured by the

wanton and entirely illegitimate interference of a State-supported bureaucratic school, will join in demanding fair play for the independent institutions.

We may fairly demand that the Government shall either wholly support and administer university education in London, or shall keep hands off this field of operations, so as not to damage the position of free institutions already in possession.—Yours truly,

A PROFESSOR OF UNIVERSITY COLLEGE.

CONSULTANTS AND GENERAL PRACTITIONERS.

SIR,—I am very glad, indeed, to read your able article on "Consultants and General Practitioners," in the JOURNAL of June 12th, having taken great interest in the subject, and read a paper on this subject at a meeting of the Association, which you did me the honour of inserting in the JOURNAL for October 6th, 1883.

An illustration of the evil that arises from the want of harmony between consultants and general practitioners lately occurred to me. I advised a patient, some time ago, to see a London physician. This patient I was previously in the habit of attending regularly; but, for some time lately, I did not attend him, except on trivial occasions. On one of my visits, he asked my opinion as to a prescription a friend of his had copied from a cheap popular medical publication, which contained very powerful remedies. I told him I did not consider it safe to take, as it was liable to weaken the heart. Recently, he consulted me for a sharp attack of bronchitis; and then told me he had been to see the physician I advised him to see, and showed me the prescription, which, to my surprise, was identical in every respect with the one his friend had copied.

Now, sir, this placed me in a very awkward position as regards my patient, who told me, though he had every confidence in my opinion, yet he must regard the opinion of so learned a man as the one I recommended to him as superior to mine, and he said he certainly should not consult me again about his peculiar complaint. At the same time, however, I could not but see that his regard for the medical profession was lowered by the fact that what the physician had advised was the same as that his friend had recommended.

Looking at the matter from a purely pecuniary point of view, the physician had two guineas for his advice, which has extended now over three years, and I have lost about £100. Besides this, the prescription is being copied, and distributed among the gentleman's friends. I wrote to the physician, and received a kind and courteous reply.

May I venture to express an earnest hope that physicians and general practitioners will not let the matter drop; but endeavour, for their mutual advantage, to secure a more honourable relationship.—I am, sir, your obedient servant,

A. H. NEWTH.

Hayward's Heath.

SIR,—In the circular-letter, published in the BRITISH MEDICAL JOURNAL on June 12th, suggesting the formation of an association directed against consultants in name, but not in deed, much reliance appears to be placed upon the customs of the bar. A moment's consideration, however, would have shown that the bar is in a radically different position, inasmuch as, in almost every case where it is customary to employ a barrister, a solicitor is unable to act in his place. The two customs would only be on all fours if, let me say, for the sake of argument, a general practitioner could not take charge of a case where life was endangered. Moreover, the customs of the English bar have so many inconveniences, that they have not been continued in the United States. Further, a barrister's fees increase in direct proportion with the increase in his professional standing; but the majority of consulting physicians, certainly not excepting the most highly placed, habitually accept fees, which are, when compared with barristers' fees, ridiculously small; and are often, from one motive or another, still further reduced.

The old days, when a physician was born to the purple, are gone; a young man can no longer come to London, and step into a good consulting practice, in a few years, merely because he is a Fellow of a College at Oxford or Cambridge. There are too many of us, and the general practitioner has grown too good. Now-a-days, a consultant is made, not born. If there is to be a class of consultants in the future, it must be continually recruited; recruits must come, either from the ranks of the general practitioners, or, as at present, from a special class of young men who bide their time with this aim. Recruiting from the general ranks of the profession is, at least in London, practically forbidden, owing to the manner in which certain rules of the Royal College of Physicians are enforced by the Fellows. The special class of young men thus created exist in large numbers, ostensibly at least; but these men find it hard to live; for, on the one side, the general practitioner is growing more competent, and, on the other, they are habitually undersold by leading consultants.

Free trade (always supposing that a maximum standard of knowledge is exacted by the State in self-protection) would be better than the existing protective system, under which the protected undersell each other and the unprotected. Circumstances force upon many young men the necessity of becoming Members of the Royal College of Physicians, and they are thereby debarred from general practice. Boycotting will do no permanent good; what is wanted is, such a reform within the College as shall teach its Fellows that they must obey the spirit, as well as the letter, of its by-laws.—Yours, etc.,

M.R.C.P.

SIR,—I am glad to see that the relations of consultants and general practitioners are exciting comment, and can add my testimony to the urgent need there is for it; for I have lost, partially or entirely, many patients, through their going to consultants—by my advice sometimes, at others, independently of it. It has most commonly happened in this way. By my advice, and generally bearing a letter from me, the patient has seen a consultant, and then, on subsequent occasions, he has thought it better to "get a prescription" from the consultant, instead of coming to me. Very often, too, the consultant has requested the patient to see him again.

There have been several instances, moreover, where I find still greater cause for complaint; in which, by careless and inconsiderate remarks on the part of consultants to my patients, I have been discredited in my patients' eyes, and thrown over by them. The following is an instance. The patient had gouty bronchitis, and albuminuria. He asked me if there were any fear of Bright's disease; to which I replied that there was a possibility of its ensuing, if the congestion of the kidneys were perpetuated. This alarmed him, and shortly afterwards he consulted a physician of considerable eminence. The albumen had disappeared from the urine, and the physician led him to suppose that it was all a mistake that there had been anything the matter with his kidneys or urine at all. Several instances of a similar character have occurred to me, where a little considerate caution would have prevented the discredit which was brought upon me by those who were supposed to know better than I.

I do not think any strict rule, such as that a consultant should see no patient except through the intervention of a general practitioner, would be workable or needful; but only that it is most desirable that consultants should strive to preserve that kind of relationship between themselves and the other parties concerned, by every means in their power. If they do not, it seems to me they are likely to lose consultations, the general practitioners will lose the benefit of their assistance often when they might otherwise desire it, and the public will lose the benefit of the conjunction of the services of the two, at the same time. Occasionally, too, as I have known happen, patients will find themselves unrelieved by consultants' prescriptions, and afterwards gain benefit from a general practitioner's.—I am, sir, yours obediently,

E.G.P.

SIR,—The public will certainly not forego their right in a matter of disease, in a matter of life and death, to get advice as they think best; nor is it in the least degree probable that medical men, whatever their position, will refuse to give advice when sought under ordinary conditions. The simple rule should be, that which just sensitiveness would inspire—refusal by the consultant to attend alone in any subsequent illness of the patient, on whose case he has, by another medical man, been willingly called into consultation. I use the word "willingly;" because, if after unjust objection of the ordinary attendant, the consultation were insisted on, the duty otherwise essential would not exist; but under such rare exception only should the consultant, at any time during the practice of the ordinary medical man, accept independent attendance on the patient. Such a rule, rigidly practiced throughout the profession would, in a general way, go far and not too far, as a remedy to an insidious and very frequent evil.—Your obedient servant,

GEORGE CORDWENT.

THE REVIVAL OF OVARIOTOMY.

SIR,—In the JOURNAL of June 19, page 1197, Mr. Lawson Tait—excusing himself for having dedicated one of his books to me—writes as follows: "In fact, the dedication of my book is from Sir Spencer Wells's own pen." I have long since ceased to be surprised at any statement, however startling, made by Mr. Tait; and I should hav left this assertion of his with as little notice as I have many others, if I had not read the following passage in Mr. Gladstone's speech, made recently at Edinburgh:

"Lord Salisbury, the late Prime Minister, says of the present Prime Minister, that I have made one of the most deliberate mis-statements on record. But I am bound to tell you that Lord Salisbury is a man whose mode of language has never tended to elevate, but always to lower, the standard of Parliamentary manners."

I should be sorry to lower the standard of collegiate manners towards the Parliamentary standard; but if, without doing so, I can apply any word stronger than "deliberate misstatement" to Mr. Tait's assertion about the dedication of his book, I now wish to make use of that word. —I am, yours, etc.,

T. SPENCER WELLS.

SIR,—I shall close this disagreeable discussion, so far as I am concerned, by a brief reply to my friend, Dr. Henry Savage. When he states that I have completed 139 consecutive and successful ovariotomies through an incision only two inches long, he asserts what I have never said. He really ought to read my paper and quote my exact words, and not trust to his inexact memory. What I did say is, that my *average* incision is not more than two inches.

I have a fortunate habit of preserving letters. I had one, entirely unsolicited, from Dr. Henry Savage some years ago, which I would publish *in extenso*, only it might get Dr. Henry Savage into terrible trouble with his colleagues. One sentence of it, however, must see the light, because it disposes absolutely of the serious part of his letter to you.

"Wells, as you know, claims 10 per cent. for his later operations. Well, then, admitting 22 per cent. on the whole number, his earlier mortality must have been more than 25."—I am, etc.,

Birmingham. LAWSON TAIT.

UNSETTLED PROBLEMS ABOUT PNEUMONIA.

SIR,—Mr. Edmund Penny has contributed to the JOURNAL of May 29th the history of a series of cases "favouring the possibility of the contagious character of this disease." While he is careful to point out that there was no likelihood of chill in any of his patients, he fails to lay sufficient stress upon the important point that in every case quoted the pneumonia was associated with measles, a fact suggestive of two arguments—one in favour of, the other against, his view.

On the one hand (*pro*): exposure to chill, such as frequently precedes the onset of acute pneumonia, has been recently advanced as one of the strongest arguments in support of the infective theory of the disease; it being maintained that the chill produces a certain amount of bronchial catarrh, facilitating the entrance of the virus, if such there be, into the system. Now, though in the case quoted there was possibly no chill, there was, nevertheless, its equivalent, as far as the bronchial mucous membrane was concerned, in the shape of the catarrhal condition of the respiratory tract, which is a prominent feature of measles before, during, and after the appearance of the rash.

On the other hand (*contra*): the cases which he saw were only four in number; they were all cases of measles. It is not unusual to meet with four successive cases of measles, complicated with capillary bronchitis, or broncho-pneumonia; the physical signs of basic bronchitis, when associated with puerile breathing, somewhat resemble those of acute pneumonia; and the absence of the "herpetic eruption," in all, suggests the broncho-pneumonia of measles, rather than acute croupous pneumonia. There is no information as to the quantity of chlorides in the urine of any of the children, two of whom were old enough to have passed it into a utensil.

These remarks are not intended to deny the contagious character apparently belonging to many cases of acute pneumonia, but to point out that the evidence upon so important a subject, to be of value, should be so given as to leave no room for misconstruction.—Yours very truly,

C. HAIG-BROWN, M.D.

Charterhouse, Godalming.

COWS AND SCARLATINA.

SIR,—In confirmation of the idea that scarlatina epidemics frequently originate in the cow herself, rather than in the family of the dairyman, permit me to mention the following facts, which came under my observation many years ago.

One morning I was sent for to visit the child of a milk-dealer that had been taken ill the previous night. My visit was delayed till 2 o'clock P.M., by which time the child was covered with an almost livid scarlatina-rash. It was quite delirious, and died in about three hours. The only other child in the house took the disease in a malignant form, but ultimately recovered.

Some time afterwards, I saw another similar case, which ended fatally. I was struck with the similarity, and, on inquiry, was not surprised to discover that the subject of the disease (a fine healthy boy, about seven years of age) was in the habit of spending the greater part of his day in the yard of a neighbouring milk-dealer, where cows were constantly kept. Since that time, I have seen very many cases of scarlatina, but none so virulent.

Is it possible that the virulence may be accounted for by these patients contracting the disease direct from the cow? It would be an unwelcome illustration of the law of compensation, if it should be shown that, while the virus of small-pox is attenuated by passing through the cow, that of scarlatina is rendered more deadly.

I have also remarked, in those country districts in the North of England with which I am acquainted, how very fatal are epidemics of this disease among the children of even well-to-do farmers.—Yours,

Liverpool. J. MUIR HOWIE, M.B.

CHEMISTS AND THEIR DUTIES.

SIR,—The question has been raised as to how far it is proper for dispensing chemists to issue preparations of drugs ostensibly for the treatment of particular diseases. Our remarks do not apply to the small retail druggists who may resort to such means in order to maintain, it may be, a precarious existence. Of these we will assume that their poverty and not their will consents; but it is quite otherwise with their aristocratic brethren in the fashionable districts who nevertheless see no objection, apparently, to issuing to the public pills, potions, tablets or what-not, which are alleged to be "good for the liver, the stomach, or the nerves, &c." Yet such a proceeding is distinctly beyond their functions, and is as much to be discountenanced as is the sale of the more potent patent medicines. We notice this, because certain of them, who pride themselves upon observing the very letter of the unwritten law (if one may be permitted to make use of such an expression) daily transgress in this way as if they were blissfully ignorant of their dereliction of duty. It is exactly analogous to prescribing for a patient; and yet while (it is to be hoped) a really respectable druggist would shrink with virtuous horror from doing this, he very willingly dispenses prescriptions of his own, ready-made. No reasonable objection can be made to their selling most external applications, the benefit of which in the majority of cases is derived partly from the crude *massage* involved in "rubbing them in," and partly from what has been denominated the "faith-cure." Nor can much be urged against the propriety of their selling mild laxatives, uncrotonised castor-oil or seidlitz powders, etc.; but it is quite otherwise when drugs possessed of specific and possibly powerful effects are so dispensed. It may be accepted as an axiom that any drug, which is capable of producing a well-marked physiological effect, ought only to be used under medical supervision; and if the preparations sold do not contain any such drug, their sale is an imposition on the public.

It would be well if a little of the severity of the laws affecting *pharmaciens* in France were applied in this country; but it is only fair to add that, before applying restrictions to druggists, justice would require that a beginning should be made with medical men who unnecessarily trespass on what should properly be the druggists' territory. To the medical profession, at any rate in towns, such a step would have the double advantage of raising it in public estimation while it would give weight to their demand for a better regulation of the retail sale of drugs and medicines.—I am yours, etc.,

A PRESCRIBING PHYSICIAN.

A NEW AMBULANCE WAGON.

SIR,—I beg to draw your attention to a new ambulance wagon, which I had an opportunity of inspecting at Leicester during my recent visit to that town for the purpose of examining the ambulance classes on behalf of the St. John Ambulance Association.

The ambulance has been made by Messrs. Lee and Taylor, Engineers and Machinists, Nichols Street, Leicester, who purpose forwarding you photographs of the apparatus, which will convey a much better idea of its qualities than any verbal descriptions can give. Its dimensions are:—Length over all, with stretcher, 8 feet 2 inches; height, 4 feet 5 inches; width between wheels, 3 feet 2 inches; weight, inclusive, about 170 pounds. The stretcher, easily moved, is conveyed on a wagon provided with four wheels, running very lightly; in fact, it may be drawn with ease by a boy. Under the stretcher are splints, and in a box at the rear of the wagon are found boric lint, scissors, bandages, thread, and a variety of surgical and medical appliances useful in the first treatment of injuries, as well as of sickness and poisoning. The strength of the ambulance may be gathered from the fact that a gentleman weighing nearly 15½ stones laid on it with perfect ease, and it was easily drawn about. I then lay on it,

and was drawn purposely over a brick laid down in front of the wheels, at a slow pace. The jar was very slight, owing to the careful way in which the springs have been arranged. I look upon it as one of the most perfect ambulances I have seen for the purpose of removing sick or injured persons, and I trust the members of the Association, at the forthcoming annual meeting, may have an opportunity of seeing one of the vehicles, and thoroughly testing its merits.—I am, Sir, yours most obediently, MATTHEW COATES, M.D.

Vancouver, Mitcham Road, Streatham, S.W.

ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

SIR,—As the by-laws of the Royal College of Surgeons require me to stand again for election into the Council, on July 1st, after two years' tenure of office, I may be permitted to express my hope that the Fellows will continue their trust in me.

I have attended every meeting of the Council held during my membership. Besides sharing in routine business, I have served on two important committees; one for widening the basis on which the fellowship may be obtained, the other for considering the question of granting the title of M.D. to members who have passed the conjoint examination of the two colleges.

In joining in the work of these committees, I have striven to promote the acceptance of these proposals, which are, in my opinion, most desirable to bring into operation. By taking part in all discussions, when I believed I could do so usefully, I have endeavoured to instruct myself in the business of the College, and to perform the duties entrusted to me.

On these experiences, I venture to rest my claim for a renewal of the confidence of the Fellows. If reinstated into the Council, I shall endeavour to promote the interests of the College to the best of my ability.—I am, Sir, etc.,

Wimpole Street. BERKELEY HILL.

UNSATISFACTORY INQUESTS.

SIR,—There can be no doubt that a reform is needed in the whole of our present system of coroners' jurisdiction, from their appointment to the finding of verdicts, including also their extrajudicial decisions as to whether an inquest is or is not necessary. The principal requirement is greater uniformity. All coroners should be paid by salary, rather than by a fee per inquest; and there should be some rule, more definite than that which at present exists, as to what are proper cases to be referred to them. The subject is well worthy of consideration at the forthcoming annual meeting at Brighton.

But, while admitting all that Mr. Lovegrove has written, and that there are unsatisfactory inquests, I think it will be well for us to look at home, and see if there not also "unsatisfactory death-certificates." All deaths may, as regards this question, be divided into three classes: (*a*) those in which a certificate ought to be given; (*b*) those in which one ought to be refused; (*c*) those which are of a doubtful character. The first of these are those cases in which the deceased have been attended by medical practitioners in their last illness for natural diseases, and where there is no circumstance demanding an inquiry. The second class is less briefly defined, but includes all deaths from accident within a year and a day thereof; all cases involving a charge of neglect; all deaths from poison, whether suicidal, homicidal, or accidental; and all deaths from violence. This may appear somewhat trite; but there is much difference of opinion on this point. Thus, I have seen a certificate in which the cause of death was stated to be "childbirth—neglect of midwife." Of course, the registrar refused to register it, and referred it to the coroner. The proper course would have been for the surgeon to have refused a certificate, and communicated directly with the coroner. I have known certificates given in cases of homicidal violence, accident, and even poison, where the giving of a certificate could not be justified; it was simply a waste of time and trouble, an inquest being inevitable. Coroners complain, and very naturally, of this; and we must cast out our own "beams" before we venture to see the coroners' "motes."

The doubtful cases are the most difficult of all. Some coroners claim the right to sit in every case of sudden death; and it will be remembered that the late Dr. Hardwicke incurred much odium for holding an inquest upon the late Mr. Acton, who was well known to be suffering from heart-disease. Other coroners adopt a different course, being guided by the medical attendant; but, as the law is at present, the coroner has an undoubted right to sit in cases of sudden death, and it would be wiser, therefore, to refer every such case to him. So, also, with regard to infants found dead in bed by their mothers; some practitioners would certify, though they are proper cases to be referred to the coroner whether he should hold an inquest or not. Greater uniformity is required as to the giving or withholding of medical certificates, and reference of all doubtful cases to the coroner.

Some medical practitioners regard all coroner's inquests as farces, no doubt with some reason; but we must remember that the coroner is as much an "institution" as a magistrate, recorder, or judge of assize. He is the only official who has power to inquire primarily as to a sudden, violent, or suspicious death, to order a *post mortem* examination, and to summon witnesses.

Let medical practitioners first begin by referring all cases which are proper ones for inquiry, or in which any doubt exists, directly to the coroner. Let them treat the coroner with that respect which they would have him show them, for some have quite as much dread of the coroner as Mr. Lovegrove thinks coroners appear to have of medical witnesses. Let us first correct what is amiss in our own ranks, and then we shall be in a better position to demand reform and uniformity of practice from coroners.—I am sir, etc., yours faithfully, FRED. W. LOWNDES.

Liverpool.

JEJUNOSTOMY.

SIR,—In your report of the Clinical Society of London (December 5th, 1885), Mr. Golding-Bird gives a description of the above operation, which he performed on October 25th, 1885; and Mr. Pearce Gould states that the same operation had been done by him in the beginning of September. I was surprised that no notice was taken of a similar operation, performed by me on March 9th, 1883, an account of which appeared in your issue of February 21st, 1885. I believe the omission to have arisen from the fact that I used the general term, enterostomy; for the reason that I had, before operating, carefully considered, and consulted with my friends, whether to open the duodenum or the jejunum. Preference was given to the latter, for reasons stated in the paper referred to. Like the above gentlemen, I was not aware of anything of the kind having been previously attempted; but, unlike them, I had the melancholy satisfaction of discovering that the operation had been performed, in the year 1859, by M. Surmay, to whom, therefore, I believe, belongs the merit of priority. It may be worth while to note that the operative procedure of the various operators differs, as regards the site of the abdominal incision, and in other respects.—Yours faithfully,

G. J. ROBERTSON, M.B.,
Surgeon to the Oldham Infirmary.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN extraordinary meeting of the Council was held on Thursday, June 24th, at the College.

On the confirmation of the Minutes of the Ordinary Council, held on June 10th, the following amended resolution relating to Mr. Bryceson was carried:

"That Mr. Bryceson be allowed to present himself for the final Examination for the Diploma of Member, on producing certificates of having attended anew, at the London Hospital College of Medicine, the several courses of lectures which were invalid in his schedule—namely, the courses on Materia Medica, Midwifery, Chemistry, Practical Chemistry, Medicine, and Pathological Anatomy."

Mr. Alabone, a Member of the College, was summoned by the Council, to answer certain questions relating to unprofessional notices of him which had appeared in various public journals; and, having made a verbal statement, was called upon to put the same in writing, for the further consideration of the Council.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.—The general meeting of this Society was held on May 21st. The report stated that the Society, during the past year, had held eight ordinary, besides two extraordinary meetings. The following gentlemen were elected office-bearers for the ensuing year:—*President:* Dr. S. C. Smith. *Vice-Presidents:* Mr. Ed. Atkinson and Dr. Cameron. *Treasurer:* Dr. Clifford Allbutt. *Honorary Secretaries:* Mr. A. W. Mayo Robson and Dr. Jacob. *Librarian:* Dr. Barrs. *Auditor:* Dr. Braithwaite. *Committee:* Dr. Churton; Dr. Dobson; Mr. Wm. Hall; Dr. Hutchinson; Mr. Jessop; Dr. Fletcher Little; Mr. W. N. Price; Mr. Fredk. Shann; Dr. Swann; Mr. Wiseman; Mr. C. J. Wright; Dr. Young.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH-MATTERS AT WOOLWICH.

A CORRESPONDENT has drawn our attention to the anomalous position occupied by Woolwich among sanitary authorities, in that it has no appointed medical officer of health, and that there is no statutory obligation on the Local Board to make such an appointment. Under Section 40 of the Public Health Act, 1848, the Local Board have power to appoint a medical officer of health, but this permissive power has not been made use of by them. The sanitary laws in force in Woolwich appear to be even more than usually confused. From 1805 to 1852, the sanitary affairs of Woolwich were administered under a private Improvement Act "for paving, cleansing, lighting and watching the town and parish, and for removing and preventing nuisances therein." In 1852, a provisional order was obtained for the application of the Public Health Act of 1848; and the Local Board of Health, which thereupon superseded the old Board of Commissioners, has retained its constitution up to the present time. In the Metropolis Local Management Act of 1855, Woolwich was scheduled as a metropolitan parish; so that, far certain purposes—for the purpose of main sewerage, for the regulation of the structure and foundations of new buildings, and for certain improvements, etc.—the district became subject to the jurisdiction of the Metropolitan Board of Works. By a saving clause, however, of the Act (Sect. 238), the new powers and duties conferren upon metropolitan local boards in general were not extended to the Local Board of Health of Woolwich, except the one of electing a delegate to serve upon the new authority; and, on the other hand, because of its metropolitan position, the Public Health Acts of 1872 and 1875, which consolidated public health law relating to England generally, and extended the duties of urban and rural authorities, have no application in this parish, except in certain comparatively unimportant particulars. In these circumstances, the Local Government Board are powerless to do more than remonstrate; but, for the assistance of the local authority, they caused an inspection to be made in December, 1884, by Mr. Spear, one of their medical staff. His report exposed the weak points in the sanitary administration of the district, and "the conditions that most required criticism appeared to have resulted in large measure from the want of such action as a medical officer of health would be specially competent to advise." There is a very competent officer holding the dual appointment of surveyor and inspector of nuisances at Woolwich, but he cannot take the place of a skilled medical officer of health. Such an officer is required, not only to concern himself with the spread of infectious disease, but to inquire into, and ascertain by such means as are at his disposal, the causes, origin, and distribution of diseases, without distinction, within his district, and to ascertain to what extent the same have depended upon conditions capable of removal or mitigation; to inform himself respecting all influences affecting or threatening to affect injuriously the public health within the district; to make systematic inspections at certain periods, and at intervals, as occasion may require, for the above-named purposes; to report from time to time to the sanitary authority the results of these investigations, and the measures which may require to be adopted for the improvement or protection of the public health; generally to advise on all sanitary points involved in the action of the authority; and to certify, in cases in which such certificate is need as the basis or in aid of sanitary action, for the guidance of the authority or of the justices. Further, he is required, subject to the instructions of the authority, to direct or superintend the work of the inspector of nuisances—that is to say, to be the responsible head of the sanitary department. The Local Board are ill-advised, as regards the public health, in not making the necessary appointment of medical officer of health; and they certainly ought to be placed on the same footing as other sanitary authorities in this matter, when opportunity for legislation offers.

THE REPORT OF THE MANSION HOUSE COUNCIL ON THE DWELLINGS OF THE POOR.

THE report of the Mansion House Council, presented at its last annual meeting, is an important record of a year's sanitary work, much of which has been accomplished by the voluntary labours of its twenty-one local committees, which have been prosecuted in most of the districts included in the metropolitan area. Nearly 6,000 cases of unsanitary conditions have been dealt with during the year. In many instances, members of the committee receive communications from the complainants direct; and it is satisfactory to learn that these are increasing in proportion as the poorer class of tenants are made acquainted with the fact that all communications are received in strict confidence, and acted upon after personal inquiry and verification by the local committee in the name and on the responsibility of the Committee. References are made in the report to the publication, during the year, of the Report of the Royal Commission on the Housing of the Working Classes, and the passing of the Housing of the Working Classes Act 1885. Inquiries into the sanitary condition of the parishes of St. James's and St. John, Clerkenwell, and of Mile End Old Town, were set on foot by the Council, with the result that details of hundreds of cases of neglect on the part of the vestry to enforce sanitary acts in Mile End Old Town were fully laid before the Commissioner, and the medical officer requested by his vestry to resign. In Clerkenwell, the vestry had since ordered the supply of water and proper flushing apparatus to all closets throughout the parish. It is believed that the action of the Council has had a most beneficial effect in stirring up the vestries in other parishes, which has resulted in increased activity on the part of the sanitary authorities.

Attention is called to the fact that the relations of the medical officers of health to the vestries, the status of sanitary inspectors, and the position of district surveyors, still remain as unsatisfactory as ever, whilst the absence of compulsory laws as to registration of ownership of property, notification of cases of infectious disease, the regulation of tenement houses, the establishment of public mortuaries, and the arrangement for the removal of dust are still very prejudicial to the public health. The power that the water companies possess of cutting off the supply to houses owing to non-payment of rates by the owner is, in the opinion of the council, one which should be removed without further delay.

The council also points out how important it is that inspectors of nuisances should possess some qualifications pointing to their fitness for their post, such as the certificate from some recognised public body, and observe the having been "something in the jewellery trade," or an ex-postman, or an upholsterer's carman, can hardly point to any special qualification for the important office of a sanitary inspector; and further, that he should be compelled to give the whole of his time to sanitary work, and that the number of such officers should be increased, "so as to enable them, periodically, to visit all the poorer houses, at least in their district, and make a thorough inspection of them." On the dust question, the report says, "It is our belief that no satisfactory solution of the dust problem will be arrived at until fixed dust-bins are utterly abolished, and a system of collection in galvanised iron pails universally adopted."

The council recommends the introduction into Parliament of a Bill similar in character to the Public Health Metropolis Bill, introduced into the House of Lords last year by Lord Salisbury.

ANTISEPTIC DRAINAGE, AND UTILISATION OF THE WHOLE PRODUCTS OF EXCRETA.

WE have received from Dr. Lownds, late of Her Majesty's Indian Medical Service, a pamphlet containing proposals for what he describes as "Antiseptic drainage, and the utilisation of the whole of the products of excreta. After reiterating the objections to cesspools, river-carriage, and sewage-farms, he proceeds to explain his system, which consists essentially in the separate disposal of solid excreta, urine, and domestic slop-waters, the solids being mixed with peat-charcoal, and carted away weekly as manure, the liquids being stored in tanks, in which the surface of the fluid is kept covered, and as it were, sealed by a layer of oil charged with some antiseptic.

He would restrict the use of sewers to their original purpose, the disposal of the rainfall and of comparatively clean water; and, for this end, would submit the kitchen-slops to a process of subsidence and precipitation by means of sulphate of alumina in tanks covered with antiseptic oil, in contact with which the grease would, as it rose, form a solid layer. The depurated water passing by an overflow pipe into the sewer, the sediment and scum would not require emptying oftener than once in six months.

This urinal consists of a pan, divided by a midfeather, the anterior part covered by a porcelain grate and layer of antiseptic oil, the hinder contained in a chamber ventilated above through a box of peat-charcoal, and leading below to a waste-pipe connected with a separate tank. The urine maintains the same level on either side of the midfeather, any addition in front being attended by an overflow of an equal quantity into the waste behind. The closet is on the plan of those earth-closets in which a separation of the solid and liquid excreta is attempted, a small urinal being fitted in front, while, in the rear, an inclined plane of corrugated iron, covered with peat-charcoal, presents a slope, down which the fæces (assuming them to be always solid)

will roll into the hopper below, where, like soft pills in a box of powder, they will become enveloped in the charcoal.

The fæces should be removed by cart every week; the urine-tank emptied every few months, according to the demand, or, in towns, its contents conveyed by pipes to central tanks and pumping-stations for evaporation, the slopwaters only passing into the sewers.

We do not doubt that in his own well-conducted establishment, and under his careful supervision, the system may work well, but he admits that the difficulties begin with the education of domestics. Very well, but who is to educate the occupants of tenement dwellings, even assuming that the universal adoption of these sinks, urinals and closets, to the exclusion of all others in which so much capital is invested, could be enforced. Where is room to be found for the tanks in close back yards, and at whose expense are they to be constructed? The complete operation of urine from fæces, again, is in practice impracticable, when we take into consideration the tens of thousands of children and invalids in large towns using chamber utensils, and under such an addition of fluid the best earth or charcoal closet breaks down.

In detached houses, large or small, and in villages, the immediate utilisation of excreta is highly desirable, in the poorest quarters of large towns the pail system, preserving as it does the full manurial value of the total excreta, works well enough under municipal supervision. But for general use, among rich and poor, the system which with the least attention, or none beyond pulling a handle, removes all excreta from within the dwelling in the shortest possible time is the best, and this we have in water carriage, with valve or flush-out closets for the better class, and the simplest flush-outs for the lower class of houses.

Again, it must not be forgotten that the washings of streets and yards charged with horse-dung, and all sorts of filth, are very different from rain as it falls, and that the sewage of towns not provided with water-closets is often fouler than that where the excreta are passed into the sewer, as may be seen in most continental towns; indeed, the large addition of pure water used in flushing closets more than compensated for the addition of excrement. Dr. Lownd's plan would not avoid the pollution of watercourses and rivers, or the substitution of so-called sewage-farms, or, more accurately speaking, filtering grounds; and, if we must have these, it is assuredly better that we should avoid the retention of solid and liquid excreta in the midst of our dwellings, under circumstances demanding constant and intelligent supervision at the imminent risk of poisoning the air we breathe.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, June 5th, 5,837 births and 2,957 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had declined in the four preceding weeks from 20.6 to 17.4 per 1,000, further fell during the week to 17.0, a lower rate than has been recorded in any week since September last. The rates in the several towns, ranged in order from the lowest, were as follow:—Bristol, 13.0; Norwich, 13.0; Hull, 13.4; Brighton, 13.9; Salford, 14.3; Sheffield, 14.6; Wolverhampton, 15.0; London, 15.5; Halifax, 16.0; Bradford, 16.2; Sunderland, 16.4; Leicester, 16.4; Huddersfield, 16.5; Nottingham, 17.5; Derby, 17.6; Oldham, 18.0; Newcastle-upon-Tyne, 18.2; Leeds, 18.5; Blackburn, 19.6; Birkenhead, 19.7; Liverpool, 19.8; Birmingham, 19.8; Manchester, 21.7; Plymouth, 21.8; Portsmouth, 22.2; Cardiff, 23.3; Bolton, 23.8; and the highest rate during the week, 31.8 in Preston. The death-rate in the twenty-seven provincial towns averaged 18.2 per 1,000, and exceeded by as much as 2.7 the rate recorded in London, which, as before stated, was only 15.5 per 1,000. The 2,957 deaths registered in the twenty-eight towns during the week under notice included 279 which were referred to the principal zymotic diseases, against numbers declining from 367 to 278 in the four preceding weeks; of these, 95 resulted from measles, 74 from whooping-cough, 42 from diarrhœa, 29 from scarlet fever, 20 from diphtheria, 19 from "fever" (principally enteric), and not one from small-pox. These 279 deaths were equal to an annual rate of 1.6 per 1,000. The zymotic rate in London during the week under notice was equal to 1.7 per 1,000, while in the twenty-seven provincial towns it averaged 1.5, and ranged from 0.0 in Norwich, Leicester, Derby, and Halifax, to 3.5 in Bolton, 5.0 in Portsmouth, and 10.8 in Preston. The deaths referred to measles, which had been 108 and 90 in the two preceding weeks, rose again during the week to 95, and showed the largest proportional fatality in Portsmouth, Blackburn, Bolton, and Preston. The fatal cases of whooping-cough, which had declined in the four preceding weeks from 141 to 76, further fell during the week under notice to 74, and caused the highest death-rates in Cardiff and Portsmouth. The 42 deaths referred to diarrhœal diseases showed a further increase upon recent weekly numbers. The fatal cases of scarlet fever, which had been 21 and 23 in the two previous weeks, further rose during the week to 29: this disease caused the highest death-rate in Salford. The 20 deaths referred to diphtheria showed a decline of 8 from the number in the preceding week, and included 13 in London, 3 in Portsmouth, and 2 in Manchester. The fatal cases of fever, which had been 27 and 25 in the two previous weeks, further declined during the week to 19, a lower number than in any week on record. No death from small-pox was registered during the week under notice, either in London, or in any of the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 35 at the end of the two preceding weeks, declined to 25 on Saturday, June 5th; 4 new cases were admitted to these hospitals during the week under notice, against 10 and 6 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 2.3 per 1,000, and was very considerably below the average. The causes of 88, or 3.0 per cent., of the 2,957 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 5,699 births and 3,027 deaths were registered during the week ending Saturday, June 12th. The annual rate of mortality, which had steadily declined in the five preceding weeks from 20.6 to 17.0 per 1,000, rose again during the week to 17.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 9.0; Cardiff, 12.4; Birkenhead, 13.1; Derby, 13.6; Plymouth, 14.3; Salford, 14.6; Birmingham, 15.1; Leicester, 15.3; Huddersfield, 15.3; Sheffield, 15.6; Nottingham, 15.6; London, 16.1; Norwich, 17.0; Newcastle-upon-Tyne, 17.2; Bristol, 17.5; Hull, 18.8; Sunderland, 18.8; Liverpool, 19.0; Bradford, 19.7; Oldham, 20.8; Portsmouth, 21.1; Leeds, 21.5; Bolton, 22.3; Halifax, 24.0; Manchester 24.8; Wolverhampton, 25 4; Blackburn, 26.4; and the highest rate during the week, 34.5 in Preston. The death-rate in the twenty-seven provincial towns averaged 17.4 per 1,000, and exceeded by 1.3 the rate recorded in London, which, as before stated, was only 16.1 per 1,000. The 3,027 deaths registered in the twenty-eight towns during the week under notice included 89 which were referred to measles, 60 to whooping-cough, 47 to diarrhœa, 28 to "fever" (principally enteric), 23 to scarlet fever, 18 to diphtheria, and not 1 to small-pox; in all, 265 deaths resulted from these principal zymotic diseases, against 278 and 279 in the two preceding weeks. The zymotic death-rate was equal to 1.5 per 1,000. In London the zymotic rate was 1.5, and corresponded with the mean rate in the twenty-seven provincial towns, among which it ranged from 0.0 in Norwich and Plymouth, to 5.4 in Portsmouth, 6.4 in Blackburn, and 7.2 in Preston. The fatal cases of measles, which had been 90 and 95 in the two preceding weeks, declined again during the week to 89, and caused the highest death-rates in Birmingham, Bolton, Blackburn, and Preston. The fatal cases of whooping-cough, which had declined in the five previous weeks from 141 to 74, further fell during the week under notice to 60; this disease showed the largest proportional fatality in Portsmouth and Derby. The deaths from diarrhœal diseases, which had risen in the three preceding weeks from 27 to 42, further increased to 47 during the week. The fatal cases of "fever," which had declined in the three previous weeks from 27 to 19, rose again during the week to 28, and caused the highest death-rates in Preston, Portsmouth, and Huddersfield. The deaths referred to scarlet fever, which had been 23 and 29 in the two preceding weeks, declined to 23 during the week under notice. The 18 deaths from diphtheria showed a further decline from recent weekly numbers, and included 11 in London, and 3 in Portsmouth. No fatal case of small-pox occurred during the week, either in London, or in any of the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 35 and 25 at the end of the two preceding weeks, rose again to 29 on Saturday, June 12th; 9 new cases were admitted to these hospitals during the week, against 10, 6 and 4 in the three previous weeks. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 2.7 per 1,000, and was below the average. The causes of 72, or 2.4 per cent. of the 3,027 deaths registered during the week in the twenty-eight towns, were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the principal Scotch towns, having an estimated population of 1,283,977 persons, 907 births and 515 deaths were registered during the week ending Saturday, June 5th. The annual rate of mortality, which had steadily declined in the five preceding weeks from 23.1 to 21.3 per 1,000, further fell during the week to 20.9, but exceeded by 3.9 per 1,000 the average rate during the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 16.0 in Greenock, 16.2 in Aberdeen, 17.8 in Edinburgh, 18.1 in Dundee, 18.5 in Leith, 19.7 in Perth, 21.7 in Paisley, and 25.2 in Glasgow. The 515 deaths registered during the week in these Scotch towns included 21 which were referred to whooping-cough, 19 to measles, 14 to diarrhœa, 6 to scarlet fever, 5 to "fever," 3 to diphtheria, and not one to small-pox; in all, 68 deaths resulted from these principal zymotic diseases, against 44 and 60 in the two preceding weeks. These 68 deaths were equal to an annual rate of 2.8 per 1,000, which exceeded by as much as 1.2 the average zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns were recorded in Edinburgh, Aberdeen, and Leith. The deaths from whooping-cough, which had been 11 and 17 in the two preceding weeks, further rose during the week to 21, and included 16 in Glasgow, and 3 in Aberdeen. The fatal cases of measles, which, in the two previous weeks had been 10 and 17, further increased to 19, of which 11 occurred in Edinburgh, 5 in Leith, and 3 in Glasgow. The 14 deaths referred to diarrhœal diseases also showed a further increase upon recent weekly numbers. The fatal cases of scarlet fever, which had risen from 3 to 9 in the three preceding weeks, declined to 6 during the week under notice, all of which were recorded in Glasgow. The 5 deaths from fever were within one of the number returned in the preceding week, and included 2 in Glasgow. Of the 3 fatal cases of diphtheria, 2 occurred in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 3.9 per 1,000, against 2.3 in London. The causes of 84, or 16.0 per cent., of the 515 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, June 12th, 857 births and 516 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had declined in the six preceding weeks from 23.1 to 20.9 per 1,000, was again 20.9 during the week under notice, but exceeded by 3.5 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 14.8 in Leith, 14.8, in Perth, 16.4 in Dundee, 19.1 in Paisley, 20.3 in Aberdeen, 21.6 in Greenock, 22.5 in Edinburgh, and 22.9 in Glasgow. The 516 deaths registered during the week under notice in these towns included 49 which were referred to the principal zymotic diseases, against 60 and 68 in the two preceding weeks; of these, 19 resulted from whooping-cough, 10 from measles, 7 from diarrhœa, 6 from scarlet fever, 4 from "fever," 3 from diphtheria, and not one from small-pox. These 49 deaths were equal to an annual rate of 2.0 per 1,000, which slightly exceeded the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Aberdeen, Glasgow, and Edinburgh. The fatal cases of whooping-cough, which had been 11, 17, and 21 in the three preceding weeks, declined during the week under

notice to 19, of which 12 were recorded in Glasgow, and 6 in Edinburgh. The deaths referred to measles, which, in the three previous weeks, had risen from 10 to 19, declined to 10, and included 8 in Edinburgh and 2 in Leith. The 7 fatal cases of diarrhœa were considerably below the average. The deaths referred to scarlet fever, which had been 9 and 6 in the two preceding weeks, were again 6 during the week under notice, of which 4 occurred in Glasgow. The 4 fatal cases of "fever" showed a slight further decline from recent weekly numbers, and included 2 in Edinburgh. The 3 deaths from diphtheria corresponded with the number in the previous week. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 3.8 per 1,000, against 2.7 in London. The causes of 80, or 16 per cent. of the 516 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending May 22nd, the number of deaths registered in the sixteen principal town-districts of Ireland was 413. The average annual death-rate represented by the deaths registered was 24.9 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 26.6; Cork, 18.2; Drogheda, 21.1; Dublin, 27.2; Dundalk, 17.5; Galway, 6.7; Kilkenny, 12.7; Limerick, 27.0; Lisburn, 14.5; Londonderry, 23.2; Lurgan, 30.8; Newry, 17.6; Sligo, 28.9; Waterford, 16.2; Wexford, 38.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.3 per 1,000, the rates varying from 0.0 in Galway, Kilkenny, Drogheda, Wexford, Sligo, Lisburn, Lurgan, and Armagh, to 4.4 in Dundalk; the 4 deaths from all causes registered in the last-named district comprising 1 from diarrhœa. The 113 deaths from all causes registered in Belfast comprised 1 from scarlatina, 1 from whooping-cough, 1 from diphtheria, and 4 from diarrhœa; among the 20 deaths in Limerick were 1 from typhus and 1 from whooping-cough; and the 13 deaths in Londonderry comprised 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 194. Ten deaths from zymotic diseases were registered in Dublin; they comprised 1 from typhus, 2 from whooping-cough, 1 from diphtheria, 1 from cerebro-spinal fever, 1 from enteric fever, 1 from diarrhœa, 2 from erysipelas, etc. Twenty-six deaths from diseases of the respiratory system were registered; they comprised 13 from bronchitis, and 5 from pneumonia. The deaths of 10 infants under 1 year old were ascribed to convulsions. Two deaths were caused by apoplexy, 4 by epilepsy, 17 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis caused 29 deaths, mesenteric disease 8, and cancer 7. One accidental death was registered. In 30 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending May 29th, the number of deaths registered in the sixteen principal town districts of Ireland, was 403. The average annual death-rate represented by the deaths registered, was 24.3 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000. Armagh, 25.8; Belfast, 29.6; Cork, 14.9; Drogheda, 21.1; Dublin, 25.4; Dundalk, 17.5; Galway, 13.4; Kilkenny, 12.7; Limerick, 24.3; Lisburn, 19.3; Londonderry, 21.4; Lurgan, 15.4; Newry, 14.0; Sligo, 14.4; Waterford, 20.8; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts, were equal to an annual rate of 1.0 per 1,000, the rates varying from 0.0 in ten of the districts, to 5.1 in Lurgan; the 3 deaths from all causes registered in that district, comprising 1 from enteric fever. The 126 deaths from all causes, registered in Belfast, comprised 1 from diphtheria and 5 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 176. There were but 6 deaths from zymotic diseases registered in Dublin; they consisted of 2 from scarlet fever, 2 from whooping-cough, 1 from diphtheria, and 1 from enteric fever. Twenty-nine deaths from diseases of the respiratory system were registered; they comprised 7 from bronchitis, and 10 from pneumonia. The deaths of 11 children under 5 years of age (including 9 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 1 by epilepsy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis caused 36 deaths, mesenteric disease, 6; and cancer, 2. Five accidental deaths, and one case of suicide, were registered. In twenty-two instances, the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending June 5th, 363 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered, was 21.9 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 31.0; Belfast, 21.4; Cork, 21.4; Drogheda, 12.7; Dublin, 25.1; Dundalk, 17.5; Galway, 33.6; Kilkenny, 8.5; Limerick, 22.9; Lisburn, 4.8; Londonderry, 12.5; Lurgan, 10.3; Newry, 7.0; Sligo, 4.8; Waterford, 16.2; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts, were equal to an annual rate of 1.3 per 1,000, the rates varying from 0.0 in ten of the districts, to 8.5 in Drogheda; the 3 deaths from all causes registered in that district comprising 2 from measles. The 91 deaths from all causes registered in Belfast, comprised 1 from whooping-cough, 2 from enteric fever, and 4 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 177. Ten deaths from zymotic diseases were registered in Dublin; they comprised 3 from scarlet fever, 3 from whooping-cough, 1 from enteric fever, 2 from diarrhœa, etc. Thirty-two deaths from diseases of the respiratory system were registered; they comprised 24 from bronchitis, and 5 from pneumonia. The deaths of 10 children under 5 years of age (including 8 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by epilepsy, 1 by apoplexy, 14 by other diseases of the brain and nervous system (exclusive of convulsions), and 18 by diseases of the circulatory system. Phthisis caused 33 deaths, mesenteric disease 2, and cancer 2. Two accidental deaths and one case of homicide were registered. In 27 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears from statistics published in the Registrar-General's return for the week ending May 22nd, that the annual death-rate recently averaged 28.9 per 1,000 in the three principal Indian cities; it was 24.4 in Calcutta, 24.5 in Bombay, and 34.4 in Madras. Cholera caused 29 deaths in Calcutta, and measles 26 in Bombay; while "fever" was fatally prevalent in each of the three Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 29.5 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by so much as 1. the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 43.5, and showed a slight further increase upon the rates recorded in the two preceding weeks; the 773 deaths included 29 from "fever," 39 from measles, and 24 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 26.0, and ranged from 17.9 in Christiania, to 30.0 in Copenhagen; diphtheria and croup caused 5 deaths in Christiania, and 5 in Copenhagen; 5 deaths from scarlet fever occurred in Christiania, and 3 in Stockholm. In Paris, the death-rate was equal to 27.6, and exceeded by as much as 10.3 the rate that prevailed in London; the deaths included 35 from diphtheria and croup, 34 from measles, and 6 from small-pox. The 202 deaths in Brussels, of which 3 resulted from "fever" and 4 from measles, gave a rate of 24.1. The rate in Geneva was 28.1, and 2 deaths from whooping-cough were returned. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 22.1, being 20.9 in Rotterdam, 21.7 in the Hague, and 22.9 in Amsterdam; croup caused 4 deaths in Amsterdam, and whooping-cough 2 in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 29.6, and ranged from 22.7 and 23.7 in Berlin and Dresden, to 38.1 and 41.1 in Buda-Pesth and Prague. Small-pox caused 10 deaths in Buda-Pesth, 5 in Prague, and 2 in Vienna; diphtheria and croup were fatally prevalent in Berlin, Hamburg, and Vienna; and "fever" caused 8 deaths in Prague, and 7 in Buda-Pesth. The mean death-rate in three of the principal Italian cities was 29.8, the rates being 25.4 in Rome, 30.8 in Turin, and 37.2 in Venice; small-pox caused 5 deaths in Rome and 4 in Turin, and 21 deaths were referred to cholera in Venice. The death-rate was equal to 40.6 in Alexandria, and to 40.8 in Cairo; typhoid fever caused 26 deaths in Cairo, and 6 in Alexandria. In four of the largest American cities, the mean recorded death-rate was 24.9, the rates ranging from 21.1 in Baltimore to 26.4 in New York. Diphtheria was fatally prevalent in New York; scarlet fever caused 13 deaths in Brooklyn, and 7 in Philadelphia; and 20 deaths were referred to measles in Baltimore.

It appears from the Registrar-General's return for the week ending May 29th, that the annual death-rate recently averaged 26.4 per 1,000 in the three principal Indian cities; it was 21.1 in Calcutta, 24.3 in Bombay, and 30.2 in Madras. Cholera caused 23 deaths in Calcutta, and small-pox 24 in Bombay; "fever" mortality showed the largest excess in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 28.8 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no fewer than 11.4 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 39.6, showing a decline from the still higher rates in previous weeks; the 704 deaths included 74 from diarrhœal diseases, 86 from measles, and 26 from "fever." In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 24.7, and ranged from 21.0 in Christiania to 26.9 in Stockholm; diphtheria and croup caused 4 deaths in Stockholm, and 3 in Copenhagen. In Paris, the death-rate was equal to 26.2, and exceeded the rate in London by so much as 10.7; the deaths included 35 from diphtheria and croup, 29 from measles, and 20 from typhoid fever. The 187 deaths in Brussels, of which 6 were referred to croup, and 1 to small-pox, gave a rate of 22.3. The rate in Geneva was 23.0, and 3 fatal cases of whooping-cough were reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 22.8, the several rates being 19.9 in the Hague, 22.5 in Rotterdam, and 23.9 in Amsterdam; the deaths in Amsterdam included 6 from diphtheria and croup, and 5 from measles. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 30.0, and ranged from 23.7 and 24.1 in Berlin and Dresden, to 39.5 in Prague, and 42.6 in Buda-Pesth. Small-pox caused 13 deaths in Buda-Pesth, 10 in Prague, and 4 in Vienna; diphtheria showed the greatest mortality in Hamburg, Buda-Pesth, Dresden, and Berlin; and 8 deaths from "fever" were reported in Buda-Pesth. The mean death-rate in three of the principal Italian cities was 28.6, the rate being 27.3 in Rome, 28.2 in Turin, and 33.2 in Venice; 39 fatal cases of cholera occurred in Venice, small-pox caused 7 deaths in Rome and 4 in Turin, diphtheria and croup 8 deaths in Turin, and diphtheria showed more or less fatal prevalence in each of these Italian cities. The death-rate was equal to 48.5 in Alexandria, and to 44.3 in Cairo; typhoid fever caused 19 deaths in Cairo, and 5 in Alexandria, and the fatal cases of diarrhœal diseases were 55 in Alexandria, and 66 in Cairo. In four of the largest American cities, the mean recorded death-rate was 21.7, the rates ranging from 19.3 in Baltimore, to 25.3 in New York. Diphtheria and croup caused considerable mortality in New York, Brooklyn, and Philadelphia; and 11 fatal cases of typhoid fever were also reported in the last mentioned city.

It appears from the statistics published in the Registrar-General's return for the week ending June 5th, that the annual death-rate recently averaged 26.7 per 1,000 in the three principal Indian cities: it was 21.4 in Calcutta, 26.7 in Madras, and 29.5 in Bombay. Cholera caused 26 deaths in Calcutta, and diarrhœal diseases 36 in Bombay; "fever" mortality showed the largest excess in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 29.0 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no less than 9.0 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 34.7, but showed a further decline from the still higher rates in previous weeks; the 617 deaths included 70 from diarrhœal diseases, 32 from measles, and 25 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 28.6, and ranged from 22.2 in Christiania, to 32.9 in Copenhagen; diphtheria and croup caused 4 deaths in Christiania and 4 in Copenhagen, and scarlet fever 3 in Christiania and 2 in Stockholm. In Paris, the death-rate was 25.2, and exceeded the rate that prevailed in London by 9.7; the deaths included 32 from diphtheria and croup, 22 from measles, and 14 from typhoid fever. The 160 deaths in Brussels, of which 5 resulted from diphtheria and croup, and 3 from whooping-cough, gave a rate of 19.1. In Geneva the rate was equal to 18.7. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 21.4, and the rates ranged from 18.4 in the Hague to 22.8 in Amsterdam; in the latter city the 164 deaths included 12 from diphtheria and croup, and 3 from typhoid fever. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 31.0, and ranged from 21.2 in Dresden, and 25.0 in Berlin, to 34.6 in Breslau, 39.1 in Prague, and 41.5 in Buda-Pesth. Small-pox caused 16 deaths in Buda-Pesth, and 6 in Vienna and in Prague; diphtheria caused the greatest mortality in Hamburg and in Buda-Pesth, and diarrhœa in Berlin, Breslau, and Vienna. The death-rate was 28.1 in Rome, and 45.4 in Venice; the deaths in Rome included 10 from measles, and 13 from measles, and cholera caused 45 deaths in Venice. In Alexandria, the death-rate was 41.9, and in Cairo 50.4; diarrhœal diseases caused 48 deaths in Alexandria and 110 in Cairo, and the deaths in the

latter city also included 42 from typhoid fever. In four of the largest American cities, the mean recorded death-rate was 21.4, and the rates ranged from 17.8 in Philadelphia to 25.3 in New York. Diphtheria was more or less fatally prevalent in each of these American cities, and 22 deaths from this disease were reported in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

LLANGAFELACH (SWANSEA UNION).—Mr. Rice Morgan has been fully occupied since his appointment to this district in May, 1885. An epidemic of typhoid fever, affecting a large number of persons in and near Swansea, was a cause of considerable anxiety. After most careful investigation, Mr. Morgan arrives at the conclusion that the borough water-supply was the agent for the spread of the disease. He is supported in this opinion by the medical officer for Swansea, who had had a similar experience in a former epidemic of the disease in 1879. The presence of enteric fever in some cottages built on a slope near the upper end of one of the reservoirs supplying the town, and their condition as to drainage, led to the inference that, during heavy rainfall, the specific infection was washed down into it. The facts afterwards collected permit of no doubt on the subject. Mr. Morgan brings forward a conclusive chain of evidence to bear out his argument; and, acting thereon, every precaution was taken to check the spread of the disease. He strongly urges the purchase of houses within a certain radius of the reservoir, and advocates legislative interference, if necessary. Measles also visited the district in epidemic form. Mr. Morgan returns a death-rate of 16.5 per 1,000 for his six months of office.

PORTSMOUTH—Dr. Sykes's official connection with this borough has now terminated; but he will, at least, have the satisfaction of knowing that, during his tenure of office, he pointed out to the Council the defects of their sanitary armour. If they neglect his warnings, and exotic disease should, at any time, get access into this country through the unguarded gate of Portsmouth, the Town Council will have only themselves to blame. The most serious prevalence of zymotic disease during the year 1884 was of measles, which assumed an epidemic form, and caused 164 deaths. The notification of this disease not being compulsory, the sanitary authority could do little in the way of prevention. Dr. Sykes argues that, as it is propagated in a similar manner to the rest of infectious diseases, and is as amenable to preventive treatment, the same opportunities should be afforded for controlling its spread. Measles cost the borough 156 lives in 1882; it was responsible for serious mortality in 1884, and yet is regarded as a harmless disease, which everyone must have. The deaths from fevers and diarrhœa were below the average, though there was no lack of cases. The constant visitations of enteric fever are a great blot upon the sanitary administration. The soil has been polluted for years by faultily constructed cesspools, and these nuisance are still allowed to be perpetrated. The annual percentage of deaths is 10.8 of the cases occurring. Taking into account loss of time, cost of medical attendance, nursing, etc., Dr. Sykes estimates the cost of each case at £5. This, multiplied by 918, the average of cases, gives £4,590 as the annual waste of money on this one preventable disease. A map accompanying this report shows the incidence of enteric fever and diphtheria in the various subdivisions. In point of relative healthiness, Southsea stands out prominently from the rest, an excellent illustration of the advantages of compliance with sanitary laws. In other portions of the district, people die at the rate of 1 in 52, but in Southsea the proportion is 1 in 70, each year. There was a narrow escape from a a visitation from cholera, H.M.S. *Crocodile* arriving in port with three convalescents on board. They were immediately isolated in the Garrison Station Hospital. The general death-rate was 19.22 per 1,000, to which zymotic disease contributed 2.91.

POPLAR.—During the year ended December 31st, 1884, special attention was directed to the preventive measures required in view of the approach of cholera, and a list of these precautions is appended to the reports. They consisted mainly of the cleansing of courts and alleys, the disinfection of drains, a furthering, to the utmost, a constant water-supply, and the abolition of the storage-system. The fact that an unusually large number of eels, dead or decomposing, were found in the supply-pipes, suggests the advisability of boiling the water for drinking purposes. Dr. Corner gives a death-rate of 18.1 per 1,000, the lowest on record for the south or Poplar district; while Dr. Russell Talbot attests to the equally healthy condition of the north, or Bromley district, by the exceptionally low rate of 16.79. The zymotic mortality, in the latter district, was somewhat above that of Poplar. Scarlet fever, whooping-cough, and diarrhœa were most prevalent. Cases of small-pox were promptly dealt with, and Dr. Corner reports that, of 119 patients in his district, 91 were removed to hospitals. Both he and Dr. Talbot urge strongly the benefits of revaccination, and point out the inadequacy of the present system of public vaccination during an epidemic. The failure of their efforts to procure greater facilities in this respect, induced these gentlemen to take upon themselves this duty; and Dr. Talbot, in particular, gives instances where his prompt action was attended with beneficial results. Temporary inspectors were appointed for a house-to-house inspection, but an increase to the permanent staff would seem to be thought necessary.

ROTHERHAM.—In each of his last two annual reports for this borough, Dr. Hardwicke has been able to record a lower death-rate than for the preceding year. The rate per 1,000 from all causes, in 1883, was 20.56, and, in 1884, 19.2, being in each case lower than the average rate of the town for the previous ten years, and than the average rate of the twenty-eight large towns as published by the Registrar-General. This "steady and continuous improvement" in the general death-rate, although but small, and although, during 1884, zymotics produced a rate of 3.9 per 1,000, is looked upon with satisfaction by the health officer. Whooping-cough, scarlet fever, and enteric fever prevailed more or less throughout the two years, but not many particulars are given on the subject. It is very significant that the recommendations of the health officer, in his last two reports, are practically identical. "I have still to record the fact," he says, in his last report, "that we are unprovided with a public hospital and mortuary; also that the town is deluged with smoke, to the detriment of health and property." It is strange that a town council, having the supervision of the public health in a borough of about 35,000 persons, should so long delay the provision of hospital-accommodation, whilst the health officer has to record, in connection with infectious patients, "the case was removed to the workhouse."

DUBLIN.—In 1884, the deaths from all causes in this city were in the ratio of 29.96 per 1,000 persons. The rates in 1882 and 1883 were 27.2 and 31.52 respectively. Sir Charles A. Cameron finds a reason for the high death-rates in the fact, that Dublin contains a relatively larger number of poor and under-fed persons than any of the more prosperous towns of England. The greatest mortality caused by any zymotic disease in 1884 was due to diarrhœa, 268 deaths being registered from that disease and from dysentery. Scarlet fever assumed an epidemic form both in 1883 and in 1884, though the number of fatal cases was not unusually large. Typhus fever killed 75 persons. Sir Charles Cameron exhibits, by means of charts, the weekly progress of the various zymotic and pulmonary diseases. Special attention is directed to the relation existing between cold and the mortality from diseases of the respiratory organs. It is noticeable that a fall in temperature in the spring months is more fatal than in the later months of the year. Sir Charles Cameron displays great vigour in dealing with the houses of the working classes. In 1882, a sanitary survey of all the houses in the city was made. It was found that, of the 24,211 inhabited houses, 7,234 were occupied by two or more families; and, of the 54,725 families residing in Dublin, no fewer than 32,202 lived in these 7,234 houses. People of all ages and both sexes were found huddled together in single rooms. Great efforts are being made to improve the condition of these tenement-houses. Numbers have been permanently closed. The Corporation cleared two areas at a cost of more than £51,000, and these have been laid out in streets and new dwellings, constructed by the Artisans' Dwellings Company. In no city in the empire have so many unhealthy houses been closed under the Public Health Act. The improvement in the state of the public health has been considerable; but much has yet to be done before the sanitary state of Dublin can be regarded as anything but extremely unsatisfactory.

THE MARY WARDELL CONVALESCENT HOME.—At the first annual meeting of the Mary Wardell Convalescent Home for Scarlet Fever Patients, held on June 18th, at 32, Sackville Street, Piccadilly, Sir J. Risdon Bennett, who presided, in referring to the report, called attention to the fact that the frequent recurrence of epidemics of scarlet fever could only be averted by the isolation of the convalescents from the healthy during a period of several weeks after the acute stage had ceased. In London, there were annually about 20,000 infectious convalescents in contact with the healthy among the population, each one of whom might infect an unlimited number of those with whom they were casually brought into association. There was, he observed, but one practical remedy for this ever-recurring danger—the establishment and maintenance of institutions like the Mary Wardell Home at Brockley Hill, Stanmore. Sir Risdon Bennett remarked on the great usefulness of the Mary Wardell Home, and spoke in terms of high commendation of the sanitary and other arrangements. Sir Edward Sieveking moved the adoption of the report, and added his testimony to the great value of this Home.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, June 18th, 1886.

MEDICAL ACTS AMENDMENT BILL.

[SPECIAL REPORT TO THE BRITISH MEDICAL JOURNAL.]

ORDER for the Second Reading read.

Earl SPENCER (Lord President of the Council): The Bill which I have the honour to present to your lordships does not refer to a subject new to this House; in fact, the subject of the amendment of the Medical Acts has been before Parliament in an enormous number of Bills. There has been twenty-one or twenty-two since 1870. All these measures have not been before your lordships; but, at the same time, there have been many occasions when your lordships have seen fit to pass a Bill on the subject. In 1870, the First Lord of the Admiralty (the Marquis of Ripon), when he held the office I now have the honour to hold, introduced a Bill for this purpose. That Bill was well recommended, but it was withdrawn or lost in the House of Commons owing to the opposition of those who claimed that there should be a direct representation on the Medical Council of the medical practitioners throughout the United Kingdom. After that, in 1878, a measure on the subject was introduced by the noble duke opposite (the Duke of Richmond and Gordon). My noble friend carried that Bill through your lordships' House, but it failed to receive the assent of the other House of Parliament, owing, I believe, to the lapse of time. There was not sufficient time to carry it. In the succeeding year, another Bill was proposed and passed your lordships' House. That was referred to the Select Committee over which the late Mr. W. E. Forster presided in the House of Commons. In 1880, another Bill was introduced and referred to the same Committee. After that, as your lordships know, Parliament dissolved; consequently, that Bill fell to the ground. I had the honour to hold the office I now hold in 1880 and 1881, and, in the latter year, I recommended the appointment of a Royal Commission on this subject. Her Majesty was pleased to appoint the Commission, and my noble friend (Lord Camperdown) very ably presided over it. It was composed of very able men, and they made a very exhaustive report. On certain particulars, there was considerable difference of opinion, but, at the same time, the evidence they took and the strong opinion formed by the majority of the Commissioners in favour of direct representation, enabled the Government to propose a Bill which, for the first time, contained provisions for the direct representation of the medical profession on the Council. That Bill was introduced by Lord Carlingford. It passed your lordships' House, but it failed to pass in the House of Commons. In 1884, the same Bill went through the same process. Last year, no Bill was presented on the subject, but this year my right hon. friend, the Vice-President of the Committee of Council on Education (Sir Lyon Playfair), who had very great advantages in dealing with this subject, introduced a measure in the House of Commons, and succeeded in passing it through it various stages. I believe that that is the first time that a Bill on this very difficult subject has been carried through the House of Commons, and I think that credit is due to my right hon. friend for the skill and ability with which he conducted the measure. My lords, that is the Bill which I now have the honour to propose to your lordships. The subject is one which very much needs legislation. There has been, for a long while, very great uncertainty with regard to the whole subject of medical education and examination. So much doubt has existed on the subject, that considerable difficulties have arisen in the profession. Your lordships may well conceive that when a subject of this sort is constantly being brought up for legislation, and no action is taken, it greatly disturbs and affects injuriously the medical profession, particularly with regard to education, and the consequent examinations. My lords, at the present moment I believe there are somewhat over 16,000 medical practitioners in the United Kingdom. They receive their licences from a very great variety of bodies, 19, I think, in all. These bodies give them certificates, and enable them by those certificates to be registered on the general roll or register of medical practitioners in the country. In order to get on that roll it is not necessary to pass through medicine, surgery and midwifery, but it is necessary to get a certificate either for one or the other, and the consequence is, that no one knows, when he sees a medical practitioner in his neighbourhood, whether he has a certificate for medicine, or whether he has only one for surgery. In that way very great difficulty often occurs, and great inconvenience arises. The bodies who give these certificates are the universities in the three kingdoms; they have power to give certificates, both in medicine and surgery. There are other corporations, such as the College of Physicians in London, and the College of Physicians in Ireland, the College of Surgeons in London and Ireland, the same in Edinburgh and Glasgow. I believe the College of Physicians in London do claim the privilege of giving certificates both in medicine and surgery, but some of the other corporations have not that power. Now this Bill has steered clear of some of the difficulties which have wrecked other Bills before. It embraces the points which are admitted to be of very great importance, but on which there is practical agreement in the three kingdoms. One principle of the Bill requires that, before anyone can be registered as a medical practitioner, he should get a qualification in the three subjects—medicine, surgery, and midwifery. That is one of the fundamental principles of the Bill, and I need hardly point out of what great importance that principle is. Some difference is made with regard to those who may issue the certificates. They may be issued by the universities, and they may also be issued by the corporations which are capable of giving the three qualifications; but we have a further provision, that the corporations may unite, and, when they unite, they may give the necessary qualifications. There are cases where there would be some difficulty in one of those bodies getting another body to unite with them. For instance, there would be a difficulty in the Apothecaries of London getting the consent of the College of Physicians to unite with them, or in getting the consent of the College of Surgeons to unite with them, for the purpose of holding an examination. In that case, the Bill proposes, when they have endeavoured to get a corporation to unite with them for the purpose of one of these examinations, and have failed, that the Medical Council may send an examiner, who may assist them in carrying out one of these necessary qualifying examinations. Another point is with regard to maintaining the standard of efficiency in the medical examinations held by these various bodies. That is an exceedingly important matter, and it is one on which there has been great difference of opinion in former days. Those who are acquainted with the subject will remember what is called the one portal through which those who wished to get certificates had to pass; the meaning of that being, that there was to be only one body giving the certificates. There was great difficulty in carrying that out. Under the present Bill, we have enlarged the powers both of the Privy Council and the Medical Council as to examinations. The Medical Council will be required, after this Bill becomes law, to send examiners to the different examinations, in order that they may report to them that the standard of examinations is full and sufficient. If they say that any of the bodies that have the power of giving these diplomas do not have a sufficiently high standard for these examinations, then the Medical Council, with the approval of the Privy Council, may disqualify those bodies hereafter from giving these diplomas. The Privy Council has also power, in case of the default of the Medical Council or other bodies of exercising the greater power of disqualifying them for giving these privileges. There is one important matter dealt with in this Bill, the constitution of the General Council. It is proposed that there should be five members of this Council, directly selected from the general body of practitioners in the United Kingdom. Three will be elected from England, one from Scotland, and one from Ireland. That, my lords, is a very important matter. It is a thing which the general practitioners throughout the country have long contended for. It seems to be a very just principle that these gentlemen who are so powerful a body, and exercise such important duties throughout the country, should have some direct representation on the Central Medical Council, which regulates and superintends medical education throughout the United Kingdom. That is an important change in the Medical Council, and, besides that, changes are made as to Scotland. At the present moment, there is a representative from Edinburgh and Aberdeen, and another from Glasgow and St. Andrew's. We propose now that Edinburgh and Glasgow should each have a separate representative on the Council, and that Aberdeen and St. Andrew's should have one conjointly. Then there is an important provision in the Bill as to the registration of colonial and foreign practitioners. The Bill gives power to the Privy Council to advise Her Majesty when she thinks fit to allow practitioners, both in the colonies and foreign countries, to practice in this country, provided there is reciprocity on their part of allowing practitioners registered in the United Kingdom to practice in those colonies or foreign countries, whichever it may be. Powers are given for the examination of the different bodies who give diplomas in those colonies or foreign countries, and the Medical Council, with the leave of the Privy Council, may decide whether the different bodies in those countries who give diplomas keep up a sufficiently high standard, and whether the medical men they send out have a sufficiently sound qualification to entitle them to practice. There are certain other provisions, but I do not think I need refer to them now. They are

not very great matters of principle, though they are important to those to whom they refer. As I have said before, this Bill is not a very long one, nor is it one that involves any very new principle. We hope that it may receive as much approval in this House as it has elsewhere; and, if it passes into law, I cannot help thinking that we shall have done a great deal to settle a long vexed question which has disturbed the medical and surgical world in this country. We hope that it will put the practice of medicine and surgery on a sounder footing, and that it will benefit the members of the profession to whom, of all people in this country, we all owe so much. I beg to move the second reading of this Bill.

The Duke of RICHMOND and GORDON: I do not wish to offer any opposition to the second reading of the Bill; indeed, I congratulate my noble friend on having arrived at a point, in dealing with this question, at which I have arrived myself on two occasions, although I am sorry to say I have never finally succeeded. Legislation on this subject has been attempted twenty-two or twenty-three times. Some of the measures which have been brought forward may have been of a more extended and larger character than the Bill now under discussion, and may have embraced a greater variety of topics. I believe that the provisions of the Bill have been very well considered in the other House of Parliament. I quite agree with my noble friend that the difficult task of carrying it through the House has been performed by the Vice-President of the Committee of Council on Education with great skill and ability; and I have no doubt that, if the measure is passed, it will be successfully carried out. I am not going over the points or various clauses of the Bill, because I may say that I generally agree with the details of the Bill; but there is one point on which I wish to give notice, and that is on Clause 7, which deals with the members of the General Council. I wish to intimate that, in Committee, I intend to move an amendment which, if carried, will have the effect of allowing the University of Aberdeen and the University of St. Andrew's each to elect a member on the Council. I need not explain the matter more fully now; I will do so when we go into Committee on the Bill.

The Duke of ARGYLL: I only wish to say that I shall support the proposal of my noble friend opposite. He acts for the University of Aberdeen, and I shall act for the University of St. Andrew's. This is the only case in the Bill in which two universities are tied together in order to make one appointment. In the Bill as it originally stood there were more duplicates of that kind—that is to say, cases in which two public bodies were associated together for the election of one member; and, if I understand the matter aright, the change which has been made in the Bill was made in the House of Commons, chiefly on the influence of the Irish members. They were disposed to complain that, if the Bill passed as it originally stood, the Scotch universities would have appointed more members than the Irish universities. As the Bill stands, the Irish bodies will each appoint one member, and there will be five in all; whereas, from Scotland, there will be two universities associated in an election, and we shall have on the whole three, instead of five. I do not think the Irish members will have anything to complain of, if the Lord President allows the University of Aberdeen and the University of St. Andrews to make appointments severally, instead of collectively. I think we have a right in this matter to complain of the interference of the Irish members with the fair claims of Scotland; still I am not inclined, as my noble friend is, to sweep the Irish members entirely out of Parliament.

The Earl of MILLTOWN: I wish to point out to the noble Duke (Argyll) that if this proposal is adopted, Scotland will have seven representatives from the corporations. It is proposed to give it six, namely, one from the College of Physicians at Edinburgh, one from the College of Surgeons of Edinburgh, one from the Faculty of Physicians and Surgeons of Glasgow, one from the University of Edinburgh, one from the University of Glasgow, and one from the Universities of Aberdeen and St. Andrew's. Ireland is only to have five, namely, one from the King and Queen's College of Physicians, one from the Royal College of Surgeons, one from the Apothecaries' Hall, one from the University of Dublin, and one from the Royal University of Ireland.

The Duke of ARGYLL: Oh, yes, I see my mistake.

Earl SPENCER: Whether the alteration which was effected in the Commons was right or not I cannot say, but I am afraid there would be considerable difficulty in rearranging these representatives. I would point out to the noble duke (Richmond and Gordon) that, under the old state of things, Glasgow and St. Andrew's Universities were linked together, as also were the Universities of Edinburgh and Aberdeen. The principle of linking two universities together, therefore, is not a new one. Instead of having four bodies linked together, in the present Bill we only link two.

The Bill was then read a second time.

Tuesday, June 22nd.

Their lordships went into Committee on the Medical Acts Amendment Bill.

Clauses up to and including Clause 6 were agreed to, with verbal amendments, for the purpose of making the sections clearer.

Clause 7 (Members of General Council).

The Duke of RICHMOND and GORDON: I rise for the purpose of proposing an amendment to this clause, respecting the Universities of Aberdeen and St. Andrew's. Since I gave notice of this amendment, I find that the mode in which I propose to deal with the matter is not the proper way; therefore, I shall make my proposal in a form other than to omit the words "one person chosen from time to time by," in line 3 of page 5, and the word "collectively," in line 4. I confess I am very much astonished to find my noble friend the Lord President treating the University of Aberdeen in the manner in which he proposes to treat it in the Bill, by bracketing it with the University of St. Andrew's. Of the University of St. Andrew's I desire to speak in the most respectful terms, and I leave the merits of the University, and all the good which belongs to it, confidently in the hands of the noble duke (Argyll), who stated the other evening that he should have an amendment to move in Committee in regard to that University. I say I am astonished to find that the noble earl has joined the University of Aberdeen with the University of St. Andrew's. This is the only case in the whole of the Bill, as now presented to us, in which two universities are joined together. It is true that the Universities of Durham and Manchester were originally put together, like Aberdeen and St. Andrew's, and, I must say, it seems to me somewhat odd that the Victoria University in Manchester, which, if I mistake not, only received the Royal Charter in 1879, should be taken out of the union with the Durham University, whilst the Aberdeen and St. Andrew's Universities are to remain linked together. The Victoria University, as I say, only dates back as far as 1878, whilst the University of Aberdeen was founded in the year 1494. The course the Government propose I look upon as a slight put upon both of them, which neither deserves. The Manchester Medical School is still in embryo. It may turn out in time to be a very excellent teaching university, but it is conceded on all hands that there is no better medical school in the United Kingdom than that which exists in the University of Aberdeen. I do not say it is better, but it is as good as the school of the University of Edinburgh. The result of the teaching in the University of Aberdeen is shown in the eminence of some of those who have been educated in it. I refer to such men as Sir James Clarke, Dr. Matthews Duncan, and Sir Andrew Clark. And yet this is to be dealt with in the manner I have described—the only university that is to be so dealt with. The charter of this University as to the right to medical degrees is more specific, is quite as great, if not more so, than that of any other Scotch University. I cannot conceive what can have induced the right hon. gentleman the Vice-President of the Council to cast a great slur on the University of Aberdeen, of which I have the honour to be Chancellor. I cannot bring forward better arguments than I have adduced to your lordships. It seems to me to be a most extraordinary thing to take the course proposed; therefore I beg to move to leave out lines 3, 4, 5, and 6, on page 7; to leave out the words "One person chosen from time to time by the University of Aberdeen and the University of St. Andrew's collectively; one person chosen from time to time by each of the following bodies," in order to insert the words "The University of Aberdeen," and "The University of St. Andrew's." There will be a consequential amendment to that if your lordships agree to it.

The Earl of MILLTOWN: I hope your lordships and Her Majesty's Government will not assent to the amendment proposed by the noble duke. Nothing can be further from my mind, or the mind of those who framed this clause than a desire to cast a slur on the university that the noble duke so admirably represents in your lordships' House; but, as a matter of fact, this clause as to the composition of the Medical Council is the result of a compromise. It bears upon a question, which has been fought over and over again, as to how many members should be contributed by the three portions of the United Kingdom; and, as the matter stands now, England contributes eight members, Scotland six, and Ireland only five. I assure your lordships that the Irish bodies were very reluctant to yield the palm even to that extent to Scotland, but now that they have done so, I trust your lordships will not disturb the arrangement that has been arrived at. If the amendment is adopted, the result will be that representatives of England will be eight, those in Scotland seven, and those of Ireland only five, a result which I am quite sure will not satisfy the Irish bodies, and which will be very likely to cause the wreck of the Bill in the House of Commons. As

to the number of University members, I may remind your lordships that, as the Bill now stands, there are five University members for England, three for Scotland, and only two for Ireland. If the noble duke's amendment be carried, there will be four University members for Scotland, and only two for Ireland, which will be extremely unfair. Scotland has a large number of Universities, and that, no doubt, has caused the great difficulty which has arisen, but the aggregate number of representatives that country now has is considerably more than those for Ireland. If this amendment be carried, I shall ask your lordships to increase the number of representatives of the Dublin University from one to two.

The Duke of ARGYLL: I do not think this should be treated as an international question. I can assure the noble earl that I should not object to Ireland having a dozen members on the Medical Council if she had as many bodies qualified to examine. It is entirely a question in each kingdom of the number of universities, and other bodies, who are capable of exercising the duty; and if it so happens that Ireland has fewer than Scotland, it does not seem to me that the matter is one that should be considered. Nationality has nothing to do with the question. I do not see why the two ancient Universities of Aberdeen and St. Andrew's should be coupled together in this way.

Earl SPENCER: I am afraid I am not able to accept the amendment of the noble duke, as it is likely to give a great deal of dissatisfaction, and to raise difficulties and objections which have been set at rest. The noble duke has stated that I have shown a great want of respect to the University of Aberdeen and the University of St. Andrew's. I am sure I have no desire to do anything of the kind. If I have shown any want of respect to the University of Aberdeen, the noble duke himself, in former years, may not have been so entirely innocent of the same fault. In two Bills, the noble duke proposed, and, I believe, in a speech on one of them, he proposed that Aberdeen should be linked to St. Andrew's. I therefore do not think I have shown any special want of respect to Aberdeen—certainly not, when I find that the noble duke (Richmond and Gordon), who, I believe, if Chancellor of the University, on a similar occasion, followed the same course. On that question of respect, I would point out that Aberdeen University never had independent representation. It has always been linked with another university. I believe that, under the plan proposed in the Bill, Aberdeen University would be in a much more favourable position than formerly. No doubt, very distinguished medical men have come from the Aberdeen University, as they have also come from the University of Edinburgh. I do not think there is any want of respect on our part in linking the two universities together. With regard to what has fallen from the noble duke behind me (Argyll), who was so extremely liberal as to nationality, and would be so glad to see as many Irish representatives on the Council as there are universities or medical corporations in that country, I am afraid there are not many Scotchmen, who are interested in this matter, who will share the noble duke's opinion. The fact is, there has always been a great controversy on the part of those who represent the different divisions of the United Kingdom on the General Council as to what their numbers should be, and I am afraid that feeling would still remain if we adopted this proposal. If we adopt it, England will have fourteen representatives, Scotland nine, and Ireland seven. It will destroy the proportions, and it will also destroy the balance there is between the corporations and the universities, and that, again, is a matter to which considerable importance is attached. There is a matter I wish particularly to point out to the noble duke opposite. There is an important section in the Bill which gives elasticity in regard to the constitution of the Medical Council. It enables the Council, at any future time, to increase the direct representation from any country, or, if it considers that the universities linked with each other should have separate representatives, it enables the Privy Council to give those universities separate representation. Now, that I consider a very important matter, and I hope the noble duke (Richmond and Gordon) will consider it, and will adopt the view that it gives sufficient power, if thought desirable, to enable the University of Aberdeen to have separate representation. I am afraid I shall have to trouble your lordships to divide on this question, as it is one of very considerable importance, and I do not know what the effect of accepting the amendment might be.

Lord DE ROS did not think it would be wise to alter the Bill in the manner proposed, and jeopardise the first Bill which had had a good prospect of becoming law. He trusted the amendment would not be pressed.

The Duke of RICHMOND and GORDON said he should have to ask their lordships to divide. As far as he was concerned, it did not matter much whether there was a member or two more on the Council. It did not matter a great deal whether there were twenty-nine or thirty on it.

Their lordships then divided, with the following result:—

Not contents (for the amendment)	44
Contents (against the amendment)	41
Majority for the amendment	3

The amendment was, therefore, agreed to, lines 3, 4, 5 and 6, on page 6, being struck out, and the words, "The University of Aberdeen" and "The University of St. Andrew's" inserted.

A consequential amendment was also agreed to.

Several other alterations of an unimportant character were agreed to without discussion, and the Bill passed through Committee, and was ordered to be reported to the House.

Tuesday, June 22nd.

In the House of Lords on Tuesday, the report of the amendments made on the Medical Acts Amendment Bill was, on the motion of the Earl of Dalhousie, received, and the Bill was ordered for third reading.

Wednesday, June 23rd.

On Wednesday the Bill was read a third time and passed, on the motion of the Earl of Dalhousie.

HOUSE OF COMMONS.—Thursday, June 24th.

THE Lords' Amendments were considered and agreed to, and the Bill will receive the Royal assent to-day (Friday).

NAVAL AND MILITARY MEDICAL SERVICES.

GENERAL PRENDERGAST'S DESPATCHES.

THE General Order, issued by the Medical Department at Simla on May 14th, relative to the recent field operations in Burmah, is published in the *London Gazette* of June 22nd. In our last issue, we briefly noticed those portions having special reference to the medical officers engaged in the campaign.

Deputy Surgeon-General J. M. Donnelly (says General Prendergast in his despatch), as Principal Medical Officer of the Forces, has organised and administered the very efficient hospital arrangements, afloat and ashore, to my satisfaction.....Surgeon-Major C. Sibthorpe, in medical charge of the Head-quarters' Staff, has shown himself always ready to afford any professional or personal assistance in his power.

MEDICAL STAFF.

Surgeon-Major H. WAGHORN, serving in the Bombay command, has leave of absence for six months on urgent private affairs; Surgeon-Major D. B. BROWN also serving in the Bombay command, has leave for six months on medical certificate.

Brigade-Surgeon W. COLLIS is appointed to the administrative medical charge of the Peshawur district, in anticipation of his promotion, *vice* Deputy Surgeon-General W. H. Corbett, M.D., deceased.

The undermentioned gentlemen, serving in the Madras command, are posted as follows: Surgeon-Major P. L. KILROY, doing duty at the station hospital, Bangalore, to be Senior Medical Officer at the station hospital, Bellary; Surgeon-Major J. MARTIN, doing duty at the station hospital, Secunderabad, to be Senior Medical Officer at the station hospital, Madras; Surgeon D. R. HAMILTON, M.B., doing duty at the station hospital, Bellary, to do general duty in the Eastern District.

Surgeon-Major T. H. WHITE, M.D., is promoted to be Brigade-Surgeon, *vice* G. S. Davie, M.D., who has been granted retired pay. Dr. White, who is at present serving in Bengal, entered the service as Assistant-Surgeon, January 19th, 1860; became Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1875. He has no war-record.

Surgeon S. L. O'NEILL has resigned his commission, which dates from February 3rd, 1878. Mr. O'Neill was engaged in the recent campaign in the Soudan, and was present in the engagements during the return of the Desert Column to Korti, and was slightly wounded (medal with clasp).

THE INDIAN MEDICAL SERVICE.

THE services of Surgeon R. H. CHARLES, M.D., Bengal Establishment, Garrison Surgeon at Attock, are permanently placed at the disposal of the Government of the Punjab.

Surgeon-Major A. STEPHEN, M.B., Bengal Establishment, is appointed to officiate as Sanitary Commissioner of the Punjab, during the absence of Surgeon H. W. Bellew on leave.

Messrs. H. R. WOOLBERT, G. H. BAKER, T. GRAINGER, M.D., J. R. ADIE, A. C. YOUNAN, A. W. ALCOCK, A. R. EDWARDS, and J. M. CADELL, appointed Surgeons to the Bengal Establishment, reported their arrival at Bombay on April 27th.

Surgeon-Major C. J. M. MEADOWS, Bengal Establishment, is appointed Honorary Surgeon to the Dacca Volunteers, *vice* Surgeon-Major A. Crombie, M.D., who has resigned that appointment.

Surgeon J. C. LUCAS, M.D., Bombay Establishment, is transferred from general duty Mhow Circle, to field service, Burmah.

Department, from the date on which he is relieved of his appointment under the Government of Bengal.

Surgeon R. J. TAAFFE, M.B., Bengal Establishment, is permitted to resign the service from May 18th; his rank as Surgeon is dated March 31st, 1877.

Surgeon E. S. BRANDER, Bengal Establishment, is directed to officiate as Civil Surgeon of Rawul Pindee, *vice* Surgeon-Major G. Massy, on sick leave.

Surgeon G. T. THOMAS, Madras Establishment, on special duty in the Rangoon Central Gaol, is appointed to the executive and medical charge of the gaol, during the absence of Surgeon M. Gaisford.

Surgeon A. G. E. NEWLAND, Madras Establishment, is appointed to the officiating medical charge of the 20th Native Infantry.

Surgeon-Major P. MURPHY, M.D., Bombay Establishment, Superintendent of Mahableshwur in the district of Satara, is appointed to be a magistrate of the second class in the district of Satara.

Surgeon-Major J. ARNOTT, M.D., Bombay Establishment, is ordered to act as Surgeon Goculdass Tejpal Native General Hospital during the absence of Brigade-Surgeon H. V. Carter, M.D.

Surgeon-Major C. F. OGILVIE, Bombay Establishment, is appointed to the officiating medical charge of the 1st Bombay Lancers, *vice* Surgeon G. H. Bull, M.D., appointed officiating Staff-Surgeon, Poona.

The undermentioned gentlemen, whose retirement has been already announced, have been granted a step of honorary rank:—Brigade-Surgeon JOHN HOUSTON, M.D, Madras Establishment; Brigade-Surgeon CHRISTOPHER JOYNT, M.D., Bombay Establishment; Surgeon-Major R. T. LYONS, M.D., Bengal Establishment, and Surgeon-Major J. C. WHISHAW, M.D., Bengal Establishment.

The undermentioned gentlemen have obtained leave of absence for the periods specified:—Surgeon-Major R. POWER, M.D., Madras Establishment, 12th Native Infantry, for one year from date of landing in Europe on medical certificate; Surgeon M. Gaisford, Bengal Establishment, Superintendent of the Rangoon Central Gaol, for three months on privilege leave.

Surgeon and Honorary Surgeon-Major JOHN BURNS, of the 3rd Lancashire Volunteers, has resigned his commission, which dates from July 3rd, 1867.

Surgeon and Honorary Surgeon-Major JOHN FRASER, M.D., of the 3rd Volunteer Battalion of the South Staffordshire Regiment (late the 4th Stafford Volunteers), has also resigned his appointment, which is dated January 1st, 1873. He is permitted to retain his rank and uniform.

SOME INTERNAL WEAK POINTS IN THE ARMY MEDICAL DEPARTMENT SYSTEM.

SIR,—May I invite attention to what seem to me to be some internal weak points in the Army Medical Department organisation?

1. *Deputy Surgeon-General on Home Service.*—These officers, who should be our best men, are very seriously handicapped by being constantly changed. A deputy surgeon-general goes to India for five years, or to other foreign states for three years; but in England they are being perpetually changed. As a result, they disclaim responsibility, and seem to me to be the least responsible officers in our service. The intense centralisation of our service, worse, as far as I can see, than in any other branch of the army, makes them mere machines for forwarding letters. One deputy surgeon-general called himself "a mere post-office;" another said, "he is only a clerk." The central office in London does everything, the local officers have neither power nor responsibility. We can never develop efficient officers until we decentralise in the fullest way, and throw on the district officers full responsibility. Owing to the central medical office doing all the work, we are afraid to complain in any way, as the least complaint or suggestion would be a reflection on the head-quarters administration. It seems absurd to see a head-quarter office burdening itself with unimportant matter which could be well dealt with locally. When the strain of war comes, men so enfeebled in peace by want of responsibility, will be unable to rise to the occasion.

2. *Secretaries or Staff-Officers to Districts.*—At almost all stations, our Deputy Surgeons-General have now no officers acting as secretaries or staff-officers in their office. Sergeants deal with our most confidential reports and correspondence, and the Medical Service, as a result, produces no trained staff-officers for war. There is a great want of confidence in the sergeant-clerks, and many stories are afloat as to their being venal. It is fatal to our *morale* to think that the most confidential letter can be talked about in the sergeants' mess by any clerk. In war time, we have no trained secretaries to assist in the offices or in important posts. How the Director-General chooses such men for war nobody knows. It must be a complete fluke, as officers are not being trained in peace for it. Look at Dublin. The office of the Principal Medical Officer of Ireland is not managed by a medical officer, but by a civil clerk, who never goes to war. The training such an office would give, or should give, would be very useful to any officer; now it is all lost in a civilian who is a permanency. While we are all called wrongly "staff officers," we really are destitute of a true staff, and how can we become really efficient? The whole aim of the future is to develop a real "staff" for the medical service, chosen men picked from amongst our numbers.

3. *Sanitary Officers for War.*—How does the Director-General choose such officers for war? He has no one really in training in peace. The sanitary officers at our larger garrisons take no share in the statistical work, and hence lose the important experience such knowledge would give them. How are the statistical officers for the Director-General's office chosen? It must be by a fluke, as there is no one in training in the district. What is the remedy? Make every sanitary officer compile the district statistical reports, as well as the sanitary reports, and copy the head-quarter office, where sanitary and statistical work is combined under one head. Decentralise the head-quarter work. Is there in any garrison an analytical laboratory, or any microscopic testing of food or supplies? Have we produced one single sanitary authority of real eminence since Parkes died, save De Chaumont? We get no chance of producing such men, as all statistical work is centralised in London, and all sanitary work is based on that. At Netley only is there an analytical laboratory or microscope-room.

4. *Instructors for the Medical Staff Corps.*—Have we, anywhere, officer instructors for the Medical Staff Corps in training? Answer, Nowhere. The other day, when one was needed at Aldershot, an officer who had never been through the regular course was chosen, and it was a good choice. But it was a chance, and chance is bad; we want certainty. It is not fair to ask chance officers, changing daily, to undertake training instructions in our garrisons. We need to have at every divisional head-quarters, a definite "instructor," told off to do this work, in addition to his other duties, say for six months at a time; and his class should be examined by some outside person; and, if it were well taught, and the men knew their work, he should be commended, and eventually made instructor at Aldershot, or adjutant of volunteers, or such like, as vacancies occurred. The centralisation of the Aldershot instructions is intense, and highly injurious to us all. Its curriculum should be distributed far and wide, and regular courses of instruction given at every district head-quarters by one definite teacher. It is well known that teaching is an art which few men possess. The local deputy surgeon-general should be made completely responsible for all this definite instruction, which is greatly needed, as the Aldershot course is far too short to teach the medical staff corps men either discipline or technical knowledge. There is no syllabus for a distinct nursing course, nor any distinct grade of male "nurses," although cooks are specialised. We need a regular grading of nurses, with definite nursing title, running up through "assistant nurses," to "nurses," "chief nurses, or wardmasters," and "superintending nurses," or sergeant-majors.

Centralised Mobilisation.—Owing to our terrible system of centralised mobilisation, by which all our bearer-companies and field-hospitals are tied up at Aldershot, we know nothing of the *personnel* of the units given us in the field. Every local deputy surgeon-general, or principal medical officer, should mobilise either half or the whole of a bearer-company or field-hospital locally, so that we may know who the rascals are, and who are the good men; and if the men be undisciplined and ill-taught, we can then hang the principal medical officer from whose district they come. To-day, the deputy surgeons-general have no responsibility for mobilisation, and it all falls on the staff-officer or depôt commandant. In any big war it would fail; in every war it is hopelessly bad, and favours the bad drunken orderlies who are not known by a central mobilisation. Once mobilised locally, the detachment, as a detachment, could go to Aldershot as the nucleus of the field-hospital. Nothing strikes at our efficiency more than this highly centralised mobilisation. We know nothing whatever of the men; and at Aldershot a regular mixture of officers and men is made, without any principle whatever. It should be, at any rate, a standing order that all officers and men of the same peace-division of the Medical Staff Corps, should be kept, as far as possible, in the same field-units. The true way is to direct the local deputy surgeon-general to send so many officers and so many men, organised as a team, to Aldershot, and let them be kept together as a team, there and throughout the campaign.

Who Inspects the Deputy Surgeons-General?—Answer, practically nobody. Hasty visits by the Director-General or the Surgeon-General at head-quarters are not real inspectors. A regular inspector-general, reporting to the Director-General, is what is needed. The Royal Artillery has such an officer; and we would be benefited by such an officer teaching us and inspecting us. I suppose the Portsmouth surgeon-general could be replaced by a deputy surgeon-general, and the surgeon-general made inspector-general. He would be just as available for war-service, or any other general duty, and would learn a great deal himself.

Military Law.—It seems strange that, in the examinations of surgeons for surgeon-major, no mention is made of military law, which subject is very important to all military officers. Ignorance of its principles has done great injury to the medical service in the past. Why not introduce the subject? Again, why are not these officers practically examined, before promotion, in the drill and field work of the Medical Staff Corps? or how comes it that a young surgeon-major can boast at an Aldershot mess-table that he knows nothing whatever about such drill? Make it part of the curriculum for examination, and such a boast will be heard no more. It is on this class of officer, namely, surgeon passing to surgeon-major, that the fullest stringency of examination should fall, as it is on them that the heaviest weight of army-work falls. Finally, we have no "staff," in its true sense, for the medical service; while we are all a sham "staff," the real article does not exists, and we suffer in consequence. Mediocrity was, in the past, our curse, and has left the medical service of the army without any high reputation. We can never rise to anything without "specialisation," and that we do not develop because we are completely centralised in the London office. The fullest, freest measure of decentralisation is our need, and it would cost very little.—Yours, etc., I.V.R.C.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL ETHICS IN OBSTETRIC PRACTICE.

SIR,—I am anxious to have your opinion of my conduct in the following case. I was called, on May 31st, to see a woman in labour. The waters had broken eighteen hours before, and she had been in labour about five hours. I immediately diagnosed a shoulder-presentation. My patient was a young, nervous, and sensitive woman. I informed the friends of the nature of the case, and sent a messenger for a medical man, to give chloroform while I turned. This gentleman not being at home, another practitioner, Dr. X., was called in. On his entering the room, I explained the nature of the case. He remarked, "You do not require chloroform for that," and, ignoring my presence from that moment, assumed the control of the case. The operation of turning was performed, and the child was delivered alive; but, although artificial respiration was kept up by the operator for some time, it soon ceased to breath. As I had informed Dr. X. for what purpose I wished his assistance, and had quietly remonstrated against his performing the operation, I thought, in the interest of the patient, I would allow him the management of the case. On its conclusion, I informed the friends that as Dr. X. had taken the case into his own hands, it would be proper of him to go on with it. This he refused to do; and, on my declining to have anything further to do with it, he told the friends I was "a young man who did not know anything." The question I am anxious to know is, whether, under the circumstances, I was right in declining to have anything further to do with the case.—Faithfully yours, A.

*** The principle by which both "A. and Dr. X." should have been governed in the above stated case is clearly laid down in the following rule, extracted from the *Code of Medical Ethics*, second edition, page 72, chapter 1, section 5, rule 13. "When a consultation is requested by a practitioner in attendance, on a difficult or dangerous case of midwifery, and operative treatment—by turning, or instrumental delivery, etc., as the case may be—has been decided on, it should

be carried out by the accoucheur in charge, and not by the consultant—except in the incident of an unqualified assistant being the attendant. In the latter event, the consultant should at once assume the responsibility, and take entire charge of the case. It not unfrequently happens, however, that the family attendant, as an act of courtesy, requests the consultant to officiate; and, in that case, he should do so, but not otherwise, or he may thereby, unintentionally, cast an unjust and injurious reflection on the professional ability of a brother practitioner." The conduct described is in obvious opposition to this rule.

In regard to our correspondent's special personal question, we think that, provocative as Dr. X.'s conduct is described to have been, A., in resigning charge of the case, hardly fulfilled the highest obligations to the patient, to his brother, for whom he was acting as *locum tenens*, and to himself; in reference to which latter obligation, we think that he would have done well to renew, in other than the sick-room, his protest, in a calm, dignified tone, and have courteously intimated to Dr. X. his intention to refer the matter to professional opinion.

THE CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

SIR,—Mr. Smelt's letter reads very well, and seems to place matters in a new light, whilst, in reality, it leaves them just where they were.

The contents of the laudanum bottle could have been removed before Irvine was aware of anything being amiss, seeing that Mr. Pitman was called to Mrs. Darling before daylight. The examination of the sample, therefore, obtained by the sergeant in the presence of Irvine cannot certainly be taken as evidence of its identity in composition with the quantity taken from the bottle by Irvine. He, indeed, at that time, may not have suspected his principal of changing the laudanum, although he does now. The truth, if it is to be learnt at all, must be elicited either from the fatal medicine supplied to Mrs. Darling, or from collateral circumstances, or from both sources.

First, then, as regards the fatal mixture itself. There is proof positive, both in the colour of the mixture, and in the presence of crystals of alkaloid morphine, that the poison was not administered as tincture of opium. The colour was a pale yellow, and, as I have before stated, indicated the addition of certainly not more than two drachms of laudanum, or of a fluid like it in colour and odour. If Mr. Pitman had no alkaloidal morphine in his surgery, Irvine could not have put it into the bottle. It could not have been added as the hydrochlorate, because that salt is not soluble in cold solutions to give a deposit of crystals of the alkaloid with ammonia. It may have been added as the acetate, but the only acid found was hydrochloric. There remains the hypodermic solution which is readily miscible with tincture of opium, and which, when mixed with an equal quantity of that fluid, would give all the appearances found in the fatal mixture on analysis by Mr. Thompson.

Secondly, and more importantly, there are the collateral circumstances and events which transpired before, during, and after the trial. It is in detailing events in which I then took a part that I wish to blame both Mr. Pitman and Mr. Thompson. I have said that I was closeted with prisoner's counsel for twenty minutes before the trial. During the next ten, I took a seat in court, and found myself between Messrs. Pitman and Thompson. I asked the former if an examination had been made of the contents of the bottle from which Irvine had mixed the medicine. He said there had, and that the analyst had pronounced it pure laudanum. I then turned to Mr. Thompson, and asked him if he had made an analysis of a sample sent from Mr. Pitman's surgery, and he said that he had examined half an ounce of it, and found it perfectly pure tincture of opium. I then left them, and made my way to Mr. Evans, Irvine's solicitor. On telling him what I had learnt, he said that Irvine had told him of the substitution of the contents of the laudanum-bottle, by Pitman, for undoubted laudanum, before the examination.

The trial then commenced. Counsel for the prisoner, instructed by me, cross-examined these two gentlemen mainly, if not entirely, upon the possibility of the laudanum-bottle containing something stronger than laudanum. Although I specially requested him to do so, he would not enter upon the appearances presented by the bottle shown to the jury, in comparison with those of one I procured mixed by a neighbouring chemist, and containing three ounces of laudanum and the other ingredients of the medicine. I should say he did not care to plunge into an ocean of physic when he hardly felt safe whilst paddling in the shallows.

The cross-examination, however, such as it was, or could be, was directed against Messrs. Pitman and Thompson, with the plainly-evident intention, on the part of prisoner's counsel, to account for the presence of the morphine upon the theory of its mixture with the laudanum in the bottle from which Irvine compounded the medicine. The question he asked Mr. Thompson was: "Assuming morphine to have been mixed with the laudanum in some form or other, would the appearances you observed have been similar?" This question Mr. Thompson distinctly fenced by saying, "You can assume anything." On being pressed, however, he said: "Yes, they would." Now, why did he not say at once: "There is no necessity to assume anything upon that matter, for I have examined a sample of the laudanum, and found it perfectly pure?"

On cross-examining Mr. Pitman, counsel badgered him extensively about using Battley's solution of opium; asked him "Are you an opium-eater?" and elicited from him the fact that his dispenser, Lewis, took laudanum habitually; and yet Mr. Pitman never said: "All these questions are quite unnecessary; a sample of the laudanum has been analysed, and found pure."

Further, both gentlemen were to blame in not correcting the statement made by counsel in reference to the laudanum-bottle, during his address to the jury—"the bottle, remember, which has never been examined." It was not, even then, too late for them to speak out, and say: "There was an analysis made."

Mr. Sydney Smelt thinks that prisoner's counsel was "badly treated in getting his brief only half an hour before the trial." I, however, am of opinion that it was a piece of presumption, on the part of counsel, for one moment to imagine that any professional man, in an intricate professional matter, and especially a medical and chemical matter, could be defended even by the best of his peers, upon so short a notice. A medical man should be tried by a jury of medical men, for lawyers know nothing of physic.

Finally, sir, I have to say that, if the members of the medical profession stand calmly by, and see a brother practitioner condemned and sentenced to six months' imprisonment on the very slender evidence of the presence of poison found in a bottle of medicine, with no satisfactory or convincing proof as to by whom it was put there, without inquiring, as medical men alone can, into the reasons for its presence, by the chemical reactions which may have taken place amongst the ingredients, they will not be acting the part of brethren.—I am, sir, your obedient servant,

C. R. ILLINGWORTH.

ASSISTANTS AND HOLIDAYS.

UNDERGRADUATE.—We are not cognisant of any rule or custom that entails upon "an in- or out-door assistant" the necessity of providing a *locum tenens* during his absence on the customary annual holiday health-trip; and, unless a mutually understood agreement to that effect were entered into between the principal and assistant in the case alluded to, we should not advise the innovation. Such a provision, however, is, we may add, not uncommon in deeds of partnership.

AN OLD SUBSCRIBER: 1. There is no reason which would prevent a M.R.C.S. and L.S.A. from "consulting and prescribing for any person who might be disposed to seeek his advice" as a consultant.

2. With regard to the second question, whether, "not being in regular practice," he is prohibited from visiting, at the request of the medical owner, the house licensed for private lunatics, in order to fill up certificates stating that the person under control is properly treated; 16 and 17 Vict., c. 96, s. 36, and 16 and 17 Vict., c. 97, s. 132, would require him to be "in actual practice;" but 25 and 26 Vict., c. 111, s. 47, appears to only require him to be "registered under the Medical Act."

HOSPITAL AND DISPENSARY MANAGEMENT.

HEREFORD COUNTY AND CITY LUNATIC ASYLUM.

FROM the Report for 1885, we gather that this asylum is being rapidly filled to overflowing with a class of patients who were formerly maintained at home and in workhouses, until the grant of 4s. per head was given to encourage their removal into county asylums. With regard to the nature of these cases, Dr. Chapman writes: "I must confess to have myself laboured under a misapprehension of their nature before they were sent to us in such numbers. I believed these 'workhouse cases' were chiefly mild cases of imbecility, helpful, industrious, but not quite able to take care of themselves or always to restrain their tempers. Actual experience shows this not to be the case; they consist much more largely of the most degraded idiots, helpless, and of dirty habits, of cases of decay from paralysis, or other forms of nervous disease, and of failure from old age. . . . These patients are not those for whom asylums were built, and if asylums are to accommodate them, they must be modified accordingly." Ten years ago, 15 per cent. of all the lunatics in Herefordshire were in workhouses; last year, there were only 9.4 per cent. It seems clear that, either the policy of the last few years must be reversed by the transfer of chronic harmless cases back to workhouses, or else steps must promptly be taken to enlarge the Hereford Asylum. The Commissioners reported, on April 20th, 1885: "There are here a large number of patients, of both sexes, who are well suited for the wards of a good workhouse infirmary, and do not require the expensive treatment of an asylum." Herefordshire enjoys the unenviable distinction of having a larger proportion of lunatics to population than is found in any other county; the average for England and Wales is 2.59 per 1,000, while in Herefordshire it is 4 per 1,000. The recoveries during 1885 were at the rate of 35 per cent. of the admissions. The death-rate was, as usual, low, being only 5.2 per cent. of the average population. During the fifteen years the asylum has been open, the average annual death-rate has been only 6.5 per cent.; in no year has it been as high as 10 per cent. *Post mortem* examinations were made in only eleven out of the twenty deaths. There was a large number of cases of erysipelas during the year, four ending fatally. It does great credit to the superintendent and the staff generally, that "for several years past, neither restraint nor seclusion in any form has been resorted to." Side by side with this we would place the fact, that the proportion of male attendants to patients was one to ten more, and of nurses one to nine. We have nothing but praise for the statistical tables appended to the report; for completeness and accuracy, they may with advantage be taken as a model by many other asylums.

THE GLASGOW OPHTHALMIC INSTITUTION.

FROM the report presented at the seventeenth annual general meeting of the donors and subscribers to this institution, it appears that, in 1885, 2,915 out-patients and 380 in-patients were treated. Of the 3,295 cases treated during the year, 3,125 were cured, 96 relieved, and 74 were dismissed as incapable of further benefit. The working classes, by their subscriptions, supply nearly two-thirds of the entire income from voluntary sources, £678, against £367 from other subscriptions and donations, and £82 from interest on stocks. There were 628 operations performed during the year, including a large number for cataract. There were several successful cases of transplantation of conjunctiva on skin, also some operations for detachment of the retina.

OBITUARY.

TIMOTHY RICHARDS LEWIS, M.B., C.M.,

Surgeon-Major, Assistant-Professor of Pathology at the Army Medical School, Netley.

THE comparatively short life and public services of this distinguished pathologist call for more than a passing notice; for the Army Medical Department, its medical school and medical science, have sustained an irreparable loss by his death on May 7th, 1886; which sad event was briefly recorded in our issue of May 15th. His loss was so unexpected, that we cannot yet realise its magnitude. He was gradually becoming a very centre of scientific influence, and a source of inspiration for earnest work as a teacher, and of genuine research in his position as Assistant-Professor of Pathology at Netley. Of his aims and his methods of work in this official position (which he had held for only three years) we have now but the memory left—a memory which we would not willingly let die; for he exercised in it a most beneficial influence, and accomplished a great amount of work by sheer strength of personal character, having ever before him the ideal of the higher tone of real work. He was, indeed, one of those men "who go on and on working, and full of work and vigour for the Truth's sake;" and he imbued the minds of those he taught with this same keen love of work. Many friends also, young and old, here and in India, looked up to him for advice in the practical affairs of life (other than professional), relying on the soundness and impartiality of his judgment, his sterling candour, and great common sense. The life-history of such a man, and the work he did, is worthy of more than a passing notice for the example it teaches; as, pursuing a lofty ideal, he died at the early age of 44, almost before the scientific medical world knew what it possessed in his life.

Timothy Richards Lewis was born at Crinow, Narberth, Pembrokeshire, on October 31st, 1841; and, as a lad, he received his first teachings at the national school there, which was the only school in the place. But, while Lewis was yet only nine or ten years of age, the Reverend Joseph Morris and his brother established a small but most efficient grammar school at Narberth, and to this school Lewis was at once sent.

After leaving school, at the age of 15, he was apprenticed to a druggist at Narberth, and left for London four years later, where his first engagement was with Mr. Porter, an operative chemist at Streatham. Thence he went to the German Hospital, as compounder and dispenser of medicine. Here he applied himself to the study of the German language, so as to acquire facility in reading and speaking it, an accomplishment which served him in good stead in his subsequent scientific career. He had, by this time, also acquired a good knowledge of practical chemistry, and became an expert manipulator. During his stay at the German Hospital, he found time to attend some of the classes at University College, London; and here he was so successful in his studies, that he obtained the "Fellowes" silver medal for clinical medicine in 1866. Subsequently, he went to Aberdeen, where he proceeded to the M.B. degree of that university, and graduated with honours in 1867.

Eventually, he became a candidate for the Army Medical Department of Her Majesty's Service; and, at the London examination in February, 1868, he passed into the Army Medical School at Netley first in the order of merit; and, at the end of the four months' course of study, he again passed out at the top of the list. In both examinations (in London and Netley), he gained exceptionally high marks in all the subjects, and especially in pathology, medicine, and hygiene. His commission, as Assistant-Surgeon in Her Majesty's Army, is dated March 31st, 1868; Surgeon, March 1st, 1873; and Surgeon-Major, March 31st, 1880.

At the time when Lewis entered Netley, the attention of the scientific world was occupied with the so-called fungoid theories, regarding the causation of cholera, propounded by Professors Hallier and De Bary. At the suggestion of the Professors of the Army Medical School, the Secretaries of State for War and for India sanctioned the sending of the two gentlemen who secured the highest marks at the Netley examination, in the British and Indian Medical Services respectively, to study for a time, under the expounders of these fungoid theories, in Germany, and thence to India, for the purpose of fully and completely investigating and reporting upon them and the pathology cholera.

Drs. T. R. Lewis and D. D. Cunningham were the two gentlemen selected for this important inquiry, and instructions were drawn up by the Senate of the Army Medical School for their guidance.

After visiting Professors Hallier and De Bary, they proceeded to Munich, where they were most kindly received by Professor Max von Pettenkofer, with whom Dr. Lewis maintained a life-long friendship and correspondence. Having spent about three months in Germany with these eminent teachers, Drs. Lewis and Cunningham proceeded to India, and reached Calcutta in January, 1869, from which time until January, 1883, Lewis was entirely occupied in cholera and kindred inquiries, usually in conjunction with Cunningham, until, in 1879, the latter was appointed Professor of Physiology in the University of Calcutta.

Having mastered the native language, they were able to pursue their inquiries into remote Indian towns and villages, as well as in the more important cities; and excursions, of longer or shorter duration, were constantly being made wherever cholera was to be found, often in the company of Dr. J. M. Cuningham, then Sanitary Commissioner with the Government of India.

Their first report was published, as an appendix to the sixth annual report of the Sanitary Commissioner with the Government of India, 1870, "On Microscopic Objects in Cholera-Discharges;" and, in the same way, most of their subsequent work on this and kindred subjects from time to time appeared, such as "Bladder Worms found in Beef and Pork," by T. R. Lewis; "Cholera in Madras," by D. D. Cunningham; "A first series of Microscopical and Physiological Observations on Cholera" (1872); a second series (1874) "Soil in relation to Disease;" and many other reports of a similar character.

During intervals of cessation from cholera investigation, Lewis occupied himself with other important pathological inquiries. In March, 1870, when examining a specimen of milky urine in Calcutta, Lewis found that it contained numerous microscopic nematoid worms in a living condition, which he described and figured in a report published in 1870 by the Indian Government, an abstract of which also appeared in the BRITISH MEDICAL JOURNAL of November 19th, 1870; and specimens were forwarded to the late Dr. Parkes, at Netley. Towards the beginning of July, 1872, Dr. Lewis found nine minute nematoid worms in a state of great activity on a slide containing a drop of blood from the finger of a Hindoo suffering from chyluria. These were identical in character with those previously found in the urine, and furnished the first recorded instance of nematoid hæmatozoa having been found in man. Since that time, Dr. Lewis continued to make many similar observations, and traced this helminth (the filaria sanguinis hominis) to the blood direct, and to one or other of the various tissues and secretions of the body of numerous patients, all of whom were known to suffer, or to have suffered, from chyluria, or some closely allied pathological condition,—observations which have since been confirmed by other observers in numerous instances. These observations were published in the eighth *Annual Report of the Sanitary Commissioner with the Government of India*, and also in the *Indian Annals of Medical Science*, vol. xvi, "On a Hæmatozoon in Human Blood; its Connection with Chyluria and other Diseases;" another paper was published in 1874, in the same periodical, "On the Pathological Significance of Nematode Hæmatozoa;" and, lastly, in Quain's *Dictionary of Medicine*, under the article "Chyluria," Dr. Lewis gave a full and masterly account of what is known of this disease in the various countries in which it has been found. Some time after he had written the article for the dictionary, he succeeded in obtaining what is beyond question the mature form of this helminth. On August 7th, 1877, two living specimens were found (a male and a female) in the person of a young Bengalee, at the hospital of the Calcutta Medical College, affected with well marked nævoid elephantiasis of the scrotum (elephantiasis lymphangiectodes) associated with the presence of embryo filaria in the blood.

Dr. Lewis began to investigate leprosy in 1873, and in 1877 published, conjointly with D. D. Cunningham, a report on *Leprosy in India;* and in the same year they also published a report on *The Oriental Sore.* In this year, Dr. Lewis was elected a Fellow of the Calcutta University.

In 1878, he published *Microscopic Organisms found in the Blood of Man and Animals;* and in the same year, conjointly with D. D. Cunningham, a most valuable monograph on *Cholera in Relation to Certain Physical Phenomena.* During this period Lewis was directing much attention to the question of soil in relation to disease; and, in various parts of the country, Pettenkofer wells (as they are called) were sunk, and data of observations regarding the fluctuations of subsoil-water were recorded. At this time, also, he was summoned to Bombay, to assist in the investigation of the nature of the famine-fever there, upon which subject he published two reports. At the end of this year, he obtained fifteen months' leave of absence, six months of which he passed on the Continent of Europe, working in the pathological laboratories of Berlin, Dresden, Prague, Vienna, Munich, and Strasburg, meeting, amongst others, his old friend von Pettenkofer, De Bary, Klebs, Stricker, Recklinghausen, and the

great pathologist, Professor Virchow, whose demonstrations he constantly attended, and by whom he was most kindly received.

In 1879, he married, and, at once starting for India, reached Calcutta in November of that year.

In 1880, Dr. J. M. Cuningham, having been made Surgeon-General, as well as Sanitary Commissioner with the Government of India, required the help of Dr. Lewis in the secretarial work in the latter office; and accordingly he accompanied the Government to Simla, from which station, during the ensuing hot season, he made a journey to various places to investigate the pathology of enteric fever; and, although he has left no printed reports on this subject, he has left many manuscript observations, amongst which are valuable photographic representations of the intestinal lesions, printed by the Autotype Company.

In 1881, he published a very comprehensive memorandum on "Indian Jail Diets;" and, in 1882, a report on the cholera-outbreak at Aden of the previous year.

In 1883, he was offered and accepted the post of Assistant-Professor of Pathology at Netley, and at once proceeded to England, which he reached in the month of March, receiving on his arrival a letter of thanks from the Secretary of State for India, in which the important work he had done for India was fully recognised.

On reaching Netley, to be associated in his work with his old friend and teacher Professor Aitken, he was distressed to find the latter seriously ill with acute nephritis, and at once took upon himself the whole of Dr. Aitken's duties for that session, preparing such a course of lectures on pathology as is required for the surgeons on probation at Netley, and, in addition, conducting his own work in the microscopical class. In the use of the microscope, Lewis was *facile princeps*, and the processes of staining and counter-staining tissue he had literally "at his fingers' ends." He introduced for the first time into this course at Netley practical instruction in the methods of bacteriological inquiry, having previously obtained and arranged the necessary apparatus for all kinds of cultivation experiments with which he had become familiar by his work in India.

At the International Sanitary Conference held at Amsterdam in 1883, and again at the more important Conference at Rome in 1885, Sir Joseph Fayrer and Dr. Lewis were selected by the Indian Government as its representatives; and, by their energetic opposition to the assertion that any case of cholera could be shown to have been imported from India into Europe, they were largely instrumental in securing the adoption of less vexatious quarantine restrictions by the Congress than would otherwise have been the case.

When Koch's theory of a comma-shaped bacillus was put forth as the cause of cholera, Lewis felt that he must look into the point; and, during the summer vacation at Netley of 1884, he started off to Marseilles and Toulon, to satisfy himself regarding the alleged discovery. On his return, he published his memorandum on the subject, in which he stated that the result of his investigations went to show that the so-called cholera-bacillus was only "an old friend under a new name"—a *spirillum*, broken up by manipulation, which is to be found in the mouths of healthy persons.

During the last year of his life, he was appointed honorary secretary to a Committee convened by the Secretary of State for India, under the presidency of Sir William Jenner, to consider a report by Drs. Klein and Gibbes, who had been sent to India by the Government to investigate Koch's alleged discovery, and other points connected with the history of cholera. He succeeded in drawing up a report, which was signed by every member of the Committee.

Only a fortnight before the commencement of his serious and fatal illness, the value of his many years of patient and laborious work was recognised by the Council of the Royal Society, who recommended him for election as one of the Fellows for the present year; and, had he lived but a few more weeks, Lewis would have actually received this, the "blue ribbon" of science.

His sound common sense, his habit of going to the very root of every question, his accurate and clear judgment, eminently fitted him for the investigation and exposition, so far as he could find the light, of the intricate and mysterious diseases it was his lot in life to study. He devoted himself to his work with untiring and resistless energy, never resting, never satisfied, and, like a true student in the fields of science, always making one revelation the point from which to search for greater light, from which to start upon more extended inquiries.

But now he is at rest. "We may not stir the heaven of his repose with loud-voiced grief, or passionate request or selfish plaint;" but in the sudden loss of a useful life at this early age, recognise at once "the burden and the mystery of all this unintelligible world."

HUTCHINSON ROYES BELL, F.R.C.S.,
Surgeon to King's College Hospital.

Hutchinson Royes Bell was born in 1842 at Sydney, New South Wales. He came of a family which had been long established near Leconfield in the East Riding of Yorkshire, and formerly possessed a considerable estate in that neighbourhood. Mr. Bell himself still retained a small freehold property there. His life was, however, passed in other scenes, for he received his early education at a private school in Jersey, and subsequently attended King's College School. He received his medical education at King's College, where he entered in 1859. He was a Leathes' prizeman; and, in a later stage of his student-career, held various offices in connection with the hospital, including that of house-surgeon. He subsequently held the appointments of Prosector at the Royal College of Surgeons, Assistant Demonstrator of Anatomy at King's College, and Surgical Registrar to the hospital. After studying at Vienna and Paris, he returned to London, where he came under the observation of the late Sir William Fergusson, who formed so high an estimate of Mr. Bell's abilities as a surgeon, that he not only made him one of his assistants in private practice, but was instrumental in obtaining for him the appointment of Assistant-Surgeon to King's College Hospital. It may be added that, up to the time of the death of that illustrious surgeon, Mr. Bell continued to enjoy his friendship and esteem.

Mr. Royes Bell, in his new position, quickly became universally popular, not only with the students, who felt that he took a deep interest in their welfare, but also with his colleagues, who knew that they could rely upon his assistance and skill. Grave in manner, and of a modest and retiring disposition, Royes Bell hardly did full justice to himself in his intercourse with strangers. Those who knew him intimately, however, could appreciate a vein of quiet humour which made him a most agreeable companion, and were able also to form a just estimate of his excellent judgment, which rendered his advice, never hurriedly given, always exceedingly valuable. His nature was sympathetic almost to a fault; the inevitable uncertainties and occasional vicissitudes of surgery weighed upon his mind, and caused him an amount of anxiety which doubtless, at times, acted injuriously upon his health.

Mr. Bell was not a voluminous writer, and his chief contribution to literature was the "Lettsomian Lectures on Diseases of the Testicle.' What he did put his hand to, however, he did well, and the articles on this subject, in *Ashhurst's Encyclopædia of Surgery*, are also from his pen.

Mr. Bell, who, in addition to his other duties, was surgeon to the St. Pancras and Northern Dispensary, was appointed full surgeon to King's College Hospital in 1877, with charge of out-patients and several beds. Since the same year, also, he occupied the important position of demonstrator of operative surgery at the hospital; the duties of this office he discharged with a disinterested zeal thoroughly appreciated by his pupils. As an instance of this devotion to duty, it may be mentioned that last January, though in bad health, and feeling extremely indisposed, he insisted upon attempting to give his customary demonstration to his surgery class; he had, however, overestimated his powers, and fainted in the middle of his lecture. His health had begun to fail visibly in November last; he suffered from severe headache, accompanied by vomiting, but, beyond the fainting-fit above-mentioned, there was no other positive indication that the end was so near. Mr. Bell was staying at Folkestone for a short holiday at Whitsuntide, when he was seized with symptoms of cerebral hæmorrhage, on Whit-Monday. He never recovered consciousness, and, becoming more and more comatose, died in sixteen hours; examination of the urine revealed the presence of tube-casts, and one-fifth albumen.

Mr. Bell was buried at the Brompton Cemetery, on Friday, June 18th; the coffin, covered with wreaths of white flowers, was borne in an open car. The Rev. Dr. Wace, principal of King's College, read the burial service, in the presence of a numerous gathering, composed of relatives, friends, and colleagues of the deceased. The feeling of the students was evinced by the large number who attended at the cemetery.

Mr. Bell was unmarried, but leaves two sisters, who resided with him, and to whom he displayed an affectionate devotion of which it would be impossible to speak too highly. Mr. Bell also leaves two brothers, of whom one is engaged in medical practice in the Isle of Wight, and the other, Lieut.-Col. Mark Bell, V.C., R.E.

RICHARD GRATTAN, M.D.

It is but rarely, we should suppose, that it falls to the lot of a journalist to report, as was done in a recent number, the deaths within one week of two members of the profession, both Fellows of the same College, and both over ninety years of age. The elder of these two nonagenarians, Dr. Richard Grattan, was born in his ancestral residence in the county Kildare (in which he also died) on January 23rd, 1790. He graduated in arts in the University of Dublin in 1810, and subsequently took his degree of M.D. in the University of Edinburgh. Two years after the battle of Waterloo, he was elected a Fellow of the King and Queen's College of Physicians in Ireland, and at the time of his death, and indeed for many years previously, was the Senior Fellow of that corporation. Soon after graduating in medicine, he became Physician to the Cork Street Fever Hospital, and as such we find him appearing in 1817 as the author of the *Annual Medical Report* of that institution. He prepared three or four of these reports subsequently, and having thus, as he has said, become a writer, it pleased him to see his name in print. He then commenced, to again quote his own words, "to write upon every subject—Medicine, Politics, Religion, Catholic Emancipation, Reform of Parliament, and Repeal of the Union," and obtained considerable notoriety. He practised his profession in Dublin for about fifteen years, and then retired to the country to restore the old mansion in which he was born, and to benefit, as he hoped, his country, and the social condition of the industrious classes.

Dr. Grattan was a kinsman of the eminent statesman, the Right Hon. Henry Grattan, and, like his distinguished relative, was an ardent patriot. He was a man of a most speculative and imaginative character, and put himself forward at every opportunity as an uncompromising supporter of what he considered to be civil and religious liberty. He delighted in polemical disputes and in metaphysical discussions, and at the age of 70 wrote a remarkable work, entitled *Considerations on the Human Mind; its Present State and Future Destination*, which gives a most heterogeneous description of his religious, political, and social opinions.

In 1846-47, Dr. Grattan, who held the Commission of the Peace for the county of Kildare, had a long contest with Sir Maziere Brady, then Lord-Chancellor of Ireland, on account of his refusal to bestow the Commission of the Peace on practising physicians, on the ground that their profession disqualified them for the office. The Irish Colleges of Physicians and of Surgeons refused to comply with Dr. Grattan's request to remonstrate with the Lord Chancellor to have the rule rescinded. Grattan, therefore, feeling that the entire responsibility of defending the honour of the profession rested upon him, set to work with characteristic energy. He wrote a letter to the Lord Chancellor, which stimulated the profession to exert itself. Every Member of Parliament was applied to, and the result was that the Chancellor had to rescind his resolution, and to appoint to the magistracy such gentlemen as were entitled to the office, even though they were medical practitioners. Dr. Grattan was naturally very proud of the victory over the Lord Chancellor; and he suggested that, after his death, the profession, recognising his "conduct, energy, and zeal throughout this affair," would perhaps "think it right to acknowledge the value of his services by erecting a suitable memorial to his memory in some secluded spot of the Phœnix Park"! It is noteworthy that an attempt two years ago, by another late Lord Chancellor, to exclude dispensary medical officers from the Commission of the Peace, formed the subject of some questions that were then put to the Chief Secretary in the House of Commons. The Irish Medical Association took the matter up, and memorialised the Lord-Lieutenant, with a satisfactory result.

Dr. Grattan's advanced political views soon brought him again into collision with Lord Chancellor Brady. An aggregate meeting of Irish Nationalists was held in Dublin in 1849, to inaugurate an Association named the "Irish Alliance," at which Dr. Grattan took the chair. The attention of the Lord Chancellor was called to the alleged disloyal sentiments expressed in some of the speeches at this meeting, from which Dr. Grattan did not dissent; and, in consequence, he was removed from the Commission. This was an insult which Dr. Grattan never forgave, and looked upon it almost as an act of personal resentment in consequence of his previous defeat of the Chancellor.

The greater part of Dr. Grattan's long life was so intimately connected with political matters, that any memoir of him must necessarily chiefly refer to such a connection. But we do not hesitate to say that, throughout his whole career, he evinced the greatest pride in being a member of the profession; and we believe that there was no man of his time who took a more active and unselfish part in upholding its interests, position, and dignity, than he did.

JAMES APJOHN, M.D., F.R.S.

We briefly announced lately the death of this distinguished Irish chemist, which took place at his residence, near Dublin, on June 2nd. Dr. Apjohn was a native of the county Limerick, and had reached the patriarchial age of 91. He was educated at the Tipperary Diocesan School, and entered Trinity College, Dublin, in 1814. Two years subsequently he gained a scholarship, and in 1821 he took his degree of M.B. In conjunction with such distinguished men as the late Sir Henry Marsh, Robert Graves, Archibald Jacob, and William Cusack, he assisted in establishing the Park Street School of Medicine in Dublin, and lectured on chemistry there from 1825 to 1828, when he was elected to the chair of chemistry in the school of the Royal College of Surgeons in Ireland. In 1841 the Board of Trinity College appointed him lecturer on applied chemistry in their Engineering School; and in 1850, on the death of Dr. Francis Barker, who had held the chair for forty-nine years, Dr Apjohn was also appointed University Professor of Chemistry. This, the premier chair of chemistry in Ireland, Dr. Apjohn filled with credit and distinction for twenty-five years. In 1875 he resigned it, but retained his professorship in the Engineering School until 1880. Since then, both chairs have again been filled by the same person: namely, Dr. Apjohn's eminent successor in the University Professorship, Dr. James Emerson Reynolds, F.R.S.

Throughout his long and valuable life, Dr. Apjohn was not only an earnest and most able teacher of the science he represented in Trinity College, but he also produced researches of high value. Most of his work was on the physical side of chemistry, and chiefly dealt with the specific heat of gases, and with the properties of gaseous mixtures near to and at their points of saturation with moisture; and "Apjohn's formula" for ascertaining the dew-point from the indications of the wet bulb hygrometer, is one of the best known physical expressions.

In 1838, he analysed and described a new mineral alum containing manganese, which has since been named "Apjohnite." Again, in 1841, a new lead ore, which he termed "Kilbrickenite;" and, in 1852, a new mineral species, to which he assigned the mineralogical name "Jelletite," after the present Provost of Trinity College.

Dr. Apjohn represented the University of Dublin on the General Medical Council for many years, and took a prominent part in the production of the *British Pharmacopœia*. Every chemical process and test therein recommended was carefully examined in the Trinity College laboratory, and much of the success of the work was due to Dr. Apjohn's laborious revision in detail. His *Manual of the Metalloids*, the first edition of which was published in 1863, held a conspicuous place in the educational literature of chemistry, until the rapid development of chemical philosophy in new directions, and the change from equivalent to atomic weights, rendered it obsolete.

In addition to being the author of numerous original memoirs, to some of which we have incidentally referred, Dr. Apjohn contributed the articles on Spontaneous Combustion, on Electricity, on Galvanism, and on Toxicology, to the *Cyclopædia of Practical Medicine*.

At the time of his death, Dr. Apjohn was second in order of seniority on the roll of Fellows of the King and Queen's College of Physicians, and was Consulting Physician to the City of Dublin Hospital, in the establishment of which he took a part. He was a Vice-President of the Royal Irish Academy, and was awarded its Cunningham gold medal, as far back as the year 1837, for his essay on "A New Method of Investigating the Gaseous Bodies." He was also a Fellow of the Royal Society, and a member of several scientific bodies.

Like many other men of great intellect and ability, Dr. Apjohn was naturally of a shy and rather retiring disposition. One of his greatest characteristics, perhaps, was his thoroughness and love of truth; and, consequently, he was esteemed and respected by all who knew him.

Viscount Bridport has been appointed President of the Crewkerne Hospital for the ensuing year.

Bequests and Donations.—The British Home for Incurables has received £1,000, under the will of Dr. Gideon G. Gardiner.—The Leeds General Infirmary has received £1,000, under the will of Mr. Thomas Emsley, of Burley Grange.—King's College Hospital has received £200 anonymously, namely, £100 to the general funds, and £100 for the Convalescent Home.—"J. B." has given £100 to Charing Cross Hospital, and £100 to the Evelina Hospital for Sick Children.—University College has received £100 from the United Friendly Societies' Demonstration, N.W. District.—Mr. Peter Reid has given £50, additional, to the Ventnor Consumption Hospital.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone all the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board of Examiners on June 17th.

Charles A. Barstow, James Street, Harrogate; Alfred E. Jones, Stamford Hill; Josiah Mansbridge, West Hampstead; Charles F. Rilott, Grange Park, Ealing; George O. Whittaker, Blackley, Manchester; Charles F. Wright, Edgware Road, W.; Thomas H. G. Wrighton, Buckhurst Hill.

Seven candidates referred.

UNIVERSITY OF BRUSSELS.—For the examination commencing June 1st, 1886, for the degree of M.D., nine candidates presented themselves, and the following gentlemen obtained their diplomas.

John F. H. Ellerton, M.R.C.S. and L.R.C.P.Edin., Bridport; Charles S. Humphreys, M.R.C.S. and L.R.C.P.Lond., St. George's Dispensary, W.; George W. F. Paul, M.R.C.S. and L.R.C.P.Lond., 62, Ladbroke Grove Road; Percy Rendall, M.R.C.S. and L.S.A.Lond., 20, Ladbroke Square.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their Examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, June 17th, 1886.

Birch, Charles Ormond, Harley Street, W.
Denman, Robert, Sydenham, S.E.
Freeman, Richard Austin, Caledonian Road, N.
Morris, Edward, Wharton Road, West Kensington Park.
Williams-Freeman, John Peere, Bursledon, Southampton.
Yolland, John Horatio, Hoylake, Birkenhead.

MEDICAL VACANCIES.

The following vacancies are announced.

AXBRIDGE UNION.—Medical Officer. Salary, £47 10s., with additional medical extras. Applications by June 28th to W. Reece, Esq.

BRAINTREE UNION, Essex.—Medical Officer and Public Vaccinator. Salary, £100 per annum. Applications by July 2nd to F. Smoothy, Esq.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE. Gloucester.—Junior Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. Applications to Dr. Needham.

BUCKS GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80, first year, with board and lodging. Applications by July 6th to G. Fell, Esq., solicitor, Aylesbury.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by June 30th to the Secretary.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer. Salary, £80 per annum, with board and residence. Applications by June 29th to the Chairman of the Medical Board.

HULL ROYAL INFIRMARY.—Honorary Physician. Applications by July 5th to the Chairman, Hull Royal Infirmary.

JERSEY GENERAL DISPENSARY.—Resident Visiting and Dispensing Medical Officer. Salary, £120, with furnished rooms, attendance, coals, and gas. Applications by July 7th to F. A. Hyne, Esq., 43, David Place, Jersey.

LYING-IN HOSPITAL, York Road, Lambeth.—House-Physician. Salary, £50 per annum, with board and residence. Applications by June 28th to the Secretary.

NATIONAL DENTAL HOSPITAL, Great Portland Street.—Anæsthetist. Applications by June 30th to A. G. Klugh, Esq.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury.—Junior House-Physician. Salary, £50 per annum, with board and apartments. Applications by July 8th to B. Burford Rawlings, Esq.

NORTH RIDING OF YORKSHIRE LUNATIC ASYLUM, Clifton.—Resident Clinical Assistant. Board, apartments, etc. Applications by June 30th to the Medical Superintendent.

OWENS COLLEGE, Manchester.—Professor of Chemistry. Applications to the Council of the College, under cover, to the Registrar by August 31st.

RIPON DISPENSARY.—Resident House-Surgeon and Dispenser. Salary, £100 per annum. Applications by July 1st to the Honorary Secretary.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Senior Resident Medical Officer. Salary, £104 per annum, with board and residence. Applications by July 7th to J. S. Blyth, Esq.

SEAMEN'S HOSPITAL SOCIETY, Greenwich.—Surgeon for the Dispensary at Well Street, London Docks. Salary, £63 per annum. Applications by July 2nd to W. T. Evans, Esq., Seamen's Hospital Office, Greenwich, S.E.

TEWKESBURY UNION.—Medical Officer and Public Vaccinator for the Overbury District. Salary, £60 per annum, with extras. Applications by July 5th to H. A. Badham, Esq.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications by June 28th to C. A. Newnham, Esq.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Resident Assistant. Board, lodging, and, washing. Applications by June 28th to the Chairman of the Medical Committee.

WEST RIDING ASYLUM, WAKEFIELD.—Resident Clinical Assistant. Board, apartments, etc. Applications immediately to the Medical Director at the Asylum.

MEDICAL APPOINTMENTS.

CLARK, F. W., L.R.C.P.Lond., M.R.C.S.Eng., appointed Assistant Medical Officer to the Croydon Infirmary, *vice* G. A. S. Gordon, resigned.

GARRY, T. G., M.D., M.Ch., M.A.O., appointed Resident Physician to the Ben Rhydding Hydropathic Establishment, *vice* Dr. Little, appointed Consulting Physician.

HUTCHINSON, Procter S., M.R.C.S.Eng., appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden Square.

MITCHELL, Robert, M.A., M.B., C.M.Edin., appointed House-Surgeon to the Dewsbury and District General Infirmary.

NEALE, J. Headley, M.B., C.M.Edin., M.R.C.P.Lond., appointed Honorary Assistant-Physician to the Leicester Infirmary and Fever House.

PARTRIDGE, S., M.B., C.M., re-appointed Junior House-Surgeon to the Carlisle Dispensary.

POPE, F. M., B.A., M.B., M.R.C.P.Lond., M.R.C.S.Eng., appointed Honorary Full Physician to the Leicester Infirmary and Fever House, *vice* Dr. Buck, resigned.

RODLER, J., L.R.C.P.Edin., M.R.C.S.Eng., appointed Head Surgeon to the Liverpool Dispensaries.

ROUGHTON, E. W., M.D.Lond., appointed Assistant Demonstrator of Anatomy at St. Bartholomew's Hospital.

SCHACHT, F. F., M.B., B.A.Cantab., M.R.C.S., appointed Honorary Physician to Westminster General Dispensary, *vice* B. O'Connor, M.D., resigned.

SMYTHE, A. C. B., F.R.C.S., appointed Surgeon to St. George's Dispensary, Hanover Square, *vice* F. T. Prince, deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

HOOKER.—On June 16th, at Gosport, the wife of Charles Hooker, Surgeon Cirencester, of a son.

JONES.—On June 22nd, 1886, at 6, Westbourne Street, Hyde Park Gardens, the wife of T. W. Carmalt Jones, M.A., F.R.C.S.Edin., of a son.

MARRIAGES.

DAVIES—DIXON.—June 16th, at Holy Trinity Church, Stroud Green, N., by the Rev. W. Cator, William Thomas Frederick Davies, M.B., B.S.Lond., of Swansea, to Florence, daughter of Thomas Dixon, Esq., of Stroud Green, and Dutoits Pan, South Africa.

HOLBECHE—EASTWOOD.—On June 16th, at St. Peter's, Malvern Wells, by the Venerable the Archdeacon of Cirencester, assisted by the Rev. R. F. S. Perfect, M.A., Vicar, Arthur Oliver Holbeche, M.R.C.S., L.R.C.P., of Malvern Wells, youngest son of the late Vincent Holbeche, Esq., of Sutton Coldfield, Warwickshire, to Helen Jane, daughter of the late Rev. J. Eastwood, M.A., Vicar of Hope, Staffordshire.

WOOD—MADGEN.—On June 23rd, at St. Hilda's, South Shields, by the Rev. James McGrigor, John Cundell Wood, L.R.C.S., L.R.C.P.Ed., son of Peter Wood, of Sunderland, to Ellen Maude Madgen, of South Shields, second daughter of the late W. L. Madgen, of Greencroft, Haltwhistle.

DEATH.

JONES.—On June 18th, at Medina Lodge, West Cowes, from the effects of accident, John Jones, M.R.C.S., aged 45.

CHARING CROSS HOSPITAL.—The presentation of medals, prizes, and certificates gained during the summer session, 1885 and the winter session 1885-86, by the students of Charing Cross Hospital Medical School, took place this week at the Medical School, Chandos Street. The Rev. John F. Kitto, Vicar of St. Martin-in-the-Fields, in the chair. The Dean, Dr. Bruce, read his report, which stated that sixty-nine students had entered during the past twelve months—this being the largest entry in the history of the school. The average daily attendance of pupils had been 190. After the distribution of prizes, the chairman addressed the students, the whole concluding with a vote of thanks to the chairman on the motion of Sir Joseph Fayrer.

THE NATIONAL AID SOCIETY.—The accounts of the Princess of Wales Branch of the National Aid Society have been closed, and the surplus, £6417 16s. 3d., has been placed in the hands of the Princess of Wales for investment, to form a fund, to be used whenever needed for the assistance of British soldiers and sailors in time of war.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Ophthalmological Society of the United Kingdom, Annual General Meeting, 8.30 P.M. Living specimens at 8 P.M. Dr. Symons (Adelaide): Double Symmetrical Corneal Changes. W. A. Brailey and Simeon Snell: Nævus of Choroid with Secondary Glaucoma. E. Nettleship: Transverse Calcareous Film of Cornea after Operation. W. A. Brailey: Case of Double Glaucoma (microscopical specimens). W. T. Cant: Paralysis of both Sixth Nerves with Morbus Brightii. W. A. Brailey: 1. Tubercular Iritis. 2. Interstitial Keratitis: Query Tubercular.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St. Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's.—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

QUERIES.

CASES OF INTERSTITIAL KERATITIS.

OPHTHALMOS writes: Will any of your readers give me the names and dates of any publications, since that of Mr. Hutchinson in 1863, comprising an analysis of a series of cases of interstitial keratitis? I believe there was a summary of 100 such cases in some provincial journal within the last six months.

CAUSE OF WARTS.

H. G. M. asks if some member could inform him if washing the feet, etc., in the water in which potatoes have been boiled caused warts; and, if so, how it caused them. About two months ago, a child was brought to him, suffering from a large number of warts on both feet. The child's mother blamed the potato-water for them. The potato-water ablutions were discontinued, and each wart was touched once with nitric acid. At the end of a month, all the warts were gone.

*** In a child predisposed to warts, any irritant, solid or in solution, tends to produce them.

ANSWERS.

INCOME-TAX RETURNS.

DR. SANGRADO will find some practical information on this subject at page 132 of *The Sanitary and Medical Record's Diary*, December for 1886 (Smith, Elder, and Co.).

CUCAINE IN CATHETERISM.

MR. HURRY FENWICK writes: In answer to Mr. B. Dale in the JOURNAL of June 19th, the most convenient instrument for applying cucaine to the deep urethra is a terminal-orificed one. Either a terminal-orificed soft Jacques catheter, which Meyer and Meltzer will supply, or a Guyon bougie à boule perforée (supplied by Lasserre, 26, Boulevard Saint-Michel, Paris) will do. Suck up half a drachm of a 20 per cent. solution of cucaine into an India-rubber teat-topped medicine-dropper, and, having passed the catheter until the point is at the site required, and fitted the point of the dropper into the mouth of the catheter, squirt the contents along the same. To inject the prostatic canal, the point need only rest in the membranous urethra.

I have not as yet had a case of "cucaine-poisoning," and I have used it most freely (up to half an ounce of a 10 per cent.) in lithotrity, internal urethrotomy, and in conveying patients with enlarged prostates and irritable bladders into the country, besides, of course, in the minor operations of vesico-urethral practice. The only disagreeable effects I have noticed is a distressing sleeplessness, which I believe arises from absorption.

The last question: "Have I observed any such effect as is produced by contact of chloroform with depuration of air upon a surface?" which is palpably a printer's error for deprivation of air, I am unable to answer.

JUNIUS.—It is impossible for a surgeon to give an opinion of a case which he has not seen. Resecting a fractured bone is sometimes necessary, and, in the case which you quote, you acted as you thought right. Medical members of general committees at hospitals should not discuss questions concerning the clinical work of an absent colleague, without previous notice to the gentleman whose actions they think right to criticise. To exercise scrutiny over cases remaining for a long time in the wards, is an essential part of hospital management. It is best for the Secretary to draw up a monthly list of such cases, and to make inquiries of the surgeons in charge of them. To regulate long-standing cases by a consultation between the members of the staff, which is quite a different thing from a consultation about an operation, is an arrangement which does not, as a rule, work satisfactorily.

INQUEST ON A CASE OF MARASMUS INFANTUM.

F. W. J., having seen and examined the child two days before its death (the fifth day of its life), was clearly justified in giving a certificate indicating, to the best of his knowledge and belief, the cause of death; though "marasmus infantum" is a very indefinite term, still it is perhaps as good as any other when congenital syphilis is suspected. It is not safe, however, to diagnose inherited syphilis in an infant who presents no objective signs beyond wasting, merely because it is reported to be premature by a month, and the mother had had a previous abortion. If an inquest be held, a coroner is bound by the written law to ascertain the cause of death, but he is equally bound by the unwritten law to use all courtesy to the medical witnesses especially, who are often placed in most difficult positions.

SPARTEINE.

IN reply to "H. S.," who inquires (JOURNAL, June 5th, page 1091) as to the dose of sparteine sulphate in cardiac dilatation with anasarca, Dr. J. STRAHAN (Belfast) writes as follows. Although calculated to be of great value in most cases of cardiac atony, from whatever cause, sparteine is not so likely to benefit anasarca, at least directly. In this it contrasts strongly with digitalis and caffeine, the action of which drugs it otherwise closely imitates. In the same respect it contrasts strongly with the drug from which it is obtained (spartium scroparium). The uncombined alkaloid sparteine is unsuitable for medicinal use, as it is extremely bitter and perfectly insoluble in water. It is an oily, colourless liquid, having very decided basic properties from its strong alkalinity. It agrees with coneine and nicotine, in having no oxygen in its composition, its formula being C30 H26 N2. It combines with any acid, and with excess of sulphuric, forms sparteine sulphate, which is perfectly soluble in water. The physiological action of this salt has been investigated by Mills, in 1863; by Fick, in 1870; by Rymond, a pupil of Vulpian, in 1880; and it was introduced as a remedy for heart-affections in 1883. Its action on the healthy heart has been quite recently investigated by Laborde.

As to the dose, the author of a paper on the subject, in the *Comptes Rendus de l'Union Pharmaceutique* (see *London Medical Record*, March, 1886, p. 106), has fixed the dose which produces marked cardiac effects, without acting on the digestion or nervous system, at 1.54 grains (one decigramme) in aqueous solution.

The action of sparteine sulphate on the heart is most definite and useful; but in moderate doses it leaves the quantity of urine unaltered, so that it does not seem a promising remedy for anasarca. According to Germain Sée, sparteine has three characteristic effects. The most striking is the raising of the pulse and cardiac action, acting in this, much as digitalis and convallaria majalis, though its cardiac tonic action is greater, more lasting, and more quickly produced. The next effect is very prompt regulation of disorderly rhythm. This action is so very marked, that no known remedy approaches it. Its third effect resembles that of atropina, as it greatly and quickly accelerates the action. In

this it contrasts with digitalis, convallaria, caffeine, and most cardiac remedies. All these results are mostly quite obviously marked, in one hour, after 1½ grains; but in some cases several hours elapse, and all the effects continue for three or four days after the last dose.

It also causes increase of general strength in the patient, with easier respiration, but in the latter respect it is surpassed by iodide of potassium. It is indicated when cardiac rhythm is disturbed, the pulse being irregular, or intermittent, or both. Like digitalis, it will quickly remove these symptoms. In any case where there is atony of the cardiac muscle, whether from organic change in the muscular fibre, or from uncompensated valvular defects, sparteine promptly removes the debility of the myocardium. This restored vigour of the cardiac muscle is singularly maintained, or even increased by moderate doses of the remedy.

I think it highly probable, however, that in the case described by "H. S.," the succus scoparii, or some other preparation of the drug, would give better results than the alkaloid. Or, perhaps, digitalis or caffeine, if no contra-indication existed, would, at least, be more likely to remove the anasarca. If all these failed in respect of the anasarca, large doses of saturated aqueous solution of magnesium sulphate have a wonderful effect on the dropsy, without undue depression, and without any griping or pain whatever. If all internal remedies fail, then resort must be had to Southey's anasarca-trocars; or to incisions one inch long over each outer malleolus, which rarely fail to drain the last drop of fluid out of each cavity, and the areolar tissue of the whole body. Details regarding the incisions and an exhaustive discussion of the whole question will be found in Ringer's *Therapeutics*, article in preface "Dropsy."

NOTES, LETTERS, ETC.

The Case of Dr. F. S. Ridley, Preston: A Memoir: An Appeal.

On March 30th, this gentleman, to the great shock and regret of a wide circle of friends and others, passed suddenly away, from syncope, at the age of 52.

Educated at St. Bartholomew's Hospital, his bright intelligence and fitness for the profession were noteworthy. He gained the "Wix Prize" in 1857. Qualifying M.R.C.S. and L.M.Eng., he later proceeded M.D.St.And., and L.S.A., and soon settled in Preston, where his professional ability and social qualities soon attracted public notice and confidence. Early in his career, he contracted, and nearly succumbed to, typhus fever; and, in return for his heroic services and self-sacrifice—a vacancy occurring—the guardians of the union appointed him medical officer to their new infirmary (200 beds); he also held two district appointments.

Although few men were better acquainted with the "insolence of office and the poor-law's delay" for more than twenty years, Dr. Ridley observed untiring devotion in the discharge of his public duties, to which he always gave prominence. To the poor he was always just and kind, and in the service of the poor-law he did good and hard work. He was an able exponent of the principles of medicine, and, though a stern moralist, a gifted teacher of the practical mysteries of his craft. Of wide general culture, he devoted much time to the natural sciences, and took a deep interest in cellular pathology, and its offspring—antiseptics. He was, however, too self-denying and fond of work to observe the yearly holiday, and build up new energy. He may be said to have died at his post, for the "long rest" came at the meridian of a life of good work. Dr. Ridley was a member of the Association. Ever striving to leave in comfort his family, he made investments and insured his life, but a series of reverses followed each other in cruel and rapid succession. To losses by bad debts, a bank failure, and illnesses, his securities depreciated, and his practice waned. Early in the year, the insurance-office into which he had paid heavy premiums liquidated; and, his last hope gone, during ill-health, and amid misfortunes sufficient to break any heart, the end came.

The long lease of his house terminated about the time of his death, and the transfer of his practice, in the sad concourse of events, was questioned and given up.

Dr. Ridley has left a widow and two daughters but scantily provided for, and it is on their behalf that I urge an appeal in the Journal. To old Bartholomew's men, and to his fellow-practitioners, do I look for help; and to the members of the Association I feel that I do not look in vain.

Subscriptions will be gladly received by Dr. Edwin Moore, Preston, and by myself.

H. A. Smith.

Ealing, W.

Alcohol for the Medical Staff.

Dr. M. T. Sadler (Barnsley) writes: If Mr. Sturge really thinks 1s. 9d. a head an extravagant amount to spend in twelve months in stimulants (mainly beer) for the nurses, etc., of a hospital, he is very welcome to say so. It was to the vagueness of the original charge of "wrong and discreditable" expenditure that I objected. The calculation of the amount, which is his, not mine, based apparently on the assumption that the staff of a hospital in equal number to the patients, is, however, a noteworthy example of the manner in which temperance statistics are often compiled.

Death of Fœtus through Knot in Cord?

Mr. H. Davis (Callington) writes: I have this day (June 7th) delivered a woman of a large child, living and well, whose umbilical cord had two knots firmly tied in it; the first was six inches from the child; the second, four from the first knot. The knots were so small that, at first, I thought they were simple enlargements, but, when opened, they presented deep grooves, having on each side, the vessels very large and tortuous. I believe I have had many cases of live births with one knot, but this is the first with two.

Royal College of Surgeons of England.

The following questions in Anatomy and Physiology were submitted to the candidates at the recent first examination for the Diploma of Fellow. In each subject, at least three of the four questions were required to be answered. *Anatomy.*—1. Give the origin, insertion, nerve-supply, and action of all the muscles attached to the phalanges of the great toe. N.B.—The action is required only as regards the phalanges. 2. Describe the form and relations of the thyroid body. Mention its nervous and vascular supply. 3. Describe the dissections necessary to expose the trunk and branches of the inferior dental nerve. 4. Describe the anatomy of the envelopes of the testis, including their vascular and nervous supply. Explain developmentally the descent of the testis. *Physiology.*—1. Describe the mechanisms which regulate endocardial pressure under various conditions of heart-beat and vascular tension. 2. Describe the structure of the retina. State the functions of the pigmentary layer, and of the rods and cones. Give the evidence on which your statements rest. 3. What fats are found in the human body? What is their composition? State what is known regarding their derivation from food-stuffs. 4. Describe the development, growth, and retrogression of a Graffian follicle. The following were the questions at the Second Examination. *Pathology, Therapeutics, and Surgery.*—All four questions were required to be answered. 1. Discuss the operative treatment of cancer of the tongue, including the selection of cases; and give the various methods of operating, their advantages and disadvantages. 2. Under what circumstances, in a case of chronic disease of a joint, would you prefer excision to amputation? 3. Give the pathological anatomy, diagnosis, and treatment of strumous disease of the lymphatic glands. 4. Discuss the differential diagnosis of the disorders of the liver requiring surgical treatment, and describe the methods of operating suitable to each.

An Appeal.

Sir,—May I beg space in your valuable Journal, to ask assistance for a most deserving case which calls for immediate help. It is that of the widow of a medical man, who died a few years ago, without making any provision for his wife and four little children. She has used her utmost endeavours up to the present time, and worked very hard to provide for the welfare of her family, who are all dependent upon her support. She is now very much out of health, from continued anxiety and the many privations she has had to endure, and for the present is unable to pursue her previous occupations; in fact, is reduced to selling the few things she has gathered together, for present maintenance.

I propose, therefore, through your kind assistance, to start a fund, which will, I hope, relieve her present distress, and afford the means for her embarking upon suitable and remunerative employment as soon as she is able.

I trust that all the readers of your Journal will respond to my appeal, by sending whatever small donation may be agreeable to them. These, with larger amounts, will be thankfully received and acknowledged by myself. I may add, that if any subscriber to the fund desires a more detailed account of the case, I shall be pleased to give any further information that may be wished. Sir Andrew Clark has already subscribed, and Sir James Paget has promised to do so when a fund is started.—I am, sir, yours obediently,

Abercorn House, Baron's Court, S.W. R. Fitzroy Benham.

Papain and Dyspepsia.

Dr. S. Martin writes: With reference to the letter of Dr. G. Herschell, on this subject, in the Journal of June 12th, I fail to see the logical fallacy in my statement quoted by Dr. Herschell. We give a proteolytic ferment by the mouth in cases of dyspepsia, to supply the place of the pepsin, which we imagine absent. I say "imagine," because, unless the method of Leube or Jawovski be used, one cannot say with certainty whether it is absent or not. If papain does not digest in the stomach, its administration does not carry out this dictum of rational therapeutics. It acts in the small intestines, say Drs. Finkler and Herschell; this statement is not proved: and, if it were, I fail to see the indications of administering the drug, since there is no evidence to show that pancreatic digestion is sub-normal in chronic dyspepsia; and, if normal, trypsin is quite equal to peptonising all the proteid-ingesta. Dr. Herschell, I may point out, says that he gives pancreatin in dyspepsia, and yet admits that it is destroyed in the stomach.

If Professor Finkler has found two different proteolytic ferments in papain juice, he has made an unique discovery in vegetable physiology, one, as far as I know, not yet published. The ferment he names after himself is only a weak preparation of the ferment in the papain juice. Lastly, as regards the danger of "corrosion to an anæmic stomach," which is supposed to follow the administration of Christy's papain; I should doubt whether any one has seen this corrosion; it is perhaps a deduction from the commonly accepted theory of the formation of gastric ulcer. As a fact of observation, it is still in the region of the unknown.

Practice in Canada.

The Rev. J. Lowe, F.R.C.S., superintendent of the Edinburgh Medical Missionary Society, 56, George Square, Edinburgh, gives, in the quarterly journal of the Society just to hand, an extract from a clergyman in Quebec, saying that a medical missionary to work amongst the Protestant poor is required. He would have rooms and board, and a small salary, with liberty to practise. He would also have charge of the cottage-hospital founded by the Rev. D. Marsh. A suitable matron is also required. Mr. Lowe has written to Canada for further particulars. If any of our readers wish to communicate with him on the subject, we are confident that they will receive whatever information he obtains. He expresses a hope, however, that such correspondents, who, under similar circumstances, have sometimes been very numerous, will not omit a stamp for the reply.

Trichorhexis Nodosa.

Mr. D. Bradley (Dudley) writes: In the British Medical Journal of June 5th, you report that Dr. Saundby showed specimens of trichorrhexis nodosa at the meeting of the Pathological and Clinical Section of the Birmingham and Midland Counties Branch of the Association.

I presume (although no mention is made of the site of the disease) that the specimens were taken from the beard, and that appears to be its most common situation; and Kaposi (in Hebra's work on *Diseases of the Skin* (New Sydenham Society's translation), says that he has never seen it in any other part. Dr. Tilbury Fox, in his *Manual of Diseases of the Skin*, describes what is, without doubt, the same disease, and considers that it is a parasitic disease affecting the beard, caused by the trichophyton tonsurans, but does not mention it as affecting the hair of the head; the other authorities to which I have access do not mention it. Under these circumstances, I venture to record the fact that I have at present under notice three cases of the disease affecting the beard, and one in which the hair of the head is affected. This last was brought to my notice in consequence of the hair on one side of the head having suddenly become shorter than that on the other side. The patient (a young lady about 14 years of age had only noticed it for a day or two before I saw it. I at once examined the hairs with the microscope, and found the condition of them to be similar to that described by Kaposi and Fox, and to that which I have frequently seen in the beards of many men, but never before in hair from the head. I am at present inclined to agree with Dr. Fox that the disease is parasitic, as there are numerous apparently spherical bodies to be seen with the microscope, which resemble the spores of the trichophyton.

I should be glad of any suggestions as to treatment. Shaving the beard does

not succeed, and in this my experience agrees with that of Kaposi; and, although I have had the young lady's hair cut short, I am not very sanguine that it will be successful. Dr. Fox recommends epilation for the beard, but this would be practically impossible when half the head is affected.

Patent Medicines.

Mr. John Scott (Manchester) writes: The foolish mother of a five weeks' old infant, which was suffering from diarrhœa, purchased some stuff called "infants' preservative," and gave the child a teaspoonful. The diarrhœa promptly ceased; so did consciousness. After five hours of ineffectual treatment, the child was brought to me in a state of deep coma. Faradism failed to arouse consciousness, or to improve the flagging respiration. By means of a Teale's worm-catheter stuck on the end of a Higginson's syringe, warm water was injected into the stomach; and, as vomiting was not induced, reflex irritability being completely in abeyance, the catheter was jerked off the syringe, and by siphon action the stomach made to empty itself of a strong-smelling brownish fluid. The proceeding was repeated several times, until the stomach was washed clean. In about two hours, the child was fit to be sent home.

There is nothing remarkable about this case medically, but there is a good deal that is remarkable about the manner in which our provident mother-State allows these nostrums to be sold. In Quain's *Dictionary*, I find that "there is no doubt that great numbers of infants perish every year in this country through the improper use of quack remedies containing opium." The State is bustling enough over alcohol, vaccination, education, the load-lines, and I know not what else; but its indifference to the lives of the infants is exasperating. The principle with reference to all quack remedies is *si quis vult decipi, decipiatur*. Perhaps it rejoices in the money it gets from stamp-duties.

One remedy is easy, and in a short time would be effectual. Let the analysis of any secret remedy be printed on the outside of the package containing it. The commercial Briton would soon cease to pay more than the market price for bread-crumb or citrate of potash. But would not this be interfering with private enterprise, and robbing some philanthropist of the fruit of his brains? Not so; for we of the medical profession, at least, know that the success of the patentee of every secret remedy depends solely on the audacity with which he plumbs the depths of human credulity.

This is by no means the first time that the evils of infant-drugging have been forced on me; and I am convinced that, if as much energy were devoted to the solution of this problem as is given to much minor matters in the State, it should not be possible to print such a sentence as the above in two successive editions of Quain's *Dictionary*.

Medical Book-keeping.

Mr. W. W. Hardwicke (Dovercourt) writes: The subject of medical book-keeping keeps constantly cropping up; and the question, which is the best system, has frequently been a puzzle to us. It has long been acknowledged that the old cumbersome method of our forefathers was very laborious and unsatisfactory, and it was felt that, by a little skill and ingenuity, a far easier and less laborious system might be adopted. There were two points to be kept in mind in introducing any new system; the account must be thoroughly clear, and safe from any mistakes, not only to medical creditor, but to the county court judge, before whom, I regret to say, a great many more of us have to appear than like to; besides this, it must involve the minimum of time and trouble. Two years ago, after using the old-fashioned system for many years, I adopted what appeared to me to be the most concise and convenient of these new systems—the A B C, introduced by Mr. Allsop, of the *Shipley Times* office, Saltaire, Yorkshire; and after two years of use, I can safely recommend it to my brother practitioners as the most convenient that can possibly be adopted. This system consists of day-book and ledger only. The principle of it is the gradual condensation of the account, without the old repetition. The day-book takes the place of the old list-book and day-book—in fact, is an enlarged list-book; no prescriptions are entered here, but each item supplied to a patient during any day is entered under a sign, a list of which is printed on the first page. Each page lasts one month. At any time the items are priced, and at the end of the month the total amount is placed in the total column at the end of the line, then carried to its proper place in the ledger. Nothing is entered in the ledger but cash, and it is also ruled ready for use.

A certain number of pages are set apart for each letter of the alphabet, the number varying according to the letter, so that the trouble of indexing and referring so frequently is entirely dispensed with. The page required is turned to at once, say "B," and the eye runs down the name column till the particular one required, say "Bennett," is found. Each name has a space composed of five horizontal lines, representing five years; these are divided longitudinally into months, with two parallel cash-columns at the end of each three months or quarter. The headings are all printed ready for use, so that, when an amount for any month is brought from the day-book, the name is found, and the amount placed in its proper place in an instant. I usually make a note above such as "Mr., Mrs., Chd.," etc.

The accounts can be sent out as often as required, quarterly (which is certainly the best plan), half-yearly, or even annually (although now obsolete). It can thus be seen with what a small amount of labour the book-keeping of a large practice can be managed, and the regular writing out of bills child's play compared with the old plan, which generally occupied all the spare time of about a fortnight; whereas the bills for a practice of £1,000 a year can now be written out in the spare time of twenty-four to forty-eight hours. The bill-heads I use with this system are: "Professional attendance upon ——— Mrs. Bennett in ——— January and ——— February, £——.

In the event of any amount not being required in full, as occurs sometimes with the poorer classes, certain pages at the end of the ledger are set apart for instalments. A reference is made to the proper space in the instalment-pages, thus $\frac{3}{2}\frac{4}{6}$, which reads: page 346, No. 2 space, which turned to, is found the name simply—"Bennett."

The arrangement of these pages is somewhat different to the others. Each page is divided into ten spaces, and each space lasts five years, as the ordinary ledger-pages. But here the account, being still more condensed, is reduced to quarters. Four cash-columns, headed "1st, 2nd, 3rd, and 4th quarters," are placed side by side; then comes another column for "arrears," and another, the 6th, for "total amount owing." The rest of the space to the end of the lines is taken up with instalment-columns for each month in the year, with a "total cash paid" column at the extreme end.

With this system, an account for five years can be seen at a glance, and bills of particulars written out in a very few minutes, if required. With regard to prescriptions, only fresh prescriptions are written; and these, being usually few, are best written on a slip of paper carried in the pocket-book where the daily list of patients is carried, at the patient's house, with the date, which plan saves the trouble of going over each case a second time, on arriving home after a round. Where an assistant is kept, these are handed to him, with a list of those requiring medicines, etc., repeating.

The result of the day's work is entered up in the day-book either at night or in the morning, at the same time that the list for the next day is arranged. These prescriptions may be either filed, or gummed into a book kept for the purpose, the former being the easier method, but in all private cases they ought to be kept. In club-practice, the record can be kept on the label.

As regards visits to club-patients, it is advisable to keep a list of them at the bottom of the page in the day-book, so that they may not be forgotten.

The signs for the day-book are very simple, and easily learned. The day-book and ledger may be made to last ten, fifteen, or twenty years. I have omitted to mention that in the day-book are spaces for "midwifery engagements," and "addresses of nurses, etc."

I would recommend this book always to be interleaved with blotting-paper. Besides these books, it is generally necessary to keep a private cash-book and an expenses-book.

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